

CHECKLIST OF THE
BIRDS
OF NEW ZEALAND



FIFTH EDITION, 2022

ORNITHOLOGICAL SOCIETY OF NEW ZEALAND

CHECKLIST OF THE
BIRDS
OF NEW ZEALAND

By the Checklist Committee
Ornithological Society of New Zealand
FIFTH EDITION
2022

First published in Wellington, New Zealand (online only) in 2022 by
Ornithological Society of New Zealand

© Ornithological Society of New Zealand, Inc., 2022

First edition 1953, second edition 1970, third edition 1990, fourth edition 2010
Fifth edition 2022

This publication is copyright. Apart from any fair dealing for the purpose of private study, research, criticism, or review, as permitted under the Copyright Act, no part of this publication may be reproduced by any process, stored in a retrieval system, or transmitted in any form, without the prior permission of the Ornithological Society of New Zealand.

Cataloguing-in-Publication Data

Checklist of the birds of New Zealand, fifth edition.

Previous edition: Checklist of the birds of New Zealand, Norfolk and Macquarie Islands,
and the Ross Dependency. Wellington, N.Z.: Te Papa Press, 2010.

Includes bibliographical references.

Ornithological Society of New Zealand Occasional Publications (May 2022)
(ISSN 2815-8121)

Ornithological Society of New Zealand Occasional Publication No. 1
(Published May 2022)

1. Birds—New Zealand. 2. Extinct birds—New Zealand.

I. Ornithological Society of New Zealand. Checklist Committee.

II. Checklist of the birds of New Zealand.

Recommended Citation

Checklist Committee (OSNZ). 2022. *Checklist of the Birds of New Zealand* (5th edition).
Ornithological Society of New Zealand Occasional Publication No. 1.
Wellington: Ornithological Society of New Zealand.

Cover design by Shaun Lee

Page layout by Geoff Norman

CONTENTS

INTRODUCTION	7
Contributors	7
Geographical Coverage	7
Format and Treatment	8
Classification	8
Species Concepts	8
Scientific Names	9
Common Names (English, Māori, and Moriori)	10
Number of Species	10
Fossil Distributions	11
Feather Lice: a Note by R.L. Palma	11
General References	12
Symbols and Abbreviations	12
Recommended Citations	12
Acknowledgements	13
 Order DINORNITHIFORMES	 14
Family Megalapterygidae: Upland Moa	14
Family Emeidae: Emeid Moa	15
Family Dinornithidae: Giant Moa	18
 Order APTERYGIFORMES	 20
Family Apterygidae: Kiwi	20
 Order ANSERIFORMES	 24
Family Anatidae: Swans, Geese, and Ducks	25
 Order GALLIFORMES	 38
Family Numididae: Guineafowl	38
Family Odontophoridae: American Quails	38
Family Phasianidae: Partridges, Quails, Pheasants, and Turkeys	39
 Order PODICIPEDIFORMES	 42
Family Podicipedidae: Grebes	42
 Order COLUMBIFORMES	 44
Family Columbidae: Pigeons and Doves	44
 Order CUCULIFORMES	 47
Family Cuculidae: Cuckoos	47
 Order APODIFORMES	 51
Family Aegothelidae: Owllet-nightjars	51
Family Apodidae: Swifts	52
 Order GRUIFORMES	 54
Family Aptornithidae: Adzebills	54
Family Rallidae: Rails, Gallinules, and Coots	54
Family Gruidae: Cranes	62
 Order CHARADRIIFORMES	 64
Family Haematopodidae: Oystercatchers	64
Family Recurvirostridae: Stilts and Avocets	65
Family Charadriidae: Plovers, Lapwings, and Dotterels	66

Family Rostratulidae: Painted Snipes	72
Family Scolopacidae: Sandpipers and Snipes	73
Family Glareolidae: Coursers and Pratincoles	88
Family Stercorariidae: Skuas	88
Family Laridae: Noddies, Gulls, and Terns	90
Order PHAETHONTIFORMES	104
Family Phaethontidae: Tropicbirds	104
Order SPHENISCIFORMES	106
Family Spheniscidae: Penguins	106
Order PROCELLARIIFORMES	114
Family Diomedeidae: Albatrosses Toroa	114
Family Oceanitidae: Southern Storm Petrels	123
Family Hydrobatidae: Northern Storm Petrels	128
Family Procellariidae: Fulmars, Petrels, Prions, and Shearwaters	129
Order SULIFORMES	162
Family Fregatidae: Frigatebirds	162
Family Sulidae: Gannets and Boobies	163
Family Anhingidae: Darters	165
Family Phalacrocoracidae: Cormorants and Shags Kawau	166
Order PELECANIFORMES	173
Family Pelecanidae: Pelicans	173
Family Ardeidae: Herons and Bitterns Matuku	173
Family Threskiornithidae: Ibises and Spoonbills	180
Order ACCIPITRIFORMES	183
Family Accipitridae: Kites, Hawks, and Eagles	183
Order STRIGIFORMES	186
Family Tytonidae: Barn Owls	186
Family Strigidae: Typical Owls	187
Order CORACIIFORMES	190
Family Coraciidae: Rollers	190
Family Alcedinidae: Kingfishers	190
Order FALCONIFORMES	192
Family Falconidae: Falcons	192
Order PSITTACIFORMES	194
Family Strigopidae: Kākāpō, and Kākā and Kea	194
Family Cacatuidae: Cockatoos	196
Family Psittaculidae: Old World Parrots	196
Order PASSERIFORMES	200
Family Acanthisittidae: New Zealand Wrens	200
Family Meliphagidae: Honeyeaters	203
Family Acanthizidae: Australasian Warblers	206
Family Callaeidae: New Zealand Wattlebirds	207
Family Notiomystidae: Hihi	209
Family Mohouidae: New Zealand Creepers	210
Family Oriolidae: Old World Orioles, Pitohuis, Figbirds, and Piopio	211

Family Campephagidae: Cuckoo-shrikes and Trillers	213
Family Artamidae: Butcherbirds, Currawongs, and Woodswallows	213
Family Rhipiduridae: Fantails	215
Family Monarchidae: Monarch Flycatchers	216
Family Corvidae: Crows and Jays	217
Family Petroicidae: Australasian Robins	218
Family Alaudidae: Larks	221
Family Acrocephalidae: Reed-warblers	221
Family Locustellidae: Grassbirds	221
Family Hirundinidae: Swallows and Martins	223
Family Zosteropidae: White-eyes	224
Family Sturnidae: Starlings and Mynas	225
Family Turdidae: Thrushes	226
Family Prunellidae: Accentors	227
Family Passeridae: Old World Sparrows	227
Family Motacillidae: Pipits and Wagtails	228
Family Fringillidae: Finches, Euphonias, and Hawai'ian Honeycreepers	229
Family Emberizidae: Buntings and New World Sparrows	231
APPENDICES	232
1: Fossil Birds of New Zealand	232
2: Failed Introductions of Foreign Birds to New Zealand	246
3: Alternative English, Māori, and Moriori names for New Zealand birds	262
REFERENCES	282

INTRODUCTION

The aim of this fifth checklist of New Zealand birds, like its predecessors, is to provide information on the nomenclature, taxonomy, classification, distribution (current, historical, and fossil) and status of the birds of the New Zealand region. As with earlier editions, it was produced by a Checklist Committee of the Ornithological Society of New Zealand Inc. (OSNZ).

The four previous checklists and the respective Checklist Committee conveners were:

- *Checklist of New Zealand birds*, 1953 (C.A. Fleming).
- *Annotated checklist of the birds of New Zealand*, 1970 (F.C. Kinsky).
- *Checklist of the birds of New Zealand and the Ross Dependency, Antarctica*, 1990 (E.G. Turbott).
- *Checklist of the birds of New Zealand, Norfolk and Macquarie Islands, and the Ross Dependency, Antarctica*, 2010 (B.J. Gill).

In 1980, a revision entitled “*Amendments and Additions to the 1970 Annotated Checklist of the Birds of New Zealand*” was published as a supplement to *Notornis*, volume 27 (F.C. Kinsky, Convener).

In preparing this revised checklist the Committee has had in mind some guiding principles agreed at the outset. One was the need for a cautious approach. We agreed that the national checklist should develop steadily on what has gone before, without adopting novel sequences or taxonomic treatments that have not been presented, discussed and adopted in other publications. Stability of nomenclature is an important consideration, and in the interests of stability the New Zealand checklist should avoid proposing radical sequences and taxonomies, only to have them reversed in a subsequent edition.

The New Zealand avifauna is part of a larger Australasian and global avifauna, and a second principle was that wherever appropriate we should be strongly guided by existing decisions in other taxonomic works. We have had the benefit of the following works published since the fourth New Zealand checklist:

- The two volumes of the fourth edition of the *Howard & Moore Complete Checklist of the Birds of the World* (Dickinson & Remsen 2013; Dickinson & Christidis 2014).
- The *eBird/Clements Checklist of Birds of the World*, v2019 (Clements *et al.* 2019).
- The *Handbook of the Birds of the World and BirdLife International digital checklist of the birds of the world*. Version 5. (Handbook of the Birds of the World and BirdLife International 2020).
- The *Check-list of North American Birds* (online), (Chesser *et al.* 2020).
- *International Ornithological Congress (IOC) World Bird Names*, version 11.1 (F. Gill *et al.* 2021).

These works do not always agree in their sequence or taxonomic treatment, and so in attempting to follow global practice we sometimes had choice as to what seemed best for New Zealand. We have made our own decisions on taxonomy when dealing with the groups of birds endemic to New Zealand, or groups (like oceanic seabirds) where New Zealand has a large fauna.

This checklist takes account of all the records approved by the Society’s Records Appraisal Committee since the last checklist (Checklist Committee 2010) was published (Miskelly *et al.* 2011, 2013, 2015; Miskelly, Crossland *et al.* 2017, 2019, 2021). The text for the current checklist was finalised in February 2022.

Contributors

Following publication of the 2010 Checklist, the OSNZ Council appointed the following Checklist Committee: A.J.D. Tennyson (Convener), G.K. Chambers, C.M. Miskelly, R.L. Palma, R.P. Scofield and T.H. Worthy. G.K. Chambers resigned in 2012, and J.R. Wood was co-opted to the Committee in 2015. N.J. Rawlence was co-opted in 2017 following the resignation of J.R. Wood. Some progress was made up to 2017 before a period of stasis, followed by several resignations in 2019 (A.J.D. Tennyson) and 2020 (R.P. Scofield and T.H. Worthy). The OSNZ Council appointed C.M. Miskelly as Convener in 2020, and ratified the continued involvement of R.L. Palma and N.J. Rawlence. Birds New Zealand council member (and now Vice President) N.J. Forsdick, and former Checklist Committee members B.J. Gill and A.J.D. Tennyson were co-opted to the Checklist Committee in mid-2020. This team undertook the bulk of the research, preparation of new text, and editing and re-organisation of existing text presented in this revision. Changes made since the 2010 Checklist are summarised in Miskelly *et al.* (2022).

Geographical Coverage

The present checklist covers the following areas:

1. The main islands of New Zealand and the Chatham Islands / Rekohu / Wharekauri.
2. The Kermadec Islands / Rangitāhua north-east of New Zealand.

3. The subantarctic islands south of New Zealand, namely the Snares Islands / Tini Heke, the Bounty Islands / Moutere Hauriri, Antipodes Island / Moutere Mahue, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku. The New Zealand Checklist no longer covers Norfolk Island, Macquarie Island, and the Ross Dependency, Antarctica (*contra* Checklist Committee 2010).

New Zealand place names in the main text have, where possible, been updated to conform to the New Zealand Place Names Database and the New Zealand Gazetteer of Official Geographic Names. Place names in synonymies have not been updated, as these report historical records.

Format and Treatment

We have retained the same format and style as the 2010 Checklist, which in turn followed those of the 1990 Checklist and Condon's *Checklist of the Birds of Australia* (Condon 1975). For the majority of taxa, their entries are based on the 2010 Checklist, edited to include information published since 2010, and to delete information that is out-dated. An arrowhead (►) in the left margin is used to show full species (cf. subspecies). Extinct forms in the Recent avifauna are included in the main text, where a cross (†) marks extinct species, subspecies and their higher taxa. Similarly, introduced species in our region, and higher and lower taxa represented by introduced species, are marked by an asterisk (*). Extinct forms known only as fossils from before the Late Pleistocene are listed in Appendix 1.

Appendix 2 lists failed introductions, including species introduced in the 1800s during the acclimatisation era, and recent introductions like crimson rosella, rainbow lorikeet, and red-vented bulbul that for various reasons have not established. A full list of all taxa included in the main Checklist and Appendices 2 and 3 (including their naming authority, year of naming, English name, Māori name, order, family, species/subspecies status, New Zealand breeding status, and 2021 New Zealand conservation status) can be downloaded as Supplementary Material 1 (<https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-1-checklist-2022-database.xlsx>).

Appendix 3 is a new feature, which provides a comprehensive list of English, Māori, and Moriori names for New Zealand birds. A full list of the database of names underlying Appendix 3 (including page references of examples where each name and variant has been published) can be downloaded as Supplementary Material 2 (<https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>).

Classification

Bird classification is a fast-changing field, spurred on by advances in the use of molecular biology to help resolve taxonomic and phylogenetic problems. There have been major developments affecting the classification and taxonomy of New Zealand birds since the 2010 Checklist. The molecular biology revolution, with its ability to establish ever-finer differences, and pressure for the conservation of genetic diversity, are forcing the recognition of more and more species, often by the elevation of subspecific taxa to specific level. In general we have tried to adopt a cautious approach, accepting higher-level relationships determined by molecular studies only when there is support from other evidence and/or several studies. Because it is a time of change and uncertainty we have explained the sequences we have adopted, and the reasons for them, by adding sections of explanatory text at various taxonomic levels.

The sequence in which orders and families are presented has been substantially changed since the 2010 Checklist, and largely follows the sequence recommended by Cracraft (2013, 2014), Dickinson & Remsen (2013), Dickinson & Christidis (2014), Clements *et al.* (2019), Handbook of the Birds of the World and BirdLife International (2020), Chesser *et al.* (2020), and F. Gill *et al.* (2021). Species within a genus, and subspecies of a species, are listed from north to south (according to their distribution) if there is no strong evidence for a phylogenetic sequence, with Chatham Islands and subantarctic taxa placed after South Island and Stewart Island / Rakiura taxa.

Species Concepts

How best to define species boundaries in birds is a longstanding and highly contentious issue. The debate boils down to finding the best and most practical way to impose a discontinuous classification scheme on generally uncooperative subjects, and providing a sound theoretical basis for doing so (Hull 1997). For most of the latter part of the 20th Century the dominant paradigm was Ernst Mayr's Biological Species Concept (BSC) and his associated model of allopatric speciation (E. Mayr 1940, 1996). This concept has not stood the test of time and fails badly for birds, due to the existence of multiple allopatric populations of many taxa, and widespread interspecific and even intergeneric hybridisation (Grant & Grant 1992, 1997).

The vacuum left by the retreat of the BSC has been filled with several competing alternatives, none of which is entirely satisfactory (Mayden 1997). Among these contenders, Cracraft's (1983) Phylogenetic Species Concept (PSC) has found increasing favour among modern biologists, because it embraces cladistic methods of classification and accommodates molecular data. However, this concept has difficult aspects too. In particular, it is recognised that *in extremis* each individual would become a species in its own right since each individual possesses unique genetic characters. This drawback is recognised as leading to "taxonomic inflation" (Issac *et al.* 2004). The Committee has followed the advice of Baum & Donoghue (1995) by recognising that several alternative versions of the PSC are available, and selecting a

restricted definition popularly known as the Diagnostic Species Concept (DSC or PSC1). In this, we follow the example set by Helbig *et al.* (2002) for recognition of bird species in Britain and Europe. We have, however, rejected their use of the subordinate concepts “allospecies”, “semi-species” and “superspecies” for a variety of technical reasons.

Nonetheless, we have continued to recognise “subspecies”. The best definition of recognisable taxa below specific level is perhaps even more difficult for ornithologists to agree upon than the definition of species themselves. Here we have taken a conservative approach. Subspecies recognised in the 2010 Checklist have been retained unless good evidence to the contrary has been published in the intervening period. This ensures continuity of nomenclature between editions of the checklist.

All such decisions and recommendations are supported by published sources in widely available literature. We also state the nature of the new evidence (plumage characters, DNA sequences, etc.) that supports their inclusion.

Scientific Names

Original citations are given for the current names of all families, genera, species and subspecies. In the generic synonymies, synonyms are mainly limited to those genera for which the type species occurs in the New Zealand region and to those which have been published in association with New Zealand species or subspecies, regardless of the present status of the latter. In the species and subspecies synonymies, we have attempted to provide full synonymies for endemic and native taxa. However, for introduced species and subspecies, we have listed those names and combinations that have been published for the geographic coverage of this checklist. In the species and subspecies synonymies, we have attempted to include at least one example of each of the different generic combinations available in the literature, but not always the earliest one. *Nomina nuda* (singular: *nomen nudum*) are not available names in zoological nomenclature (ICZN 1999: 111) and, therefore, cannot be entered in synonymy. However, we have listed those *nomina nuda* that were subsequently made available by the same or other author/s when evidence from the literature showed that they were clearly intended for the same taxon.

In the generic, species and subspecies synonymies, scientific names (i.e. genus, species, subspecies, author and date) are followed by a colon (:) if the entries refer to original descriptions of taxa. In the species and subspecies synonymies, scientific names are followed by a semicolon (;) if they refer to subsequent uses of the species and subspecies names in association with other genera, or in cases of unjustified emendations. Important general references for the synonymies of New Zealand birds are the *Catalogue of the Birds in the British Museum* (Sharpe *et al.* 1874–98), *Systema Avium Australasianarum* (Mathews 1927, 1930a), *Check-List of Birds of the World* (Peters 1931–87), and Condon’s checklist of Australian non-passerines (Condon 1975).

Various nomenclatural issues were identified during preparation of the 2010 and 2022 Checklists that affect names and synonyms of New Zealand birds, including the following:

- The validity of the names of Brisson (1760) was restricted to those generic names that appeared in Latin on the even-numbered pages between pages 26 and 61 of the *Tabula Synoptica Avium Secundum Ordines* that appeared at the beginning of volume 1 (ICZN 1963).
- Over 35 scientific names of New Zealand bird species cited in R. Taylor (1870) were not included in the synonymies of the species treated in this checklist because they were either incorrectly spelt or not recognisable as belonging to any of the currently accepted taxa.
- David & Gosselin (2002a,b) advocated changing the endings of numerous bird names, including several New Zealand ones, on supposed grammatical grounds. Their approach was criticised by the Standing Committee on Ornithological Nomenclature of the 23rd International Ornithological Congress (Schodde 2006), so for the present we have not followed it, apart from for *Phalaropus*, *Pygoscelis*, *Eolophus*, and *Callaeas* (see Dickinson & Remsen 2013, and Dickinson & Christidis 2014).
- We follow Schodde *et al.* (2010) in accepting 1801 as the publication date of Latham’s *Supplementum Indicis Ornithologici* (*contra* Schodde & Mason 1999, who argued for 1802).
- We have attempted to give authorship and original citations for family-group names. The main reference sources, other than the original literature, have been Ridgway (1901, 1902, 1904, 1907, 1911, 1914, 1916, 1919), Friedmann (1941, 1946, 1950), Brodkorb (1963, 1964, 1967, 1971, 1978), Bock (1994), and Olson (1995). We heeded the criticisms by Olson (1995) of certain names advanced by Bock (1994), and checked all original literature to ensure names had a valid origin in terms of ICZN (1999).
- Olson (1995) pointed out that “Some authors have accepted names based on Illiger (1811), an important and scholarly publication that Bock [1994] categorically rejects, not without some justification. On the other hand, Bock takes many family-group names as dating from the excessively recondite and eccentric work of Rafinesque (1815). There is no rational basis for accepting any of Rafinesque’s names while rejecting all of Illiger’s, however, as the nomenclatural problems attendant on both works are virtually identical.” We have concluded that in Illiger (1811) the names Psittacidae (from Illiger’s “famille Psittacini”) and Columbidae (from “famille Columbini”) are available, as the names appear to be “formed from the stem of an available generic name (... indicated either by express reference to the generic name or by inference from its stem ...)” (ICZN 1999: Article 11.7.1.1).

For the same reason we also concluded that in Rafinesque (1815) the following names are available: Merginae (from Rafinesque’s “sous-famille Mergidia”), Pelecanidae (from “sous-famille Pelicanea”), Rallidae (from “sous-famille Rallia”), Scolopacidae (from “famille Scolopacea”), Tringinae (from “sous-famille Tringaria”), Laridae/Larinae (from “sous-famille Laridia”), Coraciidae (from “sous-famille Coracinia”), Turdidae (from “sous-famille Turdinia”), Sturnidae (from “sous-famille Sturnidia”), Hirundinidae (from “sous-famille Hirundia”), and Passeridae (from “sous-famille Passernia”).

- We followed Bock (1994) and Olson (1995) in accepting Leach (1820) as author of many family-group names. Some have been amended, at the suggestion of Olson (1995), to allow the names to be attributed to Leach (1819). Through the help of Robert Prŷs-Jones (the Natural History Museum, Tring) we were able to confirm that it was indeed the 1819 15th edition of Leach’s “11th Room-Synopsis” that first contained latinised family names.
- We found Vigors (1825) to be the first comprehensive list in Linnaean format that was an important source of new names and also indicated authorities for previously advanced ones. By checking original references wherever possible, we found and corrected several long-standing transcription errors and incorrect citations of authorship.

Common Names (English, Māori, and Moriori)

A primary role of the four previous editions of the *Checklist of the Birds of New Zealand* has been to provide guidance on the names to use for New Zealand birds. This has included English and Māori bird names, as well as scientific names. Māori bird names have become increasingly widely used by the general public and the scientific community in recent years (Wehi *et al.* 2019), and this is reflected in this revision of the Checklist.

Māori bird names have been moved from Appendix 3 and reinserted in the main Checklist, where they are presented alongside English bird names, on either side of a vertical bar. The two names presented (English and Māori) are considered equivalent; authors and editors of Birds New Zealand publications can use either name without explanation or justification.

The name presented to the left of the bar is the name that has been used most often in the journal *Notornis* over the previous decade (or decades, for species that are referred to infrequently). For a few species (e.g. rowi *Apteryx rowi*, kererū *Hemiphaga novaeseelandiae*, hihi *Notiomystis cincta*, and mohua *Mohoua ochrocephala*), the Māori name has been more widely used within recent scientific literature than the equivalent English name that was used in the 2010 Checklist (Okarito brown kiwi, New Zealand pigeon, stitchbird, and yellowhead, respectively), and so the Māori name is presented first. It is anticipated that further English and Māori names will switch positions (either side of the vertical bar) with subsequent revisions of the Checklist, based on the increasing usage of Māori bird names.

We have chosen to place several other widely used Māori bird names to the right of the vertical bar if they are used for more than one species (e.g. kuaka for *Pelecanoides urinatrix* and *Limosa lapponica*, and tieke for *Philesturnus rufusater* and *P. carunculatus*). Māori bird names that apply to two or more species are followed with an asterisk (*), with a footnote immediately below the species or subspecies account listing or summarising other taxa to which the same name also applies.

For species where Māori and English names are identical apart from the use of macrons, the Māori name is presented first, to encourage correct pronunciation (e.g. kākāpō | kakapo *Strigops habroptila*, kākā | kaka *Nestor meridionalis*, and tūi | tui *Prosthemadera novaeseelandiae*). Names that combine Māori and English are treated as if they are English names, without macrons (e.g. North Island kaka *N. m. septentrionalis*, and Chatham Island tui *P. n. chathamensis*).

One of the challenges with presenting Māori bird names is that some species have different names applied to different life stages, or by different iwi (H.W. Williams 1917; Wehi *et al.* 2019). The names presented in the main text of this revision are predominantly those that were in Appendix 3 of the 2010 Checklist. These were largely based on the compendiums prepared by the Anglican bishop Herbert Williams (1860–1937) in various editions of his *A dictionary of the Maori language* (see H.W. Williams 1906, 1917, 1957, 1971). Alternative Māori, Moriori, and English names for New Zealand birds are presented in a new Appendix 3, with superscripts denoting where the name is sourced from (and see Supplementary Materials 2 (<https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>)). If any of these names become the most widely-used variant over time, they will be moved into the main Checklist during subsequent revisions.

We give only one English common name in the species and subspecies headings, and only one Maori name (if relevant), so as to provide single, preferred names for taxa in each language. This should help people making lists of bird records, and is one of the major uses of an “official” checklist.”

Number of Species

The present checklist enumerates 427 living or recently extinct species (Table 1), compared with 435 species in the 2010 Checklist. The slight decrease is due to the exclusion of Norfolk Island in particular (also Macquarie Island and the Ross Dependency). The deletion of 21 Norfolk Island species plus snow petrel (*Pagodroma nivea* – from Macquarie Island and Ross Dependency) was largely offset by the number of species added due to changes in taxonomy (“splitting”), records of further species in New Zealand (such as new vagrants), and descriptions of extinct species from Holocene bone deposits.

Table 1. Number of taxa represented in the main list (excluding any appendices) of this, and previous, New Zealand checklists.

CHECKLIST	SPECIES	SPECIES OR SUBSPECIES	SCOPE
1953	254	333	NZ and Macquarie Island; birds extant in historical times
1970	282	363	As for 1953 plus Ross Dependency
1990	379	448	As for 1970 plus all extinct species, including fossil species
2010	435	491	As for 1970 plus Norfolk Island and post-Pleistocene extinct species
2022	427	484	NZ only, including post-Pleistocene extinct species

Fossil Distributions

The fossil record of birds in New Zealand can conveniently be considered in two sections. The majority of fossils or remains of extinct birds (and nearly half of the species) are from during the Late Pleistocene epoch (0.05–0.01 Ma) and Holocene epoch (0.01–0 Ma). No avian taxa are known to have become extinct in the Late Pleistocene, therefore the Recent fauna comprises species known only from Holocene remains plus historically known species. The Holocene extinctions were all human-induced (Tennyson & Martinson 2007). Knowledge of the Pleistocene (>0.05 Ma) fauna is limited (Worthy *et al.* 1991; Worthy 1997a; B. Gill *et al.* 2005; Tennyson & Tomotani 2021a). Fossils older than the Late Pleistocene (Appendix 1) are listed with their age. These species (e.g. various penguins, Miocene birds of the St Bathans assemblage) should be excluded from analyses of the Recent fauna.

In the species texts, statements on Late Pleistocene and Holocene remains are based mainly on the data presented in the faunal reviews of Millener (1990, 1991) and Holdaway *et al.* (2001), and compilations by area as follows:

- North Island – Yaldwyn (1956), Millener (1981a), Horn (1983), Worthy (2000, 2004), Worthy & Holdaway (2000), Worthy, Holdaway *et al.* (2002), Worthy & Swabey (2002).
- South Island, north-west Nelson – Worthy & Mildenhall (1989), Worthy (1993a, 1997b, 2001), Worthy & Holdaway (1994), Worthy & Roscoe (2003).
- South Island, West Coast – Worthy & Holdaway (1993), Worthy, Miskelly *et al.* (2002), Worthy & Zhao (2010).
- South Island, Canterbury and Marlborough – Worthy (1993b, 1997d, 1998d), Worthy & Holdaway (1995, 1996), Holdaway & Worthy (1997).
- South Island, Otago and Southland – Worthy (1998a,b), Worthy & Grant-Mackie (2003).
- Stewart Island / Rakiura – Worthy (1998c,e).
- Chatham Islands / Rekohu / Wharekauri – Tennyson & Millener (1994), Millener (1999).
- Auckland Islands / Maukahuka – Tennyson (2020a).

Distributions in archaeological sites are mainly based on data in Worthy (1998c,d, 1999b) and Worthy & Holdaway (2002) and references therein.

Feather Lice: a Note by R.L. Palma

Bird lice, also called feather lice (Insecta: Phthiraptera), are wingless, flat-bodied insects that are permanently parasitic on warm-blooded vertebrates. Most species of birds have lice in their plumage, where they shelter, feed, reproduce, and die. The geographical distribution of lice is, with some exceptions, that of their hosts. Bird lice have developed morphological, behavioural, and physiological adaptations to survive on their hosts. Similarly, because lice are detrimental to host health and fitness, hosts have developed adaptations to control their lice populations. This reciprocal natural selection pressure has led to the co-evolution of hosts and lice (Johnson & Clayton 2003). Thus, the phylogenetic relations of lice often parallel those of their hosts and may help both to elucidate the relationships of the latter and to distinguish closely related host taxa, which are otherwise poorly defined.

A total of 375 identified species and subspecies of feather lice – belonging to 84 genera and subgenera in four families – have been recorded from birds in the New Zealand region. Pilgrim & Palma (1982) published the first checklist of lice known from New Zealand birds, which was updated by Palma (1999). Palma (2017) published a comprehensive account of all the species of feather lice recorded in New Zealand. That total number of species represents about 8% of all the species known from birds in the world (Price *et al.* 2003: 3).

Levels of endemism are generally low compared with other insect groups in New Zealand: only 29 louse species (9.5%) are endemic to the region, while at higher taxonomic levels the degree of endemism is even lower, with one endemic genus and two endemic subgenera representing 4% of the total, and none at the family level. As many as 58 species and subspecies (15%) of feather lice were introduced into the region together with their hosts by human agency.

The total New Zealand bird louse fauna is much greater than the figures given above. A large number of species are expected to be recorded from a considerable number of breeding and vagrant birds (mainly among the Charadriiformes

and Passeriformes), which have not yet been sufficiently searched for lice in the New Zealand region. For breeding species without louse records in the region see Palma (2017: 272).

Lice are a useful tool to aid the identification of seabirds that are found dead on New Zealand beaches every year, especially in the case of immature specimens (Melville 1985) or when the bird remains are in such poor condition that they lack diagnostic features to allow proper identification. Kiwi lice are also an extremely reliable tool to identify their hosts – not only the species but also their geographical provenance (Palma 1991; Palma & Price 2004). Suggestions for collecting bird lice are given in Pilgrim & Palma (1982: 32).

General References

The previous New Zealand checklists (see second paragraph of this Introduction) are cited in the main text as Checklist Committee (1953, 1970, 1990, 2010). Two important general works underpinning entries in the present checklist are the OSNZ's atlases of bird distribution (Bull *et al.* 1985; C. Robertson *et al.* 2007).

The species texts have drawn on the following reviews on the birds of certain island groups:

- Kermadec Islands / Rangitāhua – Veitch *et al.* (2004).
- Chatham Islands / Rēkohu / Wharekauri – Holdaway (1994b), Aikman & Miskelly (2004), Miskelly *et al.* (2006).
- Snares Islands / Tini Heke – Miskelly *et al.* (2001a).
- Bounty Islands / Moutere Hauriri – C. Robertson & van Tests (1982).
- Antipodes Islands / Moutere Mahue – Warham & Bell (1979), Tennyson *et al.* (2002).
- Auckland Islands / Maukahuka – Miskelly, Elliott *et al.* (2020).
- Campbell Island / Motu Ihupuku – Westerskov (1960), Bailey & Sorensen (1962), Kinsky (1969).

This checklist deals primarily with classification, nomenclature, and status. For information on the biology and life history of New Zealand birds and associated literature, readers should consult the multi-volume series *Handbook of Australian, New Zealand and Antarctic Birds* (1990–2006). General biology references to New Zealand species are given in the 1990 Checklist, and also in Heather & Robertson (1996).

Symbols and Abbreviations

► Indicates a species (cf. subspecies)

* Indicates a species (or other taxon) introduced to the New Zealand region

† Indicates an extinct taxon

a.s.l., above sea level

AIM, Auckland War Memorial Museum

BMNH, Natural History Museum (bird section), Tring, United Kingdom

CM, Canterbury Museum, Christchurch

NMNZ, Museum of New Zealand Te Papa Tongarewa, Wellington

Recommended Citations

Main text and Appendices 1 & 2

Checklist Committee (OSNZ). 2022. *Checklist of the Birds of New Zealand* (Fifth edition). Ornithological Society of New Zealand Occasional Publication No. 1. Wellington, Ornithological Society of New Zealand (published online as a pdf – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/checklist-2022.pdf> and as HTML webpages – <https://www.birdsnz.org.nz/society-publications/checklist/>).

Appendix 3 – Alternative names

Miskelly, C.M. 2022. Alternative English, Māori, and Moriori names for New Zealand birds. Pp. 260–278 (Appendix 3) in Checklist Committee, *Checklist of the birds of New Zealand* (Fifth edition). Ornithological Society of New Zealand Occasional Publication No. 1. Wellington, Ornithological Society of New Zealand (published online as a pdf – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/checklist-2022-appendix3.pdf> and as an HTML webpage – <https://www.birdsnz.org.nz/society-publications/checklist/appendix-3-alternative-names-for-new-zealand-birds/>).

Supplementary Materials

Checklist Committee (OSNZ). 2022. Database of New Zealand birds. Supplementary Materials 1 in Checklist Committee, *Checklist of the birds of New Zealand*. (Fifth edition). Ornithological Society of New Zealand Occasional Publication No. 1. Wellington, Ornithological Society of New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-1-checklist-2022-database.xlsx>).

Miskelly, C.M. 2022. Database of alternative names for New Zealand birds. Supplementary Materials 2 in Checklist Committee, *Checklist of the birds of New Zealand*. (Fifth edition). Ornithological Society of New Zealand Occasional

Publication No. 1. Wellington, Ornithological Society of New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>).

Amendments to the 2010 Checklist

Miskelly, C.M.; Forsdick, N.J.; Gill, B.J.; Palma, R.L.; Rawlence, N.J.; Tennyson, A.J.D. 2022. Amendments to the 2010 *Checklist of the Birds of New Zealand*. Ornithological Society of New Zealand Occasional Publication No. 2. Wellington, Ornithological Society of New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/amendments-to-2010-checklist.pdf>).

Acknowledgements

This version of the Checklist is based on an electronic copy of the 2010 (fourth edition) of the Checklist. We thank the authors of that edition for their scholarship (Brian Gill as convener, Brian Bell, Geoff Chambers, David Medway, Ricardo Palma, Paul Scofield, Alan Tennyson, and Trevor Worthy). Geoff Chambers, Paul Scofield, Jamie Wood, and Trevor Worthy contributed to preparation of the current edition through their membership of the Checklist Committee for various lengths of time up to 2020, including voting on decisions made between 2012 and 2017. We also thank participants in the Checklist Committee mentor scheme, particularly Hugh Robertson and Hamish Spencer, for their contributions to discussions and decisions. The manuscript benefited greatly from careful checking by *Notornis* editor Craig Symes.

This is the first digital-only ‘Occasional Publication’ of the Ornithological Society of New Zealand. We thank Xequals Code & Creative for developing the webpage, and Ian Armitage for his work as the Birds New Zealand Council member overseeing the website upgrade. Shaun Lee designed the Checklist and Amendments covers, and Geoff Norman undertook their page layout, both as *pro bono* contributions to Birds New Zealand (Ornithological Society of New Zealand).

Colin M. Miskelly
Convener, OSNZ Checklist Committee
Wellington, February 2022

On behalf of the Checklist Committee (Natalie J. Forsdick, Brian J. Gill, Ricardo L. Palma, Nicolas J. Rawlence & Alan J. D. Tennyson).

Class AVES: Birds
Subclass PALAEOGNATHAE: Palaeognathous Birds
Parvclass RATITAE: Ratites

Cracraft (1974) proposed a monophyletic origin for the entire ratite-tinamou assemblage and united them within the single order Palaeognathiformes. Houde & Olson (1981), Olson (1985b), and Houde (1986, 1988) provided compelling evidence that at least some palaeognathous birds (perhaps including ostriches, moa, and kiwi) may have arisen independently (polyphyletically), by neotony, from neognathous ancestors and are, thus, secondarily palaeognathous. Researchers are virtually unanimous that palaeognaths are monophyletic, that Palaeognathae is the sister taxon to Neognathae, and that Tinamiformes are embedded within Ratitae (Knox *et al.* 2002; Cracraft *et al.* 2004; Harshman *et al.* 2008; M. Phillips *et al.* 2010; A. Baker *et al.* 2014). Therefore, it seems prudent to revert to the more traditional arrangement (e.g. Archey 1941; Brodtkorb 1963; Checklist Committee 1970) of placing each ratite family in separate orders.

Order †**DINORNITHIFORMES**: Moa

Detailed diagnoses and histories of nomenclature for all moa taxa are given in Worthy & Holdaway (2002), and Worthy & Scofield (2012). Bruce & McAllan (1990) showed that for several taxa the original publication of the name occurred in either *The Athenaeum* or in *The Literary Gazette*. However, these were often *nomina nuda* as detailed in the synonymies listed below. If the name appeared in both publications on the same day, Bruce & McAllan (1990) acted as first revisers and selected one as the original publication for that name.

Analysis of morphological geographical variation within *Dinornis* supports the concept of a single highly dimorphic species on each island, whose average size varies with habitat, thus explaining the size variation previously attributed to three taxa (Bunce *et al.* 2003; Worthy *et al.* 2005). Referral of *Palapteryx geranoides* Owen to *Pachyornis* by Worthy (2005b) resulted in *Pachyornis mappini* being synonymised under *Pachyornis geranoides*, thus necessitating that moa records previously referred to *Euryapteryx geranoides* become *Euryapteryx gravis*.

Family †**MEGALAPTERYGIDAE** Bunce, Worthy, Phillips, Holdaway, Willerslev, Haile, Shapiro, Scofield, Drummond, Kamp & Cooper: Upland Moa

Megalapterygidae Bunce, Worthy, Phillips, Holdaway, Willerslev, Haile, Shapiro, Scofield, Drummond, Kamp & Cooper, 2009: *Proc. Nat. Acad. Sci. USA* 106: 20647 – Type genus *Megalapteryx* Haast, 1886.

Bunce *et al.* (2009), in the most comprehensive analysis of molecular data to date, confirmed that the monotypic moa genus *Megalapteryx* was sister to all other moa and hence outside of Emeidae, as has been shown repeatedly by analyses of mitochondrial DNA (e.g. A. Cooper 1997; and references in Bunce *et al.* 2009) and by morphological analyses (Worthy & Holdaway 2002). Bunce *et al.* (2009) acknowledged this by erecting the family Megalapterygidae and showed there is no basis for the subfamilies within Emeidae. Megalapterygidae should be the first family in Dinornithiformes. We no longer recognise the subfamilies Anomalopteryginae Archey or Emeinae Bonaparte.

Genus †**Megalapteryx** Haast

Megalapteryx Haast, 1886: *Trans. Zool. Soc. London* 12(5): 161 – Type species (by monotypy) *Megalapteryx hectori* Haast = *Megalapteryx didinus* (Owen).

Palaeocasuaris Rothschild, 1907: *Extinct Birds*: 219 – Type species (by original designation) *Palaeocasuaris haasti* Rothschild = *Megalapteryx didinus* (Owen).

► †**Megalapteryx didinus** (Owen)

Upland Moa | Moa Pukepuke

Dinornis didinus Owen, 1882 (Oct.): *Proc. Zool. Soc. London* 1882 (36): 549. *Nomen nudum*.

Dinornis didinus Owen, 1883: *Trans. Zool. Soc. London* 11(8): 257 – Queenstown.

Megalapteryx hectori Haast, 1884: *Trans. N.Z. Inst.* 16: 577. *Nomen nudum*.

Megalapteryx hectori Haast, 1886: *Proc. Zool. Soc. London* 1885 (35): 541. *Nomen nudum*.

Megalapteryx hectori Haast, 1886: *Trans. Zool. Soc. London* 12(5): 162 – Takaka, Nelson.

Megalapteryx tenuipes Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 251 – Lake Wakatipu.

Anomalopteryx didina (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 277.

Megalapteryx tenuipes Lydekker; Andrews 1897, *Novit. Zool.* 4: 188.

Megalapteryx hamiltoni Rothschild, 1907: *Extinct Birds*: 197 – “Waingongoro, North Island”, error (*vide* Oliver 1949, *Dom. Mus. Bull.* 15: 151).

Palaeocasuaris haasti Rothschild, 1907: *Extinct Birds*: 220 – Maniototo, Otago.

Palaeocasuaris velox Rothschild, 1907: *Extinct Birds*: 220 – Maniototo, Otago.

Palaeocasuaris elegans Rothschild, 1907: *Extinct Birds*: 220 – Maniototo, Otago.

Megalapteryx didinus (Owen); Oliver 1930, *New Zealand Birds*, 1st edition: 42.

Megalapteryx benhami Archey, 1941: *Bull. Auck. Inst. Museum* 1: 35 – Mt Arthur [Salisbury] Tableland, Nelson.

Remains in Late Pleistocene and Holocene sites and in middens. South Island only; the type locality for *Megalapteryx hamiltoni* must be an error (Oliver 1949). Common in subalpine zones throughout, especially north-west Nelson, Fiordland, and Otago, where deposits are available; rare in eastern and lowland areas (Worthy 1988b, 1989a).

Family †**EMEIDAE** Bonaparte: Emeid Moa

Emeinae Bonaparte, 1854: *Ann. Sci. Nat., Zool., Paris, 4th series. 1*: 152 – Type genus *Emeus* Reichenbach, 1853.

Genus †**Anomalopteryx** Reichenbach

Anomalopteryx Reichenbach, 1853: *Handb. Spec. Ornith. 3*: xxx – Type species (by monotypy) *Dinornis didiformis* Owen = *Anomalopteryx didiformis* (Owen).

Graya Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*(18): 841 – Type species (by subsequent designation) *Dinornis dromaeoides* Owen = *Anomalopteryx didiformis* (Owen).

Anomalornis Hutton, 1897: *Trans. N.Z. Inst. 29*: 543. Unnecessary *nomen novum* for *Anomalopteryx* Reichenbach, 1853.

► †**Anomalopteryx didiformis** (Owen)

Little Bush Moa | Moariki

Dinornis didiformis Owen, 1843: *The Literary Gazette 1402*: 778. *Nomen nudum*.

Dinornis didiformis Owen, 1844 (Mar.): *Proc. Zool. Soc. London 1843* (11): 144. *Nomen nudum*.

Dinornis dromaeoides Owen, 1844 (Mar.): *Proc. Zool. Soc. London 1843* (11): 145. *Nomen nudum*.

Dinornis didiformis Owen, 1844 (Jun.): *Trans. Zool. Soc. London 3*(3): 242 – Poverty Bay.

Dinornis dromaeoides Owen, 1844 (Jun.): *Trans. Zool. Soc. London 3*(3): 253 – Poverty Bay.

Dinornis dromioides Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 46. Unjustified emendation.

Dinornis (Palapteryx) dromioides Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 47. Unjustified emendation.

Dinornis parvus Owen, 1883: *Trans. Zool. Soc. London 11*(8): 233 – Pokororo, Nelson.

Dinornis oweni Haast, 1886: *Trans. Zool. Soc. London 12*(5): 171 – Whangarei.

Anomalopteryx dromaeoides (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 266.

Anomalopteryx didiformis (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 275.

Anomalopteryx parva (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 278.

Anomalopteryx antiquus Hutton, 1892: *Trans. N.Z. Inst. 24*: 124 – Timaru.

Anomalopteryx fortis Hutton, 1893: *Trans. N.Z. Inst. 25*: 9 – Glenmark.

Anomalopteryx antiqua Hutton, 1893: *Trans. N.Z. Inst. 25*: 14. Unjustified emendation.

Anomalornis gracilis Hutton, 1897: *Trans. N.Z. Inst. 29*: 546, pl. 47, fig. A – Opito, near Mercury Bay, Coromandel. Junior secondary homonym of *Dinornis gracilis* Owen, 1854.

Anomalornis didiformis (Owen); Hutton 1897, *Trans. N.Z. Inst. 29*: 547.

Anomalornis owenii (Haast); Hutton 1897, *Trans. N.Z. Inst. 29*: 549. Unjustified emendation.

Anomalopteryx parvus (Owen); Oliver 1930, *New Zealand Birds*, 1st edition: 45.

Pachyornis owenii (Haast); Archey 1941, *Bull. Auck. Inst. Museum 1*: 44. Unjustified emendation.

Remains in Late Pleistocene and Holocene sites and in middens (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007). North Island and South Island: widespread in areas formerly with closed-canopy forests (particularly in cave deposits); rare in Canterbury, Otago, and North Island coastal dunes. Stewart Island / Rakiura: middens only, rare.

Genus †**Pachyornis** Lydekker

Pachyornis Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 316 – Type species (by original designation) *Dinornis elephantopus* Owen = *Pachyornis elephantopus* (Owen).

The holotype cranium of *Palapteryx geranoides* Owen was previously regarded as belonging to *Euryapteryx*. Thus, it was treated as the holotype for the larger of the two species placed in that genus (e.g. Worthy & Holdaway 2002). However, reassessment of the holotype of *Palapteryx geranoides* revealed it to be a *Pachyornis* and, therefore, *Pachyornis geranoides* (Owen) is a senior synonym of *Pachyornis mappini* Archey (Worthy 2005b). Based on this, all North Island records of *Pachyornis* are referable to *Pachyornis geranoides* (Owen), and the larger *Euryapteryx* taxon is *Euryapteryx gravis*.

► †**Pachyornis geranoides** (Owen)

Mantell's Moa | Moa Ruarangi

Palapteryx geranoides Owen, 1848 (13 Apr.): *Proc. Zool. Soc. London 1848* (16): 1, 7. *Nomen nudum*.

Palapteryx geranoides Owen, 1848 (22 Apr.): *Trans. Zool. Soc. London 3*(5): 346. *Nomen nudum*.

Palapteryx geranoides Owen, 1848 (22 Apr.): *Trans. Zool. Soc. London 3*(5): 361, pl. 54, figs 1–3 – Waingongoro, North Island.

Dinornis geranoides (Owen); Owen 1866, *Trans. Zool. Soc. London 5*(5): 395, 402, pl. 65, figs 5, 6; pl. 67, figs 5, 6.

Dinornis curtus; Owen 1871, *Trans. Zool. Soc. London 7*(5): pl. 44, figs 7–10. Not *Dinornis curtus* Owen, 1846.

Anomalopteryx(?) geranoides (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 288.

Anomalopteryx curta (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 281. In part. Unjustified emendation.

Cela geranoides (Owen); Hutton 1891, *New Zealand Journ. Sci. (new series) 1*: 248. In part.

Pachyornis pygmaeus; Hutton 1895, *Trans. N.Z. Inst. 27*: 174, pl. 9. Not *Euryapteryx pygmaeus* Hutton, 1891.

- Dinornis expunctus* Archey, 1927: *Trans. N.Z. Inst.* 58: 152. Unnecessary *nomen novum* for *Palapteryx geranoides* Owen, 1848.
Emeus exilis (Hutton); Oliver 1930, *New Zealand Birds*, 1st edition: 49. In part.
Pachyornis mappini Archey, 1941: *Bull. Auck. Inst. Museum* 1: 41, pls 4–5, 7, 9–12, 15 – Mangaotaki, Piopio.
Pachyornis (Mauiorinis) septentrionalis Oliver, 1949: *Dom. Mus. Bull.* 15: 59, figs 29–37 – Te Pohue, Hawke’s Bay.
Pachyornis (Mauiorinis) mappini (Archey); Oliver 1949, *Dom. Mus. Bull.* 15: 59, figs 35, 37–40.
Pachyornis septentrionalis Oliver; Brodkorb 1963, *Bull. Florida State Museum (Biol. Sci.)* 7(4): 211.
Pachyornis geranoides (Owen); Worthy 2005, *Tuhinga* 16: 40.

Remains in Late Pleistocene and Holocene sites and in middens. North Island only. Considerably larger in Pleistocene than in Holocene, and sexually dimorphic with females larger (Worthy 1987; Huynen *et al.* 2003). The “skeleton” type of *Dinornis oweni* Haast includes a skull (the type) that belongs to *Anomalopteryx*, and its post-cranials; however, the latter are small bones belonging to *Pachyornis geranoides* (Millener 1982). A full history of the taxon is given in Worthy (2005b).

► †***Pachyornis elephantopus*** (Owen)

Heavy-footed Moa | Moa Waewae Taumaha

- Dinornis elephantopus* Owen, 1856 (12 Apr.): *The Athenaeum* 1485: 462 – Awamoa, Otago.
Dinornis elephantopus var. *major* Hutton, 1875: *Trans. N.Z. Inst.* 7: 276, table A – Hamilton Swamp, Otago.
Dinornis queenslandiae De Vis, 1884: *Proc. Roy. Soc. Queensland* 1: 23 – King’s Creek, Queensland, Australia, error for New Zealand midden (*vide* Scarlett 1969, *Mem. Queensland Mus.* 15(3): 211).
Pachyornis elephantopus (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 321.
Pachyornis immanis Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 343 – South Island.
Euryapteryx ponderosus Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 249 – Hamilton Swamp, Otago.
Euryapteryx elephantopus (Owen); Hutton 1892, *Trans. N.Z. Inst.* 24: 135.
Pachyornis rothschildi Lydekker, 1892: *Proc. Zool. Soc. London 1891* (33): 481, pl. 38 – New Zealand.
Pachyornis inhabilis Hutton, 1893: *Trans. N.Z. Inst.* 25: 11 – ?Canterbury.
Pachyornis valgus Hutton, 1893: *Trans. N.Z. Inst.* 25: 12 – Enfield, Canterbury.
Euryapteryx crassa; Benham 1910, *Trans. N.Z. Inst.* 42: 354. Not *Dinornis crassus* Owen, 1846.
Euryapteryx immanis (Lydekker); Lambrecht 1933, *Handb. Palaeornithologie*: 150.
Pachyornis (Pounamua) murihiku Oliver, 1949: *Dom. Mus. Bull.* 15: 59 – Greenhills dunes, Southland.
Pachyornis murihiku Oliver, 1949: *Dom. Mus. Bull.* 15: 67 – Greenhills dunes, Southland.
Pachyornis queenslandiae (De Vis); Oliver 1949, *Dom. Mus. Bull.* 15: 80.
Dromiceius queenslandiae (De Vis); A.H. Miller 1963, *Rec. South Austr. Museum* 14(3): 417.

In natural deposits and middens (Benham 1910 [not *Euryapteryx*]; Worthy 1998c): Late Pleistocene and Holocene. South Island, Stewart Island / Rakiura. There are no North Island records for this species (Worthy & Holdaway 2002, and references therein; *contra* Scarlett 1968; Millener 1981a).

► †***Pachyornis australis*** Oliver

Crested Moa | Moa Koukou

- Mesopteryx* sp. β Parker, 1895: *Trans. Zool. Soc. London* 13(11): 378.
Pachyornis (Pachyornis) australis Oliver, 1949: *Dom. Mus. Bull.* 15: 59.
Pachyornis australis Oliver, 1949: *Dom. Mus. Bull.* 15: 70 – Salisbury Tableland, Nelson.
Pachyornis elephantopus; Cracraft 1976, *Smithsonian Contrib. Paleobiology* 27: 196. Not *Dinornis elephantopus* Owen, 1856.

Remains from Late Pleistocene and Holocene sites. South Island only (Worthy 1989a,b). The youngest dated remains were AD 1396–1442 (Rawlence & Cooper 2013). Subalpine areas mainly, but also Southland dunes. As yet, recognised from few sites; not yet verified from midden sites.

Genus †*Emeus* Reichenbach

- Emeus* Reichenbach, 1853: *Handb. Spec. Ornith.* 3: xxx – Type species (by monotypy) *Dinornis crassus* Owen = *Emeus crassus* (Owen).
Syornis Reichenbach, 1853: *Handb. Spec. Ornith.* 3: xxx – Type species (by monotypy) *Dinornis casuarinus* Owen = *Emeus crassus* (Owen).
Meionornis Haast, 1874: *Trans. N.Z. Inst.* 6: 426 – Type species (by subsequent designation) *Dinornis casuarinus* Owen = *Emeus crassus* (Owen).
Mesopteryx Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 248 – Type species (by monotypy) *Dinornis huttoni* Owen = *Emeus crassus* (Owen).

► †***Emeus crassus*** (Owen)

Eastern Moa | Moa Mōmona

- Dinornis crassus* Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 46 – Waikouaiti, Otago.
Dinornis casuarinus Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 47 – Waikouaiti, Otago.
Emeus crassus (Owen); Reichenbach 1850, *Avium Syst. Nat.*: 30.
Syornis casuarinus (Owen); Reichenbach 1850, *Avium Syst. Nat.*: 30.
Dinornis rheides Owen, 1870: *Trans. Zool. Soc. London* 7(2): 132 – Awamoa, Otago.
Dinornis huttoni Owen, 1879: *Extinct Wingless Birds New Zealand*: 430 – Hamilton Swamp, Otago.
Anomalopteryx casuarina (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 257.

Syornis crassus (Owen); Hutton 1891, *New Zealand Journ. Sci.* (new series) 1(6): 249.
Mesopteryx didinus; Hutton 1892, *Trans. N.Z. Inst.* 24: 129. In part.
Mesopteryx didina; Hutton 1893, *Trans. N.Z. Inst.* 25: 13. Not *Dinornis didinus* Owen, 1883.
Mesopteryx casuarina (Owen); Parker 1895, *Trans. Zool. Soc. London* 13(11): 377.
Mesopteryx, species γ Parker, 1895: *Trans. Zool. Soc. London* 13(11): 378 – Hamilton Swamp, Otago.
Meionornis didinus; Hutton 1896, *Trans. N.Z. Inst.* 28: 636. Not *Dinornis didinus* Owen, 1883.
Meionornis casuarinus (Owen); Hutton 1896, *Trans. N.Z. Inst.* 28: 636.
Euryapteryx crassus (Owen); Hutton 1896, *Trans. N.Z. Inst.* 28: 638.
Megalapteryx huttoni (Owen); Rothschild 1907, *Extinct Birds*: 199.
?*Cela rheides* (Owen); Rothschild 1907, *Extinct Birds*: 207.
Cela casuarinus (Owen); Rothschild 1907, *Extinct Birds*: 207.
Emeus casuarinus (Owen); Oliver 1930, *New Zealand Birds*, 1st edition: 48.
Emeus huttonii (Owen); Oliver 1930, *New Zealand Birds*, 1st edition: 49. Unjustified emendation.

Remains in Late Pleistocene and Holocene deposits and in middens. South Island; east of the Southern Alps / Kā Tiritiri o te Moana only, and always in lowland areas (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007).

Genus †*Euryapteryx* Haast

Cela Reichenbach, 1853: *Handb. Spec. Ornith.* 3: xxx – Type species (by monotypy) *Dinornis curtus* Owen = *Euryapteryx curtus* (Owen). Junior homonym of *Cela* Moehring, 1758.
Celeus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43(18): 841. *Nomen novum* for *Cela* Reichenbach, 1853. Junior homonym of *Celeus* Boie, 1831.
Euryapteryx Haast, 1874: *Trans. N.Z. Inst.* 6: 427 – Type species (by subsequent designation) *Dinornis gravis* Owen = *Euryapteryx curtus gravis* (Owen).
Zelornis Oliver, 1949: *Dom. Mus. Bull.* 15: 117 – Type species (by original designation) *Euryapteryx exilis* Hutton = *Euryapteryx curtus* (Owen).

Euryapteryx curtus (Owen, 1846) and *Euryapteryx gravis* (Owen, 1870) were considered to be full species by the Checklist Committee (2010); however, following a review by Worthy & Scofield (2012), these taxa are now considered to be subspecies of *Euryapteryx curtus*.

► †*Euryapteryx curtus* (Owen)

Stout-legged Moa | Moa Hakahaka

†*Euryapteryx curtus curtus* (Owen)

Coastal Moa

Dinornis curtus Owen, 1846: *Proc. Zool. Soc. London* 1846(14): 48 – North Island.
Cela curtus (Owen); Reichenbach 1850, *Avium Syst. Nat.*: 30.
Anomalopteryx curta (Owen); Lydekker 1891, *Cat. Fossil Birds Brit. Museum*: 46. Unjustified emendation.
Mesopteryx, species α Parker, 1895: *Trans. Zool. Soc. London* 13(11): 378 – Te Aute, Hawke's Bay.
Euryapteryx exilis Hutton, 1897: *Trans. N.Z. Inst.* 29: 552 – Wangachu, South Taranaki.
Anomalopteryx curtus (Owen); Oliver 1930, *New Zealand Birds*, 1st edition: 46.
Euryapteryx curtus (Owen); Archey 1941, *Bull. Auck. Inst. Museum* 1: 60.
Euryapteryx tane Oliver, 1949: *Dom. Mus. Bull.* 15: 105 – Doubtless Bay.
Zelornis exilis (Hutton); Oliver 1949, *Dom. Mus. Bull.* 15: 121.
Euryapteryx curtus (Owen); Worthy 2005, *Tuhinga* 16: 57.
Euryapteryx curtus curtus (Owen); Worthy & Scofield 2012, *New Zealand Journ. Zool.* 39: 131.

Remains in many Late Pleistocene and Holocene deposits, and in middens. A few mid-Nukumaru records (2.1 Ma; Worthy *et al.* 1991). North Island and Great Barrier Island only. Common in former shrubland communities, particularly of dunes. Shows size-variation with geological age and sex (females larger; Worthy 1987; Huynen *et al.* 2003).

†*Euryapteryx curtus gravis* (Owen)

Stout-legged Moa | Moa Hakahaka

Dinornis gravis Owen, 1870: *Trans. Zool. Soc. London* 7(2): 141 – Kakanui River, Otago.
Euryapteryx gravis (Owen); Haast 1874, *Trans. N.Z. Inst.* 6: 426.
Euryapteryx pygmaeus Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 249 – Takaka Hill, Nelson.
Emeus gravipes Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 297 – Kakanui River, Otago.
Euryapteryx compacta Hutton, 1893: *Trans. N.Z. Inst.* 25: 6 – Enfield, Canterbury.
Emeus crassus; Parker 1895, *Trans. Zool. Soc. London* 13(11): 379. Not *Dinornis crassus* Owen, 1846.
Emeus, species α Parker, 1895: *Trans. Zool. Soc. London* 13(11): 379 – Shag Point, Otago.
Emeus, species β Parker, 1895: *Trans. Zool. Soc. London* 13(11): 379 – Glenmark, Canterbury.
Emeus, species γ Parker, 1895: *Trans. Zool. Soc. London* 13(11): 380 – Hamilton Swamp, Otago.
Euryapteryx ponderosa; Hamilton 1898, *Trans. N.Z. Inst.* 30: 445. Not *Euryapteryx ponderosus* Hutton, 1891.
Emeus boothi Rothschild, 1907: *Extinct Birds*: 210. Unnecessary *nomen novum* for *Emeus*, species α Parker, 1895.
Emeus haasti Rothschild, 1907: *Extinct Birds*: 210. Unnecessary *nomen novum* for *Emeus*, species β Parker, 1895.
Emeus parkeri Rothschild, 1907: *Extinct Birds*: 210. Unnecessary *nomen novum* for *Emeus*, species γ Parker, 1895.

Euryapteryx kuranui Oliver 1930, *New Zealand Birds*, 1st edition: 52 – Castlepoint, Wairarapa.
Euryapteryx gravipes (Lydekker); Oliver 1930, *New Zealand Birds*, 1st edition: 53.
Zelornis haasti (Rothschild); Oliver 1949, *Dom. Mus. Bull.* 15: 125.
Euryapteryx geranoides; Checklist Committee 1990, *Checklist Birds N.Z.*: 4. Not *Palapteryx geranoides* Owen, 1848.
Euryapteryx curtus (Owen); Tennyson & Martinson 2006, *Extinct Birds of New Zealand*: 36. In part.
Euryapteryx curtus gravis (Owen); Worthy & Scofield 2012, *N.Z. Journ. Zool.* 39: 131.

Remains in many Late Pleistocene and Holocene deposits; also in middens. A few mid-Nukumaruan records (2.1 Ma; Worthy *et al.* 1991). South Island only. Most abundant in drier eastern regions in the Holocene (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007).

Taxon rediagnosed by Worthy (1992) and Worthy & Holdaway (2002). Until the recognition that the type of *Palapteryx geranoides* was a *Pachyornis* (Worthy 2005b), the stout-legged moa had been referred to *Euryapteryx geranoides* (Owen), since Cracraft (1976) synonymised *Dinornis gravis* Owen with it.

Family †DINORNITHIDAE Bonaparte: Giant Moa

Dinornithidae Bonaparte, 1849: *Consp. Syst. Ornith.*: 1 – Type genus *Dinornis* Owen, 1843.

The Checklist Committee (2010) wrongly listed the author of Dinornithidae as Bonaparte, 1853. The correct author is Bonaparte (1849).

Genus †*Dinornis* Owen

Dinornis Owen, 1843: *Proc. Zool. Soc. London 1843* (11): 10 – Type species (by monotypy) *Dinornis novaezealandiae* Owen.
Megalornis Owen, 1843: *Proc. Zool. Soc. London 1843* (11): 19. Unnecessary *nomen novum* for *Dinornis* Owen, 1843. Junior homonym of *Megalornis* G.R. Gray, 1841.
Palapteryx Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 46 – Type species (by subsequent designation) *Dinornis ingens* Owen = *Dinornis novaezealandiae* Owen.
Movia Reichenbach, 1853: *Handb. Spec. Ornith.* 3: xxx – Type species (by monotypy) *Dinornis ingens* Owen = *Dinornis novaezealandiae* Owen.
Moa Reichenbach, 1853: *Handb. Spec. Ornith.* 3: xxx – Type species (by monotypy) *Dinornis giganteus* Owen = *Dinornis novaezealandiae* Owen.
Owenia G.R. Gray, 1855: *Cat. Genera Subgen. Birds Brit. Mus.*: 152 – Type species (by original designation) *Dinornis struthoides* Owen = *Dinornis novaezealandiae* Owen.
Tylopteryx Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 247 – Type species (by subsequent designation) *Dinornis gracilis* Owen = *Dinornis novaezealandiae* Owen.

The revision by Bunce *et al.* (2003), supported by data in Huynen *et al.* (2003), revealed that there were only two species of *Dinornis* in New Zealand, one in the North Island and one in the South Island. In each case, all small birds (formerly assigned to *D. struthoides*) were shown to be males and all large ones (hitherto *D. novaezealandiae* and *D. giganteus*) females. Geographic variation, with size-depression in wetter regions with closed forest, explains size variation (Bunce *et al.* 2003; Worthy *et al.* 2005). The following taxonomy and nomenclature follows Bunce *et al.* (2003).

► †*Dinornis novaezealandiae* Owen

North Island Giant Moa | Kuranui

Dinornis Novae-Zealandiae Owen, 1843 (Jul.): *Proc. Zool. Soc. London 1843* (11): 8 – Poverty Bay.
Dinornis giganteus Owen, 1843 (2 Dec.): *The Literary Gazette* 1402: 778 – Poverty Bay.
Dinornis struthoides Owen, 1843 (2 Dec.): *The Literary Gazette* 1402: 778. *Nomen nudum*.
Dinornis ingens Owen, 1844: *Trans. Zool. Soc. London* 3(3): 247 – Poverty Bay.
Dinornis struthoides Owen, 1844: *Trans. Zool. Soc. London* 3(3): 244 – Poverty Bay.
Dinornis gigas Owen, 1846: *Trans. Zool. Soc. London* 3(4): 314, pl. 39. Unjustified emendation.
Dinornis gracilis Owen, 1854: *The Athenaeum* 1412: 1402 – Opito, Coromandel.
Palapteryx ingens (Owen); Haast 1869, *Trans. N.Z. Inst.* 1(8): 84.
Dinornis struthioides Lydekker, 1891; *Cat. Fossil Birds Brit. Museum*: 242. Unjustified emendation.
Dinornis firmus Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 247 – Poverty Bay.
Dinornis excelsus Hutton, 1891: *New Zealand Journ. Sci.* (new series) 1(6): 247 – Te Aute, Hawke's Bay.
Dinornis dromioides; Oliver 1930, *New Zealand Birds*, 1st edition: 41. Not *Dinornis dromioides* Owen, 1846.
Dinornis hercules Oliver, 1949: *Dom. Mus. Bull.* 15: 174 – Coonoor, northern Wairarapa.
Dinornis gazella Oliver, 1949: *Dom. Mus. Bull.* 15: 166 – Te Aute, Hawke's Bay.
Dinornis novaezealandiae Owen; Checklist Committee 1990, *Checklist Birds N.Z.*: 6.
Dinornis novaezealandiae Owen; Tennyson & Martinson 2006, *Extinct Birds of New Zealand*: 22. Unjustified emendation (see Murdoch 2008, *Notornis* 55: 228).

Remains in many Late Pleistocene and Holocene cave, swamp, and dune sites, and in middens. North Island, including Great Barrier Island / Aotea (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007). One mid-Nukumaruan record (1.8 Ma; Worthy *et al.* 1991).

► †***Dinornis robustus*** Owen

South Island Giant Moa | Moa Nunui

Dinornis ingens var. *robustus* Owen, 1846: *Proc. Zool. Soc. London 1846* (14): 48 – Waikouaiti, Otago.

Palapteryx robustus (Owen); Owen 1851, *Trans. Zool. Soc. London* 4(1): 2, pl. 1, fig. 1.

Dinornis maximus Haast, 1869: *Trans. N.Z. Inst. 1*: 87 – Glenmark, Canterbury.

Dinornis altus Owen, 1879: *Extinct Wingless Birds New Zealand*: 361 – South Island.

Palapteryx plenus Hutton, 1891: *New Zealand Journ. Sci. (new series)* 1(6): 248 – ?South Island.

Dinornis validus Hutton, 1891: *New Zealand Journ. Sci. (new series)* 1(6): 247 – Glenmark, Canterbury.

Dinornis torosus Hutton, 1891: *New Zealand Journ. Sci. (new series)* 1(6): 247 – Takaka Hill, Nelson.

Dinornis potens Hutton, 1891: *New Zealand Journ. Sci. (new series)* 1(6): 247 – Heathcote, Canterbury.

Dinornis strenuus Hutton, 1893: *Trans. N.Z. Inst. 25*: 8 – Enfield, Canterbury.

Dinornis robustus (Owen); Bunce *et al.* 2003; *Nature* 425: 174.

Remains in many Late Pleistocene and Holocene cave, dune, and swamp sites, and in middens. South Island, including D'Urville Island; Stewart Island / Rakiura. Widespread. Largest individuals were in lowlands and eastern regions (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007).

Order **APTERYGIFORMES**: Kiwi

The Checklist Committee (2010) placed kiwi in the order Casuariiformes, as they were then considered sister to cassowaries + emus (A. Cooper *et al.* 1992, 2001; A. Cooper 1997; Haddrath & Baker 2001). More recent studies have revealed kiwi to be sister to the extinct elephant birds (Aepyornithidae) from Madagascar (M. Phillips *et al.* 2010; Mitchell, Llamas *et al.* 2014; Grealy *et al.* 2017; Yonezawa *et al.* 2017), and most authorities recognise seven orders within the Palaeognathae. We follow Cracraft (2013), Dickinson & Remsen (2013), Clements *et al.* (2019), de Moya *et al.* (2019), Urantówka *et al.* (2020), and F. Gill *et al.* (2021) in returning kiwi in their own order (Apterygiformes), which was the recommendation of the Checklist Committee in 1953, 1970, and 1990.

Family **APTERYGIDAE** G.R. Gray: Kiwi

Apteryginae G.R. Gray, 1840: *List Gen. Birds* (1st edition): 63 – Type genus *Apteryx* Shaw, 1813.

Genus **Apteryx** Shaw

Apteryx Shaw, 1813: *Nat. Miscell.* 24(286): pls 1057–1060 – Type species (by monotypy) *Apteryx australis* Shaw.

Apternyx Swainson, 1837: *Nat. Hist. Classif. Birds 1*: 119. Unjustified emendation.

Apternix Agassiz, 1846: *Nomen. Zool. Index Univ. Aves 2*. Unjustified emendation.

Pseudapteryx Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 218 – Type species (by monotypy) *Pseudapteryx gracilis* Lydekker = *Apteryx owenii* Gould.

Stictapteryx Iredale & Mathews, 1926: *Bull. Brit. Ornith. Club.* 46: 76 – Type species (by original designation) *Apteryx owenii* Gould.

Kiwi Verheyen, 1960: *Bull. Roy. Soc. d'Anvers 15*: 10. Unnecessary nomen novum for *Stictapteryx* Iredale & Mathews, 1935.

Kiwi were once throughout the main islands of New Zealand: North, Little Barrier / Hauturu, Great Barrier / Aotea, South, D'Urville, and Stewart / Rakiura Islands; probably originally in all vegetated habitats (Worthy & Holdaway 2002). Increasingly restricted since European settlement to residual forests and adjacent scrub and rough farmland. North Island brown kiwi (*Apteryx mantelli*), but not other forms, have colonised exotic forests (Germano *et al.* 2018).

Since compilation of the 1990 Checklist (Checklist Committee 1990), several studies have been published on the molecular biology of kiwi (e.g. A. Baker *et al.* 1995; Burbidge *et al.* 2003; Shepherd & Lambert 2008; Shepherd *et al.* 2012; Weir *et al.* 2016; Scofield *et al.* 2021; Shepherd, Tennyson *et al.* 2021; Bemmels *et al.* 2021). Kiwi, particularly brown kiwi, are marked by mostly allopatric genetic diversity in both modern and extinct populations. This is not closely associated with morphological differences, making delineation of species limits difficult (Shepherd & Lambert 2008). For brown kiwi we follow Holdaway *et al.* (2001) and Tennyson, Palma *et al.* (2003) in recognising a North Island species (*A. mantelli*) and two extant South Island species (*A. rowi* and *A. australis* – the latter having two subspecies). Several historical names were not based on localised specimens or adequate descriptions and are unable to be referred to known taxa. These include:

Dromiceius Novae-Zelandiae, Lesson, 1828: *Manuel d'Ornith.* 2: 210 – Bay of Islands (and also *Apteryx australis novae-zelandiae* (Lesson), *A. a. novaezealandiae* [sic] (Lesson), and *Dromiceius novaezealandiae* – see Mathews 1935 and 1937a, and Lee & Bruce 2019).

Apteryx major Ellman, 1861: *The Zoologist 19*: 7468 – New Zealand.

Apteryx fusca Potts, 1873: *Trans. N.Z. Inst.* 5: 196 – West Coast. Not *Apteryx fusca* Rowley, 1875.

The authorship of *Apteryx* and *Apteryx australis* is restricted to Shaw, following ICZN (1916), and as supported by Dickinson *et al.* (2006). *Apteryx haastii* Potts, 1872 was used for great spotted kiwi until 2021, when the two syntype specimens for *A. haastii* were shown to be hybrids between *A. owenii* and *A. rowi* (Shepherd, Tennyson *et al.* 2021).

► **Apteryx mantelli** Bartlett

North Island Brown Kiwi | Kiwi-nui

Apteryx Mantelli Bartlett, 1852: *Proc. Zool. Soc. London 1850* (18): 275, pl. 30, figs 3–4; pl. 31, fig. 2 – North Island, restricted to Ohakune (*fide* Shepherd *et al.* 2009, *Bull. Brit. Ornith. Club* 129: 197).

Apteryx mantellii Bartlett; G.R. Gray 1862, *Ibis* 4: 233. Unjustified emendation.

Apteryx australis var. *Mantelli* Bartlett; Finsch 1872, *Journ. für Ornith.* 20: 263.

Apteryx bulleri Sharpe, 1888: *Proc. Wellington Phil. Soc.*: 6 – North Island.

Apteryx australis mantelli Bartlett; Checklist Committee 1953, *Checklist N.Z. Birds*: 13.

Apteryx mantelli Bartlett; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 125, 175.

Apteryx apteryx mantelli Bartlett; Grealy, Phillips, Miller, Gilbert, Rouillard, Lambert, Bunce & Haile 2017, *Mol. Phyl. Evol.* 109: 154. Error for “*Apteryx australis mantelli* Bartlett”.

Apteryx mantelli is treated as a full species because of the marked differences in plumage noted in its original description and significant genetic differences (A. Baker *et al.* 1995; Burbidge *et al.* 2003). In this, we follow Holdaway *et al.* (2001), Worthy & Holdaway (2002), and Tennyson, Palma *et al.* (2003). Originally recorded throughout the North Island. Now restricted to isolated and declining populations in Northland, Taranaki, western slopes of Ruapehu, King Country, inland northern Hawke's Bay, Urewera, and Coromandel; introduced to Ponui, Kawau, Kapiti (1910–40), and Hauturu

/ Little Barrier Islands (Miskelly & Powlesland 2013; Germano *et al.* 2018). Birds introduced to the latter were from Taupo in 1913 (Oliver 1955: 49), but lice from Hauturu / Little Barrier Island birds indicate survival of the former resident population reported by Reischek (1887) (see Palma 1991). Genetic studies have revealed a high degree of genetic differentiation between remnant populations (A. Baker *et al.* 1995; Burbidge *et al.* 2003; Shepherd & Lambert 2008; Weir *et al.* 2016; Bemmels *et al.* 2021). Common in Late Pleistocene and Holocene deposits and in middens throughout much of the North Island (Worthy & Holdaway 2002). However, mtDNA from bones from Martinborough (Wairarapa) and Lake Poukawa (Hawke's Bay) clustered with *A. rowi* (Shepherd & Lambert 2008). This suggests that the now extinct brown kiwi populations from the south of the North Island may have been *A. rowi* not *A. mantelli*.

► ***Apteryx rowi*** Tennyson, Palma, Robertson, Worthy & Gill

Rowi | Okarito Brown Kiwi

Apteryx australis australis Shaw & Nodder [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 13. In part.

Apteryx sp. Okarito Form; Worthy & Holdaway 2002, *Lost World of Moa*: 219.

Apteryx rowii Burbidge, Colbourne, Robertson & Baker, 2003 (Apr.): *Conservation Genetics* 4: 172, 176. *Nomen nudum*.

Apteryx rowii Marsh, 2003 (5 Jul.): *New Zealand Listener* 5: 29. *Nomen nudum*.

Apteryx rowi Tennyson, Palma, Robertson, Worthy & Gill, 2003: *Rec. Auck. Inst. Museum* 40: 57 – South Okarito Forest, South Westland.

Until recently, confined to Okarito, South Island. Brown kiwi have been recorded from Okarito since at least 1867 under the names of roa, rohi, and rowi, and have been recognised as distinct from South Island brown kiwi since the 1950s (for nomenclatural history see Tennyson, Palma *et al.* 2003). Genetic studies of mtDNA supported morphological differences and suggested that the Okarito brown kiwi is the sister taxon of the North Island brown kiwi (A. Baker *et al.* 1995; Burbidge *et al.* 2003; Shepherd & Lambert 2008; Weir *et al.* 2016; Bemmels *et al.* 2021), and not closely related to *A. australis*. Closer relationship to *A. mantelli* than to *A. australis* is also supported by evidence from lice (Palma & Price 2004). Endangered; c. 450 birds remaining in 2018 (Germano *et al.* 2018). Translocated to Mana and Blumine Islands during 2010–12 (Miskelly & Powlesland 2013).

Studies of ancient mtDNA sequences (cytochrome-*b*, control region, derived from bones found in natural deposits) indicates that extinct brown kiwi populations north of Okarito on the South Island West Coast (Buller, Takaka Hill) and from Martinborough (Wairarapa) and Lake Poukawa (Hawke's Bay), in the south-east North Island, form a single clade with extant *A. rowi* that is sister to remaining North Island brown kiwi (Shepherd & Lambert 2008; Weir *et al.* 2016). This suggests that *A. rowi* had a former range from Okarito, up the South Island West Coast and into the southern North Island.

[***Apteryx haastii*** Potts

Potts' Kiwi

Apteryx haastii Potts, 1872 (Jan.): *Ibis* 2 (3rd series): 35 – West Coast. *Nomen protectum* (*vide* Palma *et al.* 2003, *Tuhinga* 14: 7).

Apteryx Haastii Potts, 1872 (May): *Trans. N.Z. Inst.* 4: 204 – Westland.

Apteryx Haasti Potts; Finsch 1872, *Journ. für Ornith.* 20: 271. Unjustified emendation.

Apteryx haasti Potts; Checklist Committee 1953, *Checklist N.Z. Birds*: 13. Unjustified emendation.

Apteryx haastii Potts; Checklist Committee 1980, *Notornis (Suppl.)* 27: 4.

Potts' kiwi was named based on two specimens collected in South Westland in 1870–1871 (Potts 1872a). These birds and others that look like them are now considered to be hybrids between rowi (*Apteryx rowi*) and little spotted kiwi (*A. owenii*) (see Shepherd, Tennyson *et al.* 2021). Potts' kiwi was long confused with great spotted kiwi (*Apteryx maxima*). A pair released on Allports Island, Queen Charlotte Sound have apparently produced at least one surviving offspring (Miskelly & Powlesland 2013; Shepherd, Tennyson *et al.* 2021).]

► ***Apteryx australis*** Shaw

Southern Brown Kiwi | Tokoeka

Southern brown kiwi was formerly abundant throughout Stewart Island / Rakiura and at low elevations in southern and south-eastern South Island; however, its South Island range had contracted to Fiordland by 1893 (Marchant & Higgins 1990; Weir *et al.* 2016; Scofield *et al.* 2021). Several studies combining modern and ancient DNA sequences have demonstrated that populations of *A. australis* at Haast, Fiordland, and Stewart Island, and extinct populations in Southland and east of the Southern Alps / Kā Tiritiri o te Moana formed a single clade with deep diversity (Shepherd & Lambert 2008; Weir *et al.* 2016; Scofield *et al.* 2021; Undin *et al.* 2021). These include the populations of “large” kiwi from eastern areas that Worthy (1997d, 1998b) found to have significantly smaller and stouter leg bones than extant *A. australis*. The Stewart Island / Rakiura birds form a monophyletic clade divergent from South Island birds (Burbidge *et al.* 2003; Shepherd & Lambert 2008; Weir *et al.* 2016; Scofield *et al.* 2021; Bemmels *et al.* 2021), supporting the subspecies status attributed them below. Also present on Secretary, Resolution, Cooper, and Long Islands, Fiordland, with introduced populations on Parrot and Indian Islands, Dusky Sound (Miskelly & Powlesland 2013). Introduced to Kapiti Island where the stock is now hybrid between *A. australis* and *A. mantelli* (Checklist Committee 1990). Scofield *et al.* (2021) demonstrated that the type specimen of *Apteryx australis* must have been collected on Stewart Island / Rakiura. This means that the Stewart Island brown kiwi (formerly known as *A. australis lawryi*) becomes the nominate subspecies. There are no scientific names available for the brown kiwi found in Fiordland and near Haast.

Apteryx australis subsp.**South Island Brown Kiwi | Tokoeka**

- Apteryx australis*; Hutton 1871, *Cat. Birds N.Z.*: 23. Not *Apteryx australis* Shaw.
Apteryx australis australis Shaw & Nodder [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 13. Not *Apteryx australis* Shaw.
Apteryx “eastern South Is.”; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28: 125.
Apteryx “East South Is.”; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28: 175.
Apteryx (Eastern South Island); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28: 185.
Apteryx sp. Eastern Kiwi; Worthy & Holdaway 2002, *Lost World of Moa*: 220.
Apteryx australis “Haast”; Miskelly *et al.* 2008, *Notornis* 55: 126.
Apteryx australis (Northern Fiordland); Miskelly *et al.* 2008, *Notornis* 55: 127.
Apteryx australis australis; Checklist Committee 2010, *Checklist N.Z. Birds*: 21. Not *Apteryx australis* Shaw.
Apteryx australis “northern Fiordland”; Robertson *et al.* 2013, *Conservation status New Zealand birds, 2012*: 2.
Apteryx australis “northern”; Robertson *et al.* 2017, *Conservation status New Zealand birds, 2016*: 5.
Apteryx australis “southern Fiordland”; Robertson *et al.* 2021, *Conservation status Aotearoa New Zealand birds, 2021*: 6.
Apteryx australis “Northern Fiordland”; Robertson *et al.* 2021, *Conservation status Aotearoa New Zealand birds, 2021*: 23.

South Island; Haast River to Arawata River, and Fiordland (C. Robertson *et al.* 2007). Disjunct populations, the result of postulated recent and ongoing population declines, are treated as distinct management units by the Department of Conservation (Burbidge *et al.* 2003; Weir *et al.* 2016; Germano *et al.* 2018; Bemmels *et al.* 2021; Scofield *et al.* 2021; Shepherd, Tennyson *et al.* 2021; Undin *et al.* 2021). Holocene remains widespread throughout the South Island (Worthy 1997d, 1998b; Worthy & Holdaway 2002).

Apteryx australis australis Shaw**Stewart Island Brown Kiwi | Rakiura Tokoeka**

- Apteryx australis* Shaw, 1813: *Nat. Miscell.* 24(286): pls 1057–1060 – New Zealand, restricted to Stewart Island / Rakiura (*vide* Scofield *et al.* 2021, *Cons. Gen.* doi: 10.1007/s10592-021-01349-y: 5).
Apteryx australis (Shaw); Swainson 1837, in D. Lardner, *The Cabinet Cyclopaedia* 2(92): 346. Unjustified emendation.
Apteryx maxima Buller, 1891: *Trans. N.Z. Inst.* 24: 602 – Stewart Island. Junior primary homonym of *Apteryx maxima* Sclater & Hochstetter, 1861.
Apteryx lawryi Rothschild, 1893: *Bull. Br. Ornith. Club* 1: 61 – Stewart Island.
Apteryx Australis Shaw; Mathews 1930, *Emu* 29: 278.
Apteryx australis lawryi Rothschild; Checklist Committee 1953, *Checklist N.Z. Birds*: 13.

Stewart Island / Rakiura (main island, and Ulva Island in Paterson Inlet / Whaka a Te Wera), in forest and scrub; widespread and locally common (Marchant & Higgins 1990). Several midden records.

► Apteryx owenii Gould**Little Spotted Kiwi | Kiwi Pukupuku**

- Apteryx Owenii* Gould, 1847 (12 Jun.): *The Literary Gazette* 1586: 433 – Middle [South Island], restricted to Nelson District (*vide* Oliver 1930, *New Zealand Birds*, 1st edition: 61).
Apteryx Oweni Gould; Anon. 1870, *Cat. Colonial Mus.*: 74. Unjustified emendation.
Apteryx mollis Potts, 1873: *Trans. N.Z. Inst.* 5: 196 – Martins Bay.
Apteryx fusca Rowley, 1875: *Ornith. Miscellany* 2: 8. South Island. *Nomen novum* for “dark coloured *A. owenii*”.
Apteryx oweni Gould; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.
Pseudapteryx gracilis Lydekker, 1891: *Cat. Fossil Birds Brit. Museum*: 218, fig. 53A – New Zealand.
Apteryx oweni occidentalis Rothschild, 1893: *Bull. Br. Ornith. Club* 1: 61 – “west coast of the South and North Islands”, restricted to Dusky Sound, Fiordland (*vide* Hartert 1927, *Novit. Zool.* 34: 31). Unjustified emendation.
Apteryx occidentalis Rothschild; Buller 1896, *Trans. N.Z. Inst.* 28: 358.
Apteryx owenii owenii Gould; Mathews & Iredale 1913, *Ibis* 1 (10th series): 205.
Stictapteryx owenii iredalei Mathews, 1935: *Bull. Br. Ornith. Club* 55: 180 – North Island.
Apteryx oweni Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 13. Unjustified emendation.
Kiwi owenii (Gould); Verheyen 1960, *Bull. Roy. Soc. d’Anvers* 15: 10.
Apteryx owenii Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 8.

On European settlement, rare in the North Island: a specimen in BMNH from Mount Hector, Tararua Range (Buller 1876a); reported from Wangapopo Range, near Pirongia, King Country, by Reischek in Feb. 1882 (Reischek 1930: 177; the species name *A. owenii* was also recorded in the original German text, i.e. Reischek 1924). On European settlement, common in the South Island throughout forest areas of Marlborough, Nelson, Westland, and Fiordland (e.g. Potts 1873). Rapidly declined in the late 19th Century. Few verified mainland records after 1930 (Ramstad *et al.* 2021). An adult breeding female from Banjo Creek, Westhaven Inlet, Jul. 1978 (NMNZ OR.023036; Worthy & Holdaway 1994: 307) and an adult female from Smyth River, South Westland, 1978 (NMNZ OR.023043) are *A. owenii*, not *A. maxima* (*contra* Marchant & Higgins 1990: 81). *A. owenii* also survived on D’Urville Island until the last birds were transferred to Long Island, Queen Charlotte Sound, in 1982 and 1987 (Ramstad *et al.* 2021). Common on Kapiti Island, where introduced in 1912 (Miskelly & Powlesland 2013; Ramstad *et al.* 2021). Kapiti birds have different lice from those of all mainland skins examined (Pilgrim & Palma 1982; Marchant & Higgins 1990: 85). Successfully transferred in the 1980s from Kapiti to Red Mercury (Whakau) Island (Coromandel), Hen Island / Taranga (Hauraki Gulf) and Long Island (Marlborough Sounds). In 1993 transferred from Kapiti to Tiritiri Matangi Island (Hauraki Gulf), in 2000 to Karori Sanctuary / Zealandia,

Wellington, in 2008 to Chalky Island, Fiordland, in 2009 to Motuihe Island (Hauraki Gulf), and in 2015 to Anchor Island, Fiordland (Miskelly & Powlesland 2013; H. Robertson 2015). Frequent in Late Pleistocene and Holocene deposits, and in middens, throughout North and South Islands (Worthy & Holdaway 2002). Bruce & McAllan (1990), as first revisers, selected *The Literary Gazette* as the original publication of the name *Apteryx owenii*. See comments under rowi (*A. rowi*) regarding the status of Potts' kiwi (*A. haastii*).

► ***Apteryx maxima* Sclater & Hochstetter**

Great Spotted Kiwi | Roroa

Apteryx maxima Sclater & Hochstetter, 1861: *The Natural History Review*: 506 – near Charleston, West Coast.

Apteryx maxima Verreaux [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74.

Apteryx maxima Hutton, 1871: *Cat. Birds N.Z.*: 23, 75 – Westland. Junior primary homonym and junior synonym of *Apteryx maxima* Sclater & Hochstetter, 1861.

Apteryx maximus Verreaux [sic]; Rothschild 1893, *Ibis* 5 (6th series): 576.

Apteryx grandis Grieve, 1913: *Proc. Roy. Phys. Soc. Edinburgh* 19: 63 – South Island.

Apteryx owenii maxima Hutton; Mathews 1935, *Bull. Br. Ornith. Club* 55: 180.

Apteryx maxima Sclater & Hochstetter, 1861; Palma, Worthy & Tennyson 2003, *Tuhinga* 14: 7. As *nomen oblitum*.

Apteryx haastii of authors. Not *Apteryx haastii* Potts, 1872: *Ibis* 2 (3rd series): 35 – West Coast (= hybrid between *A. owenii* and *A. rowi*; Shepherd *et al.* 2021).

Apteryx maxima Sclater & Hochstetter, 1861; Shepherd, Tennyson, Robertson, Colbourne & Ramstad 2021, *Avian Research* 12:24: 11. Resurrected from *nomen oblitum*.

North-western South Island (C. Robertson *et al.* 2007). Extends across the divide (in high altitude beech forest) at various points between Arthur's Pass and the Hope River (Germano *et al.* 2018). Bones in deposits are largely indeterminate, as they are generally morphologically inseparable from those of *Apteryx australis* (e.g. Worthy 1997d), but remains likely to be this species are known in high-altitude sites in north-west Nelson (Mount Owen, Mount Arthur) and in sites in the Honeycomb Hill cave system, Oparara. Some bones have been identified as *A. maxima* by DNA-typing (Shepherd & Lambert 2008), but this method is limited to relatively few well-preserved specimens. Not recorded from the North Island. Nineteen individuals from Goulard Downs were introduced to Hauturu / Little Barrier Island in 1915 in a failed bid to establish an island population (Oliver 1955). More recently, translocated to St Arnaud, Nelson Lakes in 2004–06, Flora Saddle, Mt Arthur in 2010–16, and Nina Valley, Lewis Pass in 2011–12 (Miskelly & Powlesland 2013; Toy & Toy 2020).

Until 2021, great spotted kiwi were known by the species name *Apteryx haastii*; however, the two syntype specimens of *Apteryx haastii* are hybrids between *A. owenii* and *A. rowi* (Shepherd, Tennyson *et al.* 2021, and see under *A. rowi* above). *Apteryx maxima* was made a *nomen oblitum* by Palma *et al.* (2003) because at that time *Apteryx haastii* and *Apteryx maxima* were considered to be synonyms. However, as they clearly are not synonyms (Shepherd, Tennyson *et al.* 2021), Article 23.11 of the ICZN Code (1999) does not apply. From accounts in Grieve (1913) it is clear that in the late 1880s *Apteryx maxima* was called *A. grandis* by various commercial collectors, notably James Dall.

Subclass NEOGNATHAE: Neognathous Birds

Order ANSERIFORMES: Duck-like Birds

This order is best placed within Galloanserimorphae after Ratitae, following Knox *et al.* (2002). The higher taxonomy is based on Checklist Committee (1990, 2010) modified to reflect the common features of the relationships shown and/or taxonomies proposed in Madsen *et al.* (1988), Livezey (1989, 1990, 1991, 1996a–c, 1997a,b), Sibley & Ahlquist (1990), del Hoyo *et al.* (1992), McCracken *et al.* (1999), Sorenson *et al.* (1999), Donne-Goussé *et al.* (2002), and Callaghan & Harshman (2005). Anseriformes is taken to have three families: Anhimidae (screamers) confined to South America, Anseranatidae (magpie goose) monotypic of Australia, and Anatidae. Within Anatidae, it is traditionally considered that the whistling ducks *Dendrocygna* and *Thalassornis* are basal, and that the rest of Anatidae formed two major clades: Anserinae (swans and geese) and Anatinae (all other taxa). However, we follow Checklist Committee (1990) and Marchant & Higgins (1990), and in part Livezey (1997b), Dickinson (2003), and Callaghan & Harshman (2005), in treating shelducks and kin, sea ducks, and stiff-tailed ducks as subfamilies: Tadorninae, Merginae, and Oxyurinae respectively. To these is added the basal monotypic anseriform *Stictonetta* of Australia in Stictonettinae.

Analyses of skeletal and plumage features found an association between Aythyini, Mergini, Oxyurini, *Biziura* and other modified diving ducks (Livezey 1997b), in contrast to traditional taxonomies (e.g. Delacour & Mayr 1945; Johnsgard 1968) which had not revealed these taxa to be related. Subsequent DNA analyses indicated that these taxa have no close relationships to one another, and that their diving specialisations have resulted in morphological convergence that obscures phylogeny (Madsen *et al.* 1988; Sibley & Ahlquist 1990; Sraml *et al.* 1996; Johnson & Sorenson 1999; McCracken *et al.* 1999; Sorenson *et al.* 1999; Donne-Goussé *et al.* 2002; McCracken & Sorenson 2005).

The stiff-tailed ducks (*Oxyura* and related genera) are considered more basal than Anatinae, following Madsen *et al.* (1988), Sibley *et al.* (1988), Sibley & Ahlquist (1990), Marchant & Higgins (1990), Sraml *et al.* (1996), Callaghan & Harshman (2005), Worthy & Lee (2008), and Worthy (2009), and so are placed after *Dendrocygna* and Anserinae. Genetic studies, e.g. Sraml *et al.* (1996) and McCracken *et al.* (1999), provided strong evidence that *Biziura* is not closely related to *Oxyura*, although both taxa lie outside Anatinae. Callaghan & Harshman (2005) did not allocate *Biziura* to a subfamily, leaving its position in the phylogeny of Anatidae as *incertae sedis*. Worthy (2009) found it to be a member of Oxyurinae. Pending resolution of its higher relationships, *Biziura* is here retained in Oxyurinae. *Cereopsis* is accepted as a member of Anserinae following Livezey (1989, 1997b), Marchant & Higgins (1990), Donne-Goussé *et al.* (2002), and Callaghan & Harshman (2005). We have not placed *Cnemiornis* in its own monotypic family (Cnemiornithidae), as suggested by Livezey (1989) and followed by Callaghan & Harshman (2005), because later analyses failed to support this.

The shelducks and sheldgeese form a monophyletic clade in most studies (e.g. Livezey 1997a,b; Sorenson *et al.* 1999; Donne-Goussé *et al.* 2002), which we place at the subfamily level before Anatinae, following Checklist Committee (1990, 2010), Marchant & Higgins (1990), Livezey (1997b), Dickinson (2003), and Callaghan & Harshman (2005). Livezey (1997a,b) resurrected *Casarca* for the unbanded shelducks, restricting *Tadorna* to *T. tadorna* and *T. radjah*. In this scheme the paradise shelduck would be *Casarca variegata* in the subgenus *Pseudotadorna* Kuroda, 1917 with *C. tadornoides* and *C. cristata*. Here we follow the more conservative approach of placing all shelducks in one genus, as did Kear (2005).

The placement of *Malacorhynchus* in the anatid phylogeny is problematic because it is monotypic, at least in the Recent fauna, and poorly studied: it has been included in just one genetic analysis to date. We depart from the conservative placement of *Malacorhynchus* early in the sequence within Anatinae (e.g. Marchant & Higgins 1990; Livezey 1997b; Dickinson 2003; Callaghan & Harshman 2005), and accept the feather protein evidence (Brush 1976), genetic evidence (Sraml *et al.* 1996) and morphological and behavioural evidence (Frith 1977; Olson & Feduccia 1980; Worthy & Lee 2008) and Worthy (2009), that in sum suggest it should be classified outside Anatinae and before Tadorninae. Provisionally, we place it between Anserinae and Tadorninae. Fullagar (in Kear 2005: 442) considered this taxon to be part of the old endemic component of Australia's avifauna with no close relatives elsewhere.

Merginae is placed after Tadorninae, rather than after Anatinae, or as Mergini at the end of Anatinae, to reflect the relationships shown by mtDNA studies (Sorenson *et al.* 1999; Donne-Goussé *et al.* 2002). We follow the recommendation of Worthy & Olson (2002) that *Euryanas finschi* is listed as the sister taxon of *Chenonetta jubata* within Anatinae, *contra* Livezey (1989, 1997b), who had *Euryanas* as a monotypic tribe far removed from *Chenonetta*. Livezey (1997b), followed by Dickinson (2003), also suggested that *Hymenolaimus* lies within Tadorninae, but without supporting data for that position we leave it within Anatinae, following Checklist Committee (1990) and Marchant & Higgins (1990).

Authorship of family-group taxa is based on Rafinesque (1815), Leach (1819), Brodtkorb (1964), Bock (1994), and Olson (1995). We follow Browning & Monroe (1991) for the publication date of Reichenbach (1853).

Suborder ANSERES: Swans, Geese, and Ducks

Family ANATIDAE Leach: Swans, Geese, and Ducks

Anatidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition, London*: 67 – Type genus *Anas* Linnaeus, 1758.

Subfamily DENDROCYGNINAE Reichenbach: Whistling-ducks

Dendrocygninae Reichenbach, 1849: *Avium Syst. Nat.*: 9 – Type genus *Dendrocygna* Swainson, 1837.

Genus *Dendrocygna* Swainson

Dendrocygna Swainson, 1837: *Nat. Hist. Classif. Birds* 2: 365 – Type species (by subsequent designation) *Anas arcuata* Horsfield = *Dendrocygna arcuata* (Horsfield).

Leptotarsis Eyton, 1838: *Monograph Anatidae*: 111 – Type species (by monotypy) *Leptotarsis eytoni* Eyton = *Dendrocygna eytoni* (Eyton).

► *Dendrocygna eytoni* (Eyton) Plumed Whistling-duck

Leptotarsis eytoni Eyton, 1838: *Monograph Anatidae*: 111 – North-western Australia (*vide* Mathews & Iredale, 1913: *Ibis* 1 (10th series): 407).

Dendrocygna eytoni munna Mathews, 1912: *Austral Avian Rec. I*: 86 – Dawson River, Queensland, Australia.

Dendrocygna eytoni (Eyton); Checklist Committee 1953, *Checklist N.Z. Birds*: 34.

Breeds throughout tropical Australia, with scattered colonies in New South Wales river systems (Frith 1977; Marchant & Higgins 1990). Straggler to New Zealand. About 15 records; usually in small flocks: one at Thames, 1871; flock of 14 at Lake Tuakitoto and at Kaitangata, 1871; three at Ashburton, 1894–96; 12 at Little Wanganui, North Westland, Jan. 1975; 9–11 at Elbow landing, Lower Waikato River, Apr. 1982; one at Te Aroha, 1984; six at Haast Beach, Westland, Mar. 1990; seven at Hokitika, Apr. 1992; five at Woodville, Feb. 2007; seven at Fox Glacier, Apr. 2011; three at Taradale, Napier, Sep. 2011, three at Te Whanga, Chatham Island, Oct. 2011, three at Barrytown, Feb. 2012; five at Kokatahi, Hokitika, Apr. 2015 (F. Hutton 1871; Oliver 1955; Ellis 1975; Marchant & Higgins 1990; Guest 1991; Medway 2000a; Scofield 2008; Miskelly, Crossland *et al.* 2013, 2017).

Subfamily ANSERINAE Vigors: Swans and Geese

Anserina Vigors, 1825: *Zoological Journ.* 2: 404 – Type genus *Anser* Brisson, 1760.

Tribe CYGNINI Vigors: Swans

Cygnina Vigors, 1825: *Zoological Journ.* 2: 404 – Type genus *Cygnus* Bechstein, 1803.

Genus *Cygnus* Bechstein

Cygnus Bechstein, 1803: *Ornith. Taschenb. Deutschland* 2: 404 (footnote) – Type species (by monotypy) *Anas olor* Gmelin = *Cygnus olor* (Gmelin).

Chenopsis Wagler, 1832: *Isis von Oken*, Heft 11: col. 1234 – Type species (by monotypy) *Anas atrata* Latham = *Cygnus atratus* (Latham).

► **Cygnus olor* (Gmelin) Mute Swan | Wāna

Anas Olor Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 501. Based on the “Mute Swan” of Latham 1785, *Gen. Synop. Birds* 3: 436 – Russia.

Cygnus olor (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 34.

Northern Eurasia; introduced from Great Britain as an ornamental bird (Oliver 1955: 609). Small feral populations mainly on Lake Ellesmere / Te Waihora, and some small wetlands north of Christchurch, in the South Island, and on small lakes in Hawke’s Bay in the North Island (Marchant & Higgins 1990). Also called white swan.

► *Cygnus atratus* (Latham) Black Swan | Kakiānau

Anas atrata Latham, 1790: *Index Ornith.* 2: 834 – New South Wales, Australia.

Anser Novae-Hollandiae Bonnaterre, 1791: *Tableaux Encycl. Method. Ornith.* 1 (47): 108. Based on the “Black Swan” of Phillip 1789, *Voy. Governor Phillip Botany Bay; colonies Port Jackson & Norfolk*: 98 – New South Wales, Australia.

Anas plutonia Shaw, 1792: *Nat. Miscell.* 3(36): pl. 108–110 – New South Wales, Australia.

Anas cygnus niger Perry, 1811: *Arcana* 15: pl. 59 – New South Wales, Australia.

Chenopsis atratus (Latham); Wagler 1832, *Isis von Oken*, Heft 11: col. 1234.

Chenopsis [sic] *atrata* (Latham); Reichenbach 1853, *Avium Syst. Nat.*: 10.

Cygnus plutonius (Shaw); Baedeker 1863, *Die Eier europaischen Vögel Natur gemalt.*: pl. 31, fig. 2.

Chenopsis atrata roberti Mathews, 1912: *Novit. Zool.* 18(3): 446 – Augusta, Western Australia.

Chenopsis atrata atrata (Latham); Mathews 1913, *List Birds Australia*: 86.

Chenopsis [sic] *atratus* (Latham); Thomson 1922, *Naturalisation Animals Plants New Zealand*: 106.

Cygnus atratus (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 34.

Australia, Tasmania. In New Zealand, widespread and abundant throughout main islands and on Chatham Island. The New Zealand stocks are regarded as both introduced and self-introduced. A reassessment of the history of this species in New Zealand (M. Williams 1981) suggests that its wide distribution and marked abundance during 1864–68 are inexplicable without spontaneous immigration, considering that a major increase occurred at or slightly after the period of introduction (about 100 birds were released in 1864–68 by the Nelson, Canterbury, Southland, and Otago Acclimatisation Societies; see Kirk 1896). Estimates of genetic diversity of *C. atratus* in Australia, New Zealand, and the Chatham Islands, also support self-introduction (Rawlence, Kardamaki *et al.* 2017). First recorded alive in the Chatham Islands in 1864, when an exhausted bird was caught (Richards 1950); 4–5 birds were introduced there in 1890 (Aikman & Miskelly 2004). Vagrant to Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020).

► †**Cygnus sumnerensis** (Forbes)

New Zealand Swan | Matapu

Holocene bones of *Cygnus* are common in coastal, lacustrine, and archaeological deposits throughout New Zealand and the Chatham Islands. Worthy (1998d) concluded that those from Marfells Beach (Marlborough) were indistinguishable from *C. atratus*. However, Rawlence, Kardamaki *et al.* (2017) used mitochondrial DNA and skeletal measurements to show that swan bones from New Zealand and the Chatham Islands were distinct from those of *C. atratus*, and that Chatham Island bones (including the holotype of *C. chathamicus*) differed sufficiently (both genetically and morphologically) from New Zealand samples that they should be recognised as a separate subspecies. This approach is followed here.

†**Cygnus sumnerensis sumnerensis** (Forbes)

New Zealand Swan | Matapu

Chenopsis sumnerensis Forbes, 1890: *Nature* (2 Jan.) 41(1053): 209; *Ibis* 2 (6th series): 264 – Sumner, Canterbury.

Cygnus sumnerensis (Forbes); Checklist Committee 1990, *Checklist Birds N.Z.*: 98.

Cygnus atratus; Checklist Committee 2010, *Checklist Birds N.Z.*: 32. In part, as junior synonym.

Cygnus sumnerensis sumnerensis (Forbes); Rawlence, Kardamaki *et al.* (2017), *Proc. Roy. Soc. B* 284: 20170876: 3.

Known from natural deposits and middens from North, South, and Stewart Islands (Worthy & Holdaway 2002; Rawlence, Kardamaki *et al.* 2017).

†**Cygnus sumnerensis chathamicus** Oliver

Chatham Island Swan | Pouwa

Cygnus chathamicus Oliver, 1955: *New Zealand Birds*, 2nd edition: 603 – Chatham Islands.

Cygnus chathamica; Dawson 1958, *Ibis* 100(2): 233. Unjustified emendation.

Cygnus chathamensis; Worthy 1998, *Rec. Cant. Museum* 12(1): 110. Unjustified emendation.

Cygnus atratus; Checklist Committee 2010, *Checklist Birds N.Z.*: 32. In part, as junior synonym.

Cygnus sumnerensis chathamicus Oliver; Rawlence, Kardamaki *et al.* (2017), *Proc. Roy. Soc. B* 284: 20170876: 3.

Common in natural deposits and middens on Chatham Island (Millener 1999; Rawlence, Kardamaki *et al.* 2017).

Tribe CEREOPSINI Vigors: Australasian Geese

Cereopsina Vigors, 1825: *Zoological Journ.* 2: 404 – Type genus *Cereopsis* Latham, 1801.

Genus ***Cereopsis** Latham

Cereopsis Latham, 1801: *Index Ornith. Suppl.*: lxvii – Type species (by monotypy) *Cereopsis novaehollandiae* Latham.

► ***Cereopsis novaehollandiae** Latham

Cape Barren Goose

Cereopsis N. Hollandiae Latham, 1801: *Index Ornith. Suppl.*: lxvii – New South Wales = islands of Bass Strait, Australia (*vide* Mathews 1927, *Syst. Avium Australasianarum* 1: 210).

Cereopsis cinerea Vieillot, 1816: *Nouv. Dict. Hist. Nat., nouv. éd.* 5: 516. Unnecessary *nomen novum* for *Cereopsis novaehollandiae* Latham, 1801.

Anser griseus Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 23: 336 – Tasmania, Australia.

Anas terrae leeuwin Bennett, 1831: *Proc. Comm. Sci. Corresp. Zool. Soc. London* 1(3): 26 (ex Riche MS) – Esperance Bay, Western Australia.

Cereopsis australis Swainson, 1837: *Classification of Birds* 2(92): 366 – Bass Strait, Australia.

Cereopsis novaehollandiae georgi Mathews, 1912: *Novit. Zool.* 18(3): 446 – Twin-Peak Islands, Western Australia.

Cereopsis novae-hollandiae Latham; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 106.

Cereopsis novaehollandiae Latham; Checklist Committee 1953, *Checklist N.Z. Birds*: 34.

Cereopsis novaezealandiae Oliver, 1955: *New Zealand Birds*, 2nd edition: 601 – New Zealand. Junior primary homonym of *Cereopsis novae-zealandiae* Forbes, 1892.

Cereopsis novaehollandiae grisea Storr, 1980: *West. Austr. Naturalist* 14: 202 – Recherche Archipelago, Western Australia.

Cereopsis novaehollandiae novaehollandiae Latham; Storr, 1980: *West. Austr. Naturalist* 14: 202.

Breeds on islands off southern Australia (Bass Strait and Great Australian Bight). Liberated at Lake Hawea in 1914, where it survived as a small population in the Hawea, Wanaka, and Hunter River area until about 1946 (G. Williams 1968). Reports from Fiordland (1947, 1967), Waitaki-Benmore (1966), South Auckland (1986) may have been stragglers from Australia. Records from Whanganui and Waikanae (Dec. 1987 to Jan. 1988; G. Taylor 1990: 199) were probably of birds escaped from captivity. Breeding pairs in North Canterbury 1995, 1996, were probably escapees from flock of

c. 30 at Peacock Springs (O'Donnell & West 1996: 172, 1998: 12, 2001: 84). Regular recent records, including: Takaka, Dec. 1998 (O'Donnell 2001: 102); Lake Ellesmere / Te Waihora, Dec. 2000 (Medway 2001c); Waikuku Aug. to Sep. 2001 (Medway 2001d); South Canterbury, 3 Sep. 2001; Waikanae, Aug. 2002; near Timaru, Sep. 2002 (Medway 2002d); Otaihanga, Paraparaumu, Jun. 2003; Washdyke Lagoon, Aug. 2003 (Medway 2003b); Sweetwater, Kaitaia, Jul. 2006; Hokitika, Jul. 2007, Apr. 2012 & Feb. 2013 (Scofield 2008; Miskelly *et al.* 2013); Cape Reinga, Feb. 2009 (Miskelly *et al.* 2011); Te Kuiti, Mar. 2011 (Miskelly *et al.* 2013); Waimauku, Auckland, Jan. 2017; New Plymouth, Jul. 2018 & Nov. 2020 (Miskelly, Crossland *et al.* 2019, 2021); Te Marua, Upper Hutt, Oct. 2020 (Miskelly, Crossland *et al.* 2021). See also C. Robertson *et al.* (2007). Contrary to Forbes (1892), Oliver (1955), and Dawson (1958) there is no pre-human record of *Cereopsis* in New Zealand (see under *Cnemiornis calcitrans* below).

Genus †*Cnemiornis* Owen

Cnemiornis Owen, 1866: *Trans. Zool. Soc. London* 5(5): 396 – Type species (by original designation) *Cnemiornis calcitrans* Owen.

A cladistic analysis of morphology by Livezey (1989, 1997b) placed the flightless geese *Cnemiornis* in a basal position in Anseriformes as a distinct family (Cnemiornithidae); however, a re-analysis using a more complete data-set, corroborated by a mtDNA analysis by Worthy *et al.* (1997), strongly indicated *Cnemiornis* was the sister taxon of *Cereopsis*, as most previous workers had thought. Dawson (1958), Worthy *et al.* (1997), and Worthy & Holdaway (2002) provided details of the nomenclatural history of the included species.

► †*Cnemiornis gracilis* Forbes

North Island Goose | Tarepo

Cnemiornis gracilis Forbes, 1892: *Trans. N.Z. Inst.* 24: 187 – Te Aute, Hawke's Bay.

Cnemiornis septentrionalis Oliver, 1955: *New Zealand Birds*, 2nd edition: 602 – Hunterville, Rangitikei.

Cnemiornis gracilis Forbes; Checklist Committee 1990, *Checklist Birds N.Z.*: 100.

Extinct – known from bones only. Two doubtful Early Pleistocene records (see below) and one middle Pleistocene record; otherwise Late Pleistocene (e.g. Waitomo, Mahoenui, Hawke's Bay; Worthy & Swabey 2002) and Holocene. The oldest record of certain provenance is one bone from Clifton Sand, near Cape Kidnappers, c. 680,000 years old (Oxygen Isotope Stage 17; B. Gill *et al.* 2005). One midden record (Paremata, Wellington; Davidson 1978).

One supposed Early Pleistocene record is from Hunterville (Drew 1897), possibly from the Tewkesbury Formation of 1.8 Ma (Fleming 1953: 157). Drew (1897) reported that all bones had Tertiary marine shells and sand filling holes and grooves, but the *Cnemiornis* bones from Hunterville in the Whanganui Museum have no such infilling. The holotype left tibiotarsus of *Cn. septentrionalis*, and other bones recorded from Hunterville, are probably all of one individual (Checklist Committee 2010). This implies a less turbulent depositional history, such as would be provided by Late Pleistocene fluvial cover beds rather than the older marine sediments (Worthy *et al.* 1991). Alternatively, the bones may be among those sent from Te Aute to Whanganui Museum by Rev. A.O. Williams (Drew 1897: 285).

Bones described as too big for a kiwi and too small for a moa were collected by S.H. Drew in 1886 in quarries between Okehu and Kai Iwi stations, from sandy shell beds that are also exposed at Butlers Creek (J. Park 1887: 63). *Cnemiornis* bones in Whanganui Museum, identified as from 'brown sands at Kai Iwi in 1886' (Oliver 1955: 602), are presumed to be some of these bones. The deposits were referred to Butlers Shell Conglomerate (Fleming 1953: 175), implying an Early Pleistocene age (c. 1.15 Ma), but Worthy *et al.* (1991) doubted this provenance, suggesting that they were from Late Pleistocene cover beds. The right tibiotarsus and tarsometatarsus in Whanganui Museum are brown (Checklist Committee 2010) unlike the polished black fragments of moa bone known certainly from Butlers Shell Conglomerate.

► †*Cnemiornis calcitrans* Owen

South Island Goose

Cnemiornis calcitrans Owen, 1865: *Proc. Zool. Soc. London* 1865 (28): 438. *Nomen nudum*.

Cnemiornis calcitrans Owen, 1866: *Trans. Zool. Soc. London* 5(5): 396 – Timaru.

Cnemiornis minor Forbes, 1892: *Trans. N.Z. Inst.* 24: 187 – New Zealand.

Cereopsis novae-zealandiae Forbes, 1892: *Trans. N.Z. Inst.* 24: 188 – Enfield, Otago.

Cnemiornis calcitrans Owen; Checklist Committee 1990, *Checklist Birds N.Z.*: 99.

Extinct – known from Late Pleistocene and Holocene deposits, particularly in caves and swamps of the eastern South Island (Marlborough to Southland); only in Pleistocene deposits in western regions (Worthy 1999a); rare in middens (10 sites; Worthy 1999b).

Tribe *ANSERINI Vigors: Northern Geese

Anserina Vigors, 1825: *Zoological Journ.* 2: 404 – Type genus *Anser* Brisson, 1760.

Genus **Anser* Scopoli

Anser Brisson, 1760: *Ornithologie* 1: 58, 6: 261 – Type species (by tautonymy) *Anser domesticus* = *Anas anser* Linnaeus.

► **Anser anser* (Linnaeus)

Greylag Goose | Kuihi*

Anas Anser Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 123 – Europe & northern North America, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 40).

Anser anser ferus Brünnich, 1764: *Ornith. Borealis*: 13, no 53 – Eurasia.
Anser cinereus Meyer, 1810: *Ornith. Taschenb. Deutschland 2*: 552 – Eurasia.
Anser ferus Linnaeus [sic]; Hamilton 1909, *Hand-list Birds New Zealand*: 18.
Anser cinereus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 105.
Anser anser (Linnaeus); Heather & Robertson 1996, *Field Guide Birds New Zealand*: 74, 262.

Occurs naturally from Iceland across Eurasia to China. Domesticated for centuries, the species was first brought to New Zealand by Cook in 1773 (Thomson 1922) and later by European settlers. Now feral in many regions throughout North and South Islands (Heather & Robertson 1996; C. Robertson *et al.* 2007) and Chatham Islands (Tennyson 1998b).

*Also used for Canada goose *Branta canadensis*.

Genus **Branta* Scopoli

Branta Scopoli, 1769: *Annus 1, Hist. Nat.*: 67 – Type species (by subsequent designation) *Anas bernicla* Linnaeus = *Branta bernicla* (Linnaeus).

► **Branta canadensis* (Linnaeus) Canada Goose | Kuihi*

Anas canadensis Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 123 – Canada.

North America and north-east Asia (Kamchatka to Japan) (Marchant & Higgins 1990).

**Branta canadensis maxima* Delacour Canada Goose | Kuihi*

Anas canadensis; Hamilton 1909, *Hand-list Birds New Zealand*: 19. Not *Anas canadensis* Linnaeus, 1758.
Branta canadensis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 104. Not *Anas canadensis* Linnaeus, 1758.
Branta canadensis maxima Delacour, 1951: *American Mus. Novit. 1537*: 5 – Round Lake, Grant County, Minnesota, USA.
Branta canadensis canadensis; Checklist Committee 1953, *Checklist N.Z. Birds*: 34. Not *Anas canadensis* Linnaeus, 1758.
Branta canadensis; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 36. Not *Anas canadensis* Linnaeus, 1758.
Branta canadensis maxima Delacour; Checklist Committee 1990, *Checklist Birds N.Z.*: 98.

Northern and central states of the USA (North Dakota to Arkansas). First successfully introduced to New Zealand in 1905 (Imber 1971). In the South Island, abundant from Marlborough to Southland and Fiordland (C. Robertson *et al.* 2007). North Canterbury birds regularly migrating from hill country breeding areas to Lake Ellesmere / Te Waihora. North Island numbers increasing and distribution expanding as a result of liberations at Wairoa and in the Wairarapa and Waikato (C. Robertson *et al.* 2007). Rarely reaches the Kermadec Islands / Rangitāhua (Veitch *et al.* 2004), Chatham Islands (Miskelly *et al.* 2006), Snares Islands (Miskelly *et al.* 2001a), and Auckland Islands / Maukahuka (McClelland & Moore 1991; Miskelly, Elliott *et al.* 2020). Vagrants from New Zealand have also reached Lord Howe Island (1969, 1977; Smithers 1977; McAllan *et al.* 2004), New Caledonia (1965; McAllan *et al.* 2004), and Australia (Anon. 2007a). First record for Australia was at Shoalhaven River, Nowra, Illawarra, in Oct. 2002 (Stafford 2002).

*Also used for greylag goose *Anser anser*.

INCERTAE SEDIS

Tribe MALACORHYNCHINI Boetticher: Pink-eared Ducks

Malacorhynchini Boetticher, 1950: *Beitr. Gattungssyst. Vögel 2* – Type genus *Malacorhynchus* Swainson, 1831.

Genus *Malacorhynchus* Swainson

Malacorhynchus Swainson, 1831: *Journ. Royal Inst. Great Britain 2*: 18 – Type species (by monotypy) *Anas membranacea* Latham = *Malacorhynchus membranaceus* (Latham).

Genetic evidence (Sraml *et al.* 1996; Checklist Committee 2010) places *Malacorhynchus* outside Anatinae, between *Dendrocygna* and *Tadorna*, thus supporting the evidence from feather proteins (Brush 1976) and morphology (Olson & Feduccia 1980). Morphological data suggest that *Malacorhynchus* is a member of the Oxyurinae (Worthy & Lee 2008; Worthy 2009).

► *Malacorhynchus membranaceus* (Latham) Pink-eared Duck

Anas membranacea Latham, 1801: *Index Ornith. Suppl.*: lxi – New South Wales, Australia.
Malacorhynchus membranaceus (Latham); Eyton 1838, *Monograph Anatidae*: 136. In part.
Malacorhynchus membranaceus assimilis Mathews, 1912: *Austral Avian Rec. 1*: 86 – Fitzroy River, Western Australia.
Malacorhynchus membranaceus (Latham); Johnsgard 1979, in Peters *Check-list Birds World 1* (2nd edition): 480.

Rare vagrant to New Zealand. One bird at Mangere Sewage Ponds, Jun. to Jul. 1990 (Eller *et al.* 1991; Guest 1991).

► †*Malacorhynchus scarletti* Olson Scarlett's Duck

Malacorhynchus scarletti Olson, 1977: *Emu 77*: 132 – Pyramid Valley, North Canterbury.

North, South, and Chatham Islands (Worthy & Gill 2002). Known from a very few, mainly lacustrine, Holocene deposits. Sister taxon of the Australian pink-eared duck *M. membranaceus* (Olson 1977; Worthy 1995).

Subfamily OXYURINAE J.C. Phillips: Stiff-tailed Ducks

The inclusion of *Biziura* in Oxyurinae may change because of genetic, morphological, and behavioural evidence (Sraml *et al.* 1996). McCracken *et al.* (1999) suggested that *Biziura* is a monotypic basal anatid lineage, placed outside Oxyurinae.

Tribe OXYURINI J.C. Phillips: Stiff-tailed Ducks

Oxyurinae J.C. Phillips, 1926: *Nat. Hist. Ducks* 4: 201 – Type genus *Oxyura* Bonaparte, 1828.

Genus *Oxyura* Bonaparte

Oxyura Bonaparte, 1828: *Ann. Lyc. Nat. Hist. N.Y.* 2: 390 – Type species (by monotypy) *Anas rubidus* Wilson = *Oxyura jamaicensis* (Gmelin).

Erisimatura Bonaparte, 1832: *Giornale Arcadico di Scienze, Lettere ed Arti* 52: 208. Unnecessary *nomen novum* for *Oxyura* Bonaparte, 1828.

Oxyura australis Gould, 1837 was reported as a subfossil from Lake Poukawa (Horn 1983), but all *Oxyura* remains from New Zealand are now referred to the endemic species *Oxyura vantetsi* Worthy, 2005 (see also Worthy 2004).

► †*Oxyura vantetsi* Worthy

New Zealand Blue-billed Duck

Oxyura australis; Horn 1983, *Journ. Royal Soc. N.Z.* 13: 67. Not *Oxyura australis* Gould, 1837.

Oxyura australis; Checklist Committee 1990, *Checklist Birds N.Z.*: 107. Not *Oxyura australis* Gould, 1837.

Oxyura vantetsi Worthy, 2005: *Mem. Queensland Mus.* 51: 263 – Lake Poukawa, Hawke's Bay.

Extinct. New Zealand: North and South Islands. Holocene remains representing at least 19 individuals were identified from swamp deposits at Poukawa, Hawke's Bay, and a single bone from a South Island locality, probably Wairau Bar (Worthy 2004, 2005a).

Genus *Biziura* Stephens

Biziura Stephens, 1824: in Shaw, *General Zool.* 12(2): 221 – Type species (by monotypy) *Biziura novaehollandiae* Stephens = *Anas lobata* Shaw.

► †*Biziura delautouri* Forbes

New Zealand Musk Duck

Biziura delautouri Forbes, 1892 (Mar.): *Nature* 45(1166): 417 – Enfield Swamp, Oamaru, Otago.

Biziura lautouri Forbes, 1892 (May): *Trans. N.Z. Inst.* 24: 188 – Otago.

Biziura lobata delautouri Forbes, 1892; Olson 1977, *Emu* 77: 134.

Biziura delautouri Forbes; Checklist Committee 1990, *Checklist Birds N.Z.*: 108.

This species has generally been considered conspecific with *B. lobata* (Shaw, 1796) (e.g. Scarlett 1969); however, data presented by Olson (1977) and Worthy (2002b) confirmed the distinctiveness of the species. Rare; known from two Holocene sites in the North Island (Waikuku Beach dunes, Far North; Lake Poukawa, Hawke's Bay) and three in the South Island (Marfells Beach, Marlborough; Enfield, near Oamaru; Harwood, Otago Harbour) (Worthy 2002b; Lalas *et al.* 2014).

Subfamily TADORNINAE Reichenbach: Shelducks

Tribe TADORNINI Reichenbach: Shelducks

Tadorninae Reichenbach, 1849: *Avium Syst. Nat.*: 10 – Type genus *Tadorna* J.D.D. Fleming, 1822.

Genus *Tadorna* Boie

Tadorna Boie, 1822 (before May): *Tagebuch Reise Norwegen*: 140, 351 – Type species (by tautonymy) *Tadorna familiaris* Boie = *Tadorna tadorna* (Linnaeus).

Tadorna J.D.D. Fleming, 1822 (Jun.): *Phil. Zool* 2: 260 – Type species (by tautonymy) *Anas tadorna* Linnaeus = *Tadorna tadorna* (Linnaeus). Junior homonym and junior synonym of *Tadorna* Boie, 1822.

Casarca Bonaparte, 1838: *Geogr. Comp. List. Birds*: 56 – Type species (by monotypy) *Anas rutila* Pallas = *Tadorna ferruginea* (Pallas).

Casarka Eyton, 1838: *Monograph Anatidae*: 479. Unnecessary *nomen novum* for *Casarca* Bonaparte, 1838.

Vulpanser Keyserling & Blasius, 1840: *Wirbelthiere Europa's* 84: 125 – Type species (by monotypy) *Anas tadorna* Linnaeus = *Tadorna tadorna* (Linnaeus).

Nettalopex Heine, 1890: in Heine & Reichenow, *Nom. Mus. Hein. Ornith.*: 343. Unnecessary *nomen novum* for *Casarca* Bonaparte, 1838.

Zesarkaca Mathews, 1937: *Emu* 37: 31 – Type species (by original designation) *Anas variegata* Gmelin = *Tadorna variegata* (Gmelin).

► *Tadorna variegata* (Gmelin)

Paradise Shelduck | Pūtangitangi

Anas variegata Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 505. Based on the “Variegated Goose” of Latham 1785, *Gen. Synop. Birds* 3(2): 441 – “Habitat in nova Seelandia”, restricted to Dusky Sound, Fiordland (*vide* Medway 1976, *Notornis* 23: 54).

- Anser variegatus* (Gmelin); Bonnaterre, 1791: *Tableaux Encycl. Méthod. Ornith.* 1(47): 113.
Anas picta Vieillot, 1816: *Nouv. Dict. Hist. Nat., nouv. éd.* 5: 132 (ex Cooke) – New Zealand. Not *Anas picta* Gmelin, 1789.
Bernicla variegata (Gmelin); Stephens 1824, in Shaw, *General Zool.* 12(2): 59.
Casarka castanea Eyton, 1838: *Monograph Anatidae*: 108, pl. 10 – New Zealand.
Casarka variegata (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 198.
Anas cheneros J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 92 – Dusky Sound, Fiordland.
Casarka castanea Eyton; Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 649.
Anser variegata (Gmelin); Ellman 1861, *Zoologist* 19: 7471.
Tadorna variegata (Gmelin); Sclater 1864, *Proc. Zool. Soc. London 1864* (2): 191, pl. 19.
Vulpanser variegata (Gmelin); Reichenow 1882, *Ornith. Centralblatt*: 36.
Nettalopez variegata (Gmelin); Heine & Reichenow 1890, *Nom. Mus. Hein. Ornith.*: 343.
Zesarkaca variegata (Gmelin); Mathews 1937, *Emu* 37: 31.

New Zealand. In the North Island, modern distribution is the result of deliberate introductions, e.g. Southland to National Park (settlement) from 1915 to 1920s, and National Park and Gisborne to Northland in the 1960s (M. Williams 1971). In the South Island, widely distributed throughout with greatest numbers along the eastern foothills of the Southern Alps / Kā Tiritiri o te Moana. Also Stewart Island / Rakiura and most major offshore islands, including Great Barrier / Aotea, Hauturu / Little Barrier and Kapiti Islands. Chatham Islands: one recorded Rangitira Island, Jan. 1984 (Fennell & Merton 1984). Five birds reached Lord Howe Island in Mar. 1950 with at least three staying until Aug. 1950 (McAllan *et al.* 2004). Holocene deposits and midden records from widely distributed sites throughout North and South Islands (M. Williams 1971; Worthy 1999b), and in the Chatham Islands. The Chatham remains may belong to an undescribed taxon (Millener 1999). Records from Enderby Island, Auckland Islands / Maukahuka are likely to have been misidentifications of *T. tadornoides* (see Miskelly, Elliott *et al.* 2020).

► ***Tadorna tadornoides*** (Jardine & Selby)

Chestnut-breasted Shelduck

- Anas tadornoides* Jardine & Selby, 1828: *Illus. Ornith.* 4: pl. 62 and text – New South Wales, Australia.
Anas kasarkoides Lafresnaye, 1835: *Mag. Zool., Paris*: pl. 36, text – New South Wales, Australia.
Casarka todornoides (Jardine & Selby); Eyton 1838, *Monograph Anatidae*: 107. Unjustified emendation.
Vulpanser todornoides (Jardine & Selby); Reichenow 1882, *Ornith. Centralblatt*: 35. Unjustified emendation.
Nettalopez tadornina Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 343 – Australia.
Tadorna tadornoides westralis Mathews, 1912: *Austral Avian Rec.* 1: 118 – Augusta, Western Australia.
Casarka tadornoides (Jardine & Selby); Oliver 1955, *New Zealand Birds*, 2nd edition: 406.
Tadorna tadornoides (Jardine & Selby); Checklist Committee 1990, *Checklist Birds N.Z.*: 101.

South-west and south-east Australia, including Tasmania. First New Zealand records were Lake Ellesmere / Te Waihora, before 1955, and Dec. 1982, and Hokitika River, Jan. 1973, (Oliver 1955; Fennell *et al.* 1983; Grant 1989). In 1983–86 recorded widely throughout New Zealand (including Snares Islands / Tini Heke, Auckland / Maukahuka and Campbell / Motu Ihupuku Islands) during Jan. to May. Highest number recorded was in 1983 (56); only 8 in 1984, but rising to 33 in 1985 (Heather 1987). At least nine records from Enderby Island, Auckland Islands: Apr. 1983 (2), Dec. 1984 (2), Dec. 1985 (3), Dec. 1990 (8), Jan. 1991 (1), Dec. 1994 (1), Jan. 2007 (1), Dec. 2012 (1), Jan. 2013 (1), Nov.–Dec. 2014 (13), Nov.–Dec. 2015 (1) (all records from Miskelly, Elliott *et al.* 2020). One on Snares Islands / Tini Heke Nov.–Dec. 1984 (Miskelly *et al.* 2001a). Three, Tupuangi, Pitt Island, Chatham Islands, Dec. 1997 (Tennyson 1998b). A pair with half-grown young near Lake Tekapo in Jan. 1985 is the only confirmed breeding record. Occasionally reported from the three main islands since: one, Puhanga, Jan. 1992 (Medway 2000a); two, Coopers Lagoon, Canterbury, Jun. 1995 (Miskelly *et al.* 2013); two, Peacock Springs, Christchurch, May 1996 (Miskelly, Crossland *et al.* 2017); three, Lake Omana, Foxton, Mar. 1998 (Medway 2001c); two, Te Horo, Kapiti coast, Dec. 2002 (Medway 2003a); two, Normanby Lake (south of Timaru), Mar.–Apr. 2003 (Medway 2003b); one, Lake Rotomahana, Rotorua, Apr. 2003 (Medway 2004b); one, Hagley Park, Christchurch, Dec. 2005 (Scofield 2006); three, Otago Peninsula, Jan. 2007 (Scofield 2008); one, Kaiapoi, Feb. 2003; one, Bromley, Christchurch, Feb. 2003, Dec. 2005, Feb. 2005 & Feb. 2006; nine, Lake Ellesmere / Te Waihora, Jan. 2007 (Miskelly *et al.* 2011, 2013, 2015; Miskelly, Crossland *et al.* 2017); one, St Annes Lagoon, Cheviot, Feb. 2007; one, McKays Crossing, Kapiti coast, Nov. 2014; one, Mangere, Auckland, Dec. 2014 (Miskelly *et al.* 2015); two, Avon-Heathcote estuary, Nov. 2015; one, Lake Ellesmere, Feb. 2016 (Miskelly, Crossland *et al.* 2017); one, Miranda, Firth of Thames, May 2017; one, Invercargill, Nov. 2017; two, Invercargill, Mar. 2018 (Miskelly, Crossland *et al.* 2019); one, Invercargill, Oct. 2018; two, Miranda, Firth of Thames, Jan. 2019; two, Invercargill, Oct. 2020; two, Ringaringa, Stewart Island / Rakiura, Dec. 2020 (Miskelly, Crossland *et al.* 2021). Tennyson (1998b) cited records of vagrants at Norfolk and Kermadec Islands / Rangitāhua.

Subfamily MERGINAE Rafinesque: Sea Ducks

Mergidia Rafinesque, 1815: *Analyse de la Nature*: 72 – Type genus *Mergus* Linnaeus, 1758.

Genus *Mergus* Linnaeus

Mergus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 129 – Type species (by subsequent designation) *Mergus castor* Linnaeus = *Mergus serrator* Linnaeus.

Merganser Brisson, 1760: *Ornithologie* 6: 230 – Type species (by subsequent designation) *Mergus castor* Linnaeus = *Mergus serrator* Linnaeus.

Promergus Mathews & Iredale, 1913: *Ibis 1* (10th series): 410 – Type species (by original designation) *Mergus australis* Hombron & Jacquinot.

► † *Mergus milleneri* Williams & Tennyson

Chatham Island Merganser

Mergus australis Hombron & Jacquinot, 1841: Checklist Committee (2010) *Checklist Birds N.Z.*: 40. In part.

Mergus milleneri Williams & Tennyson, 2014: *Wildfowl* 64: 22 – Chatham Island.

Known only from Holocene remains on Chatham Island (M. Williams *et al.* 2014, 2015).

► † *Mergus australis* Hombron & Jacquinot

Auckland Island Merganser | Miuweka

Mergus australis Hombron & Jacquinot, 1841: *Ann. Sci. Nat., Zool. Paris, 2nd series 16*: 320 – Auckland Islands, restricted to Port Ross (*vide* Miskelly, Elliott *et al.* 2020, *Notornis* 67: 65).

Merganser australis (Hombron & Jacquinot); Hutton 1904, *Index Faunae N.Z.*: 37.

Promergus australis (Hombron & Jacquinot); Mathews & Iredale 1913, *Ibis 1* (10th series): 410.

Mergus australis Hombron & Jacquinot; Checklist Committee 1953, *Checklist N.Z. Birds*: 36.

The English name for this species should be Auckland Island merganser rather than New Zealand merganser, following M. Williams *et al.* (2014). The only historical records are from Auckland and Adams Islands in the Auckland Islands / Maukahuka; the last specimens were apparently a pair shot on 9 Jan. 1902, and the species is now extinct (Kear & Scarlett 1970; M. Williams 2012). Holocene bones found on Enderby Island (Tennyson 2020a). The specific identity of North Island, South Island, and Stewart Island / Rakiura *Mergus* bones is unresolved (M. Williams *et al.* 2014). Young *et al.* (1997) mistakenly reported bones of *Mergus* from Campbell Island / Motu Ihupuku, and did not mention the Chatham Islands (see previous entry).

Subfamily ANATINAE Leach: Ducks

Ellman (1861: 7471) named two new species of teal as *Anas fusca* and *A. mediterranea*, but he did not give sufficient information to identify them unequivocally. Therefore, *Anas fusca* Ellman, 1861 and *Anas mediterranea* Ellman, 1861 are here regarded as *nomina dubia*.

Tribe ANATINI Leach: Typical Ducks

Anatidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition, London*: 67 – Type genus *Anas* Linnaeus, 1758.

Genus *Chenonetta* Brandt

Chenonetta Brandt, 1836: *Descr. Icon. Anim. Ross. Nov., Aves 1*: 5 – Type species (by monotypy) *Anser lophotus* Brandt = *Chenonetta jubata* (Latham).

Euryanas Oliver, 1930: *New Zealand Birds*, 1st edition: 220 – Type species (by original designation) *Anas finschi* Van Beneden = *Chenonetta finschi* (Van Beneden).

Livezey (1989, 1997b) placed *Anas finschi* Van Beneden, 1875 in the monotypic tribe Euryanatini within Tadorninae. This was followed by Callaghan & Harshman (2005), who overlooked the analysis of Worthy & Olson (2002) showing that the New Zealand taxon had a close relationship to *Chenonetta jubata*. *Chenonetta* is placed early in Anatinae following Kear (2005) as supported by Worthy (2009).

► *Chenonetta jubata* (Latham)

Australian Wood Duck

Anas jubata Latham, 1801: *Index Ornith. Suppl.*: lxiix – New South Wales, Australia.

Anser lophotus Brandt, 1836: *Descr. Icon. Anim. Ross. Nov., Aves 1*: 5 – New South Wales, Australia.

Chenonetta jubata alexanderi Mathews, 1916: *Austral Avian Rec.* 3: 56 – North of Western Australia.

Chenonetta jubata (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Australia and Tasmania. Recent coloniser to New Zealand. Fourteen records accepted by Records Appraisal Committee: Glendhu, Wanaka, 1910; Orawia, Southland, 1944; Wairau River, near mouth of the Waikakaho River, Marlborough, 1980 (Oliver 1955; P. Jenkins 1982); Snares Islands / Tini Heke, 1982–86 (Miskelly *et al.* 2001a); Otapiri, Southland, May 2002 (Medway 2002f); Bromley, Christchurch, Feb. 2009 & Jan. 2011 (Miskelly *et al.* 2011, 2013); Wakapuaka, Nelson, Jun. 2010; Burwood, Christchurch, May 2011 (Miskelly *et al.* 2013); four, Redwood Valley, Tasman, Dec. 2014 (Miskelly, Crossland *et al.* 2017). A few pairs breeding near Waimea Inlet, Tasman, since Oct. 2015 (W. Cook *et al.* 2016;

Miskelly, Crossland *et al.* 2019). Unconfirmed records include: Nelson Haven, Jan. 1999, and Lake Elterwater, Mar. 1999 (O'Donnell 2001: 103).

► † **Chenonetta finschi** (Van Beneden)

Finsch's Duck | Manutahora

Anas finschi Van Beneden, 1875: *Ann. Soc. Géol. Belgique* 2: 123, pl. 3 – Earnsclough Cave, Otago.
Euryanus [sic] *finschi* (Van Beneden); Oliver 1930, *New Zealand Birds*, 1st edition: 220.
Euryanas finschi (Van Beneden); Checklist Committee 1990, *Checklist Birds N.Z.*: 105.
Chenonetta finschi (Van Beneden); Worthy & Olson 2002, *Notornis* 49: 14.

Formerly placed in the monotypic genus *Euryanas*, but now placed in *Chenonetta* following Worthy & Olson (2002). Abridged versions of the original description appeared in Van Beneden (1875, 1877). Widely distributed in Holocene and Late Pleistocene deposits and middens throughout North and South Islands. Distribution changed from Pleistocene to Holocene following changes in vegetation distribution (Worthy 1999a). The species had a 10% reduction in relative wing length from the Late Pleistocene to the Holocene (Worthy 1988a, 1997b).

Genus **Hymenolaimus** G.R. Gray

Malacorhynchus Wagler, 1832: *Isis von Oken*, Heft 11: col. 1235 – Type (by monotypy) *Malacorhynchus forsterorum* Wagler, 1832 = *Hymenolaimus malacorhynchus* (Gmelin). Junior homonym of *Malacorhynchus* Swainson, 1831.
Hymenolaimus G.R. Gray, 1843: *Ann. Mag. Nat. Hist., London* 11: 370 – Type species (by monotypy) *Anas malacorhynchus* Gmelin = *Hymenolaimus malacorhynchus* (Gmelin).
Hymenolaemus Agassiz, 1846: *Nomen. Zool. Animal. Fossil.* 2: 190. Unjustified emendation.

Livezey (1996c, 1997b) suggested that *Hymenolaimus* lies within Tadorninae; this was followed by Dickinson (2003) and Kear (2005), although Callaghan (*in* Kear 2005: 370) stated that its relationships are unclear. Homoplasy demonstrably affected perceived relationships in Livezey's analyses, especially among diving taxa (McCracken *et al.* 1999), and some of the unique behavioural and morphological features of *Hymenolaimus* probably relate to its specialised habitat, therefore we leave the genus in Anatinae until a tadornine relationship has been corroborated by other evidence.

► **Hymenolaimus malacorhynchus** (Gmelin)

Whio | Blue Duck

Anas malacorhynchus Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 526. Based on the “Soft-billed Duck” of Latham 1785, *Gen. Synop. Birds* 3(2): 522 – “Habitat in nova Seelandia”, restricted to Dusky Sound, Fiordland (*vide* Checklist Committee 1990).
Rhynchaspis malacorynchos (Gmelin); Stephens 1824, *in* Shaw, *General Zool.* 12(2): 123. Unjustified emendation.
Malacorhynchus Forsterorum Wagler, 1832: *Isis von Oken*, Heft 11: col. 1235 – Dusky Sound, Fiordland.
Malacorhynchus membranaceus Latham; Eyton 1838, *Monograph Anatidae*: 136. *In part.*
Malacorynchos [sic] *Forsterorum* Wagler; G.R. Gray 1843, *in* E. Dieffenbach, *Travels in N.Z.* 2: 198.
Anas malacoryncha J.R. Forster, 1844: *in* M.H.C. Lichtenstein, *Descrip. Animalium*: 94 – Dusky Sound, Fiordland.
Anas malacorhynchus Forster; Ellman 1861, *Zoologist* 19: 7471. Unjustified emendation.
Hymenolaimus malacorhynchus; G.R. Gray, 1862: *Ibis* 4: 241. Unjustified emendation.
Hymenolaimus melacorhynchus; G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 75. Unjustified emendation.
Fuligula (*Hymenolaemus*) *malacoryncha* (Gmelin); Reichenow 1882, *Ornith. Centralblatt*: 5.
Hymenolaemus malacorhynchus (Gmelin); Hamilton 1909, *Hand-list Birds New Zealand*: 11. Unjustified emendation.
Hymenolaimus malacorhynchus malacorhynchus (Gmelin); Mathews 1937, *Emu* 37: 32. Unjustified emendation.
Hymenolaimus malacorhynchus hymenolaimus Mathews, 1937: *Emu* 37: 32 – North Island.
Hymenolaimus malacorhynchus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

New Zealand. North Island: mostly restricted to headwaters of some rivers in Bay of Plenty and rivers draining from central mountains and eastern ranges. Introduced to Taranaki Maunga / Egmont National Park 1999–2010 (Miskelly & Powlesland 2013). South Island: widespread in headwaters of rivers on western side of the Southern Alps / Kā Tiritiri o te Moana and in Fiordland and the Catlins, but declining. A few Late Pleistocene and Holocene deposits and midden records from both North and South Islands. Vagrant to Auckland Islands / Maukahuka (five birds, 1883; Miskelly, Elliott *et al.* 2020). Subspecies, as defined by Mathews (1937b), require validation (R. O'Brien, *in* Marchant & Higgins 1990: 1262) as reported size differences are unsupported by data, and plumage differences are subtle. Genetic variation between birds in the North and South Islands is minimal (Triggs *et al.* 1992; B. Robertson *et al.* 2003) and provides no evidence for distinct taxa.

Genus **Anas** Linnaeus

Anas Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 122 – Type species (by subsequent designation) *Anas Boschas* Linnaeus = *Anas platyrhynchos* Linnaeus.
Anassus Rafinesque, 1815: *Analyse de la Nature*: 72. Unnecessary *nomen novum* for *Anas* Linnaeus 1758.
Mareca Stephens, 1824: *in* Shaw, *General Zool.* 12(2): 130 – Type species (by subsequent designation) *Mareca fistularis* Stephens = *Anas penelope* Linnaeus.
Querquedula Stephens, 1824: *in* Shaw, *General Zool.* 12(2): 142 – Type species (by tautonymy) *Anas querquedula* Linnaeus.
Nettion Kaup, 1829: *Natürl. Syst.*: 95 – Type species (by original designation) *Anas crecca* Linnaeus.
Boschas Swainson, 1831: *Journ. Royal Inst. Great Britain* 2: 20 – Type species (by tautonymy) *Anas Boschas* Linnaeus = *Anas platyrhynchos* Linnaeus.

- Nesonetta* G.R. Gray, 1844: *Gen. Birds* 3: 627 – Type species (by original designation) *Nesonetta aucklandica* G.R. Gray = *Anas aucklandica* (G.R. Gray).
- Virago* Newton, 1872: *Proc. Zool. Soc. London 1871* (41): 651 – Type species (by original designation) *Anas punctata* Gould = *Anas castanea* (Eyton).
- Elasmonetta* Salvadori, 1895: *Cat. Birds Brit. Mus.* 27: 287 – Type species (by monotypy) *Anas chlorotis* G.R. Gray.
- Xenonetta* J.H. Fleming, 1935: *Occas. Papers Roy. Ontario Mus., Zool. I*: 1 – Type species (by original designation) *Xenonetta nesiotis* J.H. Fleming = *Anas nesiotis* (J.H. Fleming).
- Pachyanas* Oliver, 1955: *New Zealand Birds*, 2nd edition: 599 – Type species (by original designation) *Pachyanas chathamica* Oliver = *Anas chathamica* (Oliver).

All New Zealand teal taxa were regarded as distinct species by most authorities in the first half of the 20th Century. However, in a review of the Anatidae, Delacour & Mayr (1945) advocated placing *A. chlorotis* as a subspecies of *A. aucklandica*. This was not followed by Oliver (1955); however, Checklist Committee (1953) took Delacour & Mayr's suggestion a step further and included all the New Zealand teal as subspecies of *Anas castanea*. This arrangement was later dropped, and Delacour & Mayr's treatment was followed (Checklist Committee 1970, 1990) with the Australian birds kept specifically distinct. Re-examination of the teal complex has since found widespread support for the specific distinction of each of the New Zealand teal in such features as skeletal morphology (Livezey 1990), plumage and behaviour (Marchant & Higgins 1990), allozyme electrophoresis (Daugherty *et al.* 1999) and DNA studies (Johnson & Sorenson 1998; Kennedy & Spencer 2000). We follow these authors, and Livezey (1997b) and Kear (2005) in recognising each of the New Zealand teal as full species. Kennedy & Spencer (2000) revealed that the genetic differences between them is greater than between their sister taxa, the grey and chestnut teals.

► *Anas gracilis* Buller

Grey Teal | Têtê-moroiti

- Anas punctata*, var. G.R. Gray, 1859: *Proc. Zool. Soc. London 1859* (27): 166 – New Caledonia. Junior primary homonym of *Anas punctata* Burchell, 1828.
- Anas gracilis* Buller, 1869: *Ibis* 5 (new series): 41 – Manawatu River area.
- Mareca castanea* Marie, 1870: *Actes Société Linnéenne Bordeaux* 27: 328 – New Caledonia. Junior primary homonym of *Mareca castanea* Eyton, 1838.
- Anas gibberifrons*; Anon. 1870, *Cat. Colonial Mus.*: 75. Not *Anas (Mareca) gibberifrons* S. Müller, 1842.
- Virago castanea*; Newton 1872, *Proc. Zool. Soc. London 1871* (3): 651. Not *Mareca castanea* Eyton, 1838.
- Anas (Virago) castanea*; Ramsay 1877, *Proc. Linn. Soc. New South Wales* 2: 200. In part.
- Anas castanea*; Hutton 1880, *Trans. Proc. N.Z. Inst.* 12: 272. Not *Mareca castanea* Eyton, 1838.
- Nettion castaneum*; Hutton 1904, *Index Faunae N.Z.*: 36. Not *Mareca castanea* Eyton, 1838.
- Nettion gibberifrons*; Hutton 1904, *Index Faunae N.Z.*: 36. Not *Anas (Mareca) gibberifrons* S. Müller, 1842.
- Nettium* [sic] *castaneum*; Buller 1906, *Suppl. Birds N.Z.* 2: 10. Not *Mareca castanea* Eyton, 1838.
- Nettium* [sic] *gibberifrons*; Buller 1906, *Suppl. Birds N.Z.* 2: 10. Not *Anas (Mareca) gibberifrons* S. Müller, 1842.
- Nettion castaneum rogersi* Mathews, 1912: *Austral Avian Rec. I*: 86 – Parry's Creek, Western Australia. Junior secondary homonym of *Anas superciliosa rogersi* Mathews, 1912.
- Anas gibberifrons mathewsi* J.C. Phillips, 1923: *Nat. Hist. Ducks* 2: 266. *Nomen novum* for *Nettion castaneum rogersi* Mathews, 1912.
- Virago gibberifrons rogersi* (Mathews); Mathews 1927, *Syst. Avium Australasianarum I*: 216.
- Virago gibberifrons gracilis* (Buller); Mathews 1927, *Syst. Avium Australasianarum I*: 216.
- Querquedula gibberifrons*; Oliver 1930, *New Zealand Birds*, 1st edition: 219. Not *Anas (Mareca) gibberifrons* S. Müller, 1842.
- Anas gibberifrons gracilis* Buller; Checklist Committee 1953, *Checklist N.Z. Birds*: 34.
- Anas gracilis gracilis* Buller; Parker *et al.* 1985, *Annot. Checklist Birds South Australia* 2A, *Waterfowl*: 9.
- Anas gracilis* Buller; Checklist Committee 1990, *Checklist Birds N.Z.*: 103.

New Guinea, Australia (including Tasmania), and New Zealand. Previously rare and local in New Zealand, but now well established throughout the country (C. Robertson *et al.* 2007). Identified from only a few Holocene deposits and midden sites (North, South, and Chatham Islands; Holdaway & Worthy 1997; Worthy 1998d, 1999b, 2004). Two at the Snares Islands / Tini Heke, Nov. 1987 (Miskelly *et al.* 2001a); 16 on Enderby Island, Auckland Islands / Maukahuka, Nov. 2011 (Miskelly, Elliott *et al.* 2020); one on Campbell Island / Motu Ihupuku, Oct. 2012 (Kyle Morrison *in* Miskelly, Elliott *et al.* 2020).

► *Anas castanea* (Eyton)

Chestnut Teal

- Mareca castanea* Eyton, 1838: *Monograph Anatidae*: 119, pl. 19 – New South Wales, Australia.
- Anas punctata* Gould, 1845: *Birds of Australia* 6: 11 – New South Wales, Australia. Junior primary homonym of *Anas punctata* Burchell, 1822.
- Anas (Virago) castanea* (Eyton); Ramsay 1877, *Proc. Linn. Soc. New South Wales* 2: 200.
- Nettion castanea* (Eyton); Salvadori 1895, *Cat. Birds Brit. Mus.* 27: 252.
- Virago castanea castanea* (Eyton); Mathews 1916, *Austral Avian Rec.* 3(3): 56.
- Virago castanea alexanderi* Mathews, 1916: *Austral Avian Rec.* 3(3): 56 – South-west Australia.
- Anas castanea castanea* (Eyton); Ripley 1942, *Auk* 59: 91.
- Anas castanea* (Eyton); J. Moore & Moore 1992, *Notornis* 39: 290.

Australia (including Tasmania). First New Zealand record from Manawatu River estuary in Jun. 1991 (J. Moore & Moore 1992; Guest 1992); three more seen at the same site May–Jul. 1992 (J. Moore & Moore 1992). Since then, recorded almost annually at Manawatu estuary 1993–2003, but also at Karitane, Otago, Jan. 1993 and Kowhai River, Canterbury, Aug. 1993 (Medway 2000b, 2001d, 2003b), and Coatesville, North Auckland, Oct. 2003 (Scofield 2008). Three records of single birds since 2010: Bromley, Christchurch, Mar. 2010; Mangere, Auckland, May 2010; Invercargill Oct. 2018 (Miskelly *et al.* 2011; Miskelly, Crossland *et al.* 2021).

► †**Anas chathamica** (Oliver)

Chatham Island Duck

Pachyanas chathamica Oliver, 1955: *New Zealand Birds*, 2nd edition: 599 – Chatham Islands.

Anas chathamica (Oliver); Mitchell *et al.* 2014, *Mol. Phyl. Evol.* 70: 427.

Known from Holocene remains from the Chatham Islands. Mitchell, Wood *et al.* (2014) used mitochondrial DNA and osteological characters to show that the Chatham Island duck is nested within *Anas*, and is most closely related to the New Zealand/subantarctic ‘brown teals’. The monotypic genus *Pachyanas* Oliver, 1955, therefore becomes a junior synonym of *Anas* Linnaeus, 1758, and the Chatham Island duck should be referred to as *Anas chathamica*.

► **Anas chlorotis** G.R. Gray

Brown Teal | Pāteke

Anas chlorotis G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(8): 15, pl. 20 – New Zealand, restricted to North Island (*vide* Mathews 1937, *Emu* 37: 31).

Elasmonetta chlorotis (G.R. Gray); Hutton 1904, *Index Faunae N.Z.*: 36.

Elasmonetta chlorotis chlorotis (G.R. Gray); Mathews, 1937: *Emu* 37: 31.

Elasmonetta chlorotis peculiaris Mathews, 1937: *Emu* 37: 31 – Lake Wakatipu, Otago.

Anas castanea chlorotis G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Anas aucklandica chlorotis G.R. Gray; Checklist Committee 1990, *Checklist Birds N.Z.*: 103.

Anas chlorotis G.R. Gray; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 130, 177.

New Zealand. Originally widely distributed in lowland swamps and swamp forests of both main islands and Stewart Island / Rakiura, where it was the most common duck species in pre-human deposits (Worthy 2002a, 2004); now rare and localised. Persists on Great Barrier Island / Aotea and Hauturu / Little Barrier Islands; small local groups in Northland (Whirinaki, Helena Bay, Whangaruru Harbour, and south side of Bay of Islands); also occasional sightings in Fiordland. Not seen on Stewart Island since 1980. Successfully introduced to Kapiti, Tiritiri Matangi, and Mana Islands, Urupukapuka and Moturoa (Bay of Islands), Mayor Island / Tuhua, and to Zealandia / Karori Sanctuary, Port Charles, Tawaharanui, Cape Kidnappers, Lake Rotokare (Taranaki), Clinton Valley (Fiordland), and Awaroa Inlet, Abel Tasman National Park (Miskelly & Powlesland 2013; M. Williams 2020). Natural deposits and midden records from North, South, and Chatham Islands (Worthy 2002a). One bird recorded extra-limally in New Caledonia three years in succession (Delacour 1965).

► **Anas aucklandica** (G.R. Gray)

Auckland Island Teal | Metawetanga

Nesonetta aucklandica G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(8): 16 – Auckland Islands, restricted to Laurie Harbour (*vide* Miskelly & Taylor 2020, *Notornis* 67: 19).

Nesonetta Aucklandica G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 75.

Erismatura (Nesonetta) aucklandica Reichenow 1882; *Ornith. Centralblatt*: 4. Junior secondary homonym of *Nesonetta aucklandica* G.R. Gray, 1845.

Anas castanea aucklandica (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Anas aucklandica aucklandica (G.R. Gray); Checklist Committee 1990, *Checklist Birds N.Z.*: 104.

Anas aucklandica (G.R. Gray); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 130, 177.

Auckland Islands / Maukahuka: currently on Adams, Disappointment, Enderby, Rose, Ewing, Ocean, Frenchs, and Dundas Islands (Miskelly, Elliott *et al.* 2020). Holocene bones, including midden material, have been found in dunes on Enderby Island (Tennyson 2020a).

► **Anas nesiotis** (J.H. Fleming)

Campbell Island Teal

Xenonetta nesiotis J.H. Fleming, 1935: *Occas. Papers Roy. Ontario Mus., Zool.* 1: 1 – Campbell Island.

Anas castanea nesiotis (J.H. Fleming); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Anas aucklandica nesiotis (J.H. Fleming); Checklist Committee 1990, *Checklist Birds N.Z.*: 104.

Anas nesiotis (J.H. Fleming); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 130, 177.

Campbell Island / Motu Ihupuku. Between 1840 and 2004, survived only on a closely adjacent islet (Dent Island) where it was rediscovered in 1975, with a total population probably less than 30. The history of the species, its distribution, and taxonomy was provided by M. Williams & Robertson (1996). Reintroduced to Campbell Island / Motu Ihupuku in 2004 following successful eradication of rats. Since 1999 a population derived from translocated birds has been wild on Codfish Island / Whenua Hou. This was intended to be temporary to rebuild numbers for transfer to Campbell Island / Motu Ihupuku; however, owing to the birds’ success in breeding on the island and their cryptic nature, removal was abandoned (McClelland 2002a; Checklist Committee 2010).

- **Anas acuta** Linnaeus **Northern Pintail**
Anas acuta Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 126 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica, 2nd edition*: 44).
Anas acuta Linnaeus; Petyt 1999, *Notornis* 46: 298.

The most widespread waterfowl species in the Northern Hemisphere, with vagrants reaching Micronesia and Polynesia (Kear 2005), and one record from Australia (Marchant & Higgins 1990: 1302). New Zealand records from Farewell Spit, Oct. 1997 (Petyt 1999; Medway 2000a), and Invercargill, Oct. 2021 (Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).

- ***Anas platyrhynchos** Linnaeus **Mallard | Rakiraki**
 Northern Hemisphere, from North America, North Africa, and Europe to Asia, Hawai'ian Islands, and Laysan Island. Seven subspecies.

- *Anas platyrhynchos platyrhynchos** Linnaeus **Mallard | Rakiraki**
Anas platyrhynchos Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 125 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica, 2nd edition*: 42).
Anas boschas Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 205 – Europe.
Anas boschas Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 68.
Anas boscas [sic] Linnaeus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 101.
Anas platyrhynchos platyrhynchos Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Breeds in arctic and temperate regions of North America, North Africa, Europe, and Asia, wintering in southern North America, Central America, North Africa, and south Asia. Introduced to New Zealand from the United Kingdom (1865–1920s) and North America (1937) and reared extensively for release until the 1960s. Now the most numerous and widespread waterfowl in New Zealand. Established on Chatham, Snares / Tini Heke, Auckland / Maukahuka, Campbell / Motu Ihupuku, and Antipodes Islands, and most offshore islands. Birds banded in New Zealand have reached New Caledonia on several occasions, as well as Lord Howe Island, New South Wales, South Australia, and Vanuatu (Anon. 2018).

- **Anas superciliosa** Gmelin **Grey Duck | Pāpera**
Anas superciliosa Gmelin, 1789: *Syst. Nat., 13th edition 1(2)*: 537. Based on the “Supercilious Duck” of Latham 1785, *Gen. Synop. Birds* 3: 497 – Dusky Sound, Fiordland.
Anas leucophrys J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 93 – Dusky Sound, Fiordland.
Anas novaehollandiae Stokes, 1846: *Discoveries Australia 1 (App.)*: 483. *Nomen nudum*.
Anas mülleri Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 649 – Java and Timor, Indonesia.
Anas superciliosa G.R. Gray, 1859: *Proc. Zool. Soc. London 1859 (2)*: 166 – New Caledonia. Junior primary homonym and junior synonym of *Anas superciliosa* Gmelin, 1789.
Anas superciliosa var. *pelewensis* Hartlaub & Finsch, 1872: *Proc. Zool. Soc. London 1872 (7)*: 108 – Pelew [= Palau] Islands.
Anas superciliaris Gmelin; Layard 1880, *Ibis* 4 (4th series): 233. Unjustified emendation.
Anas oustaleti Salvadori, 1894: *Bull. Brit. Ornith. Club* 4: 1 – Marianas Islands, Pacific Ocean. Hybrid between *Anas platyrhynchos* Linnaeus and *Anas superciliosa* Gmelin.
Anas superciliosa rogersi Mathews, 1912: *Austral Avian Rec. 1*: 33 – Augusta, Western Australia.
Anas superciliosa perna Riley, 1919: *Proc. Biol. Soc. Washington* 32: 93 – Celebes (= Sulawesi), Indonesia.
Anas novaehollandiae Mathews, 1920: *Check-list Birds Australia*: 58 (ex Stokes, 1846).
Anas superciliosus rukensis Kuroda, 1939: *Geese & Ducks World*, text to pl. 52 – Truk, Caroline Islands, Pacific Ocean.
Anas superciliosa superciliosa Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 35.
Anas superciliosa Gmelin; Marchant & Higgins 1990, *HANZAB 1*: 1320.

South Pacific (Palau to Austral Islands), Indonesia, Australia, and New Zealand. Three subspecies sometimes recognised (*A. s. superciliosa*, *A. s. pelewensis*, *A. s. rogersi*). Marchant & Higgins (1990) did not support the subspecific distinction of New Zealand and Australian birds as they do not differ in size or plumage. This lack of distinction was supported by DNA studies indicating mixing of the Australian and New Zealand populations (Rhymer *et al.* 2004); however, a distinct haplotype is present in some New Zealand birds. Subspecific distinction is not considered warranted (Kear 2005).

New Zealand and outlying islands (Kermadec / Rangitāhua, Chatham, Snares / Tini Heke, Auckland / Maukahuka, Antipodes, Campbell / Motu Ihupuku, and Macquarie Islands). A declining species, suffering from loss of habitat, and from hybridisation and competition with mallards in modified wetlands. Most numerous in Northland and Westland. Widespread in natural deposits and midden deposits in North, South, and Chatham Islands, but abundant in lacustrine sites only.

Genus **Spatula** Boie

- Spatula* Boie, 1822: *Isis von Oken*, Heft 5: col. 564 – Type species (by monotypy) *Anas clypeata* Linnaeus = *Spatula clypeata* (Linnaeus).
Rhynchaspis Stephens, 1824: in Shaw, *General Zool.* 12(2): 114 – Type species (by subsequent designation) *Anas clypeata* Linnaeus = *Spatula clypeata* (Linnaeus).

Rhynchoplatus Berthold, 1827: in Latreille, *Nat. Fam. Thierreich*: 84 – Type species (by monotypy) *Anas clypeata* Linnaeus = *Spatula clypeata* (Linnaeus).

Clypeata Lesson, 1828: *Manuel d'Ornith.* 2: 416 – Type species (by original designation) *Anas clypeata* Linnaeus = *Spatula clypeata* (Linnaeus).

Spathulea J.D.D. Fleming, 1828: *Hist. Brit. Anim.* 123 – Type species (by monotypy) *Anas clypeata* Linnaeus = *Spatula clypeata* (Linnaeus).

We follow Gonzales *et al.* (2009) and Dickinson & Remsen (2013) in placing shovelers in the genus *Spatula* (cf. *Anas* used in previous New Zealand checklists).

► ***Spatula rhynchotis* (Latham)**

Australasian Shoveler | Kuruwhengi

Anas rhynchotis Latham, 1801: *Index Ornith. Suppl.*: lxx – New South Wales, Australia.

Rhynchaspis rhynchotis (Latham): Stephens 1824, in Shaw, *General Zool.* 12(2): 123.

Spatula rhynchotis (Latham); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 198.

Spatula variegata Gould, 1856: *Proc. Zool. Soc. London 1856* (24): 95 – New Zealand.

Anas rhynchotes Latham; Ellman 1861, *Zoologist* 19: 7471. Unjustified emendation.

Rhynchaspis variegata (Gould); Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 12): 269.

Spatula rhynchotis rhynchotis (Latham); Mathews 1912, *Novit. Zool.* 18(3): 238.

Spatula rhynchotis variegata (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 409.

Spatula rhynchotis dydimus Mathews, 1916: *Austral Avian Rec.* 3: 56 – south-western Australia.

Sptaula [sic] *rhynchotis* (Latham); Oliver 1930, *New Zealand Birds*, 1st edition: 224. Misspelling.

Anas rhynchotis variegata (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Anas rhynchotis rhynchotis Latham; Condon 1975, *Checklist Birds Australia* 1: 71.

Anas rhynchotis Latham; Marchant & Higgins 1990, *HANZAB* 1: 1340.

Australia and New Zealand. Australian and New Zealand populations were formerly treated as separate subspecies (e.g. Checklist Committee 1990). However, Marchant & Higgins (1990) questioned the distinction of the Australian and New Zealand birds, and Kear (2005) did not accept their subspecific distinction. In view of their extreme mobility it seems unlikely that the populations are separate. We follow Fullagar (*in* Kear 2005) in treating the species as monotypic.

New Zealand. Throughout both main islands; formerly on Chatham Islands (where still vagrant; Miskelly *et al.* 2006). Vagrant to Stewart Island / Rakiura; Auckland Islands / Maukahuka, Oct. 1943, Mar. 2003, and Dec. 2015 (5 birds) (Miskelly, Elliott *et al.* 2020); Snares Islands / Tini Heke, May 1997 (Miskelly *et al.* 2001a). Natural deposits and midden records from scattered sites throughout range. There is a 6,000-year-old record from Lake Poukawa (Worthy 2004), *contra* earlier reports that the taxon was a recent arrival in New Zealand (e.g. Worthy & Holdaway 2002).

► ***Spatula clypeata* (Linnaeus)**

Northern Shoveler

Anas clypeata Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 124 – coasts of Europe, restricted to southern Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 42).

Spatula clypeata (Linnaeus); Boie 1822: *Isis von Oken*, Heft 10: col. 564.

Anas clypeata Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 38.

Europe, Asia, and North America; migrating south to Africa, southern and south-east Asia, Hawai'i, and Central and South America. Regularly straggles to Micronesia and rarely to Polynesia, Australia, and Norfolk Island (one record). About 30 records in New Zealand; seven during 1968–1995, and the rest following an influx in 2017–18, when at least five birds were present (Miskelly, Crossland *et al.* 2019): Mangatawhiri swamp, lower Waikato, May 1968 (P. Howard 1968); Lake Ngakawau, near Lake Horowhenua, May 1969; Lake Horowhenua, Aug. 1971 (Kinsky & Jones 1972; Stidolph 1974a); Pauri Lake, Whanganui, Aug. 1989 (2 birds, Battley 1991); Kaikorai Estuary, Otago, May 1990 (Guest 1991); Matata Lagoon, Bay of Plenty, May 1993; Gisborne, Jun.–Jul. 1995 (Medway 2000a); 2 birds, Invercargill, Oct. 2017; 2 birds, Miranda, Firth of Thames, May–Jun. 2018; Wakapuaka (Nelson), Porangahau estuary (Hawke's Bay), and Lake Ellesmere / Te Waihora (2 birds), Jun. 2018; Wakapuaka, Lake Ellesmere, and Invercargill Oct. 2018 (Miskelly, Crossland *et al.* 2019); Bromley, Christchurch, Apr. 2019; Pegasus wetland, North Canterbury, May 2019; Lake Ellesmere, Jun. 2019; Te Aroha, Aug. 2019; Otaki, and Lake Elterwater (Marlborough), Sep. 2019; Waituna Lagoon, Southland, Nov. 2019; Pegasus wetland, North Canterbury May–Aug. 2020; Lake Rotomahana, Rotorua, Jul. 2020 (Miskelly, Crossland *et al.* 2021).

Tribe AYTHYINI Delacour & Mayr: Scaup

Aythini Delacour & Mayr, 1945: *Wilson Bull.* 57(1): 26 – Type genus *Aythya* Boie, 1822.

Genus *Aythya* Boie

Aythya Boie, 1822 (before May): *Tagebuch Reise Norwegen*: 308, 351 – Type species (by monotypy) *Anas marila* Linnaeus = *Aythya marila* (Linnaeus).

Nyroca J.D.D. Fleming, 1822 (Jun.): *Phil. Zool.* 2: 260 – Type species (by tautonymy) *Anas nyroca* Gldenstdt = *Aythya nyroca* (Gldenstdt).

Fuligula Stephens, 1824: in Shaw, *General Zool.* 12(2): 187 – Type species (by tautonymy) *Anas fuligula* Linnaeus = *Aythya fuligula* (Linnaeus).

Fulix Sundevall, 1836: *Kungl. Svenska Vetenskapsakad. Handl.* 1835: 129 – Type species (by subsequent designation) *Anas fuligula* Linnaeus = *Aythya fuligula* (Linnaeus).

Marila Reichenbach, 1852: *Avium Syst. Nat.*: 8 – Type species (by monotypy) *Anas ferina* Linnaeus = *Aythya ferina* (Linnaeus).

Ilyonetta Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 347. Unnecessary *nomen novum* for *Nyroca* J.D.D. Fleming, 1822.

Perissonetta Oberholser, 1920: *Proc. Indiana Acad. Sci.*: 110 – Type species (by subsequent designation) *Anas collaris* Donovan = *Aythya collaris* (Donovan).

Zeafulix Mathews, 1937: *Emu* 37: 32 – Type species (by original designation) *Anas novaeseelandiae* Gmelin = *Aythya novaeseelandiae* (Gmelin).

Sorenson & Fleischer (1996) investigated the intraspecific relationships of *Aythya* with mtDNA analyses and found that *A. novaeseelandiae* is the sister taxon to *A. fuligula*.

► *Aythya australis* (Eyton)

Australian White-eyed Duck | Karakahia

Nyroca australis Eyton, 1838: *Monograph Anatidae*: 160 – Australia, restricted to New South Wales (*vide* Mathews 1912, *Novit. Zool.* 18(3): 239).

Nyroca nyroca dampieri Mathews, 1912: *Austral Avian Rec. 1*: 87 – Fitzroy River, Western Australia.

Aythya australis ledeboeri Bartels & Franck, 1938: *Treubia* 16: 337 – East Java, Indonesia.

Aythya australis australis (Eyton); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

Aythya australis (Eyton); Checklist Committee 1990, *Checklist Birds N.Z.*: 106.

Australia (mainly south-east and Tasmania); nomadic. Ranging as far as eastern Java, Sulawesi, and New Guinea, with a possibly distinct subspecies (*A. a. extima*) on Banks Islands (Vanuatu) and New Caledonia, but these populations may not be resident and may represent part of the species' nomadic range. Established in New Zealand for about 30 years, 1867–95 (F. Hutton 1870; Oliver 1955). Since then the only records are: Hamurana, 1934; flock of eight, Runanga Lake, Hawke's Bay, May 1973 (Anon. 1973); Western Springs, Auckland, Apr. 1980 (Jowett 1980); Snares Islands / Tini Heke, Aug.–Sep. 1981 (Miskelly *et al.* 2001a); two, Lake Ryan, Cobden, Greymouth, Feb. 1994 (Medway 2000a); New Plymouth, Oct. 2001 (Medway 2002d); Bromley, Christchurch, Dec. 2005 (Scofield 2006); Kaiapoi Lakes, North Canterbury, Apr. 2012 & May 2013 (Miskelly *et al.* 2013, 2015); Foxton Beach, Nov. 2013; Blenheim, Apr. 2015 (Miskelly, Crossland *et al.* 2017).

► *Aythya novaeseelandiae* (Gmelin)

New Zealand Scaup | Pāpango

Anas novae Seelandiae Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 541. Based on the "New-Zealand Duck" of Latham 1785, *Gen. Synop. Birds* 3(2): 543 – New Zealand, restricted to Dusky Sound, Fiordland (*vide* G. Forster 1777, *Voyage World* 1: 168).

Anas Novae Zealandiae Gmelin; Latham 1790, *Index Ornith.* 2: 870. Unjustified emendation.

Fuligula novae zealandiae (Gmelin); Stephens 1824, in Shaw, *General Zool.* 12(2): 210. Unjustified emendation.

Fuligula Novae Zealandiae (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 198. Unjustified emendation.

Anas atricilla J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 95 – Dusky Sound, Fiordland.

Marila novaeseelandiae (Gmelin); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 651. Unjustified emendation.

Anas atra Ellman, 1861: *Zoologist* 19: 7471 – New Zealand.

Fuligula Novae Zealandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 75. Unjustified emendation.

Fulix novae seelandiae (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 86.

Fuligula novae zealandiae (Gmelin); Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 4): 259. Unjustified emendation.

Fuligula novae-zealandiae (Gmelin); Hutton 1904, *Index Faunae N.Z.*: 37. Unjustified emendation.

Fuligula novaeseelandiae (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 410.

Fuligula novae-seelandiae (Gmelin); Mathews 1930, *Emu* 29: 281.

Nyroca novaeseelandiae (Gmelin); Peters 1931, *Check-list Birds World* 1: 175.

Zeafulix novaeseelandiae novaeseelandiae (Gmelin); Mathews 1937, *Emu* 37: 32.

Zeafulix novaeseelandiae maui Mathews, 1937: *Emu* 37: 32 – North Island.

Aythya novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 35.

New Zealand. Lagoons and lakes, including mountain lakes and numerous small coastal ponds and sand-dune lakes, in both North and South Islands. Numbers reduced following settlement, but species has colonised hydro lakes in both islands and has been successfully reintroduced to small lakes within its former range. Natural deposits and midden records from widely distributed sites in both main islands and the Chatham Islands.

Order GALLIFORMES: Game Birds

We follow the classification for Galliformes recommended by T. Crowe *et al.* (2006) and Ksepka (2009).

Holdaway *et al.* (2001) considered that Cheeseman's (1891) second-hand record of megapodes from Raoul Island, Kermadec Islands / Rangitāhua, before the 1870 volcanic eruption has veracity. However, we feel that Holocene skeletal remains are required before this record is accepted.

Family *NUMIDIDAE Reichenbach: Guineafowl

Numidinae Reichenbach, 1850: *Avium Syst. Nat.*: 26 – Type genus *Numida* Linnaeus, 1766.

Genus **Numida* Linnaeus

Numida Linnaeus, 1766: *Syst. Nat., 12th edition, 1*: 273 – Type species (by monotypy) *Phasianus meleagris* Linnaeus = *Numida meleagris* (Linnaeus).

► **Numida meleagris* (Linnaeus)

Helmeted Guineafowl

Phasianus Meleagris Linnaeus, 1758: *Syst. Nat., 10th edition, 1*: 158 – Africa, restricted to upper Nile, Nubia (*vide* Peters 1934, *Check-list Birds World* 2: 134).

Numida ptilorhyncha Lesson, 1831: *Traité d'Ornith.* 7: 498 – Africa.

Numida ptilorhyncha Licht. [sic]; Hutton 1871, *Cat. Birds N.Z.*: 69.

Numida meleagris (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 38.

Africa, south of the Sahara. First introduced to Canterbury in the 1860s and subsequently elsewhere in North and South Islands, and Raoul Island in the Kermadec Islands / Rangitāhua. Wild populations present in rough farmland in a few New Zealand localities (C. Robertson *et al.* 2007). Some of the records from the Auckland region may be semi-domesticated (Bull *et al.* 1985). The oldest, apparently established, population is inland from Whanganui (Oliver 1955) but its current status is unknown. At least nine subspecies. New Zealand stock assumed to be from domesticated origin (thus either *N. m. meleagris* or *N. m. galeata*).

Family *ODONTOPHORIDAE Gould: American Quails

Odontophorinae Gould, 1844: *Monograph Odontophorinae 1*: 1 – Type genus *Odontophorus* Vieillot, 1816.

Genus **Callipepla* Wagler

Callipepla Wagler, 1832: *Isis von Oken*, Heft 2: col. 277 – Type species (by monotypy) *Callipepla strenua* Wagler = *Callipepla squamata* Vigors.

Lophortyx Bonaparte, 1838: *Geogr. Comp. List. Birds*: 42 – Type species (by subsequent designation) *Tetrao californicus* Shaw = *Callipepla californica* (Shaw).

► **Callipepla californica* (Shaw)

California Quail | Tikaokao

Tetrao californicus Shaw, 1798: in Shaw & Nodder, *Nat. Miscell.* 9: text to pl.345 – Monterey, California, USA.

Western North America from southern British Columbia to Baja California. Introduced to Hawai'i, Chile, Australia, and New Zealand (Marchant & Higgins 1993).

**Callipepla californica brunnescens* (Ridgway)

California Quail | Tikaokao

Ortyx californica Stephens [sic]; Hutton 1871, *Cat. Birds N.Z.*: 67. Not *Tetrao californicus* Shaw, 1798.

Lophortyx californicus brunnescens Ridgway, 1884: *Proc. Biol. Soc. Washington* 2: 94 – “Santa Barbara, California”, error for San Francisco, California, USA (*vide* Peters 1934, *Check-list Birds World* 2: 44).

Ortyx californicus; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 1 (part 6): 226. Not *Tetrao californicus* Shaw, 1798.

Lophortyx californica brunnescens Ridgway; Checklist Committee 1953, *Checklist N.Z. Birds*: 37. Emendation.

Lophortyx californica; Wakelin 1968, *Notornis* 15: 162. Not *Tetrao californicus* Shaw, 1798.

Callipepla californica brunnescens (Ridgway); Checklist Committee 1990, *Checklist Birds N.Z.*: 113.

South-west Oregon and California (Marchant & Higgins 1993). Introduced to New Zealand from 1865 to 1875 in both North and South Islands (Thomson 1922) with subsequent liberations of New Zealand-bred stock. Now widely distributed on both main islands, and some settled offshore islands (G. Williams 1963, 1967; C. Robertson *et al.* 2007). No longer present on the Chatham Islands (Miskelly *et al.* 2006).

Family PHASIANIDAE Vigors: Partridges, Quails, Pheasants, and Turkeys

Phasianidae Vigors, 1825: *Zoological Journ.* 2: 402 – Type genus *Phasianus* Linnaeus, 1758.

Subfamily COTURNICINAE Bonaparte: Old World Quails

Coturnicinae Bonaparte, 1853: *Compt. Rend. Séa. Acad. Sci., Paris* 37(18): 646 – Type genus *Coturnix* Garsault, 1764.

Genus *Coturnix* Bonnaterre

Coturnix Bonnaterre, 1791: *Tableaux Encycl. Méthod. Ornith.* 1(47): lxxxvii – Type species (by tautonymy) “Caille”, *Coturnix communis* Bonnaterre = *Coturnix coturnix* Linnaeus.

Zecoturnix Iredale & Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 76 – Type species (by original designation) *Coturnix novaezealandiae* Quoy & Gaimard.

► † *Coturnix novaezealandiae* Quoy & Gaimard

New Zealand Quail | Koreke

Coturnix Novae-Zelandiae Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool.* 1: 242, pl. 24, fig. 1 – Hauraki Gulf.

Coturnix Novae Zelandiae Quoy & Gaimard; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 195. Unjustified emendation.

Coturnix Novae Zelandiae Quoy [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74. Unjustified emendation.

Coturnix novae zealandiae Quoy & Gaimard; Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 161. Unjustified emendation.

Coturnix novae-zealandiae Quoy & Gaimard; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Coturnix novaezealandiae Quoy & Gaimard; Mathews & Iredale 1913, *Ibis* 1 (10th series): 207. Unjustified emendation.

Zecoturnix novae-zealandiae (Quoy & Gaimard); Mathews 1930, *Emu* 29: 279.

Coturnix novaezealandiae pounami Mathews, 1944: *Emu* 43: 247 – Port Cooper, Canterbury. Unjustified emendation.

Coturnix novaezealandiae novaezealandiae Quoy & Gaimard; Checklist Committee 1953, *Checklist N.Z. Birds*: 37. Unjustified emendation.

Coturnix novaezealandiae novaezealandiae Quoy & Gaimard; Checklist Committee 1990, *Checklist Birds N.Z.*: 115.

Coturnix novaezealandiae Quoy & Gaimard; Marchant & Higgins 1993, *HANZAB* 2: 402.

At times the New Zealand quail has been regarded as conspecific with the stubble quail *Coturnix pectoralis* Gould, 1837 of Australia and Tasmania (e.g. van Tets 1978; Checklist Committee 1990), which was unsuccessfully introduced to New Zealand in the 1870s (Marchant & Higgins 1993; see Appendix 2). More recently, separation of *C. novaezealandiae* and *C. pectoralis* has been accepted (e.g. Marchant & Higgins 1993; Dickinson 2003) as advocated by Oliver (1955). New Zealand: North, South, and Great Barrier / Aotea Islands. A bird of open grasslands. Still common by 1848, when as many as 86 could be shot on one day; on the verge of extinction by 1870. The last North Island sighting was Dec. 1869; the last reliable South Island observation was in 1875, with latest specimens collected 1867 or 1868. The reasons for the disappearance are uncertain but it coincides with the establishment of cats and probable ongoing predation by Norway rats (Tennyson & Martinson 2007: 11, 64, 143, 149). Late Pleistocene and Holocene remains from numerous sites in both main islands, especially dunes; common in middens (Worthy & Holdaway 2002).

Genus **Synoicus* Gould

Synoicus Gould, 1843: *Birds of Australia* 5: pl. 89 and text – Type species (by monotypy) *Perdix australis* Latham = *Synoicus ypsilophora australis* (Latham).

Synaecus Agassiz, 1846: *Nomen. Zool. Index Univ. Aves* 2. Unjustified emendation.

Ypsilophorus Mathews, 1912: *Austral Avian Rec.* 1: 112. Unnecessary *nomen novum* for *Synoicus* Gould, 1843, which is not a junior homonym of *Synoicum* Phipps, 1774.

Seabrook-Davison *et al.* (2009) and Kimball *et al.* (2011) revealed the genus *Coturnix* to be paraphyletic. We follow Dickinson & Remsen (2013), Clements *et al.* (2019), and F. Gill *et al.* (2021) in resurrecting the genus *Synoicus* for brown quail (*S. ypsilophorus*) and blue-breasted quail (*S. chinensis chinensis*) (see Appendix 2 for the latter).

► **Synoicus ypsilophorus* (Bosc)

Brown Quail

Coturnix ypsilophorus Bosc, 1792: *Journ. d’Hist. Natur.* 2: 297, pl. 39 – no locality = Tasmania (*vide* Mathews 1913, *List Birds Australia*: 7).

Synoicus ypsilophorus (Bosc); Checklist Committee 1953, *Checklist N.Z. Birds*: 37.

Indonesia, New Guinea, Australia (north, south-west, east, and Tasmania) (Marchant & Higgins 1993).

**Synoicus ypsilophorus australis* (Latham)

Australian Brown Quail | Kuera

Perdix australis Latham, 1801: *Index Ornith. Suppl.*: lxii – New South Wales, Australia.

Synoicus australis (Latham); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 1 (part 6): 226.

Synaecus australis Temminck [sic]; Hamilton 1909, *Hand-list birds New Zealand*: 18.

Synoicus ypsilophorus; Checklist Committee 1953, *Checklist N.Z. Birds*: 37. Not *Coturnix ypsilophorus* Bosc, 1792.

Coturnix ypsilophora australis (Latham); Marchant & Higgins 1993, *HANZAB* 2: 404.

Synoicus ypsilophorus australis (Latham); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 34.

Mainland Australia. Introduced to New Zealand and widely liberated in the 1860s and 1870s in both North and South Islands (Thomson 1922). Now surviving only in the North Island: common in Northland, and scattered elsewhere as far south as Wairarapa; also on northern offshore islands – Manawatāwhi / Three Kings, Great Barrier / Aotea, Hauturu / Little Barrier, Tiritiri Matangi, Mayor / Tuhua, Mercury, The Aldermen, and Moutohora / Whale Islands (C. Robertson *et al.* 2007). Although introductions from Australia came from both the Australian mainland (*S. y. australis*) and Tasmania (*S. y. ypsilophora*), recent specimens are referable only to *S. y. australis* (Oliver 1955; Marchant & Higgins 2003; see Appendix 2). Recorded on Manawatāwhi / Three Kings Islands as early as 1887; Turbott & Buddle (1948) discussed the possibility that it reached northern New Zealand by self-introduction before the 1860–70 liberations. We do not accept this argument due to the possibility of misidentification with *C. novaeseelandiae*. Seabrook-Davison *et al.* (2009) reported that New Zealand populations were genetically identical to the northern Australian subspecies *S. y. cervina*; however, Marchant & Higgins (1993) recognised a single subspecies from mainland Australia (*S. y. australis*) and suggested that “taxonomy [was] in need of review”.

Genus **Alectoris* Kaup

Alectoris Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 180, 193 – Type species (by monotypy) *Perdix petrosa* of authors (not Gmelin) = *Alectoris barbara* (Bonnaterre).

► **Alectoris chukar* (J.E. Gray)

Chukor

Perdix Chukar J.E. Gray, 1830: in Hardwicke, *Illust. Indian Zool.* 1(2), pl. 54 – India, restricted to Srinagar, Kumaon (*vide* Peters 1934, *Check-list Birds World* 2: 65).

Alectoris graeca chukar (J.E. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 38.

Alectoris chukar (J.E. Gray); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 40.

Eurasia from south-east Europe and Asia Minor east through central Asia to outer Mongolia (Marchant & Higgins 1993). Two subspecies, *A. c. chukar* and *A. c. koroviakovi* (Zarudny, 1914), were introduced to New Zealand and have probably interbred widely (G. Williams 1950, 1951). Now well established on the dry, rocky country of the eastern South Island from Marlborough to Central Otago (C. Robertson *et al.* 2007). Liberations in the North Island were unsuccessful (Marchant & Higgins 1993).

Subfamily *PAVONINAE Rafinesque: Peafowls

Pavosia Rafinesque, 1815: *Analyse de la Nature*: 70 – Type genus *Pavo* Linnaeus, 1758.

Genus **Pavo* Linnaeus

Pavo Linnaeus, 1758: *Syst. Nat.*, 10th edition, 1: 136 – Type species (by tautonymy) *Pavo* = *Pavo cristatus* Linnaeus.

► **Pavo cristatus* Linnaeus

Peafowl | Pīkao

Pavo cristatus Linnaeus, 1758: *Syst. Nat.*, 10th edition, 1: 156 – “India orientali, Zeylona” = India.

Pavo cristatus Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 38.

India and Sri Lanka. Deliberately introduced to New Zealand from 1843 (Thomson 1922). Increasingly common in Northland, western Firth of Thames, Coromandel, Rotorua district, Bay of Plenty, East Cape, King Country, Taranaki, Whanganui district, Gisborne, Mahia, and Hawke’s Bay, with some records from north-west Nelson, Marlborough, and Canterbury (C. Robertson *et al.* 2007). No subspecies.

Subfamily *MELEAGRIDINAE G.R. Gray: Turkeys

Meleagrinae G.R. Gray, 1840: *List Gen. Birds* (1st edition): 60 – Type genus *Meleagris* Linnaeus, 1758.

Genus **Meleagris* Linnaeus

Meleagris Linnaeus, 1758: *Syst. Nat.*, 10th edition, 1: 156 – Type species (by tautonymy) *Meleagris* = *Meleagris gallopavo* Linnaeus.

► **Meleagris gallopavo* Linnaeus

Wild Turkey | Korukoru

North America, from north-east and central USA to Mexico (Marchant & Higgins 1993).

**Meleagris gallopavo gallopavo* Linnaeus

Gould’s Wild Turkey

Meleagris gallopavo Linnaeus, 1758: *Syst. Nat.*, 10th edition, 1: 156 – Mexico.

Meleagris gallipavo Linnaeus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 108. Unjustified emendation.

Meleagris gallopavo gallopavo Linnaeus; Peters 1934, *Check-list Birds World* 2: 140.

Meleagris gallopavo Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 117.

Sierra Madre Mountains of north-west Mexico, New Mexico, and Arizona (Marchant & Higgins 1993). All domesticated turkeys stem from this subspecies. Wild stock originally introduced unsuccessfully to Hawke’s Bay, Nelson, and Canterbury in the early 1890s (Thomson 1922). Current population stems from subsequent introductions to Whanganui area in 1920 and Wellington, Hawke’s Bay, and Marlborough in the 1950s (Long 1981), as well as escapees from farms.

Increasingly common in the wild in rough farmland throughout the North Island, and in north-west Nelson, Marlborough, Canterbury, and Central Otago (C. Robertson *et al.* 2007).

Subfamily PHASIANINAE Vigors: Pheasants and Monals

Phasianidae Vigors, 1825: *Zoological Journ.* 2: 402 – Type genus *Phasianus* Linnaeus, 1758.

Genus **Phasianus* Linnaeus

Phasianus Linnaeus, 1758: *Syst. Nat., 10th edition, 1*: 158 – Type species (by tautonymy) *Phasianus* = *Phasianus colchicus* Linnaeus.

► **Phasianus colchicus* Linnaeus

Common Pheasant

Phasianus colchicus Linnaeus, 1758: *Syst. Nat., 10th edition, 1*: 158 – “Africa, Asia”, restricted to the Rioni River Valley, western Transcaucasia.

Phasianus torquatus; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 1 (part 6): 226. Not *Phasianus torquatus* Gmelin, 1789.

Phasianus colchicus Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 37.

Asia from Asia Minor to Japan; widely introduced around the world and established in Europe, North America, Japan, islands of the Pacific Ocean, Australia, and New Zealand (Marchant & Higgins 1993). In New Zealand repeatedly introduced from 1842 onwards; local populations are still being reinforced by releases of New Zealand-bred stock. Most common in the North Island, and very sparse in the South Island, except around Nelson and Canterbury (C. Robertson *et al.* 2007). The New Zealand stock is derived from several interbreeding subspecies, though most individuals are probably hybrids between ring-necked pheasants *Ph. c. torquatus* and southern Caucasus (black-necked) pheasants *Ph. c. colchicus* (Westerskov 1963).

Order PODICIPEDIFORMES: Grebes

Family PODICIPEDIDAE Bonaparte: Grebes

Podicipinae [sic] Bonaparte, 1831: *Saggio dist. Metodica Anim. Vert.*: 62 – Type genus *Podiceps* Latham.

Genus *Podiceps* Latham

Podiceps Latham, 1787: *Gen. Synop. Birds Suppl. 1*: 294 – Type species (by subsequent designation) *Colymbus cristatus* Linnaeus = *Podiceps cristatus* (Linnaeus).

Lophaethya Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 72 – Type species (by subsequent designation) *Colymbus cristatus* Linnaeus = *Podiceps cristatus* (Linnaeus).

Podicipes Oken, 1839: *Isis von Oken*: col. 673. Unjustified emendation.

Lophaethya Agassiz, 1846: *Nomen. Zool. Index Univ. Aves 2*: 990. Unjustified emendation.

► *Podiceps cristatus* (Linnaeus)

Great Crested Grebe

Colymbus cristatus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 135 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 53).

Three subspecies: *P. c. cristatus* in Palearctic, *P. c. infuscatus* Salvadori, 1844 in Africa south of the Sahara, and *P. c. australis* in Australia and New Zealand.

Podiceps cristatus australis Gould

Australasian Crested Grebe | Pūteketeke

Podiceps australis Gould, 1844: *Birds of Australia*, Part 17 – Australia and Tasmania (*vide* McAllan 2004, *Notornis 51*: 125).

Podiceps hectori Buller, 1865: *Essay N.Z. Ornith.*: 19 – Lake Wakatipu.

Podiceps Hectori Buller; Finsch 1867, *Journ. für Ornith.* 15: 345.

Podiceps cristatus; Anon. 1870, *Cat. Colonial Mus.*: 75. Not *Colymbus cristatus* Linnaeus, 1758.

Podicipes cristatus; Hutton 1904, *Index Faunae N.Z.*: 36. Not *Colymbus cristatus* Linnaeus, 1758.

Lophaethya cristata; Buller 1905, *Suppl. Birds N.Z. 1*: 76. Not *Colymbus cristatus* Linnaeus, 1758.

Lophaethya [sic] *cristata*; Hamilton 1909, *Hand-list Birds New Zealand*: 4. Not *Colymbus cristatus* Linnaeus, 1758.

Podiceps cristatus christiani Mathews, 1911: *Birds Australia 1*: 267, pl. 64 – Victoria, Australia.

Podiceps cristatus australis Gould; Mathews & Iredale 1913, *Ibis 1* (10th series): 218.

Australia (mainly south-east and south-west) and New Zealand. No genetic differentiation was found between Australian and New Zealand populations (B. Robertson & Gemmill 2002). In New Zealand, breeding South Island only; lowland lakes west of the Southern Alps / Kā Tiritiri o te Moana; subalpine and alpine lakes within and east of the main ranges, with the greatest density in Canterbury (C. Robertson *et al.* 2007). After a decline in Nelson, Marlborough, Otago, and Southland has recolonised Marlborough (Westerskov 1972; Sagar 1981), increased in Southern Lakes District and around Christchurch, but decreased in Fiordland (C. Robertson *et al.* 2007). Some local movement between lakes, but seldom reported from salt water (Sagar & O'Donnell 1982). North Island: few acceptable records since European colonisation (Westerskov 1972). One at Rotorua, Dec. 1975 to Jun. 1976 (Palliser 1976, 1977). Late Holocene records from Whakamoenga Cave, Lake Taupo, and Lake Poukawa. Three North Island midden records (Tairua, Taupo, Paremata); only one South Island record (Lake Grassmere / Kapara Te Hau, dune or midden).

Genus *Poliiocephalus* Selby

Poliiocephalus Selby, 1840: *Cat. Genera Subgen. Types Aves*: 47 – Type species (by monotypy) *Podiceps poliiocephalus* Jardine & Selby = *Poliiocephalus poliiocephalus* (Jardine & Selby).

► *Poliiocephalus rufopectus* (G.R. Gray)

New Zealand Dabchick | Weweia

Podiceps (Poliiocephalus) [sic] *rufopectus* G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z. 2*: 198 – North Island.

Fulica novaezelandiae Colenso, 1844: *London Journ. Botany 3*: 54 – “A little below Ngaruawahie” = Ngaruawahia, Waikato.

Fulica nova-zealandiae Colenso, 1845: *Tasm. Journ. Nat. Sci. Agric. 2*: 283 – “A little below Ngaruawahie” = Ngaruawahia, Waikato.

Podiceps rufopectus G.R. Gray; Ellman 1861, *Zoologist 19*: 7471.

Podiceps rufipectus G.R. Gray; G.R. Gray 1862, *Ibis 4*: 242. Unjustified emendation.

Podicipes rufipectus G.R. Gray; Hutton 1904, *Index Faunae N.Z.*: 36. Unjustified emendation.

Poliiocephalus rufopectus (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 218.

Podiceps rufopectus G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 16.

New Zealand only. North Island: coastal and sand-dune lakes from North Cape (Otou) to lower Waikato; southern Taranaki to Paraparaumu; lakes and dams of Volcanic Plateau south to Lakes Rotopounamu and Rotoaira; lakes and dams of Gisborne, Hawke's Bay, and Wairarapa, with post-nuptial flocks forming especially in Wairarapa and Manawatu (Stidolph & Heather 1978; Lusk & Lusk 1981). South Island: formerly sparingly distributed on lowland lakes, but declined rapidly in the 19th Century; last proved breeding early 1940s (Eglinton Valley); a single record between 1950 and 2000 (Lake Elterwater, Jun. 1987), presumably a vagrant from the North Island (Heather 1988). Numerous records from Golden Bay, Tasman Bay, and Marlborough since 2006 (Scofield 2008; Miskelly *et al.* 2011, 2013, 2015; Miskelly, Crossland *et al.*

2017, 2019, 2021). Breeding confirmed at Takaka in 2012 and 2018 (Petyt 2013; Miskelly, Crossland *et al.* 2021) and likely near Seddon in 2015 (Miskelly, Crossland *et al.* 2017). The southernmost record was one (possibly two) at Pegasus wetland, North Canterbury, May 2020 (Miskelly, Crossland *et al.* 2021). Holocene remains from one North Island site (Poukawa) and three South Island sites (Lake Grassmere / Kapara Te Hau, Waikari Cave, Pyramid Valley); one midden record (Whakamoenga Cave, Taupo). Storer (1971, 1987) considered the New Zealand dabchick to be closely related to the Australian hoary-headed grebe *P. poliocephalus*, and that the two differ both in behaviour and in morphology from the “true” dabchicks or little grebes (*Tachybaptus*). However, the relationship is not here considered close enough to be subspecific.

► ***Poliocephalus poliocephalus*** (Jardine & Selby) **Hoary-headed Grebe | Taihoropi**

Podiceps poliocephalus Jardine & Selby, 1827: *Illustr. Ornith. 1*: pl. 13 and text – New South Wales, Australia.

Podiceps nestor Gould, 1837: *Synop. Birds Australia 1*: pl. 19 – New South Wales and Tasmania, Australia.

Podiceps poliocephalus cloatesi Mathews, 1912: *Novit. Zool. 18*(3): 197 – Point Cloates, Western Australia.

Poliocephalus poliocephalus (Jardine & Selby); Checklist Committee 1990, *Checklist Birds N.Z.*: 11.

Australia, mostly south of 25°S, and including Tasmania; an irregular visitor elsewhere throughout much of Australia (Marchant & Higgins 1990). First New Zealand records: Boat Harbour, Snares Islands / Tini Heke, one, Feb. 1975; Lake Horowhenua, one, Jul. 1975; Te Anau district, two, Nov. 1975 (H. Best 1976). One, then two, pairs bred in Southland, 1976 to 1978 (Barlow 1976); breeding unknown in North Island. Widely scattered sightings in 1977–78, mostly of single birds, in North and South Islands north to Aupouri Peninsula (Marchant & Higgins 1990). Few records 1979–2012, with eight accepted South Island records since then: Big Lagoon, Southland, May 2012 (Miskelly *et al.* 2013); Lake Hakapoua, Fiordland, Feb. 2013 (Miskelly, Crossland *et al.* 2017); three birds, Lake Elterwater, Marlborough, Aug. 2014, with subsequent records there in Jan. 2018 and Jul. 2019 (Miskelly, Crossland *et al.* 2015, 2019, 2021); Bromley, Christchurch, May 2015; 2 birds, Lake Ellesmere / Te Waihora, Jun. 2018 (Miskelly, Crossland *et al.* 2019). An adult with two chicks photographed at Lake Elterwater in Nov. 2019 (images by Scott Brooks on New Zealand Birds Online, viewed 24 Jun. 2021).

Genus *Tachybaptus* Reichenbach

Tachybaptus Reichenbach, 1849: *Avium Syst. Nat.*: pl. 2 – Type species (by monotypy) *Colymbus minor* = *Tachybaptus ruficollis* (Pallas).

This genus includes four Eastern Hemisphere species: *T. novaehollandiae*, *T. ruficollis* (Pallas, 1764), *T. pelzelinii* (Hartlaub, 1861) and *T. rufolavatus* (Delacour, 1932) (see Storer 1963).

► ***Tachybaptus novaehollandiae*** (Stephens) **Eastern Little Grebe**

Indonesia, New Guinea, New Caledonia, New Hebrides, Solomon Islands, Australia, Tasmania, and New Zealand (Marchant & Higgins 1990). Seven subspecies.

Tachybaptus novaehollandiae novaehollandiae (Stephens) **Australasian Little Grebe | Tokitokipio**

Podiceps Novae Hollandiae Stephens, 1826: in Shaw, *General Zool. 13*(1): 18 – New South Wales, Australia.

Podiceps gularis Gould, 1837: *Synop. Birds Australia 1*: pl. 19 – New South Wales, Australia.

Podiceps fluviatilis carterae Mathews, 1912: *Novit. Zool. 18*(3): 197 – Broome Hill, south-western Australia.

Podiceps fluviatilis parryi Mathews, 1912: *Novit. Zool. 18*(3): 197 – Parry’s Creek, Western Australia.

Tachybaptus novaehollandiae novaehollandiae (Stephens); Checklist Committee 1990, *Checklist Birds N.Z.*: 12.

Australia (mainly north, south-west, and east, including Tasmania) (Marchant & Higgins 1990). First New Zealand records: one near Arrowtown, 1968 (Chance 1969); a pair near Dargaville, 1972, attempted breeding (P. Miller 1973); Lake Okareka, one, 1973 (Lyle 1973). North Island: by early 1980s, breeding on small sheltered ponds from Aupouri Peninsula to southern Kaipara, forming small flocks in autumn. Then apparently declined, with breeding reports of a pair on Lake Kereta, south Kaipara, and perhaps elsewhere in Northland (Lauder 1978). More recently a significant expansion in range has occurred with records between 1999 and 2004 in 40 atlas squares from the Far North to Manawatu (C. Robertson *et al.* 2007). Breeding regularly between Whangarei and North Auckland (Beauchamp 2019), with isolated records from Lake Mangamahoe, Taranaki, Dec. 2018 and May 2019 (Miskelly, Crossland *et al.* 2021). South Island: pairs or family parties seen until mid-1990s on at least eight widely scattered small lakes from Elterwater (Marlborough) to Redcliff (Southland), and on both sides of the Southern Alps / Kā Tiritiri o te Moana (Marchant & Higgins 1990; Miskelly *et al.* 2015). Has declined since 2000, with none currently known to be breeding in South Island. South Island records since 2004 from Harewood, Christchurch, Apr. 2004; two birds, The Levels, Timaru, Apr. 2007; St Annes Lagoon, Cheviot, Apr. 2018; Takaka, Jun. 2018; and Lake Benmore, Sep. 2020 (Miskelly, Crossland *et al.* 2013, 2015, 2019, 2021).

Order **COLUMBIFORMES**: Pigeons and DovesSuborder **COLUMBAE**: Pigeons and DovesFamily **COLUMBIDAE** Illiger: Pigeons and Doves

Columbini Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 243 – Type genus *Columba* Linnaeus, 1758.

We follow Pereira *et al.* (2007), Dickinson & Remsen (2013), and Nowak *et al.* (2019) in recognising three subfamilies of pigeons, two of which occur in New Zealand. Genus sequence follows Dickinson & Remsen (2013), Clements *et al.* (2019), Handbook of the Birds of the World and BirdLife International (2020), and F. Gill *et al.* (2021).

Subfamily **COLUMBINAE** Illiger: Typical Pigeons

Columbini Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 243 – Type genus *Columba* Linnaeus, 1758.

Genus ***Columba** Linnaeus

Columba Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 162 – Type species (by subsequent designation) *Columba oenas* Linnaeus.

► ***Columba livia** Gmelin

Rock Pigeon | Kererū Aropari

Columba domestica β *livia* Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 769 – south Europe.

Columba livia Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 53.

Europe, North Africa, and west Asia. Domestic forms brought to New Zealand in the early days of European settlement have become feral in most cities and major towns. In rural areas, widespread, mainly in low-rainfall zones of Hawke's Bay, Marlborough, Canterbury, and Otago (Higgins & Davies 1996; C. Robertson *et al.* 2007). It was a well-established, and numerous, breeding species on Norfolk Island by 1825 (Backhouse 1843: 257, 264).

Genus ***Streptopelia** Bonaparte

Streptopelia Bonaparte, 1855: *Compt. Rend. Séa. Acad. Sci., Paris 40*: 17 – Type species (by subsequent designation) *Columba risoria* Linnaeus = *Streptopelia risoria* (Linnaeus).

► ***Streptopelia risoria** (Linnaeus)

Barbary Dove

Columba risoria Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 165 – India.

Columbam roseogriseam Sundevall, 1857: *Kungl. Svenska Vetenskapsakad. Handl.* 2(1): 54 – Nubia, Sudan.

Turtur risorius (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 64.

Streptopelia 'risoria' (Linnaeus); Goodwin 1970, *Pigeons Doves World*: 117.

Streptopelia roseogrisea (Sundevall); Checklist Committee 1990, *Checklist Birds N.Z.*: 173.

Streptopelia 'risoria' (Linnaeus); Higgins & Davies 1996, *HANZAB* 3: 864.

Streptopelia risoria (Linnaeus); ICZN 2008, *Bull. Zool. Nomenclature* 65(4): 327.

North Africa, Arabian Peninsula (Higgins & Davies 1996). This is the domesticated form, also known as ring dove. In New Zealand: first introduced to Nelson, in 1867, and later to Canterbury and Dunedin (Thomson 1922). Since about 1970, there have been feral populations at various places in the North Island from Northland to the Wairarapa. Presently in isolated locations, locally common about Kerikeri, Auckland, and in the Hawke's Bay (C. Robertson *et al.* 2007). The Masterton population established in the 1970s (Stidolph 1974b) did not persist (Heather & Robertson 1996). There were a few South Island sightings 1999–2004 (C. Robertson *et al.* 2007).

The name *S. risoria* has priority over *S. roseogrisea* (ICZN 2008).

► ***Streptopelia chinensis** (Scopoli)

Spotted Dove

Columba chinensis Scopoli, 1786: *Delic. Flor. Faun. insubr.* 2: 94 – Canton, China.

South-east Asia from India to south China and Indonesia (Higgins & Davies 1996). Introduced to Australia, New Zealand, New Britain, Fiji, Hawai'i, California, and Mauritius (Long 1981; Higgins & Davies 1996). Five subspecies.

► ***Streptopelia chinensis tigrina** (Temminck)

Spotted Dove

Columba Tigrina Temminck, 1810: in P. Knip & J.C. Temminck, *Les Pigeons, les Colombes*: 94, pl. 43 – Java and Timor, Indonesia.

Turtur tigrinus minor Parrot, 1907: *Abh. Kl. Bayer Akad. Wiss.* 24(1): 275 – Sumatra, Indonesia.

Streptopelia chinensis tigrina (Temminck); Checklist Committee 1953, *Checklist N.Z. Birds*: 53.

Bangladesh, Burma, South-east Asia. A common cage-bird introduced to New Britain, Fiji, and parts of Australia. Feral in Auckland since the 1920s, and steadily expanding its range. Now firmly established in the greater Auckland area from Warkworth to Firth of Thames, and in the Whangarei and Bay of Plenty areas south to Taupo (Heather & Robertson 1996; C. Robertson *et al.* 2007).

Subfamily RAPHINAE Wetmore: Fruit Doves

Raphidae Wetmore, 1930: *Proc. U.S. Nat. Mus* 76(24): 5 – Type genus *Raphus* Brisson, 1760.

Genus *Ptilinopus* Swainson

Ptilinopus Swainson, 1825: *Zoological Journ.* 1: 473 – Type species (by monotypy) *Ptilinopus purpuratus* var. *regina* Swainson.
Lamprotreron Bonaparte, 1854: *Consp. Gen. Avium* 2: 17 – Type species (by original designation) *Columba superba* Temminck.
Reginopus Mathews, 1913: *Austral Avian Rec.* 2: 73 – Type species (by original designation) *Ptilinopus ewingii* Gould.

► *Ptilinopus regina* Swainson

Rose-crowned Fruit-dove

Ptilinopus purpuratus var. *regina* Swainson, 1825: *Zoological Journ.* 1: 474 – Australasia, restricted to New South Wales, Australia (fide Condon 1975, *Checklist Birds Australia* 1: 162).

Ptilinopus swainsonii Gould, 1842: *Birds of Australia* 5: text to pl. 55 – Clarence River, New South Wales, Australia.

Ptilinopus regina yorki Mathews, 1922: *Austral Avian Rec.* 5: 1 – Cape York, Queensland, Australia.

Ptilinopus regina regina Swainson; Condon 1975, *Checklist Birds Australia* 1: 162.

Ptilinopus regina Swainson; Hermes *et al.* 1986, *Notornis* 33: 149.

Ptilinopus (Ptilinopus) regina regina Swainson; Schodde 1997, *Zool. Cat. Australia* 37.2: 57.

Australia: islands in Torres Strait, and from Cape York to northern New South Wales, including islands off east Queensland (Higgins & Davies 1996). Migratory or nomadic. One record from New Zealand (Taranaki Bight, Aug. 2019; Miskelly 2020b). One record from Norfolk Island (Hermes *et al.* 1986).

Genus *Hemiphaga* Bonaparte

Hemiphaga Bonaparte, 1854: *Compt. Rend. Séa. Acad. Sci., Paris* 39: 1076 – Type species (by original designation) *Columba novaeseelandiae* Gmelin = *Hemiphaga novaeseelandiae* (Gmelin).

Endemic to the New Zealand region, plus Norfolk Island. Two extant New Zealand species (*H. novaeseelandiae* and *H. chathamensis*). The Norfolk Island pigeon (*H. spadicea*) became extinct about 1839 (N. Taylor 1966; Checklist Committee 2010).

► *Hemiphaga novaeseelandiae* (Gmelin)

Kererū | New Zealand Pigeon

Columba novae Seelandiae Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 773. Based on the “New-Zealand Pigeon” of Latham 1783, *Gen. Synop. Birds* 2(2): 640 – Dusky Sound, Fiordland.

Columba zealandica Latham, 1790: *Index Ornith.* 2: 603 – New Zealand.

Columba argetraea J.R. Forster, 1794: *Mag. merkwürdigen neuen Reise Beschreibungen* 11(3): 313, footnote – New Zealand and Norfolk Island, restricted to Dusky Sound, Fiordland (fide Steinheimer *et al.* 2008, *Notornis* 55(1): 35).

Columba argetraea J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 80 – South Island. Junior primary homonym of *Columba argetraea* J.R. Forster, 1794.

Hemiphaga novae-zealandiae (Gmelin); Bonaparte, 1854: *Compt. Rend. Séa. Acad. Sci., Paris* 39: 1077. Unjustified emendation.

Columba Novae-Zealandiae Gmelin; Ellman 1861, *Zoologist* 19: 7467. Unjustified emendation.

Carpophaga Novae Zealandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74. Unjustified emendation.

Carpophaga novae zealandiae (Gmelin); Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 157. Unjustified emendation.

Carpophaga Novae Zealandiae (Gmelin); Buller 1876, *Trans. Proc. N.Z. Inst.* 8: 196. Unjustified emendation.

Carpophaga novae-zealandiae (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Hemiphaga novae-seelandiae (Gmelin); Mathews 1930, *Emu* 29: 279.

Hemiphaga novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 53.

Hemiphaga novaeseelandiae (Gmelin); Holdaway, Worthy & Tennyson 2001, *New Zealand Journ. Zool.* 28(2): 134, 179.

New Zealand: North and South Islands, Stewart Island / Rakiura, and most of the large offshore islands. Common and widespread in native forests and remnants throughout range, including suburban areas (Higgins & Davies 1996; C. Robertson *et al.* 2007). Holocene remains and midden records from numerous sites (Worthy & Holdaway 2002). A 19th Century report of large pigeons on Raoul Island, Kermadec Islands / Rangitāhua (Cheeseman 1891), was supported by the discovery of a bone in Polynesian middens, which was referred to *H. novaeseelandiae* (Worthy & Brassey 2000).

► *Hemiphaga chathamensis* (Rothschild)

Parea | Chatham Island Pigeon

Carpophaga chathamensis Rothschild, 1891: *Proc. Zool. Soc. London 1891* (21): 312, pl. 28 – Chatham Island.

Carpophaga chathamica Forbes, 1892: *Nature* 46: 252 – Chatham Islands.

Carpophaga chathamensis Rothschild; Buller 1896, *Trans. Proc. N.Z. Inst.* 28: 348. Unjustified emendation.

Hemiphaga chathamensis (Rothschild); Buller 1905, *Suppl. Birds N.Z.* 1: 41.

Hemiphaga Chathamensis (Rothschild); Hamilton 1909, *Hand-list Birds New Zealand*: 3.

Hemiphaga novaeseelandiae chathamensis (Rothschild); Checklist Committee 1953, *Checklist N.Z. Birds*: 53.

Chatham Islands: originally on Chatham, Mangere, and Pitt Islands, but now breeding only on Chatham Island (Aikman & Miskelly 2004). Common as Holocene remains on Chatham, Mangere, and Pitt Islands (Millener 1999; Tennyson & Millener 1994). Abundant in middens on Chatham Island (Sutton & Marshall 1977; Marshall *et al.* 1987). Eagle *et al.*

(2005) reported a pigeon (cf. *Hemiphaga*) bone from the Pliocene of the Chatham Islands; however, Tennyson (2010) considered it more likely to be a Holocene-aged specimen (i.e. of *Hemiphaga chathamensis*). Differences in plumage and skeletal morphology, compared to mainland birds, support the species status of the Chatham Islands population (Higgins & Davies 1996; Millener & Powlesland 2001).

Order **CUCULIFORMES**: CuckoosSuborder **CUCULI**: Cuckoos

An agreed phylogeny of the cuckoos and their relatives has not yet been achieved – see Christidis & Boles (2008) for a review.

Family **CUCULIDAE** Leach: CuckoosSubfamily **CUCULINAE** Leach: Parasitic Cuckoos

Cuculidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition*, London: 66– Type genus *Cuculus* Linnaeus, 1758.

Genus **Cuculus** Linnaeus

Cuculus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 110 – Type species (by tautonymy) *Cuculus canorus* Linnaeus.

► **Cuculus optatus** Gould**Oriental Cuckoo**

Cuculus optatus Gould, 1845: *Proc. Zool. Soc. London 1845* (13): 18 – Port Essington, Northern Territory, Australia.

Cuculus horsfieldi Moore, 1858: *Cat. Birds Brit. Mus. East Indian Co. 2*: 703 – Java, Indonesia.

Cuculus saturatus Horsfield [sic]; Buller 1906, *Suppl. Birds N.Z. 2*: 102. Not *Cuculus saturatus* Hodgson, 1843.

Cuculus optatus Gould; Mathews & Iredale, 1913: *Ibis 1* (10th series): 430.

Cuculus saturatus horsfieldi Horsfield & Moore [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 55.

Cuculus saturatus horsfieldi Moore; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 60.

Cuculus saturatus Blyth [sic]; Checklist Committee 1990, *Checklist Birds N.Z.*: 181. Not *Cuculus saturatus* Hodgson, 1843.

Cuculus (Cuculus) saturatus optatus Gould; Mason 1997, *Zool. Cat. Australia 37.2*: 226.

Breeds widely in Eurasia. Migratory; winters in south-east Asia, New Guinea, the Solomon Islands, and north and north-east Australia (uncommon) (Higgins 1999). There is confusion and uncertainty about the specific and subspecific status (and nomenclature) of various populations of this and closely related Asian cuckoos, both migratory and resident. Mason (1997) considered that the species reaching Australia and New Zealand is *C. saturatus* Hodgson, 1843, which was the name (but not the author) used by Checklist Committee (1990). However, we follow R. Payne (2005), R.C. Banks *et al.* (2006), and Christidis & Boles (2008) in using *C. optatus*. More than one subspecies may reach Australia (Higgins 1999), and presumably New Zealand. Given this uncertainty, New Zealand birds cannot be assigned to a subspecies without further investigation. Straggler to New Zealand; around 19 records since Feb. 1902, when a specimen was shot at Lake Te Anau (previously, doubtfully recorded in Hawke's Bay in 1889). Localities range from Raoul Island, Kermadec Islands / Rangitāhua (Miskelly *et al.* 2011) south to Snares Islands / Tini Heke (Miskelly *et al.* 2001a), all Oct.–Apr. Recent records are: Christchurch, Mar. 1993 (Medway 2000a); Te Kuiti, Nov.–Dec. 1993 (Medway 2000a); Invercargill, Apr. 1998 (Medway 2001d); Dunedin, Mar. 2001 (Medway 2001c); Kakanui, North Otago, Dec. 2001 (Medway 2002d); Muriwai Beach, Dec. 2002 (Medway 2003a); Whataroa, South Westland, Jan. 2005 (Scofield 2005a), Raoul Island, Dec. 2010 (Miskelly *et al.* 2011); Renwick, Marlborough, Apr. 2011 (Miskelly *et al.* 2013); Lake Poteriteri, Fiordland, Jan. 2015 (Miskelly, Crossland *et al.* 2017); and Greytown, Oct. 2018 (Miskelly, Crossland *et al.* 2019). One record from Norfolk Island (J. Moore 1999).

Genus **Cacomantis** Statius Müller

Cacomantis Statius Müller, 1843: *Verhand. Natur. Gesch. Nederl. Overz. Berit.*: 177 – Type species (by subsequent designation) *Cuculus flavus* Gmelin = *Cacomantis merulinus* (Scopoli).

Heteroscenes Cabanis & Heine, 1863: *Mus. Heineanum 4*(1): 26 – Type species (by monotypy) *Columba pallida* Latham = *Cacomantis pallidus* (Latham).

Recognition of *Cacomantis* as a genus distinct from *Cuculus* follows Christidis & Boles (1994, 2008) and Mason (1997). We follow Erritzøe *et al.* (2012), Clements *et al.* (2019), and F. Gill *et al.* (2021) in placing pallid cuckoo in the genus *Cacomantis*.

► **Cacomantis pallidus** (Latham)**Pallid Cuckoo**

Columba pallida Latham, 1801: *Index Ornith. Suppl.*: lx – “Nouvelle-Hollande”, restricted to New South Wales, Australia (*vide* Mason 1997, *Zool. Cat. Australia 37.2*: 228).

Cuculus pallidus (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 55.

Cuculus (Heteroscenes) pallidus (Latham); Mason 1997, *Zool. Cat. Australia 37.2*: 228.

Cacomantis pallidus (Latham); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 28.

Heteroscenes pallidus (Latham); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 147.

No subspecies. Breeds in southern parts of Australia, including Tasmania. Migratory; winters in inland and north Australia. Also found in southern New Guinea (occasionally) and Indonesia (Flores, Timor, Moluccas) (Higgins 1999). Straggler to New Zealand region. Seven records: Craig Flat, Otago (May–Oct. 1939, 1940 and 1941, and then found dead; Marples 1942a); Okarito, Dec. 1941; Greymouth, Mar. 1942 (Oliver 1955); Wairarapa, 1977 (Checklist Committee 1990); Omarama, Otago, Jan. 1990 (Guest 1991); Karori, Wellington, Nov. 2006 (Scofield 2008); Bainham, Golden Bay, Dec. 2019 (Miskelly, Crossland *et al.* 2021). One record from Macquarie Island (Sep. 1990).

► **Cacomantis flabelliformis** (Latham) **Fan-tailed Cuckoo**

Australia (including Tasmania), New Guinea, Vanuatu, New Caledonia, and Fiji (Higgins 1999). Five subspecies.

Cacomantis flabelliformis flabelliformis (Latham) **Fan-tailed Cuckoo**

Cuculus flabelliformis Latham, 1801: *Index Ornith. Suppl.*: xxx. Based on the “Fan-tailed Cuckoo” of Latham 1801, *Suppl. 2. Gen. Synop. Birds*: 138 – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* Mason 1997, *Zool. Cat. Australia* 37.2: 236).

Cuculus prionurus Lichtenstein, 1823: *Verzeich. Doubl., Berlin*: 9 – “Nov. Cambr. austr.” = New South Wales, Australia (*vide* Mason 1997, *Zool. Cat. Australia* 37.2: 236).

Cacomantis pyrrhophanus prionurus (Lichtenstein); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 60.

Cuculus pyrrhophanus prionurus (Lichtenstein); Checklist Committee 1980, *Notornis (Suppl.)* 27: 20.

Cacomantis flabelliformis flabelliformis (Latham); Checklist Committee 1990, *Checklist Birds N.Z.*: 182.

Breeds in south-west and south-east Australia including Tasmania. Nomadic or partly migratory within Australia; irregular migrant to eastern Solomon Islands (Higgins 1999). Straggler to New Zealand. Seven records: Governors Bay, Lyttelton Harbour / Whakaraupō, Jun. 1960 (Turbott & Scarlett 1964); Wanaka, Central Otago, Sep. 1991 (Guest 1992); Haast, South Westland, and Karikari Moana, Northland, Oct. 1991 (Medway 2000a); Culverden, North Canterbury, Dec. 1999 (Medway 2001a); Maungatoroto, Northland, Oct. 2010 (Miskelly *et al.* 2011); Halfmoon Bay, Stewart Island, Oct. 2017 (NMNZ OR.030300).

Genus **Chrysococcyx** Boie

Chrysococcyx Boie, 1826: *Isis von Oken*, Heft 2: col. 977 – Type species (by monotypy) *Cuculus cupreus* Shaw = *Chrysococcyx cupreus* (Shaw).

Chalcites Lesson, 1830: *Traité d’Ornith.* 2: 152 – Type species (by tautonymy) *Cuculus chalcites* Temminck = *Chrysococcyx lucidus plagosus* (Latham).

Cryssococci Lesson, 1837: *Compléments Oeuvres Buffon* 9: 269. Misspelling.

Lamprococcyx Cabanis & Heine, 1863: *Mus. Heineanum* 4(1): 11 – Type species (by original designation) *Cuculus lucidus* Gmelin = *Chrysococcyx lucidus lucidus* (Gmelin).

Chalcococcyx Cabanis & Heine, 1863: *Mus. Heineanum* 4(1): 15 – Type species *Cuculus xanthorhynchus* Horsfield = *Chrysococcyx xanthorhynchus* (Horsfield).

There is long-standing disagreement on whether to use *Chalcites* for the Australo-Asian glossy cuckoos, leaving *Chrysococcyx* for the African species, or whether to unite all under *Chrysococcyx*. Mason (1997) and Christidis & Boles (2008) used *Chalcites*. However, we follow Checklist Committee (1990, 2010), Christidis & Boles (1994), and R. Payne (2005) in using *Chrysococcyx*.

► **Chrysococcyx lucidus** (Gmelin) **Shining Bronze-cuckoo**

Breeds in south-west and south-east Australia (including Tasmania), New Zealand, Vanuatu, and New Caledonia. Migratory to the Lesser Sundas (Indonesia), New Guinea, and the Solomon Islands (Higgins 1999). Four subspecies (Dickinson & Remsen 2013).

Chrysococcyx lucidus lucidus (Gmelin) **Shining Cuckoo | Pīpīwharau**

Cuculus lucidus Gmelin, 1788: *Syst. Nat., 13th edition* 1(1): 421. Based on the “Shining Cuckoo” of Latham 1782, *Gen. Synop. Birds* 2: 528, pl. 23 – “nova Zeelandia”, restricted to Queen Charlotte Sound, Marlborough (*vide* Mason 1997, *Zool. Cat. Australia* 37.2: 242).

Cuculus nitens J.R. Forster, 1844: *in* M.H.C. Lichtenstein, *Descrip. Animalium*: 151 – Queen Charlotte Sound, Marlborough.

Chrysococcyx plagosus; Hutton 1872, *Ibis* 2 (3rd series): 246. Not *Cuculus plagosus* Latham, 1801.

Chrysococcyx lucidus Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74.

Chrysococcyx lucidus (Gmelin); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 77.

Chalcococcyx lucidus (Gmelin); Buller 1906, *Suppl. Birds N.Z.* 2: 101.

Lamprococcyx lucidus (Gmelin); Mathews & Iredale, 1913: *Ibis* 1 (10th series): 430.

Lamprococcyx lucidus australis Mathews, 1916: *Bull. Brit. Ornith. Club* 36: 83 – Queensland, Australia.

Chalcites lucidus lucidus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 55.

Chalcites lucidus (Gmelin); Wakelin 1968, *Notornis* 15: 171.

Chrysococcyx lucidus lucidus (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 182.

Chalcites (Chalcites) lucidus lucidus (Gmelin); Mason 1997, *Zool. Cat. Australia* 37.2: 241.

Breeds in New Zealand, including Stewart / Rakiura and Chatham Islands, and on Norfolk Island. Straggler to Kermadec Islands / Rangitāhua, Snares Islands / Tini Heke, Auckland Islands / Maukahuka, and Macquarie Island (Higgins 1999; Miskelly *et al.* 2001a; Miskelly, Elliott *et al.* 2020). Reaches Lord Howe Island but unable to breed there as the local population of *Gerygone* (likely host) is extinct. Found throughout New Zealand in spring and summer; rare in May, Jun. and Jul. Brood-parasite of grey and Chatham Island warblers (*Gerygone* spp.). Winters in New Britain, New Ireland, Bougainville, and the Solomon Islands (Higgins 1999). Many (perhaps most) migrate via New South Wales and Queensland (B. Gill 1983; Noske 2019). Recorded from Holocene deposits on the Chatham Islands (Millener 1999).

Genus *Eudynamys* Vigors & Horsfield

Eudynamys Vigors & Horsfield, 1826: *Trans. Linn. Soc. London* 15(1): 303 – Type species (by subsequent designation) *Cuculus orientalis* Linnaeus = *Eudynamys orientalis* (Linnaeus).

Eudynamis Cabanis & Heine, 1863: *Mus. Heineanum* 4(1): 49. Unjustified emendation.

Urodynamis Salvadori, 1880: *Ornitologia Papuasie Molucche* 1: 370 – Type species (by original designation) *Cuculus taitensis* Sparrman = *Eudynamys taitensis* (Sparrman).

R. Payne (2005) recognised *Urodynamis* as a monotypic genus for the long-tailed cuckoo, and in an analysis of mitochondrial gene sequences found that *Urodynamis* was closer to *Scythrops* than to *Eudynamys scolopacea* (Linnaeus, 1758) (Sorenson & Payne 2005). A subsequent PhD study using 6 nuclear and 1 mitochondrial loci also supported a separate genus for long-tailed cuckoo, but found *Eudynamys* to be sister to *Scythrops* (N. Burg 2018). Given the morphological similarity between long-tailed cuckoo and koels (*Eudynamys* spp.), we have retained long-tailed cuckoo in *Eudynamys* pending more detailed genetic comparisons.

► *Eudynamys taitensis* (Sparrman)

Long-tailed Cuckoo | Koekoeā

Cuculus taitensis Sparrman, 1787: *Mus. Carlsonianum* 2: no XXXII, pl. 32 – no locality = Tahiti, French Polynesia (*vide* Rothschild & Hartert 1905, *Novit. Zool.* 12(2): 258).

Cuculus tahitiensis Gmelin, 1788: *Syst. Nat., 13th edition* 1(1): 412 – Tahiti, French Polynesia.

Cuculus perlatus Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 232 – Tahiti, French Polynesia.

Eudynamys taitensis (Sparrman); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 193.

Cuculus fasciatus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 160 – Tahiti, French Polynesia.

Eudynamys cuneicauda Peale, 1848: *U.S. Expl. Exped.* 8: 139, 322 – Ovalau, Fiji Islands.

Eudynamys taitensis (Sparrman); G.R. Gray 1870, *Hand-list Birds* 2: 221. Unjustified emendation.

Eudynamis Tahitiensis (Sparrman); Potts 1871, *Trans. N.Z. Inst.* 3: 90. Unjustified emendation.

Eudynamis tahitiensis (Gmelin); Layard & Layard 1878, *Ibis* 2 (4th series): 275.

Urodynamis taitensis (Sparrman); Salvadori 1880, *Ornitologia Papuasie Molucche* 1: 370.

Eudynamis taitensis (Sparrman); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 1 (part 4): 127.

Eudynamis taitensis (Sparrman); Shelly 1891, *Cat. Birds Brit. Mus.*: 314. Unjustified emendation.

Urodynamis taitensis pheletes Wetmore, 1917: *Proc. Biol. Soc. Washington* 30: 1 – Otago.

Urodynamis taitensis belli Mathews, 1918: *Bull. Brit. Ornith. Club* 39: 24 – Norfolk Island.

Eurodynamis taitensis (Sparrman); Stead 1936, *Trans. Proc. Roy. Soc. N.Z.* 66: 182. Unjustified emendation.

Urodynamis taitensis cuneicauda (Peale); Mathews 1944, *Emu* 43: 245.

Eudynamys taitensis (Sparrman); Checklist Committee 1990, *Checklist Birds N.Z.*: 183.

Eudynamys (Urodynamis) taitensis (Sparrman); Mason 1997, *Zool. Cat. Australia* 37.2: 251.

Urodynamys [sic] taitensis (Sparrman); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 28, 275.

Urodynamis taitensis (Sparrman); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 159.

Breeds in New Zealand, including Hauturu / Little Barrier, Kapiti, Stewart / Rakiura and Codfish / Whenua Hou Islands. Brood-parasite of whitehead, brown creeper, and mohua (*Mohoua* spp.) (Higgins 1999). Found throughout New Zealand in spring and summer, but especially forested areas where its hosts reside (C. Robertson *et al.* 2007). Straggler to Chatham Islands and Snares / Tini Heke (Miskelly *et al.* 2001a, 2006). *Contra* Checklist Committee (2010), no records known from Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020). Rarely overwinters on mainland New Zealand. Migrates through Norfolk, Lord Howe, and Kermadec Islands / Rangitāhua to Oceania: Palau, Micronesia in the west to Henderson Island (Pitcairn Island group) in the east, a wintering ground extending longitudinally across 11,000 km (Bogert 1937; Gill & Hauber 2012). The northernmost record is Wake Island at about 19°N (Gill & Hauber 2013). Sometimes present in winter months on Raoul Island, Kermadec Islands (Veitch *et al.* 2004). Bogert (1937) reported the core wintering range to be Fiji to the Society Islands. No subspecies. Few Holocene bone records.

Genus *Scythrops* Latham

Scythrops Latham, 1790: *Index Ornith.* 1: 141 – Type species (by monotypy) *Scythrops novaehollandiae* Latham.

► *Scythrops novaehollandiae* Latham

Channel-billed Cuckoo

Scythrops novae Hollandiae Latham, 1790: *Index Ornith.* 1: 141 – “nova Hollandia”, restricted to New South Wales, Australia (*vide* Mason 1997, *Zool. Cat. Australia* 37.2: 253).

Scythrops novaehollandiae Latham; Checklist Committee 1953, *Checklist N.Z. Birds*: 56.

Eastern Indonesia, New Guinea, Bismarck Archipelago, north and east Australia (Higgins 1999). Migratory. Straggler to New Zealand and Norfolk Island. Six New Zealand records: Invercargill, Dec. 1924; Ngataki, Northland, Oct. 1986; Raglan, Oct. 1996; Te Pahi, Northland, Oct. 1996; Pukerua Bay, Wellington, Nov. 1996; Mangawhai Heads, Northland, Oct. 2002 (Tennyson & Brackenbury 1998; Medway 2003a). Two birds recorded from Norfolk Island (Higgins 1999; J. Moore 1999).

Order **APODIFORMES**: Swifts, Hummingbirds, and Owlet-nightjars

The 2010 Checklist followed G. Mayr (2002, 2005), G. Mayr *et al.* (2003), and Barrowclough *et al.* (2006) in moving owlet-nightjars (Aegothelidae) from Caprimulgiformes (nightjars) to Apodiformes. Simonetta (1967) was the first authority to conclude that owlet-nightjars were not closely related to true nightjars, and suggested that *Aegotheles* was more closely related to basal or primitive apodids. The differences were so profound that Simonetta (1967: 31) erected the suborder Aegothelae for the family. Sibley *et al.* (1988) also placed *Aegotheles* at suborder level, based on DNA evidence, calling the group Aegotheli, apparently unaware of Simonetta's (1967) name. More recent osteological and genetic studies (e.g. G. Mayr 2002, 2005; G. Mayr *et al.* 2003; Barrowclough *et al.* 2006) provide overwhelming evidence that the Caprimulgiformes (*sensu del Hoyo et al.* 1999) is paraphyletic, and that Aegothelidae forms a clade with Apodiformes – Hemiprocnidae and Apodidae (swifts) and Trochilidae (hummingbirds) – outside the other members of Caprimulgiformes. Many additional studies (reviewed by Sangster 2005) have supported this relationship. Sangster (2005) gave the non-Linnaean name Daedalornithes for the clade of Apodiformes and *Aegotheles*; however, the relationship can be as easily accommodated by transferring Aegothelae to the Apodiformes (Barrowclough *et al.* 2006). Recent genetic studies have either supported the sister relationship of owlet-nightjars and swifts, with this clade nested within a paraphyletic, expanded Caprimulgiformes (Sigurdsson 2013; Yuri *et al.* 2013), or have suggested that owlet-nightjars and night-jars are sister-groups and more closely related to owls than to swifts (Liu *et al.* 2019). Several authors have recommended elevating Aegothelidae to their own order (Aegotheliformes; see Yuri *et al.* 2013; Prum *et al.* 2015; Chen *et al.* 2019). We have retained Aegothelidae within Apodiformes pending further studies or greater consensus.

Suborder AEGOTHELAE: Owlet-nightjars

Family **AEGOTHELIDAE** Bonaparte: Owlet-nightjars

Aegothelinae Bonaparte, 1853: *Compt. Rend. Séa. Acad. Sci., Paris* 37(18): 645 – Type genus *Aegotheles* Vigors & Horsfield, 1827.

Genus **Aegotheles** Vigors & Horsfield

Aegotheles Vigors & Horsfield, 1826: *Trans. Linn. Soc. London* 15(1): 194 – Type species (by monotypy) *Caprimulgus novaehollandiae* Latham = *Aegotheles cristatus* (White).

Euaegotheles Mathews, 1918: *Birds Australia* 7: 52 – Type species (by original designation) *Batrachostomus psilopterus* G.R. Gray = *Aegotheles crinifrons* (Bonaparte).

Megaegotheles Scarlett, 1968: *Notornis* 15: 254 – Type species (by monotypy) *Megaegotheles novaezealandiae* Scarlett = *Aegotheles novaezealandiae* (Scarlett).

Potts (1871, 1873) described a small bird from locations in both Canterbury and Westland that he considered was either a small owl or a member of Podargidae. It was poorly described and no specimen was kept, but it was described as the size of a kingfisher and of very gentle nature. It is possible that this bird was *Aegotheles novaezealandiae*, not otherwise recorded alive. The use of the name *Strix parvissima* by Ellman (1861) suggests that this bird was known several years before Potts (1871). However, in the absence of an adequate description these records are unidentifiable, and the following names are *nomina dubia*:

Strix parvissima Ellman, 1861: *Zoologist* 19: 7465. *Nomen dubium*.

Strix parvissima Potts, 1871: *Trans. N.Z. Inst.* 2: 68 – Rangitata River, Canterbury. *Nomen dubium*.

Athene (Strix) parvissima Potts; Potts 1873, *Trans. N.Z. Inst.* 5: 172. *Nomen dubium*.

► †**Aegotheles novaezealandiae** (Scarlett)

New Zealand Owlet-nightjar | Ruru Hinapō

Megaegotheles novaezealandiae Scarlett, 1968: *Notornis* 15: 254 – Canaan, Takaka, Nelson.

Aegotheles novaezealandiae (Scarlett); Olson, Balouet & Fisher 1987, *Gerfaut* 77: 349.

Aegotheles novaezealandiae (Scarlett); Tennyson & Martinson 2006, *Extinct Birds of New Zealand*: 104. Unjustified emendation (see Murdoch 2008, *Notornis* 55: 228).

Extinct. Widespread in Late Pleistocene and Holocene deposits (particularly caves) in the North and South Islands; rarely recorded from middens (Worthy & Holdaway 2002). Larger than *Aegotheles* of Australia and probably flightless or nearly so (Rich & Scarlett 1977). Olson *et al.* (1987) synonymised *Megaegotheles* with *Aegotheles*. The phylogeny of Aegothelidae was assessed based on mtDNA sequences, and *A. novaezealandiae* shown to be the sister taxon of *A. savesi* from New Caledonia; together they are basal in the genus (Dumbacher *et al.* 2003).

Suborder APODI: Swifts and Treeswifts

Family APODIDAE Olphe-Galliard: Swifts

Subfamily APODINAE Olphe-Galliard: Swiftlets, Spinetails, and Typical Swifts

Apodidae Olphe-Galliard, 1887: *Contrib. Faune Ornith. Europe Occidentale* 22: 90 – Type genus *Apus* Scopoli, 1777.

The order of species follows Christidis & Boles (1994, 2008) and Schodde (1997b).

Tribe CHAETURINI: Needletails

Chaetureae Bonaparte, 1857: *Rivista Contemporanea, Torino* 9: 212 – Type genus *Chaetura* Stephens, 1826.

Genus *Hirundapus* Hodgson

Hirundapus Hodgson, 1837: *Journ. Asiatic Soc. Bengal* 5: 780 – Type species (by original designation) *Hirundapus nudipes* Hodgson = *Hirundapus caudacutus nudipes* Hodgson.

- ***Hirundapus caudacutus*** (Latham) **White-throated Needletail**
Breeds from western Siberia east to Japan and south to Taiwan, Burma, and the Himalayas (Higgins 1999). Two subspecies. Nominate race a long-distance migrant to New Guinea and Australia. Also called spine-tailed swift.

- Hirundapus caudacutus caudacutus*** (Latham) **White-throated Needletail**
Hirundo caudacuta Latham, 1801: *Index Ornith. Suppl.*: lvii – “Nova Hollandia”, restricted to New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 341).
Choetura [sic] *caudacuta* (Latham); Buller 1905, *Suppl. Birds N.Z.* 1: 95.
Chaetura caudacuta caudacuta (Latham); Mathews & Iredale 1913, *Ibis* 1 (10th series): 428.
Hirundapus caudacutus caudacutus (Latham); Checklist Committee 1990, *Checklist Birds N.Z.*: 188.
Hirundapus caudacutus (Latham); J. Moore 1999, *Notornis* 46: 363.

Breeds from western Siberia and Mongolia to Sakhalin, Kurile Islands, Manchuria, and Japan (Higgins 1999). Migrates through China to winter in New Guinea, and Australia (including Tasmania) from Oct. to Mar.–Apr. (Higgins 1999). Straggler to New Zealand: many records from 1888 (mainly between Nov. and Apr.), mostly in the North Island but as far south as the Snares Islands / Tini Heke and Auckland Islands / Maukahuka (Miskelly *et al.* 2001a; Miskelly, Elliott *et al.* 2020); also Chatham Islands (Scofield 2005a; Miskelly *et al.* 2006). Irruptions noted in some years (1942–43, 1968–69, 2020, including a flock of 80 at Upper Moutere, Tasman, Feb. 2020; McCaskill 1943; Miskelly, Crossland *et al.* 2021). Vagrant to Macquarie Island (e.g. Jan. 1960; Warham 1961). Irregular migrant on Norfolk Island (Schodde *et al.* 1983).

Tribe APODINI: Typical Swifts

Apodidae Olphe-Galliard, 1887: *Contrib. Faune Ornith. Europe Occidentale* 22: 90 – Type genus *Apus* Scopoli, 1777.

Genus *Apus* Scopoli

Apus Scopoli, 1777: *Intro. Hist. Nat.*: 483 – Type species (by tautonymy) *Hirundo apus* Linnaeus = *Apus apus* (Linnaeus).
Micropus Wolf, 1810: in Meyer & Wolf, *Tasch. Dtsch. Vögelk.* 1: 280 – Type species (by original designation) *Hirundo apus* Linnaeus = *Apus apus* (Linnaeus).
Cypselus Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 229 – Type species (by subsequent designation) *Hirundo apus* Linnaeus = *Apus apus* (Linnaeus).

- ***Apus pacificus*** (Latham) **Fork-tailed Swift**
Breeds in Siberia, China, Japan, Taiwan, Indochina, Malaysia, and west to India, Tibet, and the Himalayas (Higgins 1999). Migratory or sedentary. Four subspecies.

- Apus pacificus pacificus*** (Latham) **Fork-tailed Swift**
Hirundo pacifica Latham, 1801: *Index Ornith. Suppl.*: lviii – “Nova Hollandia”, restricted to New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 344).
Micropus pacificus Blyth [sic]; Hutton 1904, *Index Faunae N.Z.*: 37.
Cypselus pacificus (Latham); Buller 1905, *Suppl. Birds N.Z.* 1: 95.
Apus pacificus (Latham); Mathews & Iredale 1913, *Ibis* 1 (10th series): 428.
Apus pacificus pacificus (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 57.
Apus (Apus) pacificus pacificus (Latham); Schodde 1997, *Zool. Cat. Australia* 37.2: 344.

Breeds in north-east Asia, including Japan and Korea. Winters in New Guinea and Australia (including Tasmania) from Oct. to Apr. (Higgins 1999). Straggler to New Zealand: at least 15 records since 1884 from both main islands; also Three Kings Islands / Manawatāwhi (Medway 2001c), Chatham Islands (Guest 1992; Miskelly *et al.* 2006), and Antipodes Islands (Medway 2003a). Many sightings have been between Oct. and Mar., but others, surprisingly, have been in May,

Jun., Jul., Aug. and Sep. Occasional vagrant to Macquarie Island (e.g. Dec. 1958; J. Gibson 1959). Irregular migrant to Norfolk Island (Schodde *et al.* 1983).

Order **GRUIFORMES**: Adzebills, Rails, and CranesFamily †**APTORNITHIDAE** Bonaparte: Adzebills

Aptornithidae Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43(18): 841 – Type genus *Aptornis* Owen. Name placed in the *Official Family-Group Names in Zoology* (fide ICZN 1997, Opinion 1874. *Bull. Zool. Nomenclature* 54(2): 142).

This family is recognised following Oliver (1955) and Olson (1985b), but its position has always been controversial. W. Parker (1866) found it closest to the trumpeter *Psophia* in which he had support from Fürbringer (1888) and Beddard (1898). Cracraft (1982) and Olson (1985b) placed it near the Rhynochetidae (the kagu) of New Caledonia, with Cracraft including both in a group inclusive of trumpeters, seriemas (*Cariama*), and sunbitterns (*Eurypyga*). Mitochondrial DNA analyses by Houde *et al.* (1997) revealed that *Aptornis* is more basal than rails, and has some association with *Psophia*, but not with *Rhynochetos* which is related to *Eurypyga* and basal in gruoid relationships. This basal relationship was confirmed by more comprehensive mtDNA analyses by Lanfear & Bromham (2011) and Boast *et al.* (2019), with the latter study revealing *Aptornis* as sister to Sarothruridae (flufftails and wood rails) from Madagascar and Africa, and that the two groups split about 40 million years ago. Aptornithidae + Sarothruridae were sister to finfoots and sungrebe (Heliornithidae), with this combined clade sister to Rallidae (Boast *et al.* 2019).

Genus †**Aptornis** G.A. Mantell

Aptornis G.A. Mantell, 1848 (2 Feb.): *Quart. Journ. Geol. Soc. London* 4: 233 – Type species (by monotypy) *Dinornis otidiformis* Owen = *Aptornis otidiformis* (Owen).

Apterornis Owen, 1848 (13 Apr.): *Proc. Zool. Soc. London* 1848 (16): 1. Rejected and invalid (fide ICZN 1997, Opinion 1874. *Bull. Zool. Nomenclature* 54(2): 142).

Aptornis Owen, 1848 (22 Apr.): *Trans. Zool. Soc. London* 3(5): 347 – Type species (by monotypy) *Dinornis otidiformis* = *Aptornis otidiformis* (Owen). Name placed in the *Official List of Generic Names in Zoology* (fide ICZN 1997, Opinion 1874. *Bull. Zool. Nomenclature* 54(2): 142). Junior homonym and synonym of *Aptornis* G.A. Mantell.

Olson (1985b) advocated the priority of *Apterornis* Owen, 1848 over *Aptornis* Owen, 1848, but the latter was conserved in Opinion 1874 (ICZN 1997). However, G.A. Mantell (1848) had priority over R. Owen (1848) and is thus the author of the genus. The two recent species are estimated to have separated 2.3–0.2 million years ago (Boast *et al.* 2019).

- †**Aptornis otidiformis** (Owen) **North Island Adzebill**
Dinornis otidiformis Owen, 1843: *The Literary Gazette* 1402: 778. *Nomen nudum*.
Dinornis otidiformis Owen, 1844: *Trans. Zool. Soc. London* 3(3): 247 – Poverty Bay, Gisborne. Name placed in the *Official List of Specific Names in Zoology* (fide ICZN 1997, Opinion 1874. *Bull. Zool. Nomenclature* 54(2): 142).
Aptornis otidiformis (Owen); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.
 Extinct. North Island. Common in Late Pleistocene and Holocene deposits, but rare in middens (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007).
- †**Aptornis defossor** Owen **South Island Adzebill | Ngutu Hahau**
Aptornis defossor Owen, 1871: *Trans. Zool. Soc. London* 7(5): 354, pls 40–44 – Oamaru.
Aptornis bulleri Owen, 1887 (Jul.): in Buller, *History of the Birds of N.Z.*, 2nd edition 1 (part 1): 23 – Albury, South Canterbury.
 Extinct. South Island. Common in Late Pleistocene and Holocene deposits, but rare in middens (Holdaway *et al.* 2001; Worthy & Holdaway 2002; Tennyson & Martinson 2007).

Family **RALLIDAE** Rafinesque: Rails, Gallinules, and CootsSubfamily **RALLINAE** Rafinesque: Rails, Gallinules, and Coots

Rallia Rafinesque, 1815: *Analyse de la Nature*: 70 – Type genus *Rallus* Linnaeus, 1758.

Genus **Crex** Bechstein

Crex Bechstein, 1803: *Ornith. Taschenb. Deutschland* 2: 336 – Type species (by monotypy and tautonymy) *Crex pratensis* Bechstein = *Crex crex* (Linnaeus).

- **Crex crex** (Linnaeus) **Corncrake**
Rallus crex Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 153 – Europe, restricted to Sweden (fide Peters 1934, *Check-list Birds World* 2: 181).
Rallus featherstonii Buller, 1865: *Essay N.Z. Ornith.*: 18 – Nelson.
Rallus Featherstoni Buller; Anon. 1870, *Cat. Colonial Mus.*: 75. Unjustified emendation.
Ortygometra crex (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 33.
Rallus Featherstonii Buller; Hutton 1871, *Cat. Birds N.Z.*: 33, 77.
Crex crex (Linnaeus); Mathews & Iredale 1913, *Ibis* 1 (10th series): 214.

F. Hutton (1871) referred a specimen in the Colonial Museum (now Museum of New Zealand Te Papa Tongarewa), the basis of Buller's *Rallus featherstoni*, to *Ortygometra crex*; see also G.R. Gray (1871). Formerly placed on the Suspense List by Checklist Committee (1970, 1990). Hutton (1871) considered that the unique specimen (from Nelson) differed little from European examples and so it was listed as a vagrant. Marchant & Higgins (1993: 537) noted two records of vagrants in Australia, including one from New South Wales, lending credibility to the New Zealand record.

Genus *Lewinia* G.R. Gray

Lewinia G.R. Gray, 1855: *Cat. Genera Subgen. Birds Brit. Mus.*: 120 – Type species (by monotypy) *Rallus lewinii* Swainson = *Lewinia pectoralis* (Temminck).

Donacias Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 321. Unnecessary *nomen novum* for *Lewinia* G.R. Gray, 1855.

Hyporallus Iredale & Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 76 – Type species (by original designation) *Rallus muelleri* Rothschild = *Lewinia muelleri* (Rothschild).

An adult Lewin's rail (*Lewinia pectoralis*) supposedly from the Auckland Islands / Maukahuka is held by the American Museum of Natural History (Oliver 1955: 351). Its identity and provenance is discussed by Mathews & Iredale (1913), Greenway (1958), Falla (1967), Elliott *et al.* (1991), and Miskelly & Taylor (2020), with most authors concluding that it was unlikely that the specimen was from the Auckland Islands or New Zealand.

► *Lewinia muelleri* (Rothschild)

Auckland Island Rail

Rallus brachipus; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Rallus brachipus* Swainson, 1838.

Rallus muelleri Rothschild, 1893: *Bull. Brit. Ornith. Club* 1(8): 40 – Auckland Island.

Hypotaenidia muelleri (Rothschild); Buller 1905, *Suppl. Birds N.Z.* 1: 42.

Rallus pectoralis muelleri Rothschild; Checklist Committee 1953, *Checklist N.Z. Birds*: 39.

Lewinia muelleri (Rothschild); Sibley & Monroe 1990, *Distr. and Taxon. Birds of the World*: 225.

Dryolimnas pectoralis muelleri (Rothschild); Marchant & Higgins 1993, *HANZAB* 2: 529.

Dryolimnas muelleri (Rothschild); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.

Auckland Islands / Maukahuka, surviving on Adams and Disappointment Islands (Miskelly, Elliott *et al.* 2020; Elliott *et al.* 2020; K. Walker *et al.* 2020). Bones have been found in sand dunes on Enderby Island (Tennyson 2020a). The type specimen is presumed to have been destroyed during World War II (Falla 1967). Previously listed as *Rallus pectoralis muelleri* (e.g. Checklist Committee 1990) or *Dryolimnas pectoralis muelleri* (e.g. Marchant & Higgins 1993); we follow Sibley & Monroe (1990) and B. Taylor & van Perlo (1998) in placing this taxon in *Lewinia*.

Genus *Gallirallus* Lafresnaye

Ocydromus Wagler, 1830: *Natur. Syst. Amphib. Säug. Vögel.*: 98 – Type species *Ocydromus australis* = *Gallirallus australis* (Sparrman). Junior homonym of *Ocydromus* Schellenberg, 1806.

Gallirallus Lafresnaye, 1841: *Revue Zool.* 1841: 243 – Type species (by monotypy) *Gallirallus brachypterus* Lafresnaye = *Gallirallus australis* (Sparrman).

Brachypteryx Owen, 1848: *Proc. Zool. Soc. London 1848* (16): 2, 7 – Type species *Rallus australis* Sparrman = *Gallirallus australis* (Sparrman). Junior homonym of *Brachypteryx* Horsfield, 1821.

Hypotaenidia Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 23 – Type species (by original designation) *Rallus pectoralis* Gould = *Gallirallus philippensis melli* (Mathews), not *Rallus pectoralis* Temminck.

Nesolimnas Andrews, 1896: *Novit. Zool.* 3: 260, 266 – Type species (by monotypy) *Rallus dieffenbachii* G.R. Gray = *Gallirallus dieffenbachii* (G.R. Gray).

► *Gallirallus philippensis* (Linnaeus)

Banded Rail

Rallus philippensis Linnaeus, 1766: *Syst. Nat., 12th edition* 1: 263 – Philippines.

Rallus pectoralis Gould, 1848: *Birds of Australia* 6: pl. 76 – New South Wales, Australia. Junior primary homonym of *Rallus pectoralis* Temminck, 1831.

Hypotaenidia australis Von Pelzeln, 1873: *Ibis* 3 (3rd series): 42. *Nomen novum* for *Rallus pectoralis* Gould, 1848. Junior secondary homonym of *Rallus australis* Sparrman.

Rallus philippensis; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Rallus philippensis* Linnaeus, 1766.

Indonesia, Philippines, Melanesia, Australia (including Tasmania), western Polynesia, New Zealand, and Macquarie Island. The regional variation in this, one of the most polytypic rails with a high dispersal capability, was reviewed by Schodde & de Naurois (1982). The Australian subspecies (*G. p. melli*) has been recorded from Norfolk Island (Marchant & Higgins 1993), and an endemic subspecies on Macquarie Island (*G. p. macquariensis*) became extinct between 1880 and 1894 (Oliver 1955).

Gallirallus philippensis assimilis (G.R. Gray)

Banded Rail | Moho Pererū

Rallus assimilis G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 197 – New Zealand.

Rallus assimilis Ellman, 1861: *Zoologist* 19: 7470 – New Zealand. Junior primary homonym of *Rallus assimilis* G.R. Gray, 1843.

Rallus pectoralis Lesson; Anon. 1870, *Cat. Colonial Mus.*: 74. Not *Rallus pectoralis* Gould, 1848.

Rallus pictus Potts, 1872: *Trans. N.Z. Inst.* 4: 202 – Okarito, south Westland.

Rallus philippensis; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Rallus philippensis* Linnaeus, 1766.

Hypotaenidia philippensis; Buller 1905, *Suppl. Birds N.Z. 1*: 43. Not *Rallus philippensis* Linnaeus, 1766.
Eulabeornis philippensis assimilis (G.R. Gray); Mathews 1911, *Birds Australia 1*: 196.
Hypotaenidia philippensis assimilis (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 211.
Hypotaenidia assimilis (G.R. Gray); Mathews 1930, *Emu 29*: 279.
Rallus philippensis assimilis G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 38.
Gallirallus philippensis assimilis (G.R. Gray); Marchant & Higgins 1993, *HANZAB 2*: 495.

Main islands of New Zealand, formerly common throughout. North Island: Northland (including Manawatāwhi / Three Kings, Poor Knights, Hauturu / Little Barrier, and Great Barrier / Aotea Islands), Auckland, Waikato, Coromandel, and Bay of Plenty; rare south of 39°S (Marchant & Higgins 1993: 497). South Island: coastal north-west Nelson, Golden Bay and Pelorus Sound; rare elsewhere (Elliott 1989). Islands south-west of Stewart Island / Rakiura. Rare in Late Pleistocene or Holocene deposits and middens.

► † ***Gallirallus dieffenbachii*** (G.R. Gray)

Dieffenbach's Rail | Moeriki

Rallus Dieffenbachii G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z. 2*: 197 – Chatham Islands.
Ocydromus Dieffenbachii (G.R. Gray); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 14, pl. 15.
Hypotaenidia dieffenbachii (G.R. Gray); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris 43*: 599. Unjustified emendation.
Hypotaenidia dieffenbachii (G.R. Gray); G.R. Gray 1862, *Ibis 4*: 238.
Rallus Dieffenbachii G.R. Gray; Anon. 1870, *Cat. Colonial Mus.:* 75. Unjustified emendation.
Rallus dieffenbachii G.R. Gray; Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 179. In part.
Cabalus dieffenbachii (G.R. Gray); Sharpe 1875, *Zool. Voy. 'Erebus' & 'Terror', Birds – 1 (Appendix)*: 29, pl. 15. In part.
Nesolimnas dieffenbachii (G.R. Gray); Buller 1905, *Suppl. Birds N.Z. 1*: 44.
Rallus philippensis dieffenbachii G.R. Gray; Checklist Committee 1990, *Checklist Birds N.Z.*: 119.
Gallirallus dieffenbachii (G.R. Gray); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.

Extinct. Known historically from a single skin collected on Chatham Island in 1840, but its bones are common in Holocene deposits and middens on Chatham, Pitt, and Mangere Islands (Tennyson & Millener 1994). Here we follow Olson (1975), Marchant & Higgins (1993), Treweek (1997a,b), Holdaway *et al.* (2001), and Worthy & Holdaway (2002) in recognising this taxon as a separate species on account of distinctive morphology and genotype.

► ***Gallirallus australis*** (Sparrman)

Weka

Rallus australis Sparrman, 1786: *Mus. Carlsonianum 1*: no XIV, pl. 14 – Dusky Sound, Fiordland.
Ocydromus insignis Forbes, 1892: *Trans. N.Z. Inst.* 24: 188 – New Zealand, restricted to Enfield Swamp, Otago (*vide* Worthy 1998, *Journ. Royal Soc. N.Z.* 28: 461).
Ocydromus minor Hamilton, 1893: *Trans. N.Z. Inst.* 25: 103, 106 – Castle Rocks, Southland.

New Zealand. Formerly widespread on North and South Islands, and Stewart Island / Rakiura and many inshore islands (Beauchamp *et al.* 1999). Abundant in Late Pleistocene and Holocene deposits and middens on North, South, and Stewart Islands, but the bones cannot be determined to subspecies. Subspecies said to differ mainly in plumage (Beauchamp *et al.* 1999). South Island birds very variable in size and plumage, with light to dark morphs exhibiting clinal variation with environment (e.g. rainfall gradients) (Buller 1878b; Marchant & Higgins 1993: 519). Introduced to Chatham and Pitt Islands (*G. a. hectori*) where still common; Macquarie Island (*G. a. scotti*) where now extirpated; and many inshore islands (various subspecies) about New Zealand (Marchant & Higgins 1993: 507). The variation observed in existing and former weka populations, led to numerous names for taxa, generally based on plumage differences, producing a complex nomenclatural history, e.g. F. Hutton (1871, 1874); Buller (1878b). Two taxa based on Holocene remains were synonymised with *Gallirallus australis* (Sparrman): *Gallirallus minor* Hamilton, by Holdaway & Worthy (1997: 93) as advocated by Olson (1975), and *Ocydromus insignis* Forbes, by Worthy (1998a: 461). Ellman (1861) provided the following new names for rails which probably relate to various colour morphs of *Gallirallus australis* but for which there is insufficient data to refer them to any particular subspecies:

Rallus punctatus Ellman, 1861: *Zoologist 19*: 7470 – *Nomen dubium*.
Rallus niger Ellman, 1861: *Zoologist 19*: 7470 – *Nomen dubium*.
Rallus rufus Ellman, 1861: *Zoologist 19*: 7470 – *Nomen dubium*.
Rallus fuscus Ellman, 1861: *Zoologist 19*: 7471 – *Nomen dubium*.
Rallus strepitans Ellman, 1861: *Zoologist 19*: 7471 – *Nomen dubium*.

Gallirallus australis greyi (Buller)

North Island Weka

Ocydromus Earli; Anon. 1870, *Cat. Colonial Mus.:* 75. Not *Ocydromus earli* G.R. Gray, 1862.
Ocydromus earli; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Ocydromus earli* G.R. Gray, 1862.
Ocydromus greyi Buller, 1888 (Nov.): *History of the Birds of N.Z.*, 2nd edition 2 (part 10): 105, pl. 34 – North Island.
Gallirallus australis greyi (Buller); Mathews & Iredale 1913, *Ibis 1* (10th series): 212.

North Island. Formerly throughout, but now nearly extinct on the mainland where confined mainly to the eastern Bay of Plenty. Decline reviewed by Beauchamp *et al.* (2000). Successfully introduced to Kapiti, Mokoia (Lake Rotorua), Pakatoa

and Kawau Islands. The current Kawau birds derive from an introduction in the 1970s from the Gisborne area (N. Wilson 1980) and have pure North Island genes (Lambert 1999). Oliver (1955: 362) records that both North Island and Stewart Island weka were transferred to Kapiti Island, so this population may be a mix of more than one subspecies.

Gallirallus australis australis (Sparman)

Western Weka

- Rallus australis* Sparman, 1786: *Mus. Carlsonianum 1*: no XIV, pl. 14 – Dusky Sound, Fiordland.
Rallus troglodytes Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 713 – New Zealand, restricted to Dusky Sound, Fiordland (*vide* Peters 1934, *Check-list Birds World 2*: 178).
Gallirallus brachypterus Lafresnaye, 1841: *Rev. de Zool., Paris 1841*: 243 – Dusky Sound, Fiordland.
Gallirallus fuscus du Bus de Gisignies, 1847: *Esquisses Ornith. Livr. 3*, pl. 2 – Dusky Sound, Fiordland.
Ocydromus earli G.R. Gray, 1862: *Ibis 4*: 238 – New Zealand.
Ocydromus nigricans Buller, 1869: *Trans. N.Z. Inst. 1*(22): 111; (2nd edition: 56) – south-west coast of the South Island.
Ocydromus australis Sparman [sic]; Anon. 1870, *Cat. Colonial Mus.*: 75.
Ocydromus brachypterus Lafresnaye [sic]; Anon. 1870, *Cat. Colonial Mus.*: 75.
Ocydromus fuscus Dubus [sic]; Hutton 1871, *Cat. Birds N.Z.*: 32.
Ocydromus finschi Hutton, 1873: *Journ. für Ornith. 21*(124): 400. English translation in Hutton 1874, *Trans. N.Z. Inst. 6*: 111 – south Otago, east of Southern Alps.
Ocydromus earli Finsch, 1873: *Journ. für Ornith. 21*(124): 404 – New Zealand. Junior primary homonym of *Ocydromus earli* G.R. Gray, 1862.
Ocydromus australis (Sparman); Travers 1883, *Trans. Proc. N.Z. Inst. 15*: 187.
Ocydromus brachypterus (Lafresnaye); Travers 1883, *Trans. Proc. N.Z. Inst. 15*: 187.
Ocydromus assimilis Buller, 1888: *Classified List Silver's Collection N.Z. Birds*: 44 – southernmost part of South Island.
Gallirallus australis australis (Sparman); Mathews & Iredale 1913, *Ibis 1* (10th series): 212.
Gallirallus townsoni Mathews & Iredale, 1914: *Ibis 2* (10th series): 295, pl. 11 – Westport, Westland.
Gallirallus troglodytes (Gmelin); Peters 1934, *Check-list Birds World 2*: 178.

South Island. Formerly widespread in northern Marlborough, Nelson, and down the West Coast to Fiordland. Now much reduced in range and declining. Introduced to D'Urville and Chetwode Islands, but eradicated from latter. This subspecies has both dark and light morphs in Fiordland. *Ocydromus nigricans* was synonymised with *O. fuscus* by F. Hutton (1871), and *O. finschi* with *O. fuscus* by Buller (1878b). Sharpe (1893: 27) found *O. brachypterus* to be identical to *O. fuscus* (see Buller 1895: 119). *Ocydromus earli* G.R. Gray was assumed to refer to the North Island population by most workers in the 19th Century, with the exception of Finsch (e.g. 1869, 1875b), but the issue was finally settled by Buller (1891: 39) who reported a similar bird to Gray's type from Marlborough.

Gallirallus australis hectori (Hutton)

Buff Weka

- Ocydromus hectori* Hutton, 1873: *Journ. für Ornith. 21*(124): 399. English translation in Hutton 1874, *Trans. N.Z. Inst. 6*: 110 – “near the Te Anau Lake, in Otago”, error for Eglinton Flats, Otago (*vide* Tennyson & Bartle 2008, *Tuhinga 19*: 196).
Gallirallus hectori (Hutton); Mathews & Iredale 1913, *Ibis 1* (10th series): 213.
Gallirallus hectori reischeki Iredale, 1913: *Austral Avian Rec. 2*: 15 – Canterbury.
Gallirallus australis hectori (Hutton); Checklist Committee 1953, *Checklist N.Z. Birds*: 40.

South Island. Formerly widespread in eastern low-rainfall areas from Marlborough to Southland. Apparently died out on the mainland, but remains abundant on Chatham Islands (Chatham and Pitt) where introduced in 1905. Introduced to Kawau Island from Central Otago by Sir George Grey in 1863 (Buller 1878b: 215), but population died out by the 1920s. Attempted reintroductions to Arthur's Pass (1962), the Mackenzie Basin (1970s), Banks Peninsula (1980s), and Ashburton (1990s) were unsuccessful. Introduced to islands in Lakes Wanaka and Wakatipu 2005–08 (Miskelly & Powlesland 2013).

Gallirallus australis scotti (Ogilvie-Grant)

Stewart Island Weka

- Ocydromus scotti* Ogilvie-Grant, 1905: *Bull. Brit. Ornith. Club 15*: 78 – Port Pegasus, Stewart Island.
Gallirallus australis scotti (Ogilvie-Grant); Mathews & Iredale 1913, *Ibis 1* (10th series): 212.

Distinguished by slightly smaller size from *G. a. australis* with no consistent plumage differences (Marchant & Higgins 1993), so status in need of revision. Stewart Island / Rakiura and surrounding islets. Died out on the main island (G. Harper 2009); unsuccessfully reintroduced near Halfmoon Bay in 2005 (Miskelly & Powlesland 2013). Introduced to numerous outlying islands including Solander Island (Hautere) and Codfish Island / Whenua Hou, – but removed from Codfish Island by 1987. Also introduced successfully to Kapiti Island (c. 1895) and Macquarie Island (1872 and later, but now extirpated).

Genus †**Cabalus** Hutton

- Cabalus* Hutton, 1874: *Trans. N.Z. Inst. 6*: 108 – Type species (by monotypy) *Rallus modestus* Hutton = *Cabalus modestus* (Hutton).
Huttonena Mathews, 1929: *Bull. Brit. Ornith. Club 50*: 19. Unnecessary *nomen novum* for *Cabalus* Hutton 1874.

► †**Cabalus modestus** (Hutton)

Chatham Island Rail | Mātirakahu

- Rallus modestus* Hutton, 1872: *Ibis 2* (3rd series): 247 – Mangere Island, Chatham Islands.
Rallus dieffenbachii G.R. Gray; Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 179. In part.

Cabalus dieffenbachii (G.R. Gray); Sharpe 1875, *Zool. Voy. 'Erebus' & 'Terror', Birds – 1 (Appendix)*: 29. In part.
Cabalus modestus (Hutton); Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 10): 123.
Ocydromus pygmaeus Forbes, 1892: *Nature* 46: 252 – Chatham Islands.
Rallus modestus Hutton; Checklist Committee 1990, *Checklist Birds N.Z.*: 119.
Gallirallus modestus (Hutton); Trewick 1997, *Journ. Royal Soc. N.Z.* 27: 452.
Cabalus modestus (Hutton); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.

Chatham, Mangere, and Pitt Islands, Chatham Group. Extinct since 1893 (Tennyson & Martinson 2007). Common in Holocene deposits and some middens. Variouslly placed in *Rallus* or *Gallirallus* after Olson (1973), e.g. Marchant & Higgins (1993: 527). Preliminary mtDNA analyses by Trewick (1997b) suggest a close relationship to *Gallirallus dieffenbachii*, but here it is kept separate in its own genus on account of its very divergent morphology (Livezey 1998).

Genus †**Capellirallus** Falla

Capellirallus Falla, 1954: *Rec. Auck. Inst. Museum* 4: 242 – Type species (by original designation) *Capellirallus karamu* Falla.

► †**Capellirallus karamu** Falla

Snipe-rail

Capellirallus karamu Falla, 1954: *Rec. Auck. Inst. Museum* 4: 242, pls 40–42 – Karamu Cave, near Hamilton.

North Island, New Zealand. Extinct prehistorically: known from numerous Late Pleistocene and Holocene sites, including caves, dunes, swamps, and middens. Very distinctive; crane-sized with perhaps the longest bill and smallest wings (relative to body size) of any rail.

Genus †**Diaphorapteryx** Forbes

Diaphorapteryx Forbes, 1892 (31 Dec.): *Bull. Brit. Ornith. Club* 1(4): 21 – Type species (by monotypy) *Aphanapteryx hawkinsi* Forbes = *Diaphorapteryx hawkinsi* (Forbes).

► †**Diaphorapteryx hawkinsi** (Forbes)

Hawkins' Rail | Mehonui

Aphanapteryx hawkinsi Forbes, 1892 (3 Mar.): *Nature* 45: 416 – Chatham Islands.

Aphanapteryx hawkinsi Forbes; Forbes 1892 (21 Apr.): *Nature* 45: 580.

Diaphorapteryx hawkinsi (Forbes); Forbes 1892 (31 Dec.), *Bull. Brit. Ornith. Club* 1(4): 21.

Diaphorapteryx hawkingi [sic] (Forbes); Checklist Committee 1990, *Checklist Birds N.Z.*: 121. Misspelling.

Chatham Group. Extinct prehistorically, but common in Holocene dune deposits and middens on Chatham and Pitt Islands (Tennyson 2004).

Genus **Porzana** Vieillot

Porzana Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 61 – Type species (by monotypy and tautonymy) “Marouette” of Buffon = *Porzana porzana* (Linnaeus).

We follow the recommendation of Dickinson & Remsen (2013) and Chesser *et al.* (2016), based on the analyses of Slikas *et al.* (2002) and Garcia-R *et al.* (2014), to use the genus *Zapornia* for spotless crane and Baillon's crane (marsh crane). A restricted *Porzana* is here retained for *P. fluminea*.

► **Porzana fluminea** Gould

Australian Crane

Porzana fluminea Gould, 1843: *Proc. Zool. Soc. London* 1842 (10): 139 – New South Wales, Australia.

Ortygometra fluminea (Gould); Hutton 1871, *Cat. Birds N.Z.*: 33.

Porzana fluminea Gould; Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 158.

A specimen now held in the Museum of New Zealand Te Papa Tongarewa (NMNZ OR.004205) is said to have been collected from the “Province of Auckland” and is documented by F. Hutton (1871). This species is irruptive periodically throughout south-east Australia, with records from Tasmania only in irruptive years (Marchant & Higgins 1993).

Genus **Zapornia** Leach

Zapornia Leach, 1816: *Syst. Cat. Specimens Mamm. Birds Brit. Museum*: 34. – Type species (by monotypy) *Zapornia minuta* Leach, 1816 = *Zapornia parva* (Scopoli).

Zaporina J.R. Forster, 1827: *Pocket Encycl. Nat. Phen.*: 418. Unjustified emendation.

Phalaridion Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 173 – Type species (by subsequent designation) *Rallus parvus* Scopoli = *Zapornia parva* (Scopoli).

Rallites Pucheran, 1845: *Revue Zool.*: 277 – Type species (by subsequent designation) *Rallus parvus* Scopoli = *Zapornia parva* (Scopoli).

Porzanoidea Mathews, 1912: *Austral Avian Rec. 1*: 117 – Type species (by subsequent designation) *Gallinula immaculata* Swainson = *Zapornia tabuensis* (Gmelin).

Schoenocrex Roberts, 1922: *Ann. Transv. Museum* 8: 197 – Type species (by original designation) *Rallus pusillus* Pallas = *Zapornia pusilla* (Pallas).

See comments under Genus *Porzana* above explaining why the following two species are included in *Zapornia*.

► **Zapornia tabuensis** (Gmelin)**Spotless Crane | Pūweto**

Philippines, Moluccas, New Guinea, Melanesia, Australia (including Tasmania), and south-west Polynesia including New Zealand. Australian and New Zealand birds, previously separated as *Porzana tabuensis plumbea* (J.E. Gray), were synonymised with the nominate subspecies by Marchant & Higgins (1993: 566); see also Onley (1982b).

Zapornia tabuensis tabuensis (Gmelin)**Spotless Crane | Pūweto**

Rallus tabuensis Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 717 – Tongatapu, Tahiti, and other islands of French Polynesia.

Crex plumbea J.E. Gray, 1829: in E. Griffith, *Anim. Kingdom* 8 (Aves, 3): 410 – New Zealand (*vide* Mathews 1911, *Birds Australia* 1: 217).

Gallinula immaculata Swainson, 1838: *Anim. Menager.*: 337 – Tasmania, Australia.

Ortygometra tabuensis (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 14.

Rallus rufopes Ellman, 1861: *Zoologist* 19: 7470 – New Zealand.

Rallus minor Ellman, 1861: *Zoologist* 19: 7470 – New Zealand.

Porzana tabuensis (Gmelin); Hutton 1904, *Index Faunae N.Z.*: 31.

Porzana plumbea (J.E. Gray); Buller 1905, *Suppl. Birds N.Z. 1*: 63.

Porzana plumbea roberti Mathews, 1912: *Novit. Zool.* 18(3): 446 – Western Australia.

Porzanoidea plumbea plumbea (J.E. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 215.

Porzanoidea plumbea campbelli Mathews, 1914: *Austral Avian Rec.* 2: 85 – Botany Swamps, New South Wales, Australia.

Porzana tabuensis plumbea (J.E. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 40.

Porzana tabuensis tabuensis (Gmelin); Marchant & Higgins 1993, *HANZAB* 2: 559.

Zapornia tabuensis tabuensis (Gmelin); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 159.

Luzon, New Guinea, Australia, south-west Pacific islands, Norfolk Island, New Zealand. In New Zealand, widespread, including Kermadec / Rangitāhua, Manawatāwhi / Three Kings, and Poor Knights (Onley 1982a). Vagrant to Chatham and Auckland Islands / Maukahuka (Miskelly *et al.* 2006; Miskelly, Elliott *et al.* 2020). Known from a very few Holocene deposits and middens on the mainland and Chathams (Checklist Committee 1990).

► **Zapornia pusilla** (Pallas)**Baillon's Crane**

Rallus pusillus Pallas, 1776: *Reise durch verschiedene Provinzen des Russischen Reichs* 3: 700 – Dauria, Siberia.

Zapornia pusilla (Pallas); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 158.

Throughout the Old World, including New Guinea, Australia (including Tasmania), and New Zealand. Migratory in the Palearctic. The Australian subspecies (*P. p. palustris*) has been recorded from Macquarie Island (Marchant & Higgins 1993).

Zapornia pusilla affinis (G.R. Gray)**Marsh Crane | Kotoreke**

Ortygometra affinis G.R. Gray, 1845: *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 14 – Wanganui River (=Whanganui River).

Porzana affinis (G.R. Gray); Buller 1905, *Suppl. Birds N.Z. 1*: 63.

Porzana pusilla affinis (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 215.

Zapornia pusilla affinis (G.R. Gray); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 158.

North and South Islands. Widespread scattered records (Elliott 1989; Marchant & Higgins 1993). Vagrant to Chatham Islands (Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2021). Very rare in Holocene deposits or in middens (Checklist Committee 1990).

Genus Gallinula Brisson

Gallinula Brisson, 1760: *Ornithologie* 1: 50 and 6: 2 – Type species (by tautonymy) *Gallinula* Brisson = *Gallinula chloropus* (Linnaeus).

Hydrogallina La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 19 – Type species (by subsequent designation) *Fulica chloropus* Linnaeus = *Gallinula chloropus* (Linnaeus).

Stagnicola Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 702 – Type species (by subsequent designation) *Fulica chloropus* Linnaeus = *Gallinula chloropus* (Linnaeus).

► **Gallinula chloropus** (Linnaeus)**Common Moorhen**

Fulica Chloropus Linnaeus, 1758: *Syst. Nat.*, 10th edition 1(1): 152. Based on “*Gallinula Chloropus*” of Albin, 1738 – Europe, restricted to England (*vide* B. Taylor & van Perlo 1998, *Rails*: 492).

Gallinula chloropus indica Blyth, 1842: *Journ. Asiatic Soc. Bengal* 11: 887 – Calcutta, India.

Gallinula chloropus indica Blyth; Turbott & Scarlett 1964, *Notornis* 11: 107.

Gallinula chloropus (Linnaeus); B. Taylor & van Perlo 1998, *Rails*: 492.

A specimen in the Canterbury Museum (CM Av2437) is documented as “Otago, ex Smyth collection”. William Smyth worked in Dunedin during the period 1895–1910 (Turbott & Scarlett 1964; Crane & Gill 2018). The closest subspecies to the New Zealand area, *G. ch. indica*, is sometimes included in the nominate subspecies but was treated as distinct by

Peters (1934) and by R. Howard & Moore (1991). It occurs from northern India to Japan, China, Taiwan, and Malaysia and is a seasonal migrant between northern and southern parts of its range.

► ***Gallinula tenebrosa*** Gould

Dusky Moorhen

- Gallinula tenebrosa* Gould, 1846: *Birds of Australia* 6, pl. 73 – New South Wales and South Australia, Australia.
Gallinula tenebrosa magnirostris Mathews, 1912: *Novit. Zool.* 18(3): 195 – Guildford, Western Australia.
Gallinula tenebrosa subfrontata Mathews, 1912: *Novit. Zool.* 18(3): 195 – Richmond River, New South Wales, Australia.
Gallinula tenebrosa Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 123.

Australia, New Guinea, and East Indies. Straggler to New Zealand. Two records, both single birds: Lake Hayes, Otago Aug.–Oct. 1968 (Barlow 1969); near Lake Ellesmere / Te Waihora, Feb. 2005 (Scofield 2005a).

Genus *Tribonyx* du Bus de Gisignies

- Tribonyx* du Bus de Gisignies, 1840 (Apr.): *Bull. Acad. Roy. Sci. Bruxelles* 7(1): 212 – Type species (by monotypy) *Tribonyx mortierii* du Bus de Gisignies.
Brachytrallus Lafresnaye, 1840 (Aug.): *Rev. de Zool., Paris*: 231 – Type species (by monotypy) *Brachytrallus ralloides* Lafresnaye = *Tribonyx mortierii* du Bus de Gisignies.
Microtribonyx Sharpe, 1893: *Bull. Brit. Ornith. Club* 1: 29 – Type species (by original designation) *Microtribonyx ventralis* (Gould) = *Tribonyx ventralis* (Gould).
Pyramida Oliver, 1955: *New Zealand Birds*, 2nd edition: 595 – Type species (by monotypy) *Rallus hodgeni* Scarlett = *Tribonyx hodgenorum* (Scarlett).
Pyramidia Oliver, 1955: *New Zealand Birds*, 2nd edition: 596 – Misspelling.

We follow the recommendation of Christidis & Boles (2008), Dickinson & Remsen (2013), and Sangster *et al.* (2015) to use the genus *Tribonyx* rather than *Gallinula* (cf. Checklist Committee 2010) for the black-tailed native-hen. Sangster *et al.* (2015) used molecular phylogenetics to demonstrate that *Gallinula sensu lato* was not monophyletic, and that the black-tailed native-hen (*T. ventralis*) and Tasmanian native-hen (*T. mortierii*) were not closely related to other living species of *Gallinula*. This supported the morphological phylogeny proposed by Livezey (1998), who also placed these two species in *Tribonyx*.

► ***Tribonyx ventralis*** (Gould)

Black-tailed Native-hen

- Gallinula ventralis* Gould, 1837: *Proc. Zool. Soc. London* 1836 (4): 85 – Swan River, Western Australia.
Microtribonyx ventralis (Gould); Sharpe 1893, *Bull. Brit. Ornith. Club* 1: 29.
Tribonyx ventralis whitei Mathews, 1912: *Novit. Zool.* 18(3): 194 – Nevertire, north-western New South Wales, Australia.
Tribonyx ventralis territorii Mathews, 1912: *Novit. Zool.* 18(3): 195 – Alexandria, Northern Territory, Australia.
Tribonyx ventralis (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 41.
Gallinula ventralis Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 123.

Australia. Straggler to New Zealand. At least six records: Oraki, Colac Bay / Ōraka, Southland (1923); Tukituki River, Hawke's Bay (May 1957); Kongahu Swamp, Karamea (Aug.–Nov. 1984); Opuatia Swamp, Waikato (May 1986; Marchant & Higgins 1993: 610); Lake Hood, Canterbury, Aug. 2002 (Medway 2002d); and near Ashburton, Dec. 2011 (Miskelly *et al.* 2013).

► † ***Tribonyx hodgenorum*** (Scarlett)

Hodgens' Waterhen

- Rallus hodgeni* Scarlett, 1955: *Rec. Cant. Museum* 6: 265 – Pyramid Valley Swamp, Canterbury.
Pyramidia [sic] *hodgeni* (Scarlett); Oliver 1955, *New Zealand Birds*, 2nd edition: 596.
Gallirallus hartreei Scarlett, 1970: *Notornis* 17: 70 – near Napier.
Capellirallus hodgeni (Scarlett); Scarlett 1970, *Notornis* 17: 71.
Gallinula (Tribonyx) hodgeni (Scarlett); Olson 1975, *Nat. Mus. N.Z. Rec.* 1: 68.
Gallinula hodgenorum (Scarlett); Olson 1986, *Notornis* 33: 32 – Emendation.
Gallinula hodgeni (Scarlett); Checklist Committee 1990, *Checklist Birds N.Z.*: 123.
Tribonyx hodgenorum (Scarlett); Livezey 1998, *Phil. Trans. Biol. Sci. (B)* 353: 2100.
Gallinula hodgenorum (Scarlett); Checklist Committee 2010, *Checklist Birds N.Z.*: 187.

New Zealand. Late Pleistocene and Holocene remains in North and South Island sites, including middens. Extinct.

Hodgens' waterhen is considered part of the same clade as Tasmanian native-hen and black-tailed native-hen (Olson 1975; Livezey 1998), hence we recommend its placement in *Tribonyx* (rather than *Gallinula*, cf. Checklist Committee 2010).

Genus *Porphyrio* Brisson

- Porphyrio* Brisson, 1760: *Ornithologie* 1: 48 and 5: 522 – Type species (by tautonymy) *Fulica porphyrio* Linnaeus = *Porphyrio porphyrio* (Linnaeus).
Notornis Owen, 1848 (22 Jan.): *The Literary Gazette* 1618: 72 – Type species (by original designation) *Notornis mantelli* Owen = *Porphyrio mantelli* (Owen).
Caesarornis Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 21 – Type species (by monotypy) *Gallinula poliocephala* Latham = *Porphyrio poliocephalus* (Latham).

Mantellornis Mathews, 1911: *Birds Australia 1*: 249 – Type species (by original designation) *Notornis hochstetteri* A.B. Meyer = *Porphyrio hochstetteri* (A.B. Meyer).

Taxa formerly included in *Porphyrio porphyrio* (Linnaeus), which was often called the purple swamphen, have until recently usually been separated into six subspecies groups (e.g. B. Taylor & van Perlo 1998). Here we follow Sangster (1998) and Sangster *et al.* (1999) in recognising qualitative differences in morphology, supported by mtDNA studies (Trewick 1997a), that show the paraphyletic nature of the species *P. porphyrio* (*sensu* B. Taylor & van Perlo 1998). This approach recognises the following six species: western swamphen *P. porphyrio* (Linnaeus, 1758) (western Mediterranean), African swamphen *P. madagascariensis* (Latham, 1801), grey-headed swamphen *P. poliocephalus* (Latham, 1801) (Nicobar Islands and west Thailand to Iraq and Caspian region), Philippine swamphen *P. pulverulentus* Temminck, 1826, black-backed swamphen *P. indicus* Horsfield, 1821 (South-east Asia and Greater Sunda Islands), and south-west Pacific swamphen *P. melanotus*.

► ***Porphyrio melanotus* Temminck**

South-west Pacific Swamphen

The species *Porphyrio melanotus*, as defined by Sangster *et al.* (1999), is polytypic and tentatively includes: *P. m. bellus* Gould, 1841 from south-west Australia, *P. m. melanopterus* Bonaparte, 1856 from the Moluccas and Papua New Guinea, *P. m. pelewensis* Hartlaub & Finsch, 1872 from Palau, and *P. m. samoensis* Peale 1848 from Samoa, Fiji, Tonga, and Niue, in addition to those listed in synonymy below. For a fuller listing of south-west Pacific taxa see Mathews (1927: 100).

***Porphyrio melanotus melanotus* Temminck**

Pūkeko | Pukeko

Porphyrio melanotus Temminck, 1820: *Manuel d'Ornith.*, 2nd edition. 2: 701 – New South Wales, Australia.

Porphyrio stanleyi Rowley, 1875: *Ornith. Miscellany 1*: 37 – New Zealand.

Porphyrio chathamensis Sharpe, 1893: *Ibis 5* (6th series): 531 – Chatham Islands.

Porphyrio melanotus Temminck; Buller 1905, *Suppl. Birds N.Z. 1*: 64. Unjustified emendation.

Porphyrio melanotus fletcheriae Mathews, 1911: *Birds Australia 1*: 243 – Tasmania, Australia.

Porphyrio melanotus neomelanotus Mathews, 1911: *Birds Australia 1*: 246, pl. 60 – Parry's Creek, Western Australia.

Porphyrio melanotus stanleyi Rowley; Mathews & Iredale 1913, *Ibis 1* (10th series): 216.

Porphyrio melanotus chathamensis Sharpe; Mathews & Iredale 1913, *Ibis 1* (10th series): 216.

Porphyrio porphyrio melanotus Temminck; Checklist Committee 1953, *Checklist N.Z. Birds*: 41.

Porphyrio melanotus Temminck; Wakelin 1968, *Notornis 15*: 162.

Porphyrio porphyrio; J. Moore 1999, *Notornis 46*: 359. Not *Fulica porphyrio* Linnaeus, 1758.

Porphyrio melanotus melanotus Temminck; Sangster *et al.* 1999, *Ardea 87*(1): 147.

Australia (including Tasmania), Norfolk Island, and New Zealand. In New Zealand, North and South Islands and Stewart Island / Rakiura; and many offshore and inshore islands, including Kermadec / Rangitāhua, Chatham, Great Barrier / Aotea, Great Mercury / Ahuahu, Waiheke, and Kapiti Islands. Vagrant to Manawatāwhi / Three Kings Islands, Snares Islands / Tini Heke, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku (Bailey & Sorensen 1962; Miskelly, Crossland *et al.* 2017; Miskelly, Elliott *et al.* 2020). Known from only a few late Holocene deposits and middens on the mainland, none likely to be more than a few hundred years old. Recent self-introduction to the Chatham Islands, where no Holocene remains are known.

► †***Porphyrio mantelli* (Owen)**

North Island Takahe | Moho

Notornis Mantelli Owen, 1848: *Trans. Zool. Soc. London 3*(5): 347, pl. 56, figs 7–13 – Waingongoro River, Taranaki.

Porphyrio mantelli mantelli (Owen); Checklist Committee 1990, *Checklist Birds N.Z.*: 124.

Porphyrio mantelli (Owen); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.

North Island. Extinct, though a probable example was captured in 1894 in the Ruahine Ranges (Phillipps 1959). Common in Late Pleistocene and Holocene lowland deposits and in middens (Trewick & Worthy 2001). Larger than, and with differing skeletal proportions from, *P. hochstetteri*, as noted by Meyer (1883, in 1879–1897), Trewick (1996); also differs in mtDNA (Trewick 1997a).

► ***Porphyrio hochstetteri* (A.B. Meyer)**

South Island Takahe | Takahē

Notornis Mantellii Ellman, 1861: *Zoologist 19*: 7470 – New Zealand. Junior primary homonym of *Notornis mantelli* Owen, 1848.

Notornis hochstetteri A.B. Meyer, 1883: *Abbildungen von Voegel-Skeletten 1*(4–5): 28, pls 34–37 – North of Mararoa R., 3.5 miles east Whitestone R. and 9 miles south-east of south end of Lake Te Anau, Fiordland.

Notornis parkeri Forbes, 1892: *Trans. N.Z. Inst.* 24: 187 – Half a mile east of Patience Bay, Lake Te Anau, Fiordland.

Mantellornis hochstetteri (A.B. Meyer); Mathews & Iredale 1913, *Ibis 1* (10th series): 216.

Porphyrio mantelli hochstetteri (A.B. Meyer); Checklist Committee 1990, *Checklist Birds N.Z.*: 125.

Porphyrio hochstetteri (A.B. Meyer); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 132, 178.

South Island. Four live specimens and one skeleton, recently dead, were collected in the south-west corner of the South Island between 1849 and 1898. Then assumed to be extinct until rediscovered by G.B. Orbell (Nov. 1948) west of Lake Te Anau, and subsequently found to be widespread in the Murchison Mountains. Wild population currently maintained by release of captive-bred birds and intensive predator control. Unsuccessfully re-introduced to the Stuart Mountains, Fiordland, 1987–92. Introduced to Kapiti, Mana, and Tiritiri Matangi Islands since the late 1980s; more recently to

Rarotoka / Centre Island (Foveaux Strait), Motutapu Island, and to Maungatautari (Waikato). Bones widespread in Late Pleistocene and Holocene deposits and in middens (Trewick & Worthy 2001), more often at lowland than subalpine altitudes.

Genus *Fulica* Linnaeus

Fulica Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 152 – Type species (by tautonymy) *Fulica* Linnaeus = *Fulica atra* Linnaeus.

Palaeolimnas Forbes, 1893: *Ibis* 5 (6th series): 544 – Type species (by monotypy) *Fulica newtoni* Milne-Edwards.

Nesophalaris Brodkorb & Dawson, 1962: *Auk* 79: 268 – Type species (by original designation) *Fulica chathamensis* Forbes.

Both *Fulica novaezealandiae* Colenso, 1844 and *F. nova-zealandiae* Colenso, 1845 are junior synonyms of *Poliocephalus rufopectus* (G.R. Gray, 1843) (see under Podicipediformes).

► *Fulica atra* Linnaeus

Eurasian Coot

Fulica atra Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 152 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 211).

Europe, North Africa, Asia, New Guinea, and Australia (including Tasmania) (Marchant & Higgins 1993). Recently self-introduced in New Zealand.

Fulica atra australis Gould

Australian Coot

Fulica Australis Gould, 1845: *Proc. Zool. Soc. London 1845* (13): 2 – Western Australia.

Fulica tasmanica Grant, 1846: *Tasm. Journ. Nat. Sci. Agric.* 2: 310 – Tasmania, Australia.

Fulica atra ingrami Mathews, 1912: *Novit. Zool.* 18(3): 196 – Alexandria, Northern Territory, Australia.

Fulica atra tasmanica Grant; Mathews & Iredale 1913, *Ibis* 1 (10th series): 217.

Fulica atra; Stidolph 1927, *Emu* 26: 217. Not *Fulica atra* Linnaeus, 1758.

Fulica atra australis Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 125.

Australia (including Tasmania); straggler to Macquarie and Norfolk Islands. New Zealand: eight records between 1875 and 1953 (all in South Island). Recorded at Lake Tutira (Hawke's Bay), 1954. An invasion from Australia apparently occurred *c.* 1957. First proved breeding at Lake Hayes (Otago), 1958; now widespread and increasing (Small & Soper 1959; R. Jackson & Lyall 1964; R. Macdonald 1968). Vagrant to Stewart Island / Rakiura, Dec. 2012 (Miskelly *et al.* 2013), Snares Islands / Tini Heke, Apr. 2013 (Miskelly *et al.* 2015), and Auckland Islands / Maukahuka, Feb. 2012 (Miskelly, Elliott *et al.* 2020).

► †*Fulica prisca* Hamilton

New Zealand Coot

Fulica prisca Hamilton, 1893: *Trans. N.Z. Inst.* 25: 98 – Castle Rocks, Southland.

Nesophalaris prisca (Hamilton); Brodkorb & Dawson, 1962: *Auk* 79: 268.

New Zealand. Late Pleistocene and Holocene remains from North and South Island sites, including middens (Millener 1981b). Slightly smaller than the Chatham Island species. Skeletal proportions given in Worthy & Holdaway (2002) indicate that this species was probably volant, contrary to Checklist Committee (1990).

► †*Fulica chathamensis* Forbes

Chatham Island Coot

Fulica chathamensis Forbes, 1892: *Nature* 46: 252 – Chatham Islands.

Nesophalaris chathamensis (Forbes); Brodkorb & Dawson, 1962: *Auk* 79: 268.

Chatham Island. Known from Holocene deposits and middens. The osteology of this species and *F. prisca* were re-examined by Worthy & Holdaway (2002). The differences described by Millener (1980) were not substantiated but other distinct differences in cranial morphology and skeletal proportions support species distinction of these taxa. It was the largest coot in the world, yet its skeletal proportions suggest it was still volant (Worthy & Holdaway 2002).

Family GRUIDAE Vigors: Cranes

Subfamily GRUINAE Vigors: Cranes

Gruidae Vigors, 1825: *Trans. Linn. Soc. London* 14: 488 – Type genus *Grus* Pallas, 1766.

Genus *Grus* Brisson

Grus Brisson, 1760: *Ornithologie* 5: 375 – Type species (by tautonymy) *Ardea grus* Linnaeus = *Grus grus* (Linnaeus).

Grus Pallas, 1766: *Miscell. Zool.*: 66 – Type species (by tautonymy) *Ardea grus* Linnaeus = *Grus grus* (Linnaeus). Junior homonym of *Grus* Brisson.

Grus sp. indet.

(crane)

Grus is represented in Australia by two similar species, the brolga *Grus rubicundus* (Perry, 1810) and the sarus crane *G. antigone* (Linnaeus, 1758). There are four records of *Grus* from New Zealand: one from Clevedon in 1947 (McKenzie & Cunningham 1952), one at Punakaiki in 1968 (Westerskov 1968), one at Mossburn, Southland in Mar. 2009, and one at

Te Anau Downs in Feb. 2012 (Miskelly *et al.* 2013). None of the records contained sufficient information to differentiate the two Australian species (*contra* Checklist Committee 1990: 127, where the first two records were attributed to *Grus rubicundus*).

Order CHARADRIIFORMES: Waders, Skuas, Gulls, and Terns

We follow Cracraft (2013) in recognising three suborders. The sequence they are presented in follows Dickinson & Remsen (2013).

Suborder CHARADRII: Oystercatchers, Stilts, Plovers, and Sheathbills

The sequence that families are presented in follows Dickinson & Remsen (2013).

Family HAEMATOPODIDAE Bonaparte: Oystercatchers

Haematopodinae Bonaparte, 1838: *Syn. Vert. Syst.*: 28 – Type genus *Haematopus* Linnaeus, 1758.

Genus *Haematopus* Linnaeus

Haematopus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 152 – Type species (by monotypy) *Haematopus ostralegus* Linnaeus.

Ostralega Brisson, 1760: *Ornithologie 1*: 46 – Type species (by tautonymy) *Haematopus ostralegus* Linnaeus.

► *Haematopus unicolor* J.R. Forster Variable Oystercatcher | Tōrea Pango*

Haematopus niger; Wagler 1832, *Isis von Oken*, Heft 11: col.: 1230. Not *Haematopus niger* Pallas, 1811.

Haematopus unicolor J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 112 – Dusky Sound, Fiordland.

Haematopus oceanicus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*: 420 – Unknown locality.

Haematopus niger Ellman, 1861: *Zoologist 19*: 7469 – New Zealand. Junior primary homonym of *Haematopus niger* Pallas, 1811.

Haematopus reischeki Rothschild, 1899: *Bull. Brit. Ornith. Club 10*: 4 – Kaipara.

Haematopus niger unicolor J.R. Forster; Mathews & Iredale 1913, *Ibis 1* (10th series): 251.

Haematopus ostralegus unicolor J.R. Forster; Peters 1934, *Check-list Birds World 2*: 233. In part.

Haematopus unicolor reischeki Rothschild; Checklist Committee 1953, *Checklist N.Z. Birds*: 41.

Haematopus unicolor unicolor J.R. Forster; Checklist Committee 1953, *Checklist N.Z. Birds*: 42.

Haematopus unicolor J.R. Forster; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 44.

Endemic to New Zealand. Relatively common, total population *c.* 4,000 birds (Riegen & Sagar 2020). In North Island most common along north-east coast from North Cape (Otou) to Mahia Peninsula, and near Wellington; in South Island, common around Tasman and Golden Bays, Marlborough Sounds, and Fiordland; common on beaches of Stewart Island / Rakiura and its offshore islands (C. Robertson *et al.* 2007; Riegen & Sagar 2020). Plumage varies from black to pied with continuous gradient between. Relative abundance of colour morphs varies with latitude: in northern North Island *c.* 43% black, in central New Zealand *c.* 85% black, in southern South Island and on Stewart Island / Rakiura *c.* 94% black (Sagar *et al.* 1999; Medway 2000c). Found in North, South, and Stewart Island / Rakiura natural and midden deposits (Checklist Committee 1990).

*Black morph.

► *Haematopus finschi* Martens South Island Pied Oystercatcher | Tōrea

Haematopus picatus; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 196. Not *Haematopus picatus* P.P. King, 1826 = *Haematopus longirostris* Vieillot, 1817.

Haematopus longirostris; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 12. Not *Haematopus longirostris* Vieillot, 1817.

Haematopus longiristris; Travers 1883, *Trans. Proc. N.Z. Inst. 15*: 187. Unjustified emendation.

Haematopus finschi Martens, 1897: *Ornith. Monatsberichte 5*: 190 – Saltwater Creek, Westland.

Haematopus ostralegus unicolor J.R. Forster; Peters 1934, *Check-list Birds World 2*: 233. In part.

Haematopus ostralegus finschi Martens; Mathews & Iredale 1913, *Ibis 1* (10th series): 251.

Haematopus finschi Martens; Falla *et al.* 1966, *Field Guide Birds New Zealand*: 118.

Haematopus ostralegus; J. Moore 1985, *Notornis 32*: 315. Not *Haematopus ostralegus* Linnaeus, 1758.

Haematopus finschi is recognised here as being specifically distinct from *H. ostralegus* Linnaeus, 1758 following Marchant & Higgins (1993), Holdaway *et al.* (2001), and J.C. Banks & Paterson (2007). Endemic to New Zealand. Abundant; since legal protection in 1906 the total population has increased significantly to an estimated 112,000 by 1994, before declining to about 77,000 by 2005–2019 (Sagar *et al.* 1999; Riegen & Sagar 2020). Nearly all breed inland in the South Island, mostly east of the Southern Alps / Kā Tiritiri o te Moana. The majority migrate after breeding to many localities in the northern North Island, with most birds being present during autumn and winter at Kaipara and Manukau Harbours and Firth of Thames (Marchant & Higgins 1993). Birds return to breeding grounds from late Jul. to Sep. (Sagar *et al.* 1999; Medway 2000c). One record (1983) at Norfolk Island (Hermes *et al.* 1986). One record (1969), probably this species, at Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). One record (1968) at Chatham Islands (Freeman 1994). Vagrant at Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), and Australia (Totterman *et al.* 1999). Found in North and South Island natural and midden deposits (Checklist Committee 1990).

► **Haematopus chathamensis** Hartert **Chatham Island Oystercatcher | Tōrea Tai***

Haematopus ostralegus chathamensis Hartert, 1927: *Novit. Zool.* 34: 17 – Chatham Islands.
Haematopus unicolor chathamensis Hartert; Checklist Committee 1953, *Checklist N.Z. Birds*: 42.
Haematopus longirostris chathamensis Hartert; Oliver 1955, *New Zealand Birds*, 2nd edition: 248.
Haematopus chathamensis Hartert; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 44.

Endemic to Chatham Islands. Found on both rocky coastlines and sandy beaches of Chatham, Pitt, Rangatira, and Mangere Islands, and occasionally the Star Keys. Numbers have increased substantially in response to management. Total population *c.* 290 birds by 2004, most on north Chatham Island beaches (Schmechel & O'Connor 1999; Aikman & Miskelly 2004). Mitochondrial DNA analysis by J.C. Banks & Paterson (2007) supported the recognition of the Chatham Island oystercatcher as a full species. Found in natural and midden deposits (Checklist Committee 1990).

*Also used for pied morph of variable oystercatcher *H. unicolor*.

Family **RECURVIROSTRIDAE** Bonaparte: Stilts and Avocets

Subfamily **RECURVIROSTRINAE** Bonaparte: Stilts and Avocets

Recurvirostrinae Bonaparte, 1831: *Saggio dist. Metodica Anim. Vert.*: 59 – Type genus *Recurvirostra* Linnaeus, 1758.

Genus **Himantopus** Brisson

Himantopus Brisson, 1760: *Ornithologie 1*: 46, 5: 33 – Type species (by tautonymy) *Charadrius himantopus* Linnaeus = *Himantopus himantopus* (Linnaeus).
Hypsibates Nitzsch, 1827: in Ersch & Gruber, *Allgem. Ency. Wiss. Künste 16*: 150 – Type species (by monotypy) *Charadrius himantopus* Linnaeus = *Himantopus himantopus* (Linnaeus).

► **Himantopus himantopus** (Linnaeus) **Pied Stilt**

Charadrius Himantopus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 151 – southern Europe.

Almost cosmopolitan, five subspecies recognised (Dickinson & Remsen 2013).

Himantopus himantopus leucocephalus Gould **Pied Stilt | Poaka**

Himantopus leucocephalus Gould, 1837: *Synop. Birds Australia 2*: pl. 34 (*fide* McAllan 2004, *Notornis 51*: 127) – New South Wales, Australia.
Himantopus albus Ellman, 1861: *Zoologist 19*: 7470 – New Zealand.
Himantopus picatus Ellman, 1861: *Zoologist 19*: 7470 – New Zealand.
Himantopus albicollis Buller, 1875: *Trans. Proc. N.Z. Inst.* 7: 224 – Orari, Canterbury. Junior primary homonym of *Himantopus albicollis* Vieillot, 1817.
Himantopus seebohmi picata Ellman; Hartert 1891, *Kat. Vogel. Mus. Senckenb. Natur. Gesell. Frankfurt Main*: 220. Unjustified emendation.
Hypsibates leucocephalus albus (Ellman); Mathews & Iredale 1913, *Ibis 1* (10th series): 255.
Himantopus himantopus leucocephalus Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 48.
Himantopus himantopus; J. Moore 1999, *Notornis 46*: 359. Not *Charadrius himantopus* Linnaeus, 1758.

Extends from the Philippines, Indonesia, and Bismarck Archipelago to Australia and New Zealand (Marchant & Higgins 1993). Probably a relatively recent colonist to New Zealand from Australia (Holdaway 1995), where it is known as black-winged stilt. For this reason the name Australasian pied stilt, as used in Checklist Committee (1990), is inappropriate. Common throughout most of lowland New Zealand; population estimated at *c.* 24,000 birds (Riegen & Sagar 2020). Many South Island and southern North Island birds migrate to northern parts of North Island after breeding. About 85% of those recorded during winter were in the North Island, the highest numbers being consistently present at Kaipara and Manukau Harbours, and the Firth of Thames. Lake Ellesmere / Te Waihora is the South Island locality most favoured in winter (Sagar *et al.* 1999; Medway 2000c). Vagrant at Norfolk Island (J. Moore 1985a, 1999; Marchant & Higgins 1993); not common at Chatham Islands (Aikman & Miskelly 2004). Through introgression with *H. novaezelandiae*, the plumage of the New Zealand population is distinct from that of Australian birds (B. Greene 1999). A distinctively plumaged bird in Tasmania, in the 1980s, is believed to have originated from New Zealand (Fletcher *et al.* 1989).

► **Himantopus novaezelandiae** Gould **Kakī | Black Stilt**

Himantopus Novae Zelandiae Gould, 1841 (before Sep.): *Birds of Australia Part 4*: 8 (*fide* McAllan 2004, *Notornis 51*: 127) – Port Nicholson.
Himantopus melas Hombron & Jacquinot, 1841 (after Nov.): *Ann. Sci. Nat., Zool., Paris, 2nd series 16*: 320 – Otago.
Himantopus niger Ellman, 1861: *Zoologist 19*: 7470 – New Zealand.
Himantopus spicatus Potts, 1873: *Trans. N.Z. Inst.* 5: 198 – Selwyn, Canterbury.
Himantopus novae-zealandiae Gould; Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 205. Unjustified emendation.
Hypsibates novaezealandiae (Gould); Mathews & Iredale 1913, *Ibis 1* (10th series): 256. Unjustified emendation.
Himantopus himantopus novae-zealandiae Gould; Peters 1934, *Check-list Birds World 2*: 289.

Himantopus novaezealandiae Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 48. Unjustified emendation.

Himantopus novaezealandiae Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 131.

Endemic to New Zealand, now rare and endangered. Has declined drastically in numbers since the 19th Century when it bred in the lower North Island and most of the South Island. It was still common in the 1930s and 1940s in lowland South Canterbury, Central Otago, and the Mackenzie Basin, but since *c.* 1960 breeding has been confined to the Mackenzie Basin (Marchant & Higgins 1993). The wild population was 169 adults in Apr. 2020 (Overbeek *et al.* 2020), and is supported by release of captive birds. Black stilts hybridise freely with pied stilts, hybrids showing complete gradation in plumage and morphometrics between the two (Pierce 1984a). Most black stilts remain in the Mackenzie Basin over winter, but most hybrid stilts follow movement patterns of pied stilts and go to northern harbours and estuaries, including Kawhia, Kaipara, and Manukau Harbours, and the Firth of Thames (Marchant & Higgins 1993). The few stilt bones from North and South Island natural and midden deposits are probably this species (Checklist Committee 1990).

Genus *Recurvirostra* Linnaeus

Recurvirostra Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 151 – Type species (by monotypy) *Recurvirostra avosetta* Linnaeus.

Avocetta Brisson, 1760: *Ornithologie 1*: 60 and 6: 537 – Type species (by tautonymy) *Recurvirostra avosetta* Linnaeus.

► *Recurvirostra novaehollandiae* Vieillot

Red-necked Avocet | Piwari

Recurvirostra Novae-Hollandiae Vieillot, 1816: *Nouv. Dict. Hist. Nat., nouv. éd. 3*: 103 – New Holland, restricted to Victoria, Australia (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 256).

Recurvirostra rubricollis Temminck, 1823: *Manuel d'Ornith. 2*: 592 – Victoria, Australia.

Avocetta Novae-Zelandiae Ellman, 1861: *Zoologist 19*: 7470 – New Zealand.

Recurvirostra rubricollis Temminck; G.R. Gray 1862, *Ibis 4*: 237.

Recurvirostris [sic] *novae-hollandiae* Vieillot; A. Hamilton 1909, *Hand-list Birds New Zealand*: 9.

Recurvirostra novaehollandiae novaehollandiae Vieillot; Mathews & Iredale 1913, *Ibis 1* (10th series): 256.

Recurvirostra novae-hollandiae; Stidolph 1927, *Emu 26*: 217.

Recurvirostra novaehollandiae Vieillot; Checklist Committee 1990, *Checklist Birds N.Z.*: 131.

Breeds only in Australia, mainly in the south. Between 1859 and 1892, avocets were reported widely from Whangarei to Invercargill. The suggestion that the species bred in New Zealand during that period remains unsubstantiated (Marchant & Higgins 1993). There have been only two confirmed New Zealand records since 1892: Lake Ellesmere / Te Waihora, 1912 (CM Av2410) and Orowaiti Lagoon, Westport, 1968–1970 (Kaigler 1968; Grant 1968; Checklist Committee 1990). One reported shot on Norfolk Island in 1854 (J. Moore 1999).

Family CHARADRIIDAE Leach: Plovers, Lapwings, and Dotterels

Subfamily CHARADRIINAE Leach: Plovers and Dotterels

Charadriidae Leach, 1820: *Eleventh room*. In *Synopsis Contents British Museum 17th edition, London*: 69 – Type genus *Charadrius* Linnaeus, 1758.

Christidis & Boles (1994) based their sequence of genera in the Charadriidae on Christian *et al.* (1992). Within each genus, they followed the sequence of species in Hayman *et al.* (1986) and Sibley & Monroe (1990). The same sequences are followed here.

Genus *Pluvialis* Brisson

Pluvialis Brisson, 1760: *Ornithologie 1*: 46, 5: 42 – Type species (by tautonymy) *Charadrius pluvialis* Linnaeus = *Pluvialis apricaria* (Linnaeus).

Squatarola Cuvier, 1816: *Règne Anim. 1*: 467 – Type species (by tautonymy) *Tringa squatarola* Linnaeus = *Pluvialis squatarola* (Linnaeus).

► *Pluvialis fulva* (Gmelin)

Pacific Golden Plover | Kuriri

Charadrius fulvus Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 687. Based on the “Fulvous Plover” of Latham 1785, *Gen. Synop. Birds 3*(1): 211 – Tahiti, French Polynesia.

Charadrius virginicus Lichtenstein, 1823: *Verzeich. Doubl., Berlin*: 70 – Montevideo, Uruguay.

Charadrius Xanthocheilus Wagler, 1827: *Syst. Avium, Charad.*: sp. 36 – no locality.

Charadrius virginianus Jardine & Selby, 1830: *Illust. Ornith. 2*: pl. 85 – North America.

Charadrius xanthocheilus Wagler; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 195.

Charadrius Virginicus Bechstein [sic]; G.R. Gray 1844, *List Specimens Birds Brit. Mus. 3*: 67.

Charadrius virginianus Jardine & Selby; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 11.

Charadrius dominicus; Buller 1905, *Suppl. Birds N.Z. 1*: 174. Not *Charadrius dominicus* Statius Müller, 1776.

luvialis [sic] *dominicus fulvus* (Gmelin); Mathews & Iredale 1913, *Ibis 1* (10th series): 252.

Pluvialis dominicus fulvus (Gmelin); Iredale 1913, *Trans. Proc. N.Z. Inst. 45*: 85.

Pluvialis dominicanus [sic]; Stidolph 1927, *Emu 26*: 217. Not *Charadrius dominicus* Statius Müller, 1776.

- Charadrius dominicus fulvus* Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 42.
Pluvialis dominicus; Lindsay 1963, *Notornis* 10: 303. Not *Charadrius dominicus* Statius Müller, 1776.
Pluvialis dominica; Wakelin 1968, *Notornis* 15: 163. Not *Charadrius dominicus* Statius Müller, 1776.
Pluvialis dominica fulva (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 44.
Pluvialis fulva (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 138.

Breeds on arctic and subarctic tundra of Siberia and western Alaska. Migrates south on broad front to many countries, including Australasia and most Pacific islands (Marchant & Higgins 1993). The East Asian–Australasian Flyway population was estimated at 120,000 birds in 2016, of which *c.* 9,000 migrated to Australia in 1993 (Watkins 1993; Hansen *et al.* 2016). The fourth most numerous arctic wader visiting New Zealand, with *c.* 180 every summer, although numbers declining (Riegen & Sagar 2020). Widespread at many harbours and estuaries and some lakes throughout New Zealand (Sagar *et al.* 1999; Medway 2000c). Regular summer visitor to Norfolk Island (J. Moore 1999), Kermadec Islands / Rangitāhua (Veitch *et al.* 2004) and Chatham Islands (Aikman & Miskelly 2004). Straggles to Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020).

► ***Pluvialis dominicus* (Statius Müller)**

American Golden Plover

- Charadrius dominicus* Statius Müller, 1776: *Vollst. Natursyst. Suppl.*: 116 – Hispaniola, Antilles.
Pluvialis dominicus (Statius Müller); Sangster *et al.* 1999, *Ardea* 87(1): 148.

The correct name of the American golden plover is *P. dominicus*, not *P. dominica* (Sangster *et al.* 1999). American golden plovers and Pacific golden plovers are specifically distinct (Connors *et al.* 1993; Sangster *et al.* 1999). Breeds in north Siberia, Alaska, and northern Canada. Migrates to South America (Marchant & Higgins 1993). Vagrant to New Zealand. Two records: Karikari Peninsula, Northland, Jan. 1991 (Guest 1992), and Little Waihi estuary, Bay of Plenty, Jan. 2011 (Miskelly *et al.* 2015).

► ***Pluvialis squatarola* (Linnaeus)**

Grey Plover

- Tringa Squatarola* Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 149 – Europe, restricted to Sweden (*vide* Hartert 1920, *Vögel Pal. Fauna*: 1553).
Tringa helvetica Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 250 – Europe.
Squatarola helvetica; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 131.
Squatarola squatarola (Linnaeus); Peters 1934, *Check-list Birds World 2*: 243.
Charadrius squatarola (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 42.
Pluvialis squatarola (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 138.

Breeds throughout the arctic tundra; almost circumpolar except for Greenland and Scandinavia. Migrates to North and South America, Africa, south Asia, and Australasia (Marchant & Higgins 1993). Released in Otago (1867) and again (at Manuherikia, 1881), but failed to establish (Thomson 1922). An uncommon visitor to New Zealand that has been recorded from Parengarenga Harbour to Southland (Marchant & Higgins 1993). One record (1966) from Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). Vagrant at Chatham Islands (Freeman 1994).

Genus *Charadrius* Linnaeus

- Charadrius* Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 150 – Type species (by tautonymy) *Charadrius hiaticula* Linnaeus.
Aegialitis Boie, 1822: *Isis von Oken*, Heft 5: col. 558 – Type species (by subsequent designation) *Charadrius hiaticula* Linnaeus.
Eupoda Brandt, 1845: in Tchihatcheff, *Voy. Sci. Altai Orient.*: 444 – Type species (by monotypy) *Charadrius asiaticus* Pallas.
Ochthodromus Reichenbach, 1852: *Avium Syst. Nat. 3*: 18 – Type species (by original designation) *Charadrius wilsonia* Ord.
Cirrepidesmus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*: 417 – Type species (by tautonymy) *Charadrius cirrhpidesmus* Wagler = *Charadrius mongolus* Pallas.
Leucopolius Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*: 417 – Type species (by subsequent designation) *Charadrius marginatus* Vieillot.
Pluviorhynchus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*: 417 – Type species (by subsequent designation) *Charadrius obscurus* Gmelin.
Hytoceryx Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 336. Unnecessary *nomen novum* for *Pluviorhynchus* Bonaparte, 1856.
Pagoa Mathews, 1913: *Birds Australia 3*: 82 – Type species (by original designation) *Charadrius geoffroyi* Wagler = *Charadrius leschenaultii* Lesson.
Eupodella Mathews, 1913: *Birds Australia 3*: 83. Unnecessary *nomen novum* for *Eupoda* Brandt, 1845.
Nesoceryx Mathews, 1920: *Bull. Brit. Ornith. Club 41*: 35 – Type species (by original designation) *Charadrius bicinctus* Jardine & Selby.

► ***Charadrius obscurus* Gmelin**

New Zealand Dotterel | Tūturiwhatu

Endemic to New Zealand. Widespread until late 19th Century. Since then it has declined in range and numbers and is now found in two breeding populations separated by *c.* 900 km (Marchant & Higgins 1993). Two subspecies.

Charadrius obscurus aquilonius Dowding**Northern New Zealand Dotterel**

Charadrius obscurus Gmelin; Checklist Committee 1990, *Checklist Birds N.Z.*: 132. In part.

Charadrius obscurus aquilonius Dowding, 1994: *Notornis* 41: 230 – Mangere International Airport, Auckland.

The population, estimated at 2,130 birds, breeds from North Cape (Otou) to Waikanae in the west, and to Pahaoa River mouth, Wairarapa in the east (Dowding 2020). After nesting, many adults and their progeny form post-breeding flocks at favoured coastal sites, the largest numbers regularly being at Mangawhai and Omaha on the Northland east coast, and at Big Sand Island and Papakanui Spit in Kaipara Harbour (Dowding & Chamberlin 1991; Medway 2000c). Breeding productivity without management is low due to flooding of nests by high tides or storms, predation of eggs and chicks, and human disturbance (Wills *et al.* 2003). Found in natural and midden deposits (Checklist Committee 1990).

Charadrius obscurus obscurus Gmelin**Southern New Zealand Dotterel**

Charadrius obscurus Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 686. Based on the “Dusky Plover” of Latham 1785, *Gen. Synop. Birds* 3(1): 208 – Dusky Sound, Fiordland.

Charadrius glareola J.R. Forster, 1829: in J.G. Wagler, *Isis von Oken*, Heft 6: col. 653 – New Zealand, restricted to Dusky Sound, Fiordland (*vide* Mathews 1944, *Emu* 43: 244).

Pluviorhynchus obscurus (Gmelin); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 417.

Ochthodromus obscurus (Gmelin); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 211.

Ochthodromus [sic] *obscurus* (Gmelin); Buller 1905, *Suppl. Birds N.Z.* 1: 175.

Charadrius obscurus Gmelin; Checklist Committee 1990, *Checklist Birds N.Z.*: 132. In part.

Charadrius obscurus obscurus Gmelin; Dowding 1994, *Notornis* 41: 230.

Formerly widespread in the South Island (Barlow 1993; Dowding & Murphy 1993a), but now breeds only on Stewart Island / Rakiura. This population had declined to 60–65 birds by 1992 (Dowding & Murphy 1993a), but increased following predator control to 150 birds in 1999 (Dowding & Murphy 2001). There were an estimated 126 birds in 2016 (John Dowding in Riegen & Sagar 2020). The three post-breeding flocks are at Awarua Bay, Southland, and on Stewart Island / Rakiura at Paterson Inlet / Whaka a Te Wera and Cooks Arm, Port Pegasus / Pikihatiti (Dowding & Murphy 1993a).

► **Charadrius semipalmatus** Bonaparte**Semipalmated Plover**

Charadrius semipalmatus Bonaparte, 1825: *Journ. Acad. Nat. Sci. Philad.* 5(1): 98 – no locality.

Charadrius hiaticula; Checklist Committee 1990, *Checklist Birds N.Z.*: 135. Not *Charadrius hiaticula* Linnaeus, 1758.

Charadrius semipalmatus Bonaparte; Scofield 2005, *Southern Bird* 23: 7.

Breeds in Alaska and Canada. Winters from southern California to southern Argentina and Chile (Marchant & Higgins 1993). Vagrant to New Zealand. Two (possibly three or four) records. Two single birds, seen in the Firth of Thames in 1970–71 (J. Brown *et al.* 1971) and in 1983–85 (L. Howell 1985, 1986, 1987), were previously considered to be ringed plovers *Charadrius hiaticula* Linnaeus, 1758 (Checklist Committee 1990). However, these records were re-examined by the Rare Birds Committee and rejected. Therefore, ringed plover was removed from the New Zealand list. The Committee was not satisfied with the identity of the 1970–71 bird, but accepted that the 1983–85 bird was a semipalmated plover, thereby adding this species to the New Zealand list (Scofield 2005a). Another bird was found on the Manukau Harbour in Dec. 2009, and then (possibly the same bird) at Miranda, Firth of Thames, in Oct. 2010 (Miskelly *et al.* 2011, 2013).

► **Charadrius ruficapillus** Temminck**Red-capped Plover**

Charadrius ruficapillus Temminck, 1821: *Planch. Color. d’Oiseaux* 8: pl. 47, fig. 2 and 5: pl. 68 – “Oceania”, restricted to New South Wales, Australia (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 253).

Aegialitis [sic] *ruficapilla* (Temminck); Hutton 1904, *Index Faunae N.Z.*: 38.

Aegialitis ruficapilla (Temminck); Buller 1905, *Suppl. Birds N.Z.* 1: 175.

Charadrius ruficapillus tormenti Mathews, 1912: *Novit. Zool.* 18(3): 217 – Point Torment, north-west Australia.

Leucopoliis ruficapillus ruficapillus (Temminck); Mathews & Iredale 1913, *Ibis* 1 (10th series): 253.

Leucopoliis ruficapillus tormenti (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 160.

Charadrius alexandrinus ruficapillus Temminck, 1822 [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 43.

Charadrius ruficapillus Temminck; Checklist Committee 1990, *Checklist Birds N.Z.*: 134.

Breeds in Australia (including Tasmania). First recorded in New Zealand near Waikanae in 1878. The next record was not until 1947–50 when a female bred with a banded dotterel *Ch. bicinctus* on the Ashley River / Rakahuri in North Canterbury. Between 1955 and 1975, further sightings were made on or near the Ashley River / Rakahuri, one was seen at Lake Tuakitoto in South Otago, and there were several sightings near Auckland. Breeding and non-breeding birds were seen during the 1960s and 1970s on three North Canterbury rivers: Ashley / Rakahuri, Waipara, and Leader. The last breeding record was from the Ashley River / Rakahuri in 1979 (Hughey 1989; Marchant & Higgins 1993). The last non-breeding records were for Auckland in Dec. 1975, and Lake Ellesmere / Te Waihora in Jan. 1981 (Hughey 1989), until one was recorded at Miranda, Firth of Thames, in Jan. 2018 (Miskelly, Crossland *et al.* 2019).

► **Charadrius bicinctus** Jardine & Selby

Banded Dotterel | Pohowera

Breeds on mainland New Zealand, Ruapuke Island, the Chatham Islands, and at the Auckland Islands / Maukahuka. Two subspecies.

Charadrius bicinctus bicinctus Jardine & Selby

Banded Dotterel | Pohowera

Charadrius bicinctus Jardine & Selby, 1827: *Illust. Ornith. 1*: pl. 28 & text – New South Wales, Australia.

Hiaticula bicincta (Jardine & Selby); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds 1*(8): 12.

Aegialitis bicincta (Jardine & Selby); Crowfoot 1885, *Ibis 3* (5th series): 270.

Ochthodromus bicinctus (Jardine & Selby); Sharpe 1896, *Cat. Birds Brit. Mus. 24*: 212.

Ochthodromus [sic] *bicinctus* (Jardine & Selby); Buller 1905, *Suppl. Birds N.Z. 1*: 175.

Charadrius bicinctus incertus Mathews, 1912: *Novit. Zool. 18*(3): 217 – Port Malcolm, Western Australia.

Cirripidesmus bicinctus (Jardine & Selby); Mathews & Iredale 1913, *Ibis 1* (10th series): 252.

Nesoceryx bicinctus (Jardine & Selby); Mathews 1920, *Bull. Brit. Ornith. Club 41*: 35.

Nesoceryx bicinctus bicinctus (Jardine & Selby); Mathews 1927, *Syst. Avium Australasianarum 1*: 158.

Nesoceryx bicinctus incertus (Mathews); Mathews 1927, *Syst. Avium Australasianarum 1*: 158.

Charadrius bicinctus Jardine & Selby; Checklist Committee 1953, *Checklist N.Z. Birds*: 43.

Charadrius bicinctus bicinctus (Jardine & Selby); Checklist Committee 1990, *Checklist Birds N.Z.*: 133.

Total population estimated at *c.* 27,000 birds (Riegen & Sagar 2020). Breeding concentrations are on shingle riverbeds of Hawke's Bay, Manawatu and Wairarapa in the North Island, and on braided riverbeds of Marlborough, Canterbury, Otago and Southland in the South Island. Main breeding stronghold is Canterbury, where an estimated 10,000 pairs nest. Also breeds on Stewart Island / Rakiura and Ruapuke Island (Marchant & Higgins 1993), and on Chatham and Pitt Islands, (Aikman & Miskelly 2004). Chathams population estimated at *c.* 200–300 birds (Aikman & Miskelly 2004). Regional populations have different post-breeding movement patterns that range from sedentary behaviour, through migration within New Zealand, to trans-Tasman migration (Marchant & Higgins 1993). The banded dotterel is unique among waders in that a large part of the population undertakes an east–west migration. Most birds breeding in inland and high-altitude regions from North Canterbury southwards, possibly as many as 12,000, migrate to wintering areas in south-east Australia (Sagar *et al.* 1999; Medway 2000c; Hansen *et al.* 2016). A regular visitor to Norfolk Island (Marchant & Higgins 1993; J. Moore 1999). One record (1913) at Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); two records (1954 & 1980) at Auckland Islands / Maukahuka (Pierce 1980; Miskelly, Elliott *et al.* 2020). Found in North and South Island natural bone deposits (Checklist Committee 1990).

Charadrius bicinctus exilis Falla

Auckland Island Banded Dotterel

Charadrius bicinctus subsp. Oliver 1955, *New Zealand Birds*, 2nd edition: 262.

Charadrius bicinctus exilis Falla, 1978: *Notornis 25*: 101 – Adams Island, Auckland Islands.

Charadrius exilis Falla; Holdaway *et al.* 2001, *New Zealand Journ. Zool. 28*(2): 174, 178.

Holdaway *et al.* (2001) considered that the Auckland Island banded dotterel should be given specific status because of its greater weight and longer legs than *Ch. b. bicinctus*. However, those characters are not considered here to be sufficient of themselves to warrant specific status for *Ch. b. exilis*. Endemic to Auckland Islands / Maukahuka. Breeds on Adams, Enderby, and Rose Islands, formerly on Auckland Island (Falla 1978; Pierce 1980; K. Walker *et al.* 1991; Miskelly, Elliott *et al.* 2020). Population in 1989 conservatively estimated as 730 birds (K. Walker *et al.* 1991). One Holocene bone found on Enderby Island (Tennyson 2020a).

► **Charadrius mongolus** Pallas

Lesser Sand Plover

Charadrius mongolus Pallas, 1776: *Reise durch verschiedene Provinzen des Russischen Reichs 3*: 700 – “salt lakes towards Mongolian border”.

Cirripidesmus mongolus (Pallas); Mathews 1927, *Syst. Avium Australasianarum 1*: 158.

Charadrius mongolus Pallas; Checklist Committee 1990, *Checklist Birds N.Z.*: 135.

Breeds across eastern Asia from the Himalayas to north-east Siberia. Five subspecies groups are currently recognised. The *mongolus*-group comprises *Ch. m. mongolus* and *Ch. m. stegmanni* Portenko, 1939. They breed in eastern inland Russia, Kamchatka, the Commander Islands, and the Chukotsk Peninsula, wintering between Taiwan and Australia. The *atrifrons*-group comprises *Ch. m. atrifrons*, *Ch. m. pamirensis* Richmond, 1896, and *Ch. m. schaeferi* de Schaunessy, 1938. They breed in central Russia, the Himalayas, and southern and eastern Tibet, wintering from Africa through India to the Greater Sunda Islands (Marchant & Higgins 1993). The suggestion by Garner *et al.* (2003) that birds of the two subspecies-groups are best regarded as two separate species is not accepted here. Lesser sand plovers are uncommon visitors to New Zealand. Recorded from Parengarenga Harbour to coastal Southland, usually as single birds (Marchant & Higgins 1993). Favoured northern sites are Kaipara and Manukau Harbours. Two records (before 1968 and 1976) at Norfolk Island (Marchant & Higgins 1993). One purported record (1987) at Chatham Islands (Freeman 1994). Parrish (2000a) has shown that birds of both the *mongolus*-group and the *atrifrons*-group visit New Zealand.

► **Charadrius leschenaultii** Lesson **Greater Sand Plover**

Three subspecies are currently recognised, of which *Ch. l. leschenaultii* visits New Zealand (Marchant & Higgins 1993).

Charadrius leschenaultii leschenaultii Lesson **Greater Sand Plover**

- Charadrius Leschenaultii* Lesson, 1826: in Levrault, *Dict. Sci. Nat.* 42: 36 – Pondicherry, India.
Pagoa leschenaultii (Lesson); Mathews 1927, *Syst. Avium Australasianarum* 1: 159.
Charadrius leschenaultii Lesson; Checklist Committee 1953, *Checklist N.Z. Birds*: 43. Unjustified emendation.
Charadrius leschenaultii Lesson; Checklist Committee 1990, *Checklist Birds N.Z.*: 135.
Charadrius leschenaultii leschenaultii Lesson; Marchant & Higgins 1993, *HANZAB* 2: 868.

Breeds in eastern Central Asia. Migrates mainly to Australia. An uncommon visitor to New Zealand. Recorded, usually singly, from Parengarenga Harbour to coastal Southland, favoured northern sites being Kaipara and Manukau Harbours (Marchant & Higgins 1993). One record (1996) of two birds at Norfolk Island (J. Moore 1999).

► **Charadrius veredus** Gould **Oriental Dotterel**

- Charadrius veredus* Gould, 1848: *Proc. Zool. Soc. London 1848* (16): 38 – Northern Australia.
Eupoda vereda (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 253.
Eupodella vereda (Gould); Mathews 1927, *Syst. Avium Australasianarum* 1: 159.
Charadrius asiaticus veredus Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 43.
Charadrius veredus Gould; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 45.

Breeds in Mongolia and Manchuria. Migrates mostly to Indonesia and Australia (Marchant & Higgins 1993). A rare visitor to New Zealand. Nineteen records, mostly of single birds: Firth of Thames, Mar. 1953, Dec. 1954–Jan. 1955 (ten birds, McKenzie 1956); Parengarenga Harbour, Feb. 1955, Mar. 1968, Aug. 1969 (Sibson & Rutherford 1956; Edgar 1968; Edgar *et al.* 1969); Manukau Harbour, Feb. 1975 (Edgar 1975), Mar. 1994 (two birds, Medway 2000a); Wainono Lagoon, Jan. 1977, Jan. 1983 (Edgar 1977; Fennell 1983b); Greymouth, Sep.–Oct. 1982, Oct. 1987 (Booth 1984; O'Donnell & West 1989); Invercargill estuary, Feb. 1988 (O'Donnell & West 1989); Waituna Lagoon, Southland, Feb. 1988 (O'Donnell & West 1989); Lake Ellesmere / Te Waihora, Feb.–Mar. 1989 (O'Donnell & West 1990); Port Waikato, Sep. 2013 (Miskelly *et al.* 2015); Ohiwa, Bay of Plenty, Jan. 2016 (Miskelly, Crossland *et al.* 2017). Two records at Kermadec Islands / Rangitāhua (Apr. 1908, Sep. 1982; Veitch *et al.* 2004), and one record at Chatham Islands (Nov. 2000; Miskelly *et al.* 2006).

Genus *Anarhynchus* Quoy & Gaimard

- Anarhynchus* Quoy & Gaimard, 1830: in Dumont d'Urville, *Voyage Astrolabe Zool.* 1: 252 – Type species (by monotypy)
Anarhynchus frontalis Quoy & Gaimard.
Anarynychus Quoy & Gaimard; Mathews 1930, *Emu* 29: 280. Unjustified emendation.
Anarhynchus Quoy & Gaimard; Stead 1932, *Life Histories New Zealand Birds*: 91. Unjustified emendation.

Burton (1972) found that, apart from the laterally curved bill, the head and neck anatomy in the wrybill closely resembles that of plovers of the genus *Charadrius*. The laterally curved bill of the wrybill, unique among birds, is considered to be an adaptation to specialised feeding in stony riverbeds at its breeding grounds (Pierce 1979). R. Phillips (1980) tentatively considered the banded dotterel, wrybill, and New Zealand dotterel to be closely related members of a single genus, and Holdaway *et al.* (2001) included the wrybill in *Charadrius*. However, subsequent data (A. Baker, Pereira & Paton 2007) suggest a less close relationship to *Charadrius*, and so we have retained the wrybill in its own genus.

► **Anarhynchus frontalis** Quoy & Gaimard **Wrybill | Ngutu Pare**

- Anarhynchus frontalis* Quoy & Gaimard, 1830: in Dumont d'Urville, *Voyage Astrolabe Zool.* 1: 252 – Hauraki Gulf.
Thinornis? frontalis (Quoy & Gaimard); G.R. Gray 1847, *Gen. Birds* 3: 545.
Anarhynchus albifrons Schlegel, 1857: *Handl. Dierk.* 1: 435 – Hauraki Gulf.
Charadrius atricinctus Ellman, 1861: *Zoologist* 19: 7469 – New Zealand.
Charadrius frontalis (Quoy & Gaimard); G.R. Gray 1862, *Ibis* 4: 234.
Haematopus frontalis (Quoy & Gaimard); Finsch 1867, *Journ. für Ornith.* 15(5): 346.
Thinornis frontalis (Quoy & Gaimard); G.R. Gray 1871, *Hand-list Birds* 3: 17.
Anarhynchus frontalis Quoy & Gaimard; Checklist Committee 1990, *Checklist Birds N.Z.*: 137.
Charadrius frontalis (Quoy & Gaimard); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 174, 178.

Endemic to New Zealand. Breeds on braided riverbeds of Canterbury and Otago, with the Rakaia River being the most important breeding locality (Marchant & Higgins 1993). Migrates after nesting to wintering grounds in the northern harbours, most being congregated at the Firth of Thames and Manukau Harbour. An average of 4,800 birds was counted during 2005–2019 (Riegen & Sagar 2020). One record (Jun. 1999) at Chatham Islands (M. Bell & Bell 2000a). Found in North Island dune and midden deposits (Checklist Committee 1990).

Genus *Elseyornis* Mathews

Elseya Mathews, 1913: *Birds Australia*. 3: 125 – Type species (by original designation) *Charadrius melanops* Vieillot. Junior homonym of *Elseya* J.E. Gray, 1867.

Elseyornis Mathews, 1914: *Austral Avian Rec.* 2: 87. *Nomen novum* for *Elseya* Mathews, 1913.

► *Elseyornis melanops* (Vieillot)

Black-fronted Dotterel

Charadrius melanops Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 27: 139 – “aux Terres Australes Baudin Exp.”, restricted to New South Wales, Australia (*vide* Mathews & Iredale 1921, *Man. Birds of Australia* 1: 173).

Charadrius nigrifrons Temminck & Laugier, 1821: *Nouv. Recueil Planch. Color. d'Oiseaux* 1: pl. 47 (ex Cuvier MS) – New South Wales, Australia.

Charadrius russatus Jerdon, 1840: *Madras Journ. Lit. Sci.* 12: 213 – Madras, India.

Charadrius melanops marngli Mathews, 1912: *Novit. Zool.* 18(3): 218 – Marngle Creek, north-west Australia.

Elseyornis melanops melanops (Vieillot); Mathews 1927, *Syst. Avium Australasianarum* 1: 163.

Elseyornis melanops russatus (Jerdon); Mathews 1927, *Syst. Avium Australasianarum* 1: 163.

Charadrius melanops Vieillot; Checklist Committee 1990, *Checklist Birds N.Z.*: 134.

Elseyornis melanops (Vieillot); Christidis & Boles 1994, *Taxonomy Species Birds Australia*: 15, 51.

Christidis & Boles (1994) pointed out that biochemical studies by Christian *et al.* (1992) support the placement of the black-fronted dotterel in its own monotypic genus *Elseyornis*. Breeds throughout Australia and in New Zealand. Colonised New Zealand from late 1950s, beginning in Hawke's Bay (Barlow 1989). Now breeds on shingle riverbeds of southern North Island, north-east South Island, Canterbury, Otago, and Southland. Elsewhere in New Zealand is a non-breeding vagrant, but a small number regularly visit estuaries in eastern Bay of Plenty (Marchant & Higgins 1993).

Genus *Thinornis* G.R. Gray

Thinornis G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 11 – Type species (by monotypy) *Thinornis rossii* G.R. Gray = *Thinornis novaeseelandiae* (Gmelin).

► *Thinornis novaeseelandiae* (Gmelin)

Shore Plover | Tuturuatu

Charadrius novae Seelandiae Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 684. Based on the “New Zealand Plover” of Latham 1785, *Gen. Synop. Birds* 3(1): 206, pl. 83 – Dusky Sound, Fiordland (*vide* Medway 2008, *Notornis* 54: 116).

Charadrius Dudoora Wagler, 1827: *Syst. Avium, Charad.*: sp. 14 – New Zealand.

Charadrius Torquatula J.R. Forster, 1829: in J.G. Wagler, *Isis von Oken*, Heft 6: col. 652 – Dusky Sound, Fiordland (*vide* Medway 2008, *Notornis* 54: 116).

Hiaticula Novae Seelandiae (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 195.

Thinornis novae seelandiae (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 12, pl. 11.

Thinornis Rossii G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 12, pl. 11 – Auckland Island.

Thinornis novae zelandiae (Gmelin); Buller 1865, *Essay N.Z. Ornith.*: 17. Unjustified emendation.

Thinornis Novae Zelandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74. Unjustified emendation.

Thinornis Rossi G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 74. Unjustified emendation.

Thinornis novae-zealandiae (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Thinornis novae zealandiae (Gmelin); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 304. Unjustified emendation.

Thinornis novaeseelandiae (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 253.

Thinornis novae-seelandiae (Gmelin); Mathews 1930, *Emu* 29: 280.

Charadrius novaeseelandiae Gmelin; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 133, 178.

The holotype of *Th. rossii*, a putative endemic taxon from the Auckland Islands / Maukahuka, is considered by most authorities to be an immature *Th. novaeseelandiae*, but is a much darker bird and worthy of further investigation (Miskelly & Taylor 2020; Miskelly, Elliott *et al.* 2020; Kirwan & Collar 2020). Oliver (1955) regarded *Thinornis* G.R. Gray, 1845 as a distinct genus because of its long pointed bill that is longer than the tarsus, and the graduated tail. Holdaway *et al.* (2001) suggested that in all other respects the shore plover is a typical *Charadrius*, and placed it in that genus. However, R. Phillips (1980) considered, although noting his data were too inadequate to be certain, that the shore plover does not seem to belong to the same group as the banded dotterel, wrybill, and New Zealand dotterel from which it differs in several respects that he enumerated. Detailed studies are necessary to determine the true generic status of the shore plover. Meanwhile, it is preferable to retain the shore plover in *Thinornis*. Endemic to New Zealand. Little reliable information about previous distribution, but in early–mid 19th Century was probably widely distributed around the South Island coast, with some reports from the North Island (Marchant & Higgins 1993; A. Davis 1994). Confined to Chatham Islands by late 1800s, where the only known natural wild population, estimated at 130 birds in 1993, was on Rangatira Island (Dowding & Kennedy 1993; A. Davis 1994). Translocations from Rangatira Island to Mangere Island have led to establishment of a small breeding population on Mangere Island (Aikman & Miskelly 2004). A second natural wild population of *c.* 21 birds was discovered on Western Reef off Chatham Island in 1999 (D. Bell & Bell 2000), but it declined steadily after discovery to only one male which was taken into captivity in 2003 (Aikman & Miskelly 2004). Captive-reared birds released on

some northern New Zealand inshore islands have strayed to the North Island mainland (e.g. Medway 2004b). Bones found in Chatham Island natural and midden deposits (Checklist Committee 1990).

Genus *Erythrogonyx* Gould

Erythrogonyx Gould, 1838: *Synop. Birds Australia* 4: pl. 73 and text – Type species (by monotypy) *Erythrogonyx cinctus* Gould.

► *Erythrogonyx cinctus* Gould

Red-kneed Dotterel

Erythrogonyx cinctus Gould, 1838: *Synop. Birds Australia* 4: pl. 73 and text – New South Wales, Australia.

Erythrogonyx cinctus Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 136.

Breeds only in Australia (Marchant & Higgins 1993). Vagrant to New Zealand. One record: Manawatu estuary, Mar. 1976 (H. Robertson & Dennison 1977).

Genus *Vanellus* Brisson

Vanellus Brisson, 1760: *Ornithologie* 1: 48, 5: 94 – Type species (by tautonymy) *Tringa vanellus* Linnaeus = *Vanellus vanellus* (Linnaeus).

Lobivanellus G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 84 – Type species (by original designation) *Parra goensis* Gmelin = *Vanellus indicus* (Boddaert).

Lobibyx Heine, 1890: *Nom. Mus. Hein. Ornith.*: 334 – Type species (by original designation) *Tringa lobata* Latham = *Vanellus miles novaehollandiae* Stephens.

► *Vanellus miles* (Boddaert)

Masked Lapwing

Tringa miles Boddaert, 1783: *Tables des Planches Enluminées d'Histoire Naturelle de M. d'Aubenton*: 51 – Timor.

Two subspecies: *Vanellus m. miles* in northern Australia and New Guinea, *V. m. novaehollandiae* from mid-Queensland to south-east Australia, Tasmania, and New Zealand (Marchant & Higgins 1993).

Vanellus miles novaehollandiae Stephens

Spur-winged Plover

Tringa lobata Latham, 1801: *Index Ornith. Suppl.*: lxx – New South Wales, Australia. Junior primary homonym of *Tringa lobata* Linnaeus, 1758.

Vanellus Novae-Hollandiae Stephens, 1819: in Shaw, *General Zool.* 11: 516 – New South Wales, Australia.

Lobivanellus lobatus (Latham); Buller 1887 (Jul.), *History of the Birds of N.Z.*, 2nd edition 2 (part 1): 13. Not *Tringa lobata* Linnaeus, 1758.

Lobibyx novaehollandiae (Stephens); Mathews & Iredale 1913, *Ibis* 1 (10th series): 251.

Lobibyx novae-hollandiae (Stephens); Checklist Committee 1953, *Checklist N.Z. Birds*: 42.

Vanellus miles novaehollandiae Stephens; Checklist Committee 1990, *Checklist Birds N.Z.*: 139.

Colonised New Zealand from c. 1932, beginning at Invercargill. By 1970 had spread throughout Southland and parts of Otago (Barlow 1972) and, soon afterwards, to the rest of the South Island where it is now common in all suitable areas. Mainland New Zealand population increased dramatically since 1970s and is still growing; now common throughout all suitable North Island areas (Medway 2000c; C. Robertson *et al.* 2007). Widespread on Stewart Island / Rakiura (Dowding & Murphy 1993b). Breeding first recorded on Chatham Island in 1981; now well established there and on Pitt Island (Aikman & Miskelly 2004). Regularly present on Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020). Vagrant at Norfolk Island (J. Moore 1999), Niue Island (Miskelly, Crossland *et al.* 2017), Kermadec Islands / Rangitāhua (Veitch *et al.* 2004), Snares Islands / Tini Heke (Miskelly *et al.* 2001a, 2015), Antipodes Islands (Tennyson *et al.* 2002), and Campbell Island / Motu Ihupuku (Marchant & Higgins 1993; Scofield 2005a; Miskelly *et al.* 2015).

Suborder SCOLOPACI: Snipes and Sandpipers

The sequence that families are presented in follows Dickinson & Remsen (2013).

Family ROSTRATULIDAE Mathews: Painted Snipes

Rostratulidae Mathews, 1913: *Birds Australia* 3: 306 – Type genus *Rostratula* Vieillot, 1816.

Genus *Rostratula* Vieillot

Rostratula Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 56 – Type species (by monotypy) “Becassine de Madagascar” of Buffon = *Rostratula benghalensis* (Linnaeus).

Rhynchaea Cuvier, 1817: *Règne Anim.* 1: 487 – Type species (by original designation) *Scolopax capensis* Linnaeus = *Rostratula benghalensis* (Linnaeus).

Two species (B. Lane & Rogers 2000; A. Baker, Pereira, Rogers *et al.* 2007; Christidis & Boles 2008): *R. benghalensis* breeds in central and southern Africa, south Asia, southern Japan, China, the Philippines, and western Indonesia; *R. australis* is confined to Australia. The two species were formerly considered conspecific (as *R. benghalensis*), with the sole New Zealand record not assigned to subspecies. Based on distribution, the Checklist Committee assumes this bird to have been *R. australis*.

► **Rostratula australis** (Gould)

Australian Painted Snipe

Rhynchaea australis Gould, 1838: *Synop. Birds Australia 4*: Appendix, 6 – New South Wales, Australia.

Rostratula benghalensis australis (Gould); Hayman, Marchant & Prater 1986, *Shorebirds*: 222.

Rostratula benghalensis; Checklist Committee 1990, *Checklist Birds N.Z.*: 128. Not *Rostratula benghalensis* (Linnaeus, 1758).

Rostratula australis (Gould); Christidis & Boles, *Syst. Taxon. Australian Birds* 2008: 24.

One record: Lake Ellesmere / Te Waihora, Aug. 1986 (K. Harrison & Mulligan 1987).

Family **SCOLOPACIDAE** Rafinesque: Sandpipers and Snipes

Scolopacea Rafinesque, 1815: *Analyse de la Nature*: 70 – Type genus *Scolopax* Linnaeus, 1758.

The subfamilies used, their sequence, and the sequence of genera within each subfamily is based on R. Gibson & Baker (2012) and Chesser *et al.* (2020).

Subfamily **NUMENINAE** G.R. Gray: Curlews and Whimbrels

Numeninae G.R. Gray, 1840: *List Gen. Birds* (1st edition): 68 – Type genus *Numenius* Brisson, 1760.

Genus **Bartramia** Lesson

Bartramia Lesson, 1831: *Traité d'Ornith.* 7: 553 – Type species (by monotypy) *Bartramia laticauda* Lesson = *Bartramia longicauda* (Bechstein).

► **Bartramia longicauda** (Bechstein)

Upland Sandpiper

Tringa longicauda Bechstein, 1811: *Kurze Uebers. Vögel*: 453 – North America.

Bartramia longicauda (Bechstein); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 47.

Breeds in North America, migrates to southern South America (Higgins & Davies 1996). Vagrant to New Zealand. One record: Manukau Harbour 1967 (McKenzie 1968).

Genus **Numenius** Brisson

Numenius Brisson, 1760: *Ornithologie 1*: 48, 5: 311 – Type species (by tautonymy) *Scolopax arquata* Linnaeus = *Numenius arquata* (Linnaeus).

Phaeopus Cuvier, 1816: *Règne Anim. 1*: 485 – Type species (by tautonymy) *Scolopax phaeopus* Linnaeus = *Numenius phaeopus* (Linnaeus).

Cracticornis G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 88 – Type species (by original designation) *Scolopax arquata* Linnaeus = *Numenius arquata* (Linnaeus).

Mesoscolopax Sharpe, 1896: *Cat. Birds Brit. Mus.* 24: 338, 371 – Type species (by monotypy) *Numenius minutus* Gould.

We follow Sangster *et al.* (2011) and Tan *et al.* (2019) in recognising two species of whimbrel (*N. phaeopus* and *N. hudsonicus*), both of which reach New Zealand. A whimbrel bone found in a natural deposit in Marlborough has not been identified to taxon (Checklist Committee 1990).

► **Numenius madagascariensis** (Linnaeus)

Eastern Curlew

Scolopax madagascariensis Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 242 – Macassar, Sulawesi, Indonesia.

Numenius cyanopus Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 306 – “Nouvelle Hollande”, restricted to New South Wales, Australia (*vide* Mathews 1927, *Syst. Avium Australasianarum 1*: 166).

Numenius australasianus Gould, 1838: *Synop. Birds Australia 4, App.*: 6 – New South Wales, Australia.

Numenius australis Gould, 1838: *Proc. Zool. Soc. London 1837* (5): 155 – New South Wales, Australia.

Numenius rostratus G.R. Gray, 1843: *Ann. Mag. Nat. Hist., London 11*: 194 – New South Wales, Australia.

Numenius rufescens Gould, 1863: *Proc. Zool. Soc. London 1862* (18): 286 – Formosa (= Taiwan).

Numenius cyanopus Vieillot; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187.

Numenius madagascariensis (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 44.

Breeds in north-eastern Asia. Migrates to South-east Asia, Indonesia, New Guinea, Solomon Islands, and Australasia (Higgins & Davies 1996). The East Asian–Australasian Flyway population was estimated at 35,000 birds in 2016, of which *c.* 19,000 migrated to Australia in 1993 (Watkins 1993; Hansen *et al.* 2016). The eighth most numerous arctic wader visiting New Zealand each year, but in numbers much less than visit Australia. An average of nine birds in New Zealand every summer 2005–2019, with numbers declining (Riegen & Sagar 2020). Favoured locality Farewell Spit, also annually visits Manukau Harbour and Firth of Thames (Sagar *et al.* 1999; Medway 2000c; Riegen & Sagar 2020). Rare visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1999). Three records on Chatham Island: May 1993, Dec. 1997, Oct. 2000 (Miskelly *et al.* 2006). One record from each of: Kermadec Islands / Rangitāhua, Oct. 1974 (Veitch *et al.* 2004); Campbell Island / Motu Ihupuku, Jan. 2013; Stewart Island / Rakiura, Jan. 2013 (Miskelly *et al.* 2015).

- **Numenius phaeopus** (Linnaeus) **Eurasian Whimbrel**
Scolopax Phaeopus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 146 – Europe, restricted to Sweden (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 257).
Breeds from northern Europe to north-east Siberia. Migrates as far as Africa and Australasia (Higgins & Davies 1996). Up to five subspecies recognised, of which one, *N. ph. variegatus*, has been recorded in New Zealand. Contrary to Checklist Committee (2010: 202), we follow Sangster *et al.* (2011) and Tan *et al.* (2019) in recognising American whimbrel (*N. hudsonicus*) as a distinct species.
- Numenius phaeopus variegatus** (Scopoli) **Asiatic Whimbrel**
Tantalus variegatus Scopoli, 1786: *Delic. Flor. Faun. insubr. 2*: 92 – Luzon, Philippines.
Scolopax luzoniensis Gmelin, 1789: *Syst. Nat., 13th edition 1(2)*: 656 – Luzon, Philippines.
Numenius atricapillus Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd. 8*: 303. Unnecessary *nomen novum* for *Scolopax luzoniensis* Gmelin, 1789.
Numenius uropygialis Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 175 – southern coast of Australia.
Limosa uropygialis Gould [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74.
Limosa uropygialis (Gould); Hutton 1872, *Ibis 2* (3rd series): 246.
Numenius uropygialis Gould; Travers 1883, *Trans. Proc. N.Z. Inst. 15*: 187.
Numenius variegatus (Scopoli); Buller 1905, *Suppl. Birds N.Z. 1*: 181.
Numenius phaeopus variegatus (Scopoli); Mathews & Iredale 1913, *Ibis 1* (10th series): 257.
Phaeopus phaeopus variegatus (Scopoli); Mathews 1927, *Syst. Avium Australasianarum 1*: 166.
Numenius phaeopus; J. Moore 1981, *Notornis 28*: 54. Not *Scolopax phaeopus* Linnaeus, 1758.
Numenius phaeopus variegata (Scopoli); Heather & Robertson 1996, *Field Guide Birds New Zealand*: 112, 320. Unjustified emendation.
Breeds in eastern Siberia. Migrates to South-east Asia, New Guinea, and Australasia (Higgins & Davies 1996). By far the most common whimbrel in New Zealand. The East Asian–Australasian Flyway population was estimated at 40,000 birds in 1993, of which *c.* 10,000 migrated to Australia (Watkins 1993). Whimbrels are the sixth most numerous arctic waders visiting New Zealand each year, with *c.* 30 present during summer 2005–2019 (Riegen & Sagar 2020). Widespread throughout New Zealand, often in small flocks. Most whimbrels are recorded at large northern harbours and Farewell Spit, but also reported from many estuaries throughout the country (Sagar *et al.* 1999; Medway 2000c). A regular, probably annual, summer visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1999); an occasional visitor to Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); vagrant at Chatham Islands (Freeman 1994; Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2017, 2021), and at Auckland Islands / Maukahuka (Feb. 1994; Miskelly, Elliott *et al.* 2020).
- **Numenius hudsonicus** Latham **American Whimbrel**
Numenius hudsonicus Latham, 1790: *Index Ornith. 2*: 712 – Hudson Bay, North America.
Limosa hudsonica (Latham); Buller 1905, *Suppl. Birds N.Z. 1*: 185.
Numenius phaeopus hudsonicus Latham; Checklist Committee 1953, *Checklist N.Z. Birds*: 44.
Breeds in northern North America. Migrates mainly to central and South America. Monotypic, although some authorities use subspecies *rufiventris* Vigors, 1829 for western populations (Engelmoer & Roselaar 1998; Tomkovich 2008). Retained on the New Zealand list on the basis of a bird collected at Wairau Bar in Dec. 1873 (Oliver 1955; NMNZ OR.000111), and a possible sight record in Firth of Thames in May 1964 (Hogg & Brown 1966). As dorsal plumage colour is now recognised to be an unreliable character for separating the two whimbrel species (Beaman & Madge 1998; Robson 2008; Brazil 2009; van Duivendijk 2011; *contra* Falla *et al.* 1966, 1981; Heather & Robertson 1996), all other New Zealand records of American whimbrel are considered to be unverified.
- **Numenius minutus** Gould **Little Whimbrel**
Numenius minutus Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 176 – Maitland, New South Wales, Australia.
Mesoscolopax minutus (Gould); Buller 1905, *Suppl. Birds N.Z. 1*: 181.
Numenius minutus Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 44.
Breeds in central and north-east Siberia. Migrates mostly to New Guinea and Australia (Higgins & Davies 1996). An uncommon visitor to New Zealand. Widespread, usually single birds. Recorded at many estuaries and some coastal lakes from Parengarenga Harbour to Riverton (Higgins & Davies 1996; Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).
- **Numenius tahitiensis** (Gmelin) **Bristle-thighed Curlew**
Scolopax tahitiensis Gmelin, 1789: *Syst. Nat., 13th edition 1(2)*: 656. Based on the “Otaheite Curlew” of Latham 1785, *Gen. Synop. Birds 3*(1): 122, no. 4 – Tahiti, French Polynesia.
Phaeopus tahitiensis (Gmelin); Mathews 1927, *Syst. Avium Australasianarum 1*: 167.
Numenius tahitiensis (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 47.
Breeds in remote mountains of western Alaska. Migrates to oceanic islands and atolls of Central and South Pacific (Higgins & Davies 1996). Three records (1966, 1972) from Kermadec Islands / Rangitāhua (Veitch *et al.* 2004).

Subfamily LIMOSINAE G.R. Gray: Godwits

Limosinae G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 88 – Type genus *Limosa* Brisson, 1760.

Genus *Limosa* Brisson

Limosa Brisson, 1760: *Ornithologie 1*: 48, 5: 261 – Type species (by tautonymy) *Scolopax limosa* Linnaeus.

Vetola Mathews, 1913: *Birds Australia 3*: 191 – Type species (by original designation) *Scolopax lapponica* Linnaeus = *Limosa lapponica* (Linnaeus).

► *Limosa lapponica* (Linnaeus)

Bar-tailed Godwit | Kuaka*

Scolopax lapponica Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 147 – Lapland, Sweden.

Five subspecies recognised. Nominate subspecies breeds in north Eurasia; subspecies *L. l. baueri* breeds in north-east Siberia and western Alaska; subspecies *L. l. menzibieri* Portenko, 1936 breeds in north-eastern Asia; subspecies *L. l. anadyrensis* Engelmoer & Roselaar, 1998 breeds in the Anadyr lowlands in eastern Siberia; subspecies *L. l. taymyrensis* Engelmoer & Roselaar, 1998 breeds in central Siberia.

Limosa lapponica baueri Naumann

Eastern Bar-tailed Godwit | Kuaka*

Limosa baueri Naumann, 1836: *Naturgesch. Vog. Deutsch. 8*: 429 – New Holland, restricted to Victoria, Australia (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 258).

Limosa lapponica var. *Novae Zealandiae* G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 13 – New Zealand.

Limosa Foxii Peale, 1848: *U.S. Expl. Exped. Birds 8*: 231, 332 – Rose Island, Samoan Islands.

Gallinago punctata Ellman, 1861: *Zoologist 19*: 7470 – New Zealand.

Limosa novae zealandiae G.R. Gray; G.R. Gray 1862, *Ibis 4*: 236.

Limosa lapponica novae zealandiae G.R. Gray; Ridgway 1880, *Proc. U.S. Nat. Mus. 3*: 800.

Limosa brevipes Sharpe, 1896: *Cat. Birds Brit. Mus. 24*: 378 (ex G.R. Gray, 1844) – New Zealand.

Limosa novae-zealandiae G.R. Gray; Hutton 1904, *Index Faunae N.Z.*: 32.

Limosa lapponica baueri Naumann; Mathews & Iredale 1913, *Ibis 1* (10th series): 258.

Vetola lapponica baueri (Naumann); Mathews 1927, *Syst. Avium Australasianarum 1*: 168.

Limosa lapponica; Lindsay 1963, *Notornis 10*: 304. Not *Scolopax lapponica* Linnaeus, 1758.

Nearly all bar-tailed godwits that migrate to south-east Australia and New Zealand are considered to be of this subspecies (J. Wilson *et al.* 2007). The East Asian–Australasian Flyway population was estimated at 115,000 birds in 1993, of which about half migrated to Australia (Watkins 1993). The most numerous arctic wader to visit New Zealand, with an average of 77,800 every summer 2005–2019 (Riegen & Sagar 2020). Widespread; prefers localities with broad inter-tidal areas; seldom inland. Favoured localities are large northern harbours and Farewell Spit (Sagar *et al.* 1999; Medway 2000c). A regular summer visitor in small numbers to Norfolk Island (Schodde *et al.* 1983; J. Moore 1999); probably an annual summer visitor to Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); a regular summer visitor to Chatham Islands (Aikman & Miskelly 2004). Vagrant at Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), Campbell Island / Motu Ihupuku, and Macquarie Island (Higgins & Davies 1996). Found in dune and midden deposits on mainland New Zealand (Checklist Committee 1990). One bone found in Enderby Island dune deposit (Tennyson 2020a).

*Also used for common diving petrel *Pelecanoides urinatrix*.

► *Limosa limosa* (Linnaeus)

Black-tailed Godwit

Scolopax limosa Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 147 – Europe, restricted to Sweden (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 258).

Three subspecies recognised. *L. l. limosa* breeds in western Siberia and Europe; *L. l. islandica* Brehm, 1831 breeds in Iceland; *L. l. melanuroides* breeds in eastern Siberia and Mongolia. Only the latter has been recorded in New Zealand.

Limosa limosa melanuroides Gould

Asiatic Black-tailed Godwit

Limosa melanuroides Gould, 1846: *Birds of Australia*, Part 24 (*vide* McAllan 2004, *Notornis 51*: 128) – Port Essington, Northern Territory, Australia.

Limosa limosa melanuroides Gould; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 47.

An uncommon but probably annual visitor to New Zealand in small numbers. Widespread, usually single birds but occasionally in small flocks. Recorded at many estuaries from Parengarenga Harbour to Southland coast (Higgins & Davies 1996). Vagrant at Auckland Islands / Maukahuka (Jan. 1963, Dec. 1976, Feb. 2004; Miskelly, Elliott *et al.* 2020), and Chatham Island (Dec. 2000; Medway 2001a).

► *Limosa haemastica* (Linnaeus)

Hudsonian Godwit

Scolopax haemastica Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 147. Based on “The Red-breasted Godwit” of Edwards 1750, *Nat. Hist. Birds 3*: 138, pl. 138 – North America, restricted to Hudson Bay (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 258).

Limosa limosa haemastica (Linnaeus); Mathews & Iredale 1913, *Ibis 1* (10th series): 258.

Vetola haemastica (Linnaeus); Mathews 1927, *Syst. Avium Australasianarum I*: 168.

Limosa haemastica (Linnaeus); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 47.

Breeds in northern North America. Migrates mostly to South America. An uncommon but probably annual visitor to New Zealand in small numbers. Widespread, usually single birds. Recorded at many estuaries and a few freshwater coastal lagoons from Parengarenga Harbour to Southland coast (Higgins & Davies 1996). One record at Chatham Island, Nov.–Dec. 2004 (Miskelly *et al.* 2006). Also recorded once at Norfolk Island (J. Moore 1981).

Subfamily ARENARIINAE Stejneger: Sandpipers and Turnstones

Arenariinae Stejneger, 1885 (1840): *Standard Natural History* 4: 99 – Type genus *Arenaria* Brisson, 1760 (*vide* ICZN 1999, Art. 40.2).

As we were unable to find proof that Reichenbach (1849–1853) used the subfamily name Calidrinae (or Calidridinae) [*vide* G.R. Gray (1871), Brodtkorb (1967), Bock (1994), Checklist Committee (2010), R.C. Banks (2012), Dickinson & Remsen (2013) and others], we follow R.C. Banks (2012) and Chesser *et al.* (2020) in using Arenariinae. Some authorities use Tribe Arenariini for turnstones (*Arenaria*), and Tribe Calidrini for *Calidris* sandpipers (e.g. Dickinson & Remsen 2013; Handbook of the Birds of the World and BirdLife International 2020).

Genus *Arenaria* Brisson

Arenaria Brisson, 1760: *Ornithologie I*: 48, 5: 132 – Type species (by tautonymy) *Tringa interpres* Linnaeus = *Arenaria interpres* (Linnaeus).

Morinella Meyer & Wolf, 1810: *Taschenb. Vögel*. 2: 382 – Type species (by monotypy) *Morinella collaris* Meyer & Wolf = *Arenaria interpres* (Linnaeus).

Strepsilas Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 263 – Type species (by monotypy) *Tringa interpres* Linnaeus = *Arenaria interpres* (Linnaeus).

Cinclus G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 85 – Type species (by original designation) *Tringa interpres* Linnaeus = *Arenaria interpres* (Linnaeus). Junior homonym of *Cinclus* Borkhausen, 1797.

► *Arenaria interpres* (Linnaeus)

Ruddy Turnstone

Almost cosmopolitan in northern autumn and winter, being found on coasts of the Americas, Africa, Madagascar, south and South-east Asia, the islands of the Pacific, and Australasia. Two subspecies commonly recognised: *A. i. interpres* – breeds from the northern Canadian Arctic, across Arctic Eurasia to north-west Alaska, and spends the non-breeding season on the coasts of western Europe, Africa, south Asia, Australasia, and the Pacific Islands; *A. i. morinella* (Linnaeus, 1766) – breeds in north-east Alaska and across most of Arctic Canada and winters from South Carolina south to central Chile and northern Argentina (Nettleship 2000; del Hoyo & Collar 2014). The nominate subspecies is the only form known from Australasia (Higgins & Davies 1996; Melville *et al.* 2020).

Arenaria interpres interpres (Linnaeus)

Ruddy Turnstone

Tringa interpres Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 148 – Europe and North America, restricted to Gotland, Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 271).

Morinella collaris Meyer & Wolf, 1810: *Taschenb. Vögel*. 2: 383 (footnote). Unnecessary *nomen novum* for *Tringa interpres* Linnaeus, 1758.

Charadrius Cinclus Pallas, 1811: *Zoogr. Rosso-Asiatica* 2: 148 – Siberia to Kamchatka Peninsula.

Tringa oahuensis Bloxham, 1826: *in* Byron, *Voy. "Blonde"*: 251 – Hawai'ian Islands, Pacific Ocean.

Cinclus interpres (Linnaeus); G.R. Gray 1841, *List Gen. Birds* (2nd edition): 85.

Strepsilas collaris (Meyer & Wolf); Holböll 1843, *Naturhist. Tidsskr.* 4: 407.

Strepsilas interpres (Linnaeus); Anon. 1870, *Cat. Colonial Mus.*: 74.

Morinella interpres oahuensis (Bloxham); Mathews & Iredale 1913, *Ibis* 1 (10th series): 250.

Arenaria interpres cinclus (Pallas); Mathews 1931, *Ibis* 1 (13th series): 45.

Arenaria interpres interpres (Linnaeus); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 49.

Arenaria interpres (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 139.

Checklist Committee (1990) included the ruddy turnstone in the Charadriidae, but Sibley & Monroe (1990), Christidis & Boles (1994, 2008) and Higgins & Davies (1996) included it in the Scolopacidae. The latter placement is followed here. The East Asian–Australasian Flyway population was estimated at 28,000 birds in 1993, of which *c.* 14,000 migrated to Australia (Watkins 1993). The third most numerous arctic wader visiting New Zealand, with *c.* 1,600 in recent summers (Riegen & Sagar 2020). Widespread, but tends to concentrate in certain favoured coastal localities, principally the northern harbours, Nelson–Marlborough region, and southern estuaries (Sagar *et al.* 1999; Medway 2000c). A regular summer visitor to Norfolk Island (J. Moore 1999), Chatham Islands (Aikman & Miskelly 2004), Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), and probably Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). Vagrant at Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Antipodes Islands (Tennyson *et al.* 2002), Campbell Island / Motu Ihupuku (Kinsky 1969), and Macquarie Island (Milius 2003). Found in a Kaikoura midden and Chatham Island dune deposits (Checklist Committee 1990).

Genus **Calidris** Merrem

- Calidris* Merrem, 1804: *Allg. Lit. Zeitung* 2(168): col. 542 – Type species (by tautonymy) *Tringa calidris* Gmelin = *Calidris canutus* (Linnaeus).
- Philomachus* Merrem, 1804: *Allg. Lit. Zeitung* 2(168): col. 542 – Type species (by monotypy) *Tringa pugnax* Linnaeus = *Calidris pugnax* (Linnaeus).
- Ereunetes* Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 262 – Type species (by monotypy) *Ereunetes petrificatus* Illiger = *Calidris pusilla* (Linnaeus).
- Erolia* Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 55 – Type species (by monotypy) *Erolia variegata* Vieillot = *Calidris ferruginea* (Pontoppidan).
- Limicola* Koch, 1816: *Syst. Baierischen Zool. 1*: 316 – Type species (by monotypy) *Numenius pygmaeus* Bechstein = *Calidris falcinellus* (Pontoppidan).
- Pelidna* Cuvier, 1817: *Règne Anim. 1*: 490 – Type species (by original designation) *Tringa alpina* Linnaeus = *Calidris alpina* (Linnaeus).
- Eurynorhynchus* Nilsson, 1821: *Ornith. Svecica*: 29 – Type species (by monotypy) *Platalea pygmaea* Linnaeus = *Calidris pygmaea* (Linnaeus).
- Crocethia* Billberg, 1828: *Synop. Faun. Scand. 1*(2): 132 – Type species (by monotypy) *Charadrius calidris* Linnaeus = *Calidris alba* (Pallas).
- Pisobia* Billberg, 1828: *Synop. Faun. Scand. 1*(2): 136 – Type species (by subsequent designation) *Tringa minuta* Leisler = *Calidris minuta* (Leisler).
- Platyrhamphus* Billberg, 1828: *Synop. Faun. Scand. 1*: 172 – Type species (by monotypy) *Numenius pusillus* Bechstein = *Calidris falcinellus* (Pontoppidan).
- Limonites* Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 37 – Type species (by monotypy) *Tringa temminckii* Leisler = *Calidris temminckii* (Leisler).
- Falcinellus* Kaup, 1829: *Skizz. Entwickl.-Gesch. Nat. Syst.*: 37 – Type species (by monotypy) *Tringa platyrhynchus* Temminck = *Calidris falcinellus* (Pontoppidan).
- Ancylochilus* Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 50 – Type species (by monotypy) *Scolopax subarquata* Gldenstaedt = *Calidris ferruginea* (Pontoppidan).
- Actodromas* Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 55 – Type species (by monotypy) *Tringa minuta* Leisler = *Calidris minuta* (Leisler).
- Canutus* Brehm, 1831: *Handb. Naturgesch. Vg. Deutschl.*: 653 – Type species (by tautonymy) *Tringa canutus* Linnaeus = *Calidris canutus* (Linnaeus).
- Aphriza* Audubon, 1839: *Ornith. Biography* 5: 249 – Type species (by monotypy) *Tringa townsendi* Audubon = *Calidris virgata* (Gmelin).
- Schaeniclus* G.R. Gray 1844: *List Birds Brit. Mus.* 3: 104 – Type species (by monotypy) *Tringa cinclus* Linnaeus = *Calidris alpina* (Linnaeus).
- Tryngites* Cabanis, 1856: *Journ. fr Ornith.* 4(6): 418 – Type species (by monotypy) *Tringa rufescens* Vieillot = *Calidris subruficollis* (Vieillot).
- Micropalama* Baird, 1858: *Expl. Surv. Miss. River Pac. Ocean. Birds*: 714, 726 – Type species (by monotypy) *Tringa himantopus* Bonaparte = *Calidris himantopus* (Bonaparte).
- Heteropygia* Coues, 1861: *Proc. Acad. Nat. Sci. Philad.*: 190 – Type species (by original designation) *Tringa bonapartei* Baird = *Calidris fuscicollis* (Vieillot).
- Limnocinclus* Gould, 1865: *Handb. Birds Australia* 2: 254 – Type species (by subsequent designation) *Totanus acuminatus* Horsfield = *Calidris acuminata* (Horsfield).
- Anteliotringa* Mathews, 1913: *Birds Australia* 3: 274 – Type species (by original designation) *Totanus tenuirostris* Horsfield = *Calidris tenuirostris* (Horsfield).
- Caladris*; Oliver 1955, *New Zealand Birds*, 2nd edition: 406. Misspelling.

We follow R. Gibson & Baker (2012) and R.C. Banks (2012) in synonymising genera *Limicola*, *Philomachus*, and *Tryngites* within *Calidris*. We follow R.C. Banks (2012) in giving *Calidris* priority over *Philomachus*. The species sequence follows R.C. Banks (2012).

► **Calidris tenuirostris** (Horsfield)**Great Knot**

- Totanus tenuirostris* Horsfield, 1821: *Trans. Linn. Soc. London* 13(1): 192 – Java, Indonesia.
- Anteliotringa tenuirostris* (Horsfield); Mathews 1927, *Syst. Avium Australasianarum* 1: 178.
- Calidris tenuirostris* (Horsfield); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 50.

Breeds in north-east Siberia. Migrates to south Asia, the Philippines, and Australia, especially to the north and north-west coasts. An uncommon but probably annual visitor to New Zealand. Recorded, mostly from the North Island, at harbours, coastal lakes, and estuaries from Manukau Harbour to Lake Ellesmere / Te Waihora (Higgins & Davies 1996). Usually single birds, but up to four present in 2003 at the Manawatu River estuary, a favoured locality, and three present in 2004 at Mangere sewage ponds, Auckland (Medway 2004b; Rare Birds Committee 2005).

► **Calidris canutus** (Linnaeus)**Red Knot | Huahou**

- Tringa canutus* Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 149 – Sweden.

Breeds in widely separated parts of the high arctic. Migrates to temperate and tropical estuaries of both hemispheres (Higgins & Davies 1996). The second most numerous arctic wader visiting New Zealand each year, with an estimated

32,000 in the country every summer (Riegen & Sagar 2020). Widespread; favoured localities being Kaipara Harbour, Manukau Harbour, Firth of Thames, and Farewell Spit (Sagar *et al.* 1999; Medway 2000c; Riegen & Sagar 2020). An occasional visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1985a, 1999; Hermes *et al.* 1986) and Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); a regular summer visitor to the Chatham Islands (Aikman & Miskelly 2004); and a straggler to Auckland / Maukahuka, Campbell / Motu Ihupuku, and Macquarie Islands (Higgins & Davies 1996; Miskelly, Elliott *et al.* 2020). Six subspecies are recognised (Higgins & Davies 1996; Tomkovich 2001). Found in one North Island midden and in Chatham Island dunes (Checklist Committee 1990).

***Calidris canutus rogersi* (Mathews)**

Red Knot | Huahou

Tringa canuta; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Tringa canutus* Linnaeus, 1758.

Tringa canutus; Hutton 1904, *Index Faunae N.Z.*: 32. Not *Tringa canutus* Linnaeus, 1758.

Canutus canutus rogersi Mathews, 1913: *Birds Australia* 3: 270, 273, pl. 163 – Shanghai, China.

Canutus canutus; Mathews & Iredale 1913, *Ibis* 1 (10th series): 261. Not *Tringa canutus* Linnaeus, 1758.

Calidris canutus rogersi (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 46.

Calidris canutus canutus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 49. Not *Tringa canutus* Linnaeus, 1758.

The predominant subspecies of red knot in New Zealand (Riegen & Sagar 2020). Breeds in north-east Siberia. Migrates to Australia and New Zealand (Higgins & Davies 1996; Tomkovich 2001). The world population was estimated at 50,600 to 62,000 birds (D. Rogers *et al.* 2010).

***Calidris canutus piersmai* Tomkovich**

Red Knot | Huahou

Canutus canutus piersmai Tomkovich, 2001: *Bull. Br. Ornithol. Club* 121: 259 – Bolshoy Lyakhovsky Island, New Siberia Islands.

Up to 25% of the red knots in New Zealand may be this subspecies (D. Rogers *et al.* 2010). Evidence for their presence in New Zealand includes two specimens in Te Papa (NMNZ OR.017279 & OR.019001) identified by Pavel Tomkovich in Mar. 2015, 12 individually colour-banded birds from New Zealand that were identified as *C. c. piersmai* from their breeding plumage while at Bohai Bay, China during migration to their breeding grounds (D. Rogers *et al.* 2010), and six of a sample of 15 red knots from Manawatu estuary being genotyped as *C. c. piersmai* (Conklin *et al.* 2022). Breeds in the New Siberia Islands (northern Siberia). Migrates to Australia and New Zealand (D. Rogers *et al.* 2010; Riegen & Sagar 2020). The world population was estimated at 48,700 to 60,100 birds (D. Rogers *et al.* 2010).

► ***Calidris pugnax* (Linnaeus)**

Ruff

Tringa pugnax Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 148 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 288).

Philomachus pugnax (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 148.

Calidris pugnax (Linnaeus); Banks 2012, *Zootaxa* 3513: 87.

Breeds from northern Europe east to eastern Siberia. Migrates mostly to southern Europe, Africa, and India (Higgins & Davies 1996). A rare visitor to New Zealand. Fourteen records: Colac Bay / Ōraka, Dec. 1984–Mar. 85 (Miskelly & Cooper 1985); Lake Ellesmere / Te Waihora, Dec. 1984–Jan. 1985, Nov. 1991, Dec. 1999–Jan. 2000 (K. Harrison *et al.* 1985; Medway 2000a, 2001a); Lake Poukawa, Hawke's Bay, Nov. 1985 (L. Howell 1987); Wainono Lagoon, South Canterbury, Nov. 1987, Oct. 2002 (Maloney 1988; Medway 2003a); Firth of Thames, Nov. 2001 (Medway 2002d); Ahuriri River estuary, Hawke's Bay, Dec. 2001 (Medway 2002f); New Plymouth, Oct. 2002 (Medway 2002f); Rakaia River mouth, Jun. 2003 (Medway 2003b); Kaiapoi, Feb. 2004 (Miskelly *et al.* 2011); Maketu estuary, Bay of Plenty, Dec. 2005 (Scofield 2006); Nelson Haven, Nov. 2007 (Scofield 2008).

► ***Calidris falcinellus* (Pontoppidan)**

Broad-billed Sandpiper

Scolopax falcinellus Pontoppidan, 1763: *Danske Atlas* 1: 623, pl. 13 – Denmark.

Calidris falcinellus (Pontoppidan); Banks 2012, *Zootaxa* 3513: 87.

Two subspecies. Breeds in northern Europe and northern Siberia. Migrates mainly to east Africa, south Asia, and Australia (Higgins & Davies 1996).

***Calidris falcinellus sibirica* (Dresser)**

Eastern Broad-billed Sandpiper

Limicola sibirica Dresser, 1876: *Proc. Zool. Soc. London* 1876 (44): 674 – China.

Limicola falcinellus sibiricus Dresser; Checklist Committee 1990, *Checklist Birds N.Z.*: 148. Unjustified emendation.

Limicola falcinellus sibirica Dresser; Higgins & Davies 1996, *HANZAB* 3: 333.

Calidris falcinellus sibirica (Dresser); Gibson & Withrow 2015, *Western Birds* 46: 115.

The correct spelling of the subspecific name is *sibirica* (Higgins & Davies 1996). Breeds in eastern Siberia. Migrates mainly to South-east Asia and Australia. An uncommon visitor to New Zealand, mostly single birds in the North Island (Higgins & Davies 1996). The only South Island record is from Lake Ellesmere / Te Waihora in Jan. 2001 (Medway 2001d).

► ***Calidris acuminata*** (Horsfield)

Sharp-tailed Sandpiper | Kohutapu

- Totanus acuminatus* Horsfield, 1821: *Trans. Linn. Soc. London* 13(1): 192 – Java, Indonesia.
Tringa australis Jardine & Selby, 1830: *Illust. Ornith.* 2: [66], pl. 91 – “New Holland” = Australia.
Schœniclus australis (Jardine & Selby); G.R. Gray 1844, *List Birds Brit. Mus.* 3: 105.
Limnocolinus australis (Jardine & Selby); Potts 1873, *Trans. Proc. N.Z. Inst.* 5: 171.
Limnocolinus acuminatus (Horsfield); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187.
Tringa acuminata (Horsfield); Buller 1887 (Oct), *History of the Birds of N.Z.*, 2nd edition 2 (part 2): 37.
Heteropygia acuminata (Horsfield); Buller 1905, *Suppl. Birds N.Z.* 1: 187.
Pisobia maculata acuminata (Horsfield); Iredale 1913, *Trans. Proc. N.Z. Inst.* 45: 86.
Heteropygia maculata acuminata (Horsfield); Mathews & Iredale 1913, *Ibis* 1 (10th series): 260.
Limnocolinus acuminatus rufescens Mathews, 1916: *Bull. Brit. Ornith. Club* 36: 82 – north-west Australia.
Erolia acuminatus; Stidolph 1927, *Emu* 26: 216. Unjustified emendation.
Erolia acuminata; Stidolph 1932, *Emu* 31: 234.
Erolia acuminata (Horsfield); Peters 1934, *Check-list Birds World* 2: 284.
Calidris acuminata (Horsfield); Checklist Committee 1953, *Checklist N.Z. Birds*: 46.

Breeds in north-east Siberia. Migrates mainly to New Guinea and Australia (Higgins & Davies 1996). The East Asian–Australasian Flyway population was estimated at 85,000 birds in 2016, most of which migrate to Australia (Hansen *et al.* 2016). The seventh most numerous arctic wader visiting New Zealand each year, but in numbers much less than visit Australia. About 20 in New Zealand every summer. Widespread; favoured localities being Firth of Thames, Lake Ellesmere / Te Waihora, and the estuary at Invercargill (Sagar *et al.* 1999; Medway 2000c). Regular visitor to Norfolk Island (J. Moore 1999) and occasional visitor to Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). Vagrant at Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Chatham Islands (Freeman 1994; Miskelly *et al.* 2006), and Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020).

► ***Calidris himantopus*** (Bonaparte)

Stilt Sandpiper

- Tringa himantopus* Bonaparte, 1826: *Ann. Lyc. Nat. Hist. N.Y.* 2: 157 – Long Branch, New Jersey, USA.
Micropalama himantopus (Bonaparte); Medway 2001, *Notornis* 48: 61.
Calidris himantopus (Bonaparte); Sangster *et al.* 2004, *Ibis* 146: 153.

Sangster *et al.* (2004) considered that morphological, behavioural, and molecular studies indicated that the stilt sandpiper was best placed in *Calidris*, and this was confirmed by R. Gibson & Baker (2012) based on multiple gene sequences. Breeds in north Alaska. Migrates to central South America. Accidental in Western Europe, Japan, and Australia (Higgins & Davies 1996). Vagrant to New Zealand. One record: Lake Ellesmere / Te Waihora, Sep. 1998 (Medway 2000a, 2001a; Hill 2006).

► ***Calidris ferruginea*** (Pontoppidan)

Curlew Sandpiper

- Tringa ferrugineus* Pontoppidan, 1763: *Danske Atlas* 1: 624 – Christiansø Islands, off Bornholm, Denmark.
Scolopax testacea Pallas, 1764: in Vroeg, *Cat. Raisonné Coll. Oiseaux, Adumbr.*: 6 – Holland.
Scolopax subarquata Gùldenstaedt, 1775: *Novi Comment. Acad. Scient. Imperial. Petropol.* 19: 471 – near the Caspian Sea.
Tringa (Pelidna) chinensis J.E. Gray, 1831: *Zool. Miscell.* 1: 2 – China.
Ancylochilus subarquatus (Gùldenstaedt); Buller 1905, *Suppl. Birds N.Z.* 1: 187.
Tringa subarquata (Gùldenstaedt); A. Hamilton 1909, *Hand-list Birds New Zealand*: 10.
Erolia ferruginea (Brünnich) [sic]; Mathews & Iredale 1913, *Ibis* 1 (10th series): 259.
Erolia testacea chinensis (G.R. Gray); Mathews 1927, *Syst. Avium Australasianarum* 1: 177.
Erolia testacea; Stidolph 1927, *Emu* 26: 216.
Erolia testacea (Pallas); Peters 1934, *Check-list Birds World* 2: 286.
Calidris ferruginea (Pontoppidan); Checklist Committee 1953, *Checklist N.Z. Birds*: 47.
Caladris testacea (Pallas); Oliver 1955, *New Zealand Birds*, 2nd edition: 406. Misspelling.

Breeds mainly in central Siberia. Migrates to Africa, south Asia, and Australasia (Higgins & Davies 1996). The East Asian–Australasian Flyway population was estimated at 250,000 birds in 1993, of which c. 188,000 migrated to Australia, dropping to 90,000 by 2016 (Watkins 1993; Hansen *et al.* 2016). The ninth most numerous arctic wader visiting New Zealand each year, but in numbers much less than visit Australia. About eight in New Zealand in recent summers (Riegen & Sagar 2020). Widespread; favoured localities include Lake Ellesmere / Te Waihora, Firth of Thames, Parengarenga Harbour, and Awarua Bay (Sagar *et al.* 1999; Medway 2000c). Three records (1970, 1984, 1987) at Norfolk Island (Hermes *et al.* 1986; J. Moore 1999). Vagrant at Auckland Islands / Maukahuka (Dec. 1972; Miskelly, Elliott *et al.* 2020) and Chatham Island (Jan. 1997; Miskelly *et al.* 2006).

[***Calidris paramelanotos*** Parker

Cox's Sandpiper

- Calidris paramelanotos* Parker, 1982: *South Australian Naturalist* 56: 63 – Price Saltfields, Gulf St Vincent, South Australia.
Calidris melanotos x *Calidris ferruginea* Christidis *et al.* 1996: *Condor* 98: 462.
Calidris ferruginea x *Calidris melanotos* Christidis & Boles, 2008: *Syst. Taxon. Australian Birds*: 139.

Calidris x paramelanotos Parker; Gunby 2018, *Notornis* 65: 51.

Cox's sandpiper was named based on two specimens collected in South Australia in 1975 & 1977 (S. Parker 1982). These birds and others that look like them are now considered to be stereotyped hybrids between a male pectoral sandpiper (*Calidris melanotos*) and a female curlew sandpiper (*C. ferruginea*) (Christidis, Davies *et al.* 1996). One accepted record from New Zealand, at Lake Ellesmere / Te Waihora in Nov. 2016 (Gunby 2018).]

► ***Calidris subminuta*** (Middendorff)

Long-toed Stint

Tringa subminuta Middendorff, 1851: *Reise Nord. Ost. Sibir.* 2(2): 222, pl. 19, fig. 6 – Stanowoj Mountains, Siberia.

Pisobia subminuta (Middendorff); Mathews 1927, *Syst. Avium Australasianarum* 1: 176.

Erolia subminuta (Middendorff); Peters 1934, *Check-list Birds World* 2: 283.

Calidris subminuta (Middendorff); Medway 2001, *Notornis* 48: 61.

Breeding distribution poorly known, widely scattered in Siberia. Migrates mostly to South-east Asia and Philippines, some reaching Australia annually (Higgins & Davies 1996). Vagrant to New Zealand. Two records: Lake Ellesmere / Te Waihora, Aug. 1997 and Dec. 2000 (Medway 2001c; Petch *et al.* 2002).

► ***Calidris ruficollis*** (Pallas)

Red-necked Stint

Trynga ruficollis Pallas, 1776: *Reise durch verschiedene Provinzen des Russischen Reichs* 3: 700 – “Circa lacus salsos Dauriae campestris” = Kulussutai, southern Transbaikalia, Russia (*vide* Peters 1934, *Check-list Birds World* 2: 282).

Limonites ruficollis (Pallas); Buller 1905, *Suppl. Birds N.Z.* 1: 186.

Pisobia minuta ruficollis (Pallas); Mathews & Iredale 1913, *Ibis* 1 (10th series): 260.

Pisobia ruficollis (Pallas); Mathews 1927, *Syst. Avium Australasianarum* 1: 176.

Erolia ruficollis; Stidolph 1927, *Emu* 26: 216.

Erolia ruficollis (Pallas); Peters 1934, *Check-list Birds World* 2: 282.

Calidris ruficollis ruficollis (Pallas); Checklist Committee 1953, *Checklist N.Z. Birds*: 47.

Calidris ruficollis (Pallas); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 50.

Breeds in northern Siberia and north-west Alaska. Migrates to Malaysia, the Philippines, and Australasia (Higgins & Davies 1996). Most abundant migrant wader in Australasia. The East Asian–Australasian Flyway population was estimated at 315,000 birds in 2015, of which *c.* 270,000 migrated to Australia (BirdLife International 2016). The fifth most numerous arctic wader visiting New Zealand each year, but in numbers much less than visit Australia. About 90 in New Zealand in recent summers, most at Lake Ellesmere / Te Waihora (Riegen & Sagar 2020). Awarua Bay, Manukau Harbour, and Farewell Spit are also important localities (Sagar *et al.* 1999; Medway 2000c; Riegen & Sagar 2020). Occasional visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1985a, 1999). Vagrant at Chatham Islands (Freeman 1994; Miskelly *et al.* 2006). Seven records from Enderby Island, Auckland Islands / Maukahuka, 1963–2008 (Miskelly, Elliott *et al.* 2020), and one at Snares Islands / Tini Heke, Oct. 2001 (D. Houston *in* Miskelly, Elliott *et al.* 2020).

► ***Calidris alba*** (Pallas)

Sanderling

Trynga alba Pallas, 1764: *in* Vroeg, *Cat. Raisonné Coll. Oiseaux, Adumbr.*: 7 – coast of the North Sea.

Crocethia alba; Stidolph 1927, *Emu* 26: 216.

Crocethia alba (Pallas); Peters 1934, *Check-list Birds World* 2: 281.

Calidris alba (Pallas); Checklist Committee 1953, *Checklist N.Z. Birds*: 47.

Breeds at scattered localities from northern North America to northern Russia and islands in the Arctic Ocean. Migrates to tropical and temperate regions of both hemispheres (Higgins & Davies 1996). An uncommon but probably annual visitor to New Zealand. Recorded from Northland to Southland, usually single birds but sometimes small flocks of up to six birds (Higgins & Davies 1996). Three on Chatham Island, Dec. 1985 (Freeman 1994), and one on Enderby Island, Auckland Islands / Maukahuka Nov. 2007 – Feb. 2008 (Miskelly, Crossland *et al.* 2019; Miskelly, Elliott *et al.* 2020).

► ***Calidris alpina*** (Linnaeus)

Dunlin

Tringa alpina Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 149 – Lapland, Sweden.

Pelidna alpina (Linnaeus); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 602.

Erolia alpina alpina (Linnaeus); Peters 1934, *Check-list Birds World* 2: 286.

Calidris alpina (Linnaeus); Checklist Committee 1980, *Notornis (Suppl.)* 27: 18.

Breeds in North America, east Greenland, Iceland, and north Eurasia. Migrates to winter on northern hemisphere coasts (Higgins & Davies 1996). Vagrant to New Zealand. Four records, all single birds: Kaipara Harbour Feb. 1974 (B. Brown 1975), Firth of Thames Mar. 1977 (B. Brown 1979), and Manukau Harbour Jun. 1979 and Apr. 2006 (Habraken 1980; Miskelly *et al.* 2011). As many as 11 subspecies of *Calidris alpina* have been recognised (Higgins & Davies 1996; but see Marthinsen *et al.* 2007). The subspecific identity of birds recorded in New Zealand is not known.

► ***Calidris bairdii*** (Coues)

Baird's Sandpiper

Actodromas (Actodromas) Bairdii Coues, 1861: *Proc. Acad. Nat. Sci. Philad.* 13: 194 – “North America east of the Rocky Mountains”, restricted to Fort Resolution, Great Slave Lake, Mackenzie District, Canada (*vide* Peters 1934, *Check-list Birds World* 2: 284).

Heteropygia bairdi (Coues); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 570. Unjustified emendation.

Erolia bairdii (Coues); Peters 1934, *Check-list Birds World* 2: 284.

Calidris bairdii (Coues); Checklist Committee 1980, *Notornis (Suppl.)* 27: 17.

Breeds in north-east Siberia, north-west Alaska, arctic Canada, and north-west Greenland. Migrates mainly to western and southern South America (Higgins & Davies 1996). Vagrant to New Zealand. Six records: Manukau Harbour, Mar. 1970, Apr. 1976 (McKenzie *et al.* 1971; Edgar 1976); Firth of Thames, Dec. 1970, Oct. 1972 (J. Brown *et al.* 1971; Edgar 1973); Manawatu Estuary, Oct. 1976 (Kinsky 1977a); and Portland Island, Nov. 2002 (Scofield 2008).

► ***Calidris minuta*** (Leisler)

Little Stint

Tringa minuta Leisler, 1812: *Nachträge Bechsteins Naturgeschichte Deutschlands I*: 74 – Hanau am Main, Germany.

Limonites minuta (Leisler); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 538.

Erolia minuta; Stidolph 1927, *Emu* 26: 216.

Erolia minuta (Leisler); Peters 1934, *Check-list Birds World* 2: 282.

Calidris minuta (Leisler); Crocker *et al.* 2002, *Notornis* 49: 182.

Breeds in west and central Palaearctic. Migrates mainly to Africa. Small numbers regularly visit Australia (Higgins & Davies 1996). Vagrant to New Zealand. Five records: Lake Ellesmere / Te Waihora, Nov. 1992–Apr. 1993, Jan. –Apr. 1995, Mar. 2001, Oct. 2019 (Crocker *et al.* 2002; Miskelly *et al.* 2011; Miskelly, Crossland *et al.* 2021); Manukau Harbour, Sep. 2019 (Miskelly, Crossland *et al.* 2021).

► ***Calidris minutilla*** (Vieillot)

Least Sandpiper

Tringa minutilla Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 34*: 466 – “Amérique jusq’ua delà du Canada”, restricted to Halifax, Nova Scotia, Canada (*vide* American Ornithologists Union 1931, *Check-list North Amer. Birds*, 4th edition: 120).

Limonites minutilla (Vieillot); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 548.

Erolia minutilla (Vieillot); Peters 1934, *Check-list Birds World* 2: 283.

Erolia minutilla; Stidolph 1953, *Notornis* 5: 115.

Calidris minutilla subspecies; Brathwaite 1955, *Notornis* 6: 145, 149.

Calidris minutilla (Vieillot); Checklist Committee 1990, *Checklist Birds N.Z.*: 231.

Breeds in northern North America. Migrates south as far as Chile and Brazil (Higgins & Davies 1996). Possibly recorded in New Zealand: single birds reported at Wairoa River mouth, Hawke’s Bay, Nov. 1952 (Stidolph 1953); Westshore Domain, Napier, Nov. 1953–Jan. 1954 (Brathwaite 1955); Firth of Thames, 1972, no details (Falla *et al.* 1981). Placed in Suspense List by Checklist Committee (1990).

► ***Calidris fuscicollis*** (Vieillot)

White-rumped Sandpiper

Tringa fuscicollis Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 34*: 461 – Paraguay (ex Azara, 1805).

Heteropygia fuscicollis (Vieillot); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 574.

Erolia fuscicollis (Vieillot); Peters 1934, *Check-list Birds World* 2: 284.

Calidris fuscicollis (Vieillot); Checklist Committee 1980, *Notornis (Suppl.)* 27: 17.

Calidris fuscicollis (Vieillot); Checklist Committee 1990, *Checklist Birds N.Z.*: 146. Unjustified emendation.

Breeds in arctic Canada, rarely in northern Alaska. Migrates mainly to southern South America (Higgins & Davies 1996). Vagrant to New Zealand. Two records: Manukau Harbour (two birds), Dec. 1969 (McKenzie 1970), Parengarenga Harbour, Mar. 1971 (Edgar 1971a).

► ***Calidris subruficollis*** (Vieillot)

Buff-breasted Sandpiper

Tringa subruficollis Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 2, 34*: 465 – Paraguay.

Tringa rufescens Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 2, 34*: 470 – Louisiana, U.S.A.

Tryngites rufescens (Vieillot); Cabanis 1856, *Journ. für Ornith.* 4(6): 418.

Tryngites subruficollis (Vieillot); Ridgway 1885, *Proc. U.S. Nat. Mus.* 8: 356.

Calidris subruficollis (Vieillot); Peterson 2020, *Field Guide Birds Western North America*: 124.

Breeds from north-east Siberia (Chukchi Peninsula) east to northern Alaska and Canada. Migrates to South America (mainly south-east Bolivia to north-east Argentina; Higgins & Davies 1996). Three records, probably of two birds: Papakanui Spit, South Kaipara Head, Mar. 2014; Ashley River estuary, Nov. 2019; and Lake Ellesmere / Te Waihora, Dec. 2019 (Miskelly *et al.* 2015; Miskelly, Crossland *et al.* 2021).

► ***Calidris melanotos*** (Vieillot)

Pectoral Sandpiper

Tringa melanotos Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 34*: 462 (ex Azara, 1805) – Paraguay.

Tringa maculata Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 34*: 465 – Antilles.

Pelidna pectoralis Say, 1823: *in* Long, *Exped. Rocky Mts I*: 171 – USA.

Limnocolinus pectoralis (Say); Gould 1865, *Handb. Birds Australia* 2: 254.

Heteropygia maculata (Vieillot); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 562.

Erolia maculata; Stidolph 1927, *Emu* 26: 216.

Limnocinclus maculata (Vieillot); Mathews 1931, *Ibis* 1 (13th series): 45.

Pisobia pectoralis; Stidolph 1932, *Emu* 31: 234.

Erolia melanotos (Vieillot); Peters 1934, *Check-list Birds World* 2: 284.

Calidris melanotos (Vieillot); Checklist Committee 1953, *Checklist N.Z. Birds*: 47.

Breeds across northern Siberia, and in northern Alaska and Canada. Migrates mainly to southern South America (Higgins & Davies 1996). An uncommon but probably annual visitor to New Zealand in small numbers. Widespread, occurring at many estuaries and coastal lakes and lagoons from Northland to Southland (Higgins & Davies 1996). Occasional visitor to Norfolk Island (J. Moore 1985a, 1999); vagrant at Chatham Islands (Miskelly *et al.* 2006, 2015).

See comments under curlew sandpiper (*C. ferruginea*) regarding the status of Cox's sandpiper (*C. paramelanotos*) and its occurrence in New Zealand.

► ***Calidris pusilla*** (Linnaeus)

Semipalmated Sandpiper

Tringa pusillus Linnaeus, 1766: *Syst. Nat., 12th edition* 1: 252 – Santo Domingo, Dominican Republic.

Ereunetes pusillus (Linnaeus); Sharpe 1896, *Cat. Birds Brit. Mus.* 24: 514.

Calidris pusilla; Sibson & Mackenzie 1967, *Notornis* 14: 84.

Calidris pusilla (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 231.

Breeds on the arctic coast of North America. Migrates south mostly to West Indies and northern South America (Higgins & Davies 1996). Possibly recorded in New Zealand: single bird reported at Westshore Lagoon, Napier, Jan. 1966 (Sibson & Mackenzie 1967). Placed in Suspense List by Checklist Committee (1990).

► ***Calidris mauri*** (Cabanis)

Western Sandpiper

Ereunetes Mauri Cabanis, 1857: *Journ. für Ornith.* 4(6): 419 – Cuba.

Ereunetes mauri Cabanis; Peters 1934, *Check-list Birds World* 2: 281.

Calidris mauri (Cabanis); Blackburn & Bell 1965, *Notornis* 12: 109.

Breeds mainly on coasts of north and west Alaska. Migrates mostly to coastal California, Mexico, Central America, and northern South America (Higgins & Davies 1996). Vagrant to New Zealand. Five records: Farewell Spit Oct. 1964 (Blackburn & Bell 1965); Rangaunu Harbour Nov. 1970 (Edgar 1971a); Firth of Thames Feb. 1971 and Nov. 1984 (Edgar 1972a; Fennell 1986); Parengarenga Harbour Jan. 1979 (Sibson 1979).

Subfamily SCOLOPACINAE Rafinesque: Snipes, Woodcocks, and Dowitchers

Scolopacea Rafinesque, 1815: *Analyse de la Nature*: 70 – Type genus *Scolopax* Linnaeus, 1758.

Some authorities use Tribe Limnodromini for dowitchers (*Limnodromus*) and Tribe Scolopacini for woodcocks and snipes (*Scolopax*, *Coenocorypha*, *Gallinago*, and *Lymnocyrtus*) (e.g. Dickinson & Remsen 2013; Handbook of the Birds of the World and BirdLife International 2020).

Genus *Limnodromus* Wied

Macrorhamphus J.R. Forster, 1817. *Synonymic Cat. Brit. Birds*. London: British Museum 17: 22 – Type species: (by original designation) *Scolopax grisea* Gmelin = *Limnodromus griseus* (Gmelin). Junior homonym of *Macrorhamphus* Fischer, 1813.

Limnodromus Wied, 1833: *Beitr. Naturg. Brasil.* 4: 716 – Type species (by monotypy) *Scolopax novaeboracensis* Gmelin = *Limnodromus griseus* (Gmelin).

Pseudoscolopax Blyth, 1859: *Journ. Asiatic Soc. Bengal* 18: 280 – Type species (by monotypy) *Macrorhamphus semipalmatus* Blyth = *Limnodromus semipalmatus* (Blyth).

► ***Limnodromus semipalmatus*** (Blyth)

Asiatic Dowitcher

Macrorhamphus semipalmatus Blyth, 1848: *Journ. Asiatic Soc. Bengal* 17(1): 252 – Calcutta, India.

Limnodromus semipalmatus (Blyth); Fennell *et al.* 1985, *Notornis* 32: 323.

Breeds from central Asia to Manchuria. Migrates mostly to south-east India, Thailand, Malaysia, Indonesia, and north-west Australia. Vagrant to New Zealand (Higgins & Davies 1996). Six records, all single birds: Avon–Heathcote estuary / Ihutai, Aug. 1985 (Fennell, Fennell *et al.* 1985); Firth of Thames, Feb. 1987 (Keeley 1988); Farewell Spit, Jan. 1988 (Miskelly *et al.* 2013); Maketu estuary, Bay of Plenty, Nov. 1998 (Medway 2001c); Ohiwa Harbour, Bay of Plenty, Dec. 2002 (Medway 2003a); and Motueka sandspit, Dec. 2016 (Miskelly, Crossland *et al.* 2017).

Genus *Coenocorypha* G.R. Gray

Coenocorypha G.R. Gray, 1855: *Cat. Genera Subgen. Birds Brit. Mus.*: 119 – Type species (by original designation) *Gallinago aucklandica* G.R. Gray.

The elevation of *Coenocorypha barrierensis*, *C. iredalei*, and *C. huegeli* to species level follows Worthy, Miskelly *et al.* (2002). The order in which the species are treated follows that of Holdaway *et al.* (2001). Beyond the New Zealand region, the genus formerly occurred in Fiji (*C. miratropica* Worthy, 2003) and New Caledonia (*C. neocaledonica* Worthy,

Anderson & Sand, 2013). An extinct form of *Coenocorypha* from Norfolk Island (Holdaway *et al.* 2001) has yet to be described. Of the New Zealand *Coenocorypha*, *C. barrierensis*, *C. iredalei*, and *C. chathamica* are extinct.

➤ † ***Coenocorypha barrierensis*** Oliver **North Island Snipe**

Coenocorypha aucklandica barrierensis Oliver, 1955: *New Zealand Birds*, 2nd edition: 275 – Little Barrier Island, New Zealand.
Coenocorypha aucklandica medwayi Medway, 1971: *Notornis* 18: 219 – Awakino, Mahoenui area. *Nomen nudum*: = *Coenocorypha barrierensis* Oliver, 1955 (*vide* Checklist Committee 1990: 141).
Coenocorypha barrierensis Oliver; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28: 133, 174.

Checklist Committee (1990) regarded the so-called Little Barrier snipe as a subspecies of *C. aucklandica*. Extinct. Formerly widespread in the North Island where it is known from Holocene bones (Worthy, Miskelly *et al.* 2002). One bird was reputedly shot on Browns Island (Motukorea), Hauraki Gulf, in 1820 (Miskelly 1987). Formerly on Hauturu / Little Barrier Island where a unique specimen was caught in 1870 (Miskelly 1988).

➤ † ***Coenocorypha iredalei*** Rothschild **South Island Snipe | Tutukiwi***

Coenocorypha aucklandica iredalei Rothschild, 1921: *Bull. Brit. Ornith. Club* 41: 63 – Jacky Lee Island, New Zealand.
Coenocorypha iredalei Rothschild; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 133, 174.

Checklist Committee (1990) regarded the so-called Stewart Island snipe as a subspecies of *C. aucklandica*. Formerly widespread in the South Island where it is known only from Holocene bones (Worthy, Miskelly *et al.* 2002), apart from a possible record in Dusky Sound in 1773 (Medway 2007). It survived into the 20th Century on several islands around Stewart Island / Rakiura (Higgins & Davies 1996; Miskelly 1987, 2012b). Extinct as a consequence of the extirpation of its last known population, on Taukihepa / Big South Cape Island, following the arrival of ship rats (*Rattus rattus*) there in the early 1960s (Blackburn 1965; Miskelly 2012b).

* Also used for Snares Island snipe *C. huegeli*.

➤ † ***Coenocorypha chathamica*** (Forbes) **Forbes' Snipe**

Gallinago chathamica Forbes, 1893: *Ibis* 5 (6th series): 545 – Chatham Islands.
Coenocorypha chathamica (Forbes); Checklist Committee 1990, *Checklist Birds N.Z.*: 142.

Worthy, Miskelly *et al.* (2002) did not examine the status of this taxon. It is retained here at species level as in Checklist Committee (1990), but with a change in its vernacular name from extinct Chatham Island snipe to the more appropriate Forbes' snipe as used by Holdaway *et al.* (2001) and Worthy, Miskelly *et al.* (2002). Extinct. Endemic to the Chatham Islands. Known only from natural and midden deposits (Oliver 1955; Checklist Committee 1990).

➤ ***Coenocorypha pusilla*** (Buller) **Chatham Island Snipe**

Gallinago pusilla Buller, 1869: *Ibis* 5 (new series): 41 – small rocky islet off Chatham Island.
Coenocorypha aucklandica pusilla (Buller); Mathews & Iredale 1913, *Ibis* 1 (10th series): 261.
Coenocorypha pusilla (Buller); Checklist Committee 1990, *Checklist Birds N.Z.*: 142.

Checklist Committee (1990) regarded the Chatham Island snipe as being specifically distinct from other *Coenocorypha* taxa. It is retained here at species level following Worthy, Miskelly *et al.* (2002) and A. Baker *et al.* (2010). Endemic to the Chatham Islands. Currently restricted to Rangatira, Mangere, Little Mangere, and Star Keys of the Chatham Islands, and occasionally seen on Pitt Island / Rangiauria and Rabbit Island (Higgins & Davies 1996; Aikman & Miskelly 2004). Total population estimated at *c.* 1,000 pairs (Higgins & Davies 1996; Aikman & Miskelly 2004). Bones abundant in natural and midden deposits (Checklist Committee 1990).

➤ ***Coenocorypha huegeli*** (Tristram) **Snares Island Snipe | Tutukiwi***

Gallinago huegeli Tristram, 1893: *Bull. Brit. Ornith. Club* 1: 47 – Snares Islands.
Coenocorypha aucklandica huegeli (Tristram); Mathews & Iredale 1913, *Ibis* 1 (10th series): 262.
Coenocorypha huegeli; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 133, 178.

Checklist Committee (1990) regarded the Snares Island snipe as a subspecies of *C. aucklandica*. Endemic to the Snares Islands / Tini Heke. Common on North East and Broughton Islands, and recorded on Alert Stack (Miskelly *et al.* 2001a). Breeding population probably fluctuated between 325 and 480 pairs in 1982–87 (Miskelly *et al.* 2001a). Translocated to Putauhinu, Codfish / Whenua Hou, Kundy, and Mokinui Islands near Stewart Island / Rakiura (Miskelly, Charteris *et al.* 2012; Miskelly & Powlesland 2013).

* Also used for South Island snipe *C. iredalei*.

➤ ***Coenocorypha aucklandica*** (G.R. Gray) **Subantarctic Snipe**

With the elevation of *C. barrierensis* and *C. iredalei* to species level, the vernacular name New Zealand snipe was no longer appropriate for *C. aucklandica* whose subspecies inhabit the Auckland / Maukahuka, Antipodes, and Campbell / Motu Ihupuku Islands. Therefore, the vernacular name of *C. aucklandica* was changed to the more appropriate subantarctic snipe.

Coenocorypha aucklandica aucklandica (G.R. Gray)**Auckland Island Snipe**

- Gallinago aucklandica* G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds 1*(8): 13 – Auckland Islands, restricted to Enderby Island (*vide* Miskelly & Taylor 2020, *Notornis 67*: 19).
- Scolopax holmesii* Peale, 1848: *U.S. Expl. Exped. 8*: 229 – Auckland Islands.
- Scolopax aucklandica* G.R. Gray; Finsch 1867, *Journ. für Ornith. 15*: 346. Unjustified emendation.
- Scolopax aucklandica* G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 74.
- Gallinago tristrami* Rothschild, 1894: *Bull. Brit. Ornith. Club 3*: 12 – “Antipodes Island”, error for Auckland Islands (*vide* Hartert 1927, *Novit. Zool. 34*(1): 14).
- Gallinago Aucklandica* G.R. Gray; A. Hamilton 1909, *Hand-list Birds New Zealand*: 10.
- Coenocorypha aucklandica aucklandica* (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 261.
- Coenocorypha aucklandica tristrami* (Rothschild); Mathews & Iredale 1913, *Ibis 1* (10th series): 262.
- Coenocorypha aucklandica*; Holdaway *et al.* 2001, *New Zealand Journ. Zool. 28*(2): 133, 178.

Endemic to the Auckland Islands / Maukahuka. Confined to Adams, Disappointment, Enderby, Rose, Ewing, and Ocean Islands, where breeding (Shepherd *et al.* 2020). Also reported on Dundas and Figure of Eight Islands (Miskelly, Elliott *et al.* 2020).

Coenocorypha aucklandica meinertzhagenae Rothschild**Antipodes Island Snipe**

- Coenocorypha aucklandica meinertzhagenae* Rothschild, 1927: *Novit. Zool. 34*(1): 15 – Antipodes Island.
- Coenocorypha meinertzhagenae* Rothschild; Holdaway *et al.* 2001, *New Zealand Journ. Zool. 28*(2): 174, 178.

Checklist Committee (1990) regarded the Antipodes Island snipe as a subspecies of *C. aucklandica*. The taxon is retained here at subspecies level following Worthy, Miskelly *et al.* (2002), A. Baker *et al.* (2010), and Shepherd *et al.* (2020). Endemic to the Antipodes Islands. Widespread on Antipodes Island in 1969 (Warham & Bell 1979). Population on Antipodes, Bollons, Archway, and Inner Windward Islands estimated at 8,000 birds in 1995 (Tennyson *et al.* 2002). Breeding recorded only on Antipodes Island, but probably throughout (Higgins & Davies 1996).

Coenocorypha aucklandica perseverance Miskelly & Baker**Campbell Island Snipe**

- Coenocorypha* sp. Miskelly 2000: *Notornis 47*: 131.
- Coenocorypha* “Campbell Island” Holdaway *et al.* 2001: *New Zealand Journ. Zool. 28*: 133.
- Coenocorypha* sp. Barker *et al.* 2005: *Notornis 52*: 145.
- Coenocorypha* undescribed sp. Miskelly & Fraser 2006: *Notornis 53*: 353.
- Coenocorypha* “Campbell” Baker *et al.* 2010: *Conserv. Genet. 11*: 1366.
- Coenocorypha aucklandica perseverance* Miskelly & Baker, 2010: *Notornis 56*: 114 – Campbell Island.

This subspecies was discovered in 1997 and described in 2010 (D. Barker *et al.* 2005; Miskelly & Baker 2010a,b). It is known only from the Campbell Island group (Miskelly & Baker 2010a). Subspecies status supported by Shepherd *et al.* (2020).

Genus Gallinago Brisson

- Gallinago* Brisson, 1760: *Ornithologie 5*: 298 – Type species (by tautonymy) *Scolopax gallinago* Linnaeus = *Gallinago gallinago* (Linnaeus).
- Capella* Frenzel, 1801: *Beschr. Vög. Eier Wittenberg*: 58 – Type species (by monotypy) *Scolopax coelestis* Frenzel = *Gallinago gallinago* (Linnaeus).
- Ditelmatis* Mathews, 1913: *Birds Australia 3*: 282 – Type species (by original designation) *Gallinago hardwickii* (J.E. Gray).

► **Gallinago hardwickii** (J.E. Gray)**Japanese Snipe**

- Scolopax australis* Latham, 1801: *Index Ornith. Suppl.*: lxx – Australia. Not *Scolopax australis* Scopoli, 1769.
- Scolopax Hardwickii* J.E. Gray, 1831: *Zool. Miscell. 1*: 16 – Tasmania, Australia.
- Gallinago australis* (Latham); Cheeseman 1899, *Trans. Proc. N.Z. Inst. 31*: 105.
- Gallinago hardwickii* (J.E. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 262.
- Ditelmatis hardwickii* (J.E. Gray); Mathews 1927, *Syst. Avium Australasianarum 1*: 180.
- Gallinago hardwickii*; Brathwaite 1955, *Notornis 6*: 148. Unjustified emendation.

Breeds in Japan and east Asian mainland. Migrates to New Guinea and eastern Australia (Higgins & Davies 1996). A rare visitor to New Zealand where sightings have probably been of this species rather than the very similar, but much less likely, Swinhoe’s snipe *Gallinago megala* (Swinhoe, 1861). Has been recorded, usually at freshwater wetlands, from Auckland to Southland (Miskelly *et al.* 1985). One record (1985) at Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Four records (1969, 1976, 1980, 1981) at Norfolk Island (J. Moore 1985a; Higgins & Davies 1996).

Subfamily TRINGINAE Rafinesque: Shanks and Phalaropes

- Tringaria Rafinesque, 1815: *Analyse de la Nature*: 71 – Type genus *Tringa* Linnaeus, 1758.
- Phalaropodinae Bonaparte, 1831: *Saggio dist. Metodica Anim. Vert.*: 59 – Type genus *Phalaropus* Brisson, 1760.

Some authorities use Tribe Phalaropodini for phalaropes, and Tribe Tringini for the remaining members of the subfamily (e.g. Dickinson & Remsen 2013; Handbook of the Birds of the World and BirdLife International 2020).

Genus *Phalaropus* Brisson

Phalaropus Brisson, 1760: *Ornithologie* 1: 50, 6: 12 – Type species (by tautonymy) *Tringa fulicaria* Linnaeus = *Phalaropus fulicarius* (Linnaeus).

Crymophilus Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 62 – Type species (by monotypy) *Tringa fulicaria* Linnaeus = *Phalaropus fulicarius* (Linnaeus).

Lobipes Cuvier, 1817: *Règne Anim.* 1: 495 – Type species (by original designation) *Tringa hyperborea* Linnaeus = *Phalaropus lobatus* (Linnaeus).

Steganopus Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 2, 32*: 136 – Type species (by monotypy) “Le Chorlito a tarse comprimé of Azara” = *Phalaropus tricolor* (Vieillot).

► *Phalaropus fulicarius* (Linnaeus)

Grey Phalarope

Tringa Fulicaria Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 148 – Hudson Bay, North America.

Crymophilus fulicarius (Linnaeus); Buller 1905, *Suppl. Birds N.Z. 1*: 191.

Phalaropus fulicarius (Linnaeus); Mathews & Iredale 1913, *Ibis 1* (10th series): 262.

Phalaropus fulicaria (Linnaeus); Checklist Committee 2010, *Checklist Birds N.Z.*: 208.

We follow David & Gosselin (2000, 2002a) and Dickinson & Remsen (2013) in regarding *Phalaropus* as masculine, hence the species name should be *Ph. fulicarius* (*contra* Parkes 1982 and Checklist Committee 2010). The vernacular name grey phalarope is adopted consistent with current international usage. Breeds mainly near the coast across North America and Eurasia. Migrates to winter at sea mostly off west and south-west Africa, and west of Chile (Higgins & Davies 1996). A rare visitor to New Zealand. Twelve records: Wainono Lagoon, Jun. 1883, Jun. 1987 (Oliver 1955; Maloney & Watola 1989); Lake Ellesmere / Te Waihora, 1925 (Oliver 1955); Hastings Jul. 1934 (Oliver 1955); Kaituna River mouth, Jun. 1977 (B. Brown & Latham 1978); Manukau Harbour, Jul. 1992 (Medway 2000a); Inch Clutha Lagoon, Jul. 1993 (Medway 2000a); Ninety Mile Beach, Jul. 2003 (Scofield 2006); offshore from Tolaga Bay, May 2004 (Miskelly, Crossland *et al.* 2017); Farewell Spit, Mar. 2005 (Scofield 2005a); Napier, Jul. 2012 (Miskelly *et al.* 2013); and off Kaikoura, Jul. 2019 (Miskelly, Crossland *et al.* 2021).

► *Phalaropus lobatus* (Linnaeus)

Red-necked Phalarope

Tringa tobata [sic] Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 148 – Hudson Bay, North America.

Tringa lobata Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 824. Emendation.

Lobipes lobatus (Linnaeus); Peters 1934, *Check-list Birds World 2*: 293.

Phalaropus lobatus (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 48.

Breeds in arctic and subarctic North America, Europe, and Asia. Migrates to winter at sea in three distinct areas: off coast of Arabian Peninsula, off coasts of Ecuador and Perú, and north and west of New Guinea (Higgins & Davies 1996). A rare visitor to New Zealand. Fifteen records: Lake Ellesmere / Te Waihora, 1929, Dec. 2000, Jan. 2002 (Oliver 1955; Medway 2001d, 2002f); Whanganui River estuary Apr. 1935 (Oliver 1955); Washdyke Lagoon, Mar. 1961 (Crockett 1961); Manukau Harbour, Jun. 1985 (J. Jenkins *et al.* 1986); Firth of Thames, Dec. 1996 (Medway 2000a); Farewell Spit, Nov. 2000, Oct. 2002, Feb. 2008 (Medway 2001c, 2003a; Scofield 2008); Lake Grassmere / Kapara Te Hau, Nov. 2002, May 2005, Jan. 2007 (Medway 2003a; Scofield 2006, 2008); Ahuriri estuary, Napier, Jun. 2010 (Miskelly *et al.* 2011); and Nelson, May 2018 (Miskelly, Crossland *et al.* 2021).

► *Phalaropus tricolor* (Vieillot)

Wilson's Phalarope

Steganopus tricolor Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd. 32*: 136 – Paraguay.

Phalaropus tricolor (Vieillot); Checklist Committee 1990, *Checklist Birds N.Z.*: 157.

Christidis & Boles (1994) considered that biochemical and mtDNA studies demonstrated that Wilson's phalarope was sufficiently divergent from the two other species of *Phalaropus* to be placed in its own monotypic genus *Steganopus*, and that *Steganopus* can be distinguished from *Phalaropus* by its osteology. However, Sangster *et al.* (1999) considered that results of phylogenetic analyses based on allozymes, mtDNA, and morphology were contradictory with regard to the alleged polyphyletic origin of the phalaropes. Because of this, they believed the recognition of *Steganopus* for Wilson's phalarope was unjustified, and retained Wilson's phalarope in *Phalaropus*. Sangster *et al.* (1999) are followed here. Breeds on marshes of North American prairies. Migrates to wetlands in South America, mainly in Argentina (Higgins & Davies 1996). Vagrant to New Zealand. Five records: Manawatu River estuary, Sep. 1983 (J. Moore & Moore 1984); Lake Ellesmere / Te Waihora, Nov. 1983–Apr. 84, two birds (Sagar & Harrison 1984); Taharoa, Oct. 2004 (Scofield 2005a); Ahuriri estuary, Napier, Nov. 2016 (Miskelly, Crossland *et al.* 2017); and east of Wairoa, Mar. 2017 (Miskelly, Crossland *et al.* 2019).

Genus *Xenus* Kaup

Xenus Kaup, 1829: *Skizz. Entwick.-Gesch. Nat. Syst.*: 115 – Type species (by monotypy) *Tringa cinerea* (Güldenstaedt) = *Xenus cinereus* (Güldenstaedt).

Terekia Bonaparte, 1838: *Comp. List Birds Europe & North Amer.*: 52 – Type species (by monotypy) *Totanus javanicus* Horsfield = *Xenus cinereus* (Güldenstaedt).

We follow Pereira & Baker (2005) and R. Gibson & Baker (2012) in separating *Xenus* and *Actitis* from *Tringa*. The genus and species sequence for *Xenus*, *Actitis*, and *Tringa* follows Dickinson & Remsen (2013) and Chesser *et al.* (2020).

► ***Xenus cinereus* (Güldenstaedt)**

Terek Sandpiper

Scolopax cinerea Güldenstaedt, 1774: *Novi Comment. Acad. Scient. Imperial. Petropol.* 19: 473, pl. 19 – shores of the Caspian Sea near mouth of the Terek River.

Scolopax Terek Latham, 1790: *Index Ornith.* 2: 724 – shores of the Caspian Sea near mouth of the Terek River.

Totanus javanicus Horsfield, 1821: *Trans. Linn. Soc. London* 13(1): 193 – Java, Indonesia.

Terekia cinerea (Güldenstaedt); Mathews 1927, *Syst. Avium Australasianarum* 1: 171.

Xenus cinereus (Güldenstaedt); Checklist Committee 1953, *Checklist N.Z. Birds*: 45.

Tringa terek (Latham); Checklist Committee 1990, *Checklist Birds N.Z.*: 156.

Tringa cinerea (Güldenstaedt); Sibley & Monroe 1990, *Distr. and Taxon. Birds of the World*: 238.

Monroe (1989) and Sibley & Monroe (1990) are followed here in the use of the specific epithet *cinereus* for the Terek sandpiper. Breeds from Finland across Siberia. Migrates to Africa, south and South-east Asia, the Philippines, and Australasia (Higgins & Davies 1996). An uncommon visitor to New Zealand. Recorded at estuaries and coastal lagoons from Northland to Southland, most records from the North Island (Higgins & Davies 1996). Rare visitor to Norfolk Island (Higgins & Davies 1996; J. Moore 1999).

Genus *Actitis* Illiger

Actitis Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 263 – Type species (by subsequent designation) *Tringa hypoleucos* Linnaeus = *Actitis hypoleucos* (Linnaeus).

► ***Actitis hypoleucos* (Linnaeus)**

Common Sandpiper

Tringa Hypoleucos Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 149 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 269).

Actitis hypoleucos (Linnaeus); Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 263.

Actitis hypoleucos (Linnaeus); Mathews 1927, *Syst. Avium Australasianarum* 1: 171. Unjustified emendation.

Tringa hypoleucos Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 48.

Breeds across Europe and Asia to the Kamchatka Peninsula and Japan. Migrates to Africa, southern and south-east Asia, the Philippines, New Guinea, and Australia (Higgins & Davies 1996). A rare, usually solitary, visitor to New Zealand. Recorded from estuaries, coastal lagoons, and sewage ponds from Northland to Stewart Island / Rakiura (latter in Nov. 2005; Miskelly *et al.* 2013). Most records are from the North Island (Higgins & Davies 1996; Miskelly *et al.* 2013, 2015). Two records from Norfolk Island (Hermes *et al.* 1986; J. Moore 1999).

Genus *Tringa* Linnaeus

Tringa Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 148 – Type species (by tautonymy) *Tringa ochropus* Linnaeus.

Trynga Moehring, 1758: *Geslach. Vogel.* 7: 67. Unjustified emendation.

Totanus Bechstein, 1803: *Ornith. Taschenb. Deutschland* 2: 282 – Type species (by tautonymy) *Totanus maculatus* Bechstein = *Tringa totanus* (Linnaeus).

Glottis Koch, 1816: *Syst. Baierischen Zool.* 42: 294 – Type species (by tautonymy) *Totanus glottis* Bechstein = *Tringa nebularia* (Gunnerus).

Iliornis Kaup, 1829: *Skizz. Entwickl.-Gesch. Nat. Syst.*: 156 – Type species (by monotypy) *Totanus stagnatilis* Bechstein = *Tringa stagnatilis* (Bechstein).

Heteroscelus Baird, 1858: *Rep. Expl. Surv. Miss. River Pac. Ocean. Birds* 9: 734 – Type species (by monotypy) *Tringa brevipes* (Vieillot).

Heteractitis Stejneger, 1884: *Auk* 1: 236. Unnecessary *nomen novum* for *Heteroscelus* Baird, 1858.

We follow Pereira & Baker (2005) and R. Gibson & Baker (2012) in synonymising *Heteroscelus* with *Tringa*, and keeping *Xenus* and *Actitis* separate from *Tringa*. The genus and species sequence for *Tringa* follows Dickinson & Remsen (2013) and Chesser *et al.* (2020).

► ***Tringa brevipes* (Vieillot)**

Grey-tailed Tattler

Totanus brevipes Vieillot, 1816: *Nouv. Dict. Hist. Nat., nouv. éd.* 6: 410 – no locality = Timor (*vide* Peters 1934, *Check-list Birds World* 2: 270).

Heteractitis brevipes (Vieillot); Mathews 1927, *Syst. Avium Australasianarum* 1: 170.

Heteroscelus brevipes (Vieillot); Peters 1934, *Check-list Birds World* 2: 270.

Heteroscelus incanus brevipes (Vieillot); Checklist Committee 1953, *Checklist N.Z. Birds*: 45.

Tringa brevipes (Vieillot); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 48.

Breeds patchily across north Asia to far-eastern Siberia and the Kamchatka Peninsula. Migrates to South-east Asia, the Philippines, Australasia, and islands in the south-west Pacific as far east as Fiji (Higgins & Davies 1996). An uncommon but annual visitor to New Zealand. Widespread; numerous sight records of one or two birds from Northland to Southland; prefers tidal mudflats and beaches to rocky shores (Higgins & Davies 1996). More common than *T. incana* in New Zealand. An uncommon but probably regular visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1985a, 1999) and

Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); vagrant at Chatham Islands (Freeman 1994; Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2019). Four records of up to three birds at Auckland Islands / Maukahuka (all from Enderby Island: Apr. 1980 (3), Mar. 1982 (2), Apr. 1983, Jan.–Feb. 1984; Miskelly, Elliott *et al.* 2020), and two records at Snares Islands / Tini Heke (Dec. 1968 & Dec. 2005: Warham & Keeley 1969; Miskelly, Elliott *et al.* 2020).

► ***Tringa incana*** (Gmelin)

Wandering Tattler

Scolopax incana Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 658. Based on the “Ash-coloured Snipe” of Latham 1785, *Gen. Synop. Birds 3*(1): 154, no. 29 – “Eimeo” = Moorea Island, Society Islands, French Polynesia (*vide* Medway 2004, *Notornis 51*: 157).
Totanus incanus (Gmelin); Buller 1887 (Oct.), *History of the Birds of N.Z.*, 2nd edition 2 (part 2): 38.
Heteractitis incanus (Gmelin); Buller 1905, *Suppl. Birds N.Z. 1*: 186.
Heteroscelus incanus (Gmelin); Mathews & Iredale 1913, *Ibis 1* (10th series): 259.
Tringa incanus; Stidolph 1932, *Emu 31*: 233. Unjustified emendation.
Heteroscelus incanus incanus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 45.
Heteroscelus incanus subsp.; Brathwaite 1955, *Notornis 6*: 147.
Tringa incana (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 48.

Breeds in far-eastern Siberia, coastal Alaska, and north-west Canada. Migrates to coasts of America from California to Perú, and islands of central and eastern Pacific Ocean as far south as French Polynesia, Cook Islands, Tonga, and Fiji (Higgins & Davies 1996). An uncommon but probably annual visitor to New Zealand. Widespread, usually single birds, mostly on the east coast from Northland to Canterbury, preferring rocky shores to tidal mudflats and beaches (Higgins & Davies 1996). Less common than *T. brevipes* in New Zealand. An uncommon but probably regular visitor to Norfolk Island (Schodde *et al.* 1983; J. Moore 1985a, 1999) and Kermadec Islands / Rangitāhua (Veitch *et al.* 2004); vagrant at Chatham Islands (Freeman 1994; Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2021). One record from Auckland Islands / Maukahuka (Enderby Island Feb. 1988; Miskelly, Elliott *et al.* 2020).

► ***Tringa flavipes*** (Gmelin)

Lesser Yellowlegs

Scolopax flavipes Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 659 – New York, North America.
Tringa flavipes (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 47.

Breeds in Alaska and much of western Canada. Migrates mostly to South America (Higgins & Davies 1996). A rare visitor to New Zealand. There were 15 records, from Manukau Harbour to Wainono Lagoon, between 1963 and 1993, all of single birds (Higgins & Davies 1996). The most recent record is of a single bird at Wanstead Lagoon, near Waipukurau, Hawke’s Bay, 2004 (Medway 2004b). Most sightings at coastal marshes and pools; two inland at freshwater lakes. A yellowlegs at Porirua in 1962, originally identified as a greater yellowlegs *T. melanoleuca* (Gmelin, 1789), may have been *T. flavipes* (Fleming 1963; Falla 1964; Kinsky 1970a). One record from Chatham Island (Nov. 1985; Freeman 1994).

► ***Tringa nebularia*** (Gunnerus)

Common Greenshank

Scolopax nebularia Gunnerus, 1767: *Leem’s Beskr. Finn. Lapp.*: 251 – Norway.
Scolopax glottis Latham, 1787: *Gen. Synop. Suppl. 1*: 292 – Europe.
Totanus glottis (Latham); Von Pelzeln 1860, *Sitzungsber. K. Akad. Wissen., Math.-Naturwissen. Cl., Wien 41*: 327.
Totanus glottoides Vigors & Gould, 1831: *Proc. Zool. Soc. London 1830–1831* (1): 173 – Himalayan Mountains, India.
Glottis nebularius (Gunnerus); Buller 1905, *Suppl. Birds N.Z. 1*: 186.
Tringa nebularia (Gunnerus); Checklist Committee 1953, *Checklist N.Z. Birds*: 45.

Christidis & Boles (1994) and Higgins & Davies (1996) are followed here in the use of the vernacular name common greenshank. Breeds from Scotland and Scandinavia across Asia to eastern Siberia. Migrates to Africa, Arabia, India, China, Malaysia, the Philippines, and Australasia (Higgins & Davies 1996). An uncommon visitor to New Zealand. Usually single birds, from Northland to Southland, at coastal lagoons and estuaries (Higgins & Davies 1996). Two records at Chatham Islands (1978, Oct. 2020; Sibson 1978; Miskelly, Crossland *et al.* 2021); one record at Snares Islands / Tini Heke (Nov.–Dec. 1968; Miskelly *et al.* 2001a); one record at Campbell Island / Motu Ihupuku (Jan.–Feb. 1978; Imber 1988). One record at Macquarie Island (1962; Higgins & Davies 1996), and two records at Norfolk Island (1977, 1990; J. Moore 1999).

► ***Tringa stagnatilis*** (Bechstein)

Marsh Sandpiper

Totanus stagnatilis Bechstein, 1803: *Ornith. Taschenb. Deutschland 2*: 292, pl. 29 – Germany.
Iliornis stagnatilis addenda Mathews, 1915: *Austral Avian Rec. 2*: 126 – Northern Territory, Australia.
Iliornis stagnatilis (Bechstein); Mathews 1927, *Syst. Avium Australasianarum 1*: 169.
Tringa stagnatilis (Bechstein); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 48.

Breeds from eastern Europe to eastern Siberia. Migrates to Africa, south Asia, and Australasia (Higgins & Davies 1996). An uncommon but probably annual visitor to New Zealand. Recorded at coastal lagoons, lakes, and estuaries from Northland to Southland (Higgins & Davies 1996). Usually single, but six seen together at Miranda in Firth of Thames, 1998 (Medway 2000a). Vagrant at Chatham Islands and Norfolk Island (J. Moore 1985a; Freeman 1994).

Suborder LARI: Pratincoles, Skuas, Auks, Gulls, Terns, and Skimmers

Family **GLAREOLIDAE** Brehm: Coursers and PratincolesSubfamily **GLAREOLINAE** Brehm: Pratincoles

Glareolidae Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 564 – Type genus *Glareola* Brisson, 1760.

Genus **Glareola** Brisson

Glareola Brisson, 1760: *Ornithologie 1*: 48, 5: 141 – Type species (by tautonymy) *Hirundo pratincola* Linnaeus = *Glareola pratincola* (Linnaeus).

Stiltia G.R. Gray, 1855: *Cat. Genera Subgen. Birds Brit. Mus.*: 111 – Type species (by original designation) *Glareola isabella* Vieillot.

► **Glareola maldivarum** J.R. Forster**Oriental Pratincole**

Glareola (Pratincola) maldivarum J.R. Forster, 1795: *Faunula Indica*, 2nd edition: 11 – open sea near the Maldive Islands, northern Indian Ocean.

Glareola orientalis Leach, 1821: *Trans. Linn. Soc. London 13*(1): 132 – Java, Indonesia.

Glareola grallaria; Buller 1899, *Trans. N.Z. Inst. 31*: 23. Not *Glareola grallaria* Temminck, 1820 = *Glareola isabella* Vieillot, 1816.

Stiltia isabella; Buller 1905, *Suppl. Birds N.Z. 1*: 192. Not *Glareola isabella* Vieillot, 1816.

Glareola maldivarum maldivarum J.R. Forster; Mathews 1927, *Syst. Avium Australasianarum 1*: 185.

Glareola maldivarum orientalis Leach; Mathews 1927, *Syst. Avium Australasianarum 1*: 185.

Glareola maldivarum J.R. Forster; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 52.

Breeds in south Asia from Pakistan and India to Mongolia, China, Taiwan, and north Philippines (Higgins & Davies 1996). Almost entire migratory population may spend non-breeding season in Australia (Sitters *et al.* 2004). A rare visitor to New Zealand. Eleven records: Westport 1898 (Falla 1959); Appleby, Nelson, May 1959 (Falla 1959); Port Adventure, Stewart Island / Rakiura, Apr. 1963 (Falla 1963a); Raoul Island, Kermadec Islands / Rangitāhua, May 1976 (Veitch *et al.* 2004); Wainono Lagoon, Mar. 1977 (Pierce 1978); South Turnbull, Westland, May 1977 (Edgar 1977); Kaipara Harbour, Nov. 1985 (L. Howell 1987); Ruapuke Island, Feb. 1988 (O'Donnell & West 1989); Farewell Spit, Jan. 1994 (Medway 2000a); New Plymouth, May 1999 (Medway 2000a); Lake Ellesmere / Te Waihora, Feb.–May 2002 (Medway 2002d; Miskelly *et al.* 2013). One record from Norfolk Island (J. Moore 1999).

Family **STERCORARIIDAE** Gray: Skuas

Stercorariinae G.R. Gray, 1870: *Hand-list Birds 3*: 110 – Type genus *Stercorarius* Brisson, 1760.

Several studies have revealed skuas to be a recent radiation, with poor congruence between external morphology and genetic relationships (Olson 1985b; Furness 1996; Cohen *et al.* 1997; Andersson 1999a,b; Braun & Brumfield 1998; Chu *et al.* 2009). We follow Olson (1985b), Chu *et al.* (2009), and Dickinson & Remsen (2013) in placing all skua species in the genus *Stercorarius*. The smaller species are also known as jaegers.

Genus **Stercorarius** Brisson

Stercorarius Brisson, 1760: *Ornithologie 1*: 56 – Type species (by tautonymy) *Stercorarius* Brisson = *Larus parasiticus* Linnaeus = *Stercorarius parasiticus* (Linnaeus).

Catharacta Brünnich, 1764: *Ornithologia Borealis*: 32 – Type species (by subsequent designation) *Catharacta skua* Brünnich = *Stercorarius skua* (Brünnich).

Lestris Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 272 – Type species (by subsequent designation) *Larus parasiticus* Linnaeus = *Stercorarius parasiticus* (Linnaeus).

Coprotheres Reichenbach, 1852: *Avium Syst. Nat.* 3: 5 – Type species (by original designation) *Lestris pomarinus* Temminck = *Stercorarius pomarinus* (Temminck).

Megalestris Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 43*: 643 – Type species (by monotypy) *Larus catarractes* Linnaeus = *Stercorarius skua* (Brünnich).

► **Stercorarius antarcticus** (Lesson)**Southern Skua**

Lestris antarcticus Lesson, 1831: *Traité d'Ornith.* 8: 616 – Falkland Islands and New Zealand, restricted to Falkland Islands (*vide* Mathews 1912, *Novit. Zool.* 18(3): 212).

Three subspecies recognised: *Stercorarius a. antarcticus* (breeding Falkland Islands and south-east Argentina), *S. a. hamiltoni* Hagen, 1952 (breeding Tristan da Cunha and Gough Island), and *S. a. lonnbergi* (breeding circumpolar on subantarctic islands). The latter also occurs on northern parts of the Antarctic Peninsula, where breeding overlaps with *S. maccormicki* Saunders, 1893 (Furness 1996). *Stercorarius skua* (Brünnich, 1764) and *S. antarctica* have often been treated as conspecific (Devillers 1977, 1978; Cramp & Simmons 1983; Furness 1987; Higgins & Davies 1996). However, a split between northern and southern forms of great skuas was supported by Cohen *et al.* (1997). We have followed

Mathews (1912–13), R. Brooke (1978), P. Harrison (1983), Furness (1996), and Olsen & Larsson (1997) by treating the subantarctic skua as a subspecies of *S. antarctica*. Some authors regard the subantarctic skua as a full species, e.g. Sibley & Monroe (1990).

***Stercorarius antarcticus lonnbergi* (Mathews)**

Subantarctic Skua | Hākoakoa

- Lestris antarcticus*; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 200. Not *Lestris antarcticus* Lesson, 1831.
Stercorarius antarcticus madagascariensis Bonaparte, 1856: *Consp. Gen. Avium* 2: 207. Suppressed and invalid (*vide* ICZN 1995, Opinion 1814. *Bull. Zool. Nomenclature* 52(2): 222).
Lestris catarractes; Hutton 1871, *Cat. Birds N.Z.*: 39. Not *Larus catarractes* Linnaeus, 1766.
Stercorarius catarractes; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1: 32. Not *Larus catarractes* Linnaeus, 1766.
Stercorarius antarcticus; Hutton 1879, *Trans. Proc. N.Z. Inst.* 11: 338. Not *Lestris antarcticus* Lesson, 1831.
Stercorarius parasiticus; Finsch 1888, *Ibis* 6 (5th series): 309. Not *Larus parasiticus* Linnaeus, 1758.
Megalestris antarctica; Saunders 1896, *Cat. Birds Brit. Mus.* 25: 319. Not *Lestris antarcticus* Lesson, 1831.
Catharacta antarctica lonnbergi Mathews, 1912: *Novit. Zool.* 18(3): 212 – New Zealand seas.
Catharacta lonnbergi lonnbergi Mathews; Mathews & Iredale 1913, *Ibis* 1 (10th series): 248.
Catharacta lonnbergi Mathews; Mathews 1927, *Syst. Avium Australasianarum* 1: 150.
Catharacta skua lonnbergi Mathews; Peters 1934, *Check-list Birds World* 2: 310.
Catharacta skua lonnbergi Mathews; Marples 1946, *New Zealand Bird Notes* 1 (Suppl.): 6.
Stercorarius skua lonnbergi (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 49.
Catharacta antarctica lonnbergi Mathews; Olsen & Larsson 1997, *Skuas and Jaegers*: 76.
Stercorarius antarcticus lonnbergi (Mathews); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 223.

In the New Zealand region, breeds on Campbell / Motu Ihupuku, Auckland / Maukahuka, Antipodes, Snares / Tini Heke, Chatham, Stewart / Rakiura and Solander (Hautere) Islands and their outliers (Higgins & Davies 1996). Rarely reported nesting in Fiordland (Higgins & Davies 1996), e.g. a mainland nest and eggs reported at Puysegur Point, Nov. 1962 (Checklist Committee 1970). Also breeds nearby on Macquarie Island. Straggles to the Ross Sea in summer (Court & Davis 1990) but possibly breeding on the Balleny Islands (Watson 1975). Disperses north to 30°S in autumn, reaching southern Australia and the New Zealand mainland (Higgins & Davies 1996). Rare at Norfolk Island (Higgins & Davies 1996). Natural deposit and midden records from North, South, and Chatham Islands, and Auckland Islands / Maukahuka (Checklist Committee 1990; Millener 1991; Tennyson 2020a).

► ***Stercorarius maccormicki* Saunders**

South Polar Skua

- Stercorarius maccormicki* Saunders, 1893: *Bull. Brit. Ornith. Club* 3: 12 – Possession Island, Victoria Land, Antarctica.
Megalestris maccormicki (Saunders); Saunders 1896, *Cat. Birds Brit. Mus.* 25: 321, pl. 1.
Catharacta maccormicki wilsoni Mathews, 1913: *Birds Australia* 2: 495 – Weddell Sea, Antarctica.
Catharacta maccormicki maccormicki (Saunders); Mathews & Iredale 1913, *Ibis* 1 (10th series): 249.
Catharacta skua maccormicki (Saunders); Marples 1946, *New Zealand Bird Notes* 1 (Suppl.): 6.
Stercorarius skua maccormicki Saunders; Checklist Committee 1953, *Checklist N.Z. Birds*: 49.
Catharacta maccormicki (Saunders); Checklist Committee 1990, *Checklist Birds N.Z.*: 159.

Breeds on shores and offshore islands of Antarctica, mainly near penguin and petrel colonies; winters at sea, some ranging to the North Pacific, northern Indian and North Atlantic Oceans (Ainley *et al.* 1986; Higgins & Davies 1996). First recorded from New Zealand at Auckland Islands / Maukahuka, Mar. 1904 (Miskelly 2020a). Subsequently recorded at: Rangitikei, Jan. 1940; Muriwai, Apr. 1940 (Falla 1940a); north of Hokianga, 1946–47; near the Kermadec Islands / Rangitāhua, Aug. 1951; Waikanae Beach, Mar. 1953; Himatangi, Jun. 1965; Campbell Island / Motu Ihupuku, Feb. 1968; Dargaville, Oct. 1972; Lake Ellesmere / Te Waihora, Dec. 1972; north of Macquarie Island, 1981–90 (Higgins & Davies 1996); off Banks Peninsula, Mar. 1991; off north Taranaki, Nov. 1991 (Petyt 2001a); Farewell Spit, Jan. 1993 (Higgins & Davies 1996); Hauraki Gulf, Feb. 1994 (Jowett 1995); Aramoana, Mar. 1994 (Renner 1995); South Taranaki Bight, Jan. 1995; Chatham Rise, Nov. 1998 (Petyt 2001a); in subantarctic seas, Nov. 2004 (Scofield 2005a); off Kaikoura Peninsula, Mar. 2005 (Anon. 2005; Scofield 2006); Foveaux Strait, Apr. 2005 (Scofield 2006); off Nancy Sound, Fiordland, Feb. 2013 (Miskelly *et al.* 2015); and off Otago Peninsula, Mar. 2017 (Miskelly, Crossland *et al.* 2019). Four records from Auckland Islands / Maukahuka (including 1904; Miskelly, Elliott *et al.* 2020). There are two recoveries of birds well north of their banding sites in the Ross Sea, Antarctica: one banded at Cape Hallett, Jan. 1964, was recovered in Japan in Apr. 1966 (C. Robertson 1972a), and a Cape Crozier band was found in a northern giant petrel nest on the Chatham Islands in 1973 (Imber 1994). Tentatively identified from Holocene remains on Chatham Island (Checklist Committee 1990; Millener 1991).

► ***Stercorarius pomarinus* (Temminck)**

Pomarine Skua

- Lestris pomarinus* Temminck, 1815: *Manuel d'Ornith.*: 514 – Arctic regions of Europe.
Catharacta pomarina (Temminck); Mathews 1912, *Novit. Zool.* 18(3): 213.
Coprotheres pomarinus (Temminck); Mathews 1913, *Birds Australia* 2: 497.
Coprotheres pomarinus nutcheri Mathews, 1917: *Austral Avian Rec.* 3: 72 – Broken Bay, New South Wales, Australia.

Coprotheres pomarinus pomarinus (Temminck); Mathews 1927, *Syst. Avium Australasianarum I*: 151.

Stercorarius pomarinus (Temminck); Falla 1936, *Rec. Auck. Inst. Museum* 2: 4.

Breeds in arctic regions, migrating to the Southern Hemisphere; an uncommon though regular visitor to New Zealand south to Foveaux Strait (Falla 1936; Higgins & Davies 1996) and east to the Chatham Islands (Imber 1994; Nilsson *et al.* 1994; Miskelly *et al.* 2006). More pelagic than *Stercorarius parasiticus* (Higgins & Davies 1996). An unusual assemblage of 38 counted, 56 nautical miles west of Waikato River mouth, Feb. 1984 (Checklist Committee 1990).

► ***Stercorarius parasiticus* (Linnaeus)**

Arctic Skua

Larus parasiticus Linnaeus, 1758: *Syst. Nat., 10th edition I*: 136 – within Tropic of Cancer of Europe, America, and Asia, restricted to coast of Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 311).

Larus crepidatus Banks, 1773: in J. Cook's *Voy., Hawkesworth's ed.* 2: 15 – Atlantic Ocean, 8°25' N, 22°4' W.

Lestris parasiticus (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 40.

Stercorarius crepidatus (Banks); Buller 1887 (Oct), *History of the Birds of N.Z.*, 2nd edition 2 (part 2): 66.

Catharacta parasitica (Linnaeus); Mathews 1912, *Novit. Zool.* 18(3): 213.

Stercorarius parasiticus visitori Mathews, 1915: *Austral Avian Rec.* 2: 126 – Sydney, New South Wales, Australia.

Stercorarius parasiticus (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 49.

Breeds in arctic and subarctic regions; migrates to the Southern Hemisphere, where it is in New Zealand waters mainly between Oct. and May (Falla 1936; Higgins & Davies 1996). In New Zealand it occurs from the Kermadec Islands / Rangitāhua south to Foveaux Strait and east to the Chatham Islands; sometimes in large gatherings, e.g. Kaipara Heads, c. 50 in Dec. 1955 (Higgins & Davies 1996) and 60+ in Apr. 1996 (Johnson 1997). One seen off the Antipodes Islands (Warham & Bell 1979).

► ***Stercorarius longicaudus* Vieillot**

Long-tailed Skua

Stercorarius longicaudus Vieillot, 1819: *Nouv. Dict. Hist. Nat., nouv. éd.* 21: 157 – north Europe, Asia, and America, restricted to northern Europe (*vide* Peters 1934, *Check-list Birds World* 2: 312).

Lestris longicaudus Brisson [sic]; Finsch 1872, *Journ. für Ornith.* 20(4): 241.

Stercorarius crepidatus (Banks); Buller 1887 (Oct.), *History of the Birds of N.Z.*, 2nd edition 2 (part 2): 66. In part.

Stercorarius longicaudus Vieillot; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 53.

Breeds in arctic and subarctic regions, migrating to the Southern Hemisphere; generally rare in the south-west Pacific. Two subspecies: *S. l. longicaudus* breeding in arctic and subarctic Scandinavia, east to delta of Lena River, and *S. l. pallescens* Løppenthin, 1932 breeding in arctic Greenland, North America, and Siberia, east of Kolyma River (Higgins & Davies 1996). Subspecies migrating to Australasian region unknown but presumed to be *S. l. pallescens* (Sibson 1967; Higgins & Davies 1996). Rare visitor to New Zealand, reaching south to Oreti Beach (Jan. 2001, NMNZ OR.027155) and east to near the Chatham Islands (two in Mar. 1985, and one in Dec. 2009; Higgins & Davies 1996; Miskelly, Crossland *et al.* 2021). First recorded in New Zealand on 30 Apr. 1864 (live) at Whanganui (Melville 1985). Subsequently, dead specimens at: Muriwai, Apr. 1942 (probable), Jan. 1964, and Nov. 1971 (probable); Himatangi (probably two), Mar. 1969; Dargaville, Dec. 1971 (probable) (Melville 1985). More regularly reported since 1981, especially Jan.–Feb. 1983, when 17 dead (from Northland to Wellington) and a further probable 19 dead and 19 live in the same period (Melville 1985; NMNZ OR.022964). All New Zealand records are Sep.–Apr. (Melville 1985; Powlesland & Powlesland 1994b; Higgins & Davies 1996; G. Taylor 1996; Medway 2000a; Stephenson 2006). Tentatively identified from Holocene remains on Chatham Island (Melville 1985; Checklist Committee 1990; Millener 1991).

Family LARIDAE Rafinesque: Noddies, Gulls, and Terns

We follow A. Baker, Pereira & Paton (2007), Ödeen *et al.* (2010), and D. Jackson *et al.* (2012) in placing all noddies, gulls, and terns in a single family (Laridae). This same approach was used by Dickinson & Remsen (2013), Clements *et al.* (2019), Chesser *et al.* (2020), Handbook of the Birds of the World and BirdLife International (2020), and F. Gill *et al.* (2021). Subfamily structure and the genus sequence within these follows Dickinson & Remsen (2013). These phylogenetic studies revealed that noddies (*Anous*) and then white tern (*Gygis*) were sister to other members of the family, requiring recognition of four subfamilies, in the sequence: Anoinae, Gyginae, Larinae, and Sterninae.

Subfamily ANOINAE Bonaparte: Noddies

Anoeae Bonaparte, 1854: *Ann. Sci. Nat., Zool. Paris*, 4th series 1: 144 – Type genus *Anous* Stephens, 1826.

Genus *Anous* Stephens

Anoüs Stephens, 1826: in G. Shaw, *General Zool.* 13(1): 139 – Type species (by subsequent designation) *Anoüs niger* Stephens = *Anous stolidus* (Linnaeus).

Megalopterus Boie, 1826: *Isis von Oken*, Heft 10: col. 980 – Type species (by monotypy) *Sterna tenuirostris* Temminck = *Anous tenuirostris* (Temminck).

Procelsterna Lafresnaye, 1842: *Mag. Zool., Paris* 4(2): pl. 29 – Type species (by monotypy) *Procelsterna tereticollis* Lafresnaye = *Anous ceruleus* (F.D. Bennett).

Micranous Saunders, 1895: *Bull. Brit. Ornith. Club* 4: 19 – Type species (by original designation) *Micranous tenuirostris* (Temminck) = *Anous tenuirostris* (Temminck).

Cibois *et al.* (2016) revealed *Procelsterna* to be embedded within *Anous*. We follow Cibois *et al.* (2016) in treating *Procelsterna* Lafresnaye, 1842 as a junior synonym of *Anous* Stephens, 1826. The preferred common names for noddies follow Gochfeld & Burger (1996) and Holdaway *et al.* (2001).

► ***Anous stolidus*** (Linnaeus)

Brown Noddy

Sterna stolidus Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 137 – “Americæ Pelago” = Antilles and Atlantic Ocean (*fide* Mathews 1927, *Syst. Avium Australasianarum* 1: 145).

Circumtropical, seldom ranging outside subtropical seas. Four subspecies recognised, differing in size and coloration of head and body, but differences between races are slight (Higgins & Davies 1996). Only one subspecies is known from the New Zealand region (Higgins & Davies 1996).

Anous stolidus pileatus (Scopoli)

Brown Noddy

Sterna pileata Scopoli, 1786: *Delic. Flor. Faun. insubr.* 2: 92 – no locality = Philippines (*fide* Peters 1934, *Check-list Birds World* 2: 346).

Sterna unicolor Nordmann, 1837: *in* Erman, *Nat. Atlas Reise Erde*: 17 – Society and other Pacific Islands.

Anoüs stolidus; G.R. Gray 1862, *Ibis* 4: 249. Not *Sterna stolidus* Linnaeus, 1758.

Anoüs stolidus unicolor (Nordmann); Mathews 1927, *Syst. Avium Australasianarum* 1: 145.

Anous stolidus; Oliver 1930, *New Zealand Birds*, 1st edition: 252. Not *Sterna stolidus* Linnaeus, 1758.

Anous stolidus pileatus (Scopoli); Checklist Committee 1990, *Checklist Birds N.Z.*: 169.

Breeds widely in the Indian and Pacific Oceans; common breeder at Norfolk Island (Higgins & Davies 1996); not known at the Kermadec Islands / Rangitāhua until *c.* 25 pairs found nesting on Curtis Island in 1989 (Veitch *et al.* 2004). At least 20 birds reported from multiple sites in Kermadec Islands in Mar.–Apr. 2016 (Miskelly, Crossland *et al.* 2019). Two unverified early records: east coast of North Island (1885) and “high seas” (19th Century) (Iredale 1913; B. Gill & Driessen 1993). Singles dead on Muriwai Beach, Auckland, Jun. 1992 (B. Gill & Driessen 1993) and near Waitara, Taranaki, Jun. 2002 (Medway 2004b).

► ***Anous minutus*** Boie

Black Noddy

Breeds mainly in the south-west Pacific region, with smaller numbers of breeding sites in the tropical and subtropical Atlantic, east Pacific, and in south-east Asia (Higgins & Davies 1996). Seven subspecies are recognised, differing in size and coloration of cap and darkness of rest of plumage, but relationships between populations are poorly understood (Higgins & Davies 1996). Only the nominate form is known from the New Zealand region (Higgins & Davies 1996). *Anous minutus* is treated as a separate species from *A. tenuirostris* (Temminck) – which breeds in the Indian Ocean – following Serventy *et al.* (1971) and Higgins & Davies (1996).

Anous minutus minutus Boie

Black Noddy

Anous minutus Boie, 1844: *Isis von Oken*, Heft 37: col. 188 – New Holland, restricted to Raine Island, Queensland, Australia (*fide* Mathews 1927, *Syst. Avium Australasianarum* 1: 146).

Anous leucocapillus Gould, 1846: *Proc. Zool. Soc. London 1845* (13): 103 – north coast of Australia.

Anoüs leucocapillus Gould; G.R. Gray 1862, *Ibis* 4: 250.

Anous melanogenys; Cheeseman 1891, *Trans. Proc. N.Z. Inst.* 23: 221. Not *Anous melanogenys* G.R. Gray, 1846.

Micranous leucocapillus (Gould); Buller 1905, *Suppl. Birds N.Z.* 1: 163.

Megalopterus minutus minutus (Boie); Iredale 1913, *Trans. Proc. N.Z. Inst.* 45: 85.

Megalopterus minutus kermadeci Mathews, 1916: *Austral Avian Rec.* 3: 55 – “Kermadec Island”, error for MacKay, Queensland, Australia (*fide* Mathews 1927, *Syst. Avium Australasianarum* 1: 146).

Anoüs minutus minutus Boie; Peters 1934, *Check-list Birds World* 2: 347.

Anous tenuirostris minutus Boie; Checklist Committee 1953, *Checklist N.Z. Birds*: 52.

Anous minutus Boie; Lindsay 1963, *Notornis* 10: 304.

Anous minutus minutus Boie; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 56.

Anous tenuirostris; Medway 2001, *Notornis* 48: 62. Not *Anous tenuirostris* Temminck, 1823.

Breeds widely in the south-west Pacific from Tuamotu to Samoa, New Caledonia, New Guinea, Australia, and Lord Howe and Norfolk Islands; in the New Zealand region breeds commonly at Kermadec Islands / Rangitāhua (Higgins & Davies 1996). Rarely strays outside subtropical waters to mainland New Zealand. North Island records are: Kaipara Harbour, Oct. 1953, Aug. 1964; Spirits Bay, Jan. 1965; Whangarei Heads, Feb. 1965; Houhora Harbour, (dead) Mar. 1975; Muriwai Beach, (dead) Jan. 1986; Karikari Bay, (dead) Jan. 1986 (Powlesland 1989a); Manawatāwhi / Three Kings Islands, May 1989 (Loh 1990); near Dargaville, (dead) Oct. and Nov. 1989 (G. Taylor 2004); Rangaunu Harbour, Sep. 1990 (Guest 1991); Mangawhai Spit, (dead) Jan. 1997; Ruapuke Beach, (dead) Jan. 1997; Muriwai Beach, (dead) Oct. 1998 (G. Taylor 2004); Te Werahi Beach, Apr. 2009 (Miskelly *et al.* 2011); Chicken Islands, Dec. 2018 (Miskelly, Crossland *et al.* 2019); Milford Beach, Auckland, Jan. 2020; and near the Cavalli Islands, Jun. 2020 (Miskelly, Crossland *et al.* 2021). Recorded from the South Island on about six occasions: Farewell Spit, Jan. 1961; two off Waipara River mouth, May 1975; Taieri

River mouth, Apr. 1977 (Powlesland 1989a; Higgins & Davies 1996); Nelson, Oct. 1998 (unconfirmed; Gaze 2001); Stephens Passage, Feb. 2000 (unconfirmed, Medway 2000b); and Rapahoe, Sep. 2000 (Medway 2001a).

► **Anous albivittus** (Bonaparte)

Grey Noddy

Anous cinereus Gould, 1846: *Proc. Zool. Soc. London 1845* (13): 104 – Lord Howe Island, Australia. Junior secondary homonym of *Sterna cinerea* Haldeman, 1843.

Procelsterna albivitta Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 773. *Nomen novum* for *Anous cinereus* Gould, 1846.

Anoüs cinereus Gould; G.R. Gray 1862, *Ibis* 4: 250. Not *Sterna cinerea* Haldeman, 1843.

Anoüs cinereus Gould; Cheeseman 1891, *Trans. Proc. N.Z. Inst.* 23: 222. Not *Sterna cinerea* Haldeman, 1843.

Procelsterna cinerea (Gould); Buller 1905, *Suppl. Birds N.Z. 1*: 161. Not *Sterna cinerea* Haldeman, 1843.

Procelsterna cerulea cinerea (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 246. Not *Sterna cinerea* Haldeman, 1843.

Procelsterna cerulea kermadeci Mathews, 1916: *Austral Avian Rec.* 3: 55 – Kermadec Islands.

Procelsterna cerulea albivitta Bonaparte; Checklist Committee 1953, *Checklist N.Z. Birds*: 52.

Procelsterna albivitatta albivitatta Bonaparte; Condon 1975, *Checklist Birds Australia 1*: 159. Unjustified emendation.

Procelsterna cerulea; J. Moore 1985, *Notornis* 32: 317. Not *Sterna cerulea* F.D. Bennett, 1840.

Procelsterna cerulea albivitatta Bonaparte; Checklist Committee 1990, *Checklist Birds N.Z.*: 171. Unjustified emendation.

Procelsterna albivitta Bonaparte; Gochfeld & Burger 1996, in del Hoyo, Elliot & Sargatal *Handb. Birds World* 3: 666.

Procelsterna albivitta albivitta Bonaparte; Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 224.

Anous albivittus (Bonaparte); Cibois, Thibault, Rocamora & Pasquet 2016, *Ibis* 158: 437.

Breeds at Isla Salas y Gómez, San Ambrosio, San Félix, Easter, Henderson, Austral, Tongan, Lord Howe, and Norfolk Islands, and in the New Zealand region on Kermadec Islands / Rangitāhua and occasionally on islands off the North Island: Manawatāwhi / Three Kings Islands (West Island; Scofield 1994a; Higgins & Davies 1996) and in the Bay of Plenty (Volkner Rocks, Sugarloaf Rock, and Aldermen Islands; Falla 1970; P. Latham 2003). Occasionally in large flocks in the outer waters of the North Island from Northland to East Cape but rarely on the North Island's west coast (Higgins & Davies 1996; Foreman 2000). First recorded in the North Island in 1882 at Cape Maria van Diemen (Buller 1887–88). A single South Island record: Banks Peninsula, one wrecked in the 1968 “Wahine storm” (P. Latham 2003). The preferred common name is grey noddy, following Holdaway *et al.* (2001) and Dickinson (2003); it is also called grey ternlet.

Some authorities recognise separate subspecies on Lord Howe, Norfolk, Kermadec and Austral Islands, and Tonga, (*A. a. albivittus*), Henderson, Easter, and Salas y Gómez Islands (*A. a. skottsbergii* (Lönnberg, 1921)), and San Ambrosio and San Félix Islands (*A. a. imitatrix* (Mathews, 1912)) (del Hoyo, Elliot & Sargatal 1996; Dickinson & Remsen 2013). *Anous albivittus* was previously treated as a subspecies of *Anous ceruleus* (F.D. Bennett, 1840) (= *Procelsterna cerulea*), which occurs in the tropical Pacific at Christmas Island, north-west Hawai'ian, Marshall, northern Tuamotu, Society, and Marqueses groups, Phoenix, Ellice, and Samoan Islands, and at Gambier group (Dickinson & Remsen 2013).

Subfamily GYGINAE Verheyen: White Tern

Gyginae Verheyen, 1959: *Bull. Inst. Roy. Sci. Nat. Belgique* 35(9): 14 – Type genus *Gygis* Wagler, 1832.

Genus *Gygis* Wagler

Gygis Wagler, 1832: *Isis von Oken*, Heft 11: col. 1223 – Type species (by monotypy) *Sterna candida* Gmelin = *Gygis alba candida* (Gmelin).

Leucanous Mathews, 1912: *Birds Australia* 2: 432 – Type species (by original designation) *Gygis microrhyncha* Saunders = *Gygis alba microrhyncha* Saunders.

► ***Gygis alba*** (Sparrman)

White Tern

Sterna alba Sparrman, 1786: *Mus. Carlsonianum 1*: no XI, pl. 11 – East Indies, Cape of Good Hope, and islands of the Pacific Ocean, restricted to Ascension Island, south Atlantic Ocean (*vide* Mathews 1912, *Birds Australia* 2: 441).

Circumtropical, also ranging widely over subtropical seas. Several forms named but relationships between populations are debated (e.g. Gochfeld & Burger 1996; Olson 2005; Yeung *et al.* 2009). We follow Holyoak & Thibault (1976), Kinsky & Yaldwyn (1981) and Higgins & Davies (1996) in recognising *G. a. candida* (Gmelin, 1789) as the form breeding in the New Zealand region.

Gygis alba candida (Gmelin)

White Tern

Sterna candida Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 607 – Christmas Island, Pacific Ocean.

Gygis candida Wagler [sic]; G.R. Gray 1862, *Ibis* 4: 249.

? *Gygis alba*; Finsch 1872, *Journ. für Ornith.* 20(4): 254. Not *Sterna alba* Sparrman, 1786.

Gygis candida Gould [sic]; Cheeseman 1889, *Trans. Proc. N.Z. Inst.* 21: 122.

Gygis alba; Buller 1905, *Suppl. Birds N.Z. 1*: 163. Not *Sterna alba* Sparrman, 1786.

Gygis alba candida (Gmelin); Mathews 1912, *Novit. Zool.* 18(3): 211.

Gygis alba royana Mathews, 1912: *Birds Australia* 2: 433 – Kermadec Islands.

Leucanous albus royanus (Mathews); Mathews 1927, *Syst. Avium Australasianarum 1*: 142.

Leucanous albus candidus (Gmelin); Mathews 1927, *Syst. Avium Australasianarum I*: 143.

Gygis alba; Lindsay 1963, *Notornis 10*: 304. Not *Sterna alba* Sparrman, 1786.

Gygis alba alba; Gochfeld & Burger 1996, in del Hoyo *et al. Handb. Birds World 3*: 666. Not *Sterna alba* Sparrman, 1786.

Breeds at Kermadec Islands / Rangitāhua and at many sites in the tropical Indian and Pacific Oceans (Higgins & Davies 1996). Straggles rarely to the North Island: Waipu, (two) Mar. 1883 (Iredale 1913); Te Henga (Bethells Beach), May 1960; Pakotai (Northland), May 1964; Palmerston North, Jun. 1972; Otaki Beach, May 1986 (Powlesland 1989a); Te Horo Beach, Apr. 1988; Muriwai Beach, May 1990 (Guest 1991); near Dargaville, Jul. 1990 (Powlesland *et al.* 1993); Taupiri, May 1998 (Clifford 2000a); Dargaville Beach, Jul. 1998 (G. Taylor 2004); two on Otaki coast, Jun. 2019; Kaimai Range, May 2020 (Miskelly, Crossland *et al.* 2021). One offshore from Manawatāwhi / Three Kings Islands, Apr. 2007 (Miskelly, Crossland *et al.* 2017). Records at sea off Northland (Jan. 2005; Davies 2005a) and Ohiwa Harbour (Nov. 2006; Anon. 2007b) are unverified. Only three records from the South Island: Ettrick, Otago, Mar. 1945 (Powlesland 1989a); Greymouth, Jan. 2002 (NMNZ OR.027993); near Hokitika, undated (NMNZ OR.027989).

Subfamily LARINAE Rafinesque: Gulls

Laridia Rafinesque, 1815: *Analyse de la Nature*: 72 – Type genus *Larus* Linnaeus, 1758.

Pons *et al.* (2005) presented a complete gull phylogeny based on mitochondrial DNA, which showed that *Larus sensu* Chu (1998) was not monophyletic. Pons *et al.* (2005) recommended that ten gull genera be recognised, and this was largely followed by Christidis & Boles (2008), Dickinson & Remsen (2013), and the American Ornithologists' Union (e.g. Chesser *et al.* 2020). This taxonomy is supported by the Checklist Committee, and we follow the subfamily structure and generic sequence used by Dickinson & Remsen (2013). Boie (1844: 196) listed "*Larus melanoleucos*" as from New Zealand but, as it does not include a description of the bird, it is a *nomen nudum* (Mathews & Iredale 1913: 248).

Genus *Chroicocephalus* Eyton

Gavia Boie, 1822: *Isis von Oken*, Heft 5: col. 563 – Type species (by subsequent designation) *Chroicocephalus ridibundus* (Linnaeus). Junior homonym of *Gavia* Moehring, 1758.

Chroicocephalus Eyton, 1836: *Cat. Brit. Birds*: 53 – Type species (by subsequent designation) *Larus capistratus* Temminck = *Chroicocephalus ridibundus* (Linnaeus).

Gelastes Bonaparte, 1853: *Journ für Ornith. I*: 47 – Type species (by subsequent designation) *Larus gelastes* Lichenstein = *Chroicocephalus genei* (Brème).

Bruchigavia Bonaparte, 1857: *Consp. Gen. Avium 2*: 228 – Type species (by subsequent designation) *Larus novaehollandiae* Stephens = *Chroicocephalus novaehollandiae* (Stephens).

Astogavia Mathews, 1944: *Emu 43*: 244 – Type species (by original designation) *Bruchigavia melanorhyncha* Buller = *Chroicocephalus bulleri* (Hutton).

► *Chroicocephalus novaehollandiae* (Stephens)

Silver Gull

Larus Novae-Hollandiae Stephens, 1826: in G. Shaw, *General Zool. 13*(1): 196 – New South Wales, Australia.

Gavia Andersonii Bruch, 1853: *Journ. für Ornith. I*: 100 – New Zealand, error for New South Wales, Australia (*vide* Mathews 1927, *Syst. Avium Australasianarum I*: 147).

Chroicocephalus novaehollandiae (Stephens); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 26, 146.

Three subspecies are recognised (R. Johnstone 1982; Higgins & Davies 1996): *C. n. novaehollandiae* (Australia); *C. n. forsteri* (Mathews, 1912) (New Caledonia and south-west Pacific); and *C. n. scopulinus* (New Zealand). *Chroicocephalus hartlaubii* Bruch, 1853 of South Africa is sometimes treated as a subspecies of *C. novaehollandiae* (e.g. Checklist Committee 1990), but they are not closely related (Given *et al.* 2005). Schodde *et al.* (1983), Sibley & Monroe (1990), and Given *et al.* (2005) treated *C. scopulinus* as a full species but we await the inclusion of *C. n. forsteri* in a study before adopting this approach. Early reports of *C. n. novaehollandiae* in New Zealand (Dwight 1925) have not been verified (R. Johnstone 1982). The species straggles to Norfolk Island, where it has bred, but subspecies unknown, although both *C. n. novaehollandiae* and *C. n. scopulinus* suggested (Schodde *et al.* 1983; Hermes *et al.* 1986; Higgins & Davies 1996; J. Moore 1999).

Chroicocephalus novaehollandiae scopulinus (J.R. Forster)

Red-billed Gull | Tarāpunga

Larus scopulinus J.R. Forster, 1843: in G.R. Gray, in E. Dieffenbach, *Travels in N.Z. 2*: 200. *Nomen nudum*.

Larus scopulinus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 106 – Dusky Sound, Fiordland.

Larus Jamesoni; G.R. Gray 1844, *List Birds Brit. Mus. 3*: 171. Not *Larus jamesoni* Wilson, 1831 = *Larus novaehollandiae* Stephens, 1826.

Larus novae Hollandiae; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 18. Not *Larus novaehollandiae* Stephens, 1826.

Chroicocephalus schimperi Bonaparte, 1857: *Consp. Gen. Avium 2*: 229. Not *Chroicocephalus Schimperi* Bruch, 1853.

Lestris scopulinus (J.R. Forster); Ellman 1861, *Zoologist 19*: 7472.

Xema jamesonii; Layard 1863, *Ibis 5*: 245. Not *Larus jamesoni* Wilson, 1831 = *Larus novaehollandiae* Stephens, 1826.

Gelastes scopulinus (J.R. Forster); Blasius 1865, *Journ. für Ornith. 13*(6): 384.

Larus (Gelastes) ?Andersonii G.R. Gray, 1871: *Hand-list Birds 3*: 116 – New Zealand. Junior secondary homonym of *Gavia andersonii* Bruch, 1853 = *Larus novaehollandiae* Stephens, 1826.

- Larus scopulorum* J.R. Forster; Potts 1872, *Ibis* 2 (3rd series): 38. Unjustified emendation.
Larus Novae-Hollandiae; Finsch 1872, *Journ. für Ornith.* 20(4): 241. Not *Larus novaehollandiae* Stephens, 1826.
Larus scopulinus J.R. Forster; Saunders 1896, *Cat. Birds Brit. Mus.* 25: 238.
Bruchigavia novaehollandiae scopulinus (J.R. Forster); Mathews & Iredale 1913, *Ibis* 1 (10th series): 247.
Bruchigavia novae-hollandiae; Belcher 1914, *Ibis* 2 (10th series): 595.
Bruchigavia novaehollandiae coincidens Mathews, 1944: *Emu* 43: 244 – subantarctic islands of New Zealand.
Larus novaehollandiae scopulinus J.R. Forster; Checklist Committee 1953, *Checklist N.Z. Birds*: 50.
Larus novaehollandiae; Lindsay 1963, *Notornis* 10: 304. Not *Larus novaehollandiae* Stephens, 1826.
Chroicocephalus scopulinus (J.R. Forster); Crochet *et al.* 2000, *Journ. Evolut. Biology* 13: 54.
Chroicocephalus schimperi; Voisin & Voisin 2011, *Journ. Nat. Mus. (Prague) Nat. Hist. Ser. 180*(4): 45. Not *Chroicocephalus Schimperi* Bruch, 1853.
Chroicocephalus novaehollandiae scopulinus (J.R. Forster); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition 1: 226.

Breeding on coasts and islets from Manawatāwhi / Three Kings Islands to Stewart / Rakiura, Chatham, Snares / Tini Heke, Auckland / Maukahuka and Campbell / Motu Ihupuku Islands; also breeds inland at Lake Rotorua (Gurr & Kinsky 1965, Higgins & Davies 1996). Straggler to the Kermadec Islands / Rangitāhua (possibly *C. n. novaehollandiae*; Veitch *et al.* 2004), Lord Howe Island (McAllan *et al.* 2004), and New South Wales, Australia (banded bird, Sep. 2017; Mills *et al.* 2020). Natural deposit and midden records from North, South, Stewart / Rakiura, and Chatham Islands, and Auckland Islands / Maukahuka (Checklist Committee 1990; Millener 1991; Tennyson 2020a); a few probable Late Pleistocene records (Worthy & Grant-Mackie 2003).

► *Chroicocephalus bulleri* (Hutton)

Black-billed Gull | Tarāpuka

- Bruchigavia melanorhyncha* Buller, 1869 (Jan.): *Ibis* 5 (new series): 43 – South Island. Junior secondary homonym of *Larus melanorhynchus* Temminck & Laugier, 1830 = *Larus philadelphia* (Ord, 1815).
Larus (Bruchigavia) melanorhyncha [sic] Buller; Finsch 1869 (Oct.), *Ibis* 5 (new series): 381. Not *Larus melanorhynchus* Temminck & Laugier, 1830 = *Larus philadelphia* (Ord, 1815).
Larus bulleri Hutton, 1871: *Cat. Birds N.Z.*: 41. *Nomen novum* for *Bruchigavia melanorhyncha* Buller, 1869.
Larus bulleri Potts, 1872 (Jan.): *Ibis* 2 (3rd series): 38 – Near the mouth of the Waimakeriri [sic] River. Junior primary homonym and junior synonym of *Larus bulleri* Hutton, 1871.
Larus melanorhynchus (Buller); Potts 1872, *Ibis* 2 (3rd series): 38. Not *Larus melanorhynchus* Temminck & Laugier, 1830 = *Larus philadelphia* (Ord, 1815).
Larus (Bruchigavia) Bulleri Potts, 1872 (May): *Trans. Proc. N.Z. Inst.* 4: 203 – Near the mouth of the Waimakariri River. Junior primary homonym and junior synonym of *Larus bulleri* Hutton, 1871.
Larus Pomarae [sic]; Finsch 1872, *Journ. für Ornith.* 20(4): 248. Not *Gavia pomare* Bruch, 1855 = *nomen dubium*.
Larus pomare; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1: 32. Not *Gavia pomare* Bruch, 1855 = *nomen dubium*.
Larus bulleri Hutton; Saunders 1896, *Cat. Birds Brit. Mus.* 25: 233.
Hydrocoleus bulleri (Hutton); Dwight 1925, *Bull. Am. Mus. Nat. Hist.* 52: 293.
Bruchigavia melanorhynchus [sic] Buller; Dwight 1925, *Bull. Am. Mus. Nat. Hist.* 52: 293. Not *Larus melanorhynchus* Temminck & Laugier, 1830 = *Larus philadelphia* (Ord, 1815).
Bruchigavia (Astogavia) melanorhyncha (Buller); Mathews 1944, *Emu* 43: 244. Not *Larus melanorhynchus* Temminck & Laugier, 1830 = *Larus philadelphia* (Ord, 1815).
Chroicocephalus bulleri (Hutton); Crochet *et al.* 2000, *Journ. Evolut. Biology* 13: 54.

Throughout New Zealand but mainly south of the Auckland isthmus; breeding mainly on South Island riverbeds but some breed on the coast; some movement north and to coastal areas in the non-breeding season (Higgins & Davies 1996). A few go south to Stewart Island / Rakiura and straggle to Snares Islands / Tini Heke (Higgins & Davies 1996; Miskelly *et al.* 2001a). North Island breeding range is expanding and includes: Kaipara Harbour; Manukau Harbour; near Clevedon; Firth of Thames; Coromandel Harbour; Matakana Island; Ohiwa Harbour; Waioeka River estuary; Lake Rotorua; Whakarewarewa; Lake Rotomahana; Lake Rerewhakaaitu; Lake Rotokawa; Lake Taupo; Poverty Bay; Wairoa; Portland Island; near Clive; Black Reef; Porangahau; Manawatu River; inland Wairarapa (D. Reid & Reid 1965; Drake 1980; G. Taylor & Parrish 1994a; Higgins & Davies 1996; Parrish & Lock 1997). Natural deposit and midden records from the South Island; midden only from the North Island (Checklist Committee 1990; Millener 1991).

Gavia pomare [sic] Bruch, 1855: 285 has been regarded as a synonym of *L. bulleri* but its identity is in doubt because its type locality, the Society Islands, is outside the known range of this species and the type specimen no longer exists (Steadman 2002; see also Saunders 1896: 233, 235). Notwithstanding the identity of *Gavia pomare* Bruch, 1855, that name is preoccupied by *Gavia pomarre* Bruch, 1853: 103, in turn a junior synonym of *Larus novaehollandiae novaehollandiae* Stephens, 1826.

Genus **Leucophaeus** Bruch

Leucophaeus Bonaparte, 1853: *Journ. für Ornith.* 1(1): 47. *Nomen nudum*.

Leucophaeus Bruch, 1853: *Journ. für Ornith.* 1(2): 108 – Type species (by monotypy) *Larus haematorhynchus* King = *Leucophaeus scoresbii* (Traill).

Melanolarus Heine & Reichenow, 1890, *Nom. Mus. Hein. Ornith.*: 359 – Type species (by original designation) *Larus franklini* (Swainson & Richardson) = *Leucophaeus pipixcan* (Wagler).

► **Leucophaeus atricilla** (Linnaeus)

Laughing Gull

Larus atricilla Linnaeus, 1758: *Syst. Nat. 10th edition* 1: 136. Based on “*Larus major*” of Catesby 1731: *Nat. Hist. Carolina, Florida & Bahamas* 1: 89 – America = Bahamas Islands (*vide* Catesby 1731).

Larus major T. Forster, 1817: *Synop. Cat. Brit. Birds*: 32. Unnecessary *nomen novum* for *Larus atricilla* Linnaeus, 1758.

Xema atricilla (Linnaeus); Boie 1822, *Isis von Oken* 5: 563.

Gavia atricilla (Linnaeus); Macgillivray 1842, *Man. Brit. Ornith.* 2: 240.

Chroicocephalus atricilla (Linnaeus); Bruch 1853, *Journ. für Ornith.* 1: 106.

Atricilla Catesbyi Bruch, 1855: *Journ. für Ornith.* 3: 287 – North America.

Atricilla megalopterus Bruch, 1855: *Journ. für Ornith.* 3: 287 – Perú and Gulf of Mexico.

Atricilla micropterus Bruch, 1855: *Journ. für Ornith.* 3: 288 – Southern North America.

Atricilla catesbaei (Bruch); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771. Invalid emendation.

Atricilla macroptera Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771 – no locality.

Atricilla minor Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771 – no locality.

Chroecocephalus atricilla (Linnaeus); A. & E. Newton 1859: *Ibis* 1: 371. Misspelling.

Leucophaeus atricilla (Linnaeus); Pons *et al.* 2005, *Mol. Phyl. Evol.* 37: 692.

Breeds eastern and southern United States, Mexico, Caribbean, Venezuela, and French Guiana, migrating south to northern Brazil and Perú. Two subspecies: *L. a. megalopterus* (Bruch, 1855) is migratory, breeding in United States and Mexico; the more southerly *L. a. atricilla* is sedentary (Higgins & Davies 1996). One near Opotiki in Dec. 2016 was the first record from New Zealand (Miskelly, Crossland *et al.* 2017). Probably the same bird was subsequently recorded in the same vicinity in Dec. 2017, at Wairoa in Jan. 2018, and at Cape Kidnappers in Oct. 2018 (Miskelly, Crossland *et al.* 2019, 2021).

► **Leucophaeus pipixcan** (Wagler)

Franklin's Gull

Larus atricilla Sabine, 1823: *App. Franklin's Polar Sea*: 695. Not *Larus atricilla* Linnaeus, 1758.

Larus Pipixcan Wagler, 1831 (May): *Isis von Oken*, Heft 4: col. 515 – Mexico.

Larus Franklinii Jameson, 1831 (Aug.): *Wilson's American Ornithology* 4: 245 – Saskatchewan River, Manitoba. *Nomen nudum*.

Larus Franklinii Swainson & Richardson, 1832 [1831] (*vide* Browning & Monroe 1991, *Archiv. Nat. Hist.* 18: 393): *Fauna Boreali-Americana, Birds* 2: 424, pl. 71 – Saskatchewan River, Manitoba.

Xema franklini (Swainson & Richardson); Bonaparte 1838, *Comp. List Birds Europe & North Amer.*: 62.

Xema pipixcan (Wagler); Boie 1844, *Isis von Oken*, Heft 37: col. 194.

Larus pipixcan Wagler; G.R. Gray 1846, *Gen. Birds* 3(21): 654.

Larus cucullatus Reichenbach, 1848: *Natatores*, pl. 23, fig. 296 (ex Lichtenstein manuscript) – Mexico.

Chroicocephalus franklini (Swainson & Richardson); Bruch 1853, *Journ. für Ornith.* 1: 104.

Chroicocephalus cucullatus (Reichenbach); Bruch 1853, *Journ. für Ornith.* 1: 104.

Chroicocephalus Kittlitzii Bruch, 1853: *Journ. für Ornith.* 1: 104 – Chile.

Chroicocephalus Schimperi Bruch, 1853: *Journ. für Ornith.* 1: 104 – New Zealand.

Chroicocephalus serranus Bruch, 1853: *Journ. für Ornith.* 1: 106 – Perú. Not *Larus serranus* Von Tschudi, 1844.

Gavia cucullata (Reichenbach); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771.

Gavia pipixan [sic] (Wagler); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771.

Gavia franklini (Swainson & Richardson); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771.

Gavia kittlitzii (Bruch); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 771.

Chroicocephalus franklinii (Swainson & Richardson); Lawrence in Baird 1858, *Rep. Pacific R. R. Expl. Surv.* 9: 851.

Larus cinereo-caudatus Philippi & Landbeck, 1861: *Wiegmann's Archiv für Naturg.* 1: 293 – Chile.

Larus schimperi Bonaparte; G.R. Gray 1862, *Ibis* 4: 248. Not *Chroicocephalus Schimperi* Bruch, 1853.

Larus franklini (Swainson & Richardson); Schlegel 1863, *Mus. Hist. Nat. Pays-Bas, Lari* 6: 36.

Chroicocephalus atricilla Sclater, 1864: *Proc. Zool. Soc. London* 1864 (2): 179 – Mexico City. Not *Larus atricilla* Linnaeus, 1758.

Chroicocephalus franklini (Swainson & Richardson); Snow 1873, *Cat. Birds Kansas*: 12.

Larus (Chroicocephalus) franklini (Swainson & Richardson); Coues 1874, *Birds of the Northwest*: 653.

Melanolarus franklini (Swainson & Richardson); Heine & Reichenow 1890, *Nom. Mus. Hein. Ornith.*: 359.

Larus pipixcan Wagler; Onley & Schweigman 2004, *Notornis* 51: 49.

Leucophaeus pipixcan (Wagler); Pons *et al.* 2005, *Mol. Phyl. Evol.* 37: 692.

Breeds in North America; moving south, chiefly to South America, when not breeding. Vagrants have been reported across the Pacific Ocean reaching as far as Australia (Peters 1934; Onley & Schweigman 2004). Four New Zealand records: Raoul Island, Jul. 1988 (Veitch *et al.* 2004); Tomahawk Lagoon, Dunedin, Jun.–Jul. 2002 (Onley & Schweigman 2004); Papakura, Oct. 2009 (Miskelly *et al.* 2011); Tuamarina, Marlborough, Jul. 2013 (Miskelly *et al.* 2015).

Bruch (1853) described *Chroicocephalus Schimperi* from New Zealand; his description (in German) translates as “About a third smaller than black-headed gull (*Chroicocephalus ridibundus*); white, with a grey back; head black; flight feathers black with white tips; bill short and stout, beautiful red.” Saunders (1896) listed *C. schimperi* Bruch, 1853 as a junior synonym of *Larus franklini* (= *Leucophaeus pipixcan*). The connection of the type specimen(s) with New Zealand is unknown, and likely to be in error. Bonaparte (1857) cited *Chroicocephalus schimperi* Bruch, 1853 as from New Zealand. Voisin & Voisin (2011) listed three specimens – which may have been examined by Bonaparte – of *Larus scopulinus* (= *Chroicocephalus novaehollandiae scopulinus*) from New Zealand labelled as *Larus schimperi* or *Gelastes schimperi*. None of the three specimens are listed as types, and they do not match Bruch’s 1853 description. Therefore, we list *Chroicocephalus Schimperi* Bruch, 1853 and one variant as a junior synonym of *L. pipixcan*. Two other citations to *Chroicocephalus schimperi* Bonaparte, 1857 are listed under the synonymy for *C. n. scopulinus*.

Genus *Larus* Linnaeus

Larus Linnaeus, 1758: *Syst. Nat. 10th edition 1*: 136 – Type species (by subsequent designation) *Larus marinus* Linnaeus.

Dominicanus Bruch, 1853: *Journ für Ornith. 1*: 100 – Type species (by subsequent designation) *Larus marinus* Linnaeus.

Clupearlus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris 42*: 770 – Type species (by subsequent designation) *Larus fuscus* Linnaeus.

A report of an immature Pacific gull (*Larus pacificus*) on Dargaville Beach in Jan. 2010 was initially accepted by the Records Appraisal Committee, before the report was reviewed and rejected, and the species removed from the New Zealand list in 2021 (Miskelly *et al.* 2013; Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022). The timing of these two decisions meant that the species never featured in a checklist published by the Ornithological Society of New Zealand.

► *Larus dominicanus* Lichtenstein

Southern Black-backed Gull | Karoro

Larus dominicanus Lichtenstein, 1823: *Verzeich. Doubl., Berlin*: 82 – coasts of Brazil.

Larus fuscus; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 200. Not *Larus fuscus* Linnaeus, 1758.

Larus antipodus ? G.R. Gray, 1844: *List Birds Brit. Mus. 3*: 169 – New Zealand.

Dominicanus antipodus (G.R. Gray); Bruch 1853, *Journ. für Ornith. 1*: 100.

Dominicanus Antipodum Cabanis [sic]; Bruch 1855, *Journ. für Ornith. 3*: 281.

Clupearlus antipodum (G.R. Gray); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris 42*: 770.

Lestris antarcticus Ellman, 1861: *Zoologist 19*: 7472 – New Zealand. Junior primary homonym of *Lestris antarcticus* Lesson, 1831.

Lestris fuscus Latham [sic]; Ellman 1861, *Zoologist 19*: 7472. Not *Larus fuscus* Linnaeus, 1758.

Larus antipodum G.R. Gray; G.R. Gray 1862, *Ibis 4*: 248.

Larus pacificus; Layard 1863, *Ibis 5*: 245. Not *Larus pacificus* Latham, 1801.

Larus dominicanus Lichtenstein; Finsch 1870, *Journ. für Ornith. 18*(5): 360.

Larus ?antipodum G.R. Gray; G.R. Gray 1871, *Hand-list Birds 3*: 112.

Larus dominicanus antipodus (Bruch) [sic]; Mathews & Iredale 1913, *Ibis 1* (10th series): 248.

Larus dominicanus (antipodus); Mathews 1930, *Emu 29*: 280.

Larus dominicanus absolutus Mathews, 1944: *Emu 43*: 246 – subantarctic islands of New Zealand.

Larus dominicanus dominicanus Lichtenstein; Checklist Committee 1980, *Notornis (Suppl.) 27*: 18.

The Checklist Committee (2010) recognised five subspecies following Jiguet (2002): *L. d. dominicanus* Lichtenstein (South America, Australia, New Zealand and its subantarctic islands); *L. d. vetula* (Bruch, 1853) (southern Africa); *L. d. austrinus* Fleming, 1924 (Antarctica); *L. d. judithae* Jiguet, 2002 (south Indian Ocean); and *L. d. melisandae* Jiguet, 2002 (Madagascar). Subsequent genetic research indicates that New Zealand birds are not *L. d. dominicanus* but are most closely related to Antarctic and Kerguelen Islands birds (Sternkopf 2011). A morphological review (Jiguet *et al.* 2012) recommends that six subspecies be recognised, with the New Zealand subspecies being *Larus dominicanus antipodus* G.R. Gray, 1844, and *L. d. dominicanus* being in South America. However, this study also recommends “further molecular studies of this widely distributed species before making further definitive taxonomic recommendations”. Without further research the Committee considers that New Zealand birds should be considered of indeterminate subspecies. Note that the synonyms listed here apply only to birds in the New Zealand region.

South America, Australia, and New Zealand. In the New Zealand region, breeds throughout coastal districts and on most offshore islands, including Chatham, Bounty, Antipodes, Snares / Tini Heke, Auckland / Maukahuka, and Campbell / Motu Ihupuku Islands; also inland on riverbeds and high into the mountains (Kinsky 1963; Higgins & Davies 1996; Miskelly *et al.* 2001a; Tennyson *et al.* 2002). Also breeds on Macquarie Island (Higgins & Davies 1996), and straggles north to Norfolk Island (Hermes *et al.* 1986), the Kermadec Islands / Rangitāhua (Veitch *et al.* 2004), Lord Howe Island (Higgins & Davies 1996), and Niue (Worthy *et al.* 1998; Powlesland *et al.* 2000), and south to Ross Sea, Antarctica (Spurr *et al.* 1990). Natural deposit and midden remains from North, South, Stewart / Rakiura, and Chatham Islands, and Auckland Islands / Maukahuka (Checklist Committee 1990; Millener 1991; Tennyson 2020a); rare records from Late Pleistocene sites (e.g. Worthy 2000; Worthy & Grant-Mackie 2003).

Subfamily STERNINAE Bonaparte: Terns

Sterninae Bonaparte, 1838: *Geogr. Comp. List. Birds*: 61 – Type genus *Sterna* Linnaeus, 1758.

Most recommendations from a study of tern relationships, based on mtDNA (Bridge *et al.* 2005), were adopted by the Taxonomic Subcommittee of the British Ornithologists' Union Records Committee (Sangster *et al.* 2005) and the American Ornithologists' Union Committee on Classification and Nomenclature (R.C. Banks *et al.* 2006). This follows many years of disagreement about the generic classification of terns for which 3–12 genera have been used (see Bridge *et al.* 2005). The genera and their sequence recommended by Bridge *et al.* (2005) are accepted here.

Genus *Onychoprion* Wagler

Onychoprion Wagler, 1832: *Isis von Oken*, Heft 2: col. 277 – Type species (by monotypy) *Sterna serrata* J.R. Forster = *Onychoprion fuscatus serratus* (J.R. Forster).

The gender of the genus *Onychoprion* is masculine, therefore, according to Article 30.1.2 of ICZN (1999), the species and subspecies names for the New Zealand taxa should be *O. fuscatus serratus*, *O. lunatus*, and *O. anaethetus*.

► *Onychoprion fuscatus* (Linnaeus)

Sooty Tern

Sterna fuscata Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 228 – Santo Domingo, West Indies.

Anous fuscatus (Linnaeus); G.R. Gray 1846, *Gen. Birds* 3(21): 661.

Onychoprion fuscata [sic] (Linnaeus); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 25, 144.

Onychoprion fuscatus (Linnaeus); Checklist Committee 2010, *Checklist Birds N.Z.*: 234.

Circumtropical, ranging widely over subtropical seas and sometimes into temperate waters. Several subspecies have been described and the number accepted varies among authors; the differences between the subspecies are slight, involving coloration of underparts and measurements; the status of all need re-examination (Higgins & Davies 1996). Although the race *O. f. serratus* is supposedly confined to breeding around Australia and in the South Pacific (Higgins & Davies 1996), a chick banded at the Kermadec Islands / Rangitāhua was found breeding at the Seychelles, Indian Ocean (Cossee 1995), where the supposed race *O. f. nubilosus* (Sparman, 1788) breeds (Higgins & Davies 1996).

Onychoprion fuscatus serratus (J.R. Forster)

Sooty Tern

Sterna serrata J.R. Forster, 1830: in J.G. Wagler, *Natur. Syst. Amphib. Säug. Vögel.*: 88, note 2 – New Caledonia.

Sterna fuliginosa; Cheeseman 1891, *Trans. Proc. N.Z. Inst.* 23: 221. Not *Sterna fuliginosa* Gmelin, 1789.

Onychoprion fuscatus serratus (J.R. Forster); Mathews & Iredale 1913, *Ibis* 1 (10th series): 245.

Onychoprion fuscatus kermadeci Mathews, 1916: *Austral Avian Rec.* 3: 55 – “Kermadec Islands”, error for Sydney, New South Wales, Australia (*vide* Mathews 1927, *Syst. Avium Australasianarum* 1: 142).

Sterna fuscata kermadeci (Mathews); Peters 1934, *Check-list Birds World* 2: 338.

Sterna fuscata serratus J.R. Forster; Oliver 1955, *New Zealand Birds*, 2nd edition: 343. Unjustified emendation.

Sterna fuscata; Lindsay 1963, *Notornis* 10: 304. Not *Sterna fuscata* Linnaeus, 1766.

Sterna fuscata serrata J.R. Forster; Checklist Committee 1990, *Checklist Birds N.Z.*: 165.

Onychoprion fuscatus serratus (J.R. Forster); Checklist Committee 2010, *Checklist Birds N.Z.*: 234.

Breeds abundantly in the south-west Pacific, including at Kermadec Islands / Rangitāhua. Strays to the North Island, often after storms (Turbott 1952; J. Jenkins 1962; Powlesland & Powlesland 1994a; Higgins & Davies 1996) and south to Foveaux Strait (W. Cooper 1991). An exceptional sighting was of at least 13 alive at Pakiri Beach, Jul. 1986 (Fennell 1987).

► *Onychoprion lunatus* (Peale)

Grey-backed Tern

Sterna lunata Peale, 1848: *U.S. Expl. Exped.* 8: 277 – Vincennes Island, Paumotu [= Tuamotu] Group, French Polynesia.

Sterna lunata; Scofield 2006, *Southern Bird* 27: 8.

Onychoprion lunatus (Peale); Banks *et al.* 2006, *Auk* 123: 927.

Breeds throughout much of Oceania, including islands between the northern Mariana and Hawai'ian Islands and the Fijian and Tuamotu Groups; possibly as far east as Easter Island; becomes pelagic in the Pacific Ocean after breeding (Gochfeld & Burger 1996). Two New Zealand records: Papakanui Spit, Kaipara Harbour, Jan.–Feb. 1999; mouth of the Pungaereere Stream, Taranaki, Jan. 2002 (Scofield 2006).

► *Onychoprion anaethetus* (Scopoli)

Bridled Tern

Sterna Anaethetus Scopoli, 1786: *Delic. Flor. Faun. insubr.* 2: 92 – “In Guinea”, error for Panay, Philippine Islands (*vide* Peters 1934, *Check-list Birds World* 2: 337).

Sterna anaethetus Scopoli; Tunnicliffe & Langlands 1990, *Notornis* 37: 131.

Onychoprion anaethetus (Scopoli); Banks *et al.* 2006, *Auk* 123: 927.

Breeding and widely distributed in tropical seas, seldom straying to temperate waters. Four subspecies: *O. a. anaethetus* breeds eastern Indian Ocean, South-east Asia, Australia, western Pacific; *O. a. antarcticus* (Lesson, 1831) breeds Red Sea, Persian Gulf, and west Indian Ocean; *O. a. melanopterus* (Swainson, 1837) breeds West Indies and West Africa; *O. a. nelsoni* (Ridgway, 1919) breeds Pacific coast of Mexico and Central America (Higgins & Davies 1996). The only verified

New Zealand record was a beach-cast specimen, New Brighton, Canterbury, Nov. 1987 (Tunnickliffe & Langlands 1990). A live bird reported from Ninety Mile Beach in Feb. 2022 had not been assessed by the Birds New Zealand Records Appraisal Committee in time to be included in this edition of the Checklist (Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).

Genus *Sternula* Boie

Sternula Boie, 1822: *Isis von Oken*, Heft 5: col. 563 – Type species (by monotypy) *Sterna minuta* Linnaeus = *Sternula albifrons* (Pallas).

► *Sternula albifrons* (Pallas)

Little Tern

Sterna albifrons Pallas, 1764: in Vroeg, *Cat. Raisonné Coll. Oiseaux, Adumbr.*: 6 – Maasland, Netherlands.

Widespread world-wide, with three subspecies: *S. a. albifrons* breeds Europe and North Africa and east to central Asia; *S. a. sinensis* breeds east Asia to Australia; *S. a. guineae* (Bannerman, 1913) breeds central and West Africa (Higgins & Davies 1996).

Sternula albifrons sinensis (Gmelin)

Eastern Little Tern | Tara Teo

Sterna sinensis Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 608 – China.

Sterna minuta; Finsch 1867, *Journ. für Ornith.* 15: 339, 347. Not *Sterna minuta* Linnaeus, 1766.

Sternula placens Gould, 1871: *Ann. Mag. Nat. Hist., London* 8 (4th series): 192 – Torres Straits.

Sternula inconspicua Masters, 1875: *Proc. Linn. Soc. New South Wales* 1: 63 – Cape York, Australia.

Sterna sinensis placens (Gould); Mathews 1912, *Novit. Zool.* 18(3): 208.

Sterna sinensis tormenti Mathews, 1912: *Novit. Zool.* 18(3): 209 – Point Torment, north-west Australia.

Sternula albifrons sinensis (Gmelin); Mathews 1927, *Syst. Avium Australasianarum* 1: 140.

Sterna albifrons sinensis Gmelin; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 55.

Breeds in east Asia, east from Sri Lanka to New Guinea, and north and east Australia south to Tasmania (Higgins & Davies 1996). Not recognised in New Zealand until the 1940s (McKenzie & Sibson 1957). Now known as a regular non-breeding summer visitor, occasionally in flocks of 60+, especially at the big shallow inlets of northern New Zealand; also casually visits estuarine habitats south to Stewart Island / Rakiura (Pierce 1992; Higgins & Davies 1996). Vagrants have reached Kermadec Islands / Rangitāhua (Veitch *et al.* 2004) and Chatham Islands (Dec. 1997–Feb. 1998, and Nov. 2020; M. Bell & Bell 2002; Miskelly, Crossland *et al.* 2021). Banding records have confirmed that some New Zealand migrants breed in Japan (Lawrie & Habraken 2001; Habraken 2002; Anon. 2003). Some juveniles, and the occasional birds that adopt breeding plumage in New Zealand during the southern summer, are considered to have Southern Hemisphere origins (Lawrie & Habraken 2001; Saville 2002; Pulham 2003). Immatures (Sibson & Edgar 1962), and occasionally birds in breeding plumage (e.g. McKenzie & Sibson 1957; Tennyson 1990a), may overwinter.

► *Sternula nereis* Gould

Fairy Tern

Sternula nereis Gould, 1843: *Proc. Zool. Soc. London* 1842 (10): 140 – Bass Strait.

Predominantly an Australian species (nominate subspecies) of the south and west coasts, with two other subspecies: *S. nereis exsul* (Mathews, 1912) in New Caledonia and *S. nereis davisae* in New Zealand. One possible record from Norfolk Island (White 1937; Hitchcock 1959; Hermes *et al.* 1986; Higgins & Davies 1996).

Sternula nereis davisae Mathews & Iredale

New Zealand Fairy Tern | Tara Iti

Sterna minuta; Anon. 1870, *Cat. Colonial Mus.*: 76. Not *Sterna minuta* Linnaeus, 1766.

Sterna nereis [sic] Gould [sic]; Anon. 1870, *Cat. Colonial Mus.*: 76.

Sterna (alba, sp. nov.?) Potts, 1871: *Trans. Proc. N.Z. Inst.* 3: 106 – Plains from the Rangitata to the Rakaia, Canterbury. Junior primary homonym of *Sterna alba* Sparrman, 1786.

Sterna nereis; Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 4): 285. Not *Sternula nereis* Gould, 1843.

Sternula nereis davisae Mathews & Iredale, 1913: *Ibis* 1 (10th series): 245 – New Zealand.

Sterna nereis davisae (Mathews & Iredale); Oliver 1930, *New Zealand Birds*, 1st edition: 245.

Rare; known to breed only on the coasts of Northland at Ruakaka–Waipu, Mangawhai–Pakiri, and the Kaipara Harbour (Parrish & Pulham 1995; Pulham 2004); formerly used to breed at Tauranga, the lower North Island coast and inland on eastern South Island shingle riverbeds (N. Macdonald 1953; Oliver 1955; Parrish & Pulham 1995). Moves locally, but not wholly migratory. South of Auckland, recent records from Firth of Thames, Jul. 1985, Jul.–Aug. 1988, Mar. 2002, and Jun.–Jul. 2005 (G. Taylor 1990; Battley & Pulham 2005); Manawatu River estuary, Dec. 1999 and Dec. 2020 (Medway 2001a; Miskelly, Crossland *et al.* 2021); and Maketu estuary, Bay of Plenty, Nov. 2004 (Cuming & Barnard 2005; Scofield 2006). Holocene records from North Island dunes (Millener 1991). Supposed midden records on Chatham Island were misidentifications (Holdaway *et al.* 2001).

Genus *Gelochelidon* Brehm

Gelochelidon Brehm, 1830: *Isis von Oken*, Heft 23: col. 994 – Type species (by monotypy) *Gelochelidon meridionalis* Brehm = *Gelochelidon nilotica* (Gmelin).

► *Gelochelidon nilotica* (Gmelin)

Gull-billed Tern

Sterna nilotica Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 606 – Egypt.

Gelochelidon nilotica (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 163.

Almost cosmopolitan, breeding across the temperate Northern Hemisphere and in Australia; migratory and nomadic. Six or seven subspecies recognised globally (Gochfeld & Burger 1996; Higgins & Davies 1996). Until recently the subspecies occurring in New Zealand had not been confirmed (Checklist Committee 2010; Miskelly *et al.* 2013). First recorded in New Zealand near Invercargill, where two overwintered in 1955 (McKenzie 1955). Now numerous sight records from coastal estuaries and marshes, occasionally in small flocks, e.g. eight in 1975–76 and six in 1976–77, Manukau Harbour (Falla *et al.* 1981), and six on Kaipara Harbour, Nov. 2001 (Riegen 2003). In addition to *G. n. macrotarsa*, the Asian migrant *G. n. affinis* (Horsfield, 1821) could also reach New Zealand (see D. Rogers & van de Kam 2004; D. Rogers *et al.* 2005). First recorded breeding at Awarua Bay, Southland, Dec. 2019 (failed nest; Miskelly, Crossland *et al.* 2021), followed by a newly-fledged dependent chick at New River estuary, Invercargill, in Feb. 2021 (Jacques 2021).

Gelochelidon nilotica macrotarsa (Gould)

Australian Gull-billed Tern

Sterna macrotarsa Gould, 1837: *Proc. Zool. Soc. London 1837* (5): 26 – “in terrâ Van Diemen” = Tasmania, Australia.

Gelochelidon macrotarsa (Gould); Boie 1844, *Isis von Oken*, Heft 37: col. 187.

Gelochelidon nilotica normani Mathews, 1915: *Austral Avian Rec.* 2: 125 – Normanton, Queensland, Australia.

Gelochelidon nilotica cloatesi Mathews, 1924: *Bull. Brit. Ornith. Club* 45: 41 – Point Cloates, Western Australia.

Gelochelidon nilotica macrotarsa (Gould); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 54.

One bird among a major influx of the species to New Zealand in 2011 was confirmed as being *G. n. macrotarsa* (Miskelly *et al.* 2013).

Genus *Hydroprogne* Kaup

Hydroprogne Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 91 – Type species (by subsequent designation) *Sterna caspia* Pallas = *Hydroprogne caspia* (Pallas).

Sylochelidon Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 770 – Type species (by monotypy) *Sterna caspia* Pallas = *Hydroprogne caspia* (Pallas).

Heroprogne Buller, 1905: *Suppl. Birds N.Z. 1*: 157. Unjustified emendation.

► *Hydroprogne caspia* (Pallas)

Caspian Tern | Taranui

Sterna caspia Pallas, 1770: *Novi Comment. Acad. Scient. Imperial. Petropol.* 14(1): 582, pl. 22, fig. 2 – Caspian Sea.

Sterna Tschegrava Lepechin, 1770: *Novi Comment. Acad. Scient. Imperial. Petropol.* 14(1): 500, pl. 13, fig. 2 – Shores of the Caspian Sea. Suppressed and invalid (*vide* ICZN 1969, Opinion 904. *Bull. Zool. Nomenclature* 26(5/6): 225).

Sylochelidon strenuus Gould, 1846: *Proc. Zool. Soc. London 1846* (14): 21 – southern coasts of Australia.

Sylochelidon strenua Gould; Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 772. Unjustified emendation.

Sterna major Ellman, 1861: *Zoologist* 19: 7472 – New Zealand.

Sterna (*Sylochelidon*) *strenuus* (Gould); G.R. Gray 1862, *Ibis* 4: 248.

Heroprogne caspia (Pallas); Buller 1905, *Suppl. Birds N.Z. 1*: 157.

Hydroprogne tschegrava oliveri Mathews & Iredale, 1913: *Ibis* 1 (10th series): 242 – New Zealand.

Hydroprogne caspia caspia (Pallas); Oliver 1930, *New Zealand Birds*, 1st edition: 240.

Hydroprogne caspia strenua (Gould); Oliver 1930, *New Zealand Birds*, 1st edition: 240.

Hydroprogne caspia oliveri Mathews & Iredale; Oliver 1930, *New Zealand Birds*, 1st edition: 240.

Hydroprogne tschegrava strenua (Gould); Peters 1934, *Check-list Birds World* 2: 331.

Hydroprogne caspia (Pallas); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 54.

Sterna caspia Pallas; Checklist Committee 1990, *Checklist Birds N.Z.*: 164.

Almost cosmopolitan; breeding locally across temperate zones of Eurasia, Africa, and North America, and in Australia and New Zealand (Barlow & Dowding 2002). No subspecies accepted here. Partially migratory (Barlow 1998; Barlow & Dowding 2002). Occurs around the main islands of New Zealand, breeding in small colonies or singly, most commonly in the north. Mainly breeds coastally but often inland, especially on Canterbury’s braided riverbeds (Pierce 1984b; Bull *et al.* 1985; Higgins & Davies 1996). Some movement away from breeding colonies in the non-breeding season, especially north from southern colonies (Barlow 1998; Barlow & Dowding 2002). Two records from the Chatham Islands (Dec. 1985 and Feb. 2005; Imber 1994; Miskelly *et al.* 2006) and one from the Auckland Islands / Maukahuka (Dec. 1983; Miskelly, Elliott *et al.* 2020). May have reached the Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). Rarely found in Holocene deposits and middens in the North and South Islands (Checklist Committee 1990; Millener 1991; Sibson 1992).

Genus **Chlidonias** Rafinesque

Chlidonias Rafinesque, 1822: *Kentucky Gazette* (new series) 1(8): 3, col. 5 – Type species (by monotypy) *Sterna nigra* Linnaeus = *Chlidonias niger* (Linnaeus).

Hydrochelidon Boie, 1822: *Isis von Oken*, Heft 5: col. 563 – Type species (by subsequent designation) *Sterna nigra* Linnaeus = *Chlidonias niger* (Linnaeus).

Maoristerna Mathews, 1944: *Emu* 43: 246 – Type species (by original designation) *Hydrochelidon albostrata* G.R. Gray = *Chlidonias albostratus* (G.R. Gray).

A black tern (*Chlidonias niger* (Linnaeus, 1758)) reported from the south-western North Island in early 2022 had not been assessed by the Birds New Zealand Records Appraisal Committee in time to be included in this edition of the Checklist (Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).

► **Chlidonias leucopterus** (Temminck)**White-winged Black Tern**

Sterna leucoptera Temminck, 1815: *Manuel d'Ornith.*: 483 – shores of the Mediterranean Sea.

? *Hydrochelidon leucoptera* (Temminck); Finsch 1872, *Journ. für Ornith.* 20(4): 254.

Hydrochelidon leucoptera (Temminck); Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 4): 287.

Hydrochelidon leucoptera grisea; Mathews & Iredale 1913, *Ibis* 1 (10th series): 242. Not *Sterna grisea* Horsfield, 1821.

Chlidonias leucoptera (Temminck); Oliver 1930, *New Zealand Birds*, 1st edition: 238.

Chlidonias [sic] *leucoptera*; Stidolph 1932, *Emu* 31: 234.

Chlidonias leucopterus (Temminck); Checklist Committee 1953, *Checklist N.Z. Birds*: 50.

Breeds in marshes across Eurasia, north to Siberia, and probably in East Africa; migrates to the Southern Hemisphere and prone to wander, especially first-year birds. A regular visitor to New Zealand, from the harbours of Northland to Southland lagoons (Higgins & Davies 1996); sometimes in small flocks, e.g. 15 at Ahuriri Lagoons, Napier, in 1972 (Todd & Lloyd 1980) and 14 at Coopers Lagoon / Muriwai, Canterbury, in 1995 (O'Donnell & West 1996). The earliest New Zealand record was a pair in breeding plumage on the Waihopai River, Marlborough, in Dec. 1868 (Buller 1882). Stead (in Oliver 1955) suspected breeding in Canterbury as long ago as 1927; Pierce (1974) proved it in 1973 (Kinsky 1977b). The picture is obscured because white-winged black terns may be seen in breeding plumage in New Zealand in any month.

► **Chlidonias hybridus** (Pallas)**Whiskered Tern**

Sterna hybrida Pallas, 1811: *Zoogr. Rosso-Asiatica* 2: 338 – south Russia.

Three subspecies recognised (Higgins & Davies 1996): *Ch. h. hybridus* (south Eurasia and North Africa), *Ch. h. delalandii* (Mathews, 1912) (south and east Africa and Madagascar), and *Ch. h. javanicus* (Australia). We have followed the recommendation of Mees (1977) in spelling the specific name as *Ch. hybridus* – as in Christidis & Boles (1994) and Higgins & Davies (1996) – rather than as *Ch. hybrida*, as used by Checklist Committee (1990), Christidis & Boles (2008), and recommended by David & Gosselin (2002a).

Chlidonias hybridus javanicus (Horsfield)**Whiskered Tern**

Sterna javanica Horsfield, 1821: *Trans. Linn. Soc. London* 13: 198 – Java, Indonesia.

Hydrochelidon fluviatilis Gould, 1843: *Proc. Zool. Soc. London* 1842 (10): 140 – New South Wales, Australia.

Chlidonias leucopareia fluviatilis (Gould); Mathews 1927, *Syst. Avium Australasianarum* 1: 134.

Chlidonias hybrida; Oliver 1955, *New Zealand Birds*, 2nd edition: 328. Not *Sterna hybrida* Pallas, 1811.

Chlidonias hybridus javanicus (Horsfield); Higgins & Davies 1996, *HANZAB* 3: 765.

Vagrants to New Zealand thought to be from Australia, where the species breeds mainly in the south-east (Heather & Jones 1979; Higgins & Davies 1996). Twelve sight records: Lake Horowhenua, Aug.–Oct. 1977 (two birds) and May–Sep. 1978; lower Waikato River, Aug.–Sep. 1978; Tuakau, Pukekohe, Mar. 1980; Lake Rotorua, May 1987 (Heather & Jones 1979; Higgins & Davies 1996); Bromley, Christchurch, Dec. 2005; Travis wetland, Christchurch, Dec. 2005 (Crossland 2011); Ripiro Beach, Kaipara Harbour, Oct. 2009 (Miskelly *et al.* 2011); Invercargill, Oct. 2017; Lake Rotoiti, Rotorua, Dec. 2017; Lake Taupo, Jan. 2018 (Miskelly, Crossland *et al.* 2019); Balclutha, Jan. 2020 (Miskelly, Crossland *et al.* 2021). Reported sightings at Blenheim in Jan. 2006 (Anon. 2006b) and Lake Grassmere / Kapara Te Hau in Feb. 2006 (Anon. 2006c) remain unverified.

► **Chlidonias albostratus** (G.R. Gray)**Black-fronted Tern | Tarapirohe**

Sterna antarctica J.R. Forster, 1832: in J.G. Wagler, *Isis von Oken*, Heft 11: 1223 – Queen Charlotte Sound, Marlborough. Junior primary homonym of *Sterna antarctica* Lesson, 1831.

Sterna antarctica J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 107 – New Zealand. Junior primary homonym of *Sterna antarctica* Lesson, 1831 and of *Sterna antarctica* J.R. Forster, 1832.

Hydrochelidon albostrata G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 19, pl. 21 – New Zealand.

Sternula antarctica (Wagler); Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 773. Not *Sterna antarctica* Lesson, 1831.

Hydrochelidon albistriata G.R. Gray; Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 773. Unjustified emendation.

Sterna cinerea Ellman, 1861: *Zoologist* 19: 7473 – New Zealand. Junior primary homonym of *Sterna cinerea* Haldeman, 1843.

Hydrochelidon hybrida; Finsch 1867, *Journ. für Ornith.* 15: 347. Not *Sterna hybrida* Pallas, 1811.

Sterna albistriata (G.R. Gray); Buller 1905, *Suppl. Birds N.Z. 1*: 158. Unjustified emendation.

Sterna albistriata albistriata (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 243. Unjustified emendation.
Hydochelidon [sic] *albistriata* G.R. Gray; Mathews 1930, *Emu* 29: 279.
Chlidonias albistriata (G.R. Gray); Oliver 1930, *New Zealand Birds*, 1st edition: 237. Unjustified emendation.
Clidonias albistriata (G.R. Gray); Stead 1932, *Life Histories New Zealand Birds*: 25. Unjustified emendation.
Maoristerna albostrata (G.R. Gray); Mathews 1944, *Emu* 43: 246.
Chlidonias hybrida albistriata (G.R. Gray); Sibson 1948, *New Zealand Bird Notes*: 12. Unjustified emendation.
Chlidonias hybrida albostratus (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 50.
Chlidonias albostrata (G.R. Gray); Oliver 1955, *New Zealand Birds*, 2nd edition: 327.
Sterna albostrata (G.R. Gray); Checklist Committee 1980, *Notornis (Suppl.)* 27: 19.
Chlidonias albostratus (G.R. Gray); Bridge *et al.* 2005, *Molec. Phylogen. Evolution* 35: 461.

Breeds only on the riverbeds of the eastern South Island, from Marlborough to Southland, rarely in Westland. In the non-breeding season, most feed coastally and at sea off the eastern South Island (Higgins & Davies 1996). Some regularly reach Stewart Island / Rakiura and as far north as the Bay of Plenty (Lalas 1979; P. Latham 1981; G. Taylor 2000a); rarely hundreds cross Cook Strait (e.g. at Waikanae, 1985; Fleming & Fleming 1985); rarely reaches as far north as Northland (e.g. Higgins & Davies 1996; Parrish & Lock 1996; Davies 2007) and as far south as Snares Islands / Tini Heke (Miskelly *et al.* 2001a). One possible record from Norfolk Island (McAllan 2000). May formerly have bred on the North Island's Volcanic Plateau (Sibson 1948; Higgins & Davies 1996). Checklist Committee (1953, 1970) placed the black-fronted tern in the genus *Chlidonias*, but studies by Mees (1977) and Lalas & Heather (1980) led to its placement in *Sterna* (Checklist Committee 1980, 1990). However, mtDNA work by Bridge *et al.* (2005) firmly placed its relationships among the species of *Chlidonias* and that conclusion is followed here. Rarely found in eastern South Island Holocene deposits (e.g. Worthy & Holdaway 1996; Worthy 1998d); midden and Holocene records from the North and Chatham Islands (Millener 1991) have been questioned (Holdaway *et al.* 2001).

Genus *Sterna* Linnaeus

Sterna Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 137 – Type species (by tautonymy) *Sterna hirundo* Linnaeus.

Sterna vulgaris Ellman (1861: 7472 – New Zealand) is a junior synonym of *Sterna striata* according to Sibson (1992) but the description is inadequate, the beak colour does not fit *S. striata*, the Māori name refers to *S. caspia* and there is no type specimen; therefore, *S. vulgaris* cannot be identified and is a *nomen dubium*. *Sterna parva* Ellman (1861: 7473 – New Zealand) could refer to several small tern species and, with no type specimen to confirm its identity, *S. parva* is also a *nomen dubium*.

A black-naped tern (*Sterna sumatrana* Raffles, 1822) reported from Muriwai, Auckland, in Feb. 2022 had not been assessed by the Birds New Zealand Records Appraisal Committee in time to be included in this edition of the Checklist (Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).

► *Sterna striata* Gmelin

White-fronted Tern | Tara*

Sterna striata Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 609 – New Zealand.
Sterna velox Gould, 1843: *Proc. Zool. Soc. London* 1842 (10): 139 – Bass Strait. Junior primary homonym of *Sterna velox* Cretzschmar, 1827 = *Sterna bergii velox* Cretzschmar, 1827.
Sterna frontalis G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 9, pl. 20 – New Zealand.
Sterna melanorhyncha Gould, 1848: *Birds of Australia* 7(36): pl. 26 – Tasmania. Junior secondary homonym of *Sternula melanorhyncha* Lesson, 1847.
Sterna albifrons Peale, 1848: *U.S. Expl. Exped.* 8: 279, 337 – Bay of Islands. Junior secondary homonym of *Sternula albifrons* Pallas, 1764.
Sterna atripes Ellman, 1861: *Zoologist* 19: 7473 – New Zealand.
Sterna longipennis; Finsch 1867, *Journ. für Ornith.* 15: 339, 347. Not *Sterna longipennis* Nordmann, 1835.
Sterna longipennis Nordon (sic); Potts 1882, *Out in the Open*: 216. Not *Sterna longipennis* Nordmann, 1835.
Sterna bethunei Buller, 1896: *Trans. Proc. N.Z. Inst.* 28: 349 – Auckland Islands. Not *Sterna bethunei* Travers, 1896.
Sterna striata incerta Mathews, 1912: *Novit. Zool.* 18(3): 208. Unnecessary *nomen novum* for *Sterna melanorhyncha* Gould, 1848.
Sterna striata christopheri Mathews, 1912: *Novit. Zool.* 18(3): 209 – Point Cloates, Western Australia.
Sterna striata striata Gmelin; Mathews & Iredale 1913, *Ibis* 1 (10th series): 244.
Sterna striata bethunei Buller; Mathews & Iredale 1913, *Ibis* 1 (10th series): 244. Not *Sterna bethunei* Travers, 1896.
Sterna striata yorki Mathews, 1914: *Austral Avian Rec.* 2: 86 – Cape York, Queensland, Australia.
Sterna striata melanorhyncha Gould; Mathews 1927, *Syst. Avium Australasianarum* 1: 139.
Sterna striata aucklandornna Mathews, 1929: *Bull. Brit. Ornith. Club* 50: 19. Unnecessary *nomen novum* for *Sterna bethunei* Buller, 1896.
Sterna striata Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 51.

Breeds abundantly from Northland (not Manawatāwhi / Three Kings Islands) to Stewart Island / Rakiura and at the Chatham and Auckland Islands / Maukahuka; small numbers breed on some islands in Bass Strait (Higgins & Davies 1996; G. Taylor 2000a). A rare visitor to Norfolk (Hermes *et al.* 1986), Snares / Tini Heke (Miskelly *et al.* 2001a), Campbell / Motu Ihupuku, and Macquarie Islands (Higgins & Davies 1996). Part of the New Zealand population, including many

immature birds, migrates to south-east Australia (Hindwood 1946; W. Clark & Dawson 1957; Serventy *et al.* 1971; Powlesland & Powlesland 1994b; Higgins & Davies 1996). G. Taylor (2000a) recognised *Sterna striata aucklandorn* as breeding at Chatham and Auckland Islands and the distinctiveness of this subspecies is worthy of further investigation (Higgins & Davies 1996). Holocene and midden records from North, South, and Chatham Islands (Checklist Committee 1990; Millener 1991); one Late Pleistocene record (Worthy & Grant-Mackie 2003).

*Also used as a general name for terns Sterninae.

► ***Sterna vittata* Gmelin** **Antarctic Tern**

Sterna vittata Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 609 – Christmas Harbour, Kerguelen Island, south Indian Ocean.

Circumpolar; five subspecies recognised following Higgins & Davies (1996) but variation between races needs clarification.

***Sterna vittata bethunei* Travers** **New Zealand Antarctic Tern**

Sterna bethunei Travers, 1896: in Buller, *Trans. Proc. N.Z. Inst.* 28: 348 – Bounty Islands.

Sterna vittata; Buller, 1905, *Suppl. Birds N.Z. I*: 158. Not *Sterna vittata* Gmelin, 1789.

Sterna vittata bollonsi Mathews & Iredale, 1913: *Ibis* 1 (10th series): 244 – subantarctic islands of New Zealand.

Sterna vittata macquariensis Falla, 1937: *BANZARE Reports, series B*, 2: 260 – Macquarie Island.

Sterna vittata bethunei Buller [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 51.

Sterna vittata bethunei Travers, 1896; Checklist Committee 2010, *Checklist N.Z. Birds*: 241.

Breeds at Stewart Island / Rakiura (Port Pegasus / Pikihatiti) and its outliers (including Stage, Rerewhakaupoko / Solomon and Moggy Islands) and subantarctic islands: Snares / Tini Heke, Antipodes, Bounty, Auckland / Maukahuka, Campbell / Motu Ihupuku, and also Macquarie Island (Blackburn 1965; Higgins & Davies 1996; Sagar *et al.* 2003). One accepted record north of Foveaux Strait (off Otago Peninsula, Sep. 2018; Miskelly, Crossland *et al.* 2019). Has probably strayed to the Chatham Islands (R. Murphy 1938; M. Bell & Bell 2002). Holocene bones of this species, and/or of *Sterna paradisaea*, have been found in Chatham Island dunes (Checklist Committee 1990; Millener 1991).

► ***Sterna paradisaea* Pontoppidan** **Arctic Tern**

Sterna Paradisaea Pontoppidan, 1763: *Danske Atlas I*: 622 – no locality = Christiansø Island, off Bornholm, Denmark (*vide* Brünnich 1764, *Ornithologia Borealis*: 46).

Sterna macrura Naumann, 1819: *Isis von Oken*, Heft 3: col. 1847 – Nordstrand Island, Schleswig-Holstein, Germany.

Sterna paradisaea [sic]; Falla 1930, *N.Z. Journ. Sci. & Tech.* 12 (1): 27.

Sterna paradisaea Pontoppidan; Checklist Committee 1953, *Checklist N.Z. Birds*: 51.

Sterna macrura Naumann; Oliver 1955, *New Zealand Birds*, 2nd edition: 334.

Circumpolar, breeding in arctic and subarctic regions; strongly migratory, using two main routes to Antarctica (including the Ross Sea) by the eastern Atlantic and eastern Pacific Oceans (Storr 1958; Higgins & Davies 1996; Egevang *et al.* 2010). No subspecies recognised here. First recorded in New Zealand at Waikanae in 1929 (Falla 1930). Probably an annual visitor; confirmed records in New Zealand Sep.–Jun., most commonly in Nov. (P. Latham 1979; Sibson 1982; Higgins & Davies 1996; Scofield 2005a). Records include Chatham Islands (Imber 1994), Snares / Tini Heke (Miskelly *et al.* 2001a), Antipodes Island (Tennyson *et al.* 2002), Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), Bounty Islands (Miskelly, Crossland *et al.* 2021), and Campbell Island / Motu Ihupuku, and also Macquarie Island (Higgins & Davies 1996). Kinsky (1969) considered that all Campbell Island / Motu Ihupuku records may refer to Antarctic terns. A banded juvenile from Sweden was found dead on Stewart Island / Rakiura in Dec. 2003 (Morgan 2004). Holocene bones of this species, and/or *Sterna vittata*, have been found in Chatham Island dunes (Checklist Committee 1990; Millener 1991).

► ***Sterna hirundo* Linnaeus** **Common Tern**

Sterna Hirundo Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 137 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World* 2: 332).

Breeds in eastern North America and across temperate Eurasia, both on the coast and inland; strongly migratory on a broad front. Three subspecies recognised (Higgins & Davies 1996): *S. h. hirundo* (breeds eastern North America, Caribbean, Europe, North and West Africa, and Middle East east to western Siberia); *S. h. longipennis* (breeds east Siberia to north-east China, non-breeding areas from south-east Asia to New Guinea and Australasia); and *S. h. tibetana* Saunders, 1876 (breeds Asia, in the region of western China).

***Sterna hirundo longipennis* Nordmann** **Eastern Common Tern**

Sterna longipennis Nordmann, 1835: in A. Erman, *Verz. Thieren Pflanzen.*: 17 – mouth of Kukhtuy River, Okhotsk, eastern Siberia.

Sterna hirundo longipennis Nordmann; Checklist Committee 1990, *Checklist Birds N.Z.*: 168.

A regular migrant to the east coast of Australia (Blakers *et al.* 1984; Higgins & Davies 1996) but not recognised with certainty in New Zealand until three sightings in 1984 (Pukerua Bay and Waikanae River mouth in Jan. and the Rangitaiki River mouth in Apr.; P. Latham 1986; Guest 1992). Since then, sightings have been reported most years: Waikanae, 1985–98, 2011, 2015, 2017 (Higgins & Davies 1996; Tennyson 2000; Miskelly, Crossland *et al.* 2019, 2021); Tauranga

Harbour, 1987–89 (Higgins & Davies 1996; Chudleigh 1998); Manawatu River estuary, 1987–2004, 2011–14, 2016–20 (J. Moore 1991; Higgins & Davies 1996; Saville 1999; Medway 2001a, 2003a; Rare Birds Committee 2005; Miskelly *et al.* 2013; Miskelly, Crossland *et al.* 2019, 2021); Tarawera River mouth, 1989; lakes and beach near Pouto, 1990; Pukerua Bay, 1994 (Higgins & Davies 1996; Tennyson 1996a); Ashley River estuary / Rakahuri, 1995 (first South Island record; Medway 2002f), 2020 (Miskelly, Crossland *et al.* 2021); Kaipara Harbour, 1996, 2007, 2020 (Johnson 1997; Anon. 2007c; Miskelly, Crossland *et al.* 2021); Mataitai, 1996 (Habraken 1997); Rangaunu Harbour, 1999 (Medway 2000b); Papakanui Spit, 1999 (Pulham 2000); Raglan, 2001 (Medway 2002f); Miranda, 2002 (Habraken 2002); Hawke's Bay, 2003 (Medway 2004b); Lake Omapere, 2004 (Rare Birds Committee 2005); Kapiti Island, 2004 (Scofield 2005a); Whatipu, 2006 (S. Phillips 2006); Ashburton River mouth / Hakatere, 2006 (Miskelly *et al.* 2013); Waiuku, 2006; Rakaia River mouth, 2006 (Anon. 2007b); Bay of Plenty, 2006–07 (Cuming 2007); Kaitorete Spit, 2008, 2019 (Miskelly *et al.* 2013; Miskelly, Crossland *et al.* 2021); Waitangi, Hawke's Bay, 2018 (Miskelly, Crossland *et al.* 2019); off Otago Peninsula, 2018 (Miskelly, Crossland *et al.* 2019).

Genus *Thalasseus* Boie

Thalasseus Boie, 1822: *Isis von Oken*, Heft 5: col. 563 – Type species (by subsequent designation) *Thalasseus cantiacus* (Gmelin) = *Thalasseus sandvicensis* (Latham).

We follow Bridge *et al.* (2005), Sangster *et al.* (2005), R.C. Banks *et al.* (2006), and Dickinson & Remsen (2013) in using genus *Thalasseus* for crested tern.

► *Thalasseus bergii* (Lichtenstein)

Crested Tern

Sterna bergii Lichtenstein, 1823: *Verzeich. Doubl., Berlin*: 80 – Cape of Good Hope, South Africa.

Thalasseus bergii (Lichtenstein); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 26, 144.

Thalasseus bergii cristatus is thought to be the subspecies reaching New Zealand (Turbott 1952). It breeds in south-east Asia, Indonesia, Australia, and western and central Pacific east to the Tuamotu Archipelago. Extralimital subspecies are: *T. b. bergii*, breeds in Namibia and South Africa; *T. b. thalassina* (Stresemann, 1914), breeds in Tanzania; and *T. b. velox* (Cretzschmar, 1827), breeds in the Red Sea, Persian Gulf, and Indian Ocean (Higgins & Davies 1996).

Thalasseus bergii cristatus (Stephens)

Crested Tern

Sterna cristata Stephens, 1826: in G. Shaw, *General Zool.* 13(1): 146 – China and many of the south-eastern islands of Asia, restricted to China (*vide* Peters 1934, *Check-list Birds World* 2: 342).

Sterna poliocerca Gould, 1837: *Proc. Zool. Soc. London 1837* (5): 26 – “in terrâ Van Diemen” = Tasmania, Australia.

Sterna rectirostris Peale, 1848: *U.S. Expl. Exped.* 8: 281, pl. 75, fig. 2 – Fiji Islands.

Thalasseus bergii rectirostris (Peale); Mathews & Iredale 1913, *Ibis* 1 (10th series): 243.

Thalasseus bergii cristatus (Stephens); Mathews 1927, *Syst. Avium Australasianarum* 1: 137.

Thalassius [sic] *bergii*; Marples 1946, *New Zealand Bird Notes* 1 (Suppl.): 5. Not *Sterna bergii* Lichtenstein, 1823.

Sterna bergii cristata Stephens; Turbott 1952, *Rec. Auck. Inst. Museum* 4: 189.

Sterna bergii poliocerca Gould; Condon 1975, *Checklist Birds Australia* 1: 156.

Sterna bergii; Checklist Committee 1990, *Checklist Birds N.Z.*: 168. Not *Sterna bergii* Lichtenstein, 1823.

Thalasseus bergii cristatus (Stephens); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 233.

A vagrant to the New Zealand region: Raoul Island, Kermadec Islands / Rangitāhua, 1910; Spirits Bay, 1951; Farewell Spit, 1960; Firth of Thames, Mar. 1974; Napier, Apr. 1981; Wellington Harbour and west coast, 1981–95 (Higgins & Davies 1996, Veitch *et al.* 2004); Kaikoura, May 1985 (Fennell 1986); Manawatu River estuary, Jan. 1995 (Medway 2000a); Washdyke Lagoon, Nov. 1995 (Canterbury; southernmost record; Medway 2000a); near New Plymouth, 1995–97 (Jowett 1997; Medway 1997, 2001a; Medway & Hartley 1998; Hartley 2000; Tennyson & Taylor 2000); Wellington Harbour, 2002 (L. Howell & Esler 2007); Whatipu Beach, Auckland, Jul. 2011; Christchurch, Jan. 2012; (Miskelly *et al.* 2013); Waipu estuary, Northland, Mar.–Dec. 2014 (Miskelly, Crossland *et al.* 2015, 2017); Maketu, Bay of Plenty, Mar. 2015 (Miskelly, Crossland *et al.* 2017); Whanganui River estuary, Oct. 2019 (Miskelly, Crossland *et al.* 2021).

Order PHAETHONTIFORMES: Tropicbirds

The tropicbirds and the related prehistoric family Prophaethontidae are best considered a distinct order (G. Mayr 2003; Fain & Houde 2004; Bourdon *et al.* 2005; Ericson *et al.* 2006; Christidis & Boles 2008; Hackett *et al.* 2008).

Family PHAETHONTIDAE Brandt: Tropicbirds

Phaethontes Brandt, 1840: *Mem. l'Acad. Imp. Sci., St Petersburg* (series 6) 5(2): 239 – Type genus *Phaethon* Linnaeus, 1758.

Genus *Phaethon* Linnaeus

Phaethon Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 134 – Type species (by subsequent designation) *Phaethon aethereus* Linnaeus.

Phaeton Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 219. Unjustified emendation.

Lepturus Reichenbach, 1853: *Avium Syst. Nat. 2*(1): 7 – Type species (by monotypy) *Lepturus edwardsii* Reichenbach = *Phaethon lepturus* Daudin. Junior homonym of *Lepturus* Brisson, 1760.

Phoenicurus Bonaparte, 1857: *Conspectus Gen. Avium 2*: 183 – Type species (by original designation) *Phoenicurus rubricauda* Bonaparte = *Phaethon rubricauda* Boddaert. Junior homonym of *Phoenicurus* T. Forster, 1817.

Scaephaethon Mathews, 1913: *Austral Avian Rec. 2*: 56 – Type species (by original designation) *Phaethon rubricauda westralis* Mathews. Unnecessary *nomen novum* for *Phoenicurus* Bonaparte, 1857.

Leptophaethon Mathews, 1913: *Austral Avian Rec. 2*: 56 – Type species (by original designation) *Phaethon lepturus dorotheae* Mathews. Unnecessary *nomen novum* for *Lepturus* Reichenbach, 1853.

► *Phaethon rubricauda* Boddaert

Red-tailed Tropicbird | Amokura

Phaeton rubricauda Boddaert, 1783: *Tables des Planches Enluminées d'Histoire Naturelle de M. d'Aubenton*: 57 – Mauritius.

Phaeton phoenicuros Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 583. Based on the “Red-tailed Tropic Bird” of Latham 1785, *Gen. Synop. Birds 3*(2): 619 – Indian and Southern Oceans.

Phaethon novae-hollandiae Brandt, 1840: *Mem. l'Acad. Imp. Sci., St Petersburg* (series 6) 5(2): 272 – Lord Howe Island, Australia.

Phaeton phoenicuros Gmelin; Von Pelzeln 1860, *Sitzungsber. K. Akad. Wissen., Math.-Naturwissen. Cl., Wien 41*: 331. Unjustified emendation.

Phaethon rubricauda erubescens Rothschild, 1900: *Avifauna Laysan 3*: 296 – Kermadec Islands. Junior primary homonym of *Phaeton erubescens* G.R. Gray, 1844.

Phaethon rubricauda Boddaert; Hutton 1904, *Index Faunae N.Z.*: 33.

Scaephaethon rubricauda novaehollandiae (Brandt); Mathews 1913, *List Birds Australia*: 100.

Phaethon rubricauda novaehollandiae Brandt; Mathews & Iredale 1913, *Ibis 1* (10th series): 418.

Scaephaethon rubricauda roseotincta Mathews, 1926: *Bull. Brit. Ornith. Club 46*: 60. Unnecessary *nomen novum* for *Phaethon rubricauda erubescens* Rothschild, 1900.

Phaethon rubricaudus Boddaert; Stidolph 1927, *Emu 26*: 215. Unjustified emendation.

Phaethon rubricauda roseotincta (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 28.

Phaethon rubricauda Boddaert; Checklist Committee 1990, *Checklist Birds N.Z.*: 76.

Breeds on islands of the tropical Indian and Pacific Oceans, including Lord Howe, Norfolk, and Kermadec Islands / Rangitāhua. Several subspecies described but none are recognised here, following Tarburton (1989). About 33 records from mainland New Zealand; mainly from the north of the North Island, particularly about Manawatāwhi / Three Kings Islands, where it has been seen ashore (Checklist Committee 1990; Marchant & Higgins 1990; Tennyson & Eller 1991; Durey 1992; Powlesland & Powlesland 1993; G. Taylor 2004; Miskelly, Crossland *et al.* 2017). Rarely further south – west of Taranaki, Feb. 1951 and Apr. 1961; Akaroa, 1955–58 (Canterbury; the southernmost record); south of Whanganui, Jan. 1976; Paekakariki, Jul. 1996. Also rarely inland – Taupo, Feb. 1936 and May 1978; near Lake Okataina, Apr. 1976; near Pureora, Apr. 1996 (Bull *et al.* 1985; Marchant & Higgins 1990; Tarburton 1993; Powlesland 1996; Tennyson & Lock 1998).

► *Phaethon lepturus* Daudin

White-tailed Tropicbird

Phaethon lepturus Daudin, 1802: in Buffon, *Histoire Naturelle, Quadrup. 14*: 319 – Mauritius, Indian Ocean.

Six subspecies breeding on islands as follows: tropical Indian Ocean, *Ph. l. lepturus* (several islands), *Ph. l. fulvus* Brandt, 1838 (Christmas Island, north Indian Ocean); Pacific Ocean, *Ph. l. dorotheae*; Atlantic Ocean, *Ph. l. ascensionis* (Mathews, 1915); Europa Island, Mozambique Channel, *Ph. l. europae* Le Corre & Jouventin, 1999; Caribbean Sea, *Ph. l. catesbyi* Brandt, 1838 (Dorst & Mouglin 1979; Le Corre & Jouventin 1999; Dickinson 2003). The subspecies are considered poorly defined (del Hoyo *et al.* 1992) with no races recognised by some authors (e.g. Marchant & Higgins 1990).

Phaethon lepturus dorotheae Mathews

White-tailed Tropicbird

Phaethon lepturus dorotheae Mathews, 1913: *Austral Avian Rec. 2*: 7 – Queensland, Australia.

Leptophaethon lepturus dorotheae (Mathews); Mathews 1913, *List Birds Australia*: 101.

Phaethon lepturus dorotheae Mathews; Checklist Committee 1980, *Notornis (Suppl.) 27*: 12.

Phaethon lepturus; J. Moore 1999, *Notornis 46*: 357. Not *Phaethon lepturus* Daudin, 1802.

Breeds on islands in the Pacific but not in the New Zealand region. Straggles to northern New Zealand (see Marchant & Higgins 1990): Bay of Plenty, Jan. 1973 (S. Brown 1973); near Okato, Taranaki, Feb. 1979 (the southernmost record);

Dargaville, Feb. 1979; Muriwai, Jun. 1979; Ninety Mile Beach, Mar. and May 1983; Omamari Beach, Apr. 1983; Motukawanui Island, Cavalli Group, Dec. 1985 (AIM LB1476); Waikuku Beach and Great Exhibition Bay, Jan. 1986; Ruakaka, Jan. 1989 (Gordon 1989; Guest & Bell 1989; Checklist Committee 1990); Whangarei, Mar. 1997 (NMNZ 25640); Tokerau Beach, Jan. 1999 (G. Taylor 2004); Karioitahi Beach, Oct. 2000 (AIM LB9487); Ninety Mile Beach, Apr. 2006 (L. Howell & Esler 2007); Tawharanui, North Auckland, Feb. 2011; Tauranga Harbour, Jan. 2012 (Miskelly *et al.* 2013).

Order SPHENISCIFORMES: Penguins

A single family is recognised for all living penguin species (Clarke *et al.* 2003; Ksepka *et al.* 2006, 2012; Cracraft 2013).

Family SPHENISCIDAE Bonaparte: Penguins

Spheniscidae Bonaparte, 1831: *Giornale Arcadico di Scienze, Lettere ed Arti* 49: 62 – Type genus *Spheniscus* Brisson, 1760.

The arrangement of genera follows the most widely used taxonomic sequence (e.g. Peters 1931; Marples 1946a; Falla & Mougín 1979; P. Harrison 1983; Marchant & Higgins 1990; Sibley & Monroe 1990; R. Howard & Moore 1991; del Hoyo *et al.* 1992; Christidis & Boles 1994). The generic relationships suggested by these lists has been strongly supported by many researchers (e.g. O'Hara 1989; A. Baker *et al.* 2001, 2006; L. Davis & Renner 2003; Giannini & Bertelli 2004; Bertelli & Giannini 2005; Ksepka *et al.* 2006; Walsh & Suárez 2006), including the finding that *Eudyptes* and *Megadyptes* are sister taxa. The arrangement of species within genera follows L. Davis & Renner (2003).

Genus *Aptenodytes* J.F. Miller

Aptenodytes J.F. Miller, 1778: *Icones Animalium* 4: pl. 23 – Type species (by monotypy) *Aptenodytes patagonicus* J.F. Miller.

Apterodita Scopoli, 1786: *Delic. Flor. Faun. insubr.* 2: 91. Unnecessary *nomen novum* for *Aptenodytes* J.F. Miller, 1778.

Pinguinaria Shaw, 1793: *Mus. Leverianum*: 144, pl. 35 – Type species (by monotypy) *Aptenodytes patachonica* J.R. Forster = *Aptenodytes patagonicus* J.F. Miller.

Aptenodites Lesson, 1837: *Compléments Oeuvres Buffon* 9: 542. Misspelling.

► *Aptenodytes forsteri* G.R. Gray

Emperor Penguin

Aptenodytes forsteri G.R. Gray, 1844: *Ann. Mag. Nat. Hist., London* 13: 315 – no locality = Antarctic seas (*vide* G.R. Gray 1844, *List Birds Brit. Mus.* 3: 156).

Aptenodytes excelsior Mathews & Iredale, 1935: *Bull. Brit. Ornith. Club* 55: 101 – Cape Royds, McMurdo Bay, Antarctica.

Aptenodytes forsteri G.R. Gray; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 15.

Circumpolar winter breeder around the coast and islands of Antarctica, mainly on pack-ice (Falla & Mougín 1979; Marchant & Higgins 1990). At least six colonies known in the Ross Sea area, containing about 40,000 pairs (P. Harper *et al.* 1984; G. Wilson & Taylor 1984). Seldom ranges north of the pack-ice (Marchant & Higgins 1990). Two New Zealand records: Oreti Beach, Southland, Apr. 1967 (L. Henderson 1968), and Pekapeka Beach, Kapiti coast, Jun. 2011 (Miskelly, Simpson *et al.* 2012). Two records at Macquarie Island: Feb. 1997 and Feb. 1998 (Palliser 2004, 2005).

► *Aptenodytes patagonicus* J.F. Miller

King Penguin | Tokoraki

Aptenodytes patagonica J.F. Miller, 1778: *Icones Animalium* 4: pl. 23 – no locality = South Georgia (*vide* Mathews 1911, *Birds Australia* 1: 274).

Aptenodytes patachonica J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 134, pl. 2 – Straits of Magellan, Falkland Islands, South Georgia and New Guinea.

Apterodita (longirostris) Scopoli, 1786: *Delic. Flor. Faun. insubr.* 2: 91 – “New Guinea”, error for Tierra del Fuego (*vide* Falla & Mougín 1979, *in* Peters, *Check-list Birds World 1* (2nd edition): 122).

Aptenodytes patagonica J.R. Forster, 1844: *in* M.H.C. Lichtenstein, *Descrip. Animalium*: 347 – Falkland Islands, South Georgia and New Guinea. Junior primary homonym and junior synonym of *Aptenodytes patagonica* J.F. Miller, 1778.

Aptenodytes Pennantii G.R. Gray, 1844: *Ann. Mag. Nat. Hist., London* 13: 315. Based on “The Patagonian Penguin” of Pennant 1768, *Phil. Trans. Roy. Soc. London* 58: 91, pl. 5 – Falkland Islands.

Aptenodytes Pennanti G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 75. Unjustified emendation.

Aptenodytes pennantii G.R. Gray; Hutton 1871, *Cat. Birds N.Z.*: 52.

Aptenodytes pennanti G.R. Gray; Scott 1883, *Trans. Proc. N.Z. Inst.* 25: 491. Unjustified emendation.

Aptenodytes longirostris (Scopoli); Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 306.

Aptenodytes patagonica halli Mathews, 1911: *Birds Australia* 1: 272 – Macquarie Island.

Aptenodytes patagonicus J.F. Miller; Checklist Committee 1953, *Checklist N.Z. Birds*: 14. Emendation.

Aptenodytes patagonicus patagonicus J.F. Miller; Falla & Mougín 1979, *in* Peters, *Check-list Birds World 1* (2nd edition): 122.

Aptenodytes patagonicus halli Mathews; Falla & Mougín 1979, *in* Peters, *Check-list Birds World 1* (2nd edition): 123.

Mainly in the subantarctic zone, breeding on many islands, including Macquarie and Heard Islands; straggling south to Antarctica and north to South America, South Africa, Australia, and New Zealand (Conroy & White 1973; Barrat 1976; Marchant & Higgins 1990). Occasionally reaches Campbell Island / Motu Ihupuku (Bailey & Sorensen 1962; Kerr 1976: 88; D. Thompson 2006), nine times to the Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), three times to Antipodes Island (Warham & Bell 1979; Miskelly *et al.* 2013), twice to Snares Islands / Tini Heke (Miskelly *et al.* 2001a) and once to Chatham Islands (May 2006; Miskelly *et al.* 2006). A few New Zealand mainland records: possibly off Stewart Island / Rakiura before 1862 (Ellman 1861); Moeraki, Otago, 1878 (Buller 1893); Stewart Island (Buller 1882, 1887–88); Auckland Harbour, 1924 (Stidolph 1927); Broad Bay, Stewart Island, Feb. 1983 (Fennell 1983a); Kaikoura and Timaru, Oct. 1989 (O'Donnell & West 1991); Barrytown, Jan. 2005 (Miskelly, Crossland *et al.* 2019); Porpoise Bay, Catlins, Mar. 2012 (Miskelly *et al.* 2013); Doughboy Bay, Stewart Island, Mar. 2015 (Miskelly, Crossland *et al.* 2017); Taieri Mouth, Otago, Dec. 2017 (Miskelly, Crossland *et al.* 2019). Breeding has not been recorded on Stewart Island /

Rakiura, Campbell Island / Motu Ihupuku, or Auckland Islands / Maukahuka (*contra* Milne-Edwards 1880 and Conroy & White 1973). A few midden remains on Chatham Island (Scarlett 1976c), and a mandible on Enderby Island, Auckland Islands (Tennyson 2020a).

Genus *Pygoscelis* Wagler

Pygoscelis Wagler, 1832: *Isis von Oken*, Heft 2: col. 281 – Type species (by monotypy) *Aptenodytes papua* J.R. Forster = *Pygoscelis papua* (J.R. Forster).

Dasyramphus Pucheran, 1853: in Dumont d'Urville, *Voyage Pôle Sud, Zoologie* 3: 154 – Type species (by monotypy) *Catarrhactes adeliae* Hombron & Jacquinot = *Pygoscelis adeliae* (Hombron & Jacquinot).

Dasycelis Mathews, 1934: *Bull. Brit. Ornith. Club* 55: 74 – Type species (by original designation) *Aptenodytes antarctica* J.R. Forster = *Pygoscelis antarctica* (J.R. Forster).

Pucheramphus Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 113 – Type species (by original designation) *Catarrhactes adeliae* Hombron & Jacquinot = *Pygoscelis adeliae* (Hombron & Jacquinot).

► *Pygoscelis adeliae* (Hombron & Jacquinot)

Adelie Penguin

Catarrhactes Adeliae Hombron & Jacquinot, 1841: *Ann. Sci. Nat., Zool. Paris, 2nd series* 16: 320 – Adélie Land, Antarctica.

Eudyptes adeliae (Hombron & Jacquinot); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): pl. 28.

Dasyramphus adeliae (Hombron & Jacquinot); Mathews 1929, *Ibis* 5 (12th series): 699.

Pygoscelis adeliae (Hombron & Jacquinot); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 16.

Circumpolar, breeding on ice-free coasts and islands of Antarctica and on South Shetland, South Orkney, South Sandwich, and Bouvetøya Islands (Marchant & Higgins 1990; Ainley 2002). About 750,000 pairs (about one-third of the world population) breed in the Ross Sea region (G. Wilson & Taylor 1984; Ainley 2002). Holocene remains recorded in the Ross Sea region (Lambert *et al.* 2002). Rarely straggles north, reaching Macquarie Island twice: Nov. 1950 and Feb. 1964 (Checklist Committee 1970). Has reached mainland New Zealand twice: one dead near Long Point, Marlborough, Dec. 1962, (Kennington 1963); and one live at Kaikoura, Dec. 1992–Jan. 1993 (Cossee & Mills 1993; Medway 2000a). Two live birds reported in late 2021 had not been assessed by the Birds New Zealand Records Appraisal Committee in time to be included in this edition of the Checklist (Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).

► *Pygoscelis papua* (J.R. Forster)

Gentoo Penguin

Aptenodytes Papua J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 134, pl. 3 – Falkland Islands.

Aptenodytes Papua J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 347 – New Guinea and Falkland Islands. Junior primary homonym and junior synonym of *Aptenodytes Papua* J.R. Forster, 1781.

Pygoscelis papua (J.R. Forster); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): pl. 25.

Eudyptes papua (J.R. Forster); Cassin 1858, *U.S. Expl. Exped. Ornithology* 8: 350.

We recognise four subspecies, based on Pertierra *et al.* (2020) and Tyler *et al.* (2020), and following F. Gill *et al.* (2021): northern gentoo penguin *P. p. papua*, breeding on the Falkland Islands and Tierra del Fuego; southern gentoo penguin *P. p. ellsworthi* Murphy, 1947, breeding on the Antarctic Peninsula, South Sandwich Islands, South Shetland Islands, and South Orkney Islands; South Georgia gentoo penguin *P. p. poncetii* Tyler, Bonfitto, Clucas, Reddy & Younger, 2020, breeding on South Georgia; and eastern gentoo penguin *P. p. taeniata*, breeding on Marion, Prince Edward, Crozet, Kerguelen, Heard, and Macquarie Islands. Those that have straggled to New Zealand shores are presumed to have been of the eastern subspecies.

Pygoscelis papua taeniata (Peale)

Eastern Gentoo Penguin

Aptenodytes taeniata Peale, 1848: *U.S. Expl. Exped.* 8: 264, 335 – Macquarie Island.

Pygoscelis taeniala (Peale); Scott 1883, *Trans. Proc. N.Z. Inst.* 25: 491. Unjustified emendation.

Pygoscelis taeniatus (Peale); Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 304. Unjustified emendation.

Pygoscelis papua taeniata (Peale); Mathews & Iredale 1913, *Ibis* 1 (10th series): 219.

Pygoscelis taeniata (Peale); Falla 1937, *BANZARE Reports Ser. B*, 2: 19.

Subantarctic waters of the Indian and Pacific sectors; breeding at Marion, Prince Edward, Crozet, Kerguelen, Heard, and Macquarie Islands (Marchant & Higgins 1990; Pertierra *et al.* 2020; Tyler *et al.* 2020). Straggles north: Campbell Island / Motu Ihupuku (Dec. 1964–Mar. 1965, Aug. 1965 and Dec. 1985; Kinsky 1969; Marchant & Higgins 1990); Otago: Sep. 1970, Oct. 1974, and Oct. 2011 (Edgar 1972a; Darby & Wright 1973; T. Jackson 1975; Miskelly *et al.* 2013); Bluff, Nov. 1970 (Edgar 1972a); Banks Peninsula: Feb. 1976 and Dec. 1993 (Checklist Committee 1990; Medway 2000a); Antipodes Island: Nov. 1978, Nov. 1995, and Dec. 2002 (Tennyson *et al.* 2002; Medway 2003a); Snares Islands / Tini Heke, Dec. 1985 (Miskelly *et al.* 2001a).

► ***Pygoscelis antarcticus*** (J.R. Forster)**Chinstrap Penguin**

Aptenodytes antarctica J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 134, pl. 4 – South Shetland Islands.

Eudyptes antarctica (J.R. Forster); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): pl. 26.

Pygoscelis antarctica (J.R. Forster); Oliver 1930, *New Zealand Birds*, 1st edition: 66.

Pygoscelis antarcticus (J.R. Forster); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 170.

We follow David & Gosselin (2002b) and Dickinson & Remsen (2013) in regarding *Pygoscelis* as masculine, hence the species name should be *Pygoscelis antarcticus* (*contra* Checklist Committee 2010). Circumpolar, breeding on the Antarctic Peninsula, on islands off Antarctica, at the South Shetland, South Orkney, and South Sandwich Islands, at South Georgia, and on Bouvetøya Island; possibly on Heard Island and Isla Hornos (Marchant & Higgins 1990). Only known colony near New Zealand is on Chinstrap Islet, Balleny Islands (13+ pairs; C. Robertson *et al.* 1980). Stragglers reach other parts of the Ross Sea (G. Wilson & Taylor 1984; Spurr 1985; Spurr *et al.* 1990). Many records from Macquarie Island (Marchant & Higgins 1990; Palliser 2004). Only five records from New Zealand: Antipodes Island, Nov. 1978 (Tennyson *et al.* 2002); Invercargill, Dec. 1980 (Medway 2000a); Campbell Island / Motu Ihupuku, Mar. 1984 (Fennell 1986); Otago coast, Nov. 1992 (Medway 2000a); and Kaikoura, Nov. 2002 (Saville 2003).

Genus *Eudyptes* Vieillot

Eudyptes Vieillot, 1816 (Apr.): *Analyse Nouv. Ornith. Elem.*: 67, 70 – Type species (by subsequent designation) *Aptenodytes chrysocome* J.R. Forster = *Eudyptes chrysocome* (J.R. Forster).

Catarrhactes Cuvier, 1816 (Dec.): *Règne Anim.* 1: 513. Junior homonym of *Catarrhactes* Herman, 1783.

Chrysocoma Stephens, 1826: in Shaw, *General Zool.* 13(1): 57 – Type species (by tautonymy) *Aptenodytes chrysocome* J.R. Forster = *Eudyptes chrysocome* (J.R. Forster).

Catarhactes Brandt, 1837: *Bull. l'Acad. Imp. Sci., St Petersburg* 2: 314. Unjustified emendation.

Cataractes Le Maout, 1855: *Hist. Nat. Oiseaux*: 419. Unjustified emendation.

Penguinus Mathews, 1911: *Birds Australia* 1(5): 276 – Type species (by original designation) *Aptenodytes chrysocome* J.R. Forster = *Eudyptes chrysocome* (J.R. Forster). Junior homonym of *Penguinus* Brünnich, 1771.

Catadyptes Mathews, 1934: *Bull. Brit. Ornith. Club* 55: 74 – Type species (by original designation) *Catarrhactes chrysolophus* Brandt = *Eudyptes chrysolophus* (Brandt).

Members of the genus *Eudyptes* are known as “crested penguins”. The genera *Catarractes* Brisson, 1760 and *Penguinus* Brünnich, 1771 have been used for species of crested penguins, but we regard them as *nomina dubia* following Mathews & Iredale (1913: 219). The identity of the species referred to as *Eudyptes vittata* Finsch, 1875a is uncertain. *Contra* Ogilvie-Grant (1905) and Falla & Mougín (1979: 129), the name was based on a single specimen. Finsch's (1875a) description of the starting point and form of the superciliary stripe is consistent with an immature Fiordland crested penguin (*E. pachyrhynchus*); however, the description of the bill is not entirely consistent with this species. Unless the holotype can be located and identified, we recommend that *E. vittata* be regarded as a *nomen dubium*. Rockhopper penguins rarely reach mainland New Zealand – mainly the Otago coast (e.g. Richdale 1940: 203, 1957: 1, 176; Checklist Committee 1953; Oliver 1955; Warham 1985; Ahlers 1988; Marchant & Higgins 1990; Hocken 2001; CM AV853) – but the specific status of most of these birds has not been determined.

► ***Eudyptes chrysocome*** (J.R. Forster)**Western Rockhopper Penguin**

Aptenodytes chrysocome J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 133, pl. 1 – Tasmania and Falkland Islands, restricted to Kidney Island, Berkeley Sound, East Falkland Island (*vide* Carins 1974, *Emu* 74: 56).

Aptenodytes crestata J.F. Miller, 1784: *Icones Animalium* 9: pl. 49 – Falkland Islands.

“*aptenodytes* [sic] *chrysocoma*” Deleuse, 1823: *Hist. Desc. Mus. Roy. Hist. Nat.*: 486. Unjustified emendation.

Chrysocoma saltator Stephens, 1826: in Shaw, *General Zool.* 13(1): 58, pl. 8 – Falkland Islands.

Cataractes chrysocoma (J.R. Forster); Le Maout, 1855: *Hist. Nat. Oiseaux*: 420. Unjustified emendation.

Eudyptes saltator (Stephens); Bowdler Sharpe 1879, *Phil. Trans. Roy. Soc. London* 168: 160, pl. 8, fig. 1.

Eudyptes cristatus (J.F. Miller); Iredale & Cayley 1925, *Emu* 25: 4. Unjustified emendation.

Eudyptes chrysocome chrysocome (J.R. Forster); Oliver 1930, *New Zealand Birds*, 1st edition: 71.

Eudyptes crestatus crestatus (J.F. Miller); Checklist Committee 1953, *Checklist N.Z. Birds*: 15. In part.

Eudyptes crestatus (J.F. Miller); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 17. In part.

Eudyptes chrysocome chrysocome (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 71.

Breeds on islands off Cape Horn, Isla Solitario (Chile), and the Falkland Islands (Falla & Mougín 1979; G. Clark *et al.* 1992; Schiavini 2000). At least two visited, or were resident at, Snares Islands / Tini Heke in 1985–2000 (Tennyson & Miskelly 1989; Miskelly *et al.* 2001a). One at Victory Beach, Otago Peninsula, Feb. 2019 (Miskelly, Crossland *et al.* 2021).

► ***Eudyptes filholi*** Hutton

Eastern Rockhopper Penguin | Tawaki Piki Toka

Eudyptes filholi Hutton, 1879: *Proc. Linn. Soc. New South Wales* 3: 334 – Campbell Island.

Eudyptes chrysocome; Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 290. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Catarrhactes chrysocome; Hutton 1904, *Index Faunae N.Z.*: 36. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Eudyptes chrysocome chrysocome; Mathews & Iredale 1913, *Ibis* 1 (10th series): 220. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Eudyptes chrysocome filholi Hutton; Mathews & Iredale 1913, *Ibis* 1 (10th series): 221.

Eudyptes crestatus filholi Hutton; Peters 1931, *Check-list Birds World* 1: 31.

Eudyptes crestatus crestatus (J.F. Miller); Checklist Committee 1953, *Checklist N.Z. Birds*: 15. In part.

Eudyptes crestatus (J.F. Miller); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 17. In part.

Eudyptes chrysocome filholli Hutton; Marchant & Higgins 1990, *HANZAB* 1: 240. Misspelling.

Eudyptes filholi Hutton; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 129, 176.

Breeds at Heard, Kerguelen, Crozet, Marion, Prince Edward, and Macquarie Islands, and in the New Zealand region on Campbell / Motu Ihupuku, Auckland / Maukahuka, and Antipodes Islands (Falla & Mougín 1979; C. Robertson & van Tets 1982; Marchant & Higgins 1990). Numbers have declined markedly at the Auckland Islands (W. Cooper 1992), Campbell Island / Motu Ihupuku (Cunningham & Moors 1994), and Antipodes Islands (Tennyson 1996b) in recent decades. Frequent visitor to Snares Islands / Tini Heke (Miskelly *et al.* 2001a); one on the Chatham Islands Feb.–Mar. 1988 (Tennyson 1994). One at Cape Palliser, Wairarapa, Jan. 2017 (Miskelly, Crossland *et al.* 2019). Recognised as a full species following Holdaway *et al.* (2001) and J.C. Banks *et al.* (2006). Holocene bones are common on Enderby Island, Auckland Islands (Tennyson 2020a). Some authorities treat *filholi* as a subspecies of *E. chrysocome* (e.g. Dickinson & Remsen 2013; Mays *et al.* 2019).

► ***Eudyptes moseleyi*** Mathews & Iredale

Northern Rockhopper Penguin

Eudyptes serresianus moseleyi Mathews & Iredale, 1921: *Man. Birds of Australia* 1: 11 – Inaccessible Island, Tristan da Cunha group.

Eudyptes chrysocome moseleyi Mathews & Iredale; Checklist Committee 1980, *Notornis* 27 (Suppl.): 5.

Eudyptes moseleyi Mathews & Iredale; Jouventin 1982, *Journ. Comparat. Ethology, Suppl.* 24: 139.

Eudyptes chrysocome moseleyii Mathews & Iredale; Marchant & Higgins 1990, *HANZAB* 1: 240. Unjustified emendation.

Eudyptes mosleyi; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 82. Misspelling.

Breeds in the subtropical and low subantarctic zones at Tristan da Cunha Group (Tristan, Inaccessible, Middle, and Nightingale Islands) and Gough Island in the South Atlantic Ocean, and on St Paul and Amsterdam Islands in the Indian Ocean (Falla & Mougín 1979; Richardson 1984). Ranges to southern and particularly south-west Australia (Marchant & Higgins 1990). Three to five New Zealand records, all of single birds: Rangatira Island, Chatham Islands, Aug. 1968 to Nov. 1970; (probable) Gisborne, Dec. 1976; Wellington, Jan. 1984; one or two at the Chatham Islands, 1993–2004 (Moors & Merton 1984; Marchant & Higgins 1990; S. King & Robertson 1999; Miskelly & Bell 2004). Recognised as a full species following Jouventin (1982), Woehler (1995), J.C. Banks *et al.* (2006), and Jouventin *et al.* (2006).

We follow Shirihai (2002), Dickinson & Remsen (2013), and F. Gill *et al.* (2021) in using northern rockhopper penguin as the vernacular name for this species (cf. Moseley's rockhopper penguin *sensu* Checklist Committee 2010).

► ***Eudyptes pachyrhynchus*** G.R. Gray

Fiordland Crested Penguin | Tawaki

Eudyptes pachyrhynchus G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(8): 17 – Waikouaiti, Otago.

Eudyptes chrysocomus; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 344, pl. facing page 344, fig. on left. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Eudyptes chrysocoma; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* –1 (Appendix): 35. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Aptenodytes pachyrhynchus G.R. Gray [sic]; Anon. 1870, *Cat. Colonial Mus.*: 75. Unjustified emendation.

Eudyptes pachyrhynchus G.R. Gray; Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 287. In part.

Catarrhactes pachyrhynchus (G.R. Gray); Hutton 1904, *Index Faunae N.Z.*: 36.

Eudyptes chrysocome pachyrhynchus G.R. Gray; Mathews & Iredale 1913, *Ibis* 1 (10th series): 220.

Eudyptes pachyrhynchus pachyrhynchus G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 15.

Eudyptes pachyrhynchus G.R. Gray; Checklist Committee 1990, *Checklist Birds N.Z.*: 73.

Nests on headlands, islets and around the entrances to fiords in Fiordland and South Westland, from near Bruce Bay southwards, including the Open Bay Islands (Marchant & Higgins 1990; I. McLean *et al.* 1997; Long 2017). A few nest on Stewart Island / Rakiura and its offshore islands, especially Codfish / Whenua Hou and Solander (Hautere) Islands (Studholme *et al.* 1994; Long & Litchwark 2021). Attempted breeding on islet in Palliser Bay (North Island) in 1953 and 1954 – also near Abut Head (Westland) and possibly on Banks Peninsula – but no recent reports of breeding this far north (Marchant & Higgins 1990). Immatures, and occasional older birds, are common on Snares Islands / Tini Heke Nov.–Mar. (Miskelly *et al.* 2001a). Stragglers are found around all South Island coasts and rarely as far north as Northland (Marchant & Higgins 1990; Shaw 1994). Straggles to Campbell / Motu Ihupuku, Auckland / Maukahuka, and Macquarie Islands,

southern Australia and possibly even to the Falkland Islands (Marchant & Higgins 1990; Miskelly & Bell 2004; Miskelly, Elliott *et al.* 2020). Late Pleistocene remains (e.g. Worthy & Grant-Mackie 2003) and midden and Holocene bones are known from the South Island, but North Island records need reevaluation following the description and naming of *E. warhami* and the reidentification of several North Island “*Eudyptes*” bones as *Megadyptes antipodes waitaha* (see Worthy 1997e; Rawlence, Tennyson *et al.* 2019; and T. Cole, Ksepka *et al.* 2019).

► ***Eudyptes robustus* Oliver**

Snares Crested Penguin | Pokotiwha

Eudyptes atrata Hutton, 1875: in Finsch, *Ibis* 5 (3rd series): 114 – “The Snares”. Suppressed and invalid (*vide* ICZN 1976, Opinion 1056. *Bull. Zool. Nomenclature* 33(1): 16).

Eudyptes pachyrhynchus; Finsch 1888, *Ibis* 6 (5th series): 309. Not *Eudyptes pachyrhynchus* G.R. Gray, 1845.

Eudyptes pachyrhynchus; Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 287. In part.

Eudyptes atratus Hutton; Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 296. Emendation.

Catarrhactes pachyrhynchus; Buller 1905, *Suppl. Birds N.Z. 1*: 86, 89. In part.

Eudyptes pachyrhynchus atratus Hutton; Falla 1935, *Rec. Auck. Inst. Museum* 1: 324.

Eudyptes robustus Oliver, 1953: *Emu* 53: 187 – Snares Islands. Name placed in the *Official List of Specific Names in Zoology* (*vide* ICZN 1976, Opinion 1056. *Bull. Zool. Nomenclature* 33(1): 16).

Eudyptes atratus; Warham 1972, *Ardea* 60: 147.

Eudyptes robustus Oliver; Checklist Committee 1980, *Notornis* (Suppl.) 27: 5.

Breeds only on the Snares Islands / Tini Heke (on Main and Broughton Islands and in small numbers on Toru and Rima Islets of the Western Chain; Miskelly *et al.* 2001a). Total population 28,800 breeding pairs in 2000 (Amey *et al.* 2001), and considered stable following another count in 2008 (D. Houston & Hiscock 2013). Uncommon visitor to beaches around South Island and Stewart Island / Rakiura (Marchant & Higgins 1990). A rare straggler as far north as south Australia and Tasmania (Marchant & Higgins 1990; Palliser 2006) and Napier (Medway 2002f); and to the Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), Antipodes Islands (Tennyson *et al.* 2002), Campbell Island / Motu Ihupuku, Macquarie Island (Marchant & Higgins 1990), Chatham Islands (Miskelly & Bell 2004; Scofield 2005a; Miskelly *et al.* 2006), and Falkland Islands (Lamey 1990). Tentatively identified from Holocene dune deposits on Enderby Island, Auckland Islands / Maukahuka (Tennyson 2020a).

► ***Eudyptes sclateri* Buller**

Erect-crested Penguin | Tawaki Nana Hi

Aptenodytes papua; Vieillot 1834, *Gal. des Oiseaux* 2: 246, pl. 299. Not *Aptenodytes papua* J.R. Forster, 1781.

Eudyptes chrysocome; Reischek 1888, *Trans. Proc. N.Z. Inst.* 21: 386. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Eudyptes chrysocome; Sclater 1888, *Proc. Zool. Soc. London* 1888 (19): 265. Not *Aptenodytes chrysocome* J.R. Forster, 1781.

Eudyptes sclateri Buller, 1888 (Dec.): *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 289 – Auckland Islands. Name placed in the *Official List of Specific Names in Zoology* (*vide* ICZN 1976, Opinion 1056. *Bull. Zool. Nomenclature* 33(1): 16).

Catarrhactes sclateri Buller; Buller 1905, *Suppl. Birds N.Z. 1*: 88.

Eudyptes chrysocome sclateri Buller; Mathews & Iredale 1913, *Ibis* 1 (10th series): 220.

Eudyptes vittata; Mathews 1935, *Ibis* 5 (13th series): 886. Not *Eudyptes vittata* Finsch, 1875a = *nomen dubium*.

Eudyptes pachyrhynchus vittata; Mathews 1935, *Ibis* 5 (13th series): 887. Not *Eudyptes vittata* Finsch, 1875a = *nomen dubium*.

Eudyptes pachyrhynchus sclateri Buller; Checklist Committee 1953, *Checklist N.Z. Birds*: 15.

Eudyptes sclateri Buller; Checklist Committee 1990, *Checklist Birds N.Z.*: 74.

Breeds in large numbers on the Antipodes and Bounty Islands, and in the past in small numbers at Campbell Island / Motu Ihupuku and possibly on Disappointment Island (Auckland Islands / Maukahuka; Marchant & Higgins 1990; Miskelly, Elliott *et al.* 2020). Attempted to breed on Otago Peninsula, 1938–47 (Richdale 1950). Straggles to coasts of North, South, and Stewart / Rakiura Islands (Marchant & Higgins 1990). A regular visitor to Snares Islands / Tini Heke and Chatham Islands Nov.–Mar. (Miskelly *et al.* 2001a, 2006; Miskelly & Bell 2004) and rarely to Macquarie Island (Marchant & Higgins 1990). Occasionally reaches Tasmania and southern Australia (Marchant & Higgins 1990) and the Indian Ocean (Speedie 1992). One that reached the Falkland Islands was present 1961–66; in at least one season it tended eggs with a western rockhopper penguin, but no chicks were raised (Napier 1968); another was seen there *c.* 1999 (Gurunathan 2004). No Holocene or midden records reported from mainland New Zealand sites are verifiable (Worthy 1997e). The abundant Chatham Island Holocene remains and midden material previously referred to this species (Checklist Committee 1990; L. Davis & Renner 2003), represent three taxa, including the erect-crested penguin (T. Cole, Ksepka *et al.* 2019). Tentatively identified from Holocene dune deposits on Enderby Island, Auckland / Maukahuka Islands (Tennyson 2020a).

► †***Eudyptes warhami* Cole, Tennyson, Ksepka & Thomas**

Chatham Island Crested Penguin

Eudyptes ?n. sp. Tennyson & Millener, 1994: *Notornis* 41 (supp.): 169.

Eudyptes, species undescribed Millener 1999: *Smithsonian Contrib. Paleobiology* 89: 97.

Eudyptes chathamensis Thiebot, Cherel, Crawford, Makhado, Trathan, Pinaud & Bost, 2013: *PLOS One* 8(8) e71429: 2. *Nomen nudum*.

Eudyptes warhami Cole, Tennyson, Ksepka & Thomas, (*in* Cole, Ksepka, Mitchell, Tennyson, Thomas, Pan, Zhang, Rawlence, Wood, Bover, Bouzat, Cooper, Fiddaman, Hart, Miller, Ryan, Shepherd, Wilmshurst & Waters), 2019: *Mol. Biol. Evol.* 36: 787 – Tahatika Creek, Chatham Island.

This species is known only from Holocene remains on Chatham and Mangere Islands, with referred specimens from the east coast of mainland New Zealand (Tennyson & Millener 1994; Millener 1999; T. Cole, Ksepka *et al.* 2019).

► ***Eudyptes chrysolophus*** (Brandt)

Macaroni Penguin

Breeds at islands near the Antarctic Convergence around the Southern Ocean. Vagrant in New Zealand. We follow Checklist Committee (1953), T. Cole, Dutoit *et al.* (2019), T. Cole, Ksepka *et al.* (2019), and Frugone *et al.* (2019) in regarding *Eudyptes schlegeli* as a subspecies of *Eudyptes chrysolophus*.

Eudyptes chrysolophus chrysolophus (Brandt)

Macaroni Penguin

Catarrhactes chrysolophus Brandt, 1837: *Bull. l'Acad. Imp. Sci., St Petersburg* 2: col. 315 – Falkland Islands.

Eudyptes diadematus Schlegel, 1876 “(Cat. No.2)”: in Finsch, *Trans. Proc. N.Z. Inst.* 8: 203 – locality uncertain, “said to be from New Zealand”.

Eudyptes chrysolophus (Brandt); Hutton 1879, *Proc. Linn. Soc. New South Wales* 3: 335. Unjustified emendation.

Eudyptes chrysolophus (Brandt); Buller 1888 (Dec.), *History of the Birds of N.Z.*, 2nd edition 2 (part 13): 297.

Catarrhactes chrysolophus Brandt; Buller 1905, *Suppl. Birds N.Z.* 1: 94.

Eudyptes chrysolophus chrysolophus (Brandt); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 17.

Main breeding colonies on islands within a few degrees of the Antarctic Convergence in the South Atlantic and South Indian Oceans: South Shetland, South Orkney, South Sandwich, Elephant, South Georgia, Heard, McDonald, Falkland, Bouvetøya, Prince Edward, Marion, Crozet, and Kerguelen Islands, and in Chile (Marchant & Higgins 1990; G. Clark *et al.* 1992). Previously thought to straggle to the Ross Dependency (Kinsky 1969); however, records from there are now considered to be royal penguins (Shepherd, Miskelly *et al.* 2021). Rarely reaches the New Zealand subantarctic: Campbell Island / Motu Ihupuku 1967–68 and Jan. 1993, (Kinsky 1969; Miskelly *et al.* 2013), and Snares Islands / Tini Heke 1969–74, and again in Mar. 2015 and 2019 (Miskelly *et al.* 2001a; Miskelly, Crossland *et al.* 2017, 2021).

Eudyptes chrysolophus schlegeli Finsch

Royal Penguin

Eudyptes schlegeli Finsch, 1876: *Trans. Proc. N.Z. Inst.* 8: 204 – Macquarie Island.

Eudyptes diadematus Schlegel, 1876 “indiv. No. 3, Schleg., in Mus. P.B.”: in Finsch, *Trans. Proc. N.Z. Inst.* 8: 204. Junior primary homonym of *Eudyptes diadematus* Schlegel, 1876 “(Cat. No.2)” = *Eudyptes chrysolophus* (Brandt).

Eudyptes albigularis Milne-Edwards, 1880: *Ann. Sci. Nat., Zool. Paris, 6th series* 9(18): 55, pl. 19 – Macquarie Island.

Catarrhactes schlegeli (Finsch); Hutton 1904, *Index Faunae N.Z.*: 36.

Catadyptes chrysolophus redimitus Mathews & Iredale, 1935: *Bull. Brit. Ornith. Club* 55: 102 – Macquarie Island.

Eudyptes chrysolophus schlegeli Finsch; Checklist Committee 1953, *Checklist N.Z. Birds*: 15.

Breeds only at Macquarie Island, straggling to Antarctica and islands in the southern Indian Ocean and north to Tasmania and southern Australia (Marchant & Higgins 1990; Shepherd, Miskelly *et al.* 2021). Occasionally straggles to New Zealand: Otago (Waikouaiti, Mar. 1877, and Brighton and Taiaroa Head, Feb. 1939; Stidolph 1927; Richdale 1953; Oliver 1955); Napier, 1880–81 (Stidolph 1927); Wellington (Lyal Bay, Jun. 1926, NMNZ 14083); Otago Peninsula, 1938–39 (Richdale 1957: 4); Dunedin, Mar. 1976 (NMNZ 19186); Snares Islands / Tini Heke, Feb. 1986, Mar. 1994, and Mar. 2015, (Miskelly *et al.* 2001a; Miskelly, Crossland *et al.* 2017); Moeraki, Mar. 1986 (Fennell 1987); Southland, Feb. 1997 (G. Taylor 2004); Kaikoura, Mar. 1997 (Miskelly *et al.* 2013); Nugget Point, Feb. 2004 (Rare Birds Committee 2005); Chatham Islands, Feb.–Mar. 2005 and Feb. 2020 (Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2021); Hampden Beach, Feb. 2006 (Anon. 2006b); Cape Palliser, Feb. 2007 (Anon. 2007b); Antipodes Island, Mar. 2009 (Miskelly *et al.* 2013); Otago Peninsula, Jan. 2017 (Miskelly, Crossland *et al.* 2019); and Codfish Island / Whenua Hou, Mar. 2020 (Miskelly, Crossland *et al.* 2021). Several records from Campbell Island / Motu Ihupuku (Warham 1971; Marchant & Higgins 1990; D. Thompson 2006).

Genus *Megadyptes* Milne-Edwards

Megadyptes Milne-Edwards, 1880: *Ann. Sci. Nat., Zool. Paris, 6th series* 9(18): 56 – Type species (by monotypy) *Catarrhactes antipodes* Hombron & Jacquinot = *Megadyptes antipodes* (Hombron & Jacquinot).

Fleming (1979: 75) and Fordyce (1991b: 1214, 1311) reported a fossil radius of *M. antipodes* (New Zealand Geological Survey CD 536) from the Early Pleistocene (Okehu) but analysis of this bone's identity is required.

► ***Megadyptes antipodes*** (Hombron & Jacquinot)

Yellow-eyed Penguin | Hoiho

North Island, South Island, Stewart Island / Rakiura, Chatham Islands, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku. Three subspecies are recognised, following T. Cole, Ksepka *et al.* (2019).

Megadyptes antipodes antipodes (Hombron & Jacquinot)

Yellow-eyed Penguin | Hoiho

Catarrhactes antipodes Hombron & Jacquinot, 1841: *Ann. Sci. Nat., Zool. Paris, 2nd series* 16: 320 – Auckland Islands.

Eudyptes antipodes (Hombron & Jacquinot); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 199.

Aptenodytes flavilarvata Peale, 1848: *U.S. Expl. Exped.* 8: 260 – Auckland Islands.

Pygoscelis antipodes (Hombron & Jacquinot); Hombron & Jacquinot 1853, in Dumont d'Urville, *Voyage Pôle Sud, Zoologie* 3: 156, pl. 33, fig. 2.

Pygoscelis antipoda (Hombron & Jacquinot); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 775. Unjustified emendation.
Eudyptes antipodes Ellman, 1861: *Zoologist* 19: 7472 – South Island. Junior secondary homonym and junior synonym of *Catarrhactes antipodes* Hombron & Jacquinot, 1841.

Spheniscus antipoda (Hombron & Jacquinot); Schlegel 1867, *Mus. Hist. Nat. Pays-Bas, Urinatores* 9: 9. Unjustified emendation.
Aptenodytes antipodes Hombron [sic]; Anon. 1870, *Cat. Colonial Mus.*: 75.

Eudyptes antipodum (Hombron & Jacquinot); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 346. Unjustified emendation.

Eudyptes antipoda (Hombron & Jacquinot); Hutton 1879, *Proc. Linn. Soc. New South Wales* 3: 335. Unjustified emendation.

Megadyptes antipodes (Hombron & Jacquinot); Milne-Edwards 1880, *Ann. Sci. Nat., Zool. Paris, 6th series* 9(18): 56.

Megadyptes antipodum (Hombron & Jacquinot); Hutton 1904, *Index Faunae N.Z.*: 36. Unjustified emendation.

Megadyptes antipodes fallai Mathews, 1944: *Emu* 43: 247 – Stewart Island.

Megadyptes antipodes antipodes (Hombron & Jacquinot); Cole *et al.* 2019, *Mol. Biol. Evol.* 36: 786.

Breeding only at Campbell / Motu Ihupuku, Auckland / Maukahuka, Stewart / Rakiura, and Codfish / Whenua Hou Islands; Southland and Otago coasts; and Banks Peninsula, Canterbury (Marchant & Higgins 1990; Massaro & Blair 2003). Straggles as far north as Taranaki (Messenger 2000) and East Cape (L. Davis & Renner 2003). Has reached the Snares Islands / Tini Heke (Miskelly *et al.* 2001a) and the Chatham Islands (Marchant & Higgins 1990; Imber 1994; Miskelly *et al.* 2006). Unverified reports from Kerguelen and Macquarie Islands (Marchant & Higgins 1990). Prehistorically its main populations were restricted to the subantarctic islands, with vagrants reaching the South Island, where the conspecific *M. a. waitaha* bred (Boessenkool *et al.* 2009; T. Cole, Ksepka *et al.* 2019). Holocene bones and midden remains have been found on Enderby Island, Auckland Islands (Tennyson 2020a).

† ***Megadyptes antipodes waitaha*** Boessenkool, Austin, Worthy, Scofield, Cooper, Seddon & Waters **Waitaha Penguin**

Megadyptes waitaha Boessenkool, Austin, Worthy, Scofield, Cooper, Seddon & Waters, 2009: *Proc. Roy. Soc. B.* 276: 817 – Marfells Beach, South Island.

Megadyptes antipodes waitaha Boessenkool, Austin, Worthy, Scofield, Cooper, Seddon & Waters; T. Cole *et al.* 2019, *Mol. Biol. Evol.* 36: 790.

We follow T. Cole, Ksepka *et al.* (2019) in regarding *Megadyptes waitaha* as a subspecies of *Megadyptes antipodes*. Lower North Island, and South Island south to Codfish Island / Whenua Hou, in Holocene deposits and middens (Boessenkool *et al.* 2009; Rawlence, Tennyson *et al.* 2019). *M. a. antipodes* extended its breeding range to include the South Island only after the early prehistoric extinction of *M. a. waitaha*.

† ***Megadyptes antipodes richdalei*** Tennyson & Cole **Richdale's Penguin**

Megadyptes antipodes richdalei Tennyson & Cole (*in* Cole, Ksepka, Mitchell, Tennyson, Thomas, Pan, Zhang, Rawlence, Wood, Bover, Bouzat, Cooper, Fiddaman, Hart, Miller, Ryan, Shepherd, Wilmschurst & Waters), 2019: *Mol. Biol. Evol.* 36: 788 – east of Maunganui, Chatham Island.

This subspecies is known only from Holocene remains on Chatham and Pitt Islands (T. Cole, Ksepka *et al.* 2019).

Genus *Eudyptula* Bonaparte

Eudyptula Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 775 – Type species (by monotypy) *Aptenodytes minor* J.R. Forster = *Eudyptula minor* (J.R. Forster).

Eudyptula Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 368. Unjustified emendation.

The Checklist Committee accepts that two *Eudyptula* taxa are present in New Zealand following the findings of Grosser *et al.* (2015, 2016, 2017). However, the Committee supports recognition of these taxa as subspecies rather than as species (*contra* Grosser *et al.* 2015). Support for these two clades is backed up by earlier results from J.C. Banks *et al.* (2002, 2008) and Peucker *et al.* (2009).

► ***Eudyptula minor*** (J.R. Forster) **Little Penguin**

Southern Australia and Tasmania. In the New Zealand region, throughout on coastal North and South Islands; also Stewart / Rakiura and Chatham Islands (Kinsky & Falla 1976). Vagrants often reach the Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Late Pleistocene fossils known (e.g. Worthy & Grant-Mackie 2003); often abundant in Holocene and midden deposits, throughout North, South, and Chatham Islands (Millener 1991; see also Appendix 1). Two subspecies recognised, both occurring in New Zealand. Although the two forms are genetically distinguishable, they are not identifiable in the field, and so the boundaries of their distributions and extent of sympatry in southern New Zealand is poorly known (Grosser *et al.* (2015, 2017).

The preferred common name for *Eudyptula* penguins is little penguin, following Marchant & Higgins (1990), Holdaway *et al.* (2001) and Dickinson (2003).

Eudyptula minor minor (J.R. Forster) **New Zealand Little Penguin | Kororā**

Aptenodytes minor J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 135 – Dusky Sound, Fiordland, and Queen Charlotte Sound, Marlborough Sounds.

Catarrhactes minor (J.R. Forster); Cuvier, 1817: *Règne Anim.* 1: 551.

Chrysocoma minor (J.R. Forster); Stephens, 1826: *in* Shaw, *General Zool.* 13(1): 61.

- Spheniscus minor* (J.R. Forster); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 199.
Spheniocus [sic] *minor* Temminck [sic]; Ellman 1861, *Zoologist* 19: 7472.
Spheniscus undina; Anon. 1870, *Cat. Colonial Mus.*: 76. Not *Aptenodytes undina* Gould, 1844 = *E. m. novaehollandiae*.
Eudyptula minor (J.R. Forster); Finsch 1872, *Journ. für Ornith.* 20: 262.
Eudyptula albosignata Finsch, 1874: *Proc. Zool. Soc. London 1874* (14): 207 – Akaroa, Canterbury.
Eudyptula minor (J.R. Forster); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds – I (Appendix)*: 35.
Eudyptula albosignata Finsch; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds – I (Appendix)*: 35.
Eudyptula oblosignata Finsch; Buller 1876, *Trans. Proc. N.Z. Inst.* 8: 196. Unjustified emendation.
Eudyptula albosquata Finsch; Buller 1876, *Trans. Proc. N.Z. Inst.* 8: 198. Unjustified emendation.
Eudyptula minor iredalei Mathews, 1911: *Birds Australia* 1: 286, pl. 67 – “Chatham Islands”, error for Motuora Island, Hauraki Gulf (fide Kinsky & Falla 1976, *Nat. Mus. N.Z. Rec.* 1(7): 119).
Eudyptula minor albosignata Finsch; Mathews & Iredale 1913, *Ibis* 1 (10th series): 222.
Eudyptula minor subspecies; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 16.
Eudyptula minor minor (J.R. Forster); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 17.
Eudyptula minor chathamensis Kinsky & Falla, 1976: *Nat. Mus. N.Z. Rec.* 1(7): 115 – Star Keys, Chatham Islands.
Eudyptula minor variabilis Kinsky & Falla, 1976: *Nat. Mus. N.Z. Rec.* 1(7): 116 – Mahina Bay, Wellington Harbour.
Eudyptula minor (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 69. In part.

Widespread throughout coastal North and South Islands and the Chatham Islands but largely replaced by the Australian little penguin in Otago since human settlement (Grosser *et al.* 2015, 2016).

No type specimen is known to survive (Medway 1976). *Contra* Checklist Committee (2010), the type locality is expanded to include Queen Charlotte Sound, as Forster (1781) referred to penguins from both Dusky Sound [“*portu obscuro* (Dusky Bay)”] and Queen Charlotte Sound [“*Aesluarii Reginae Charlottae* (Quen [sic] Charlotte’s Sound)”] within his type description.

***Eudyptula minor novaehollandiae* (Stephens)**

Australian Little Penguin

- Spheniscus Novae Hollandiae* Stephens, 1826: in Shaw, *General Zool.* 13(1): 68 – Port Jackson, New South Wales, Australia.
Aptenodytes australis “Gray”; Griffith 1829, *Anim. Kingd.* 8: 53 – Sydney, Australia.
Aptenodytes undina Gould, 1844: *Proc. Zool. Soc. London 1844* (12): 57 – “Van Diemen’s Land” = Tasmania, Australia.
Eudyptula undina (Gould); Hutton 1871, *Cat. Birds N.Z.*: 54.
Eudyptula undina (Gould); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds – I (Appendix)*: 35. Misspelling.
Eudyptula minor woodwardi Mathews, 1912: *Novit. Zool.* 18(3): 199 – Sandy Hook Island, Western Australia.
Eudyptula minor undina (Gould); White 1918, *South Austr. Ornith.* 3(6): 168.
Eudyptula minor novaehollandiae (Stephens); Checklist Committee 1953, *Checklist N.Z. Birds*: 14.
Eudyptula minor minor; Kinsky & Falla 1976, *Nat. Mus. N.Z. Rec.* 1(7): 111. Not *Eudyptula minor minor* (J.R. Forster, 1781).
Eudyptula minor (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 69. In part.
Eudyptula novaehollandiae (Stephens); Grosser, Burridge, Peucker & Waters 2015, *PLOS One* 10(12): e0144966. doi: 10.1371/journal.pone.0144966: 12.

Southern Australia (including Tasmania) and Otago, New Zealand (Grosser *et al.* 2015). The arrival of this taxon in New Zealand post-dates human settlement (Grosser *et al.* 2016).

Order PROCELLARIIFORMES: Albatrosses, Petrels, and Shearwaters

We follow Cracraft *et al.* (2004), Penhallurick & Wink (2004), Ericson *et al.* (2006), Hackett *et al.* (2008), Dickinson & Remsen (2013), Burleigh *et al.* (2015), Prum *et al.* (2015), Clements *et al.* (2019), Chesser *et al.* (2020), Handbook of the Birds of the World and BirdLife International (2020), Estandia *et al.* (2021), and F. Gill *et al.* (2021) in including diving petrels (*Pelecanoides* spp.) within Procellariidae. However, we note the ancient fossil record, distinctive morphology, and distinctive louse fauna of diving petrels (Price *et al.* 2003; Worthy *et al.* 2007; G. Mayr & Smith 2012). We recommend a comprehensive review of relationships within the order Procellariiformes, addressing whether the distinctiveness and antiquity of some genera within the Procellariidae warrant their recognition at family level.

Several genetic studies have concluded that southern and northern storm petrels are not sister taxa, and therefore that each of the two clades should be recognised at family level (e.g. Kennedy & Page 2002; Hackett *et al.* 2008; Prum *et al.* 2015; Reddy *et al.* 2017; Estandia *et al.* 2021). While we follow this approach, we note that several other genetic and morphological studies concluded that the two storm petrel clades were each other's closest relatives (Penhallurick & Wink 2004; Ericson *et al.* 2006; Ksepka *et al.* 2006, 2012; Livezey & Zusi 2007; Mayr & Smith 2012; Burleigh *et al.* 2015). Authors differ in their interpretation of which of the four procellariiform families is most basal. We follow Prum *et al.* (2015), Reddy *et al.* (2017), and Estandia *et al.* (2021) in placing albatrosses first, followed by southern storm petrels (Oceanitidae), then northern storm petrels (Hydrobatidae), followed by Procellariidae.

Family DIOMEDEIDAE G.R. Gray: Albatrosses | Toroa

Diomedidae G.R. Gray, 1840: *List Gen. Birds* (1st edition): 78 – Type genus *Diomedea* Linnaeus, 1758.

Albatross genera follow recommendations by Nunn *et al.* (1996) and C. Robertson & Nunn (1998), which have been adopted widely, e.g. Holdaway *et al.* (2001), Shirihai (2002), Dickinson (2003), M. Brooke (2004), and Onley & Scofield (2007). The arrangement of species used here follows the traditional order of Jouanin & Mougin (1979), except that the species within *Thalassarche* follow C. Robertson & Nunn (1998) to better reflect relationships. Common names used here mainly follow Tickell (2000).

Genus *Diomedea* Linnaeus

Diomedea Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 132 – Type species (by subsequent designation) *Diomedea exulans* Linnaeus.

Rhothonia Murphy, 1917: *Bull. Am. Mus. Nat. Hist.* 37: 861 – Type species (by original designation) *Diomedea (Rhothonia) sanfordi* Murphy = *Diomedea sanfordi* Murphy. As a subgenus of *Diomedea*.

Diomedaea: Lesson 1825, *Ann. Sci. Nat., Zool. Paris* 6: 95. Misspelling.

Diomedea: Anon. 1870, *Cat. Colonial Mus.*: 76. Misspelling.

There has been much disagreement about the taxonomy of the “wandering albatross” complex. This includes debate over the identity of Linnaeus' type specimen for *D. exulans*, and the degree of difference between populations. The 1979 world checklist of birds recognised two subspecies – a smaller darker form breeding at lower latitudes (*D. e. exulans*) and a large pale form breeding at higher latitudes (*D. e. chionoptera*) (Jouanin & Mougin 1979), and the name *chionoptera* became widely used (e.g. P. Harrison 1983; Marchant & Higgins 1990; Warham 1990; C. Robertson & Nunn 1998; Onley & Bartle 1999; Holdaway *et al.* 2001; Dickinson 2003). The Checklist Committee (1990) recognised all forms occurring in the New Zealand region as nominate *Diomedea exulans*. These taxonomic approaches are now widely regarded as outdated. The description of a new albatross species *D. amsterdamensis* breeding on Amsterdam Island (Roux *et al.* 1983) and two new subspecies of wandering albatross – *D. e. antipodensis* from the Antipodes Islands and Campbell Island / Motu Ihupuku and *D. e. gibsoni* from the Auckland Islands / Maukahuka (C. Robertson & Warham 1992) – renewed debate about relationships within the *D. exulans* group. Bourne (1989) noted that the population from the Tristan da Cunha archipelago was also distinctive and should be recognised by the name *D. e. dabbenena* Mathews, 1929. The arguments given by Bourne (1989, 1999, 2002) and Medway (1993) about the original Linnaeus wandering albatross, *Diomedea exulans*, referring to the large southern form were accepted by Checklist Committee (2010) and subsequently the type locality for *Diomedea exulans* Linnaeus, 1758, was restricted to South Georgia (Schodde *et al.* (2017). Thus, *D. chionoptera* is a junior synonym of *D. exulans* and should no longer apply to the large southern birds.

Most authors now accept five “wandering albatross” taxa (i.e. *D. exulans*, *D. dabbenena*, *D. amsterdamensis*, *D. antipodensis*, *D. gibsoni*) either as subspecies or full species. Although some authors consider *D. dabbenena* to be a subspecies of *D. exulans* (e.g. Medway 1993; Bourne 2002; Penhallurick & Wink 2004), most researchers recognise it as a full species (e.g. Gales 1998; BirdLife International 2000; Ryan 2000; Cuthbert, Phillips *et al.* 2003; M. Brooke 2004; T. Burg & Croxall 2004; Alderman *et al.* 2005; Onley & Scofield 2007). Similarly, some authors consider *D. amsterdamensis* to be a subspecies of *D. exulans* (e.g. Medway 1993; Bourne 1989, 2002; Warham 1990; Vuilleumier *et al.* 1992; James 2000; Dickinson 2003; Penhallurick & Wink 2004), while most treat it as a full species (e.g. Gales 1998; C. Robertson & Nunn 1998; Onley & Bartle 1999; BirdLife International 2000; Ryan 2000; Waugh & Weimerskirch 2003; M. Brooke 2004; Milot *et al.* 2007; Onley & Scofield 2007). In contrast, although some authors recognised *D. antipodensis* and *D. gibsoni* as full species (e.g. Gales 1998; C. Robertson & Nunn 1998; Ryan 2000), most researchers regard them as subspecies of *D. antipodensis* (e.g. Medway 1993; Onley & Bartle 1999; BirdLife International 2000;

James 2000; Warham 2000; Holdaway *et al.* 2001; M. Brooke 2004; T. Burg & Croxall 2004; Penhallurick & Wink 2004; Onley & Scofield 2007). We therefore recognise the following taxa: *D. exulans*, *D. dabbenena*, *D. amsterdamensis*, *D. antipodensis antipodensis* and *D. antipodensis gibsoni*. The last two taxa breed in the New Zealand region, with a few *D. exulans* breeding nearby on Macquarie Island. The two other forms have not been recorded in this area, although a GLS-tagged *D. amsterdamensis* may have passed through New Zealand waters near Campbell Island (Delord *et al.* 2022). Von Tschudi (1856: 157) described “*Diomedea adusta*” from west of Chile, and Von Pelzeln (1873: 51) named “*Diomedea exulans grisea*”; the identities of these two taxa require clarification.

Natural bone and midden deposits of large albatrosses have been found in several North and South Island Late Pleistocene and Holocene sites; however, their specific assignation is uncertain (Millener 1991).

► ***Diomedea exulans* Linnaeus**

Wandering Albatross | Toroa*

Diomedea exulans Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 132 – “intra tropicos Pelagi & ad Cap. b. Spei”, restricted to South Georgia (*vide* Schodde *et al.* 2017, *Zootaxa* 4236: 142).

Diomedea Albatrus; J.R. Forster 1785, *Mém. Math. Phys. Paris (Acad. Sci.)* 10: 569, pl. 13. Not *Diomedea albatrus* Pallas, 1769.

Diomedea (Diomedea) exulans Linnaeus; G.R. Gray 1871, *Hand-list Birds* 3: 109.

Diomedea spadicea Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 568 – “in maris australis latitudine 37°” = southern seas at 37°S (*vide* Schodde *et al.* 2017, *Zootaxa* 4236: 142).

Diomedea [sic] *exulans* Linnaeus; Anon. 1870, *Cat. Colonial Mus.*: 76.

Diomedea chionoptera Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 443 – Kerguelen Island, south Indian Ocean.

Diomedea exulans rothschildi Mathews, 1912: *Birds Australia* 2: 246, pl. 95 – east Australian Seas.

Diomedea exulans rohui Mathews, 1915: *Austral Avian Rec.* 2: 125 – Sydney, New South Wales, Australia.

Diomedea exulans westralis Mathews, 1918: *Bull. Brit. Ornith. Club* 39: 23 – Western Australia, off Albany.

Diomedea chionoptera chionoptera Salvin; Mathews 1927, *Syst. Avium Australasianarum* 1: 130.

Diomedea chionoptera rohui Mathews; Mathews 1927, *Syst. Avium Australasianarum* 1: 130.

Diomedea exulans georgia Mathews, 1933: *Bull. Brit. Ornith. Club* 53: 214 – South Georgia.

Diomedea (Diomedea) exulans rothschildi Mathews; Mathews 1934, *Novit. Zool.* 39(2): 152.

Diomedea exulans exulans Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 18. In part.

Diomedea exulans chionoptera Salvin; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 18.

Diomedea exulans Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 14. In part.

Schodde *et al.* (2017) designated a neotype for *D. exulans*, with South Georgia as the type locality. The southern oceans, breeding on high-latitude subantarctic and antarctic islands between 46°S and 55°S: South Georgia, Prince Edward and Marion, Crozet, Kerguelen, and Heard Islands. Close to New Zealand, a few breed on Macquarie Island (Marchant & Higgins 1990). At sea circumpolar and highly migratory, normally ranging between about 25°S and 65°S; occasionally recorded in the New Zealand region (e.g. Marchant & Higgins 1990; D. Thompson *et al.* 2000; Miskelly *et al.* 2001a, 2006; BirdLife International 2004), including banded birds from South Georgia, Crozet, and Kerguelen Islands (Croxall & Prince 1990; Marchant & Higgins 1990; Prince *et al.* 1998; G. Taylor 2004; Weimerskirch *et al.* 2006; NMNZ OR.023373). Vagrant to the Northern Hemisphere (Jouanin & Mougou 1979; Harrop 1994) but these birds may have been ship-assisted (Soldaat *et al.* 2009).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► ***Diomedea antipodensis* Robertson & Warham**

Antipodean Albatross | Toroa*

Two subspecies; restricted to nesting in the New Zealand subantarctic; ranging at sea from southern Australia across the South Pacific Ocean to South America. The common names used here follow C. Robertson & Nunn (1998), G. Taylor (2000a), and Shirihai (2002).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

***Diomedea antipodensis antipodensis* Robertson & Warham**

Antipodean Albatross | Toroa*

Diomedea exulans exulans Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 18. In part.

Diomedea exulans Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 14. In part.

Diomedea exulans antipodensis Robertson & Warham, 1992: *Bull. Brit. Ornith. Club* 112(2): 74 – Antipodes Island.

Diomedea antipodensis; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Diomedea antipodensis antipodensis Robertson & Warham; M. Brooke 2004, *Albatrosses and Petrels across the World*: 176.

Breeds on the Antipodes Islands and Campbell Island / Motu Ihupuku; ranges at sea to southern and eastern Australia and the South Pacific Ocean to the west coast of South America (C. Robertson & Warham 1992; Nicholls *et al.* 1996; 2000, 2002; K. Walker & Elliott 2005, 2006). A few have nested on the Chatham Islands since 2003 (Miskelly *et al.* 2008), and in Mar. 1996 one was seen ashore on Macquarie Island (L. Smith 1997). Occasionally reaches more tropical latitudes (K. Walker & Elliott 2006), e.g. the Tuamotu Archipelago (C. Robertson 1972b), and south to 73°S in antarctic waters (K. Walker & Elliott 2006).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

Diomedea antipodensis gibsoni* Robertson & Warham*Gibson's Albatross | Toroa***

Diomedea exulans exulans Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 18. In part.

Diomedea exulans Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 14. In part.

Diomedea exulans gibsoni Robertson & Warham, 1992: *Bull. Brit. Ornith. Club* 112(2): 76 – Adams Island, Auckland Islands.

Diomedea gibsoni; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Diomedea antipodensis; BirdLife International 2000, *Threatened Birds of the World*: In part.

Diomedea antipodensis gibsoni Robertson & Warham; M. Brooke 2004, *Albatrosses and Petrels across the World*: 176.

Breeds on the Auckland Islands / Maukahuka (Adams Island, Disappointment Island, and Auckland Island); ranges to the Tasman Sea and waters off mainland New Zealand; occasionally to south-west Australian and south-west Pacific waters (C. Robertson & Warham 1992; K. Walker *et al.* 1995; Reinke *et al.* 1998; K. Walker & Elliott 1999, 2006; Nicholls *et al.* 2000; Elliott & Walker 2005).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► *Diomedea epomophora* Lesson**Southern Royal Albatross | Toroa***

Diomedea [sic] *epomophora* Lesson, 1825: *Ann. Sci. Nat., Zool. Paris* 6: 95 – no locality, probably Australian waters (*vide* Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 42) and not “Campbell Island” as designated by Mathews & Iredale 1913, *Ibis* 1 (10th series): 239.

Diomedea exulans Linnaeus; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 189. In part.

Diomedea regia Buller, 1891: *Trans. Proc. N.Z. Inst.* 23: 230 – New Zealand region, restricted to Campbell Island (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 11).

Diomedea epomophora mccormicki Mathews, 1912: *Birds Australia* 2: 261 – Enderby Island, Auckland Islands.

Diomedea epomophora epomophora Lesson; Mathews & Iredale 1913, *Ibis* 1 (10th series): 239.

Diomedea epomophora longirostris Mathews, 1934: *Bull. Brit. Ornith. Club* 54: 112 – south Atlantic Ocean.

Diomedea (Rhothonia) epomophora epomophora Lesson; Mathews 1934, *Novit. Zool.* 39(2): 153. In part.

Diomedea (Rhothonia) epomophora mccormicki Mathews; Mathews 1934, *Novit. Zool.* 39(2): 153.

Diomedea (Rhothonia) epomophora longirostris Mathews; Mathews 1934, *Novit. Zool.* 39(2): 153.

Diomedea epomophora; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 126, 175.

Breeds mainly on Campbell Island / Motu Ihupuku; a few on Enderby, Adams, and Auckland Islands / Maukahuka (R.H. Taylor *et al.* 1970; P. Moore *et al.* 1997; G. Taylor 2000a). A few have interbred with *D. sanfordi* at Taiaroa Head, Otago and on Enderby Island (Croxall & Gales 1998; Miskelly, Elliott *et al.* 2020). Commonly ranges north from the subantarctic to 36°S in New Zealand and Australian seas (Marchant & Higgins 1990; T. Reid *et al.* 2002; Waugh *et al.* 2002; Waugh & Weimerskirch 2003). Regular migrant to seas off west and south-east coasts of South America (C. Robertson & Kinsky 1972; Enticott 1986; Marchant & Higgins 1990; Imber 1999; P. Moore & Bettany 2005; Pacheco *et al.* 2021). Rare in the south Indian and South Atlantic Oceans (Enticott 1986; Marchant & Higgins 1990; P. Moore & Bettany 2005). Vagrant north to the tropics, e.g. the Tuamotu Archipelago (C. Robertson 1972b). Holocene bones and midden remains have been found in dunes on Enderby Island (Dawson 1964; R.H. Taylor 1971; Yaldwyn 1986; Tennyson 2020a).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► *Diomedea sanfordi* Murphy**Northern Royal Albatross | Toroa***

Diomedea (Rhothonia) sanfordi Murphy, 1917: *Bull. Am. Mus. Nat. Hist.* 37: 861 – 64 km off Corral, Valdivia, Chile.

Diomedea (Rhothonia) epomophora epomophora Lesson; Mathews 1934, *Novit. Zool.* 39(2): 153. In part.

Diomedea epomophora sanfordi; Falla 1938, *Rec. Cant. Museum* 4(4): 215. Unjustified emendation.

Diomedea epomophora sanfordi Murphy; Checklist Committee 1953, *Checklist N.Z. Birds*: 16.

Diomedea sanfordi; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 126, 175.

Breeds mainly at the Chatham Islands on The Sisters and Motuhara / The Forty Fours; about 30 pairs at Taiaroa Head, Otago Peninsula (C. Robertson 1991, 1993, 2001; Imber 1999). Two have interbred with *D. epomophora* at Enderby Island, Auckland Islands / Maukahuka (Croxall & Gales 1998; Miskelly, Elliott *et al.* 2020). Ranges north to 36°S, particularly east of New Zealand during the breeding season (Marchant & Higgins 1990; Nicholls *et al.* 1994, 2002; BirdLife International 2004; Waugh *et al.* 2005). Regularly seen as far south as the Auckland Islands (Miskelly, Elliott *et al.* 2020) and small numbers occur in south-east Australian waters during all seasons (T. Reid *et al.* 2002). Circumpolar migration eastward, primarily to the South American coasts of Chile, Argentina, and Uruguay (Enticott 1986; C. Robertson & Nicholls 2000; Nicholls *et al.* 2002; BirdLife International 2004; Pacheco *et al.* 2021). C. Robertson & Nunn (1998) argued that *D. epomophora* and *D. sanfordi* should be treated as separate species because of “several key morphological distinctions” but they did not present any data to support this statement. Their proposal was rejected by James (2000) and Penhallurick & Wink (2004). However, clear identification characters have been described to support full species status for each form (e.g. Onley & Bartle 1999) and that conclusion has been increasingly followed (e.g. BirdLife International 2000; G. Taylor 2000a; Holdaway *et al.* 2001; Waugh *et al.* 2002; M. Brooke 2004; Onley & Scofield 2007) and was adopted by the Checklist Committee (2010). Holocene bones have been found on the Chatham Islands (Millener 1999; Holdaway *et al.* 2001).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

Genus **Phoebastria** Reichenbach

Phoebastria Reichenbach, 1853: *Avium Syst. Nat.*: 5 – Type species (by original designation) *Diomedea brachyura* Temminck = *Phoebastria albatrus* Pallas.

Julietata Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 27 – Type species (by original designation) *Diomedea irrorata* Salvin = *Phoebastria irrorata* (Salvin).

Galapagornis Boetticher, 1949: *Beitr. Gattungssyst. Vögel*: 27 – Type species (by original designation) *Diomedea irrorata* Salvin = *Phoebastria irrorata* (Salvin).

Laysanornis Boetticher, 1949: *Beitr. Gattungssyst. Vögel*: 27 – Type species (by original designation) *Diomedea immutabilis* Rothschild = *Phoebastria immutabilis* (Rothschild).

Penthierea Boetticher, 1949: *Beitr. Gattungssyst. Vögel*: 27 – Type species (by original designation) *Diomedea nigripes* Audubon = *Phoebastria nigripes* (Audubon).

► **Phoebastria nigripes** (Audubon)**Black-footed Albatross**

Diomedea nigripes Audubon, 1839: *Ornith. Biography* 5: 327 – Pacific Ocean, 30°44'N, 146°W.

Thalassarche nigripes (Audubon); Mathews 1927, *Syst. Avium Australasianarum* 1: 131.

Phoebastria nigripes reischekia Mathews, 1930: *Bull. Brit. Ornith. Club* 51: 29 – New Zealand, restricted to Dusky Sound (*vide* Oliver 1955, *New Zealand Birds*, 2nd edition: 181).

Diomedea nigripes Audubon; Checklist Committee 1953, *Checklist N.Z. Birds*: 18.

Phoebastria nigripes (Audubon); M. Brooke 2004, *Albatrosses and Petrels across the World*: 190.

North Pacific Ocean, breeding on the Leeward Hawai'ian Islands and on Torishima, Izu Islands; ranging mainly into the north-east Pacific (Jouanin & Mougin 1979). A single New Zealand record: Dusky Sound, Jul. 1884, in the Reischek collection (i.e. at Naturhistorisches Museum Wien; Oliver 1955).

► **Phoebastria immutabilis** (Rothschild)**Laysan Albatross**

Diomedea immutabilis Rothschild, 1893: *Bull. Brit. Ornith. Club* 1: 48 – Laysan Island, Hawai'ian Islands, Pacific Ocean.

Thalassarche immutabilis (Rothschild); Mathews 1927, *Syst. Avium Australasianarum* 1: 132.

Phoebastria immutabilis (Rothschild); Mathews 1934, *Novit. Zool.* 39(2): 154.

Diomedea immutabilis; Medway 2000, *Notornis* 47(1): 65.

Breeds on islands of the Hawai'ian chain. Ranges in the North Pacific from the Bering Sea to Japan and Baja California (Jouanin & Mougin 1979). One record in the New Zealand region, off Hawke Bay, Dec. 1995 (Medway 2000a). One ashore at Norfolk Island in 1985–86 (J. Moore 1999).

Genus **Thalassarche** Reichenbach

Thalassarche Reichenbach, 1853: *Avium Syst. Nat.*: 5 – Type species (by original designation) *Diomedea melanophrys* Temminck = *Thalassarche melanophris* (Temminck).

Thalassogeron Ridgway, 1884: in Baird, Brewer & Ridgway, *Mem. Mus. Comp. Zool.* 13: 345, 357 – Type species (by original designation) *Diomedea culminata* Gould = *Thalassarche chrysostoma* (J.R. Forster).

Nealbatrus Mathews, 1912: *Birds Australia* 2: 274 – Type species (by original designation) *Diomedea chlororhynchos* Gmelin = *Thalassarche chlororhynchos* (Gmelin).

Diomedella Mathews, 1912: *Birds Australia* 2: 275 – Type species (by original designation) *Diomedea cauta* Gould = *Thalassarche cauta cauta* (Gould).

Many natural deposit and midden records from North, South and Chatham Islands remain unidentified to species (Millener 1991; Holdaway *et al.* 2001). The small, dark-backed southern albatrosses are often called mollymawks.

► **Thalassarche chlororhynchos** (Gmelin)**Atlantic Yellow-nosed Albatross**

Diomedea chlororhynchos Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 568. Based on the “Yellow-nosed Albatross” of Latham 1785, *Gen. Synop. Birds* 3: 309, pl. 94 – Cape of Good Hope = 35°13'S, 06°03'W, South Atlantic Ocean (*vide* Medway 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 8).

Diomedea presaga Bonaparte, 1857: *Consp. Gen. Avium* 2: 185 (ex Brandt MS) – no locality.

Thalassogeron eximius G.E. Verrill, 1895: *Trans. Connect. Acad. Arts Sci.* 9: 440, pl. 8 – Gough Island, South Atlantic Ocean.

Thalassogeron chlororhynchus (Gmelin); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 451. In part. Unjustified emendation.

Nealbatrus chlororhynchus chlororhynchus (Gmelin); Mathews 1913, *List Birds Australia*: 42. Unjustified emendation.

Thalassarche chlororhynchus (Gmelin); Mathews & Iredale 1921, *Man. Birds of Australia* 1: 52. Unjustified emendation.

Thalassarche chlororhynchus chlororhynchus (Gmelin); Mathews 1927, *Syst. Avium Australasianarum* 1: 132. Unjustified emendation.

Diomedea melanoptera Miranda-Ribeiro, 1928: *Bol. Mus. Nacional, Rio de Janeiro* 4(4): 45 – no locality = Tristan da Cunha (*vide* Mathews 1948, *Bull. Brit. Ornith. Club* 68: 162).

Diomedea chlororhynchus Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part. Unjustified emendation.

Diomedea chlororhynchus Gmelin; Checklist Committee 1980, *Notornis (Suppl.)* 27: 7. In part.

Diomedea chlororhynchus chlororhynchus Gmelin; Checklist Committee 1990, *Checklist Birds N.Z.*: 19.

Thalassarche chlororhynchus; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Thalassarche carteri chlororhynchos; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 125. Error for *Thalassarche chlororhynchos chlororhynchos*.

Breeds on Gough and the Tristan da Cunha Islands (Tristan da Cunha, Nightingale, Inaccessible, Stoltenhoff, Middle); ranges widely in the South Atlantic Ocean and rarely east as far as Australian seas (R. Brooke *et al.* 1980; Tickell 2000; Cuthbert, Ryan *et al.* 2003; M. Brooke 2004); vagrant to the North Atlantic (Harrop 1994; Mlodinow 1999; Pendlebury 2007; van den Berg & Haas 2007). One vagrant attempted to nest on Middle Sister Island, Chatham Islands, during 1975–76, and another was ashore there in 1996 (C. Robertson 1975; Imber 1994; Marchant & Higgins 1990; Miskelly *et al.* 2006). One off Kaikoura, Mar. 2016, and one off the Snares Islands / Tini Heke, Nov. 2019 (Miskelly, Crossland *et al.* 2017, 2021). One on Motuhara / The Forty Fours, Chatham Islands, Dec. 2016 (images by David Boyle on New Zealand Birds Online, viewed 24 Jun. 2021). The common name used here follows BirdLife International (2000), Shirihihi (2002), M. Brooke (2004), and Onley & Scofield (2007).

► ***Thalassarche carteri* (Rothschild)**

Indian Ocean Yellow-nosed Albatross

Diomedea (Thalassarche) chlororhyncha; G.R. Gray 1871, *Hand-list Birds* 3: 109. Not *Diomedea chlororhynchos* Gmelin, 1789. Unjustified emendation.

Thalassogeron chlororhynchus (Gmelin); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 451. In part. Unjustified emendation.

Thalassogeron carteri Rothschild, 1903: *Bull. Brit. Ornith. Club* 14: 6 – Point Cloates, north-west Australia.

Diomedea bassi Mathews, 1912: *Novit. Zool.* 18(3): 206 – south-east Australian seas.

Thalassogeron chlororhynchos bassi (Mathews); Mathews & Iredale 1913, *Ibis* 1 (10th series): 240.

Nealbatrus chlororhynchus bassi (Mathews); Mathews 1913, *List Birds Australia*: 43. Unjustified emendation.

Nealbatrus chlororhynchus carteri (Rothschild); Mathews 1913, *List Birds Australia*: 43. Unjustified emendation.

Thalassarche chlororhynchus carteri (Rothschild); Mathews 1927, *Syst. Avium Australasianarum* 1: 132. Unjustified emendation.

Thalassarche chlororhynchus bassi (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 132. Unjustified emendation.

Thalassarche chlororhynchus; Oliver 1930, *New Zealand Birds*, 1st edition: 164. Not *Diomedea chlororhynchos* Gmelin, 1789. Unjustified emendation.

Diomedea chlororhynchus Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part. Unjustified emendation.

Diomedea chlororhynchos Gmelin; Checklist Committee 1980, *Notornis (Suppl.)* 27: 7. In part.

Diomedea chlororhynchos bassi Mathews; R. Brooke *et al.* 1980, *Durban Museum Novit.* 12: 175.

Diomedea chlororhynchos carteri (Rothschild); Checklist Committee 1990, *Checklist Birds N.Z.*: 19.

Thalassarche carteri; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Breeds on Prince Edward, Crozet, Kerguelen, Amsterdam and St. Paul Islands (Marchant & Higgins 1990; BirdLife International 2000). One pair nested on The Pyramid, Chatham Islands, in 1998–2003 (Medway 2001c; Miskelly *et al.* 2006). Ranges mainly between 30°S and 40°S in the Indian Ocean and Australian seas (K. Wood 1992; Tickell 2000; T. Reid *et al.* 2002). Until the 1980s, a regular visitor, mainly Apr. to Dec., to seas off the northern North Island and Bay of Plenty; rarely south to the Cook Strait region (e.g. C. Robertson 1975; Sibson 1979; P. Latham 1980; Booth 1982; Powlesland 1985; Powlesland & Powlesland 1994b). Vagrant to Stewart Island / Rakiura, Feb. 1974 (G. Wilson 1976) and the Snares Islands / Tini Heke, Jan. 1985 (Miskelly *et al.* 2001a). More recent records include off Kaikoura, Jul. 2002 and Jul. 2007 (Medway 2002f; Miskelly, Crossland *et al.* 2019); off North Cape, Mar. 2013 (Miskelly, Crossland *et al.* 2017); and off Golden Bay, Feb. 2017 (Miskelly, Crossland *et al.* 2019).

C. Robertson & Nunn (1998) argued that *Th. chlororhynchos* and *Th. carteri* should be treated as separate species but they did not present data to support this proposal (James 2000). However, R. Brooke *et al.* (1980), C. Robertson (2002), and Onley & Scofield (2007) described several morphological differences between these taxa. Species status for each was recognised by BirdLife International (2000) and M. Brooke (2004), and was accepted by the Checklist Committee (2010). The common name used here follows L. Smith *et al.* (2000).

F. Hutton (1871: 44) listed “120. DIOMEDEA CHLORORHYNCHA Gmel.” as a species represented in the collection of the Auckland Museum, with a description fitting *Th. carteri*. This would constitute the first record of a yellow-nosed albatross in New Zealand. However, since no specimen with data matching those given by Hutton can now be found in the Auckland Museum collection (Checklist Committee 2010), we leave this record as undetermined until a relevant specimen is found. Buller (1887–88, 2: 202) also refers to “DIOMEDEA CHLORORHYNCHA” citing, among others, a specimen in the Auckland Museum, but his description fits *Th. bulleri bulleri* (see below).

► ***Thalassarche chrysostris* (J.R. Forster)**

Grey-headed Albatross | Toroa*

Diomedea chrysostris J.R. Forster, 1785: *Mém. Math. Phys. Paris (Acad. Sci.)* 10: 571, pl. 14 – vicinity of the Antarctic Circle and in the Pacific Ocean = 50°15'S, 96°1'W, south-east Pacific Ocean (*vide* Medway 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 9).

Diomedea culminata Gould, 1843: *Proc. Zool. Soc. London 1843* (11): 107 – south Indian, and South Pacific Oceans.

Diomedea (Thalassarche) culminata Gould; G.R. Gray 1871, *Hand-list Birds* 3: 109.

Diomedea chlororhyncha [sic]; Filhol 1885, *Recueil Mém. Rapp. Doc. Passage Vénus, Paris (Acad. Sci.)*: 3(2): 51. Not *Diomedea chlororhynchos* Gmelin, 1789.

Thalassogeron culminatus (Gould); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 451.

Thalassogeron desolationis Salvadori, 1911: *Boll. Mus. Zool. Anat. Comp. Univ. Torino* 26(638): 2 – Desolation Island, Straits of Magellan, South America (52°S, 74°W).

- Diomedea culminata mathewsi* Rothschild, 1912: *Bull. Brit. Ornith. Club* 29: 70 – Campbell Island.
Diomedea culminata culminata Gould; Rothschild 1912, *Bull. Brit. Ornith. Club* 29: 70.
Thalassogeron chrysostoma chrysostoma (J.R. Forster); Mathews 1912, *Birds Australia* 2: 280.
Thalassogeron chrysostoma culminata (Gould); Mathews 1912, *Birds Australia* 2: 280.
Thalassogeron chrysostoma harterti Mathews, 1912: *Birds Australia* 2: 280 – “South Indian Ocean (Kerguelen Island breeding)”, restricted to 46°52’S, 05°E (*vide* Checklist Committee 1990, *Checklist Birds N.Z.*: 18).
Thalassogeron chrysostoma mathewsi (Rothschild); Mathews & Iredale 1913, *Ibis* 1 (10th series): 240.
Thalassogeron chrysostoma alexanderi Mathews, 1916: *Austral Avian Rec.*: 3: 55 – west coast of Australia.
Thalassogeron culminatus chrysostoma (J.R. Forster); Bennett 1926, *Ibis* 2 (12th series): 318.
Thalassarche chrysostoma chrysostoma (J.R. Forster); Mathews 1927, *Syst. Avium Australasianarum* 1: 131.
Thalassarche chrysostoma culminatus (Gould); Mathews 1927, *Syst. Avium Australasianarum* 1: 131.
Thalassarche chrysostoma alexanderi (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 131.
Thalassarche chrysostoma mathewsi (Rothschild); Mathews 1927, *Syst. Avium Australasianarum* 1: 131.
Thalassarche chrysostoma; Oliver 1930, *New Zealand Birds*, 1st edition: 164.
Thalassarche chrysostoma desolationis (Salvadori); Mathews 1933, *Ibis* 3 (13th series): 543.
Thalassogeron chrysostoma desolationis Salvadori; Mathews 1934, *Novit. Zool.* 39(2): 156.
Diomedea chrysostoma J.R. Forster; Checklist Committee 1953, *Checklist N.Z. Birds*: 17.

Circumpolar, breeding at Ildefonso and Diego Ramirez Islands (G. Clark *et al.* 1992; G. Robertson *et al.* 2007), South Georgia, Marion and Prince Edward Islands, Crozet, Kerguelen, Macquarie, and Campbell / Motu Ihupuku Islands (Gales 1993; Waugh, Weimerskirch, P. Moore *et al.* 1999; P. Moore 2002, 2004; Terauds *et al.* 2005). Ranges mainly between 39°S and 64°S (Marchant & Higgins 1990; Waugh, Sagar *et al.* 1999; Waugh, Weimerskirch, Cherel *et al.* 1999; Terauds *et al.* 2006). Regularly wrecked on New Zealand coasts (Powlesland 1985), including birds from South Georgia (Prince *et al.* 1998), but not usually seen alive in inshore waters (Waugh, Sagar *et al.* 1999). Vagrant at Chatham Islands (Te One, Sep. 1975; Miskelly, Crossland *et al.* 2019). One banded as a chick on South Georgia recovered alive as an adult breeding on Macquarie Island (Anon. 2004a; Terauds *et al.* 2005). Northern Hemisphere records are dubious (Jouanin & Mougin 1979; Mlodinow 1999). Possible Holocene record from the South Island (Millener 1991).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► *Thalassarche melanophrys* (Temminck)

Black-browed Albatross | Toroa*

- Diomedea melanophrys* Temminck, 1828: *Nouv. Recueil Planch. Color. d'Oiseaux* 77: pl. 456 and text – Cape of Good Hope, South Africa.
Diomedea melanophrys Temminck; Temminck 1839, in Temminck & Laugier de Chartrou, *Nouv. Recueil Planch. Color. d'Oiseaux* 102: pl. 76. Unjustified emendation.
Diomedea gilliana Coues, 1866: *Proc. Acad. Nat. Sci. Philad.* 18: 181 – no locality.
Diomedea (Thalassarche) melanophrys Temminck; G.R. Gray 1871, *Hand-list Birds* 3: 109. Unjustified emendation.
Diomedea melanophrys Temminck; Salvin 1896, *Cat. Birds Brit. Mus.* 25: 447. In part. Unjustified emendation.
Thalassarche melanophrys belcheri Mathews, 1912: *Birds Australia* 2: 271 – Kerguelen Island, south Indian Ocean.
Thalassarche melanophrys richmondi Mathews, 1912: *Birds Australia* 2: 272 – west coast of South America.
Thalassarche melanophrys melanophrys (Temminck); Mathews 1913, *List Birds Australia*: 42. Unjustified emendation.
Thalassarche melanophrys; Belcher 1914, *Ibis* 2 (10th series): 594. Unjustified emendation.
Thalassarche melanophrys melanophrys (Temminck); Mathews 1927, *Syst. Avium Australasianarum* 1: 130.
Diomedea melanophrys melanophrys Temminck; Checklist Committee 1953, *Checklist N.Z. Birds*: 17.
Diomedea melanophrys melanophrys Temminck; Checklist Committee 1980, *Notornis (Suppl.)* 27: 7. Unjustified emendation.
Thalassarche melanophrys; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 126.

The southern oceans; circumpolar, breeding on islands between 46°S and 56°S (Marchant & Higgins 1990). Breeds abundantly on islands off southern Chile: Diego de Almagro, Evangelistas, Albatros, the Ildefonso and Diego Ramirez archipelagos, and possibly Evout (G. Clark *et al.* 1992; Lawton *et al.* 2003; Alderman *et al.* 2005; G. Robertson *et al.* 2007), on Staten Island (Argentina), on the Falklands, South Georgia, Crozet, Kerguelen, Heard, and Macquarie Islands (including the Bishop and Clerks) (Marchant & Higgins 1990; Terauds *et al.* 2005). Contrary to Onley & Scofield (2007), it does not breed at the South Sandwich Islands (Convey *et al.* 1999). Small but increasing numbers breed in the New Zealand region: on Western Chain, Snares Islands / Tini Heke (one pair; Miskelly *et al.* 2001a), Bollons (Antipodes Islands), and Campbell Island / Motu Ihupuku (Tennyson *et al.* 1998). Hybridisation with *Th. impavida* occurs rarely on Campbell Island / Motu Ihupuku (P. Moore *et al.* 2001). Ranges widely between 30°S and antarctic coasts in all oceans, including seas off mainland New Zealand, particularly in winter months (Marchant & Higgins 1990; Terauds *et al.* 2006). A banded breeding adult from Campbell Island / Motu Ihupuku was caught at sea off Chile (P. Moore & Battam 2000) and another adult banded on Macquarie Island was caught off New South Wales (P. Howard 1954). A bird banded on Diego Ramirez Island, Chile, was photographed in Cook Strait (images by Kyle Morrison on New Zealand Birds Online, viewed 24 Jun. 2021). A banded bird from South Georgia was caught at sea off New Zealand (Prince *et al.* 1998) and there is genetic evidence that birds from the Falkland Islands have reached Campbell Island / Motu Ihupuku (T. Burg & Croxall 2001; P. Moore *et al.* 2001). Occasional vagrant far into the North Atlantic, where it has prospected nest sites, and to the central Pacific (Marchant & Higgins 1990; Harrop 1994; Mlodinow 1999; Tickell 2000; P. Fraser *et al.* 2007). The

frequent but incorrect usage of the spelling “*melanophrys*” dates back to Temminck’s (1839) unjustified emendation of his original spelling (Christidis & Boles 1994: 40; Holdaway *et al.* 2001: 126).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► ***Thalassarche impavida* Mathews** **Campbell Black-browed Albatross | Toroa***

Diomedea melanophrys Temminck; Salvin 1896, *Cat. Birds Brit. Mus.* 25: 447. In part. Unjustified emendation.
Diomedea melanophrys; Ogilvie-Grant 1905, *Ibis* 5 (8th series): 558. Not *Diomedea melanophris* Temminck, 1828.
Thalassarche melanophris impavida Mathews, 1912: *Birds Australia* 2: 267, pl. 96 – Tasmania, Australia.
Diomedea melanophris impavida (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 17.
Diomedea melanophrys impavida (Mathews); Checklist Committee 1980, *Notornis (Suppl.)* 27: 7. Unjustified emendation.
Thalassarche impavida; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Breeds only on the north coasts of Campbell Island / Motu Ihupuku and offshore Isle de Jeanette Marie (P. Moore & Moffat 1990; Waugh, Weimerskirch, P. Moore *et al.* 1999; P. Moore 2002, 2004; Shirihai 2002). Ranges widely in New Zealand seas and the Tasman Sea to south and east Australia; reaching south to the Ross Sea, with vagrants north to Vanuatu, New Caledonia, Fiji, Tonga, Tahiti, Tuamotu, and the Marquesas Islands; very rare in the Indian Ocean (Marchant & Higgins 1990; Petyt 1995; Waugh 1998; Cherel *et al.* 1999; Waugh, Sagar *et al.* 1999; Waugh, Weimerskirch, Cherel *et al.* 1999; Tickell 2000; T. Reid *et al.* 2002), including one ashore on Kerguelen Island (Shirihai 2002). A banded immature was caught at sea off Chile (P. Moore & Battam 2000). C. Robertson & Nunn (1998) argued that *Th. melanophris* and *Th. impavida* should be treated as separate species but did not present data to support this proposal. Their recommendation was rejected by James (2000) and Penhallurick & Wink (2004). However, there are morphological and genetic differences between these forms (Onley & Bartle 1999; Waugh, Prince *et al.* 1999; BirdLife International 2000; G. Taylor 2000a; T. Burg & Croxall 2001; Holdaway *et al.* 2001; M. Brooke 2004; Alderman *et al.* 2005), and full species status for *Th. impavida* was accepted by the Checklist Committee (2010).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► ***Thalassarche bulleri* (Rothschild)** **Buller’s Albatross | Toroa***

Breeds only in the New Zealand region; ranges in the Pacific Ocean from eastern Australian seas to the coasts of Chile and Perú (Marchant & Higgins 1990; Spear *et al.* 2003) and rarely into South Atlantic and South African waters (Curtis 1988; Shirihai 2002). C. Robertson & Nunn (1998) suggested that the two Buller’s albatross subspecies recognised here were full species, but they did not present data to support this recommendation (James 2000). BirdLife International (2000), Holdaway *et al.* (2001), M. Brooke (2004), Penhallurick & Wink (2004) and Onley & Scofield (2007) regarded these forms as questionably separable at the species level. Bones are recorded from North and South Island Holocene dunes (Millener 1991) and tentatively from a Late Pleistocene site in Otago (Worthy & Grant-Mackie 2003).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

Thalassarche bulleri bulleri* (Rothschild)** **Southern Buller’s Albatross | Toroa

Diomedea chlororhyncha; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 202. Not *Diomedea chlororhynchos* Gmelin, 1789.
Diomedea chlororhyncha; Finsch 1888, *Ibis* 6 (5th series): 308. Not *Diomedea chlororhynchos* Gmelin, 1789.
Diomedea bulleri Rothschild, 1893: *Bull. Brit. Ornith. Club* 1: 58 – New Zealand.
Thalassarche bulleri (Rothschild); Mathews & Iredale 1913, *Ibis* 1 (10th series): 240.
Diomedea bulleri Rothschild; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part.
Diomedea bulleri bulleri Rothschild; Checklist Committee 1990, *Checklist Birds N.Z.*: 20.
Thalassarche bulleri bulleri (Rothschild); M. Brooke 2004, *Albatrosses and Petrels across the World*: 211.

Breeds on the Snares Islands / Tini Heke and the Solander Islands (Hautere) (Sagar & Stahl 2005). During the breeding season, commonly found off the South Island of New Zealand and off south-east Australia; less often seen south to Macquarie Island and north to the Kermadec Islands / Rangitāhua; migrates to the eastern South Pacific Ocean off Chile and Perú (Sagar & Weimerskirch 1996; Stahl *et al.* 1998; Stahl & Sagar 2000a,b, 2006; T. Reid *et al.* 2002). One ashore on Middle Sister Island, Chatham Islands, in 1996 (Miskelly *et al.* 2006).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

***Thalassarche bulleri platei* (Reichenow)** **Northern Buller’s Albatross**

Diomedea platei Reichenow, 1898: *Ornith. Monatsberichte* 6: 190 – Cavanha, Iquique, Chile.
Thalassarche bulleri; C.A. Fleming 1939, *Emu* 38: 393. Not *Diomedea bulleri* Rothschild, 1893.
Diomedea bulleri Rothschild; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part.
Diomedea bulleri platei Reichenow; Checklist Committee 1990, *Checklist Birds N.Z.*: 20.
Thalassarche nov. sp. (*platei*); C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.
Thalassarche bulleri platei; M. Brooke 2004, *Albatrosses and Petrels across the World*: 211.
Thalassarche bulleri ssp. nov. (not *platei*); Onley & Scofield 2007, *Albatrosses, Petrels & Shearwaters World*: 140.

Breeds mainly on The Sisters and Motuhara / The Forty Fours, Chatham Islands (C. Robertson 1991); one bird ashore on The Pyramid, Chatham Islands (Miskelly *et al.* 2006). Up to 34 pairs nest on Rosemary Rock, Manawatāwhi / Three Kings Islands (A. Wright 1984; McCallum *et al.* 1985; Parrish 2006; Rayner *et al.* 2020). Ranges mainly about the Chatham Islands and in seas east of the North Island (Stahl *et al.* 1998) but recorded south into the subantarctic (Imber *et al.* 2005). At least partially migratory in the non-breeding season to seas off western South America (Stahl *et al.* 1998). Absent from Chatham Islands seas from late Jun. to early Sep. (Stahl *et al.* 1998). C. Robertson & Nunn (1998) suggested that the holotype of *Th. b. platei* was actually a juvenile *Th. b. bulleri* but they did not present data to support this claim. Holocene remains known from the Chatham Islands (Millener 1991, 1999).

► ***Thalassarche cauta* (Gould)**

White-capped Albatross | Toroa

The taxonomic status of various forms of the “white-capped albatross” complex is debated (e.g. L. Cole 2000; Holdaway *et al.* 2001; Shirihai 2002; Abbott & Double 2003a; Double *et al.* 2003; M. Brooke 2004; Onley & Scofield 2007). Two subspecies (one breeding in Tasmania, the other on the New Zealand subantarctic islands) of *Th. cauta* are recognised here. Abbott & Double’s genetic studies (2003a,b) indicate that the Tasmanian population was derived from a small number of birds colonising from the New Zealand population. Small numbers occur (subspecies unknown) off South America; one vagrant seen near Macquarie Island (Marchant & Higgins 1990; L. Cole 2000; Phalan *et al.* 2004; Pereira *et al.* 2016). One bird (subspecies uncertain) off Oregon in 1996 and possibly the same bird seen until 2000 in the north-east Pacific (L. Cole 2000). The common name used here follows Checklist Committee (1990), but albatross is used in preference to mollymawk. Also known as shy albatross (mollymawk).

***Thalassarche cauta cauta* (Gould)**

Tasmanian Albatross

Diomedea cauta Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 177 – Bass Strait, Australia.

Thalassogeron cautus (Gould); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 449.

Thalassogeron layardi Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 450 – off Cape of Good Hope.

Thalassogeron cautus cautus (Gould); Mathews 1912, *Birds Australia* 2: 293.

Thalassogeron cautus layardi Salvin; Mathews 1912, *Birds Australia* 2: 293.

Diomedella cauta rohui Mathews, 1916: *Austral Avian Rec.* 3: 55 – Sydney, New South Wales, Australia.

Diomedella cauta wallaca Mathews, 1918: *Austral Avian Rec.* 3: 160. Unnecessary *nomen novum* for *Diomedella cauta rohui* Mathews, 1916.

Diomedella cauta (Gould); Mathews 1920, *Austral Avian Rec.* 4: 68.

Diomedella cauta cauta (Gould); Mathews 1927, *Syst. Avium Australasianarum* 1: 132.

Diomedea cauta cauta Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part.

Thalassarche cauta; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Thalassarche cauta cauta (Gould); M. Brooke 2004, *Albatrosses and Petrels across the World*: 200.

Breeds on Tasmanian Islands (Albatross Island, Pedra Branca, and Mewstone); adults relatively sedentary but some, mainly immatures, range to Western Australia and South African waters (Marchant & Higgins 1990; Brothers *et al.* 1997, 1998; Hedd *et al.* 2001; BirdLife International 2004; Hedd & Gales 2005). Vagrant in Feb. to Mar. 1981 to the Red Sea and 1999–2000 to the north-east Pacific (L. Cole 2000). The first New Zealand record was a Mewstone bird recovered at the Waikato River mouth in Jul. 1989, two years and three months after being banded as a chick (Anon. 1990; Brothers *et al.* 1997). Birds photographed in Cook Strait, May 2016, and off Stewart Island / Rakiura, Feb. 2017, were accepted by the Records Appraisal Committee (Miskelly, Crossland *et al.* 2017, 2019); however, Tennyson (2020b) subsequently showed that bill colouration is not a reliable way to separate the two subspecies. The common name used here follows Onley & Scofield (2007).

***Thalassarche cauta steadi* Falla**

New Zealand White-capped Albatross | Toroa*

Thalassarche cauta; Loomis 1918, *Proc. Calif. Acad. Sci.* 2(2): 45. Not *Diomedea cauta* Gould, 1841.

Thalassarche cauta steadi Falla, 1933: *Rec. Auck. Inst. Museum* 1: 179 – Foveaux Strait, restricted to off Port Pegasus, Stewart Island (*vide* Miskelly 2012a).

Diomedella cauta steadi (Falla); Mathews 1934, *Novit. Zool.* 39(2): 157.

Diomedea cauta cauta Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 17. In part.

Thalassarche cauta cauta; Oliver 1955, *New Zealand Birds*, 2nd edition: 170. Not *Diomedea cauta* Gould, 1841.

Diomedea cauta steadi (Falla); Checklist Committee 1990, *Checklist Birds N.Z.*: 17.

Thalassarche steadi; C. Robertson & Nunn 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Breeds at the Auckland Islands / Maukahuka: mainly on Disappointment Island, fewer on Auckland and Adams Islands (Tennyson *et al.* 1998; G. Taylor 2000a; Flux 2002; Miskelly, Elliott *et al.* 2020; K. Walker *et al.* 2020). A recent colonist (c. 20 pairs) on Bollons Island, Antipodes Islands, and one pair has nested on Motuhara / The Forty Fours, Chatham Islands (C. Robertson *et al.* 1997; Tennyson *et al.* 1998; Imber *et al.* 2005; Miskelly *et al.* 2006). Ranges north into seas off mainland New Zealand (e.g. Onley 1992; Petyt 1995) and reaches Australian and southern African seas; one reached the north-east Pacific in Sep. 1951, one was ashore at South Georgia in 2003, and there is one record from Brazil (Marchant & Higgins 1990; Brothers *et al.* 1997; L. Cole 2000; Double *et al.* 2003; Anon. 2004b; Phalan *et al.* 2004; Abbott *et al.* 2006; Pereira *et al.* 2016). A male crossed with a female *T. melanophris* on Bird Island, South Georgia, produced chicks

each year from 2007-08 to 2009-10, with one fledging successfully (Burton & Croxall 2012). Identified from Holocene dune deposits at the Auckland / Maukahuka Islands (Tennyson 2020a). The common name used here follows Checklist Committee (1990), but albatross is used in preference to mollymawk.

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► ***Thalassarche eremita* Murphy** **Chatham Island Albatross | Toroa***

- Nealbatrus chlororhynchus*; Belcher 1914, *Ibis* 2 (10th series): 594. In part.
Thalassarche cauta eremita Murphy, 1930: *American Mus. Novit.* 419: 4 – The Pyramid, Chatham Islands.
Thalassarche eremita; Oliver 1930, *New Zealand Birds*, 1st edition: 163.
Diomedella cauta eremita (Murphy); Mathews 1934, *Novit. Zool.* 39(2): 157.
Thalassarche (Diomedella) cauta eremita Murphy; C.A. Fleming 1939, *Emu* 38: 393.
Diomedea cauta eremita (Murphy); Checklist Committee 1953, *Checklist N.Z. Birds*: 17.
Thalassarche eremita; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 126, 175.

Breeds at the Chatham Islands on The Pyramid (C. Robertson *et al.* 2000; P. Latham *et al.* 2004). One nest has been found on Western Chain, Snares Islands / Tini Heke (Miskelly *et al.* 2001a). At sea, ranges to mainland New Zealand and, in the non-breeding season, to waters off Chile and Perú (C. Robertson *et al.* 2000; Spear *et al.* 2003; BirdLife International 2004; P. Latham *et al.* 2004; Collins 2006a). The species occasionally reaches New South Wales and Tasmanian waters and has been seen ashore on Albatross Island, Bass Strait (T. Reid & James 1997; Palliser 1999; P. Latham *et al.* 2004). Two records off South Africa (Ryan 2002; Shirihai 2002). Formerly treated as a subspecies of *T. cauta*, but accepted as a full species by the Checklist Committee (2010), following the recommendations of C. Robertson (*in* Marchant & Higgins 1990), C. Robertson & Nunn (1998), Onley & Bartle (1999), BirdLife International (2000), Holdaway *et al.* (2001), M. Brooke (2004), and Onley & Scofield (2007). Holocene remains known from the Chatham Islands (Millener 1999). The common name used here follows Onley & Bartle (1999) and Holdaway *et al.* (2001).

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

► ***Thalassarche salvini* (Rothschild)** **Salvin's Albatross | Toroa***

- Diomedea cauta*; Buller 1878, *Trans. Proc. N.Z. Inst.* 10: 217. Not *Diomedea cauta* Gould, 1841.
Thalassogeron salvini Rothschild, 1893: *Bull. Brit. Ornith. Club* 1: 58 – New Zealand.
Diomedea salvini (Rothschild); Buller 1895, *Trans. Proc. N.Z. Inst.* 27: 122.
Thalassogeron cautus salvini Rothschild; Mathews & Iredale 1913, *Ibis* 1 (10th series): 240.
Diomedella cauta salvini (Rothschild); Mathews 1927, *Syst. Avium Australasianarum* 1: 133.
Diomedea cauta peruvia Mathews, 1933: *Bull. Brit. Ornith. Club* 53: 185 – western Perú.
Diomedella cauta atlantica Mathews, 1933: *Bull. Brit. Ornith. Club* 53: 213 – 35°44'S, 53°W, south-west Atlantic Ocean, off Argentina.
Diomedea cauta salvini (Rothschild); Checklist Committee 1953, *Checklist N.Z. Birds*: 18.
Thalassarche salvini; C. Robertson & Nunn 1998, *in* G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 19.

Breeds on the Bounty Islands and on Western Chain, Snares Islands / Tini Heke (C. Robertson & van Tets 1982; BirdLife International 2000; Miskelly *et al.* 2001a). Breeding attempts have been reported from The Pyramid and Motuhara / The Forty Fours, Chatham Islands (Miskelly *et al.* 2006). Ranges north to south-east Australian and mainland New Zealand seas (e.g. Marchant & Higgins 1990; K. Wood 1992; Petyt 1995; T. Reid *et al.* 2002), particularly east of New Zealand (e.g. Freeman 1992; Imber 1994), and migrates to seas off Perú and Chile (Arata 2003; Spear *et al.* 2003). Small numbers occur in the Indian Ocean, including a few pairs discovered breeding on Penguin Island (Crozet Islands) and one bird attempting to nest on Kerguelen Island (Shirihai 2002). Vagrant in the South Atlantic (P. Harrison 1984; Jouventin 1990; Phalan *et al.* 2004; Seco Pon *et al.* 2007) and may reach South African waters (Ryan 2001). One on the Hawai'ian Islands in Apr. 2003 (C. Robertson *et al.* 2005). Formerly treated as a subspecies of *T. cauta*, but accepted as a full species by the Checklist Committee (2010), following the recommendations of C. Robertson (*in* Marchant & Higgins 1990), C. Robertson & Nunn (1998), Onley & Bartle (1999), BirdLife International (2000), Holdaway *et al.* (2001), M. Brooke (2004), and Onley & Scofield (2007). The common name used here follows that used in the latter five publications.

*Used as a general name for *Diomedea* and *Thalassarche* albatrosses.

Genus ***Phoebetria*** Reichenbach

Phoebetria Reichenbach, 1853: *Avium Syst. Nat.*: 5 – Type species (by original designation) *Diomedea fuliginosa* Gmelin = *Phoebetria palpebrata* (J.R. Forster).

► ***Phoebetria fusca* (Hilsenberg)** **Sooty Albatross**

- Diomedea fusca* Hilsenberg, 1822: *in Frieriep's Notiz.* 3(5): 74 – Mozambique Channel, Africa.
Phoebetria fusca campbelli Mathews, 1912: *Birds Australia* 2: 304 – Australian seas.
Phoebetria fusca fusca (Hilsenberg); Nichols & Murphy, 1914: *Auk* 31: 532.
Phoebetria [palpebrata] fusca (Hilsenberg); Mathews 1934, *Novit. Zool.* 39(2): 158.
Diomedea palpebrata fusca Hilsenberg; Clancey 1965, *Ostrich* 36: 51.
Phoebetria fusca (Hilsenberg); Jouanin & Mougouin 1979, *in* Peters, *Check-list Birds World* 1 (2nd edition): 57.

Breeds on subtropical and subantarctic islands in the Indian and South Atlantic Oceans: Gough, Tristan da Cunha, Prince Edward, Marion, Crozet, Kerguelen, Amsterdam, and St Paul Islands; ranges at sea in these oceans between 30°S and antarctic waters and regularly reaches seas south of Australia (Marchant & Higgins 1990; T. Reid *et al.* 2002). Five accepted records in the New Zealand region: north of the Auckland Islands / Maukahuka, Feb. 1991; on the Pukaki Rise, Nov. 1993 (Scofield 1994b; Medway 2000a); Challenger Plateau, Jun. 1994; Antipodes Islands, Nov. 1995 (Tennyson *et al.* 2002); and off Little Mangere Island, Chatham Islands, Dec. 2006 (Miskelly *et al.* 2013). One record from Macquarie Island (Onley & Scofield 2007). The record west of the North Island by C. Jowett (Tickell 2000: 117) is poorly documented and seems doubtful.

► ***Phoebetria palpebrata*** (J.R. Forster)

Light-mantled Sooty Albatross | Toroa Pango

Diomedea palpebrata J.R. Forster, 1785: *Mém. Math. Phys. Paris (Acad. Sci.)* 10: 571, pl. 15 – 64°S, 38°E = Indian Ocean, south of Prince Edward and Marion Islands (*vide* Mathews 1927, *Syst. Avium Australasianarum* 1: 133).

Diomedea fuliginosa Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 568. Unnecessary *nomen novum* for *Diomedea palpebrata* J.R. Forster, 1785 (*vide* Medway 1998, in G. Robertson & Gales (Eds), *Albatross Biology and Conservation*: 10).

Diomedea antarctica G.R. Gray, 1844: *Gen. Birds* 3: 650. Unnecessary *nomen novum* for *Diomedea palpebrata* J.R. Forster, 1785.

Diomedea fuliginosa var. *cornicoides* Hutton, 1867: *Ibis* 3 (new series): 186, 192 – at sea, South Atlantic Ocean, south Indian Ocean and Tasman Sea, between 36°28'S, 2°18'E and 37°26'S, 163°54'E.

Diomedea [sic] *fuliginosa* Gmelin; Anon. 1870, *Cat. Colonial Mus.*: 76.

Diomedea (Phoebetria) fuliginosa Gmelin; G.R. Gray 1871, *Hand-list Birds* 3: 109.

Diomedea fuliginosa Gmelin; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 205.

Phoebetria cornicoides (Hutton); Ogilvie-Grant 1905, *Ibis* 5 (8th series): 560.

Phoebetria fuliginosa (Gmelin); Buller 1905, *Suppl. Birds N.Z.* 1: 155.

Phoebetria palpebrata huttoni Mathews, 1912: *Birds Australia* 2: 297 – New Zealand seas.

Phoebetria palpebrata antarctica Mathews, 1912: *Birds Australia* 2: 302 – South Georgia. Junior secondary homonym of *Diomedea antarctica* G.R. Gray, 1844.

Phoebetria palpebrata palpebrata (J.R. Forster); Mathews 1912, *Birds Australia* 2: 303.

Phoebetria palpebrata auduboni Nichols & Murphy, 1914: *Auk* 31: 531 – “mouth of the Columbia River, Oregon”, error for South Pacific Ocean (*vide* Mathews 1934, *Novit. Zool.* 39(2): 158).

Phoebetria palpebrata murphyi Mathews & Iredale, 1921: *Man. Birds of Australia*: 50. Unnecessary *nomen novum* for *Phoebetria palpebrata antarctica* Mathews, 1912.

Phoebetria palpebrata (J.R. Forster); Checklist Committee 1953, *Checklist N.Z. Birds*: 18.

Breeds at South Georgia, Marion, Prince Edward, Crozet, Kerguelen, Heard, Macquarie, Campbell / Motu Ihupuku, Auckland / Maukahuka, and Antipodes Islands (Marchant & Higgins 1990). Circumpolar, ranging mainly between 35°S and the coasts of Antarctica but occasionally north to 20°S (Lovegrove 1978; Marchant & Higgins 1990; G. Robertson & Weimerskirch 1993; Weimerskirch & Robertson 1994); has straggled north of the equator (Morlan 1994; Mlodinow 1999). Occasionally beach-wrecked on mainland New Zealand (Powlesland 1985), including one banded juvenile from the Crozet Islands (Barrat *et al.* 1973). Recorded as Holocene bones at the Auckland Islands / Maukahuka, and on Chatham Island (Millener 1991, 1999; Tennyson 2020a).

Family OCEANITIDAE Salvin: Southern Storm Petrels

Oceanitinae Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 343, 358 – Type genus *Oceanites* Keyserling & Blasius, 1840.

Genus *Oceanites* Keyserling & Blasius

Oceanites Keyserling & Blasius, 1840: *Wirbelthiere Europa's*: xciii, 131, 238 – Type species (by subsequent designation) *Procellaria wilsoni* Bonaparte = *Oceanites oceanicus* (Kuhl).

Procellata Bianchi, 1913: *Faune Russie, Oiseaux* 1(2): 805 – Type species (by original designation) *Procellaria oceanica* Kuhl = *Oceanites oceanicus* (Kuhl).

The subgenera of *Oceanites* used by Checklist Committee (1990) are not followed here because we recognise no other subgenera in the Procellariiformes.

► ***Oceanites oceanicus*** (Kuhl)

Wilson's Storm Petrel

Procellaria oceanica Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 136, pl. 10, fig. 1 (ex Banks MS) – no locality = South Atlantic Ocean off the mouth of Rio de la Plata (*vide* Mathews 1912, *Birds Australia* 2: 13).

Procellaria wilsoni Bonaparte, 1824: *Journ. Acad. Nat. Sci. Philad.* 3(2): 231, pl. 9, fig. 2 – Newfoundland, Canada.

Thalassidroma wilsoni (Bonaparte); Audubon 1839, *Birds Amer.* 8: 106, pl. 460.

Thalassidroma oceanica (Kuhl); Schinz 1840, *European Fauna* 1: 397, pl. 1.

Oceanites wilsoni (Bonaparte); Bonaparte 1857, *Consp. Gen. Avium* 2: 199.

Oceanites oceanica (Kuhl); Coues 1875, *Bull. U.S. Nat. Mus.* 2: 30.

Oceanites oceanicus (Kuhl); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 358.

Oceanites oceanica (Kuhl); A. Hamilton 1909, *Hand-list Birds New Zealand*: 5.

Oceanites (Oceanites) oceanicus (Kuhl); Checklist Committee 1990, *Checklist Birds N.Z.*: 58.

Breeds on coasts and islands of Antarctica and on subantarctic archipelagos as far north as the Crozet Islands (46°S); migrates to north of the equator in all oceans (B. Roberts 1940; Marchant & Higgins 1990). Two subspecies usually recognised; those breeding north of the Antarctic Convergence are *O. o. oceanicus* and those breeding south of the convergence are *O. o. exasperatus* (Bretagnolle 1989; Marchant & Higgins 1990). A New Zealand Holocene record, presumably CM Av23130 from Punakaiki (Checklist Committee 1990: 58), has been reidentified as probably being *Fregetta maoriana* (Worthy 2000). Near New Zealand, one pair of *O. o. oceanicus* reported from Bishop Island, south of Macquarie Island (G. Baker *et al.* 2002; Garnett & Crowley 2002).

Oceanites oceanicus exasperatus Mathews

Wilson's Storm Petrel

Oceanites oceanicus exasperatus Mathews, 1912: *Birds Australia* 2: 11, pl. 68 – New Zealand seas, restricted to islands south of New Zealand (*vide* B. Roberts 1940, *British Graham Land Exped. 1934–37 Scientific Reports* 1: 150).

Oceanites oceanicus oceanicus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 29. Not *Procellaria oceanica* Kuhl, 1820.

Oceanites (Oceanites) oceanicus exasperatus Mathews; Checklist Committee 1990, *Checklist Birds N.Z.*: 58.

Breeds on coasts and islands of Antarctica and the Antarctic Peninsula, including many Ross Sea localities, Balleny and Scott Islands; migrates north of the equator (Huber 1971; Nakamura *et al.* 1983; Marchant & Higgins 1990). Mathews' type specimen is from New Zealand seas, and most other New Zealand records are considered to be this subspecies (e.g. Falla *et al.* 1981; Checklist Committee 1990). Generally uncommon passage migrant past New Zealand; mainly seen Mar.–May, with exceptionally high numbers (hundreds) noted in Apr. 1990 and Mar.–Apr. 1999 (Petyt 2001b).

Genus Garrodia Forbes

Garrodia Forbes, 1881: *Coll. Sci. Papers Garrod*: 521 (footnote) – Type species (by original designation) *Thalassidroma nereis* Gould = *Garrodia nereis* (Gould).

Garrodia is sometimes regarded as a junior synonym of *Oceanites* (e.g. Mathews 1912–13, 1948; Condon 1975; Olson 1985a; Checklist Committee 1990; Marchant & Higgins 1990; Garnett & Crowley 2002) but is recognised here pending a recommended comprehensive review of storm petrel genera (Holdaway *et al.* 2001).

► **Garrodia nereis** (Gould)

Grey-backed Storm Petrel | Reoreo

Thalassidroma Nereis Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 178 – Bass Strait, Australia.

Procellaria nereis (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 196.

Procellaria (Procellaria) nereis (Gould); G.R. Gray 1871, *Hand-list Birds* 3: 104.

Thalassidroma nereis Gould; Hutton 1871, *Cat. Birds N.Z.*: 49.

Garrodia nereis (Gould); Buller 1888 (May), *History of the Birds of N.Z.*, 2nd edition 2 (part 7): 247.

Oceanites nereis nereis (Gould); Mathews 1912, *Birds Australia* 2: 15.

Procellaria saltatrix Mathews, 1912: *Birds Australia* 2: 16 (ex Solander MS) – 110 km south-east of Kaikoura.

Procellaria longipes Mathews, 1912: *Birds Australia* 2: 17 (ex Solander MS) – off New Zealand.

Oceanites nereis chubbi Mathews, 1912: *Birds Australia* 2: 18 – Falkland Islands, South Atlantic Ocean.

Oceanites nereis couesi Mathews, 1912: *Birds Australia* 2: 18 – Kerguelen Island, south Indian Ocean.

Garrodia nereis nereis (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 223.

Garrodia nereis chubbi (Mathews); Bennett 1926, *Ibis* 2 (12th series): 313.

Garrodia nereis (Gould); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 29.

Oceanites (Garrodia) nereis (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 58.

A circumpolar, predominantly subantarctic, species breeding on Falkland, South Georgia, Gough, Prince Edward, Crozet, Kerguelen, Auckland / Maukahuka, Campbell / Motu Ihupuku, Antipodes, and Chatham Islands (Marchant & Higgins 1990; D. Barker *et al.* 2005) and probably on Macquarie Island and in Fiordland (Rounsevell & Brothers 1984; Miskelly, Stahl *et al.* 2017, 2021). Apparently fairly sedentary (Serventy *et al.* 1971; Watson *et al.* 1971; Imber 1981) but straggles to northern New Zealand seas (J. Jenkins & Croxall 1970; Watson *et al.* 1971; Langlands 1989; Marchant & Higgins 1990; Gaskin & Baird 2005; Miskelly 2006). Recorded as Late Pleistocene–Holocene bones from the North, South, and Chatham Islands, and Auckland Islands / Maukahuka (Millener 1981a, 1991; Holdaway *et al.* 2001; Worthy, Holdaway *et al.* 2002; Tennyson 2020a).

Genus Pelagodroma Reichenbach

Pelagodroma Reichenbach, 1853: *Avium Syst. Nat.*: iv – Type species (by original designation) *Procellaria marina* Latham = *Pelagodroma marina* (Latham).

Pelagodroma is occasionally regarded as a junior synonym of *Oceanites* (e.g. Mathews 1948; Olson 1985a). The Kermadec storm petrel, previously considered to be a subspecies of *Pelagodroma marina*, is here treated as a separate species, following the recommendation of Holdaway *et al.* (2001).

► **Pelagodroma marina** (Latham)

White-faced Storm Petrel | Takahikare

Procellaria Fregata Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 561. Based on “Frigate Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 410 – latitude 37°S = about mouth of the Rio de la Plata (*vide* Mathews 1936, *Emu* 36: 98). Junior primary homonym of *Procellaria fregata* Linnaeus, 1766.

Procellaria marina Latham, 1790: *Index Ornith.*: 826 (ex Solander MS). Based on “Frigate Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 410 – Southern Ocean = 35°S to 37°S, off the mouth of the Rio de la Plata (*vide* Murphy 1924, *Bull. Am. Mus. Nat. Hist.* 50: 233).

Procellaria Fregatta Kuhl, 1820: *Beitr. Zool. vergl. Anat. 1*: 138 (ex Banks MS) – latitude 37°S.

Procellaria Fregata J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 180 – Tahiti, French Polynesia, Pacific Ocean. Junior primary homonym of *Procellaria fregata* Linnaeus, 1766.

Thalassidroma fregatta (Kuhl); G.R. Gray 1844, *Gen. Birds* 3: 648. Unjustified emendation.

Thalassidroma marina (Kuhl) [sic]; G.R. Gray 1844, *Gen. Birds* 3: 648.

Procellaria aequorea G.R. Gray, 1844: *Gen. Birds* 3: 648 (ex Solander MS) – no locality.

Thalassidroma marina (Latham); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(3): 17.

Pelagodroma fregata; Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 769. Not *Procellaria fregata* Linnaeus, 1766.

Thalassidroma fregata; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 321. Not *Procellaria fregata* Linnaeus, 1766.

Pelagodroma marina (Latham); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 362.

Procellaria a'quorea Mathews, 1912: *Birds Australia* 2: 23 (ex Solander MS) – 37°S off South America.

Widespread in temperate and subtropical parts of Atlantic, Indian and South Pacific Oceans, reaching subantarctic seas and migrating to tropical and subtropical waters (Marchant & Higgins 1990). Five subspecies recognised following Marchant & Higgins (1990) and Holdaway *et al.* (2001): *P. m. marina* from Tristan da Cunha group and Gough Islands; *P. m. hypoleuca* Moquin-Tandon, 1841 from Ilhas Selvagens and Canary Islands; *P. m. eadesorum* Bourne, 1953 from Cape Verde Islands; and the two locally occurring subspecies (Marchant & Higgins 1990; M. Brooke 2004 – see below).

***Pelagodroma marina maoriana* Mathews**

New Zealand White-faced Storm Petrel | Takahikare

Procellaria (Pelagodroma) fregata; G.R. Gray 1871, *Hand-list Birds* 3: 104. Not *Procellaria fregata* Linnaeus, 1766.

Thalassidroma marina; Hutton 1872, *Ibis* 2 (3rd series): 249. Not *Procellaria marina* Latham, 1790.

Pelagodroma marina maoriana Mathews, 1912: *Birds Australia* 2: 24 – Chatham Islands and Auckland Islands, restricted to Auckland Islands (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 224).

Procellaria passerina Mathews, 1912: *Birds Australia* 2: 24 (ex Solander MS) – Pacific Ocean, 29°10'S, 159°20'W.

Pelagodroma marina passerina (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 193.

Breeds on many islands off the North Island: Motuopao (Pierce 1992), Moturoa, Cavalli, Poor Knights, Mokohinau, Mercury, The Noises, Horuhoru Rock (Gannet Rock), Cow, Motuokino (Shag Rock), Ohinauiti, The Aldermen, Motunau (Plate; Bay of Plenty), East (Whangaokeno) and Motumahanga (Saddleback; off New Plymouth) (Falla 1934; Marchant & Higgins 1990; G. Taylor 2000b). Further south, breeds on Sentinel Rock (Cook Strait), Motunau Island (Canterbury), the Otago coast, several islands around Stewart Island / Rakiura (Richdale 1943; Marchant & Higgins 1990; G. Taylor 2000b; Cuming 2003), the Chatham Islands (M. Bell & Bell 2003) and formerly on Auckland Island / Maukahuka (R. Murphy & Irving 1951; G. Taylor 2000b; Miskelly, Elliott *et al.* 2020). Possibly breeds at Manawatāwhi / Three Kings (Marchant & Higgins 1990), Portland Island (Hawke's Bay; Foreman 2001) and Makaro / Ward Island (Wellington Harbour; Miskelly 2003a). Migrates to the eastern tropical Pacific Ocean, particularly between Ecuador and the Galápagos Islands (Imber 1984b; Pitman 1986; Marchant & Higgins 1990; Spear & Ainley 2007). Late Pleistocene–Holocene bones and midden records from North, South, Stewart, and Chatham Islands, and Auckland Islands / Maukahuka (Millener 1991; Worthy 1998c; Tennyson 2020a).

***Pelagodroma marina dulciae* Mathews**

Australian White-faced Storm Petrel

Pelagodroma marina dulciae Mathews, 1912: *Birds Australia* 2: 20 (key), 21 – Breaksea Island, off Albany, Western Australia.

Pelagodroma marina howei Mathews, 1912: *Birds Australia* 2: 26 – Mud Island, Port Phillip Bay, Victoria, Australia.

Pelagodroma marina dulciae Mathews; Checklist Committee 1990, *Checklist Birds N.Z.*: 59.

Breeds on Australian islands from Houtman Abrolhos, Western Australia, to Bass Strait and Tasmania, and to Broughton Island, New South Wales (Serventy *et al.* 1971; Marchant & Higgins 1990; G. Baker *et al.* 2002). Migrates to the north Indian Ocean and Arabian Sea, and tropical eastern Pacific Ocean (Imber 1984b; Marchant & Higgins 1990; Spear & Ainley 2007). Straggles to northern New Zealand: Muriwai Beach, May 1983; off Kawhia, Apr. 2016 (Miskelly, Crossland *et al.* 2021).

► ***Pelagodroma albiclunis* Murphy & Irving**

Kermadec Storm Petrel

Pelagodroma marina albiclunis Murphy & Irving, 1951: *American Mus. Novit.* 1506: 15 – Sunday [= Raoul] Island, Kermadec Islands.

Pelagodroma albiclunis Murphy & Irving; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 174.

Breeding confirmed only on Hazard Island, Kermadec Islands / Rangitāhua (Baird & Imber 2006). Many records at sea around the Kermadec Islands and a few caught ashore on Macauley Island (Veitch *et al.* 2004; Baird & Imber 2006). Once seen off eastern Australia (4 birds; J. Jenkins 1982a) and one seen off Lord Howe Island (McAllan *et al.* 2004). Perhaps formerly bred in the Lord Howe and Norfolk Island groups (based on Holocene bones; Meredith 1985; Holdaway *et al.* 2001; McAllan *et al.* 2004).

Genus *Fregetta* Bonaparte

Fregetta Bonaparte, 1855: *Compt. Rend. Séa. Acad. Sci., Paris* 41: 1113 – Type species (by original designation) *Thalassidroma leucogaster* Gould = *Fregetta grallaria leucogaster* (Gould).

Cymodroma Ridgway, 1884: *Mem. Mus. Comp. Zool.* 13: 363, 418 – Type species (by monotypy) *Procellaria grallaria* Vieillot = *Fregetta grallaria* (Vieillot).

Pealea Ridgway, 1886: *Auk* 3: 334 – Type species (by original designation) *Thalassidroma lineata* Peale = *Fregetta tropica* (Gould).

Fregettornis Mathews, 1912: *Birds Australia* 2: 31 – Type species (by original designation) *Procellaria grallaria* Vieillot = *Fregetta grallaria* (Vieillot).

Pealeornis Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 132 – Type species (by original designation) *Pealeornis maoriana* Mathews = *Fregetta maoriana* (Mathews).

Fregodroma Mathews, 1937: *Bull. Brit. Ornith. Club* 57: 145 – Type species (by original designation) *Thalassidroma tropica* Gould = *Fregetta tropica* (Gould).

Fregolla Mathews, 1937: *Emu* 37: 142 – Type species (by original designation) *Fregetta melanoleuca* Salvadori = *Fregetta tropica* (Gould). As subgenus of *Fregodroma*.

Fregandria Mathews, 1938: *Bull. Brit. Ornith. Club* 59: 10. Unnecessary *nomen novum* for *Fregolla* Mathews, 1937.

► *Fregetta grallaria* (Vieillot)

White-bellied Storm Petrel

Procellaria grallaria Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 25: 418 – “Nouvelle-Hollande” = Australia.

Procellaria aquerea Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 138 (ex Banks MS) – 37°S.

Cymodroma grallaria (Vieillot); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 366.

Fregettornis grallarius (Vieillot); Mathews 1913, *List Birds Australia*: 32.

Fregetta lineata; Murphy 1924, *American Mus. Novit.* 124: 7. Not *Thalassidroma lineata* Peale, 1848.

Fregettornis grallaria aquerea (Kuhl); Mathews 1936, *Emu* 36: 98.

Fregetta grallaria Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 30.

A widespread but uncommon subtropical breeding species. Five subspecies: *F. g. grallaria* breeds on Lord Howe and the Kermadec Islands / Rangitāhua; *F. g. leucogaster* (Gould, 1844) on Nightingale, Inaccessible, and Gough Islands in the South Atlantic, and Roche Quille (off St Paul Island) in the Indian Ocean; *F. g. segethi* (Philippi & Landbeck, 1860) on Santa Clara and Morro Vinillo, Juan Fernández Islands, and possibly on San Ambrosio, Chile; *F. g. titan* Murphy, 1928 on islets off Rapa; *F. g. guttata* (Mathews, 1933) off the Marquesas Islands (Jouanin & Mougin 1979; Thibault & Varney 1991; M. Brooke 2004; B. Robertson *et al.* 2016; Flood *et al.* 2021). Apparently disperses northward into the tropics after breeding (Jouanin & Mougin 1979; Marchant & Higgins 1990).

Fregetta grallaria grallaria (Vieillot)

White-bellied Storm Petrel

Procellaria grallaria Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 25: 418 – “Nouvelle-Hollande” = Australia.

Fregetta grallaria (Vieillot); Bonaparte 1857, *Consp. Gen. Avium* 2: 197. In part.

Procellaria (Pelagodroma) grallaria Vieillot; G.R. Gray 1871, *Hand-list Birds* 3: 104.

Fregettornis royanus Mathews, 1914: *Austral Avian Rec.* 2: 86 – Lord Howe Island, Tasman Sea.

Fregettornis insularis Mathews, 1915: *Austral Avian Rec.* 2: 124 – Lord Howe Island, Tasman Sea.

Fregettornis alisteri Mathews, 1915: *Austral Avian Rec.* 2: 124 – Lord Howe Island, Tasman Sea.

Fregettornis innominatus Mathews, 1915: *Austral Avian Rec.* 2: 124 – Lord Howe Island, Tasman Sea.

Cymodroma grallaria insularis (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 110.

Cymodroma royana (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 110.

Cymodroma howensis Mathews, 1928: *Birds Norfolk & Lord Howe Islands*: 11 – Lord Howe Island, Tasman Sea.

Fregetta leucogaster deceptis Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 146 – New Zealand.

Fregettornis grallaria innominatus Mathews; Mathews 1933, *Novit. Zool.* 39(2): 44.

Fregettornis royana [sic] Mathews; Mathews 1933, *Novit. Zool.* 39(2): 48.

Fregettornis grallaria royana [sic] Mathews; Mathews 1934, *Novit. Zool.* 39(2): 195.

Fregodroma deceptis deceptis; Mathews 1937, *Emu* 37: 141.

Fregetta grallaria (Vieillot) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 26.

Fregetta grallaria grallaria (Vieillot); Checklist Committee 1990, *Checklist Birds N.Z.*: 62.

F. [g.] grallaria; Flood *et al.* 2021: *Bull. Brit. Ornith. Club* 141: 396.

Breeds on the Kermadec Islands / Rangitāhua (Macauley and Curtis Islands; Veitch *et al.* 2004) and extralimitally on Lord Howe (G. Baker *et al.* 2002; McAllan *et al.* 2004). At sea, generally ranges to the north and east of its breeding grounds, including into the eastern tropical Pacific Ocean (Spear & Ainley 2007). Apart from records from the Kermadec Islands / Rangitāhua, very few records from the New Zealand region: “off New Zealand” (Mathews 1933); two off Farewell Spit, Nov. 1969; off the Poor Knights Islands, Dec. 1969 (J. Jenkins & Croxall 1970); Waikawa Beach, Jul. 1975; Ninety Mile Beach, Apr. 1978; Piha Beach, May 1985 (Powlesland 1987); and at sea between Hauturu / Little Barrier and Great Barrier / Aotea Islands, Jan. 1991 (Guest 1992). The Jun. 1987 Hampden Beach record (Powlesland 1989b; Checklist Committee 1990) was a misidentification (Darby & Schweigman 1993), as was the Mar. 1990 Christchurch city specimen (L. Shand 1992), which is *Oceanites o. exasperatus* (CM Av29600). Given the recent rediscovery of *Fregetta maoriana*, other records should be treated with caution also.

► ***Fregetta tropica*** (Gould)**Black-bellied Storm Petrel | Takahikare-rangi**

- Thalassidroma tropica* Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 366 – equatorial regions of Atlantic Ocean = 6°33'N, 16°06'W (fide R. Murphy & Snyder 1952, *American Mus. Novit.* 1596: 9).
- Thalassidroma melanogaster* Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 367 – off St Paul and Amsterdam Islands, Indian Ocean.
- Thalassidroma lineata* Peale, 1848: *U.S. Expl. Exped.* 8: 293 – Upolu, Samoa, (fide R. Murphy & Snyder 1952, *American Mus. Novit.* 1596: 9) = ?Drake Strait or Bellingshausen Sea, Antarctica (fide Jouanin & Mougín 1979, in Peters, *Check-list Birds World 1* (2nd edition): 108).
- Fregetta melanogastra* (Gould); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 769. Unjustified emendation.
- Fregetta tropica* (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 197.
- Thalassidroma* (*Fregetta*) *melanogaster* Gould; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.
- Thalassidroma* (*Fregetta*) *tropica* Gould; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.
- Procellaria melanogastra* (Gould); Schlegel, 1863: *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 6. Unjustified emendation.
- Oceanites lineata* (Peale); Coues 1864, *Proc. Acad. Nat. Sci. Philad.* 16: 83, 91.
- Thalassidroma melanogastra* (Gould); Finsch 1870, *Journ. für Ornith.* 18: 370. Unjustified emendation.
- Procellaria* (*Oceanites*) *lineata* (Peale); G.R. Gray 1871, *Hand-list Birds* 3: 104.
- Procellaria* (*Pelagodroma*) *melanogaster* (Gould); G.R. Gray 1871, *Hand-list Birds* 3: 105.
- Oceanitis* [sic] *tropica* (Gould); Sharpe 1879, *Phil. Trans. Roy. Soc. London* 168: 130.
- Oceanites melanogastra*; Pagenstecher, 1885: *Jahrbuch Wiss. Hamburg* 2: 18. Unjustified emendation.
- Fregetta melanogaster* (Gould); Buller 1888 (May), *History of the Birds of N.Z.*, 2nd edition 2 (part 7): 249.
- Pealea lineata* (Peale); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 364.
- Cymodroma melanogaster* (Gould); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 364.
- Pealea lineata* (Peale); Godman 1907, *Monograph Petrels 1*: 57, pl. 16. In part.
- Fregetta melanoleuca* Salvadori, 1908: *Bull. Brit. Ornith. Club* 21: 79 – Tristan da Cunha, restricted to Gough Island, South Atlantic Ocean (fide Bourne 1962, in Palmer (ed.) *Handb. North Amer. Birds 1*: 252).
- Fregetta tubulata* Mathews, 1912: *Birds Australia* 2: 42 (ex Gould 1844) – near the coast of Australia.
- Fregetta tropica melanogaster* (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 224.
- Fregetta tropica australis* Mathews, 1914: *Austral Avian Rec.* 2: 86 – New Zealand.
- Fregetta fregata*; Mathews 1933, *Novit. Zool.* 39(2): 37. Not *Procellaria fregata* Linnaeus, 1766.
- Fregetta tropica australia* [sic] Mathews; Mathews 1933, *Novit. Zool.* 39(2): 40.
- Fregettornis melanoleuca*; Mathews 1933, *Novit. Zool.* 39(2): 47.
- Fregetta leucothysanus* Mathews, 1937: *Bull. Brit. Ornith. Club* 57: 146 – south Indian Ocean, 37°30'S, 42°E.
- Fregodroma deceptis leucothysanus*; Mathews 1937, *Emu* 37: 141.
- Fregodroma tropica*; Mathews 1937, *Emu* 37: 141.
- Fregodroma tropica melanogaster*; Mathews 1937, *Emu* 37: 142.
- Fregodroma tropica australis*; Mathews 1937, *Emu* 37: 142.
- Fregolla melanoleuca* (Salvadori); Mathews 1937, *Emu* 37: 142.
- Cymodroma tropica* (Gould); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 157.
- Cymodroma lineata* (Peale); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 157.
- Fregetta tropica* (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 26.
- Fregetta tropica tropica* (Gould); Jouanin & Mougín 1979, in Peters, *Check-list Birds World 1* (2nd edition): 108.
- Fregetta tropica melanoleuca* Salvadori; Jouanin & Mougín 1979, in Peters, *Check-list Birds World 1* (2nd edition): 108.

Breeds on South Shetland, South Orkney, and South Sandwich Islands, South Georgia, Gough?, Bouvetøya?, Prince Edward, Marion, Crozet, Kerguelen, Heard, Auckland / Maukahuka, and Antipodes Islands (Beck & Brown 1971; Marchant & Higgins 1990; Convey *et al.* 1999; M. Brooke 2004; Miskelly, Elliott *et al.* 2020). Range circumpolar in subantarctic and antarctic seas; migrates to the tropics in all oceans, including the south-west Pacific Ocean north of New Zealand (Watson *et al.* 1971; Lovegrove 1978; Marchant & Higgins 1990). In New Zealand seas, common in the subantarctic but rarer further north; locally breeding populations probably migrating to the Coral Sea in winter (Marchant & Higgins 1990; Petyt 1995, 2001b; Gaskin & Baird 2005). Recorded as Holocene remains from the Chatham Islands and Auckland Islands / Maukahuka (Millener 1991; Tennyson 2020a).

► ***Fregetta maoriana*** (Mathews)**New Zealand Storm Petrel | Takahikare-raro**

- Oceanites lineata*; Bonaparte 1857, *Consp. Gen. Avium* 2: 200. Not *Thalassidroma lineata* Peale, 1848.
- Pealea lineata* (Peale); Godman 1907, *Monograph Petrels 1*: 57, pl. 16. In part.
- Fregetta lineata*; Stidolph 1927, *Emu* 26: 214. Not *Thalassidroma lineata* Peale, 1848.
- Fregetta lineata*; Oliver 1930, *New Zealand Birds*, 1st edition: 100. In part.
- Pealeornis maoriana* Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 132 – Banks Peninsula.
- Cymodroma maoriana* (Mathews); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 157.
- Oceanites oceanicus* (Kuhl); R. Murphy & Snyder 1952, *American Mus. Novit.* 1596: 12. In part.
- Oceanites oceanicus exasperatus*; Checklist Committee 1953, *Checklist N.Z. Birds*: 26. In part.
- Oceanites maorianus*; Oliver 1955, *New Zealand Birds*, 2nd edition: 100.
- Oceanites oceanicus maorianus* (Mathews); Marchant & Higgins 1990, *HANZAB 1*: 675.

Fregetta maoriana (Mathews); B. Robertson *et al.* 2011, *Mol. Phyl. Evol.* 63: 952.

Pealiornis [sic] *maoriana*; C. Robertson 2012, *Notornis* 59: 91. Misspelling.

Three museum specimens collected at sea off the east coast of New Zealand: two off East Cape (probably in Feb. 1827) and one off Banks Peninsula (19th Century; Bourne *et al.* 2004; Medway 2004a). Not subsequently recorded until many sightings at sea off north-east New Zealand, from Jan. 2003 (e.g. Flood 2003; Stephenson & Saville 2003; Bourne & Jouanin 2004; Flood *et al.* 2004; Stephenson 2004; Gaskin & Baird 2005; Rare Birds Committee 2005; Scofield 2007). Discovered to be breeding on Hauturu / Little Barrier Island in 2013 (Rayner *et al.* 2015). Late Pleistocene–Holocene bones, from the South Island West Coast and two North Island sites (near Gisborne and Martinborough), have been tentatively referred to this species (Worthy 2000; Holdaway *et al.* 2001).

The species forms a monophyletic clade with other *Fregetta* species. As it is the type species of *Pealeornis* Mathews, this genus becomes a junior synonym of *Fregetta* (see B. Robertson *et al.* 2011).

Family HYDROBATIDAE Mathews: Northern Storm Petrels

Hydrobatinae Mathews, 1913: *Birds Australia* 2: 9 – Type genus *Hydrobates* Boie, 1822.

We use the genus *Hydrobates* for species formerly included in the genus *Oceanodroma*, following the recommendations of Dickinson & Remsen (2013) and Chesser *et al.* (2019), which were based on the analyses of Penhallurick & Wink (2004), B. Robertson *et al.* (2011), and Wallace *et al.* (2017).

Genus *Hydrobates* Boie

Hydrobates Boie, 1822: *Isis von Oken*, Heft 5: col. 562 – Type species (by subsequent designation) *Procellaria pelagica* Linnaeus, 1758 = *Hydrobates pelagicus* (Linnaeus).

Oceanodroma Reichenbach, 1853: *Avium Syst. Nat.*: iv – Type species (by original designation) *Procellaria furcata* Gmelin = *Hydrobates furcatus* (Gmelin).

Cymochorea Coues, 1864: *Proc. Acad. Nat. Sci. Philad.* 16: 75 – Type species (by original designation) *Procellaria leucorhoa* Vieillot = *Hydrobates leucorhous* (Vieillot).

Halocyptena Coues, 1864: *Proc. Acad. Nat. Sci. Philad.* 16: 78 – Type species (by monotypy) *Halocyptena microsoma* Coues = *Hydrobates microsoma* (Coues).

Pacificodroma Bianchi, 1913: *Faune Russie, Oiseaux* 1(2): 516, 559 – Type species (by original designation) *Thalassidroma monorhis* Swinhoe = *Hydrobates monorhis* (Swinhoe).

Bannermania Mathews & Iredale, 1915: *Ibis* 3 (10th series): 578 – Type species (by monotypy) *Thalassidroma hornbyi* G.R. Gray = *Hydrobates hornbyi* (G.R. Gray).

Tethysia Mathews, 1933: *Bull. Brit. Ornith. Club* 53: 154 – Type species (by original designation) *Procellaria tethys* Bonaparte = *Hydrobates tethys* (Bonaparte).

Loomelania Mathews, 1934: *Bull. Brit. Ornith. Club* 54: 119 – Type species (by original designation) *Procellaria melania* Bonaparte = *Hydrobates melania* (Bonaparte).

Thalobata Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 27 – Type species (by original designation) *Thalassidroma castro* Harcourt = *Hydrobates castro* (Harcourt). As a subgenus of *Cymochorea*.

Stonowa Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 27 – Type species (by original designation) *Cymochorea owstoni* Mathews & Iredale = *Hydrobates tristrami* Salvin. As a subgenus of *Cymochorea*.

Bianchoma Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 29 – Type species (by original designation) *Cymochorea matsudairae* (Kuroda) = *Hydrobates matsudairae* Kuroda. As a subgenus of *Cymochorea*.

► *Hydrobates leucorhous* (Vieillot)

Leach's Storm Petrel

Breeds on islands in the North Pacific and North Atlantic Oceans; migrates to the tropics and subtropics after breeding (Marchant & Higgins 1990). Four subspecies recognised by most authorities (e.g. Power & Ainley 1986; Carboneras 1992a; M. Brooke 2004): *H. l. leucorhous* breeding widely in the North Atlantic and North Pacific; *H. l. chapmani* Berlepsch, 1906 breeding on the San Benitos and Los Coronados Islands (Baja California); *H. l. socorroensis* Townsend, 1890 breeding on Guadalupe Islands (Baja California) in summer; *H. l. cheimomnestes* Ainley, 1980 breeding on Guadalupe Islands in winter.

Hydrobates leucorhous leucorhous (Vieillot)

Leach's Storm Petrel

Procellaria leucorhoa Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 25: 422 – maritime shores of Picardy, France.

Procellaria leachii Temminck, 1820: *Manuel d'Ornith.*, 2nd edition. 2: 812 – St Kilda, Scotland.

Procellaria Bullockii J.D.D. Fleming, 1828: *Hist. Brit. Anim.*: 136. Unnecessary *nomen novum* for *Procellaria leachii* Temminck, 1820.

Thalassidroma leachii (Temminck); Holböll 1843, *Naturhist. Tidsskr.* 4: 430.

Thalassidroma Leachii (Temminck); G.R. Gray 1844, *Gen. Birds* 3: 648.

Oceanodroma leucorhoa (Vieillot); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 348. Unjustified emendation.

Oceanodroma leucorhoa (Vieillot); R. Murphy 1915, *Auk* 32: 170.

Cymochorea leucorhoa leucorhoa (Vieillot); Mathews 1934, *Novit. Zool.* 39(2): 186.

Cymochorea leucorhoa (Vieillot); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 91.

Cymochorea leucorhoa muriwai Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 30 – Muriwai Beach.

Cymochorea leucorhoa kaedingi; Mathews 1944, *Emu* 43: 243. Not *Oceanodroma kaedingi* Anthony, 1898.

Oceanodroma leucorhoa leucorhoa (Vieillot); Checklist Committee 1953, *Checklist N.Z. Birds*: 25.

Hydrobates leucorhous leucorhous (Vieillot); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 174.

Breeds on islands between 30°N and 70°N in the North Pacific and North Atlantic Oceans (Carboneras 1992a; M. Brooke 2004). After breeding, migrates mainly to the tropics and subtropics, where non-breeders are present all year (Marchant & Higgins 1990). Rare straggler to New Zealand: Muriwai Beach, Aug. 1922 (Falla 1933; Oliver 1955); Hauraki Plains, Apr. 1978 (Fooks 1978); Dargaville Beach, Aug. 1978 (Veitch 1980); Rabbit Island, Chatham Islands, Nov. 1980 (two prospecting for nest sites; Imber & Lovegrove 1982); Ninety Mile Beach, Oct. 1998 (G. Taylor 2004). A pair was found on an egg on Rangatira Island, Chatham Islands, Feb. 2018 (Southey 2018). The supposed Dec. 1983 Chatham Islands record (Checklist Committee 1990; Marchant & Higgins 1990) was a misidentification (Imber 1994).

Family PROCELLARIIDAE Leach: Fulmars, Petrels, Prions, and Shearwaters

Procellariidae Leach, 1820: *Eleventh room*. In *Synopsis Contents British Museum 17th edition*, London: 68 – Type genus *Procellaria* Linnaeus, 1758.

Subfamilies Procellariinae and Fulmarinae and shearwater subgenus *Thyellodroma* (as recognised by Checklist Committee 1990) are not accepted here (see Austin 1996; Nunn & Stanley 1998; Kennedy & Page 2002; Austin *et al.* 2004). The arrangement of species used here follows the traditional order of Jouanin & Mougín (1979), except for the placement of the more recently accepted genera *Lugensa*, *Pseudobulweria*, and *Ardenna*, and the inclusion of *Pelecanoides*. The species sequence for *Ardenna* shearwaters follows Pyle *et al.* (2011). Imber (1985d) concluded that *Lugensa* should follow the fulmar species and that *Pseudobulweria* should follow *Procellaria*. Penhallurick & Wink (2004) also found a close relationship between *Pseudobulweria* and *Procellaria*, and Bretagnolle *et al.* (1998) concluded that *Pseudobulweria* was closely related to shearwaters, and so here *Pseudobulweria* is placed between *Procellaria* and *Calonectris*.

Prion of La Cépède (1799: 14) has been associated with species now recognised as belonging to *Pachyptila* Illiger, 1811, but it is a *nomen dubium* (Mathews & Iredale 1913; Iredale 1913; Mathews 1922). *Priamphus* Rafinesque (1815), based on *Prion* La Cépède, is also a *nomen dubium*.

The following names of relevance to New Zealand taxa are not listed under any species because: *Procellaria fregata* of Linnaeus (1766) is a *nomen dubium* (Mathews 1936a); *Procellaria nigra* of Pallas (1769) is a *nomen dubium* (Mathews 1934a); *Procellaria fuliginosa* and *P. melanopus* of Gmelin (1789) are *nomina dubia* (Godman 1907–08; Bourne 1995); *Procellaria grisea* of Kuhl (1820) is both a *nomen dubium* and a junior primary homonym of *Procellaria grisea* Gmelin, 1789; *Procellaria velox* and *P. lugens* of Kuhl (1820) are *nomina dubia* (Salvin 1876; Mathews 1912–13; Bourne & Elliott 1965); *Procellaria munda* and *Nectris munda* of Kuhl (1820) have been placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with name numbers 484 and 485 respectively (ICZN 1957).

Genus *Macronectes* Richmond

Ossifraga Hombron & Jacquinot, 1844: *Compt. Rend. Séa. Acad. Sci., Paris* 18: 356 – Type species (by monotypy) *Procellaria gigantea* Gmelin. Junior homonym of *Ossifraga* Wood, 1835.

Macronectes Richmond, 1905: *Proc. Biol. Soc. Washington* 18: 76. *Nomen novum* for *Ossifraga* Hombron & Jacquinot, 1844.

Holocene fossil and midden records (not identified to species) from Enderby Island, Auckland Islands / Maukahuka (Tennyson 2020a).

► *Macronectes giganteus* (Gmelin)

Southern Giant Petrel | Pāngurunguru*

Procellaria gigantea Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 563. Based on the “Giant Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 396, pl. 100 – Southern Oceans, restricted to Admiralty Bay, King George Island, South Shetland Islands (*vide* Voisin *et al.* 1992, *Bull. Zool. Nomenclature* 49(2): 140).

Procellaria Brasilia Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 140 (ex Latham) – no locality.

Procellaria ossifraga J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 343 – Tierra del Fuego, South America.

Ossifraga gigantea (Gmelin); Bonaparte 1857, *Consp. Gen. Avium* 2: 186.

Procellaria gigas Huxley, 1867: *Proc. Zool. Soc. London* 1867(27): 431. Error for “*Procellaria gigantea* Gmelin”.

Fulmarus (*Ossifraga*) *giganteus* (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 105.

Ossifraga alba Potts, 1874: *Trans. N.Z. Inst.* 6: 152 – off Centre Island, Foveaux Strait.

Macronectes giganteus solanderi Mathews, 1912: *Birds Australia* 2: 187 – Falkland Islands, South Atlantic Ocean.

Macronectes giganteus forsteri Mathews, 1912: *Birds Australia* 2: 189 – Valparaiso Bay, Chile.

Macronectes giganteus wilsoni Mathews, 1912: *Birds Australia* 2: 189 – Ross Sea, Antarctica.

Macronectes giganteus albus (Potts); Mathews & Iredale 1913, *Ibis* 1 (10th series): 234.

Macronectes giganteus dovei Mathews, 1916: *Austral Avian Rec.* 3: 54 – Sydney, New South Wales.

Procellaria maxima fusca Mathews, 1933: *Emu* 33: 138 (ex Anderson) – Tierra del Fuego, South America and Kerguelen Island, South Indian Ocean.

Macronectes giganteus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 18. In part.

Macronectes giganteus giganteus (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 21.

Macronectes giganteus (Gmelin); Checklist Committee 1980, *Notornis (Suppl.)* 27: 8.

Breeds on the coasts of Antarctica, in the Chubut Province, and probably at Staten Island (Argentina), at Islas Noir and Islas Diego Ramirez (Chile), Falkland, South Georgia, South Sandwich, South Orkney, South Shetland, Bouvetøya, Gough, Marion, Prince Edward, Crozet, Kerguelen, Heard, and Macquarie Islands (Conroy 1972; Marchant & Higgins 1990; G. Clark *et al.* 1992). Ranges from antarctic coasts to about 20°S, straggling occasionally further north, e.g. New Guinea, Fiji, Tonga, and Tahiti and once even to France (Marchant & Higgins 1990; Anon. 2004a). Juveniles are common in New Zealand seas, especially from Jun. to Sep. (Sibson 1969; Powlesland 1986). Banded birds from the antarctic mainland, South Georgia, South Orkney, South Shetland, Marion, and Heard Islands have been recovered in New Zealand (Ingham 1959; Sibson 1969; Marchant & Higgins 1990; Patterson & Hunter 2000; NMNZ OR.18112).

Salomon & Voisin (2010) advocated treating *M. giganteus* as polytypic, with subspecies *solanderi* breeding in Argentina, Falkland Islands, and Gough Island. We follow Dickinson & Remsen (2013), Clements *et al.* (2019), and F. Gill *et al.* (2021) in treating *M. giganteus* as monotypic, pending further research.

*Also used for northern giant petrel *M. halli*.

► **Macronectes halli** Mathews

Northern Giant Petrel | Pāngurunguru*

Ossifraga gigantea; Hutton 1872, *Ibis* 2 (3rd series): 248. Not *Procellaria gigantea* Gmelin, 1789.

Macronectes giganteus halli Mathews, 1912: *Birds Australia* 2: 187 – Several localities, restricted to Kerguelen Island, south Indian Ocean (*vide* ICZN 1993, *Bull. Zool. Nomenclature* 50: 298).

Macronectes giganteus giganteus; Bennett 1926, *Ibis* 2 (12th series): 315. Not *Procellaria gigantea* Gmelin, 1789.

Macronectes giganteus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 18. In part.

Macronectes giganteus halli Mathews; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 20.

Macronectes halli Mathews; Checklist Committee 1980, *Notornis (Suppl.)* 27: 7.

Breeds on South Georgia, Marion, Prince Edward, Crozet, Kerguelen, Macquarie, Auckland / Maukahuka, Campbell / Motu Ihupuku, Antipodes Islands, and the Chatham Islands (Sisters, Motuhara / Forty Fours) (Marchant & Higgins 1990; Imber 1994). Formerly bred on Nelly Island (Port Pegasus, Stewart Island / Rakiura; Marchant & Higgins 1990). Ranges widely over Southern Hemisphere seas, mainly between 30°S and 64°S, with juveniles apparently undertaking circumpolar movements; banded birds from South Georgia, Crozet, and Kerguelen Islands have been recovered in New Zealand (Hunter 1984; Weimerskirch *et al.* 1985; Marchant & Higgins 1990; Petyt 1995; Patterson & Hunter 2000). Holocene remains and midden records from the North Island and Chatham Islands (Checklist Committee 1990; Millener 1991).

*Also used for southern giant petrel *M. giganteus*.

Genus Fulmarus Stephens

Fulmarus Stephens, 1826: in Shaw, *General Zool.* 13(1): 233 – Type species (by subsequent designation) *Procellaria glacialis* Linnaeus = *Fulmarus glacialis* (Linnaeus).

Halohippus Billberg, 1828: *Synop. Faun. Scand. 1*: 192 – Type species (by monotypy) *Procellaria glacialis* Linnaeus = *Fulmarus glacialis* (Linnaeus).

Rhantistes Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 105 – Type species (by monotypy) *Procellaria glacialis* Linnaeus = *Fulmarus glacialis* (Linnaeus).

Wagellus G.R. Gray, 1840: *List Gen. Birds* (1st edition): 78 – Type species (by original designation) *Procellaria glacialis* Linnaeus = *Fulmarus glacialis* (Linnaeus).

Priocella Hombron & Jacquinot, 1844: *Compt. Rend. Séa. Acad. Sci., Paris 18*: 357 – Type species (by monotypy) *Priocella garnotii* Jacquinot & Pucheran = *Fulmarus glacialoides* (A. Smith).

► **Fulmarus glacialis** (Linnaeus)

Northern Fulmar

Procellaria glacialis Linnaeus, 1761: *Fauna Svecica*, 2nd edition: 51 – Spitsbergen, Arctic Circle.

Fulmarus glacialis (Linnaeus); Stephens 1826: in Shaw, *General Zool.* 13(1): 234, pl. 27.

Fulmaris glacialis; Johnston & Mitchell 2021, *Diversity* 13, 538: 13. Unjustified emendation.

Breeds on numerous islands and coastal cliffs at high latitudes in the Northern Hemisphere. Three subspecies: *F. g. glacialis* nesting in High Arctic from north-east Canada east to Svalbard and Franz Josef Land; *F. g. auduboni* Bonaparte, 1857 nesting on shores of North Atlantic at lower latitudes from south-east Canada east to western and northern Europe; *F. g. rogersii* nesting in North Pacific from eastern Siberia to south-east Alaska (Dickinson & Remsen 2013).

Fulmarus glacialis rogersii Cassin

Pacific Northern Fulmar

Fulmarus rogersii Cassin, 1862: *Proc. Acad. Nat. Sci. Philad.* 14: 326 – “South Indian Ocean” (error, North Pacific Ocean; *vide* Deignan 1961, *Bull. U.S. Nat. Mus.* 221: 9).

Fulmarus glacialis rogersii Cassin; Coues 1882: *Checklist North American Birds*: 125.

Fulmarus glacialis columba Anthony, 1895: *Auk* 12(2): 105 – off San Diego, California.

Fulmarus rogersii [sic] Cassin; American Ornithologists Union 1910, *Check-list North Amer. Birds* (3rd edition): 51. Unjustified emendation.

Breeds on many islands and coastal cliffs around Bering Sea to southern Alaska, including Wrangel Island, Chukchi and Kamchatka Peninsulas, Kuril, Commander, Pribilof, St Lawrence, and Aleutian Islands, migrating south to seas off Japan

and California and (exceptionally) Mexico (S. Howell 2012; Dickinson & Remsen 2013). A bird at sea east of the Snares Islands in Feb. 2014 was the first record from New Zealand and the Southern Hemisphere (Miskelly, Crossland *et al.* 2017).

► **Fulmarus glacialoides** (A. Smith)

Antarctic Fulmar

Fulmarus antarcticus Stephens, 1826: in Shaw, *General Zool.* 13(1): 236. Junior secondary homonym of *Procellaria antarctica* Gmelin, 1789.

Procellaria tenuirostris Audubon, 1839: *Ornith. Biography* 5: 333. Junior primary homonym of *Procellaria tenuirostris* Temminck, 1836.

Procellaria glacialoides A. Smith, 1840: *Illust. Zool. South Africa, Aves* 2: pl. 51 – seas off Cape of Good Hope.

Priocella garnotii Hombron & Jacquinot, 1844: *Compt. Rend. Séa. Acad. Sci., Paris* 18: 357. *Nomen nudum* (fide Hellmayr & Conover 1949, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 58).

Priocella garnotii Jacquinot & Pucheran, 1844: in Dumont d'Urville, *Voyage Pôle Sud, Zoologie, Atlas I*: pl. 32, figs 43–56 – Cape seas.

Procellaria Garnotii (Hombron & Jacquinot) [sic]; G.R. Gray 1844, *Gen. Birds* 3: 648.

Thalassoica? tenuirostris (Audubon); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768. Not *Procellaria tenuirostris* Temminck, 1836.

Thalassoica polaris Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768. *Nomen nudum*.

Thalassoica glacialoides (A. Smith); Bonaparte 1857, *Consp. Gen. Avium* 2: 191.

Thalassoica glacialoides polaris Bonaparte, 1857: *Consp. Gen. Avium* 2: 192 – Louis Phillipe Land, Antarctica.

Thalassoica glacialoides tenuirostris (Audubon); Bonaparte 1857, *Consp. Gen. Avium* 2: 192. Not *Procellaria tenuirostris* Temminck, 1836.

Procellaria smithi Schlegel, 1863: *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 22. Unnecessary *nomen novum* for *Procellaria glacialoides* A. Smith, 1840.

Procellaria Smithi Schlegel; Finsch 1870, *Journ. für Ornith.* 18: 373.

Procellaria glacialoides A. Smith; Anon. 1870, *Cat. Colonial Mus.*: 76.

Fulmarus (Priocella) glacialoides (A. Smith); G.R. Gray 1871, *Hand-list Birds* 3: 105.

Fulmarus tenuirostris; Coues 1872, *Key North Amer. Birds*: 328. Not *Procellaria tenuirostris* Temminck, 1836.

Thalassoica tenuirostris (Audubon); Sharpe 1879, *Phil. Trans. Roy. Soc. London* 168: 123. Not *Procellaria tenuirostris* Temminck, 1836.

Priocella tenuirostris; Ridgway 1880, *Proc. U.S. Nat. Mus.* 2: 209. Not *Procellaria tenuirostris* Temminck, 1836.

Thalassoeca glacialoides (A. Smith); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 228.

Thalassoeca tenuirostris; Oustalet 1891, *Mission Scient. Cap Horn 6 Zoologie* (B): 162.

Priocella glacialoides (A. Smith); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 393.

Thalassoica polaris Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 394 (ex Bonaparte, 1856).

Priocella antarctica (Stephens); Mathews & Iredale 1913, *Ibis* 1 (10th series): 230. Not *Procellaria antarctica* Gmelin, 1789.

Priocella antarctica addenda Mathews, 1915: *Austral Avian Rec.* 2: 125 – New Zealand seas.

Priocella antarctica glacialoides (A. Smith); Bennett 1926, *Ibis* 2 (12th series): 314.

Priocella antarctica antarctica (Stephens); Mathews 1927, *Syst. Avium Australasianarum* 1: 116.

Fulmarus glacialoides (A. Smith); Checklist Committee 1953, *Checklist N.Z. Birds*: 18.

Breeds at many places on the coast of Antarctica and on adjacent islands, and on South Sandwich, South Orkney, South Shetland, Bouvetøya, Balleny, and Peter I Islands (Watson *et al.* 1971; Marchant & Higgins 1990). Circumpolar, moving northward in winter, normally ranging to about 40°S, but further north off the west coast of South America (Marchant & Higgins 1990). Regular straggler to New Zealand seas, mainly from May to Dec. (e.g. J. Jenkins 1981; Powlesland 1986; Marchant & Higgins 1990; Miskelly 1990; Petyt 1995; Shirihai 2002; Miskelly *et al.* 2001a; Parrish 2001; J. Wood 2004). Small numbers beach-wrecked on mainland beaches most years but hundreds ashore in some years, e.g. 1975 (642), 1978 (471), and 1999 (424) (G. Taylor 2004). An exceptional sighting of 24 live birds off Kaikoura in Sep. 2005 (Allen 2005). Rarely at the Chatham Islands (only between Sep. and Jan.; Imber 1994; Miskelly *et al.* 2006). Recorded as Holocene remains on the Chatham Islands (Millener 1991).

Genus *Thalassoica* Reichenbach

Thalassoica Reichenbach, 1853: *Avium Syst. Nat.*: iv – Type species (by original designation) *Procellaria antarctica* Gmelin = *Thalassoica antarctica* (Gmelin).

Aeipetes Forbes, 1882: *Rep. Scient. Results Challenger Exped.* 4(11): 59 – Type species (by original designation) *Procellaria antarctica* Gmelin = *Thalassoica antarctica* (Gmelin).

Thalassoeca Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 392. Unjustified emendation.

► ***Thalassoica antarctica*** (Gmelin)

Antarctic Petrel

Procellaria antarctica Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 565. Based on “Le Pétrel antarctique ou Damier brun” of Buffon 1783, *Hist. Nat.* 24, *Oiseaux* 9: 311, and on the “Antarctic peterel” of J. Cook 1777, *Voyage South Pole* 1: 252 – within the Antarctic Circle, 35°E to 45°E.

Daption antarcticum (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 242.

Procellaria antarctica J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 60, 176 – within the Antarctic circle at 58°S. Junior primary homonym of *Procellaria antarctica* Gmelin, 1789.

Procellaria lugubris Von Tschudi, 1856: *Journ. für Ornith.* 4: 185 – between 36°S and 46°S.

Thalassoica antarctica (Gmelin); Bonaparte 1857, *Consp. Gen. Avium* 2: 192.

Fulmarus (Priocella) antarcticus (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 105.

Priocella antarctica (Gmelin); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1: 37, pl. 33.

Aeipetes antarctica (Gmelin); Forbes 1882, *Rep. Scient. Results Challenger Exped.* 4(11): 59.

Thalassoeca antarctica (Gmelin); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 229.

Thalassoica antarctica (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 235.

Thalassoeca antarctica antarctica (Gmelin); Bennett 1926, *Ibis* 2 (12th series): 314.

Breeds on Antarctic islands, coasts and nunataks in Dronning Maud, Enderby, MacRobertson, Princess Elizabeth, Queen Mary, Wilkes, King George V, King Edward VII, and Coats Lands (Marchant & Higgins 1990; van Franeker *et al.* 1999). Range circumpolar in the pack-ice and irregularly north of about 50°S (Watson *et al.* 1971; Marchant & Higgins 1990). First recorded in New Zealand in Sep. 1973 (Checklist Committee 1980), then three beach-wrecked in 1975 and one in 1977 (Veitch 1980). In 1978, 77 beach-cast mainly in Sep. on Auckland west coast and numerous sightings in the Foveaux Strait and Stewart Island / Rakiura areas (Barlow 1979; Powlesland 1986; G. Taylor 2004). Since then, only occasionally recorded, with the highest numbers found beach-wrecked in 1987 (9), 1991 (19), 1992 (8), 1995 (8) and 1999 (10), mainly Aug. to Oct. (Powlesland 1986, 1989b; Powlesland & Powlesland 1993, 1994a; G. Taylor & Parrish 1994a; G. Taylor 1997, 2004). Vagrants at Chatham, Snares / Tini Heke, and Macquarie Islands (Marchant & Higgins 1990; Imber 1994; Miskelly *et al.* 2001a; Palliser 2005).

Genus *Daption* Stephens

Daption Stephens, 1826: in Shaw, *General Zool.* 13(1): 239 – Type species (by original designation) *Procellaria capensis* Linnaeus = *Daption capense* (Linnaeus).

Calopetes Sundevall, 1873: *Methodi Naturalis Avium Tentamen*: 142. Unnecessary *nomen novum* for *Daption* Stephens, 1826.

Petrella Mathews, 1914: *Auk* 31: 91 – Type species (by monotypy) *Procellaria capensis* Linnaeus = *Daption capense* (Linnaeus).

► *Daption capense* (Linnaeus)

Cape Petrel | Karetai Hurukoko

Procellaria capensis Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 132. Based on the “The white and black Spotted Peteril” of Edwards 1747, *Nat. Hist. Birds*: 90, pl. 90, right fig. – Cape of Good Hope, South Africa.

Procellaria (Daption) capensis Linnaeus; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.

Procellaria punctata Ellman, 1861: *Zoologist* 19: 7473 – coast of New Zealand.

Procellaria Capensis Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 76.

Daption capense (Linnaeus); Mathews & Iredale 1913, *Ibis* 1 (10th series): 235.

Petrella capensis (Linnaeus); Mathews 1920, *Austral Avian Rec.* 4: 67.

Circumpolar; two subspecies: *D. c. capense* breeding from antarctic coasts north to subantarctic islands, and *D. c. australe* on southern islands in the New Zealand region. Recently reported breeding on Macquarie Island (Springer 2016). Debate about the gender of the genus and, therefore, the spelling of the species and subspecies names was reviewed by Watson (1974), Warham (1978), G. Johnstone (1978), and Olson (1988). Late Pleistocene–Holocene bones and midden records (not subspecifically distinguished) from the North Island, Chatham Islands, and Auckland Islands / Maukahuka (Millener 1991; J.H. Cooper & Tennyson 2008; Tennyson 2020a).

A capital ‘C’ should be used for the common name Cape petrel regardless of editorial style, as it is named after the Cape of Good Hope (the type locality).

Daption capense australe Mathews

Snares Cape Petrel

Daption capense; Finsch 1888, *Ibis* 6 (5th ser.): 309. Not *Procellaria capensis* Linnaeus, 1758.

Daption capensis australis Mathews, 1913: *Austral Avian Rec.* 1: 187 – New Zealand.

Daption capense australe Mathews; Checklist Committee 1980, *Notornis (Suppl.)* 27: 8.

Breeds on Snares Island / Tini Heke, Bounty, Antipodes, Auckland / Maukahuka (Beacon Rock), and Campbell / Motu Ihupuku Islands; in 1987 found breeding on Motuhara / The Forty Fours and probably on The Pyramid and The Sisters, Chatham Islands (Sagar *et al.* 1996; Miskelly, Elliott *et al.* 2020). Ranges in New Zealand seas (e.g. Bartle 1974; C. Robertson & Jenkins 1981; Marchant & Higgins 1990; Onley 1995a; Tennyson 1998a; J. Houston 2000, 2001; D. Thompson *et al.* 2000), off southern Australia and south to the Ross Sea (Marchant & Higgins 1990; Medway 1992) but not usually distinguished at sea from *D. c. capense*.

Daption capense capense (Linnaeus)

Antarctic Cape Petrel

Procellaria capensis Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 132. Based on the “The white and black Spotted Peteril” of Edwards 1747, *Nat. Hist. Birds*: 90, pl. 90, right fig. – Cape of Good Hope, South Africa.

Procellaria naevia Brisson, 1760: *Ornithologie* 6: 146. *Nomen nudum* (fide ICZN 1963, *Bull. Zool. Nom.* 20: 343).

Procellaria pardela Oken, 1816: *Lehrb. Naturgesch.* 3: 533 – Cape seas.

Daption capenses [sic] (Linnaeus); Stephens, 1826: in Shaw, *General Zool.* 13(1): 241.

Daption Capensis (Stephens) [sic]; Gould 1844, *Ann. Mag. Nat. Hist., London* 13: 366.

Daption capensis (Linnaeus); Bonaparte 1857, *Consp. Gen. Avium* 2: 188.

Procellaria naevia Bonaparte, 1857: *Consp. Gen. Avium* 2: 188 (ex Brisson) – no locality.

Fulmarus (Daption) capensis (Linnaeus); G.R. Gray 1871, *Hand-list Birds* 3: 107.

Daption capensis capensis (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 18.

Daption capense capense (Linnaeus); Checklist Committee 1980, *Notornis (Suppl.)* 27: 8.

Breeds on the coasts and islands of Antarctica and the Antarctic Peninsula; on South Georgia, South Shetland, South Orkney, South Sandwich, Bouvetøya, Crozet, Kerguelen, Heard, Scott, and Balleny Islands (Marchant & Higgins 1990). Moves northward in autumn; ranging throughout southern seas to the Tropic of Capricorn and further north off the west coasts of South America and Africa (Watson *et al.* 1971; Marchant & Higgins 1990). Regularly in New Zealand seas in winter and spring (e.g. J. Houston 1998, 2000, 2001); rare in summer and autumn (Bartle 1974; Marchant & Higgins 1990). Several birds banded in Cook Strait have been recovered at South Orkney breeding colonies, and others banded in the Weddell Sea and at Terre Adélie, Antarctica, have been caught at sea in New Zealand waters (Pinder 1966; Weimerskirch *et al.* 1985; Marchant & Higgins 1990).

Genus *Lugensa* Mathews

Lugensa Mathews, 1942: *Emu* 41: 305 – Type species (by original designation) *Pterodroma lugens lugens* Mathews, 1936 = *Lugensa brevirostris* (Lesson) (*vide* Mathews 1942, *Emu* 41: 305 and ICZN 1999, *Code*: 74, Article 70.3). As a subgenus of *Pterodroma*.

Aphrodroma Olson, 2000: *Bull. Brit. Ornith. Club* 120: 60 – Type species (by original designation) *Oestrelata kidderi* Coues, 1875 = *Lugensa brevirostris* (Lesson).

Lugensa is used following the recommendations of Imber (1985d) and Bourne (2001).

► *Lugensa brevirostris* (Lesson)

Kerguelen Petrel

Procellaria brevirostris Lesson, 1833: *Traité d'Ornith.* 8: 611 – no locality = Cape of Good Hope, South Africa (*vide* R. Murphy & Pennoyer 1952, *American Mus. Novit.* 1580: 22).

Rhantistes unicolor Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 (ex Gould) – no locality = Christmas Harbour, Kerguelen Island, south Indian Ocean (*vide* Salvin 1896, *Cat. Birds Brit. Mus.* 25: 410).

Aestrelata grisea; Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 148. Not *Procellaria grisea* Kuhl, 1820.

Fulmarus (Cookilaria) ? griseus (Kuhl); G.R. Gray 1871, *Hand-list Birds* 3: 107.

Fulmarus (Cookilaria) unicolor G.R. Gray, 1871: *Hand-list Birds* 3: 107 (ex Gould) – no locality = Christmas Harbour, Kerguelen Island, south Indian Ocean (*vide* Salvin 1896, *Cat. Birds Brit. Mus.* 25: 410). Junior secondary homonym and junior synonym of *Rhantistes unicolor* Bonaparte, 1856.

Oestrelata kidderi Coues, 1875: *Bull. U.S. Nat. Mus.* 2: 28 – Kerguelen Island, south Indian Ocean.

Procellaria unicolor (G.R. Gray); Coues 1875, *Bull. U.S. Nat. Mus.* 2: 28.

Oestrelata brevirostris (Lesson); Salvin 1876, in Rowley's *Ornith. Miscellany* 1: 235.

Pterodroma kidderi okahia [sic] Mathews, 1935: *Bull. Brit. Ornith. Club* 56: 37 – Ohakea, Manawatu.

Pterodroma kidderi kidderi; Mathews 1935, *Bull. Brit. Ornith. Club* 56: 38.

Pterodroma lugens lugens Mathews, 1936: *Emu* 36: 96 – Kerguelen Island, south Indian Ocean. Junior secondary homonym of *Procellaria lugens* Kuhl, 1820.

Pterodroma lugens okahia Mathews; Mathews 1936, *Emu* 36: 97.

Pterodroma (Lugensa) lugens; Mathews 1942, *Emu* 41: 305. Not *Procellaria lugens* Kuhl, 1820.

Lugensa lugens; Mathews & Hallstrom 1943, *Notes Procellariiformes*: 9. Not *Procellaria lugens* Kuhl, 1820.

Lugensa lugens okahia (Mathews); Mathews 1944, *Emu* 43: 243.

Pterodrome [sic] *whitlocki* Mathews, 1946: *Working List Aust. Birds*: 8 – Cottesloe, Western Australia.

Bulweria brevirostris (Lesson); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.

Bulweria lugens; Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. Not *Procellaria lugens* Kuhl, 1820.

Pterodroma brevirostris (Lesson); Checklist Committee 1953, *Checklist N.Z. Birds*: 24.

Lugensa brevirostris (Lesson); Imber 1985, *Ibis* 127: 215.

Aphrodroma brevirostris (Lesson); Olson 2000, *Bull. Brit. Ornith. Club* 120: 61.

Breeds on Inaccessible, Gough, South Georgia, Marion, Prince Edward, Crozet (Possession, East, Penguin, Apostles), and Kerguelen Islands (Marchant & Higgins 1990; Ryan 2007; Black *et al.* 2012). Circumpolar, ranging between about 33°S and 67°S, to about the edge of the pack-ice, but less common in the Pacific Ocean (Watson *et al.* 1971; Marchant & Higgins 1990). Irregular winter/spring visitor to New Zealand, mainly when immature (Imber 1984a; Marchant & Higgins 1990); highest numbers dead on beaches: 1981 (284), 1984 (600), 1994 (262), and 1999 (331) (G. Taylor 1996, 2004). More than 100 live birds seen off the South Island West Coast in Aug. 1985 (Miskelly 1990). One beach-washed on Chatham Island in 1981 (Imber 1994). Holocene bones known from the Chatham Islands and Auckland Islands / Maukahuka (J.H. Cooper & Tennyson 2008; Tennyson 2020a).

Genus *Pterodroma* Bonaparte

Rhantistes Reichenbach, 1853: *Avium Syst. Nat.*: iv – Type species (by original designation) *Procellaria cookii* G.R. Gray = *Pterodroma cookii* (G.R. Gray). Junior homonym of *Rhantistes* Kaup, 1829.

Pterodroma Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 – Type species (by subsequent designation) *Procellaria macroptera* A. Smith = *Pterodroma macroptera* (A. Smith).

- Aestrelata* Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 – Type species (by subsequent designation) *Fulmarus meridionalis* Lawrence = *Pterodroma hasitata* (Kuhl).
- Cookilaria* Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 994 – Type species (by subsequent designation) *Procellaria cookii* G.R. Gray = *Pterodroma cookii* (G.R. Gray). Unnecessary *nomen novum* for *Rhantistes* Reichenbach, 1853.
- Oestrelata* Newton, 1870: *Ibis* 6 (new series): 277. Unjustified emendation.
- Oestrelatella* Bianchi, 1913: *Faune Russie, Oiseaux* 1(2): 521, 719 – Type species (by original designation) *Oestrelata hypoleuca* Salvin = *Pterodroma hypoleuca* (Salvin).
- Hallstroma* Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 35, 37 (key) – Type species (by original designation) *Procellaria neglecta* Schlegel = *Pterodroma neglecta* (Schlegel).
- Proaestrelata* Imber, 1985: *Ibis* 127: 219 – Type species (by original designation) *Oestrelata axillaris* Salvin = *Pterodroma axillaris* (Salvin). As a subgenus of *Pterodroma*.

Subgenera within *Pterodroma* (as used by Checklist Committee 1990) are not accepted here, given the debate about their usage (e.g. Bourne 1987; Christidis & Boles 1994) and the paraphyletic relationships identified within some of these groups (e.g. Nunn & Stanley 1998; Palma & Pilgrim 2002).

► *Pterodroma gouldi* (Hutton)

Grey-faced Petrel | Ōi

- Pterodroma macroptera*; Gould 1865, *Handb. Birds Australia* 2: 449. Not *Procellaria macroptera* A. Smith, 1840.
- Aestrelata gouldi* Hutton, 1869: *Ibis* 5 (new series): 351 – New Zealand seas.
- Aestrelata gouldii* Hutton; Hutton 1870, *Trans. N.Z. Inst.* 2: 79. Unjustified emendation.
- Aestrelata Gouldii* Hutton; Anon. 1870, *Cat. Colonial Mus.*: 76. Unjustified emendation.
- Procellaria Gouldii* (Hutton); Finsch 1870, *Journ. für Ornith.* 18: 372. Unjustified emendation.
- Procellaria gouldi* (Hutton); Hutton 1871, *Cat. Birds N.Z.*: 47.
- Procellaria fuliginosa* Kuhl; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 304 & pl. opposite. Not *Procellaria fuliginosa* Gmelin, 1789.
- Oestrelata fuliginosa* (Kuhl); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 221. Not *Procellaria fuliginosa* Gmelin, 1789.
- Majaqueus gouldi* (Hutton); Buller 1888 (May), *History of the Birds of N.Z.*, 2nd edition 2 (part 7): 245.
- Oestrelata macroptera*; Salvin 1896, *Cat. Birds Brit. Mus.* 25: 399. Not *Procellaria macroptera* A. Smith, 1840.
- Oestrelata gouldi* (Hutton); A. Hamilton 1909, *Hand-list birds New Zealand*: 6.
- Pterodroma macroptera gouldi* (Hutton); Mathews & Iredale 1913, *Ibis* 1 (10th series): 230.
- Pterodroma macroptera gouldii*; Oliver 1930, *New Zealand Birds*, 1st edition: 134. Unjustified emendation.
- Pterodroma (Pterodroma) macroptera gouldi* (Hutton); Checklist Committee 1990, *Checklist Birds N.Z.*: 54.
- Pterodroma gouldi* (Hutton); Onley & Scofield 2007, *Albatrosses, Petrels & Shearwaters World*: 183.

Treated by Checklist Committee (2010) as a subspecies of great-winged petrel *Pterodroma macroptera* (A. Smith, 1840); these taxa are now recognised as separate species based on the review by J. Wood, Lawrence *et al.* (2017). Breeds on many islands, islets, headlands and cliff-tops from Manawatāwhi / Three Kings Islands south to near New Plymouth on the west coast and Portland Island (off Mahia) on the east coast (Miskelly, Gilad *et al.* 2019). Relatively sedentary, ranging throughout the Tasman Sea and in the South Pacific to about 130°W, usually between 30°S and 50°S (Watson *et al.* 1971; Lovegrove 1978; J. Jenkins 1981; Marchant & Higgins 1990; Farrell 2006). Probable vagrant to Californian waters (R.C. Banks *et al.* 2004) and Chilean waters (G. Clark *et al.* 1992). Late Pleistocene–Holocene bones and midden records from the North Island, and possible bones from Chatham Island dunes (Millener 1991; J.H. Cooper & Tennyson 2008).

► *Pterodroma lessonii* (Garnot)

White-headed Petrel

- Procellaria Lessonii* Garnot, 1826: *Ann. Sci. Nat., Zool. Paris* 7: 54, pl. 4 – seas near Cape Horn and in the South Pacific Ocean at 52°S, 85°W.
- Puffinus sericeus* Lesson, 1828: *Manuel d'Ornith.* 2: 402 – South Pacific Ocean, 52°S, 85°W.
- Procellaria leucocephala* J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 206 – South Pacific Ocean, near Australia.
- Procellaria vagabunda* G.R. Gray, 1844: *Gen. Birds* 3: 648 (ex Solander MS) – no locality = Southern Ocean (*vide* Mathews 1912, *Birds Australia* 2: 155).
- Rhantistes lessoni* (Garnot); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768. Unjustified emendation.
- Adamastor sericeus* (Lesson); Bonaparte 1857, *Consp. Gen. Avium* 2: 188.
- Aestrelata leucocephala* (J.R. Forster); Bonaparte 1857, *Consp. Gen. Avium* 2: 189.
- Aestrelata Lessoni* (Garnot); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 142. Unjustified emendation.
- Procellaria Lessoni* Garnot; Finsch 1870, *Journ. für Ornith.* 18: 373. Unjustified emendation.
- Fulmarus (Aestrelata) Lessoni* (Garnot); G.R. Gray 1871, *Hand-list Birds* 3: 106. Unjustified emendation.
- Oestrelata lessoni* (Garnot); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 219. Unjustified emendation.
- Pterodroma lessonii leucocephala* (J.R. Forster); Mathews & Iredale 1913, *Ibis* 1 (10th series): 231.
- Aestrelata lessonii lessonii* (Garnot); Mathews 1913, *List Birds Australia*: 37.
- Aestrelata lessonii leucocephala* (J.R. Forster); Mathews 1913, *List Birds Australia*: 37.
- Aestrelata lessonii australis* Mathews, 1916: *Austral Avian Rec.* 3: 54 – Sydney, New South Wales, Australia.
- Aestrelata lessonii* (Garnot); Mathews 1920, *Austral Avian Rec.* 4: 67.
- Pterodroma lessoni*; Falla 1922, *Emu* 21: 207. Unjustified emendation.

- Oestrelata lessonii* (Garnot); Bennett 1926, *Ibis* 2 (12th series): 315.
Aestrelata lessonii lessonii (Garnot); Mathews 1927, *Syst. Avium Australasianarum* 1: 121. Unjustified emendation.
Pterodroma lessonii [sic] *lessonii* (Garnot); Mathews 1934, *Novit. Zool.* 39(2): 163.
Pterodroma lessonii australis (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 164.
Bulweria lessonii (Garnot); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. In part. Unjustified emendation.
Pterodroma lessonii lessonii (Garnot); Hellmayr & Conover 1949, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 75.
Pterodroma lessonii (Garnot); Checklist Committee 1953, *Checklist N.Z. Birds*: 23. Unjustified emendation.
Pterodroma lessonii (Garnot); Checklist Committee 1980, *Notornis (Suppl.)* 27: 9.
Pterodroma (Pterodroma) lessonii (Garnot); Checklist Committee 1990, *Checklist Birds N.Z.*: 55.

Breeds on Crozet, Kerguelen, Macquarie, Auckland / Maukahuka, and Antipodes Islands, and possibly on Marion, Prince Edward, and Campbell / Motu Ihupuku Islands (P. Harrison 1983). Within New Zealand, breeds on 16 islands in the Auckland Islands and at least five islands in the Antipodes Islands (Miskelly, Gilad *et al.* 2019; Miskelly, Elliott *et al.* 2020). At sea circumpolar, ranging between 30°S and the pack-ice (Watson *et al.* 1971; Nakamura 1982; Marchant & Higgins 1990). In winter to spring, regularly occurs in northern New Zealand waters (e.g. J. Jenkins 1982b), including frequent beach-wrecks on North Island west coast beaches (e.g. G. Taylor 1997). Vagrant to the Chatham Islands (Miskelly *et al.* 2006). There are Holocene records from the North and South Islands, midden records from the South and Auckland Islands, and possible bones from Chatham Island dunes (Millener 1991; Anderson 2005; J.H. Cooper & Tennyson 2008; Tennyson 2020a).

► ***Pterodroma solandri*** (Gould)

Providence Petrel

- Procellaria Solandri* Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 363 – Bass Strait, Australia.
Cookilaria melanopus Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 995 (ex Solander MS) – no locality. Not *Procellaria melanopus* Gmelin, 1789.
Cookilaria solandri (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 190.
Procellaria atlantica; G.R. Gray 1862, *Ibis* 4: 246. Not *Procellaria atlantica* Gould, 1844.
Procellaria phillipii G.R. Gray, 1862: *Ibis* 4: 246 – Norfolk Island.
Aestrelata Solandri (Gould); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 148.
Fulmarus Solandri (Gould); G.R. Gray 1871, *Hand-list Birds* 3: 107.
Fulmarus atlanticus; G.R. Gray 1871, *Hand-list Birds* 3: 107. Not *Procellaria atlantica* Gould, 1844.
Oestrelata solandri (Gould); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 410.
Oestrelata phillipi (G.R. Gray); Buller 1905, *Suppl. Birds N.Z.* 1: 119. Unjustified emendation.
Oestrelata montana Hull, 1911: *Proc. Linn. Soc. New South Wales* 35: 785 – Lord Howe Island, Tasman Sea.
Pterodroma melanopus; Falla 1933, *Rec. Auck. Inst. Museum* 1: 175. Not *Procellaria melanopus* Gmelin, 1789.
Pterodroma solandri (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 23.
Pterodroma (Pterodroma) solandri (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 54.

Breeds on Lord Howe Island and Philip Island, and was formerly in large numbers on Norfolk Island itself (Hindwood 1940; Marchant & Higgins 1990; Medway 2002c,d; Bester 2007). Ranges mainly in the north Tasman Sea to seas off Tasmania. Most migrate to the North Pacific Ocean (Japan to North America) but far more abundant in the west (Nakamura & Tanaka 1977; Tanaka 1986; Marchant & Higgins 1990; Kuroda 1991; Bartle *et al.* 1993). Straggler to the northern North Island: Muriwai Beach, Jan. 1921; Dargaville coast, Sep. 1984; five south of Macauley Island, Kermadec Islands / Rangitāhua, Jul. 2002; east of Whangaroa Harbour, May 2004; east of North Cape, May 2005 (P. Miller 1986; Rare Birds Committee 2005; Miskelly *et al.* 2011, 2015). The record of three birds off Northland in May 2005 (Davies 2005c) was not accepted by the OSNZ Rare Birds Committee (Scofield 2006). McAllan (2004) clarified collection details of the holotype and where Gould's 1844 description was first published.

► ***Pterodroma magentae*** (Giglioli & Salvadori)

Chatham Island Taiko | Tāiko*

- Aestrelata Magentae* Giglioli & Salvadori, 1869: *Ibis* 5 (new series): 61 – South Pacific Ocean, at 39°38'S, 125°58'W.
Fulmarus (Aestrelata) Magentae (Giglioli & Salvadori); G.R. Gray 1871, *Hand-list Birds* 3: 106.
Oestrelata magentae (Giglioli & Salvadori); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 407.
Pterodroma cookii axillaris; Archey & Lindsay 1924, *Rec. Cant. Museum* 2(4): 189. Not *Oestrelata axillaris* Salvin, 1893.
Pterodroma inexpectata; C.A. Fleming 1939, *Emu* 38: 405. Not *Procellaria inexpectata* J.R. Forster, 1844.
Bulweria alba (Gmelin); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. In part.
Pterodroma magentae (Giglioli & Salvadori); Bourne 1964, *Notornis* 11: 139.
Pterodroma macroptera; Dawson in Bourne 1964, *Notornis* 11: 141. Not *Procellaria macroptera* A. Smith, 1840.
Pterodroma (Pterodroma) magentae (Giglioli & Salvadori); Checklist Committee 1990, *Checklist Birds N.Z.*: 54.

Chatham Islands; a few breed in scattered burrows in bush in the south-west of Chatham Island (Crockett 1994; Imber *et al.* 1994). Breeding birds feed south and east of the Chatham Islands and non-breeders range to the central and eastern subtropical South Pacific (Crockett 1994; S. Howell, Ainley *et al.* 1996; Imber *et al.* 2005). Holocene remains are abundant on Chatham Island and rare on Pitt Island (Bourne 1964; Crockett 1994; J.H. Cooper & Tennyson 2008). Remains considered to be from human middens are abundant on Chatham Island (e.g. Sutton & Marshall 1977) but many

of these may be pre-human Holocene deposits (Millener 1999). Probable remains found in a Holocene dune deposit at the Auckland / Maukahuka Islands (Tennyson 2020a).

A capital 'M' should be used for the alternative common name Magenta petrel regardless of editorial style, as the species is named after the Italian Navy corvette *Magenta*.

*Also used for Westland petrel *Procellaria westlandica* and black petrel *P. parkinsoni*.

► ***Pterodroma neglecta*** (Schlegel)

Kermadec Petrel | Pia Koia

Breeds on islands across the subtropical South Pacific and migrates into the North Pacific Ocean. Two subspecies: *Pt. n. neglecta* breeding in the central and western Pacific, and *Pt. n. juana* Mathews, 1935, breeding in the eastern Pacific on the Juan Fernández and San Ambrosio Islands (R. Murphy & Pennoyer 1952). The species has recently been found breeding at Round Island, Indian Ocean, and possibly on Ilha da Trindade, Atlantic Ocean (Imber 2004, 2005; Tove 2005).

Pterodroma neglecta neglecta (Schlegel)

Kermadec Petrel | Pia Koia

Rhantistes raoulensis [sic] Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 (ex Gould). *Nomen nudum*.

Procellaria neglecta Schlegel, 1863: *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 10 – Sunday [= Raoul] Island, Kermadec Islands.

Aestrelata neglecta (Schlegel); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 147.

Procellaria incerta; Finsch 1870, *Journ. für Ornith.* 18: 372. Not *Procellaria incerta* Schlegel, 1863.

Fulmarus (Aestrelata) neglectus (Schlegel); G.R. Gray 1871, *Hand-list Birds* 3: 106.

Oestrelata incerta; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 220. Not *Procellaria incerta* Schlegel, 1863.

Oestrelata neglecta (Schlegel); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 224.

Oestrelata mollis; Cheeseman 1891, *Trans. Proc. N.Z. Inst.* 23: 225. Not *Procellaria mollis* Gould, 1844.

Oestrelata leucophrys Hutton, 1893: *Proc. Zool. Soc. London 1893* (50): 752, pl. 63 – Sunday [= Raoul] Island, Kermadec Islands.

Rhantistes raoulensis Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 412 (ex Bonaparte, 1856) – no locality.

Procellaria raoulensis Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 412 (ex Gould) – Raoul Island, Kermadec Islands. Junior secondary homonym and junior synonym of *Rhantistes raoulensis* Salvin, 1896.

Pterodroma neglecta neglecta (Schlegel); Mathews & Iredale 1913, *Ibis* 1 (10th series): 232.

Pterodroma neglecta quintali Mathews, 1916: *Austral Avian Rec.* 3: 68 – Lord Howe Island, Tasman Sea.

Bulweria neglecta (Schlegel); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.

Pterodroma neglecta (Schlegel); Checklist Committee 1953, *Checklist N.Z. Birds*: 23.

Pterodroma (Hallstroma) neglecta neglecta (Schlegel); Checklist Committee 1990, *Checklist Birds N.Z.*: 53.

Breeds on Lord Howe Island (Balls Pyramid and formerly the main island; McAllan *et al.* 2004), Norfolk Island group (Philip Island), Kermadec Islands / Rangitāhua (Nugent, Napier, Meyer, Dayrell, Chanter, Raoul, Macauley, Haszard, Cheeseman, and formerly on Curtis; Merton 1970; Tennyson, Scofield *et al.* 2003; Miskelly, Gilad *et al.* 2019), Austral Islands (Rapa and Raivavae), Tuamotu Islands, Pitcairn Islands (Oeno, Henderson, and Ducie), and Easter Island (Rapa Nui) (Marchant & Higgins 1990; NMNZ OR.025379). Ranges mainly in the subtropical South Pacific between 20°S and 35°S (Marchant & Higgins 1990). Some non-breeders migrate to the tropical and temperate North Pacific (up to 42°N) but migration patterns are poorly understood (Marchant & Higgins 1990; Kuroda 1991; Spear *et al.* 1992; Bartle *et al.* 1993). Live birds rarely sighted off mainland New Zealand: one prospected at Cuvier Island / Repanga during 1973–81 (Reed 1976a; Marchant & Higgins 1990), one seen off the Chatham Islands, Mar. 1975 (P. Roberts 1977), one off Kaikoura, Jan. 1999 (Medway 2001a), one off Piercy Rock, Bay of Islands, Dec. 2000 (Miskelly, Crossland *et al.* 2019), and one off Mokohinau Islands, Jan. 2014 (Miskelly *et al.* 2015). Records off Northland in Mar. and May 2005 (Davies 2005b,c) are unverified or were not accepted by the OSNZ Rare Birds Committee (Scofield 2006). Seven beach-wrecked mainland specimens: four from Muriwai Beach (Nov. 1932, another before 1955, singles Apr. 1981 and Jul. 1995); also singles at Maunganui Bluff, Mar. 1986; Anawhata Beach, Sep. 1987; and East Clive Beach, May 1995 (Oliver 1955; Powlesland 1989b; G. Taylor 1997; NMNZ S.000538). Bones possibly of this species have been found in Chatham Island dune deposits (J.H. Cooper & Tennyson 2008).

► ***Pterodroma heraldica*** (Salvin)

Herald Petrel

Procellaria leucoptera Schlegel, 1863: *Rev. Méth. Critique. Mus. d'Hist. Nat. PaysBas* 6(22): 12. Not *Procellaria leucoptera* Gould, 1844.

Fulmarus (Aestrelata) philippii G.R. Gray, 1871: *Hand-list Birds* 3: 106 – Chesterfield Group. Not *Procellaria philippii* G.R. Gray, 1862.

Oestrelata heraldica Salvin, 1888: *Ibis* 6 (5th series): 357 – Chesterfield Islands, north-west of New Caledonia.

Pterodroma (Aestrelata) heraldica paschae Lonnberg, 1921: in Skottsberg, *Nat. Hist. Juan Fernandez Easter Islands* 3: 23 – Easter Island.

Pterodroma heraldica (Salvin); Peters 1931, *Checklist Birds World* 1: 63.

Aestrelata heraldica (Salvin); R. Murphy & Pennoyer 1952, *American Mus. Novit.* 1580: 38.

Pterodroma arminjoniana heraldica (Salvin); Jouanin & Mougou 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 71.

Pterodroma (Hallstroma) heraldica (Salvin); Imber 1985: *Ibis* 127: 224.

Pterodroma (arminjoniana) heraldica Salvin; Imber 2004: *Notornis* 51: 33.

We follow M. Brooke (2004) and Onley & Scofield (2007) in recognising the Herald petrel as a full species, which breeds on several Pacific island groups between 9° and 27°S. A bird photographed near the Meyer Islets, Kermadec Islands / Rangitāhua in Mar. 2016 was the first record from New Zealand (Miskelly, Crossland *et al.* 2017).

A capital 'H' should be used for the common name Herald petrel regardless of editorial style, as it is named after the British survey vessel *HMS Herald*.

► ***Pterodroma alba*** (Gmelin)

Phoenix Petrel

Procellaria alba Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 565. Based on the "White-breasted Petrel" of Latham 1785, *Gen. Synop. Birds* 3(2): 400 – Turtle Islands and Christmas Islands, restricted to Christmas Island (*vide* R. Murphy & Pennoyer 1952, *American Mus. Novit.* 1580: 32).

Daptium album (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 246.

Procellaria parvirostris Peale, 1848: *U.S. Expl. Exped.* 8: 298 – near Honden [= Pukapuka Island], Tuamotu Archipelago, French Polynesia.

Rhantistes parvirostris (Peale); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Procellaria (Aestrelata) alba Gmelin; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.

Procellaria (—?) *parvirostris* Peale; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.

Aestrelata parvirostris (Peale); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 146.

Fulmarus albus (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 106.

Oestrelata parvirostris (Peale); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 405.

Oestrelata wortheni Rothschild, 1902: *Bull. Brit. Ornith. Club* 12: 62 – Pacific Ocean, 3°S, 118°45'W.

Aestrelata oliveri Mathews & Iredale, 1914: *Austral Avian Rec.* 2: 113 – Sunday [= Raoul] Island, Kermadec Islands.

Pterodroma parvirostris (Peale); Oliver 1923, *Name-list NZ birds*: 426.

Pterodroma oliveri (Mathews & Iredale); Mathews 1927, *Syst. Avium Australasianarum* 1: 119.

Pterodroma rostrata parvirostris (Peale); Mathews 1927, *Syst. Avium Australasianarum* 1: 119.

Pterodroma alba cantonia Mathews, 1942: *Emu* 42: 123 – Canton Island, Phoenix Islands.

Bulweria alba (Gmelin); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. In part.

Pterodroma alba (Gmelin); Jouanin & Mougouin 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 71.

Pterodroma (Hallstroma) alba (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 53.

Breeds on Pacific Ocean islands: Phoenix, Line, Marquesas, Pitcairn (Oeno, Henderson, Ducie), and Tuamotu Islands (W. King 1967; Watling 2001); possibly formerly bred on Raoul Island (Kermadec Islands / Rangitāhua), where four ashore in 1913 (Veitch *et al.* 2004). At sea ranges in the central Pacific Ocean but pelagic distribution poorly known (Marchant & Higgins 1990; Spear *et al.* 1992). One over Curtis Island (Kermadec Islands / Rangitāhua) in May 1982 (Veitch *et al.* 2004).

► ***Pterodroma mollis*** (Gould)

Soft-plumaged Petrel

Procellaria mollis Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 363 – South Atlantic Ocean, 20°S to 40°S, restricted to 29°45'S, 15°03'W (*vide* Salvin 1896, *Cat. Birds Brit. Mus.* 25: 406).

Rhantistes mollis (Gould); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Cookilaria mollis (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 190.

Aestrelata mollis (Gould); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 150.

Oestrelata mollis (Gould); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 222.

Pterodroma dubius Mathews, 1924: *Bull. Brit. Ornith. Club* 44: 70. Unnecessary *nomen novum* for bird described in Mathews 1912, *Birds Australia* 2: 158, pl. 86 – north Australia (*vide* LeCroy 2017, *Suppl. Bull. Am. Mus. Nat. Hist.* 150: 38).

Pterodroma deceptoris Mathews, 1932: *Novit. Zool.* 38(1): 34 – at sea, 36°08'S, 88°55'E.

Bulweria mollis (Gould); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.

Pterodroma mollis (Gould); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 22.

Pterodroma mollis mollis (Gould); Checklist Committee 1980, *Notornis (Suppl.)* 27: 9.

Pterodroma mollis dubia Mathews; Clancey *et al.* 1981, *Durban Museum Novit.* 12: 211.

Pterodroma mollis fusca Imber, 1985: *Ibis* 127: 224 – Marion, Prince Edward, and Crozet (East) Islands, south Indian Ocean.

Pterodroma (Pterodroma) mollis (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 56.

Breeds on Tristan da Cunha, Inaccessible, Nightingale, Gough, Marion, Prince Edward, Crozet (Possession, East, Penguin, Apostles), and Kerguelen Islands (Clancey *et al.* 1981; Marchant & Higgins 1990). Recently found breeding on Amsterdam Island (Indian Ocean), Maatsuyker Island off Tasmania, and Macquarie Island (Roux & Martinez 1987; Bretagnolle 1995; Garnett & Crowley 2002; Wiltshire *et al.* 2004; Springer 2016). Ranges mainly between about 30°S and 60°S in the South Atlantic and south Indian Oceans (Watson *et al.* 1971; P. Harper 1973; Marchant & Higgins 1990). First recorded ashore in the New Zealand region on Antipodes Island in 1969, but may have already been present in the 1920s; now increasing (Imber 1983; Imber *et al.* 1998, 2005; Tennyson, Lawrence *et al.* 2013). Since 1971, an increasing number of records of birds at sea or beach-cast around mainland New Zealand, as far north as Northland and in most months (Marchant & Higgins 1990; Guest 1991; Petyt 1995; G. Taylor 1997; Medway 2000a, 2001a, 2004b; A. Rowe & Rowe 2001; Imber *et al.* 2005; Miskelly, Crossland *et al.* 2017, 2019). Also seen at the Snares Islands / Tini Heke and Chatham Islands (Miskelly *et al.* 2001a, 2006). No subspecies recognised here; related forms in the North Atlantic are considered to be allopatric species (Bourne 1983; Sangster *et al.* 1999; Zino *et al.* 2008).

► †***Pterodroma imberi*** Tennyson, Cooper & Shepherd

Imber's Petrel

Pterodroma inexpectata (J.R. Forster); Bourne 1967, *Ibis* 109: 57. In part.

Pterodroma inexpectata (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 51. In part.

Pterodroma sp. 1 Tennyson & Millener, 1994: *Notornis* 41 (supp.): 168.

Pterodroma imberi Tennyson, Cooper & Shepherd, 2015: *Bull. Brit. Ornith. Club* 135: 273 – Pitt Island, Chatham Islands.

This extinct species is known only from Holocene remains (natural and archaeological) on the Chatham Islands (J.H. Cooper & Tennyson 2008; Tennyson *et al.* 2015).

► ***Pterodroma inexpectata*** (J.R. Forster)

Mottled Petrel | Kōruru

Procellaria inexpectata J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 204 – Antarctic Ocean.

Procellaria lugens G.R. Gray, 1844: *Gen. Birds* 3: 648 (ex Solander MS) – no locality = Southern Ocean (*vide* Mathews 1912, *Birds Australia* 2: 159). Junior primary homonym of *Procellaria lugens* Kuhl, 1820.

Procellaria gularis Peale, 1848: *U.S. Expl. Exped.* 8: 299 – Pacific Ocean, 68°S, 95°W.

Aestrelata gularis (Peale); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Aestrelata inexpectata (J.R. Forster); Bonaparte 1857, *Consp. Gen. Avium* 2: 189.

Procellaria affinis Buller, 1875: *Trans. Proc. N.Z. Inst.* 7: 216 – Potts River, Canterbury.

Aestrelata fisheri Ridgway, 1883: *Proc. U.S. Nat. Mus.* 5: 656 – Kodiak Island, Alaska, USA.

Aestrelata scalaris Brewster, 1886: *Auk* 3: 390 – Mount Morris, New York State, USA.

Oestrelata affinis (Buller); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 223, pl. 41, upper fig.

Oestrelata gularis (Peale); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 414.

Oestrelata fisheri (Ridgway); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 415.

Oestrelata scalaris (Brewster); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 416.

Procellaria lugens Mathews, 1912: *Birds Australia* 2: 159 (ex Solander MS) – Southern Ocean. Junior primary homonym of *Procellaria lugens* Kuhl, 1820.

Pterodroma inexpectata inexpectata (J.R. Forster); Mathews & Iredale 1913, *Ibis* 1 (10th series): 233.

Pterodroma inexpectata thompsoni Mathews, 1915: *Austral Avian Rec.* 2: 125 – Tasmania, Australia.

Pterodroma gularis (Peale); Bent 1918, *Auk* 35: 221.

Pterodroma neglus Mathews, 1928: *Bull. Brit. Ornith. Club* 49: 51. Unnecessary *nomen novum* for *Procellaria lugens* Mathews, 1912.

Bulweria inexpectata (J.R. Forster); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.

Pterodroma inexpectata (J.R. Forster); Checklist Committee 1953, *Checklist N.Z. Birds*: 24.

Pterodroma (*Proaestrelata*) *inexpectata* (J.R. Forster); Imber 1985, *Ibis* 127: 219.

Pterodroma (*Oestrelatella*) *inexpectata* (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 51.

Breeds only in southern New Zealand: Fiordland (Seymour and Shelter Islands in Doubtful Sound, Inner Gilbert 5 and John islets in Breaksea Sound, Shag and Front Islands and six other islands in Dusky Sound, Chalky Island and two other islands in Chalky Inlet, four islands in Preservation Inlet, Lake Hauroko islet), Solander Islands, numerous islands around Stewart Island / Rakiura (notably Codfish Island / Whenua Hou, Taukihepa / Big South Cape Island, Kundy, Putauhinu, and Rerewhakaupoko Islands, islets in Port Pegasus), and Snares Islands / Tini Heke (Warham *et al.* 1977; W. Cooper *et al.* 1986; Marchant & Higgins 1990; Miskelly, Tennyson, Stahl *et al.* 2017; Miskelly, Gilad *et al.* 2019; Miskelly, Bishop *et al.* 2019, 2020, 2021). Formerly bred on inland ranges of the North and South Islands (Stead 1932; Falla 1934; Oliver 1955; Miskelly, Gilad *et al.* 2019). Mainly ranges in subantarctic seas and south to the pack-ice between 95°E and 140°W (Watson *et al.* 1971; P. Harper 1973; Marchant & Higgins 1990; Miskelly, Elliott *et al.* 2020). Migrates to the North Pacific, mainly to the subarctic convergence zone and into the Bering Sea; vagrant to the east tropical Pacific, Chile, and New York (Nakamura & Tanaka 1977; Marchant & Higgins 1990; Kuroda 1991; Bartle *et al.* 1993). Common in Late Pleistocene–Holocene deposits, and midden deposits in the North and South Islands (Millener 1991; Worthy, Holdaway *et al.* 2002); possible Holocene records from the Chatham Islands (J.H. Cooper & Tennyson 2008).

► ***Pterodroma externa*** (Salvin)

Juan Fernandez Petrel

Oestrelata externa Salvin, 1875: *Ibis* 5 (3rd series): 373 – Masafuera Island, Juan Fernández Islands, Chile.

Pterodroma externa tristani Mathews, 1931: *Bull. Brit. Ornith. Club* 52: 63 – Tristan da Cunha, South Atlantic Ocean.

Bulweria externa (Salvin); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. In part.

Pterodroma externa externa (Salvin); Checklist Committee 1980, *Notornis* (Suppl.) 27: 9.

Pterodroma (*Hallstroma*) *externa* (Salvin); Checklist Committee 1990, *Checklist Birds N.Z.*: 52.

Breeds on Isla Alejandro Selkirk (i.e. Masafuera Island), Juan Fernández Islands (R. Murphy 1936; M. Brooke 1987). During breeding, occurs in the subtropical and tropical south-east Pacific Ocean; migrates to the North Pacific Ocean north to about 20°N (R. Murphy 1936; Pitman 1986; Marchant & Higgins 1990; Kuroda 1991; Spear *et al.* 1992). Rare vagrant to the Indian Ocean (Veit *et al.* 2007) and south-west Pacific Ocean: one blown inland, Waikato, Oct. 1971 (Reed 1972, 1976b); a possible sighting north of New Zealand, May 1977 (Lovegrove 1978); one beach-wrecked in North Canterbury, Jun. 2005 (L. Howell & Esler 2007); one off Oamaru, Mar. 2012 (Miskelly *et al.* 2013); one off East Cape, Feb. 2013 (Miskelly *et al.* 2015); one west of Mana Island, Mar. 2019 (Miskelly, Crossland *et al.* 2021). The species has prospected at the Chatham Islands, with several records between 1984 and 1999 (Imber *et al.* 1991; Miskelly *et al.* 2006).

► ***Pterodroma cervicalis*** (Salvin)**White-naped Petrel**

- Oestrelata cervicalis* Salvin, 1891: *Ibis* 3 (6th series): 192 – Kermadec Islands.
Pterodroma externa cervicalis (Salvin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 232.
Pterodroma cervicalis; Oliver 1930, *New Zealand Birds*, 1st edition: 137.
Bulweria externa (Salvin); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. In part.
Pterodroma (Proaestrelata) cervicalis (Salvin); Imber 1985, *Ibis* 127: 219.
Pterodroma (Oestrelatella) cervicalis cervicalis (Salvin); Checklist Committee 1990, *Checklist Birds N.Z.*: 52.
Pterodroma cervicalis (Salvin); Imber & Tennyson 2001, *Emu* 101: 127.

Breeds on the Kermadec Islands / Rangitāhua (Macauley and formerly on Raoul; Veitch *et al.* 2004). Recently colonised Philip Island, Norfolk Island group (J. Moore 1999). During the breeding season, ranges in adjacent seas. Migrates to the North Pacific Ocean, mainly to south-east of Japan; rarer in the eastern tropical Pacific (Lovegrove 1978; Tanaka & Inaba 1981; Pitman 1986; Marchant & Higgins 1990; Kuroda 1991; Spear *et al.* 1992). Straggles to the east coast of Australia and to northern New Zealand: Mamaku Plateau, Apr. 1968, Gisborne, 1977 (Dowding 1987); Hokianga Harbour, Jun. 1982 (Brash 1982); Karikari Peninsula, Jan. 1986 (Dowding 1987); Bay of Plenty, Feb. 1991 (Miskelly *et al.* 2013); at least two off East Cape, Jan.–Mar. 1997 (Foreman 1998); outer Hauraki Gulf, Mar. 2007 and Feb. 2014 (Miskelly *et al.* 2013, 2015); off Whangaroa Harbour, Northland, Jan. 2010 and Jan. 2011, east of Stewart Island / Rakiura, Feb. 2011, north of Mokohinau Islands, Feb. 2012 (Miskelly *et al.* 2013); west of Coromandel, Mar. 2015 (Miskelly, Crossland *et al.* 2017); off Kaikoura, Jan. 2018 (Miskelly, Crossland *et al.* 2019). Rare vagrant to the southern Indian Ocean (Stahl *et al.* 1984; Veit *et al.* 2007).

Treated here as monotypic following Imber & Tennyson (2001); however, the Vanuatu petrel (*Pt. occulta* Imber & Tennyson, 2001) is often treated as a subspecies of *Pt. cervicalis* (see Shirihai & Bretagnolle 2010; Dickinson & Remsen 2013; S. Howell & Zufelt 2019; Handbook of the Birds of the World and BirdLife International 2020).

► ***Pterodroma nigripennis*** (Rothschild)**Black-winged Petrel | Karetai Kapa Mangu**

- Oestrelata cookii*; Cheesman, 1891: *Trans. Proc. N.Z. Inst.* 23: 224. Not *Procellaria cookii* G.R. Gray, 1843.
Oestrelata nigripennis Rothschild, 1893: *Bull. Brit. Ornith. Club* 1: 57 – Kermadec Islands.
Pterodroma cookii nigripennis (Rothschild); Mathews 1912, *Birds Australia* 2: 168.
Oestrelatella nigricollis Bianchi, 1913: *Faune Russie, Oiseaux* 1(2): 727. Error for *Oestrelata nigripennis* Rothschild (*vide* Bianchi 1913, *Faune Russie, Oiseaux* 1(2): 947).
Cookilaria cookii nigripennis (Rothschild); Mathews & Iredale 1913, *Ibis* 1 (10th series): 233.
Cookilaria (cookii) nigripennis (Rothschild); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 83, pl. opposite.
Cookilaria hindwoodi Whitley, 1938: *Austral. Mus. Mag.* 6: 297 – Norfolk Island.
Pterodroma (Cookilaria) axillaris nigripennis (Rothschild); C.A. Fleming 1941, *Emu* 41: 75.
Pterodroma hypoleuca nigripennis (Rothschild); Falla 1942, *Emu* 42: 117.
Pterodroma nigripennis (Rothschild); Oliver 1955, *New Zealand Birds*, 2nd edition: 148.
Pterodroma (Proaestrelata) nigripennis (Rothschild); Imber 1985, *Ibis* 127: 219.
Pterodroma (Oestrelatella) nigripennis (Rothschild); Checklist Committee 1990, *Checklist Birds N.Z.*: 50.

In the New Zealand region breeds at Kermadec Islands / Rangitāhua (most islands), Manawatāwhi / Three Kings (Great King, South West, North East), Motuopao, Matapia, Simmonds, Motukokako (Piercy), Burgess (Pokohinu), East (Whangaokeno), Portland, and Chatham Islands (Rangatira, Mangere, probably Star Keys), and on an islet off Cape Brett (Eagle 1980; Moors 1980; J. Jenkins & Cheshire 1982; Marchant & Higgins 1990; Foreman 1991; Tennyson 1991a; Parrish & Anderson 1998; Veitch *et al.* 2004; Miskelly, Gilad *et al.* 2019). Elsewhere, breeds at Norfolk (Philip Island), Lord Howe Island and Balls Pyramid (I. Hutton & Priddel 2002), islets off New Caledonia (Pandolfi Benoit & Bretagnolle 2002), Tonga, Rarotonga, islets off Rapa Island, and possibly at Marotiri (Bass Rocks) in the Austral Islands (Rinke *et al.* 1992). This species has recently expanded its breeding range (J. Jenkins & Cheshire 1982; Tennyson 1991a). Reported to have formerly nested at Fiji, the Cook Islands, Tubuai, the Marquesas, and Henderson Island (Medway 2001b; Steadman 2006) but some of these occurrences have been questioned by Worthy (2007). During the breeding season, ranges throughout the north Tasman Sea and subtropical south-west and central Pacific Ocean, rarely reaching the South Island; migrates mainly to the tropical North Pacific Ocean, occasionally as far west as Japan (Tanaka *et al.* 1985; Pitman 1986; Marchant & Higgins 1990; Kuroda 1991; Roberson & Bailey 1991; Spear *et al.* 1992). Holocene bones in Chatham Island dunes (J.H. Cooper & Tennyson 2008).

► ***Pterodroma axillaris*** (Salvin)**Chatham Petrel | Ranguru**

- Oestrelata axillaris* Salvin, 1893: *Bull. Brit. Ornith. Club* 1: 33 – “south-east island”, Chatham Islands.
Pterodroma cookii axillaris (Salvin); Mathews 1912, *Birds Australia* 2: 168.
Cookilaria cookii axillaris (Salvin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 233.
Cookilaria (cookii) axillaris (Salvin); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 85, pl. opposite p. 83.
Pterodroma (Cookilaria) axillaris axillaris (Salvin); C.A. Fleming 1941, *Emu* 41: 75.
Pterodroma hypoleuca axillaris (Salvin); Falla 1942, *Emu* 42: 117.
Pterodroma axillaris (Salvin); Checklist Committee 1980, *Notornis (Suppl.)* 27: 10.

Pterodroma (Proaestrelata) axillaris (Salvin); Imber 1985, *Ibis* 127: 219.

Pterodroma (Oestrelatella) axillaris (Salvin); Checklist Committee 1990, *Checklist Birds N.Z.*: 51.

Breeds mainly on Rangatira (South East Island), Chatham Islands (West 1994). Breeding has recently begun on Pitt Island and south-west Chatham Island after successful reintroduction programmes (Miskelly *et al.* 2009; Gummer *et al.* 2015; Miskelly, Gilad *et al.* 2019). Rare sightings over main Chatham Island at night (Imber 1994; West 1994; Medway 2000a). Range at sea poorly known but rarely seen near the Chatham Islands (A. Rogers 1980; Imber 1994; West 1994); one early record in the Wairarapa (Buller 1905–06). Migrates to the eastern tropical Pacific Ocean (off Perú and northern Chile) from Jun. to Nov. (Rayner *et al.* 2012). Holocene remains on Chatham, Pitt, and Mangere Islands (West 1994; J.H. Cooper & Tennyson 2008). Remains considered to be from human middens on Chatham Island (e.g. Sutton & Marshall 1977) may be pre-human Holocene bones (Millener 1999).

► ***Pterodroma cookii*** (G.R. Gray)

Cook's Petrel | Titī*

Breeds only in New Zealand. We follow Rayner *et al.* (2021) in recognising two subspecies of Cook's petrel, with the two breeding populations separated by c. 1,300 km. Both populations migrate to the eastern Pacific Ocean outside the breeding season. Formerly bred on mainland North and South Islands (Imber, West *et al.* 2003). North Island midden remains and Late Pleistocene–Holocene bones from the North and South Islands (Millener 1991; Worthy & Holdaway 2002; Worthy, Holdaway *et al.* 2002).

*Also used for other petrel species including grey-faced petrel *Pt. gouldi* and sooty shearwater *Ardenna grisea*.

Pterodroma cookii cookii (G.R. Gray)

Northern Cook's Petrel

Procellaria Cookii G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 199 – New Zealand, restricted to Mangaoraka Stream near Kaimiro, north Taranaki (*vide* Medway 2004, *Notornis* 51: 155).

Procellaria velox G.R. Gray, 1844: *Gen. Birds* 3: 648 (ex Solander MS) – no locality = Southern Ocean (*vide* Mathews 1912, *Birds Australia* 2: 169). Junior primary homonym of *Procellaria velox* Kuhl, 1820.

Rhantistes cookii (G.R. Gray); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Rhantistes velox (G.R. Gray); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Cookilaria leucoptera (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 190. In part.

Cookilaria velox (G.R. Gray); Bonaparte 1857, *Consp. Gen. Avium* 2: 190.

Procellaria cookii G.R. Gray; G.R. Gray 1862, *Ibis* 4: 246.

Aestrelata Cookii (G.R. Gray); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 152.

Procellaria Cooki G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 76. Unjustified emendation.

Fulmarus (Cookilaria) Cookii (G.R. Gray); G.R. Gray 1871, *Hand-list Birds* 3: 106.

Oestrelata cookii (G.R. Gray); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 6): 217.

Oestrelata cooki (G.R. Gray); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 417. Unjustified emendation.

Pterodroma cookii cookii (G.R. Gray); Mathews 1912, *Birds Australia* 2: 166.

Cookilaria cookii cookii (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 233.

Cookilaria cookii (G.R. Gray); Mathews 1920, *Austral Avian Rec.* 4: 67.

Pterodroma cooki; Falla 1922, *Emu* 21: 207. Unjustified emendation.

Pterodroma (Cookilaria) cookii (G.R. Gray); C.A. Fleming 1941, *Emu* 41: 75.

Pterodroma (Cookilaria) cookii cookii (G.R. Gray); Falla 1942, *Emu* 42: 115.

Bulweria cooki (G.R. Gray); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156. Unjustified emendation.

Pterodroma cooki cooki (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 25. Unjustified emendation.

Pterodroma cookii (G.R. Gray); Jouanin & Mougín 1979, in Peters, *Check-list Birds World 1* (2nd edition): 77.

Breeds on Hauturu / Little Barrier and Great Barrier / Aotea Islands (Imber, West *et al.* 2003; Rayner *et al.* 2007). During the breeding season, ranges mainly east of the North Island and into the northern Tasman Sea (Rayner, Hauber *et al.* 2008). Migrates to the eastern Pacific Ocean, mainly between the equator and 40°N (Rayner *et al.* 2011).

Pterodroma cookii orientalis Murphy

Southern Cook's Petrel

Pterodroma cookii orientalis Murphy, 1929: *American Mus. Novit.* 370: 5 – 200 miles west of Callao, Perú.

Cookilaria cookii orientalis (Murphy); Mathews 1934, *Novit. Zool.* 39(2): 171.

Breeds on Codfish Island / Whenua Hou (Imber, West *et al.* 2003; Rayner, Parker *et al.* 2008). During the breeding season, ranges mainly into the southern Tasman Sea (Rayner, Hauber *et al.* 2008). Migrates to the eastern Pacific Ocean, mainly between the equator and 30°S (Rayner *et al.* 2011).

► ***Pterodroma longirostris*** (Stejneger)

Stejneger's Petrel

Aestrelata longirostris Stejneger, 1893: *Proc. U.S. Nat. Mus.* 16: 618 – Mutzu Province, Honshu, Japan.

Oestrelata longirostris (Stejneger); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 418.

Pterodroma cookii longirostris (Stejneger); Mathews 1912, *Birds Australia* 2: 168.

Pterodroma (Aestrelata) cooki masafuerae Lönnberg, 1921: in Skottsberg, *Nat. Hist. Juan Fernandez & Easter Islands* 3: 14 – Masafuera Island, Juan Fernández Islands, Chile.

Pterodroma leucoptera masafuerae Lönnberg; R. Murphy 1929, *American Mus. Novit.* 370: 11.

Cookilaria leucoptera longirostris (Stejneger); Mathews 1934, *Novit. Zool.* 39(2): 170.

Cookilaria leucoptera masafuerae (Lönnerberg); Mathews 1934, *Novit. Zool.* 39(2): 170.

Pterodroma (*Cookilaria*) *longirostris longirostris* (Stejneger); Falla 1942, *Emu* 42: 112.

Pterodroma longirostris (Stejneger); Falla 1962, *Notornis* 9: 275.

Pterodroma longirostris longirostris (Stejneger); Jouanin & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 77.

Pterodroma (*Cookilaria*) *longirostris* (Stejneger); Checklist Committee 1990, *Checklist Birds N.Z.*: 48.

Breeds on Isla Alejandro Selkirk (i.e. Masafuera Island), Juan Fernández Islands (M. Brooke 1987). Migrates primarily to the north-west Pacific Ocean and is common off Japan Jul.–Aug.; fewer records east across the Pacific to the coast of North America (Tanaka *et al.* 1985; Kuroda 1991; Roberson & Bailey 1991; Spear *et al.* 1992; Bartle *et al.* 1993). Vagrant to the North Island, Nov.–Jan.: Baring Head, 1961; two, Ohope Beach, 1962 (Falla 1962a); Turakina Valley, 1963 (NMNZ OR.026704); east of Hawke Bay, 1978 (J. Jenkins 1981); Ruakaka Beach, 1980 (NMNZ OR.022677); Northland, 1981 (Checklist Committee 1990); three, Ninety Mile Beach, 1983 (Powlesland 1985); Pukerua Bay, 1989 (Guest 1991; Powlesland *et al.* 1992); and Ninety Mile Beach, 2005 (L. Howell & Esler 2007; NMNZ OR.027767).

► *Pterodroma pycrofti* Falla

Pycroft's Petrel

Procellaria cookii; Reischek 1886, *Trans. Proc. N.Z. Inst.* 18: 92 – Lady Alice Island. Not *Procellaria cookii* G.R. Gray, 1843.

Pterodroma pycrofti Falla, 1933: *Rec. Auck. Inst. Museum* 1: 176 – Hen Island.

Cookilaria cookii pycrofti (Falla); Mathews 1934, *Novit. Zool.* 39(2): 170.

Pterodroma (*Cookilaria*) *pycrofti* Falla; C.A. Fleming 1941, *Emu* 41: 75.

Pterodroma (*Cookilaria*) *longirostris pycrofti* Falla; Falla 1942, *Emu* 42: 114.

Cookilaria pycrofti; C.A. Fleming 1944, *New Zealand Bird Notes* 1(6): 58.

Pterodroma pycrofti Falla; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 23.

Pterodroma longirostris pycrofti Falla; Jouanin & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 78.

Breeds only in New Zealand: on Stephenson Island / Mahinepua Island; Aorangi, Poor Knights Islands; Hen and Chickens (Coppermine, Whatupuke, Lady Alice, Mauitaha); and Mercury Islands (Red Mercury (Whakau), Korapuki, Double, Kawhiti / Stanley Islands) (Tennyson & Pierce 1995; G. Taylor 2000a; Miskelly, Gilad *et al.* 2019). A new breeding colony has been established on Cuvier Island / Repanga (G. Taylor 2008) after a successful introduction programme (Miskelly *et al.* 2009). Range at sea uncertain but extends east and west of the North Island (e.g. Bartle 1968; Powlesland 1987; Marchant & Higgins 1990; G. Taylor 2004). Migrates to the North Pacific Ocean (Powlesland 1987; Marchant & Higgins 1990; Kuroda 1991; Roberson & Bailey 1991; Spear *et al.* 1992; S. Howell, Webb *et al.* 1996). Three specimens labelled as collected at the Kermadec Islands / Rangitāhua are of dubious origin (Veitch *et al.* 2004). Late Pleistocene–Holocene remains found on Te Haupa Island (Saddle Island) in the Hauraki Gulf, Norfolk, Nepean, and Lord Howe Islands, and midden remains found on Norfolk Island, have been referred to this species (Meredith 1985, 1991; Tennyson & Taylor 1999; Holdaway & Anderson 2001; Holdaway *et al.* 2001; G. Baker *et al.* 2002; McAllan *et al.* 2004; Lombal *et al.* 2020).

► *Pterodroma leucoptera* (Gould)

Gould's Petrel

Procellaria leucoptera Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 364 – Cabbage Tree Island, New South Wales, Australia.

Two subspecies: *Pt. l. leucoptera* breeds on Cabbage Tree Island, Boondelbah Island, and nearby islands in New South Wales, Australia; *Pt. l. caledonica* breeds in the highlands of New Caledonia (Imber & Jenkins 1981; Priddel & Carlile 2004a; Portelli 2016). Ranges in the south-west Pacific and in the Tasman Sea to seas off Tasmania, and migrates to the central (*leucoptera*) and eastern (*caledonica*) tropical Pacific Ocean (Marchant & Higgins 1990; Priddel *et al.* 2014). Portelli (2016) recommended that no subspecies be recognised; however, we consider that there are sufficient morphological, ecological and behavioural differences between the two populations to continue recognition of two subspecies.

Pterodroma leucoptera caledonica Imber & Jenkins

New Caledonian Petrel

Pterodroma leucoptera new subspecies; Bull 1943, *Emu* 42: 152.

Pterodroma leucoptera leucoptera; Checklist Committee 1953, *Checklist N.Z. Birds*: 24. Not *Procellaria leucoptera* Gould, 1844.

Pterodroma leucoptera subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 25.

Pterodroma leucoptera caledonica Naurois, 1978: *Compt. Rend. Séa. Acad. Sci., Paris* 287: 269. *Nomen nudum* (fide Palma & Tennyson 2005, *Notornis* 52: 247).

Pterodroma leucoptera caledonica Imber & Jenkins, 1981: *Notornis* 28: 153 – New Caledonia, New Zealand, Tonga, Tasman Sea and Pitcairn Island, restricted to “Noumeá Enterprises” Camp, Kalouehola River, 550 m below Mount Dzumac, New Caledonia (fide Palma & Tennyson 2005, *Notornis* 52: 248).

Pterodroma (*Cookilaria*) *caledonica*; Bourne 1983, *Sea Swallow* 32: 71.

Pterodroma (*Cookilaria*) *leucoptera caledonica* Imber & Jenkins; Checklist Committee 1990, *Checklist Birds N.Z.*: 49.

Breeds on New Caledonia (Imber & Jenkins 1981). Ranges far south in the Tasman Sea to waters off Tasmania and to the west of Foveaux Strait; migrates to the eastern Pacific, especially near the Galápagos Islands (Imber & Jenkins 1981; Nakamura 1982; Pitman 1986; Marchant & Higgins 1990; Roberson & Bailey 1991; Spear *et al.* 1992). About 38 New Zealand records onshore (mainly beach-wrecked) as far south as Dunedin and Fiordland, but mainly from the North

Island's west coast, Nov. to Jun. (Fennell 1986; Powlesland 1987; Hawke 1989; Guest 1991; Powlesland & Powlesland 1994b; G. Taylor 1999, 2004; L. Howell & Esler 2007; Miskelly *et al.* 2013).

► ***Pterodroma brevipes* (Peale)**

Collared Petrel

Procellaria brevipes Peale, 1848: *U.S. Expl. Exped.* 8: 294, 337, pl. 80 – “latitude 68°S, longitude 95°W.” but probably Samoa Islands (*vide* Bourne 1967, *Ibis* 109: 155).

Procellaria Cookii Cassin, 1858: *U.S. Expl. Exped.*: 414 – “nearer the continent of America”. Not *Procellaria Cookii* G.R. Gray, 1843.

Procellaria torquata Macgillivray, 1860: *Zool.* 18: 7133 – Aneiteum Island, New Hebrides (= Vanuatu).

Procellaria desolata Schlegel, 1863: *Rev. méth. critique. Mus. d'Hist. Nat. PaysBas* 6(22): 13. Not *Procellaria desolata* Gmelin, 1789.

Fulmarus aneiteimensis G.R. Gray, 1871: *Hand-list Birds* 3: 107. *Nomen nudum*.

Oestrelata leucoptera Salvin, 1876: *Ibis* 6: 393. – Fiji Islands. Not *Procellaria leucoptera* Gould, 1844.

Procellaria caerulea Layard, 1876: *Proc. Zool. Soc. London* 1876: 498 – Fiji Islands. Not *Procellaria caerulea* Gmelin, 1789.

Aestrelata leucoptera Ridgway, 1887: *Man. North Amer. Birds*: 65. Not *Procellaria leucoptera* Gould, 1844.

Oestrelata torquata (Macgillivray); Salvin 1888, *Ibis* 6 (5th series): 359.

Aestrelata brevipes (Peale); Stejneger, 1893: *Proc. U.S. Nat. Mus.* 16: 617.

Oestrelata brevipes (Peale); Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 408.

Pterodroma leucoptera brevipes (Peale); Jouanin & Mouglin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 78.

Pterodroma (Cookilaria) brevipes (Peale); Imber 1985: *Ibis* 127: 224.

Pterodroma brevipes magnificens Bretagnolle & Shirihai, 2010: *Bull. Brit. Ornith. Club* 130: 288.

Pterodroma brevipes brevipes (Peale); Bretagnolle & Shirihai 2010, *Bull. Brit. Ornith. Club* 130: 300.

Breeds on islands in Vanuatu (Tanna, Erromango, and Vanua Lava, possibly Aneityum and Gaua) and Fiji (Kadavu and Gau, possibly Ovalau, Taveuni, Koro, Moala, Totoya, Vanuabalavu, and Matuku). Possibly also breeds in the Solomon Islands, Rarotonga, Moorea, Tahiti, Mangareva Island (Gambier Islands), Samoa, and American Samoa (Tennyson *et al.* 2012; M. O'Brien *et al.* 2016). Vagrant to seas near the Three Kings Islands: Mar. 2011 and Mar. 2019 (Miskelly, Crossland *et al.* 2021). The reported occurrence of a possible specimen from New Zealand (Clarkson & Walker 2001) is incorrect – the specimen (NMNZ OR.028682) is a mottled petrel (*Pt. inexpectata*).

Genus *Halobaena* Bonaparte

Halobaena Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 – Type species (by monotypy) *Procellaria caerulea* Gmelin = *Halobaena caerulea* (Gmelin).

Zaprium Coues, 1875: *Bull. U.S. Nat. Mus.* 2: 34 – Type species (by monotypy) *Halobaena caerulea* (Gmelin).

► ***Halobaena caerulea* (Gmelin)**

Blue Petrel

Procellaria caerulea Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 560. Based on the “Blue Petrel” of G. Forster 1777, *Voyage World* 1: 91 – Southern Ocean, between 47°S and 58°S.

Pachyptila caerulea (Gmelin); Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 275.

Procellaria forsteri A. Smith, 1840: *Illust. Zool. South Africa, Aves* 2(11): pl. 53 & text opposite – Cape seas. Junior primary homonym of *Procellaria forsteri* Latham, 1790.

Procellaria similis J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 59 – Antarctic Ocean.

Halobaena coerulea [sic] (Gmelin); Bonaparte 1857, *Consp. Gen. Avium* 2: 193.

Procellaria coerulea [sic] (Gmelin); Finsch 1870, *Journ. für Ornith.* 18: 373.

Procellaria cerulea [sic] Gmelin; Anon. 1870, *Cat. Colonial Mus.*: 76.

Fulmarus (Halobaena) caeruleus (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 107.

Prion caerulea (Gmelin); Mathews 1911, *Emu* 10: 320.

Halobaena caerulea (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 235.

Halobaena caerulea victoriae Mathews, 1916: *Austral Avian Rec.* 3: 54 – Victoria, Australia.

Halobaena murphyi Brooks, 1917: *Bull. Mus. Comp. Zoology* 61: 146 – Stromness Bay, South Georgia, South Atlantic Ocean.

Halobaena caerulea murphyi Brooks; Dell 1952, *Emu* 52: 150.

Breeds on Cape Horn and adjacent islands of the Hermite and Wollaston Groups; Islas Diego Ramirez and Ildefonso (G. Clark *et al.* 1992); South Georgia; and on Marion, Prince Edward, Crozet, Kerguelen, and Macquarie Islands (Marchant & Higgins 1990; G. Baker *et al.* 2002). Ranges from Antarctica to about 30°S, sometimes further north (Watson *et al.* 1971; Marchant & Higgins 1990). Regular winter/spring visitor to New Zealand seas; hundreds beach-wrecked in 1981 (Powlesland 1983), 1984 (Powlesland 1986), 1985 (G. Taylor 2004), 1991 (Powlesland & Powlesland 1993), and 1999 (G. Taylor 2004). Straggler to the Kermadec / Rangitāhua (Clifford & Lawrie 1997), Chatham (Miskelly *et al.* 2006), Snares / Tini Heke (Miskelly *et al.* 2001a), Antipodes (Tennyson *et al.* 2002), and Auckland / Maukahuka (Miskelly, Elliott *et al.* 2020) Islands. Identified from Holocene dune deposits on Enderby Island, Auckland Islands (Tennyson 2020a). Tentatively identified (R.J. Scarlett) from one North Island midden site (Checklist Committee 1990).

Genus *Pachyptila* Illiger

- Pachyptila* Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 274 – Type species (by subsequent designation) *Procellaria Forsteri* Latham = *Pachyptila vittata* (G. Forster).
- Prion* Lesson, 1828: *Manuel d’Ornith.* 2: 399 (ex La Cépède, 1799) – Type species (by subsequent designation) *Procellaria vittata* G. Forster = *Pachyptila vittata* (G. Forster).
- Pseudoprion* Coues, 1866: *Proc. Acad. Nat. Sci. Philad.* 18: 164 – Type species (by original designation) *Procellaria turtur* Kuhl = *Pachyptila turtur* (Kuhl).
- Fulmariprion* Mathews, 1912: *Birds Australia* 2: 215 – Type species (by original designation) *Pseudoprion turtur crassirostris* Mathews = *Pachyptila crassirostris* (Mathews).
- Heteroprion* Mathews, 1912: *Birds Australia* 2: 222 – Type species (by original designation) *Heteroprion belcheri* Mathews = *Pachyptila belcheri* (Mathews).
- Attaprion* Mathews, 1933: *Bull. Brit. Ornith. Club* 54: 25 – Type species (by original designation) *Procellaria desolata* Gmelin = *Pachyptila desolata* (Gmelin).
- Salviprion* Mathews, 1943: in Mathews & Hallstrom, *Notes Procellariiformes*: 30 – Type species (by original designation) *Pachyptila salvini* (Mathews). As a subgenus of *Pachyptila*.

► *Pachyptila vittata* (G. Forster)

Broad-billed Prion | Pararā

- Procellaria vittata* G. Forster, 1777: *Voyage Round World I*: 98 (footnote) – Southern Ocean, restricted to Anchor Isle, Dusky Sound, Fiordland (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24).
- Procellaria vittata* Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 560. Based on the “Broad-billed Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 414 – Southern Hemisphere, restricted to New Zealand (*vide* Mathews 1912, *Birds Australia* 2: 209). Junior primary homonym of *Procellaria vittata* G. Forster, 1777.
- Procellaria Forsteri* Latham, 1790: *Index Ornith.* 2: 827 – New Zealand, restricted to Anchor Isle, Dusky Sound, Fiordland (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24).
- Procellaria Latiostris* Bonnatere, 1791: *Tableaux Encycl. Method. Ornith.* 1(47): 81 – New Zealand, restricted to Anchor Isle, Dusky Sound, Fiordland (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24).
- Prion vittatus* (Cuv.) [sic]; Gould 1844, *Ann. Mag. Nat. Hist., London* 13: 366. In part.
- Prion lamellirostris* Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 – no locality = Anchor Isle, Dusky Sound, Fiordland (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24).
- Prion vittata* [sic] (G. Forster); Bonaparte 1857, *Cons. Gen. Avium* 2: 192.
- Prion magnirostris* Gould, 1862: *Proc. Zool. Soc. London 1862* (8): 125 – no locality = Dusky Sound (*vide* Mathews & Iredale 1943, *Notes Procellariiformes*: 24).
- Prion vittatus* Gmelin; Anon. 1870, *Cat. Colonial Mus.*: 76.
- Prion (Prion) vittata* [sic] (G. Forster); G.R. Gray 1871, *Hand-list Birds* 3: 108.
- Prion (Prion) magnirostris* Gould; G.R. Gray 1871, *Hand-list Birds* 3: 108.
- Prion australis* Potts, 1873: *Ibis* 3 (3rd series): 85 – New Zealand.
- Prion vittatus vittatus* (Gmelin); Mathews 1912, *Birds Australia* 2: 204.
- Prion vittatus gouldi* Mathews, 1912: *Birds Australia* 2: 211, 203 (key) – Bass Strait, Australia.
- Prion vittatus missus* Mathews, 1912: *Birds Australia* 2: 212, 203 (key), pl. 92 – Western Australia, restricted to Cottesloe Beach, Western Australia (*vide* Greenway 1973, *Bull. Am. Mus. Nat. Hist.* 150: 221).
- Prion vittatus keyteli* Mathews, 1912: *Birds Australia* 2: 210 – Tristan da Cunha, South Atlantic Ocean.
- Pachyptila vittatus vittatus* [sic] (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 236.
- Pachyptila vittata vittata* (Gmelin); Mathews 1913, *List Birds Australia*: 39.
- Pachyptila vittata gouldi* (Mathews); Mathews 1913, *List Birds Australia*: 39.
- Pachyptila vittata missa* (Mathews); Mathews 1913, *List Birds Australia*: 40.
- Pachyptila vittata* (Gmelin); Mathews 1920, *Austral Avian Rec.* 4: 68.
- Procellaria longirostris* Mathews, 1927: *Syst. Avium Australasianarum* 1: 126 – New Zealand, restricted to Anchor Isle, Dusky Sound, Fiordland (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24). Error for “*Procellaria latiostris*” (*vide* Mathews & Hallstrom 1943, *Notes Procellariiformes*: 24).
- Pachyptila vittata missus* [sic] (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 126.
- Pachyptila vittata keyteli* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 172.
- Pachyptila vittata balaena* Mathews, 1938: *Emu* 37: 281 – Cottesloe, Western Australia.
- Pachyptila forsteri forsteri* (Latham); C.A. Fleming 1939, *Emu* 38: 399.
- Pachyptila (Pachyptila) vittata vittata* (G. Forster); Falla 1940, *Emu* 40: 233.
- Pachyptila (Pachyptila) vittata*; C.A. Fleming 1941, *Emu* 41: 143.
- Pachyptila vittata vittata* (G. Forster); Checklist Committee 1953, *Checklist N.Z. Birds*: 19.
- Pachyptila vittata* (G. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 46.

Breeds on Tristan da Cunha, Nightingale, Inaccessible, and Gough Islands (M. Brooke 2004; Ryan 2007) and on many islands about southern New Zealand, in Fiordland and around Stewart Island / Rakiura and Foveaux Strait – including Solander (Hautere), Codfish / Whenua Hou, and Snares / Tini Heke Islands and most of the Chatham Islands (G. Taylor 2000b; Jamieson *et al.* 2016; Miskelly, Bishop *et al.* 2021). Ranges in South Atlantic and Tasman Sea and around New Zealand (P. Harper 1980; Marchant & Higgins 1990); vagrant to Perú, Chile, and Brazil (Portflitt-Toro *et al.* 2018; Pacheco *et al.* 2021). Late Pleistocene–Holocene bones and midden records on North, South, and Chatham Islands, and Auckland Islands / Maukahuka (Millener 1991; Tennyson 2020a).

Mathews & Hallstrom (1943: 24) designated G. Forster's drawing in plate 87 as the type (therefore lectotype) of *Procellaria vittata* G. Forster, 1777, with type locality as above. Medway (2002b) disputed the identity and locality of the prion depicted in plate 87, and suggested a new lectotype should be designated. However, Article 74.1.1 of ICZN (1999) states that "the valid designation of a lectotype fixes the status of the specimen as the sole name-bearing type of that nominal taxon; no later designation of a lectotype has any validity".

► ***Pachyptila salvini* (Mathews)**

Salvin's Prion

Prion vittatus salvini Mathews, 1912: *Birds Australia* 2: 212 – Crozets, Marion Island, etc., restricted to Marion Island, south Indian Ocean (*vide* Mathews 1934, *Novit. Zool.* 39(2): 172).

Heteroprion desolatus crozeti Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 147 – Crozet Archipelago, south Indian Ocean.

Pachyptila gouldi maui Mathews, 1937: *Emu* 37: 118 – Kapiti Island.

Pachyptila gouldi whittelli Mathews, 1938: *Emu* 37: 282 – Bunbury, Western Australia.

Pachyptila (Pachyptila) salvini salvini (Mathews); Falla 1940, *Emu* 40: 233.

Pachyptila (Pachyptila) salvini crozeti (Mathews); Falla 1940, *Emu* 40: 233.

Pachyptila (Pachyptila) salvini; C.A. Fleming 1941, *Emu* 41: 143.

Pachyptila salvini muriwai Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 23 – Muriwai Beach.

Pachyptila (Salviprion) salvini (Mathews); Mathews & Hallstrom 1943, *Notes Procellariiformes*: 30.

Pachyptila salvini salvini (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 19.

Pachyptila salvini crozeti (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 19.

Pachyptila vittata crozeti; Watson *et al.* 1971, *Antarctic Map Folio Series* 14: 8.

Pachyptila vittata salvini (Mathews); Jouanin & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 81.

Breeds on Marion, Prince Edward, and Crozet (Hog, Penguin, Apostles, Possession, East) Islands (Powlesland 1989a). Ranges mainly in the Indian Ocean south of 40°S, regularly reaching the coasts of South Africa, Australia, and New Zealand, mainly in winter (Jouventin *et al.* 1985; Marchant & Higgins 1990). A banded Crozet Island juvenile was found in New Zealand in Mar. 1974 (A. Howell 1974). In some years thousands of juveniles are beach-wrecked in New Zealand (P. Harper 1980; Powlesland 1989a). Remains of one were found in a skua midden on Snares Islands / Tini Heke in 1985 (Miskelly *et al.* 2001a); remains (NMNZ OR.028027), probably of this species, were found at the Kermadec Islands / Rangitāhua in 2002; and two were found beach-wrecked on Chatham Island in Oct. 1996 (Miskelly *et al.* 2006). Holocene bones from North Island dunes (Millener 1991).

No subspecies are recognised, as the Checklist Committee considers MacGillivray's prion (*P. macgillivrayi*) to be a full species (see Bretagnolle *et al.* 1990; Worthy & Jouventin 1999; Shirihai 2002; Onley & Scofield 2007; Dilley *et al.* 2015; BirdLife International 2021; C. Jones *et al.* 2021).

► ***Pachyptila desolata* (Gmelin)**

Antarctic Prion | Totorore*

Procellaria desolata Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 562. Based on the "Brownbanded Petrel" of Latham 1785, *Gen. Synop. Birds* 3(2): 409 – Desolation Island = Kerguelen Island, south Indian Ocean (*vide* Mathews 1913, *List Birds Australia*: 40).

Procellaria fasciata Bonnaterre, 1791: *Tableaux Encycl. Méthod. Ornith.* 1(47): 79. Based on the "Brown-banded Petrel" of Latham 1785, *Gen. Synop. Birds* 3(2): 409 – Desolation Island = Kerguelen Island, south Indian Ocean (*vide* Mathews 1913, *List Birds Australia*: 40).

Daption desolatum (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 244.

Pachyptila banksi A. Smith, 1840: *Illust. Zool. South Africa, Aves* 2: pl. 55 – seas off Cape of Good Hope.

Prion Banksii (A. Smith); Gould 1844, *Ann. Mag. Nat. Hist., London* 13: 366. Unjustified emendation.

Aestrelata desolata (Gmelin); Bonaparte 1857, *Consp. Gen. Avium* 2: 189.

Prion banksi (A. Smith); Bonaparte 1857, *Consp. Gen. Avium* 2: 193.

Prion rossi Bonaparte, 1857: *Consp. Gen. Avium* 2: 193 – Kerguelen Island, south Indian Ocean.

Procellaria (Aestrelata) desolata Gmelin; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 55.

Prion banksii (A. Smith); G.R. Gray 1862, *Ibis* 4: 247. Unjustified emendation.

Procellaria banksii (A. Smith); Schlegel 1863, *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 17. Unjustified emendation.

Pseudoprion Banksii (A. Smith); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 166. Unjustified emendation.

Prion Banksi (A. Smith); Finsch 1870, *Journ. für Ornith.* 18: 373.

Prion (Pseudoprion) Banksii (A. Smith); G.R. Gray 1871, *Hand-list Birds* 3: 108. Unjustified emendation.

Prion (Pseudoprion) desolata (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 108.

Prion banksii Gould [sic]; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 311. Unjustified emendation.

Prion desolatus (Gmelin); Sharpe 1879, *Phil. Trans. Roy. Soc. London* 168: 137.

Prion banksi (A. Smith); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 434.

Prion dispar Vanhoeffen, 1905: *Journ. für Ornith.* 53: 505 – Heard Island, southern Indian Ocean. *Nomen nudum.*

Heteroprion desolatus mattingleyi Mathews, 1912: *Birds Australia* 2: 223 (key), 226 – Geelong, Australia.

Heteroprion desolatus macquariensis Mathews, 1912: *Birds Australia* 2: 231 – Macquarie Island.

Heteroprion desolatus peringueyi Mathews, 1912: *Birds Australia* 2: 230 – Pondoland coast, South Africa.

Heteroprion desolatus alter Mathews, 1912: *Birds Australia* 2: 231 – Auckland Islands.

Heteroprion desolatus desolatus (Gmelin); Mathews 1913, *List Birds Australia*: 40.

- Prion dispar* Bianchi, 1913: *Faune Russie, Oiseaux* 1(2): 523 (ex Vanhöffen 1905) – Heard Island, southern Indian Ocean.
- Heteroprion desolatus* (Gmelin); Mathews 1920, *Austral Avian Rec.* 4: 68.
- Heteroprion desolatus alexanderi* Mathews & Iredale, 1921: *Man. Birds of Australia* 1: 42 – Cottesloe Beach, Western Australia.
- Heteroprion desolatus banksi* (A. Smith); Bennett 1926, *Ibis* 2 (12th series): 316.
- Heteroprion desolatus georgia* Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 147 – Stromness Bay, South Georgia, South Atlantic Ocean.
- Pachyptila vittata georgicus* Mathews, 1933: *Bull. Brit. Ornith. Club* 53: 214 – Stromness Bay, South Georgia, South Atlantic Ocean.
- Attaprion desolatus* (Gmelin); Mathews 1933, *Bull. Brit. Ornith. Club* 54: 25.
- Attaprion desolatus desolatus* (Gmelin); Mathews 1934, *Novit. Zool.* 39(2): 173.
- Attaprion desolatus mattingleyi* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 173.
- Attaprion desolatus macquariensis* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 173.
- Attaprion desolatus banksi* (A. Smith); Mathews 1934, *Novit. Zool.* 39(2): 173.
- Attaprion desolatus georgia* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 173.
- Heteroprion desolatus dispar* Iredale, 1938: *Emu* 37: 244 (ex Vanhöffen 1905) – Heard Island, southern Indian Ocean. Junior secondary homonym of *Prion dispar* Bianchi, 1913.
- Pachyptila (Heteroprion) desolata desolata* (Gmelin); Falla 1940, *Emu* 40: 233.
- Pachyptila (Heteroprion) desolata alter* (Mathews); Falla 1940, *Emu* 40: 234.
- Pachyptila (Heteroprion) desolata banksi* (A. Smith); Falla 1940, *Emu* 40: 234.
- Pachyptila (Heteroprion) desolata*; C.A. Fleming 1941, *Emu* 41: 143.
- Heteroprion desolatus heardi* Mathews, 1942: *Emu* 41: 264. Unnecessary *nomen novum* for *Heteroprion desolatus dispar* Iredale, 1938.
- Pachyptila desolata* (Gmelin); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.
- Pachyptila desolata georgia* (Mathews); Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 56.
- Pachyptila desolata desolata* (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 19.
- Pachyptila desolata banksi* A. Smith; Checklist Committee 1953, *Checklist N.Z. Birds*: 19.
- Pachyptila desolata alter* (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 19.
- Pachyptila desolata altera* (Mathews); Normand & Gosselin 2002, *Bull. Brit. Ornith. Club* 122: 16. Unjustified emendation.

Breeding on subantarctic and antarctic islands: South Georgia, South Sandwich, South Orkney, South Shetland, Crozet (East, Penguin), Kerguelen, Heard, Macquarie, McDonald, Auckland / Maukahuka, and Scott Islands; possibly on Bouvetøya and Balleny Islands and islets off Campbell Island / Motu Ihupuku; formerly at Cape Denison, Antarctica (Bailey & Sorensen 1962; Tickell 1962; Marchant & Higgins 1990; G. Baker *et al.* 2002; Miskelly, Elliott *et al.* 2020). Ranges mainly between about 50°S and the pack-ice during the breeding season; moving northward when not breeding (Watson *et al.* 1971; Marchant & Higgins 1990). Regular visitor to seas off mainland New Zealand, mainly in winter (P. Harper 1980; Powlesland 1989a). Straggler to Vanuatu (Jouanin & Mougin 1979) and the Kermadec / Rangitāhua and Chatham Islands (Imber 1994; Veitch *et al.* 2004). Identified from Holocene dune deposits at the Auckland Islands / Maukahuka (Tennyson 2020a). No subspecies accepted here following P. Harper (1980), Marchant & Higgins (1990), and Dickinson (2003).

*Also used for other petrel species including little shearwater *Puffinus assimilis*.

► *Pachyptila belcheri* (Mathews)

Thin-billed Prion | Korotangi

- Procellaria turtur* Mathews, 1912: *Birds Australia* 2: 218 (ex Solander MS) – 59°S off Tierra del Fuego, South America (*vide* Medway 2002, *Notornis* 49: 62). Junior homonym of *Procellaria turtur* Kuhl, 1820.
- Pseudoprion turtur solanderi* Mathews, 1912: *Birds Australia* 2: 220 – west coast South America, restricted to Cape Horn (*vide* Greenway 1973, *Bull. Am. Mus. Nat. Hist.* 150: 222).
- Heteroprion belcheri* Mathews, 1912: *Birds Australia* 2: 224 – Geelong, Australia.
- Heteroprion belcheri serventyi* Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 160 – Cottesloe, Western Australia.
- Pachyptila (Heteroprion) belcheri orientalis* Falla, 1937: *BANZARE Reports, ser. B, 2*: 200 – Royal Sound, Kerguelen Island, south Indian Ocean.
- Heteroprion belcheri lalfa* Mathews, 1939: *Bull. Brit. Ornith. Club* 59: 103 – Kapiti Island.
- Heteroprion belcheri falklandicus* Mathews, 1939: *Bull. Brit. Ornith. Club* 59: 104 – Falkland Islands, South Atlantic Ocean.
- Pachyptila (Heteroprion) belcheri* (Mathews); Falla 1940, *Emu* 40: 234.
- Pachyptila belcheri* (Mathews); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.
- Pachyptila belcheri falklandica* (Mathews); Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 57.

Breeds on Isla Noir and Landfall Island, Chile (G. Clark *et al.* 1992), Falkland Islands (New Island and about 12 other colonies), East Island (Crozet Group), and at Kerguelen Islands (Strange 1980; Croxall *et al.* 1984); possibly at Staten Island and other islets in the region of Tierra del Fuego (P. Harper 1972), and at Macquarie Island (G. Baker *et al.* 2002). Ranges extensively within subantarctic and antarctic seas; north to 30°S in winter and spring (Watson *et al.* 1971; Marchant & Higgins 1990). Regular winter visitor to New Zealand seas (Powlesland 1989a). New Zealand beach-wrecks are thought to be from Kerguelen Islands (P. Harper 1972); one bird banded there recovered dead on a South Island beach (Imber 2003). Straggler to Kermadec Islands / Rangitāhua (J. Macdonald & Lawford 1954; Sorensen 1964) and Campbell / Motu Ihupuku Islands (Bailey & Sorensen 1962). The taxon *Pseudoprion turtur solanderi* Mathews, 1912 was listed as

a synonym of *Pachyptila turtur* (Kuhl) by Checklist Committee (1990), but Falla (1940b), P. Harper (1972) and G. Clark *et al.* (1992) considered it a synonym of *Pachyptila belcheri*. Although *Pseudoprion turtur solanderi* has page priority over *Pachyptila belcheri* in Mathews (1912–13), the latter is still the valid name for the thin-billed prion because of the Principle of the First Reviser (ICZN 1999: 24, 30).

► ***Pachyptila turtur* (Kuhl)**

Fairy Prion | Titi Wainui

Procellaria turtur Kuhl, 1820: *Beitr. Zool. vergl. Anat. 1*: 143 (ex Banks MS) – no locality = Bass Strait, Australia (*vide* Mathews 1912, *Birds Australia* 2: 219).

Prion Turtur (Kuhl); Gould 1844, *Ann. Mag. Nat. Hist., London* 13: 366.

Prion brevirostris Gould, 1855: *Proc. Zool. Soc. London 1855* (23): 88, pl. 93 – Madeira or Desertas Islands, North Atlantic Ocean, error for South Atlantic Ocean (*vide* Mathews 1912, *Birds Australia* 2: 220).

Halobaena typica Bonaparte, 1857: *Consp. Gen. Avium* 2: 194 – “Insula Waigiou”, error for ?Bass Strait, Australia (*vide* Mathews 1912, *Birds Australia* 2: 219).

Prion ariel Bonaparte, 1857: *Consp. Gen. Avium* 2: 194 (ex Gould) – Australia? = Bass Strait, Australia (*vide* Salvin 1896, *Cat. Birds Brit. Mus.* 25: 436).

Procellaria ariel Gould [sic]; G.R. Gray 1862, *Ibis* 4: 247.

Pseudoprion turtur (Banks) [sic]; Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 166.

Pseudoprion ariel (Gould) [sic]; Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 166.

? *Pseudoprion brevirostris* (Gould); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 167.

Prion ariel Gould [sic]; Finsch 1870, *Journ. für Ornith.* 18: 374.

Prion (Pseudoprion) turtur (Smith) [sic]; G.R. Gray 1871, *Hand-list Birds* 3: 108.

Prion (Pseudoprion) ariel (Gould) [sic]; G.R. Gray 1871, *Hand-list Birds* 3: 108.

Prion turtur Solander [sic]; Hutton 1872, *Ibis* 2 (3rd series): 249.

Prion turtur (Kuhl); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 309.

Pachyptila Ariel (Gould) [sic]; Cabanis & Reichenow 1876, *Journ. für Ornith.* 24: 328.

Pseudoprion turtur huttoni Mathews, 1912: *Birds Australia* 2: 220 – Chatham Islands.

Pseudoprion turtur eatoni Mathews, 1912: *Birds Australia* 2: 220 – Kerguelen Island, south Indian Ocean.

Pseudoprion turtur turtur (Kuhl); Mathews 1913, *List Birds Australia*: 40.

Pseudoprion turtur nova Mathews, 1916: *Austral Avian Rec.* 3: 55 – Sydney, New South Wales, Australia.

Pseudoprion turtur (Kuhl); Mathews 1920, *Austral Avian Rec.* 4: 68.

Pseudoprion turtur brevirostris (Gould); Bennett 1926, *Ibis* 2 (12th series): 317.

Pachyptila turtur turtur; Oliver 1930, *New Zealand Birds*, 1st edition: 114.

Pachyptila turtur fallai Oliver, 1930: *New Zealand Birds*, 1st edition: 114 – Otago.

Heteroprion belcheri fallai (Oliver); Mathews 1931, *Ibis* 1 (13th series): 44.

Pseudoprion turtur steadi Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 146 – “Cundy, Woman’s and Betsy Islands”, off Stewart Island, restricted to Herekopare Island (*vide* Miskelly 2012, *Notornis* 59: 9).

Pseudoprion turtur oliveri Mathews, 1932: *Bull. Brit. Ornith. Club* 52: 147 – Motunau Island, Canterbury.

Pseudoprion turtur fallai (Oliver); Mathews 1934, *Novit. Zool.* 39(2): 174.

Pseudoprion turtur dertrum Mathews, 1938: *Emu* 37: 281 – Bunbury, Western Australia.

Pachyptila (Pseudoprion) eatoni eatoni (Mathews); C.A. Fleming 1939, *Emu* 38: 398.

Pachyptila (Pseudoprion) eatoni aff. *eatoni* (Mathews); C.A. Fleming 1939, *Emu* 38: 398. In part.

Pachyptila (Pseudoprion) turtur huttoni (Mathews); C.A. Fleming 1939, *Emu* 38: 400.

Pachyptila (Pseudoprion) crassirostris eatoni (Mathews); Falla 1940, *Emu* 40: 234. In part.

Pachyptila (Pseudoprion) turtur turtur (Kuhl); Falla 1940, *Emu* 40: 234.

Pachyptila (Pseudoprion) turtur fallai (Oliver); Falla 1940, *Emu* 40: 234.

Pachyptila (Pseudoprion) turtur; C.A. Fleming 1941, *Emu* 41: 143.

Pseudoprion turtur mangarei Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 23 – Mangare Island = Mangere Island, Chatham Islands.

Pseudoprion turtur benchi Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 23 – Bench Island, off Stewart Island.

Pseudoprion turtur armiger Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 23 – Poor Knights Islands.

Fulmariprion crassirostris eatoni; Mathews & Hallstrom 1943, *Notes Procellariiformes*: 26. In part.

Pachyptila turtur (Kuhl); Checklist Committee 1953, *Checklist N.Z. Birds*: 20.

Pachyptila crassirostris eatoni (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 20. In part.

Pachyptila turtur subantarctica Oliver, 1955: *New Zealand Birds*, 2nd edition: 119 – Antipodes Island.

Breeds on Beauchêne Island (Falkland Islands), South Georgia, Marion and Prince Edward Islands, Crozets (Hog, Penguin, East), Kerguelen Islands, and Roche Quille (St Paul Island), and in Australia on islands off Victoria and around Tasmania (P. Harper 1980; Marchant & Higgins 1990). Breeds on many islands in and near the New Zealand region: Poor Knights; Stephens / Takapourewa, Trios, Jag Rocks, Sentinel Rock, The Haystack / Moturaka, Ninepin Rock, The Brothers (all Cook Strait); Motukiekie Rocks, Open Bay Island, Motunau Island, Banks Peninsula islets, Dunedin coastal cliffs and nearby islands, islands in Foveaux Strait and off Stewart Island / Rakiura; Snares Islands / Tini Heke; Chatham Islands (Mangere, Little Mangere, Rabbit, Kokope, Murumurus, Star Keys, The Sisters); Antipodes Islands, Macquarie Island, and Bishop and Clerk Islands; and possibly on islets off Campbell Island / Motu Ihupuku (P. Harper 1976; Powlesland 1989a; Imber 1994; D. Brown 1995; Stuart-Menteth 1996; Loh 2000; G. Taylor 2000b; G. Baker *et al.* 2002; Tennyson

et al. 2002; Jamieson *et al.* 2016). Recently found breeding on mainland cliff ledges at Dunedin, South Island (Loh 2000), and has begun breeding on Mana Island, off Wellington, after a successful introduction programme (Miskelly & Gummer 2013). Ranges in subantarctic and subtropical seas, including the Tasman Sea and throughout the New Zealand region (Marchant & Higgins 1990). Reaches further north in winter; straggler to New Guinea, South America, and southern Africa (Marchant & Higgins 1990). Birds banded in the Cook Strait region have been recovered as far away as Australia and the Chatham Islands (Marchant & Higgins 1990). Medway (2002b) clarified the identity of Kuhl's type material. Late Pleistocene–Holocene bones and midden records on North, South, Stewart / Rakiura, and Chatham Islands (Millener 1991; Worthy 1998c).

► ***Pachyptila crassirostris* (Mathews)** **Fulmar Prion**

Breeds at Chatham, Bounty, Snares / Tini Heke, Auckland / Maukahuka, and Heard Islands. Apparently remains in adjacent seas but may be storm-drifted further away. Live records (subspecies unknown) from the south Tasman Sea (P. Harper 1972) and south-east of New Zealand (Marchant & Higgins 1990). Three subspecies accepted here.

***Pachyptila crassirostris crassirostris* (Mathews)** **Fulmar Prion**

Prion turtur; Reischek 1888, *Trans. Proc. N.Z. Inst.* 21: 388. Not *Procellaria turtur* Kuhl, 1820.
Pseudoprion turtur crassirostris Mathews, 1912: *Birds Australia* 2: 221 – Bounty Islands.
Pachyptila (Pseudoprion) turtur eatoni (Mathews); Falla 1937, *BANZARE Reports, ser. B, 2*: 203. In part.
Pachyptila (Pseudoprion) eatoni crassirostris (Mathews); C.A. Fleming 1939, *Emu* 38: 398.
Pachyptila (Pseudoprion) crassirostris crassirostris (Mathews); Falla 1940, *Emu* 40: 234.
Pachyptila (Pseudoprion) crassirostris; C.A. Fleming 1941, *Emu* 41: 143. In part.
Fulmariprion crassirostris antipodes Mathews & Hallstrom, 1943: *Notes Procellariiformes*: 26 – Antipodes Islands.
Pachyptila crassirostris Mathews; Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.
Pachyptila crassirostris crassirostris (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 20.

Breeds on the Bounty Islands, and Rima and Toru of the Western Chain, Snares Islands / Tini Heke (Marchant & Higgins 1990; Miskelly *et al.* 2001a; Jamieson *et al.* 2016). Presumed to remain in adjacent seas but occasionally reaches New Zealand coasts in winter, notably in 1985 (Powlesland 1987; Tennyson & Bartle 2005).

***Pachyptila crassirostris pyramidalis* C.A. Fleming** **Chatham Fulmar Prion**

Pachyptila (Pseudoprion) eatoni pyramidalis C.A. Fleming, 1939: *Emu* 38: 400 – The Pyramid, Chatham Islands.
Pachyptila (Pseudoprion) crassirostris pyramidalis C.A. Fleming; Falla 1940, *Emu* 40: 234.
Pachyptila (Pseudoprion) crassirostris; C.A. Fleming 1941, *Emu* 41: 143. In part.
Pachyptila crassirostris pyramidalis C.A. Fleming, 1939; Checklist Committee 1953, *Checklist N.Z. Birds*: 20.

Breeds on The Pyramid and Motuhara / The Forty Fours (Chatham Islands; Tennyson & Bartle 2005; Jamieson *et al.* 2016). Presumed to remain in adjacent seas; possibly straggles to mainland New Zealand coasts in winter (Palma & Pilgrim 2002; Tennyson & Bartle 2005). Holocene bone records from Chatham Island are presumed to be from the locally breeding subspecies (Bourne 1964; Checklist Committee 1990).

***Pachyptila crassirostris flemingi* Tennyson & Bartle** **Lesser Fulmar Prion**

Pachyptila (Pseudoprion) turtur eatoni (Mathews); Falla 1937, *BANZARE Reports, ser. B, 2*: 203. In part.
Pachyptila (Pseudoprion) eatoni aff. *eatoni*; C.A. Fleming 1939, *Emu* 38: 398. In part.
Pachyptila (Pseudoprion) crassirostris eatoni (Mathews); Falla 1940, *Emu* 40: 234. In part.
Pachyptila (Pseudoprion) crassirostris; C.A. Fleming 1941, *Emu* 41: 143. In part.
Fulmariprion crassirostris eatoni; Mathews & Hallstrom 1943, *Notes Procellariiformes*: 26. In part.
Pachyptila crassirostris eatoni (Mathews); Checklist Committee 1953, *Checklist N.Z. Birds*: 20. In part.
Pachyptila crassirostris crassirostris (Mathews); Oliver 1955, *New Zealand Birds*, 2nd edition: 115. In part.
Pachyptila turtur eatoni; Cox 1980, *Rec. South Austr. Museum* 18: 119. Not *Pseudoprion turtur eatoni* Mathews, 1912.
Pachyptila crassirostris flemingi Tennyson & Bartle, 2005: *Notornis* 52: 49 – Ewing Island, Auckland Islands.

Breeds on Auckland Islands / Maukahuka (Ewing, Ocean, Rose, Disappointment, and Monumental Islands), Heard and probably McDonald Islands (Downes *et al.* 1959; Tennyson & Bartle 2005; Miskelly, Elliott *et al.* 2020). Occurs at sea around the breeding islands, with possible stragglers reaching mainland New Zealand and Tasmania (Tennyson & Bartle 2005). Tentatively identified from Holocene dune deposits on Enderby Island, Auckland Islands / Maukahuka (Tennyson 2020a).

Genus *Bulweria* Bonaparte

Bulweria Bonaparte, 1843: *Nuov. Ann. Sci. Nat. R. Accad. Sci. Istituto Bologna* (1842) 8: 426 – Type species (by monotypy)
Procellaria bulwerii Jardine & Selby = *Bulweria bulwerii* (Jardine & Selby).

► ***Bulweria bulwerii* (Jardine & Selby)** **Bulwer's Petrel**

Procellaria Bulwerii Jardine & Selby, 1828: *Illust. Ornith.* 2(4): pl. 65 & text – Madeira, Atlantic Ocean.
Procellaria anjinho Heineken, 1829: in Brewster's *Edinb. Journ. Sci.* 1(9): 231 – Madeira, Atlantic Ocean.

- Thalassidroma Bulweri* (Jardine & Selby); G.R. Gray 1844, *Gen. Birds* 3: 648. Unjustified emendation.
Aestrelata Bulweri (Jardine & Selby); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 158. Unjustified emendation.
Bulweria bulweri (Jardine & Selby); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 420. Unjustified emendation.
Bulweria bulweri pacifica Mathews & Iredale, 1915: *Ibis* 3 (10th series): 607 – Iwojima, Bonin Islands. Unjustified emendation.
Bulweria bulwerii bulwerii (Jardine & Selby); Mathews 1927, *Syst. Avium Australasianarum* 1: 124.
Bulweria bulwerii pacifica Mathews & Iredale; Mathews 1927, *Syst. Avium Australasianarum* 1: 124.
Bulweria bulwerii (Jardine & Selby); Peters 1931, *Check-list Birds World* 1: 68.

Breeds on islands in the north-east Atlantic and north-west and central Pacific Oceans (Marchant & Higgins 1990; Bartle *et al.* 1993). Atlantic birds migrate south and west into the tropics (Marchant & Higgins 1990). Range at sea of Pacific birds poorly known; some migration southward (Sep. to Apr.) including into the equatorial, central and western Indian Ocean (Jouanin & Mougouin 1979; Marchant & Higgins 1990; Bartle *et al.* 1993). One record from the New Zealand region: a dead bird on Te Horo Beach, Horowhenua, Jan. 1998 (Palma 1999; G. Taylor 2004).

Genus *Procellaria* Linnaeus

- Procellaria* Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 131 – Type species (by subsequent designation) *Procellaria aequinoctialis* Linnaeus.
Priofinus Hombron & Jacquinot, 1844: *Compt. Rend. Séa. Acad. Sci., Paris*: 18: 355 – Type species (by subsequent designation) *Procellaria cinerea* Gmelin.
Majaqueus Reichenbach, 1853: *Avium Syst. Nat.*: iv – Type species (by original designation) *Procellaria aequinoctialis* Linnaeus.
Adamastor Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 595 – Type species (by original designation) *Procellaria haesitata* J.R. Forster = *Procellaria cinerea* Gmelin.
Cymatobolus Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 363. Unnecessary *nomen novum* for *Majaqueus* Reichenbach, 1853.
Cymatobolus Mathews, 1936: *Emu* 36: 91. Unjustified emendation.
Cymatobolus Checklist Committee, 1990: *Checklist Birds N.Z.*: 33. Unjustified emendation.

► *Procellaria aequinoctialis* Linnaeus

White-chinned Petrel | Karetai Kauae Mā

- Procellaria aequinoctialis* Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 132 – Cape of Good Hope, South Africa.
Procellaria fuliginosa Shaw, 1790: in J. White, *Journ. Voy. New South Wales, ed. 1*: pl. opposite p. 252 – Port Jackson, Sydney, Australia. Junior primary homonym of *Procellaria fuliginosa* Gmelin, 1789.
Puffinus aequinoctialis (Linnaeus); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 199.
Procellaria nigra J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 26 – Southern Ocean. Junior primary homonym of *Procellaria nigra* Pallas, 1769.
Majaqueus fuliginosa Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768 (ex Solander MS) – no locality = Antarctic and Pacific Oceans (*vide* Salvin 1876, in Rowley's *Ornith. Miscellany* 1: 231). Junior secondary homonym of *Procellaria fuliginosa* Gmelin, 1789.
Fulmarus (Majaqueus) aequinoctialis (Linnaeus); G.R. Gray 1871, *Hand-list Birds* 3: 108.
Procellaria (Majaqueus) aequinoctialis; Oustalet 1891, *Mission Scient. Cap Horn 6 Zoologie* (B): 161.
Majaqueus aequinoctialis (Linnaeus); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 395.
Procellaria aequinoctialis mixta Mathews, 1912: *Birds Australia* 2: 111 – South Atlantic 500 km north of Cape Town.
Procellaria aequinoctialis stadi Mathews, 1912: *Birds Australia* 2: 107 (key), 112 – Antipodes Island.
Procellaria aequinoctialis brabournei Mathews, 1912: *Birds Australia* 2: 113 – western coast of South America.
Procellaria aequinoctialis aequinoctialis Linnaeus; Bennett 1926, *Ibis* 2 (12th series): 314.
Procellaria aequinoctialis; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 127, 176.
Procellaria stadi Mathews; Fraser *et al.* 2005, *Notornis* 52: 175.

Circumpolar in southern oceans, breeding at South Georgia, Falkland, Marion and Prince Edward, Crozet (Possession, East, Penguin, and the Apostles), Kerguelen, Antipodes, Auckland / Maukahuka (Auckland, Adams, Disappointment, Ewing, Monumental, Enderby), and Campbell / Motu Ihupuku (Dent, Jacquemart, Monowai, Cossack Rock) Islands (Marchant & Higgins 1990; G. Taylor 2000a; Miskelly, Elliott *et al.* 2020; Rexer-Huber *et al.* 2020). Ranges between antarctic region and 30°S but much further north off South America and Africa in winter (Mougouin 1970; Watson *et al.* 1971; Marchant & Higgins 1990; Spear *et al.* 2005). Visitor to seas off mainland New Zealand and to the Chatham Islands, with most of the New Zealand population probably migrating to the west coast of South America when not breeding (Marchant & Higgins 1990; M. Fraser *et al.* 2005; Spear *et al.* 2005). Considered to be monotypic, since the elevation of *P. a. conspicillata* Gould, 1844 to a full species (Ryan 1998). There are suggestions that the Antipodes Islands birds may be a separate species also (M. Fraser *et al.* 2005). Recorded from middens at Kaikoura, South Island, as Holocene remains in Chatham Island dunes (Bourne 1964; Checklist Committee 1990; Millener 1991), and from natural deposits and middens at the Auckland Islands / Maukahuka (Anderson 2005; Tennyson 2020a).

► *Procellaria westlandica* Falla

Westland Petrel | Tāiko*

- Procellaria parkinsoni westlandica* Falla, 1946: *Rec. Cant. Museum* 5: 111 – Barrytown, West Coast of South Island.
Procellaria westlandica Falla; Checklist Committee 1953, *Checklist N.Z. Birds*: 23.

Breeds only near the Punakaiki River in hills below 250 m (H. Best & Owen 1976; Marchant & Higgins 1990; Spear *et al.* 2005). Ranges mainly in seas between Taranaki and Stewart Island / Rakiura (Petyt 1995; Miskelly *et al.* 2001a), through Cook Strait to between East Cape / Koromere and Otago (Bartle 1974; Marchant & Higgins 1990; Anderson 1992; Foreman 1992, 1994; A. Wright 1994; Onley 1995b; Freeman *et al.* 2001); rarely reaching south of Snares Islands / Tini Heke (Petyt 1995) and north and west to eastern and southern Australia (Marchant & Higgins 1990) and (in Dec. and Apr.) to the Chatham Islands (Imber 1994; Miskelly *et al.* 2006). Immatures and non-breeders occur regularly in South American waters, off Chile and Argentina (Brinkley *et al.* 2000; Spear *et al.* 2005). Holocene bones from cave deposits near Punakaiki and from dunes and one cave on Chatham Island (Checklist Committee 1990; Millener 1991).

*Also used for Chatham Island taiko *Pterodroma magentae* and black petrel *Procellaria parkinsoni*.

► ***Procellaria parkinsoni* G.R. Gray**

Black Petrel | Tāiko*

Procellaria parkinsoni G.R. Gray, 1862: *Ibis* 4: 245 – New Zealand.

Procellaria fuliginosa G.R. Gray, 1862: *Ibis* 4: 245 (ex Banks MS) – no locality = Antarctic and Pacific Oceans (*vide* Salvin 1876, in Rowley's *Ornith. Miscellany* 1: 231). Junior primary homonym of *Procellaria fuliginosa* Gmelin, 1789.

Majaqueus parkinsoni (G.R. Gray); Hutton 1869, *Ibis* 5 (new series): 351.

Procellaria Parkinsoni L. [sic]; Finsch 1870, *Journ. für Ornith.* 18: 372.

Procellaria Parkinsoni G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 76.

Fulmarus (Majaqueus) Parkinsoni (G.R. Gray); G.R. Gray 1871, *Hand-list Birds* 3: 108.

Procellaria [aequinotialis] parkinsoni G.R. Gray; Mathews 1934, *Novit. Zool.* 39(2): 176.

Procellaria parkinsoni G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 22.

Breeds only on Hauturu / Little Barrier and Great Barrier / Aotea Islands (Imber 1987; G. Taylor 2000a; E. Bell *et al.* 2007); formerly also on ranges of the North Island and north-west regions of the South Island (Imber 1987; Marchant & Higgins 1990; Medway 2002a,e). Ranges at sea mainly between 30°S and 42°S near New Zealand while breeding, but reaches seas off Queensland, New South Wales, and Victoria (Marchant & Higgins 1990; Palliser 2005; E. Bell *et al.* 2007). Rare vagrants recorded as beach-wrecks in the South Island (Powlesland 1989b). Migrates to the eastern tropical Pacific Ocean, from Mexico to Perú and off the Galápagos Islands (Jehl 1974; Imber 1987; Pitman & Ballance 1992; Imber, McFadden *et al.* 2003; Spear *et al.* 2005). Late Pleistocene–Holocene bones from Far North dunes and from cave deposits in both the North and South Islands (Millener 1981a, 1991).

*Also used for Chatham Island taiko *Pterodroma magentae* and Westland petrel *Procellaria westlandica*.

► ***Procellaria cinerea* Gmelin**

Grey Petrel | Kuia

Procellaria cinerea Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 563. Based on the “Cinereous Fulmar” of Latham 1785, *Gen. Synop. Birds* 3(2): 405 – within the Antarctic Circle = New Zealand seas at 48°S (*vide* Mathews 1912, *Birds Australia* 2: 123, *contra* Mathews 1916, *Austral Avian Rec.* 3: 54).

Procellaria gelida Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 564. Based on the “Glacial Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 399 – within the Antarctic Circle (*vide* Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 60).

Procellaria Melanura Bonaparte, 1791: *Tableaux Encycl. Method. Ornith.* 1(47): 79. Based on the “Cinereous Fulmar” of Latham 1785, *Gen. Synop. Birds* 3(2): 405 – within the Antarctic Circle = seas south of New Zealand (*vide* Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 60).

Puffinus cinereus (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 227.

Daption gelidum (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 245.

Procellaria haesitata J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 208 – “in lat. 48° Oceani pacifici antarctici” = seas south of New Zealand (*vide* Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 60).

Rhantistes gelida (Gmelin); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Cookilaria cinerea (Gmelin); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 995.

Adamastor typus Bonaparte, 1857: *Consp. Gen. Avium* 2: 187 – Antarctic seas.

Procellaria adamastor Schlegel, 1863: *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 23. Unnecessary *nomen novum* for *Adamastor typus* Bonaparte, 1857.

Adamastor cinereus (Gmelin); Coues 1864, *Proc. Acad. Nat. Sci. Philad.* 16: 119, 142.

Adamastor gelidus (Gmelin); Coues 1864, *Proc. Acad. Nat. Sci. Philad.* 16: 121, 142.

Aestrelata haesitata (J.R. Forster); Hutton 1869, *Ibis* 5 (new series): 352.

Fulmarus gelidus (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 106.

Priofinus melanurus (Vieillot); Ridgway 1880, *Proc. U.S. Nat. Mus.* 2: 209.

Priofinus cinereus (Gmelin); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 390.

Procellaria pallipes Mathews, 1912: *Birds Australia* 2: 123 (ex Solander MS) – 37°10'S, 162°5'W.

Priofinus cinereus dydimus Mathews, 1916: *Austral Avian Rec.* 3: 54 – New Zealand.

Priofinus cinereus cinereus (Gmelin); Bennett 1926, *Ibis* 2 (12th series): 314.

Adamastor cinerea [sic] (Gmelin); Mathews 1934, *Novit. Zool.* 39(2): 176.

Procellaria cinerea Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 22.

Breeds on Tristan da Cunha, Gough, Prince Edward, Crozet (Possession, East), Kerguelen, Amsterdam, Campbell Island group (Campbell / Motu Ihupuku, Dent, probably Jacquemart), Antipodes (including Bollons) (Imber 1983; Jouventin

et al. 1984; G. Taylor 2000a), and Macquarie Islands (G. Baker *et al.* 2002); probably breeds on Inaccessible Island (M. Brooke 2004); formerly bred on Marion Island (G. Taylor 2000a). Circumpolar at sea, mainly between 32°S and 58°S (Watson *et al.* 1971; Marchant & Higgins 1990). More common south and east of New Zealand than in the Tasman Sea (Powlesland 1989b; Bartle 1990; Marchant & Higgins 1990; Imber *et al.* 2005). Holocene bones on Chatham Island (Bourne 1964; Scarlett 1976a), and tentatively identified from Holocene dune deposits at the Auckland Islands / Maukahuka (Tennyson 2020a).

Genus *Pseudobulweria* Mathews

Pseudobulweria Mathews, 1936: *Ibis* 6 (13th series): 309 – Type species (by original designation) *Thalassidroma* (*Bulweria*) *macgillivrayi* G.R. Gray = *Pseudobulweria macgillivrayi* (G.R. Gray).

► *Pseudobulweria rostrata* (Peale)

Tahiti Petrel

Procellaria rostrata Peale, 1848: *U.S. Expl. Exped.* 8: 296 – about 6,000 feet a.s.l., mountains of Tahiti, French Polynesia, Pacific Ocean.

Rhantistes rostrata (Peale); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 768.

Aestrelata desolata rostrata (Peale); Bonaparte 1857, *Consp. Gen. Avium* 2: 189.

Procellaria (*Aestrelata*) *rostrata* Peale; G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 56.

Aestrelata rostrata (Peale); Coues 1866, *Proc. Acad. Nat. Sci. Philad.* 18: 144.

Oestrelata rostrata (Peale); Salvin 1896, *Cat. Birds Brit. Mus.* 25: 404.

Pterodroma rostrata (Peale); R. Murphy 1928, *American Mus. Novit.* 322: 1.

Bulweria rostrata (Peale); Mathews 1948, *Bull. Brit. Ornith. Club* 68: 156.

Pterodroma rostrata rostrata (Peale); Jouanin & Mougin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 69.

Pseudobulweria rostrata (Peale); Checklist Committee 1990, *Checklist Birds N.Z.*: 35.

South Pacific Ocean, breeding in New Caledonia (in mountains on the main island and on at least 12 small islets in the southern lagoon), Fiji (Taveuni, Gau), American Samoa (Ta'u, Tutuila, and possibly Olosega), Society Islands (Tahiti, Moorea, Raiatea), Marquesas Islands (Hiva-Oa, Tahuata, Nuku Hiva), and the Gambier Islands; possibly also in Tonga and the Cook and Austral Islands (Jouanin & Mougin 1979; Thibault & Rives 1988; Plant *et al.* 1989; Bretagnolle *et al.* 1998; Watling 2001; Villard *et al.* 2006). Ranges in the tropical and subtropical Pacific Ocean from near Taiwan to north-east Australia and east to between Mexico and Perú; has reached the north-east Indian Ocean also (Pitman 1986; Marchant & Higgins 1990; Spear *et al.* 1992). Five northern New Zealand records in 1988: one beach-washed near Dargaville in Jun.; two live near Whakaari / White Island in Jul., and singles near the Aldermen Islands and east of the Poor Knights Islands in Aug. (Guest & Bell 1989; Powlesland & Pickard 1992; Checklist Committee 2010). A few have been seen off Norfolk Island (J. Moore 1999). Bretagnolle *et al.* (1998) recognised three subspecies: *Ps. r. rostrata* (South Pacific), *Ps. r. trouessarti* (Brazil, 1917) (New Caledonia) and *Ps. r. becki* (Murphy, 1928) (south-west Pacific). We follow R. Murphy (1928), M. Brooke (2004), Onley & Scofield (2007) and Shirihai (2008) in recognising *Ps. becki* as a full species. The subspecies of *Ps. rostrata* occurring in the New Zealand region has not been determined.

Genus *Calonectris* Mathews & Iredale

Calonectris Mathews & Iredale, 1915: *Ibis* 3 (10th series): 592 – Type species (by original designation) *Procellaria leucomelas* Temminck = *Calonectris leucomelas* (Temminck).

► *Calonectris borealis* (Cory)

Cory's Shearwater

Puffinus borealis Cory, 1881: *Bull. Nuttall Ornith. Club* 6: 84 – off Chatham Island, Massachusetts, USA.

Puffinus kuhli (Boie); Godman 1907, *Monograph Petrels 1*: 94, pl. 26. In part.

Puffinus kuhli fortunatus Bannerman, 1915: *Bull. Brit. Ornith. Club* 35: 120 – Isla Graciosa, Canary Islands, Spain.

Puffinus kuhli borealis Cory; Oliver 1934, *Emu* 34: 24.

Ardenna diomedea borealis (Cory); Mathews 1944, *Emu* 43: 243.

Puffinus kuhlii borealis Cory; Hellmayr & Conover 1948, *Zool. Series, Field Mus. Nat. History* 13(1) no 2: 63. Unjustified emendation.

Puffinus diomedea borealis Cory; Checklist Committee 1953, *Checklist N.Z. Birds*: 22.

Calonectris diomedea borealis (Cory); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 26.

Calonectris borealis (Cory); Sangster *et al.* 1999, *Ardea* 87: 146.

Breeds on north-east Atlantic islands: Berlengas (off Portugal), Madeira, Porto Santo, Desertas, Selvagens, Azores, and Canary Islands (Marchant & Higgins 1990). Ranges extensively in the North Atlantic Ocean and migrates south to South American and southern African seas, and south-west Indian Ocean (Jouanin *et al.* 1977; Marchant & Higgins 1990; Camphuysen & van der Meer 2001). One New Zealand record: Foxton Beach, Jan. 1934 (Oliver 1934). Formerly treated as a subspecies of the North Atlantic shearwater *Calonectris diomedea* (Scopoli, 1769), but we follow Sangster *et al.* (1999) in recognising Cory's shearwater as a full species.

► ***Calonectris leucomelas*** (Temminck)

Streaked Shearwater

Procellaria leucomelas Temminck, 1836: *Nouv. Recueil Planch. Color. d'Oiseaux* 99: pl. 587 – Nagasaki Bay and seas of Japan.

Puffinus leucomelas (Temminck); Godman 1907, *Monograph Petrels* 1: 72, pl. 21.

Calonectris leucomelas (Temminck); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.

Breeds in the north-west Pacific, mainly on Japanese islands from southern Hokkaido in the north to the Ryukyus in the south; also on Chinese, Korean, and south-east Russian islands; its at-sea range during the breeding season is concentrated off the breeding islands in pelagic and inshore waters (Kuroda 1991; M. Brooke 2004). In the non-breeding season (roughly Nov. to Apr.), moves south, concentrating north of New Guinea and regularly reaching northern Australian waters (Marchant & Higgins 1990; M. Brooke 2004). Straggles further west into the Indian Ocean and Red Sea, also across the Pacific to the Hawai'ian Islands and California, and rarely to south-east Australia (Jouanin & Mougin 1979; Marchant & Higgins 1990; M. Brooke 2004). One New Zealand record: Kawhia Beach, Feb. 2006 (Scofield, Christie *et al.* 2010). The year of Temminck's description of *Procellaria leucomelas* was clarified by Dickinson (2001).

Genus *Ardenna* Reichenbach

Ardenna Reichenbach, 1853: *Hand. Spec. Ornith.* 3: iv – Type species (by original designation and monotypy) *Puffinus major* (Faber) = *Ardenna gravis* (O'Reilly).

Thyellodroma Stejneger, 1888: *Proc. U.S. Nat. Mus.* 11: 93 – Type species (by original designation) *Puffinus sphenurus* Gould = *Ardenna chlororhynchus* (Lesson).

Zalias Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 362 – Type species (by subsequent designation) *Puffinus chlororhynchus* Lesson = *Ardenna chlororhynchus* (Lesson).

Neonectris Mathews, 1913: *Austral Avian Rec.* 2: 12 – Type species (by original designation) *Puffinus brevicaudus* Gould = *Ardenna tenuirostris* (Temminck).

Hemipuffinus Iredale, 1913: *Austral Avian Rec.* 2: 20 – Type species (by original designation) *Puffinus carneipes* Gould = *Ardenna carneipes* (Gould).

Paranectris Iredale, 1930: *Australian Zool.* 6(2): 115 – Type species (by original designation) *Procellaria grisea* Gmelin = *Ardenna grisea* (Gmelin).

We follow Chesser *et al.* (2016) in placing the larger species of shearwaters in genus *Ardenna* (rather than *Puffinus*) based on genetic evidence that shearwaters form two deeply divergent clades that may not be sister groups (Penhallurick & Wink 2004; Austin *et al.* 2004; Pyle *et al.* 2011). Genus *Ardenna* should be inserted after genus *Calonectris*. Species sequence follows Pyle *et al.* (2011).

► ***Ardenna pacifica*** (Gmelin)

Wedge-tailed Shearwater

Breeds on islands in the Indian and Pacific Oceans, mainly between 30°N and 30°S, and ranges widely in adjacent seas (Jouanin & Mougin 1979). Some subtropical populations migrate transequatorially (Marchant & Higgins 1990). Twenty have been beach-wrecked on North Island coasts, and one banded bird was recovered in Cook Strait; all between Oct. and Jun. (W. King 1974; Veitch 1981; Powlesland 1983, 1985, 1989b; Powlesland & Powlesland 1994b; G. Taylor 1996, 2004; Medway 2000a; L. Howell & Esler 2007). Two subspecies are accepted here; both occur in the New Zealand region but the subspecific identities of most specimens and sightings off mainland New Zealand have not been determined.

Ardenna pacifica pacifica (Gmelin)

Wedge-tailed Shearwater

Procellaria pacifica Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 560. Based on the "Pacific Petrel" of Latham 1785, *Gen. Synop. Birds* 3(2): 416 – Pacific Ocean, restricted to Kermadec Islands (*vide* Mathews 1912, *Birds Australia* 2: 80).

Puffinus pacificus (Gmelin); G.R. Gray 1844, *Gen. Birds* 3: 647.

Nectris fuliginosus G.R. Gray, 1844: *Gen. Birds* 3: 647 (ex Solander MS) – no locality = Antarctic and Pacific Oceans (*vide* Salvin 1876, in Rowley's *Ornith. Miscellany* 1: 231). Junior secondary homonym of *Procellaria fuliginosa* Gmelin, 1789.

Puffinus chlororhynchus iredali Mathews, 1910: *Bull. Brit. Ornith. Club* 27: 40 – Sunday [= Raoul] Island, Kermadec Islands.

Thyellodroma pacifica pacifica (Gmelin); Mathews 1913, *List Birds Australia*: 319.

Thyellodroma pacifica (Gmelin); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.

Puffinus pacificus whitneyi Lowe, 1925: *Bull. Brit. Ornith. Club* 45: 106 – Kadavu, Fiji Islands.

Thyellodroma pacifica whitneyi (Lowe); Mathews 1927, *Syst. Avium Australasianarum* 1: 113.

Puffinus pacificus pacificus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 20.

Puffinus (Thyellodroma) pacificus pacificus (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 24.

Puffinus pacificus; Anderson 1996, *Int. Journ. Osteoarchaeology* 6: 408. Misspelling.

Ardenna pacifica (Gmelin); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96. In part.

Breeds on Kermadec / Rangitāhua, Norfolk, Fijian (Kadavu, Mamanuca, Yasawa groups, and other islets), and Tongan Islands (J. Jenkins 1979, 1986; H.D. Pratt *et al.* 1987; Veitch *et al.* 2004; Waugh *et al.* 2013). From Oct. to May, (probably this subspecies) ranges widely in adjacent seas south to about 34°S (J. Jenkins 1979, 1986); about eight mainland New Zealand beach-wrecks assumed to be this subspecies (Checklist Committee 1990). Apparently migrates to the south-eastern North Pacific Ocean (J. Jenkins 1979).

Ardenna pacifica chlororhyncha* (Lesson)*Wedge-tailed Shearwater**

- Puffinus chlororhynchus* Lesson, 1831: *Traité d'Ornith.* 8: 613 – no locality = Shark Bay, Western Australia (*vide* Pucheran 1850, *Revue Zool.*: 633).
- Puffinus sphenurus* Gould, 1844: *Ann. Mag. Nat. Hist., London* 13: 365 – Abrolhos Islands, Western Australia.
- Thiellus sphenurus* (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 201.
- Thiellus chlororhynchus* (Lesson); Bonaparte 1857, *Consp. Gen. Avium* 2: 201.
- Procellaria chlororhyncha* (Lesson); Schlegel 1863, *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 25.
- Procellaria sphenura* (Gould); Schlegel 1863, *Mus. Hist. Nat. Pays-Bas, Procellariae* 4: 25.
- Puffinus cuneatus* Salvin, 1888: *Ibis* 6 (5th series): 353 – “Insulis Krusenstern” (mythical islands designated by the collector, H.J. Snow) = one of the Leeward Hawai’ian Islands, Pacific Ocean (*vide* R. Murphy 1951, *American Mus. Novit.* 1512: 18).
- Puffinus knudseni* Stejneger, 1888: *Proc. U.S. Nat. Mus.* 11: 93 – Hawai’ian Islands, Pacific Ocean.
- Puffinus pacificus hamiltoni* Mathews, 1912: *Birds Australia* 2: 82 – The Cousin, Seychelles Islands.
- Puffinus pacificus alleni* Mathews, 1912: *Birds Australia* 2: 83 – San Benedicto, Revillagigedo Islands, Pacific Ocean.
- Puffinus pacificus laysani* Mathews, 1912: *Birds Australia* 2: 83 – Laysan Island.
- Puffinus pacificus royanus* Mathews, 1912: *Birds Australia* 2: 85, pl. 75 – Bondi Beach, New South Wales, Australia.
- Thyellodroma pacifica royana* (Mathews); Mathews 1913, *List Birds Australia*: 34.
- Thyellodroma cuneata* (Salvin); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.
- Thyellodroma cuneata cuneata* (Salvin); Mathews 1927, *Syst. Avium Australasianarum* 1: 113.
- Thyellodroma cuneata knudseni* (Stejneger); Mathews 1927, *Syst. Avium Australasianarum* 1: 113.
- Thyellodroma cuneata laysani* (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 114.
- Thyellodroma pacifica chlororhyncha* (Lesson); Mathews 1934, *Novit. Zool.* 39(2): 186.
- Thyellodroma pacifica hamiltoni* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 186.
- Thyellodroma pacifica alleni* (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 186.
- Thyellodroma pacifica cuneata* (Salvin); Mathews 1934, *Novit. Zool.* 39(2): 186.
- Puffinus pacificus cuneatus* Salvin; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 27.
- Puffinus pacificus chlororhynchus* Lesson; Checklist Committee 1980, *Notornis (Suppl.)* 27: 11.
- Puffinus (Thyellodroma) pacificus chlororhynchus* Lesson; Checklist Committee 1990, *Checklist Birds N.Z.*: 24.
- Ardenna pacifica* (Gmelin); Christidis & Boles 2008, *Syst. Taxon. Australian birds*: 18, 96. In part.
- Ardenna pacifica chlororhyncha* (Lesson); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 179.

Breeds on many islands of the tropical and subtropical Indian and Pacific Oceans, including Australian islands and Lord Howe Island, and ranges widely in adjacent seas (Marchant & Higgins 1990; Pandolfi Benoit & Bretagnolle 2002). Some populations relatively sedentary, but some western Australian birds probably migrate to the north Indian Ocean, and south-east Australian birds migrate to the western North Pacific (Marchant & Higgins 1990). Vagrant to New Zealand: Makara Beach, Jan. 1962 (Falla 1962b); Otaki Beach, Jun. 1962 (Crockett 1975; Checklist Committee 1980); a banded adult from Johnston Atoll found in Cook Strait, Nov. 1965 (W. King 1974; Amerson & Shelton 1976); Taranaki, Sep. 1983 (Checklist Committee 1990).

► ***Ardenna bulleri* (Salvin)****Buller's Shearwater | Rako**

- Puffinus bulleri* Salvin, 1888: *Ibis* 6 (5th series): 354 – New Zealand, restricted to Waikanae Beach, Wellington (*vide* Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 240).
- Puffinus zealandicus* Sandager, 1890: *Trans. Proc. N.Z. Inst.* 22: 291 – Mokohinau Islands.
- Thyellodroma bulleri* (Salvin); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.
- Thyellobroma* [sic] *pacifica bulleri* (Salvin); Mathews 1934, *Novit. Zool.* 39(2): 186.
- Puffinus bulleri* Salvin; Checklist Committee 1953, *Checklist N.Z. Birds*: 21.
- Puffinus (Thyellodroma) bulleri* Salvin; Checklist Committee 1990, *Checklist Birds N.Z.*: 25.
- Ardenna bulleri* (Salvin); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96.

Breeds on seven of the 12 Poor Knights Islands (including Tawhiti Rahi, Motu Kapiti, Aorangi, and Archway; P. Harper 1983; G. Taylor & Parrish 1992; Friesen *et al.* 2021). Single nests found on Motu Purihi Island (Simmonds Islands) in 1990 (Parrish & Waddell 1991), and on Lady Alice Island / Mauimua in Jan. 2019 (P. Crowe *et al.* 2021). Recorded prospecting at Manawatāwhi / Three Kings Islands (P. Harper & Imber 1985; Checklist Committee 1990). Live birds recorded ashore on Rangatira Island, Chathams (Miskelly *et al.* 2006), and Montague and Cabbage Tree Islands, New South Wales, Australia (Serventy *et al.* 1971, Priddel & Carlile 2004b). During the breeding season, ranges throughout New Zealand seas, reaching west to eastern Australia, east to the Chatham Islands and south to the Auckland Islands / Maukahuka (J. Jenkins 1988; Tennyson & Taylor 1989; Freeman 1992; Imber 1994; Esler 2001; Miskelly *et al.* 2006; Miskelly, Elliott *et al.* 2020). Migrates to the North Pacific, ranging from Japan to Alaska and California, with immatures reaching seas off the west coast of South America (Lovegrove 1978; Nakamura & Hasegawa 1979; Guzman & Myres 1983; Wahl 1985; Marchant & Higgins 1990; Kuroda 1991; Everett & Pitman 1993; Gould *et al.* 1998). Natural deposit and midden records from the North Island and Chatham Island (Bourne 1967; Millener 1991). Holocene remains from the South Island (Checklist Committee 1990; Millener 1991) are doubtful (Holdaway *et al.* 2001).

► ***Ardenna tenuirostris*** (Temminck)**Short-tailed Shearwater**

- Procellaria tenuirostris* Temminck, 1836: *Nouv. Recueil Planch. Color. d'Oiseaux* 99: text to pl. 587 – seas north of Japan and shores of Korea.
- Puffinus brevicaudus* Gould, 1847: *Birds of Australia* 7: pl. 56 – islands of Bass Strait, Australia.
- Priofinus brevicaudus* (Brandt) [sic]; Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 769.
- Nectris brevicaudus* (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 201.
- Nectris tenuirostris* (Temminck); Bonaparte, 1857: *Consp. Gen. Avium* 2: 202.
- Nectris curilica* Bonaparte, 1857: *Consp. Gen. Avium* 2: 202 – Kamchatka, Russia.
- Nectris brevicauda* (Gould); Coues 1864, *Proc. Acad. Nat. Sci. Philad.* 16: 127. Unjustified emendation.
- Puffinus brevicaudatus* Brandt [sic]; Finsch 1870, *Journ. für Ornith.* 18: 371. Unjustified emendation.
- Puffinus tenuirostris* (Temminck); Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 230.
- Puffinus intermedius* Hull, 1911: *Emu* 11: 98 – Cabbage Tree Island, New South Wales, Australia.
- Puffinus tenuirostris brevicauda* [sic] (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 228.
- Neonectris tenuirostris tenuirostris* (Temminck); Mathews 1913, *List Birds Australia*: 34.
- Neonectris tenuirostris brevicaudus* (Gould); Mathews 1913, *List Birds Australia*: 35.
- Neonectris tenuirostris intermedius* (Hull); Mathews 1913, *List Birds Australia*: 35.
- Neonectris tenuirostris* (Temminck); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.
- Neonectris tenuirostris grantianus* Hull, 1916: *Emu* 15: 206 – Ulladulla, New South Wales, Australia.
- Neonectris tenuirostris hulli* Mathews, 1916: *Bull. Brit. Ornith. Club* 36: 82 – Great Barrier Reef, Queensland, Australia.
- Puffinus* (*Puffinus*) *tenuirostris* (Temminck); Checklist Committee 1990, *Checklist Birds N.Z.*: 27.
- Ardenna tenuirostris* (Temminck); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96.

Breeds on islands off southern Australia from Western Australia to New South Wales, on Bass Strait islands and on the coast of Tasmania and adjacent islands (Serventy *et al.* 1971; Naarding 1980; Marchant & Higgins 1990). Ranges south to the edge of the pack-ice (Naarding 1980; Kerry *et al.* 1983; Skira 1986; Nicholls *et al.* 1998). Migrates to the North Pacific, sometimes north of the Bering Strait; probably also a migrant to the north Indian Ocean (Guzman & Myres 1983; S. Lane 1983; Marchant & Higgins 1990; Kuroda 1991; Skira 1991). Often found along mainland New Zealand coasts from Oct. to Jan. and in May (Powlesland & Pickard 1992). Straggler to Kermadec / Rangitāhua, Chatham, Auckland / Maukahuka, Campbell / Motu Ihupuku and Macquarie Islands (Marchant & Higgins 1990; Imber 1994; Miskelly, Elliott *et al.* 2020). The year of Temminck's description of *Procellaria tenuirostris* was clarified by Dickinson (2001). Natural deposit and midden records from North, South, and Chatham Islands (Scarlett 1976b; Millener 1991).

► ***Ardenna grisea*** (Gmelin)**Sooty Shearwater | Titī***

- Procellaria grisea* Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 564. Based on the “Grey Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 399 – between 35°S and 50°S = New Zealand (*vide* Mathews 1912, *Birds Australia* 2: 95).
- Nectris fuliginosa* Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 148 (ex Banks MS) – 48°27'S, 93°W. Junior secondary homonym of *Procellaria fuliginosa* Gmelin, 1789.
- Daption griseum* (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 246.
- Puffinus fuliginosus* Strickland, 1832: *Proc. Zool. Soc. London* 1832 (2): 129 – mouth of the Tees, England. Junior secondary homonym of *Procellaria fuliginosa* Gmelin, 1789.
- Puffinus cinereus*; Darwin 1841, *Zool. Beagle, 3 Birds*: 137. Not *Procellaria cinerea* Gmelin, 1789.
- Procellaria tristis* J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 205 – New Zealand.
- Procellaria fuliginosa* J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 205 – New Zealand. Junior primary homonym of *Procellaria fuliginosa* Gmelin, 1789 and of *Procellaria fuliginosa* J.R. Forster, 1844: 23 = *nomen dubium*.
- Puffinus major*; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(3): 17. Not *Procellaria major* Faber, 1822.
- Nectris fuliginosus* (Strickland); Bonaparte 1857, *Consp. Gen. Avium* 2: 201. Not *Procellaria fuliginosa* Gmelin, 1789.
- Nectris fuliginosus chilensis* Bonaparte, 1857: *Consp. Gen. Avium* 2: 202 – Chile.
- Nectris curilica* Bonaparte, 1857: *Consp. Gen. Avium* 2: 202 – Chile.
- Nectris gama* Bonaparte, 1857: *Consp. Gen. Avium* 2: 202. Based on bird in A. Smith 1840, *Illust. Zool. South Africa, Aves* 2: pl. 56 – “Afr. m. et or. Cap. B. Spei. Madag. Pacif.”, restricted to “off Chile” (*vide* Checklist Committee 1990, *Checklist Birds N.Z.*: 26).
- Puffinus tristis* (J.R. Forster); G.R. Gray 1862, *Ibis* 4: 244.
- Nectris amaurosoma* Coues, 1864: *Proc. Acad. Nat. Sci. Philad.* 16: 124 – Cape St. Lucas, Lower California, USA.
- Puffinus amaurosoma* (Coues); G.R. Gray 1871, *Hand-list Birds* 3: 102.
- Puffinus* (*Puffinus*) *tristis* (J.R. Forster); G.R. Gray 1871, *Hand-list Birds* 3: 103.
- Puffinus stricklandi* Ridgway, 1884: in Baird, Brewer & Ridgway, *Mem. Mus. Comp. Zool.* 13: 390 – North Pacific Ocean.
- Puffinus griseus* (Gmelin); Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 232.
- Puffinus* (*Nectris*) *fuliginosus* var. *chilensis*; Oustalet 1891, *Mission Scient. Cap Horn 6 Zoologie* (B): 162.
- Neonectris griseus griseus* (Gmelin); Mathews 1913, *List Birds Australia*: 34.
- Puffinus griseus griseus* (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 227.
- Neonectris griseus* (Gmelin); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.
- Neonectris griseus pescadoresi* Mathews & Iredale, 1915: *Ibis* 3 (10th series): 602 – Pescadores Islands, Taiwan.
- Neonectris griseus missus* Mathews & Iredale, 1915: *Ibis* 3 (10th series): 603 – Kurile Islands, Pacific Ocean.

Neonectris griseus nutcheri Mathews, 1916: *Austral Avian Rec.* 3: 54 – Bondi Beach, New South Wales, Australia.

Puffinus griseus chilensis; Oliver 1930, *New Zealand Birds*, 1st edition: 121.

Puffinus (Neonectris) griseus (Gmelin); Mathews 1934, *Ibis* 4 (13th series): 176.

Paranectris griseus griseus (Gmelin); Mathews 1934, *Novit. Zool.* 39(2): 184.

Paranectris griseus chilensis (Bonaparte); Mathews 1934, *Novit. Zool.* 39(2): 185.

Paranectris griseus stricklandi (Ridgway); Mathews 1934, *Novit. Zool.* 39(2): 185.

Paranectris griseus; Mathews 1936, *Emu* 36: 96.

Puffinus (Puffinus) griseus (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 26.

Ardenna grisea (Gmelin); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96.

Puffinus grisea; Johnston & Mitchell 2021, *Diversity* 13, 538: 13. Unjustified emendation.

Breeds on Chilean islands (near Chiloé, on Guafo, Guamblin, Ildefonso, Sesambre, Wollaston, Hermite, and Diego Ramírez; Warham *et al.* 1982; G. Clark *et al.* 1984, 1992; Reyes-Arriagada *et al.* 2007), Kidney Island, Falkland Islands (Croxall *et al.* 1984), Tristan da Cunha (Ryan 2007) and c. 17 islands off Tasmania and New South Wales (Marchant & Higgins 1990). Also breeds at numerous coastal localities in the New Zealand region as follows. North Island: on Manawatāwhi / Three Kings, Motuopao, Cavalli, Poor Knights, Hen and Chickens, Mokohinau, Cuvier / Repanga, Mercury, The Aldermen, Whakaari / White, Moutuotau, Rurima, Motuhora / Whale, East / Whangaokeno, Kauwahaia, Motumahanga / Saddleback, Kapiti, and Mana Islands (Moors 1980; P. Harper 1983; G. Taylor & White 1990; Parrish *et al.* 1991; G. Taylor *et al.* 1991; G. Taylor 1992; S. Hamilton *et al.* 1997; Parrish & Lock 1997; Waugh *et al.* 2013). South Island: in Golden Bay, on Stephens / Takapourewa, Motuanauru, Otuhaereroa, Trio / Kuru Pongi, Titi, Motuara, Long (Marlborough Sounds), Glasgow, Seal (West Coast), Open Bay, Motunau (Canterbury), Island Bay (off Banks Peninsula) Islands, at 111 sites in Fiordland, and on several islands off Otago and in Foveaux Strait; also on several headlands at Banks Peninsula, Otago and the West Coast (D. Brown 1991; O'Donnell & West 1989, 1996; Challies & Langlands 1992; Langlands 1995; S. Hamilton *et al.* 1997; Gaze 2000; Pollock 2005; Waugh *et al.* 2013; Miskelly, Bishop *et al.* 2021). Further south, breeds on the Solander Islands, on Stewart Island / Rakiura and almost all adjacent islands, on Snares Islands / Tini Heke, Antipodes, Campbell / Motu Ihupuku, Auckland / Maukahuka, and Macquarie Islands; also on the Chatham Islands (S. Hamilton *et al.* 1997; Waugh *et al.* 2013). Ranges south to 67°S (Watson *et al.* 1971; Marchant & Higgins 1990). The majority of birds from New Zealand migrate to the North Pacific from about 35°N to the Bering Sea (J. Phillips 1963; Guzman & Myres 1983; Briggs & Chu 1986; Marchant & Higgins 1990; Kuroda 1991) but one has been tracked into the South Atlantic (Shaffer *et al.* 2007). Common, both as Late Pleistocene–Holocene bones and in middens, from North, South, Chatham, and Auckland Islands / Maukahuka (Millener 1991; Anderson 2005; Tennyson 2020a).

*Also used for other petrel species including grey-faced petrel *Pterodroma gouldi* and Cook's petrel *Pt. cookii*.

► *Ardenna gravis* (O'Reilly)

Great Shearwater

Procellaria Gravis O'Reilly, 1818: *Greenland Adjacent Seas North-west Passage*: 121, pl. 12, fig. 1 – seas off Cape Farewell and Staten Hook, Greenland, to Newfoundland, Canada.

Puffinus gravis (O'Reilly); Godman 1907, *Monograph Petrels* 1: 90, pl. 25.

Ardenna gravis (O'Reilly); Mathews & Iredale 1915, *Ibis* 3 (10th series): 590.

Puffinus gravis (O'Reilly); Jenkins 1968, *Notornis* 15: 214.

Puffinus gravis (O'Reilly); Checklist Committee 1990, *Checklist Birds N.Z.*: 231.

Breeds on Inaccessible, Nightingale, and Gough Islands, and possibly still Tristan da Cunha; also a small colony on Kidney Island, Falkland Islands (Rowan 1952; Jouanin & Mougín 1979; M. Brooke 2004). Its at-sea range during the breeding season is mainly the South Atlantic Ocean and south-west Indian Ocean (Marchant & Higgins 1990). In the non-breeding season (Apr. to Sep.), migrates to the North Atlantic, reaching the Grand Banks, Western Europe, and the Arctic Circle (Voous & Wattel 1963; R. Brown *et al.* 1975; R. Brown 1977; Jouanin & Mougín 1979; Powers 1983; Marchant & Higgins 1990). Non-breeders appear to disperse far south off eastern South America, with records west of the Strait of Magellan (Jouanin & Mougín 1979; Marchant & Higgins 1990). Rare straggler to Californian and Australian waters (Marchant & Higgins 1990) and eastern Indian Ocean (Fromant *et al.* 2018). New Zealand sightings include five dubious records in 1967–68 (J. Jenkins 1968; Bourne 1971) and ten accepted records of single birds 2006–13: east of Pitt Island, Chatham Islands, Dec. 2006 (Scofield 2008); off Taiaroa Head, Otago, Oct. 2008 (Miskelly, Crossland *et al.* 2017); off Kaikoura, Feb. 2010 (Miskelly *et al.* 2011); near Edwards Island, Foveaux Strait; south-east of Stewart Island / Rakiura; off Puysegur Point, Fiordland; off Otago Peninsula; and east of the Poor Knights Islands (all five records in Apr. 2011; Miskelly *et al.* 2013; Miskelly, Crossland *et al.* 2021); off Canterbury Bight, Nov. 2011 (Miskelly *et al.* 2013); and off Mayor Island, Nov. 2013 (Miskelly *et al.* 2015).

► *Ardenna creatopus* (Coues)

Pink-footed Shearwater

Puffinus creatopus Coues, 1864: *Proc. Acad. Nat. Sci. Philad.*: 131 – San Nicolas Island, California., USA.

Puffinus (?) melanoleucus Philippi, 1902: *Anales Mus. Nac. Chile* 15: 93, pl. 41 – Corral, Chile.

Ardenna creatopa [sic] (Coues); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.

Puffinus carneipes creatopus Coues; Bourne 1962, in Palmer, *Handb. North Amer. Birds*: 161.

Puffinus (Ardenna) creatopus Coues; Checklist Committee 1990, *Checklist Birds N.Z.*: 23.

Ardenna creatopus (Coues); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96.

Breeds on three Chilean islands: Isla Robinson Crusoe (= Masatierra Island) and Isla Santa Clara (both in the Juan Fernández group), and on Mocha Island (R. Murphy 1936; BirdLife International 2000; M. Brooke 2004). Migrates to the eastern North Pacific, wandering as far as the Bering Sea, Hawai'i, and Kiribati (Guzman & Myres 1983; Pitman 1986; Marchant & Higgins 1990; Kuroda 1991). Very rare in the south-west Pacific; one Australian record Mar. 1986 off New South Wales. Eight New Zealand records: at least two birds in outer Canterbury Bight, Jun. 1979 (Tunnicliffe 1982, 1984); singles off Kaikoura, Jan. 1994, Dec. 1998, Feb. 1999, Dec. 2001, Jan. 2003, Feb. 2018 (Medway 2000a, 2001a, 2003b; Miskelly, Crossland *et al.* 2019, 2021); and east of Stewart Island / Rakiura, Nov. 2018 (Miskelly, Crossland *et al.* 2021).

► ***Ardenna carneipes* (Gould)**

Flesh-footed Shearwater | Toanui

Puffinus carneipes Gould, 1844 (Jan.): *Ann. Mag. Nat. Hist., London* 13: 365 – seas bounding the western coast of Australia and breeding on islands off Cape Leeuwin, Western Australia (*vide* McAllan 2004, *Notornis* 51: 126).

Puffinus carneipes Gould; G.R. Gray 1844 (Jul.); *Gen. Birds* 3: 647. Unjustified emendation.

Puffinus carbonaria G.R. Gray, 1844: *Gen. Birds* 3: 647 (ex Solander MS) – no locality = off Three Kings Islands (*vide* Mathews 1912, *Birds Australia* 2: 91).

Majaqueus carneipes (Gould); Reichenbach 1852, *Vollst. Naturg. Schwim. Aves Natatores*: pl. 14, fig. 2601.

Priofinus carneipes (Gould); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 42: 769.

Nectris carneipes (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 201.

Puffinus carneipes Gould; Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 234.

Puffinus carneipes hullianus Mathews, 1912: *Birds Australia* 2: 90 – Norfolk Island, error for Lord Howe Island, Tasman Sea (*vide* Mathews & Iredale, 1921: *Man. Birds of Australia*: 29).

Puffinus carneipes hakodate Mathews, 1912: *Birds Australia* 2: 90 – seas off Japan.

Puffinus carneipes carbonarius Mathews, 1912: *Birds Australia* 2: 90 (ex Solander MS) – off Three Kings Islands. Junior primary homonym of *Puffinus carbonaria* G.R. Gray, 1844.

Nectris carbonaria Mathews, 1912: *Birds Australia* 2: 91 (ex Solander MS) – off Three Kings Islands. Junior secondary homonym of *Puffinus carbonaria* G.R. Gray, 1844.

Hemipuffinus carneipes carneipes (Gould); Mathews 1913, *List Birds Australia*: 34.

Hemipuffinus carneipes hullianus (Mathews); Mathews 1913, *List Birds Australia*: 319.

Hemipuffinus carneipes (Gould); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.

Hemipuffinus carneipes hakodate (Mathews); Mathews & Iredale, 1921: *Man. Birds of Australia*: 29.

Hemipuffinus carneipes carbonarius (Mathews); Mathews & Iredale, 1921: *Man. Birds of Australia*: 29. Junior secondary homonym of *Puffinus carbonaria* G.R. Gray, 1844.

Puffinus carneipes zealandicus Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 76. Unnecessary *nomen novum* for *Puffinus carneipes carbonarius* Mathews, 1912.

Puffinus carneipes neozealandicus Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 93. Unnecessary *nomen novum* for *Puffinus carneipes zealandicus* Mathews, 1926.

Hemipuffinus carneipes neozealandicus (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 114.

Puffinus (*Ardenna*) *carneipes* Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 23.

Ardenna carneipes (Gould); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 18, 96.

Breeds on St Paul Island (Indian Ocean), on many islands off the south coast of Western Australia from Cape Hamelin to the Recherche Archipelago, Smith Island (South Australia), and Lord Howe Island (Marchant & Higgins 1990). In New Zealand breeds on islands off the North Island and in Cook Strait: Hen and Chickens group (particularly Lady Alice and Coppermine), Mercury Islands, Ohinau Island, The Aldermen, Karewa, East (Whangaokeno), Kauwahaia, Motumahanga (Saddleback), Trio (Kuru Pongi), and Titi Islands (Marchant & Higgins 1990; G. Taylor & Parrish 1991; Waugh *et al.* 2013). In New Zealand seas ranges mainly over the North Island continental shelf and slope but reaches south as far as Fiordland (A. Rowe & Rowe 2001), Foveaux Strait (Imber 1985a), Banks Peninsula (Langlands 1994), and east to the Chatham Islands (e.g. R. Murphy 1930; Freeman 1992; Imber 1994). Vagrant at Norfolk Island (Marchant & Higgins 1990; McAllan 2000). Western populations migrate north-west to the Arabian Sea and Gulf of Oman and probably also into the Pacific (Marchant & Higgins 1990). Eastern (Lord Howe Island and New Zealand) birds migrate to the North Pacific, mainly to seas off Korea and Japan but also across to the west coast of North America (Hindwood 1945; Guzman & Myres 1983; Marchant & Higgins 1990; Kuroda 1991); vagrant in the south-east Pacific (R. Murphy 1930). Holocene bones and midden records from North Island and Chatham Island dunes (Millener 1991).

Genus *Puffinus* Brisson

Puffinus Brisson, 1760: *Ornithologie* 1: 56, 6: 129 – Type species (by tautonymy) *Puffinus* = *Procellaria puffinus* Brünnich = *Puffinus puffinus* (Brünnich).

Nectris Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 146 – Type species (by subsequent designation) *Procellaria puffinus* Brünnich = *Puffinus puffinus* (Brünnich).

Thyellas Gloger, 1827: *Froriep's Notiz.*: 279. Unnecessary *nomen novum* for *Puffinus* Brisson, 1760.

Rhipornis Billberg, 1828: *Synop. Faun. Scand.* 1: tab. A. Unnecessary *nomen novum* for *Puffinus* Brisson, 1760.

Cymotomus Macgillivray, 1842: *Man. Brit. Ornith.* 2: 13 – Type species (by monotypy) *Procellaria puffinus* Brünnich = *Puffinus puffinus* (Brünnich).

Thiellus Bonaparte, 1857: *Consp. Gen. Avium* 2: 200. Unjustified emendation.

Reinholdia Mathews, 1912: *Austral Avian Rec. 1*: 107 – Type species (by original designation) *Puffinus reinholdi* Mathews = *Puffinus gavia* (J.R. Forster).

Alphapuffinus Mathews, 1914: *Austral Avian Rec. 2*: 110 – Type species (by original designation) *Puffinus assimilis* Gould.

Microzalias Mathews & Iredale, 1915: *Ibis 3* (10th series): 597 – Type species (by original designation) *Puffinus nativitatis* Streets.

Cinathisma Hull, 1916: *Emu 15*: 205 – Type species (by monotypy) *Cinathisma cyaneoleuca* Hull = *Puffinus gavia* (J.R. Forster).

► ***Puffinus nativitatis* Streets**

Christmas Island Shearwater

Puffinus (Nectris) nativitatis Streets, 1877: *Bull. U.S. Nat. Mus. 7*: 29 – Christmas Island, Pacific Ocean.

Puffinus nativitatis Streets; Salvin 1896, *Cat. Birds Brit. Mus. 25*: 389.

Microzalias nativitatis (Streets); Mathews 1934, *Novit. Zool. 39*(2): 185.

Puffinus (Puffinus) nativitatis Streets; Checklist Committee 1990, *Checklist Birds N.Z.*: 27.

Breeds on Marshall, Johnston, Hawai'ian, Phoenix, Line, Marquesas, Tuamotu, Samoan (possibly), Austral, Gambier, Oeno, Henderson, Ducie, and Easter Islands, and Isla Salas y Gómez (H.D. Pratt *et al.* 1987; Marchant & Higgins 1990; G. Taylor & Tennyson 1994). Not known to migrate, but pelagic distribution poorly understood (Marchant & Higgins 1990). Two New Zealand records: one dead on Dargaville Beach, Feb. 1976 (Crockett 1977); one live on Curtis Island, Kermadec Islands / Rangitāhua, Nov. 1989 (G. Taylor & Tennyson 1994).

Dickinson & Remsen (2013: 179) used the common name “Christmas shearwater” but were incorrect in stating that the bird was named after the date of discovery; it was collected on Christmas Island [now Kiritimati] in Jan. 1874 (Christopher Milensky, Smithsonian Institution, *pers. comm.* 2016), therefore “Christmas Island” shearwater remains an appropriate name.

► ***Puffinus auricularis* Townsend**

Townsend's Shearwater

Puffinus auricularis C.H. Townsend, 1890: *Proc. U.S. Nat. Mus. 13*: 133 – Clarion Island (Isla Clarión), Revillagigedo Islands, Mexico.

We follow Dickinson & Remsen (2013) and Martínez-Gómez *et al.* (2015) in treating Newell's shearwater as a subspecies of *Puffinus auricularis*.

***Puffinus auricularis newelli* Henshaw**

Newell's Shearwater

Puffinus newelli Henshaw, 1900: *Auk 17*: 246 – Waihee Valley, Ulani [= Maui Island], Hawai'ian Islands, Pacific Ocean.

Puffinus puffinus newelli Henshaw; Mathews 1934, *Novit. Zool. 39*(2): 179.

Puffinus auricularis newelli Henshaw; Jehl 1982, *Le Gerfaut 72*: 130.

Puffinus newelli Henshaw; G. Taylor 1996, *Notornis 43*: 188.

Breeds at the Hawai'ian group; thought to be migratory in the north-central Pacific Ocean (Jouanin & Mougín 1979; Pitman 1986). One dead on Dargaville Beach, Nov. 1994 (G. Taylor 1996; Palma 1999) is the only record from New Zealand. One was ashore on Philip Island, Norfolk Island group, Dec. 1997 (J. Moore 1999).

► ***Puffinus puffinus* (Brünnich)**

Manx Shearwater

Procellaria Puffinus Brünnich, 1764: *Ornith. Borealis*: 29 – Faroe Islands and Norway.

Procellaria Anglorum Temminck, 1820: *Manuel d'Ornith.*, 2nd edition. 2: 806 – St Kilda, Scotland.

Puffinus arcticus Faber, 1822: *Prodromus Isländischen Ornith.*: 56. Unnecessary *nomen novum* for *Puffinus anglorum* Temminck, 1820.

Puffinus scotorum Partington, 1837: *British Cyclopaedia Nat. Hist. 3*: 429. Unnecessary *nomen novum* for *Puffinus anglorum* Temminck, 1820.

Puffinus anglorum (Temminck); Bonaparte 1857, *Consp. Gen. Avium 2*: 203.

Puffinus manksii Coues, 1864: *Proc. Acad. Nat. Sci. Philad. 16*: 125. Unnecessary *nomen novum* for *Puffinus anglorum* Temminck, 1820.

Puffinus puffinus bermudae Nichols & Mowbray, 1916: *Auk 33*: 195 – Bermuda, Atlantic Ocean.

Puffinus mcgalli Shufeldt, 1916: *Ibis 4* (10th series): 630 – Bermuda, Atlantic Ocean.

Puffinus puffinus puffinus (Brünnich); Kinsky & Fowler 1973, *Notornis 20*: 14.

Puffinus (Puffinus) puffinus puffinus (Brünnich); Checklist Committee 1990, *Checklist Birds N.Z.*: 28.

Puffinus puffinus (Brünnich); C. Walker *et al.* 1990, *Historical Biology 3*: 220.

Breeds in the North Atlantic on islands off Newfoundland, Iceland, the British Isles, and Brittany, and on the Faeroes, Azores, and Madeira Islands (Jouanin & Mougín 1979; M. Brooke 1990; Olson 2004). Migrates mainly to seas off Brazil and Argentina; reaches southern Africa, and recorded in the eastern Pacific with increasing frequency; straggles to Australasia (Sinclair & Rose 1982; M. Brooke 1990; Marchant & Higgins 1990; Mlodinow 2004). Three New Zealand records (all beach-wrecked): Pukerua Bay, Jun. 1972 (Kinsky & Fowler 1973); Waikanae Beach, Jan. 1985 (Tennyson 1986); and Otaki Beach, Jul. 2002 (NMNZ OR.027328). Considered monotypic, following C. Walker *et al.* (1990), del Hoyo *et al.* (1992), Sangster *et al.* (1999), and Sangster, Collinson *et al.* (2002).

► ***Puffinus gavia* (J.R. Forster)**

Fluttering Shearwater | Pakahā

Procellaria gavia J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 148 – Queen Charlotte Sound, Marlborough.

Aestrelata gavia (J.R. Forster); Coues 1866, *Proc. Acad. Nat. Sci. Philad. 18*: 154.

- Puffinus ?obscurus*; Hutton 1869, *Ibis* 5 (new series): 352. Not *Procellaria obscura* Gmelin, 1788.
- ?Puffinus opisthomelas*; Finsch 1870, *Journ. für Ornith.* 18: 371. Not *Puffinus opisthomelas* Coues, 1864.
- Fulmarus (Cookilaria) gavia* (J.R. Forster); G.R. Gray 1871, *Hand-list Birds* 3: 107.
- Puffinus opisthomelas*; Hutton 1872, *Ibis* 2 (3rd series): 84. Not *Puffinus opisthomelas* Coues, 1864.
- Puffinus gavius* (J.R. Forster); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 318. Unjustified emendation.
- Puffinus gavia* (J.R. Forster); Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 236.
- Puffinus obscurus*; Buller 1888 (Nov.), *History of the Birds of N.Z.*, 2nd edition 2 (part 11): 238. Not *Procellaria obscura* Gmelin, 1788.
- Puffinus reinholdi reinholdi* Mathews, 1912: *Birds Australia* 2: 47 (key), 74, pl. 74 – New Zealand and east Australian seas.
- Reinholdia reinholdi byroni* Mathews, 1913: *Austral Avian Rec.* 1: 187 – “Byron Bay”, New South Wales, error for Five Islands, New South Wales, Australia (*vide* Mathews 1916, *Bull. Brit. Ornith. Club* 36: 89).
- Reinholdia reinholdi reinholdi* (Mathews); Mathews & Iredale 1913, *Ibis* 1 (10th series): 225.
- Puffinus assimilis gavia* (J.R. Forster); Mathews & Iredale 1913, *Ibis* 1 (10th series): 226.
- Reinholdia reinholdi* (Mathews); Mathews & Iredale, 1915: *Ibis* 3 (10th series): 590.
- Cinathisma cyaneoleuca* Hull, 1916: *Emu* 15: 205, pl. 32 – Ulladulla, New South Wales, Australia.
- Reinholdia reinholdi melanotis* Mathews, 1916: *Bull. Brit. Ornith. Club* 36: 89 – “Kaipara Beach, near Helensville, Waitemata County”, error for Muriwai Beach, near Helensville, Waitemata County (*vide* Checklist Committee 1990, *Checklist Birds N.Z.*: 28).
- Reinholdia reinholdi montaguei* Mathews, 1922: *Austral Avian Rec.* 5: 2 – New Caledonia.
- Reinholdia gavia gavia* (J.R. Forster); Mathews 1922, *Austral Avian Rec.* 5: 2.
- Reinholdia gavia byroni* Mathews; Mathews 1927, *Syst. Avium Australasianarum* 1: 112.
- Reinholdia gavia montaguei* Mathews; Mathews 1927, *Syst. Avium Australasianarum* 1: 112.
- Puffinus gavia byroni* (Mathews); Falla 1934, *Rec. Auck. Inst. Museum* 1: 252.
- Puffinus puffinus gavia* (J.R. Forster); R. Murphy 1952, *American Museum Novit.* 1586: 15.
- Puffinus gavia gavia* (J.R. Forster); Checklist Committee 1953, *Checklist N.Z. Birds*: 21.
- Puffinus (Puffinus) gavia* (J.R. Forster); Checklist Committee 1990, *Checklist Birds N.Z.*: 28.

Breeds only on New Zealand offshore islands: Manawatāwhi / Three Kings, Motuopao, Wekarua, Motu Purihi (in the Simmonds Islands), Moturoa, Stephenson / Mahinepua, Cavalli, Poor Knights, Bream, Hen and Chickens, Mokohinau, Hauturu / Little Barrier (formerly), Lots Wife, Saddle and stack off Opakau (both off Great Barrier Island / Aotea), Channel, Little Tiri, Maria, Horuhoru / Gannet Rock, Mercury, The Aldermen, Slipper / Whakau, Motunau / Plate, Taumaihi, Rurima, Moutohora / Whale Island, East / Whangaokeno, Moturipa, Motuheka, Taranaki coast islands, Stephens / Takapourewa, Trio / Kuru Pongi, and Chetwode Islands; also on islands in Queen Charlotte Sound and off the east coast of Marlborough (Falla 1934; Moors 1980; Medway 1994; Marchant & Higgins 1990; G. Taylor 1990; G. Taylor & Tennyson 1990; D. Brown 1991; G. Taylor & Parrish 1991, 1992; Powlesland & Pickard 1992; K. Owen 1994; Gaze 2000; Waugh *et al.* 2013). Translocations have resulted in breeding populations on Maud Island, Pelorus Sound (M. Bell *et al.* 2005), and Mana and Matiu / Somes Islands near Wellington (Miskelly *et al.* 2009; Miskelly & Powlesland 2013). Ranges mainly over the continental shelf, as far south as South Canterbury in autumn and winter (Imber 1985b). Straggles as far south as Southland (e.g. Tennyson 1990b; Renner 1995, 2001; J. Wood 2004; Schofield & Schofield 2006), the Chatham Islands (Imber 1994), and possibly Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Immatures and non-breeders regular in eastern Australian seas (Marchant & Higgins 1990). Has straggled to Lord Howe (McAllan *et al.* 2004), New Caledonia, and Vanuatu (Jouanin & Mougín 1979). Identified from numerous Late Pleistocene–Holocene bones and midden sites in the North, South, Stewart / Rakiura, and Chatham Islands but some bones may be remains of Scarlett’s or Hutton’s shearwaters, since the post-cranial bones of these species are difficult to distinguish (Millener 1991; Worthy 1997d, 1998a).

► †***Puffinus spelaeus*** Holdaway & Worthy

Scarlett’s Shearwater | Ōiruki

Puffinus spelaeus Holdaway & Worthy, 1994: *Emu* 94: 203 – Te Ana Titi, a cave on the Fox River, Westland.

Known from Holocene remains from the South Island, mainly in the north-west (Holdaway & Worthy 1994; Holdaway *et al.* 2001).

► ***Puffinus huttoni*** Mathews

Hutton’s Shearwater | Kaikōura Titi

- Puffinus reinholdi huttoni* Mathews, 1912: *Birds Australia* 2: 47 (key), 77 – Snares Island.
- Reinholdia reinholdi huttoni* (Mathews); Mathews & Iredale 1913, *Ibis* 1 (10th series): 226.
- Reinholdia gavia huttoni* (Mathews); Mathews 1927, *Syst. Avium Australasianarum* 1: 112.
- Puffinus leptorhynchus* Mathews, 1937: *Bull. Brit. Ornith. Club* 57: 143 – Bunbury, Western Australia.
- Puffinus puffinus huttoni* Mathews; R. Murphy 1952, *American Museum Novit.* 1586: 18.
- Puffinus gavia huttoni* Mathews; Checklist Committee 1953, *Checklist N.Z. Birds*: 21.
- Puffinus huttoni* Mathews; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 28.
- Puffinus (Puffinus) huttoni* Mathews; Checklist Committee 1990, *Checklist Birds N.Z.*: 28.

Breeds in the Seaward Kaikoura Mountains at about 1,200–1,800 m a.s.l.; visiting the colony between late Aug. and Apr. (Harrow 1976). Formerly bred also in the Inland Kaikoura Mountains (e.g. Sherley 1992). A colony on Kaikoura Peninsula was created through translocation of pre-fledged chicks (Miskelly *et al.* 2009; L. Rowe 2018). Ranges mainly east of the

South Island and into Cook Strait (Falla 1965; Harrow 1976; Powlesland & Pickard 1992); reaching as far south as Stewart Island / Rakiura and the Snares Islands / Tini Heke (Petyt 1995; Miskelly *et al.* 2001a; J. Wood 2004; Tennyson, Miskelly *et al.* 2014), to South Westland (Miskelly 1990) and north-east to East Cape / Koromere (e.g. Foreman 1991, 1996, 2000, 2002). Sometimes beach-wrecked on northern New Zealand coastlines, especially during spring (e.g. 27 on western Waikato beaches in Oct.–Nov. 2000; Clifford 2000b; also see Powlesland & Pickard 1992). Some remain in New Zealand waters all year round (Harrow 1976) but many migrate to seas off north-west Australia and are present there throughout the non-breeding season (Falla 1965; Halse 1981; Warham 1981; Powlesland & Pickard 1992; Cheshire 1999), with some remaining off Western Australia during Sep. to Dec. (Halse 1981; Warham 1981; Palliser 1997; O'Connor 1999; Hobcroft 2000). A few occur off south-east Australia during the breeding season (e.g. Imber & Crockett 1970; Halse 1981; R. Clarke 2005; Carter 2006). Possible Late Pleistocene–Holocene bones and midden records from several parts of New Zealand (e.g. Millener 1991; Worthy 1997d) should be treated with caution because of uncertain identification (see note under *P. gavia*). The type locality for the species had long been debated (e.g. Miskelly *et al.* 2001a) but the holotype was likely collected by Henry Travers off the Snares Islands in Jan. 1890 (Tennyson, Miskelly *et al.* 2014).

► ***Puffinus assimilis* Gould**

Little Shearwater | Totorore*

The number of subspecies is debated (e.g. Austin 1996; Holdaway *et al.* 2001; Austin *et al.* 2004). We follow the taxonomy of Austin *et al.* (2004), with the exception of *P. elegans* which we regard as a separate species following Holdaway *et al.* (2001). Four subspecies recognised here: *P. a. assimilis* breeding at Lord Howe and Norfolk Islands; *P. a. tunneyi* Mathews, 1912 on islands off south-west Australia; *P. a. kermadecensis* at the Kermadec Islands / Rangitāhua; *P. a. haurakiensis* off northern New Zealand. Three subspecies are known from the New Zealand region; all seem non-migratory (Marchant & Higgins 1990). Assignment to subspecies of Holocene remains and midden material is tentative.

*Also used for other petrel species including Antarctic prion *Pachyptila desolata*.

***Puffinus assimilis assimilis* Gould**

Norfolk Island Little Shearwater

Puffinus assimilis Gould, 1838: *Synop. Birds Australia 4, App.*: 7 – New South Wales, error for Norfolk Island (*vide* Mathews 1912, *Birds Australia 2*: 50).

Puffinus affinis [sic] Anon. 1840: *Penny Cyclopaedia 18*: 42. Error for “*Puffinus assimilis*”.

Nectris nugax G.R. Gray, 1844: *Gen. Birds 3*: 647 (ex Solander MS) – no locality = Australian seas (*vide* Mathews 1912, *Birds Australia 2*: 60).

Puffinus australis “Eyton” Gould, 1848: *Birds of Australia 7*: text to pl. 59 – no locality.

Puffinus nugax Bonaparte, 1857: *Consp. Gen. Avium 2*: 205 (ex Solander MS) – South Pacific Ocean, restricted to Australian seas (*vide* Mathews 1912, *Birds Australia 2*: 60). Junior secondary homonym of *Nectris nugax* G.R. Gray, 1844.

Procellaria nugax (Bonaparte); Schlegel 1863, *Mus. Hist. Nat. Pays-Bas, Procellariae 4*: 31.

Puffinus (*Puffinus*) *assimilis* Gould; G.R. Gray 1871, *Hand-list Birds 3*: 103. In part.

Puffinus assimilis howensis Mathews, 1915: *Austral Avian Rec. 2*: 125 – Lord Howe Island, Tasman Sea.

Alphapuffinus assimilis (Gould); Mathews & Iredale, 1915: *Ibis 3* (10th series): 590.

Alphapuffinus assimilis assimilis (Gould); Mathews 1934, *Novit. Zool. 39*(2): 180.

Puffinus assimilis assimilis Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 22.

Puffinus (*Puffinus*) *assimilis assimilis* Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 30.

Puffinus assimilis; Holdaway *et al.* 2001, *New Zealand Journ. Zool. 28*(2): 176.

Breeds at Lord Howe Island (McAllan *et al.* 2004) and Norfolk Island (Philip, Nepean, Bird Rocks, formerly main island; Fleming & Serventy 1943; Schodde *et al.* 1983). Straggles to New South Wales and the west coast of the North Island: three records from Muriwai Beach (Nov. 1937, and Jun. & Nov. 1939; Fleming & Serventy 1943).

***Puffinus assimilis kermadecensis* Murphy**

Kermadec Little Shearwater

Puffinus (*Puffinus*) *assimilis* Gould; G.R. Gray 1871, *Hand-list Birds 3*: 103. In part.

Puffinus assimilis; Godman 1908, *Monograph Petrels 2*: 133. Not *Puffinus assimilis* Gould, 1838.

Puffinus assimilis assimilis; Mathews 1912, *Birds Australia 2*: 69. Not *Puffinus assimilis* Gould, 1838.

Puffinus assimilis kermadecensis Murphy, 1927: *American Mus. Novit. 276*: 3 – Herald Islets, Kermadec Islands.

Alphapuffinus assimilis kermadecensis (Murphy); Mathews 1934, *Novit. Zool. 39*(2): 180.

Puffinus (*Puffinus*) *assimilis kermadecensis* Murphy; Checklist Committee 1990, *Checklist Birds N.Z.*: 30.

Puffinus kermadecensis Murphy; Holdaway *et al.* 2001, *New Zealand Journ. Zool. 28*(2): 174.

Breeds on the Kermadec Islands / Rangitāhua (Herald Islets, Macauley, Curtis, and Cheeseman Islands; possibly on Haszard Islet; formerly on Raoul Island; Veitch *et al.* 2004; Waugh *et al.* 2013). Ranges to seas off the west coast of the North Island (Imber 1985c). A reference to this subspecies occurring off the West Coast of South Island (Checklist Committee 1990) appears to be unsubstantiated.

***Puffinus assimilis haurakiensis* C.A. Fleming & Serventy**

North Island Little Shearwater

Puffinus assimilis; Reischek 1886, *Trans. Proc. N.Z. Inst. 18*: 95. Not *Puffinus assimilis* Gould, 1838.

Procellaria assimilis gavia; Mathews 1912, *Birds Australia 2*: 69. Not *Procellaria gavia* J.R. Forster, 1844.

Puffinus assimilis kempfi; Oliver 1930, *New Zealand Birds*, 1st edition: 127. In part.

Puffinus assimilis haurakiensis C.A. Fleming & Serventy, 1943: *Emu* 43: 119 – Lizard Island, Mokohinau Islands.

Puffinus (Puffinus) assimilis haurakiensis C.A. Fleming & Serventy; Checklist Committee 1990, *Checklist Birds N.Z.*: 30.

Puffinus haurakiensis C.A. Fleming & Serventy; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 174.

Breeds on Manawatāwhi / Three Kings (Parrish 1997, 2000b), Moturoa (Checklist Committee 1990), Stephenson / Mahinepua, Cavalli, Poor Knights, Hen and Chickens, Mokohinau, Mercury, Ohinau, The Aldermen, Penguin, and Rabbit Islands (Marchant & Higgins 1990; G. Taylor 2000a; Waugh *et al.* 2013). May have formerly bred on Hauturu / Little Barrier and Cuvier / Repanga Islands (Fleming & Serventy 1943). Ranges as far south as Wellington (Oliver 1955; Checklist Committee 1970; Imber 1985c). Late Pleistocene–Holocene North Island bones and midden records (Millener 1991; Holdaway *et al.* 2001) have been assumed to represent this subspecies (Checklist Committee 1990).

► ***Puffinus elegans* Giglioli & Salvadori**

Subantarctic Little Shearwater

Puffinus munda G.R. Gray, 1844: *Gen. Birds* 3: 647 (ex Solander MS) – no locality. Junior secondary homonym of *Procellaria munda* Kuhl, 1820.

Puffinus elegans Giglioli & Salvadori, 1869: *Ibis* 5 (new series): 68 – South Atlantic Ocean, at 43°54'S, 9°20'E.

Puffinus assimilis; Hutton 1872, *Ibis* 2 (3rd series): 248. Not *Puffinus assimilis* Gould, 1837.

Nectris munda Salvin, 1876: in Rowley's *Ornith. Miscellany* 1: 236 (ex Solander MS) – 48°27'S, 93°00'W. Junior secondary homonym of *Procellaria munda* Kuhl, 1820.

Procellaria munda Salvin, 1876: in Rowley's *Ornith. Miscellany* 1: 237 (ex Solander MS) – 48°27'S, 93°00'W. Junior primary homonym of *Procellaria munda* Kuhl, 1820.

Nectris Munda Mathews, 1912: *Birds Australia* 2: 59 (ex Solander MS) – southern ocean. Junior secondary homonym of *Procellaria munda* Kuhl, 1820.

Puffinus assimilis kemp Mathews, 1912: *Birds Australia* 2: 69 – Chatham Islands.

Puffinus assimilis munda (Salvin); Mathews 1912, *Birds Australia* 2: 69. Not *Procellaria munda* Kuhl, 1820.

Puffinus assimilis elegans Giglioli & Salvadori; Mathews 1912, *Birds Australia* 22: 69.

Puffinus kuhliana Mathews, 1933: *Bull. Brit. Ornith. Club* 54: 25. Unnecessary *nomen novum* for *Nectris munda* Mathews, 1912.

Alphapuffinus assimilis kemp (Mathews); Mathews 1934, *Novit. Zool.* 39(2): 180.

Alphapuffinus assimilis elegans (Giglioli & Salvadori); Mathews 1934, *Novit. Zool.* 39(2): 180.

Puffinus assimilis kuhliana Mathews; C.A. Fleming & Serventy 1943, *Emu* 43: 122.

Puffinus (Puffinus) assimilis elegans Giglioli & Salvadori; Checklist Committee 1990, *Checklist Birds N.Z.*: 31.

Puffinus elegans; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 127, 176.

Breeds on South Atlantic islands (Inaccessible, Nightingale, Gough), St Paul (south Indian Ocean), Chatham Islands (Star Keys, Little Mangere) (Holdgate 1965; Marchant & Higgins 1990; Imber 1994; Ryan 2007), and Antipodes Islands (Bollons, Archway, Inner Windward; Tennyson *et al.* 2002); possibly breeds on the Solander Islands (W. Cooper *et al.* 1986). Ranges in subantarctic seas, reaching the southern South Island (Kinsky 1971; NMNZ OR.025587, OR.028686), Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Bounty, Auckland / Maukahuka (Imber 1983; Miskelly, Elliott *et al.* 2020), and Campbell / Motu Ihupuku Islands (Kinsky 1971), and southern Chile (Jehl 1973; Imber 1983). Late Pleistocene–Holocene bones and midden records from South, Stewart / Rakiura, Chatham, and Auckland Islands / Maukahuka (e.g. Bourne 1967; Millener 1991; Tennyson 2020a), have been assumed to represent this species (Checklist Committee 1990); however, some of these bones may be *P. assimilis* (Worthy 1998c). Accepted as a full species following Holdaway *et al.* (2001) and Onley & Scofield (2007).

Genus *Pelecanoides* La Cépède

Pelecanoides La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 13 – Type species (by monotypy) *Procellaria urinatrix* Gmelin = *Pelecanoides urinatrix* (Gmelin).

Haladroma Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 274 – Type species (by monotypy) *Procellaria urinatrix* Gmelin = *Pelecanoides urinatrix* (Gmelin).

Onocralus Rafinesque, 1815: *Analyse de la Nature*: 72. Unnecessary *nomen novum* for *Pelecanoides* La Cépède, 1799.

Halodroma Cuvier, 1817: *Règne Anim. I*: 516. Unjustified emendation.

Puffinuria Lesson, 1828: *Manuel d'Ornith.* 2: 394 – Type species (by monotypy) *Puffinuria Garnotii* Lesson = *Pelecanoides garnotii* (Lesson).

Puffinaria Lesson, 1837: *Compléments Oeuvres Buffon* 9: 507. Misspelling.

Porthmornis Murphy & Harper, 1921: *Bull. Am. Mus. Nat. Hist.* 44: 502, 513 – Type species (by monotypy) *Puffinuria garnotii magellani* Mathews = *Pelecanoides magellani* (Mathews). As a subgenus of *Pelecanoides*.

Pelagodyptes Murphy & Harper, 1921: *Bull. Am. Mus. Nat. Hist.* 44: 502, 519 – Type species (by monotypy) *Pelecanoides georgicus* Murphy & Harper. As a subgenus of *Pelecanoides*.

► ***Pelecanoides urinatrix* (Gmelin)**

Common Diving Petrel | Kuaka*

Circumpolar, breeding on islands between 34°S and 55°S and ranging mainly in adjacent seas (Jouanin & Mougin 1979). Six subspecies: *P. u. urinatrix* in Australia and northern New Zealand; *P. u. berard* (Gaimard, 1823) at the Falkland Islands; *P. u. exsul* in the subantarctic; *P. u. dacunhae* Nicoll, 1906 at Tristan da Cunha and Gough Islands; *P. u. coppingeri* Mathews, 1912 in southern Chile; *P. u. chathamensis* in southern New Zealand and the Chatham Islands (Jouanin &

Mougin 1979). This species (uncertain subspecies) formerly bred on Amsterdam Island (Worthy & Jouventin 1999). Three subspecies occur in the New Zealand region.

*Also used for bar-tailed godwit *Limosa lapponica*.

***Pelecanoides urinatrix urinatrix* (Gmelin)**

Northern Diving Petrel

Procellaria urinatrix Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 560. Based on “Diving Petrel” of Latham 1785, *Gen. Synop. Birds* 3(2): 413 – Queen Charlotte Sound, Marlborough.

Procellaria tridactylae Kuhl, 1820: *Beitr. Zool. vergl. Anat.* 1: 145 – Queen Charlotte Sound, Marlborough.

Procellaria tridactyla J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 149 – Queen Charlotte Sound, Marlborough.

Junior primary homonym and junior synonym of *Procellaria tridactylae* Kuhl, 1820.

Puffinuria Urinatrix (Gmelin); Gould 1844, *Ann. Mag. Nat. Hist., London* 13: 366.

Halodroma urinatrix (Gmelin); Le Maout 1855, *Hist. Nat. Oiseaux*: 387.

Haladroma urinatrix (Gmelin); Finsch 1870, *Journ. für Ornith.* 18: 371.

Pelecanoides urinatrix Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 76.

Pelecanoides urinatrix (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 102. In part.

Pelecanoides urinatrix belcheri Mathews, 1912: *Austral Avian Rec.* 1: 84 – Australian seas, restricted to Victoria, Australia (*vide* Mathews 1934, *Novit. Zool.* 39(2): 196).

Pelecanoides urinatrix urinatrix (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 237.

Pelecanoides urinator urinator (Gmelin); Jouanin & Mougin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 120. Unjustified emendation.

Pelecanoides urinatrix urinatrix (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 32. In part.

Breeds on Australian islands off Victoria, Tasmania, and in Bass Strait, and on many islands off New Zealand: from Manawatāwhi / Three Kings Islands to the Bay of Plenty and Taranaki, in Cook Strait, and off the Marlborough Sounds (Marchant & Higgins 1990). Ranges in adjacent seas, mainly in coastal waters, apart from when they migrate to moult south-east of the Chatham Islands (Marchant & Higgins 1990; Rayner *et al.* 2017; Fromant *et al.* 2020). Abundant in Late Pleistocene–Holocene bone and midden deposits in the North and South Islands (Millener 1991). One specimen and possible Holocene remains from the Chatham Islands (Bourne 1968).

***Pelecanoides urinatrix chathamensis* Murphy & Harper**

Southern Diving Petrel

Halodroma berardi [sic] (Quoy & Gaymard) [sic]; Hutton 1872, *Ibis* 2 (3rd series): 248. Not *Procellaria Berard* Gaimard, 1823.

Halodroma urinatrix; Hutton 1872, *Ibis* 2 (3rd series): 248. Not *Procellaria urinatrix* Gmelin, 1789.

Pelecanoides berardi [sic] (Quoy & Gaymard) [sic]; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 314. Not *Procellaria Berard* Gaimard, 1823.

Pelecanoides urinatrix chathamensis Murphy & Harper, 1916: *Bull. Am. Mus. Nat. Hist.* 35: 65 – Chatham Islands.

Pelecanoides chathamensis; Falla, Sibson & Turbott 1966, *Field Guide Birds of N.Z.*: 58.

Pelecanoides urinator chathamensis Murphy & Harper; Jouanin & Mougin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 120. Unjustified emendation.

Pelecanoides urinatrix urinatrix (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 32. In part.

Breeds off the southern South Island and Stewart Island / Rakiura, including Codfish / Whenua Hou and Solander Islands, and on the Snares Islands / Tini Heke (Marchant & Higgins 1990; Miskelly *et al.* 2001a; Miskelly, Bishop *et al.* 2021) and Chatham Islands (now probably extinct on Chatham, Pitt, and Mangere Islands; Imber 1994; Tennyson & Millener 1994). R. Murphy & Harper (1921) considered both *P. u. chathamensis* and *P. u. exsul* to occur at the Auckland Islands / Maukahuka, but this requires clarification because generally *P. u. exsul* is considered to nest there. Ranges mainly in adjacent coastal waters (e.g. Richdale 1965; Imber 1994; Miskelly *et al.* 2001a). Abundant in Holocene deposits and middens on the Chatham Islands (e.g. Bourne 1964; Millener 1991; Tennyson & Millener 1994; Worthy 1998e); also present as Holocene remains on Stewart Island (Worthy 1998e) and possibly in Late Pleistocene–Holocene deposits in the southern South Island (e.g. Worthy 1998a,b). This subspecies was reinstated following the recommendations of Worthy (1998e; see comments in Holdaway *et al.* 2001).

***Pelecanoides urinatrix exsul* Salvin**

Subantarctic Diving Petrel

Pelecanoides urinatrix (Gmelin); G.R. Gray 1871, *Hand-list Birds* 3: 102. In part.

Haladroma urinatrix (Gmelin); Cabanis & Reichenow 1876, *Journ. für Ornith.* 24: 328. Not *Procellaria urinatrix* Gmelin, 1789.

Pelecanoides exsul Salvin, 1896: *Cat. Birds Brit. Mus.* 25: 437 (key), 438 – southern Indian Ocean, from Crozet Island to Kerguelen Island.

Pelecanoides urinatrix exsul Salvin; Checklist Committee 1953, *Checklist N.Z. Birds*: 27.

Pelecanoides urinator exsul Salvin; Jouanin & Mougin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 120. Unjustified emendation.

Breeds on islands mainly in the subantarctic zone: South Georgia, Prince Edward, Crozet, Kerguelen, Heard, and Macquarie Islands; in the New Zealand region on Auckland / Maukahuka, Antipodes, and Campbell / Motu Ihupuku Islands (Marchant & Higgins 1990; Miskelly, Elliott *et al.* 2020). Recently exterminated by cats on Marion Island (J. Cooper *et al.* 1995). Apparently ranges mainly in seas near the breeding places (Jouventin *et al.* 1985; Marchant & Higgins 1990; Fromant *et al.* 2021). Identified from Holocene dune deposits at the Auckland Islands / Maukahuka (Tennyson 2020a).

► ***Pelecanoides georgicus*** Murphy & Harper**South Georgian Diving Petrel**

We follow Clements *et al.* (2019) and F. Gill *et al.* (2021) in recognising two subspecies, both of which occur in New Zealand. The subspecific identity of birds that formerly bred on Enderby Island (Auckland Islands), Stewart Island, Otago Peninsula, and Chatham Island is unknown (see Worthy 1998; J. Wood & Briden 2008; Miskelly, Elliott *et al.* 2020; Tennyson 2020a). A 1995 record from Kakanui, Otago (Hocken 1996) is unverified. Stays mainly in seas near the breeding islands (M. Payne & Prince 1979) but has straggled once to New South Wales (J. Gibson & Sefton 1959).

Pelecanoides georgicus georgicus Murphy & Harper**South Georgian Diving Petrel**

Pelecanoides georgica Murphy & Harper, 1916: *Bull. Am. Mus. Nat. Hist.* 35: 66 – Cumberland Bay, South Georgia, south Atlantic Ocean.

Pelecanoides urinatrix georgica Murphy & Harper; Bennett 1926, *Ibis* 2 (12th series): 317.

Pelagodyptes georgicus (Murphy & Harper); Mathews 1934, *Novit. Zool.* 39(2): 198.

Pelagodyptes georgicus georgicus (Murphy & Harper); Mathews, 1935, *Novit. Zool.* 39(3): (page unnumbered) Additions to the keys.

Pelagodyptes georgicus novus Mathews, 1935: *Novit. Zool.* 39(3): Additions to the keys – Pacific Ocean, restricted to Macquarie Island (*vide* Mathews & Iredale 1943, *Notes Procellariiformes*: 62).

Pelecanoides georgicus Murphy [sic]; Mathews 1948, *Bull. Brit. Ornith. Club* 68: 157.

Pelecanoides georgicus georgicus Murphy & Harper; Clark & Dingwall 1985, *Cons. Islands Southern Ocean*: 68.

Pelecanoides georgicus Murphy & Harper; Checklist Committee 1990, *Checklist Birds N.Z.*: 33.

Pelecanoides ?exsul; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 204. Not *Pelecanoides exsul* Salvin, 1896.

Pelecanoides whenuahouensis; Fischer, Debski, Miskelly, Bost, Fromant, Tennyson, Tessler, Cole, Hiscock, Taylor & Wittmer 2018, *PLOS one* 13(doi.org/10.1371/journal.pone.0197766): 14 (in part).

Breeds on South Georgia, Marion, Prince Edward, Crozet, Kerguelen, and Heard Islands (Marchant & Higgins 1990). Near to New Zealand, a few pairs on the Bishop and Clerk Islets and Macquarie Island (Brothers & Ledingham 2008; Brothers & Bone 2008). One confirmed breeding record from New Zealand (NMNZ OR.21631, Dundas Island, Auckland Islands, Oct. 1943; Miskelly, Elliott *et al.* 2020; Grosser *et al.* 2021). This specimen was listed as a paratype of *P. whenuahouensis* (Fischer *et al.* 2018) before being genotyped as *P. georgicus georgicus* (see Grosser *et al.* 2021). Therefore, the original description of *P. whenuahouensis* included both subspecies.

Pelecanoides georgicus whenuahouensis Fischer, Debski, Miskelly, Bost, Fromant, Tennyson, Tessler, Cole, Hiscock, Taylor & Wittmer**Whenua Hou Diving Petrel | Kuaka Whenua Hou**

Pelecanoides georgicus Murphy & Harper; Checklist Committee 1990, *Checklist Birds N.Z.*: 33. In part.

Pelecanoides ?exsul; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 204. Not *Pelecanoides exsul* Salvin, 1896.

Pelecanoides whenuahouensis Fischer, Debski, Miskelly, Bost, Fromant, Tennyson, Tessler, Cole, Hiscock, Taylor & Wittmer, 2018: *PLOS One* 13(doi.org/10.1371/journal.pone.0197766): 14 – Codfish Island / Whenua Hou.

Pelecanoides georgicus whenuahouensis Fischer, Debski, Miskelly, Bost, Fromant, Tennyson, Tessler, Cole, Hiscock, Taylor & Wittmer; Miskelly & Taylor 2020, *Notornis* 67: 43.

Described as a full species by Fischer *et al.* (2018). A subsequent genetic study by Grosser *et al.* (2021) revealed that one of the paratypes (a breeding female from Dundas Island, Auckland Islands) was *P. georgicus sensu stricto*, and that *whenuahouensis* was little differentiated from *P. georgicus* (genetic distance 0.006; cf. 0.005 to 0.027 between subspecies of *P. urinatrix*). We therefore follow Clements *et al.* (2019) and F. Gill *et al.* (2021) in treating *whenuahouensis* as a subspecies of *P. georgicus* pending a wider phylogenetic study of the genus.

Fewer than 100 pairs on Codfish Island / Whenua Hou (Imber & Nilsson 1980; West & Imber 1989; G. Taylor 2000b; Fischer *et al.* 2018).

Order **SULIFORMES**: Frigatebirds, Gannets, Darters, and Cormorants

We follow the recommendations of Ericson *et al.* (2006), Hackett *et al.* (2008), Burleigh *et al.* (2015), Prum *et al.* (2015), and Kuhl *et al.* (2021) in separating this clade of waterbirds from Pelecaniformes. We follow Bock (1994), Clements *et al.* (2019), and Chesser *et al.* (2020) in using the name Suliformes. The family sequence follows Clements *et al.* (2019) and Chesser *et al.* (2020).

Family **FREGATIDAE** Degland & Gerbe: Frigatebirds

Fregatinae Degland & Gerbe, 1867: *Ornithologie européenne* 2(11): 357 – Type genus *Fregata* La Cépède, 1799.

Genus **Fregata** La Cépède

Fregata La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 15 – Type species (by subsequent designation) *Pelecanus Aquilus* Linnaeus = *Fregata aquila* (Linnaeus).

Tachypetes Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 63 – Type species (by monotypy) *Pelecanus minor* Gmelin = *Fregata minor* (Gmelin).

Atagen G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 101 – Type species (by original designation) *Pelecanus minor* Gmelin = *Fregata minor* (Gmelin).

Parvifregata Mathews, 1920: *Birds Australia (Suppl. 1) 1*: 64 – Type species (by original designation) *Atagen ariel* G.R. Gray = *Fregata ariel* (G.R. Gray).

► **Fregata minor** (Gmelin) **Great Frigatebird**

Pelecanus minor Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 572. Based on the “Lesser Frigate Pelican” of Latham 1785, *Gen. Synop. Birds 3*(2): 590 – no locality = Christmas Island, Indian Ocean (*vide* Lowe 1924, *Novit. Zool. 31*: 306).

Five subspecies commonly accepted, breeding on islands in the following regions (Dorst & Mougín 1979; del Hoyo *et al.* 1992; Dickinson 2003): *F. m. aldabrensis* Mathews, 1914 (west Indian Ocean), *F. m. minor* (Indian Ocean and South China Sea), *F. m. palmerstoni* (Pacific Ocean), *F. m. ridgwayi* Mathews, 1914 (east Pacific Ocean), and *F. m. nicolli* Mathews, 1914 (Atlantic Ocean). However, Marchant & Higgins (1990) recognised no subspecies. The common name great frigatebird is adopted for this species, following the discussion by Marchant & Higgins (1990).

Fregata minor palmerstoni (Gmelin) **Great Frigatebird**

Pelecanus Palmerstoni Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 573. Based on the “Palmerston Frigate Pelican” of Latham 1785, *Gen. Synop. Birds 3*(2): 592 – Palmerston Island, Pacific Ocean.

Fregata aquila; Anon. 1870, *Cat. Colonial Mus.*: 76. Not *Pelecanus aquilus* Linnaeus, 1758.

Tachypetes aquila; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 182. Not *Pelecanus aquilus* Linnaeus, 1758.

Tachypetes aquilus; Cheeseman 1891, *Trans. Proc. N.Z. Inst.* 23: 223. Not *Pelecanus aquilus* Linnaeus, 1758.

Fregata aquila palmerstoni (Gmelin); Mathews & Iredale 1913, *Ibis 1* (10th series): 417.

Fregata minor peninsulae Mathews, 1923: *Bull. Brit. Ornith. Club 44*: 15 – Raine Island, Queensland, Australia.

Fregata minor palmerstoni (Gmelin); Peters 1931, *Check-list Birds World 1*: 96.

Fregata minor (Gmelin) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 31.

Fregata minor; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33. Not *Pelecanus minor* Gmelin, 1789.

Fregata minor peninsulae Mathews; Checklist Committee 1990, *Checklist Birds N.Z.*: 86.

About 18 records from the New Zealand region, the most southerly being Westport (Oliver 1930; Checklist Committee 1953; Edgar 1972b; G. Taylor & Parrish 1991; Medway 2000a; Fryer 2004). The largest flock was eight over the Meyer Islands and Raoul Island, Kermadec Islands / Rangitāhua, Mar. 2016 (Miskelly, Crossland *et al.* 2017). The earliest record was 1861 (not 1855) – see explanation in Miskelly *et al.* (2022). Former attribution of New Zealand birds to *F. m. peninsulae* (Checklist Committee 1990) followed Condon (1975), but that name is a junior synonym of *F. m. palmerstoni* (see Dorst & Mougín 1979).

► **Fregata ariel** (G.R. Gray) **Lesser Frigatebird**

Three subspecies generally accepted (Dorst & Mougín 1979; del Hoyo *et al.* 1992; Dickinson 2003): *F. a. ariel* (Indian and Pacific Oceans), *F. a. iredalei* Mathews, 1914 (west Indian Ocean), and *F. a. trinitatis* Miranda-Ribeiro, 1919 (Atlantic Ocean), although their distinctiveness has been questioned (Marchant & Higgins 1990).

Fregata ariel ariel (G.R. Gray) **Lesser Frigatebird**

Atagen ariel G.R. Gray, 1845: *Gen. Birds 3*: 669, pl. 185 – no locality = Raine Island, northern Queensland, Australia (*vide* Mathews 1914, *Austral Avian Rec.* 2: 121).

Fregata minor; Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 342. Not *Pelecanus minor* Gmelin, 1789.

Tachypetes minor; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 185. Not *Pelecanus minor* Gmelin, 1789.

Fregata ariel ariel (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 418.

Fregata ariel (G.R. Gray); Checklist Committee 1990, *Checklist Birds N.Z.*: 87.

Breeds on islands off Queensland, New Caledonia, Fiji, and elsewhere in the tropical Pacific Ocean. Straggles to the New Zealand region: about 32 records since 1907, mostly in the north but once south to Otago (Turbott 1952; Checklist Committee 1953; Oliver 1955; Hudson 1963; Lockstone 1967; Edgar 1971b, 1972b; Marchant & Higgins 1990; G. Taylor & Parrish 1991; Powlesland *et al.* 1992; Pierce 1992; Guest 1992; Medway 2000a; Miskelly, Crossland *et al.* 2013, 2019) and probably twice to the Chatham Islands (Imber 1994). New Zealand records are considered to be of the closest breeding subspecies (Checklist Committee 1953, 1970; Oliver 1955).

Family **SULIDAE** Reichenbach: Gannets and Boobies

Sulinae Reichenbach, 1849: *Avium Syst. Nat.*: 6 – Type genus *Sula* Brisson, 1760.

Morus and *Sula* are considered generically distinct (Olson 1985b; van Tets *et al.* 1988; BOU Records Committee 1991; Friesen & Anderson 1997; J. Nelson 2005).

Genus **Morus** Vieillot

Morus Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 63 – Type species (by monotypy) Buffon's "Fou de Bassan" = *Pelecanus bassanus* Linnaeus = *Morus bassanus* (Linnaeus).

Morus J.R. Forster, 1817: *Synop. Cat. Brit. Birds*: 59. Unnecessary *nomen novum* for *Morus* Vieillot, 1816.

Sulita Mathews, 1915: *Austral Avian Rec.* 2: 123. Unnecessary *nomen novum* for *Morus* Vieillot, 1816.

► **Morus capensis** (Lichtenstein)

Cape Gannet

Dysporus capensis Lichtenstein, 1823: *Verzeich. Doubl., Berlin*: 86 – Cape of Good Hope, South Africa.

Sula capensis (Lichtenstein); Medway 2001, *Notornis* 48: 62.

Morus capensis (Lichtenstein); Parrish 2002, *Notornis* 49: 102.

Breeds on islands off coasts of southern Africa, ranging north in winter and straggling further afield (Dorst & Mougin 1979; C. Robertson & Stephenson 2005). The first New Zealand record was a bird at Cape Kidnappers Dec. 1997–Sep. 2005; it successfully bred with an Australasian gannet and a hybrid chick returned to the colony in 2005 (Medway 2001a; Stephenson 2002, 2003; C. Robertson & Stephenson 2005). Subsequently recorded at Farewell Spit, Dec. 2015 (Miskelly, Crossland *et al.* 2017).

► **Morus serrator** (G.R. Gray)

Australasian Gannet | Tākāpu

Sula Australis Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 177 – Tasmanian Seas. Junior primary homonym of *Sula australis* Stephens, 1826.

Pelecanus serrator G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 200 – no locality – vicinity of the Three Kings Islands (*vide* Medway 1993, *Notornis* 40: 69).

Sula serrator (G.R. Gray); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(8): 19.

Jula [sic] *australis* Gould; Ellman 1861, *Zoologist* 19: 7472. Not *Sula australis* Stephens, 1826.

Dysporus serrator (G.R. Gray); Finsch 1867, *Journ. für Ornith.* 15: 339.

Sula serrata; Finsch 1882, *Ibis* 6 (4th series): 402. Unjustified emendation.

Sula serrator serrator (G.R. Gray); Mathews 1913, *Austral Avian Rec.* 2: 63.

Sula serrator dyotti Mathews, 1913: *Austral Avian Rec.* 2: 63 – Tasmania, Australia.

Morus serrator serrator (G.R. Gray); Mathews 1913, *List Birds Australia*: 98.

Sulita serrator serrator (G.R. Gray); Mathews & Iredale 1921, *Man. Birds of Australia* 1: 77.

Sulita serrator rex Mathews & Iredale, 1921: *Man. Birds of Australia* 1: 77 – New Zealand.

Morus serrator (G.R. Gray); Oliver 1930, *New Zealand Birds*, 1st edition: 207.

Sula bassana serrator (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 28.

Morus serrator rex; Howard & Moore 1980, *Complete Checklist Birds World*: 60.

Morus serrator (G.R. Gray); Checklist Committee 1990, *Checklist Birds N.Z.*: 79.

Pelecanus Sectator Solander, 1993: in Medway, *Notornis* 40: 66 – "Ocean which washes northern Australia. S.lat. 36–33 W.Long. 185–187", error for vicinity of the Three Kings Islands (*vide* Medway 1993, *Notornis* 40: 69).

Sula serrator rex (Mathews & Iredale); Medway 1993, *Notornis* 40: 66.

Australia (breeding on islets off Tasmania and south-east Australia), Philip and Nepean Islands (Norfolk Island group) and New Zealand (Marchant & Higgins 1990; J. Nelson 2005). In New Zealand, breeds on outlying islands from Manawatāwhi / Three Kings Islands to Hauraki Gulf, Bay of Plenty, and Tolaga Bay on the east coast of the North Island; Oaia, Motutara (Sugarloaf Rock at Muriwai Beach), and Karewa / Gannet Islands on the North Island west coast (Wodzicki *et al.* 1984). Cape Kidnappers (south end of Hawke Bay) and two colonies at Muriwai, opposite Motutara Island, are the only North Island mainland colonies (Wodzicki *et al.* 1984; B. Greene 2003). In the South Island, colonies are at Waimaru Bay (Pelorus Sound), Arapawa Island, Farewell Spit, The Nuggets, and Little Solander Island (Marchant & Higgins 1990; D. Brown & Wilson 2004). Adult birds range widely in New Zealand seas during winter; juveniles and some adults disperse to coastal waters of Australia, as far west as the Indian Ocean, with vagrants to South Africa and north to New Caledonia (Wodzicki & Stein 1958; Wodzicki 1967; Marchant & Higgins 1990; J. Moore 1999; C. Robertson & Stephenson 2005). Stragglers reach the Chatham Islands (including one breeding record; Imber 1994; Miskelly *et al.* 2006), Snares / Tini

Heke, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku (Kinsky 1969; Miskelly *et al.* 2001a; Miskelly, Elliott *et al.* 2020). Midden and Holocene deposits: North, South, and Chatham Islands (Millener 1991).

Genus *Sula* Brisson

Sula Brisson, 1760: *Ornithologie* 1: 60; 6: 494 – Type species (by tautonymy) *Sula leucogaster* Boddaert.

Dysporus Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 279. Unnecessary *nomen novum* for *Sula* Brisson, 1760.

Hemisula Mathews, 1913: *Austral Avian Rec.* 2: 55 – Type species (by original designation) *Sula leucogaster rogersi* Mathews.

Parasula Mathews, 1913: *Austral Avian Rec.* 2: 55 – Type species (by original designation) *Sula dactylatra bedouti* Mathews.

In his list of New Zealand birds, Gray (1862: 250) included “*Sula fiber*”, with the following localities: “Enderby’s Island; Lord Howe’s Island?”. We are unable to identify this species, so regard it as a *nomen dubium*.

► *Sula sula* (Linnaeus)

Red-footed Booby

Pelecanus Sula Linnaeus, 1766, *Syst. Nat., 12th edition, 1*: 218 – “in Pelago indico” = Barbados, West Indies (*fide* Grant & Mackworth-Praed 1933, *Bull. Brit. Ornith. Club* 53: 187).

Sula sula (Linnaeus); Verreaux & Des Murs 1860: *Rev. et Mag. de Zool.*: 442.

Three subspecies are recognised: *S. s. sula* breeding in the West Indies, Hispaniola, Puerto Rico, Virgin Islands, Dominica, Grenadines, Belize, Venezuela, on Fernando de Noronha, and possibly Ascension Island; *S. s. rubripes* breeding on many Indian Ocean and Pacific Ocean islands; *S. s. websteri* breeding on Revillagigedo Islands off Mexico, Cocos Island off Costa Rica, and Galápagos Islands (Dorst & Mougín 1979). Four records from New Zealand (Miskelly, Crossland *et al.* 2021). The first birds of this species from New Zealand (two at the Kermadec Islands / Rangitāhūa in Mar.–Apr. 2016; Miskelly, Crossland *et al.* 2017) were not identified to subspecies.

F. Hutton (1871: 49) listed “*Dysporus piscator* L. – red-legged gannet”, but the taxon *Pelecanus piscator* Linnaeus, 1758 is a *nomen dubium*. Therefore, Hutton’s citation cannot be assigned to any subspecies of *Sula sula*.

Sula sula rubripes Gould

Indo-Pacific Red-footed Booby

Sula rubripes Gould, 1838: *Synop. Birds Australia 4, App.*: 7 – “New South Wales” = Raine Island, northern Queensland (*fide* Mathews 1915, *Birds Australia* 4: 210).

Sula nicolli Grant & Mackworth-Praed, 1933: *Bull. Brit. Ornith. Club* 53: 118 – Gloriosa Island, Indian Ocean.

Sula sula rubripes Gould; del Hoyo *et al.* 1992: *Handb. Birds World* 1: 325.

A bird considered to be of this subspecies was found dead on Pakatoa Island, Hauraki Gulf, in May 2017 (Miskelly, Crossland *et al.* 2021; Auckland Museum specimen LB15822).

Sula sula websteri Rothschild

Eastern Pacific Red-footed Booby

Sula websteri Rothschild, 1898: *Bull. Brit. Ornith. Club* 54: 52 – “Clarion Island, Galapagos and the neighbouring seas” = Clarion Island, Revillagigedo Islands (*fide* Dorst & Mougín 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 186).

Sula piscatrix websteri Rothschild; Beebe 1951, *Galápagos: World’s End*, 2nd edition: 323, fig. 70.

Sula sula websteri Rothschild; del Hoyo *et al.* 1992: *Handb. Birds World* 1: 325.

A bird considered to be of this subspecies was present at the Muriwai gannet colony, west Auckland, for 5 weeks in early 2017 (Miskelly, Crossland *et al.* 2019).

► *Sula leucogaster* (Boddaert)

Brown Booby

Pelecanus Leucogaster Boddaert, 1783: *Tables des Planches Enluminées d’Histoire Naturelle de M. d’Aubenton*: 57, pl. 973 – Cayenne, South America.

Breeds on tropical islands of the Indian, Pacific, and Atlantic Oceans, and the Caribbean Sea. Four subspecies; three outside New Zealand region (Dorst & Mougín 1979, Carboneras 1992b): breeding on Atlantic Ocean and Caribbean islands (*S. l. leucogaster*) and on eastern Pacific islands (*S. l. brewsteri* Goss, 1888, and *S. l. etesiaca* Thayer & Bangs, 1905). All subspecies considered doubtfully distinct by some authors (e.g. Marchant & Higgins 1990).

Sula leucogaster plotus (J.R. Forster)

Brown Booby

Pelecanus Plotus J.R. Forster, 1844: in Lichtenstein *Descrip. Animalium*: 278 – near New Caledonia.

Sula fusca; Hamilton 1889, *Trans. Proc. N.Z. Inst.* 21: 128. Not *Sula fusca* Vieillot, 1825.

Sula sula; Buller 1906, *Suppl. Birds N.Z.* 2: 50. Not *Pelecanus sula* Linnaeus, 1766.

Hemisula leucogaster plotus (Forster); Mathews 1913, *List Birds Australia*: 99.

Sula leucogaster rogersi Mathews, 1913: *Austral Avian Rec.* 1: 189 – Bedout Island, Western Australia.

Sula leucogaster; Oliver 1930, *New Zealand Birds*, 1st edition: 205. Not *Pelecanus Leucogaster* Boddaert, 1783.

Sula leucogaster plotus (Forster); Checklist Committee 1953, *Checklist N.Z. Birds*: 28.

Breeds on tropical islands in the Pacific and Indian Oceans, also the Red Sea and Gulf of Aden (Dorst & Mougín 1979). Reaches New Zealand waters probably every year (e.g. Powlesland & Powlesland 1993; Veitch *et al.* 2004; Miskelly, Crossland *et al.* 2017), rarely south to about 45°S (Pierce 1969). Sometimes these vagrants reside in an area for several months (e.g. Gaze 1975; Guest 1992; G. Taylor & Parrish 1992, 1994a) and may associate with gannets (e.g. Stein 1952;

Hawkins *et al.* 1992; Hawkins & Cook 1994; Miskelly, Crossland *et al.* 2017). A banded juvenile from Johnston Atoll was collected offshore from Okarito in 1986 (NMNZ OR.023569).

► ***Sula dactylatra* Lesson**

Masked Booby

Sula dactylatra Lesson, 1831: *Traité d'Ornith.* 8: 601 – Ascension Island, Atlantic Ocean.

Also known as the blue-faced booby. Four subspecies; all but one (*S. d. tasmani*) outside the New Zealand region (Dorst & Mougín 1979; Pitman & Jehl 1998): Atlantic Ocean and Caribbean islands (*S. d. dactylatra*), Indian Ocean and Arabian Sea islands (*S. d. melanops* Heuglin, 1859), and islands in the eastern Indian Ocean, the Banda and Coral Seas and much of the Pacific Ocean (*S. d. personata* Gould, 1846). A fifth race, from the eastern Indian Ocean, – *S. d. bedouti* Mathews, 1913 – is recognised by some authors (e.g. Marchant & Higgins 1990; R. O'Brien & Davies 1990; Dickinson 2003). The Nazca booby (*Sula granti* Rothschild, 1902), breeding on some eastern Pacific islands, was formerly regarded as a race of *S. dactylatra* (Pitman & Jehl 1998). Masked boobies straggle south to northern New Zealand, but their subspecific identity or identities have not been determined: Karewa / Gannet Island, 1883; west of North Cape (Otu), 1964; two, Firth of Thames, 1977–78 (Powlesland & Pickard 1992); near Hamilton, Jul. 1983 (J. Moore 1985a); beach-wrecked near Dargaville, May 1988 (Powlesland & Pickard 1992); Paraparaumu Beach, Sep. 1995 (NMNZ OR.025810); Nine Mile Beach, Buller (Scofield 2008). Recorded as Holocene remains at the Chatham Islands (Millener 1991).

***Sula dactylatra tasmani* van Tets, Meredith, Fullagar & Davidson**

Masked Booby

Sula piscator; G.R. Gray 1862, *Ibis* 4: 250. Not *Pelecanus piscator* Linnaeus, 1758 = *nomen dubium*.

Sula cyanops; Cheeseman 1889, *Trans. Proc. N.Z. Inst.* 21: 121. Not *Dysporus cyanops* Sundevall, 1837.

Parasula dactylatra personata; Mathews 1913, *List Birds Australia*: 99. Not *Sula personata* Gould, 1846.

Sula dactylatra; Oliver 1930, *New Zealand Birds*, 1st edition: 203. Not *Sula dactylatra* Lesson, 1831.

Sula dactylatra personata; Checklist Committee 1953, *Checklist N.Z. Birds*: 28. Not *Sula personata* Gould, 1846.

Sula tasmani van Tets, Meredith, Fullagar & Davidson, 1988: *Notornis* 35: 45 – Norfolk Island.

Sula dactylatra fullagari O'Brien & Davies, 1990: *Marine Ornithology* 18: 2 – Lord Howe Island.

Sula dactylatra tasmani van Tets, Meredith, Fullagar & Davidson; McAllan, Curtis, Hutton & Cooper 2004, *Australian Field Ornithology* 21(Suppl.): 6.

Local subspecies *S. d. tasmani* breeds on islands in the Lord Howe, Norfolk Island, and Kermadec Islands / Rangitāhua groups (R. O'Brien & Davies 1990). This subspecies was first described from Holocene material as an extinct species (van Tets *et al.* 1988) but is now considered to be conspecific with the extant masked booby (Holdaway & Anderson 2001; Holdaway *et al.* 2001; Worthy & Holdaway 2002; McAllan *et al.* 2004; Priddel *et al.* 2005). Ranges mainly north to the east coast of Australia, New Caledonia, Vanuatu (Marchant & Higgins 1990; Priddel *et al.* 2005; Anon. 2006a), Fiji (Anon. 2004a), and Tonga (J. Moore 1999). Sometimes called the Tasman booby (e.g. van Tets *et al.* 1988).

Family ANHINGIDAE Lesson: Darters

Anhingas Lesson, 1831: *Traité d'Ornith.* 8: 598 – Type genus *Anhinga* Brisson, 1760.

Genus *Anhinga* Brisson

Anhinga Brisson, 1760: *Ornithologie* 1: 60; 6: 476 – Type species (by tautonymy and monotypy) *Plotus anhinga* Linnaeus = *Anhinga anhinga* (Linnaeus).

Plotus Gunnerus, 1761: *Trondh. Selskabs Skrifter* 1: 263 – Type species (by subsequent designation) *Plotus anhinga* Linnaeus = *Anhinga anhinga* (Linnaeus). Suppressed and invalid (*vide* ICZN 1973, Opinion 999. *Bull. Zool. Nomenclature* 30(2): 80).

► ***Anhinga melanogaster* Pennant**

Darter

Anhinga melanogaster Pennant, 1769: *Indian Zool.*: 13, pl. 12 – Sri Lanka, and Java, Indonesia.

Three or four subspecies usually recognised (Marchant & Higgins 1990; del Hoyo *et al.* 1992; Johnsgard 1993; Christidis & Boles 1994; Dickinson 2003): *A. m. melanogaster* (India to south-east Asia, Sumatra, Java, Borneo, Philippines, and Sulawesi), *A. m. rufa* (Daudin, 1802) (Africa and Middle East), *A. m. novaehollandiae* (New Guinea and Australia), and sometimes *A. m. vulsini* Bangs, 1918 (Madagascar).

***Anhinga melanogaster novaehollandiae* (Gould)**

Australian Darter

Plotus Novae-Hollandiae Gould, 1847: *Proc. Zool. Soc. London 1847* (15): 34 – “Southern coast of Australia” = New South Wales (*vide* Mathews 1913, *List Birds Australia*: 97).

Plotus novae-hollandiae Gould; Hutton 1904, *Index Faunae N.Z.*: 39.

Plotus novaehollandiae novaehollandiae Gould; Mathews & Iredale 1913, *Ibis* 1 (10th series): 416.

Anhinga novae-hollandiae (Gould); Stidolph 1927, *Emu* 26: 215.

Anhinga novaehollandiae (Gould); Oliver 1930, *New Zealand Birds*, 1st edition: 201.

Anhinga rufa novaehollandiae (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 31.

Anhinga melanogaster novaehollandiae (Gould); Cramp *et al.* 1977, *Birds Western Palearctic* 1: 223.

Anhinga melanogaster rufa; Checklist Committee 1990, *Checklist Birds N.Z.*: 133. Not *Plotus rufus* Daudin, 1802.

Australia and New Guinea. Four or five stragglers recorded in New Zealand: possibly seen at Lake Ohau in “summer” 1862; one dead Hokitika, Jan. 1874 (Buller 1875a; Oliver 1955; van Tets & Scarlett 1972). Also live birds: Waiharara, Northland, Dec. 1992 (Medway 2000a); Lake Daniell, Nelson, Nov. 2003 (Scofield 2005a); and Wellington Harbour, Dec. 2003 (Medway 2004b). This race is sometimes considered to be a full species (Marchant & Higgins 1990; del Hoyo *et al.* 1992).

Family PHALACROCORACIDAE Reichenbach: Cormorants and Shags | Kawau

Phalacrocoracidae Reichenbach, 1849: *Avium Syst. Nat.*: 6 – Type genus *Phalacrocorax* Brisson, 1760.

We follow the classification system proposed by Kennedy & Spencer (2014). This includes placement of little shag in the genus *Microcarbo*, and spotted shag and Pitt Island shag in the genus *Phalacrocorax*.

Genus *Microcarbo* Bonaparte

Microcarbo Bonaparte, 1855: *Consp. Av.* 2: 177. *Nomen nudum*.

Microcarbo Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 577 – Type species (by original designation) *Pelecanus pygmaeus* Pallas = *Microcarbo pygmaeus* (Pallas).

Haliëtor Heine, 1860: *Journ. für Ornith.* 8: 202 – Type species (by original designation) *Pelecanus pygmaeus* Pallas = *Microcarbo pygmaeus* (Pallas).

► *Microcarbo melanoleucos* (Vieillot)

Little Pied Cormorant

Three subspecies: *M. m. melanoleucos* in south-east Asia, New Guinea, Australia, and some western Pacific Islands, *M. m. brevicauda* (Mayr, 1931) on Rennell Island, Solomon Islands, and *M. m. brevirostris* in New Zealand (Dorst & Mougín 1979; Marchant & Higgins 1990). Some authors consider *M. m. brevirostris* to be the same taxon as *M. m. melanoleucos* (e.g. Dowding & Taylor 1987; M. Taylor 1987) but others regard it as a distinct species (see Marchant & Higgins 1990; del Hoyo *et al.* 1992). One record from Chatham Island in 1988–89 of uncertain subspecies (Miskelly *et al.* 2006).

Microcarbo melanoleucos melanoleucos (Vieillot)

Little Pied Cormorant

Hydrocorax melanoleucos Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 88 – “Australasie”, restricted to New South Wales, Australia (*vide* Mathews 1912, *Novit. Zool.* 18(3): 241).

Phalacrocorax flavirhynchus Gould, 1838: *Proc. Zool. Soc. London 1837* (5): 157 – New South Wales, Australia.

Graculus flavirostris G.R. Gray, 1843: *in* E. Dieffenbach, *Travels in N.Z.* 2: 201. Unjustified emendation.

Graculus melanoleucos (Vieillot); G.R. Gray 1862, *Ibis* 4: 251.

Phalacrocorax melanoleucos (Vieillot); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 173.

Phalacrocorax melanoleucos melanoleucos (Vieillot); Marchant & Higgins 1990, *HANZAB 1*: 902.

Microcarbo melanoleucos (Vieillot); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 20, 103.

Australia, south-east Asia, New Guinea, and some western Pacific Islands (Marchant & Higgins 1990). Bred on Campbell Island / Motu Ihupuku 1967–69 (Kinsky 1969; Marchant & Higgins 1990; del Hoyo *et al.* 1992). At least seven pied birds on Snares Islands / Tini Heke in 1976–77 were considered to have originated in Australia (Sagar 1977). Several other records from Snares Islands / Tini Heke were also pied birds: 1975 and sightings 1982–85 (Horning 1976; Miskelly *et al.* 2001a; NMNZ OR.018703). Vagrant little shags on Norfolk Island in 1978, 1979, and 1996–97 were apparently pied (J. Moore 1981, 1999; Schodde *et al.* 1983), so most likely from Australia. Occasional immigration to mainland New Zealand from Australia has been suggested by several authors (Buller 1887–88; Dowding & Taylor 1987; Marchant & Higgins 1990; Secker 1994).

Microcarbo melanoleucos brevirostris (Gould)

Little Shag | Kawaupaka

Phalacrocorax brevirostris Gould, 1837: *Proc. Zool. Soc. London 1837* (5): 26 – no locality = New Zealand (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 415).

Graculus brevirostris (Gould); G.R. Gray 1845, *in* Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(8): 20.

Graculus melanoleucos; G.R. Gray 1845, *in* Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(8): 20. Not *Hydrocorax melanoleucos* Vieillot, 1817.

Carbo flavagula Peale, 1848: *U.S. Expl. Exped.* 8: 270, 336 – Bay of Islands, Northland.

Haliaeetus brevirostris (Gould); Bonaparte 1855, *Consp. Gen. Avium* 2: 178.

Haliaeetus brevirostris (Gould); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 577.

Carbo brevirostris (Gould); Cassin 1858, *U.S. Expl. Exped. Ornithology*: 375.

Pelecanus carboides; Ellman 1861, *Zoologist* 19: 7472. Not *Phalacrocorax carboides* Gould, 1838.

Graculus brevirostris (Gould); G.R. Gray 1862, *Ibis* 4: 252.

Phalacrocorax finschii Sharpe, 1875: *in* Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds – I (Appendix)*: 34 – New Zealand.

Graculus finschii (Sharpe); Finsch 1876, *Trans. Proc. N.Z. Inst.* 8: 203. Unjustified emendation.

Microcarbo melanoleucos brevirostris (Gould); Mathews & Iredale 1913, *Ibis* 1 (10th series): 415.

Phalacrocorax melanoleucos; Oliver 1930, *New Zealand Birds*, 1st edition: 184. Not *Hydrocorax melanoleucos* Vieillot, 1817. Unjustified emendation.

Haliëtor melanoleucos brevirostris (Gould); Peters 1931, *Check-list Birds World 1*: 93.

Microcarbo brevirostris (Gould); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 143.

Phalacrocorax melanoleucos brevirostris Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 29.

Breeds from North Cape (Otau) to Stewart Island / Rakiura and on nearby offshore islands. Vagrant to Snares Islands / Tini Heke in the 1960s, where it may have bred (Warham 1967; Warham & Keeley 1969). Apparently this subspecies also reached the Auckland Islands / Maukahuka in 1942, and Campbell Island / Motu Ihupuku in 1958 (Bailey & Sorensen 1962; Miskelly, Elliott *et al.* 2020). A dimorphic subspecies with some intermediate variants; the relative scarcity of the latter suggests that the white-breasted phase may be maintained by occasional immigration of *Ph. m. melanoleucos* from Australia (Dowding & Taylor 1987). In Holocene deposits and middens in North, South, and Stewart Islands (e.g. Horn 1983; Worthy 1998c, 1998d).

Genus *Phalacrocorax* Brisson

Phalacrocorax Brisson, 1760: *Ornithologie 1*: 60; 6: 511 – Type species (by tautonymy) *Phalacrocorax* Brisson = *Pelecanus carbo* Linnaeus = *Phalacrocorax carbo* (Linnaeus).

Carbo La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 15 – Type species (by tautonymy) *Pelecanus carbo* Linnaeus.

Haliaeus Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 279. Unnecessary *nomen novum* for *Phalacrocorax* Brisson, 1760.

Hydrocorax Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 63 – Type species (by subsequent designation) *Pelecanus carbo* Linnaeus. Junior homonym of *Hydrocorax* Brisson, 1760.

Haliaeus Schinz, 1825: in Cuvier's *Thierreich 4*: 570. Unjustified emendation.

Graucalus G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 101 – Type species (by original designation) *Pelecanus carbo* Linnaeus, 1758. Junior homonym of *Graucalus* Cuvier, 1816.

Gracalus G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 19. Unjustified emendation.

Ecmeles Gistel, 1848: *Naturg. Thierreichs*: 9. Unnecessary *nomen novum* for *Hydrocorax* Vieillot, 1816.

Graculus Reichenbach, 1850: *Novit. Synop. Avium*: no 2304, pl. 278 – Type species (by original designation) *Carbo javanicus* Horsfield = *Phalacrocorax niger* (Vieillot).

Hypoleucus Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 7 – Type species (by original designation) *Pelecanus varius* Gmelin = *Phalacrocorax varius* (Gmelin).

Stictocarbo Bonaparte, 1855: *Compt. Rend. Séa. Acad. Sci., Paris 41*: 1115 – Type species (by subsequent designation) *Pelecanus punctatus* Sparrman = *Phalacrocorax punctatus* (Sparrman).

Enygrotheres Heine & Reichenow, 1890: *Nom. Mus. Hein. Ornith.*: 353 – Type species (by original designation) *Pelecanus punctatus* Sparrman = *Phalacrocorax punctatus* (Sparrman).

► *Phalacrocorax carbo* (Linnaeus)

Great Cormorant

Pelecanus carbo Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 133 – Europe, restricted to the “rock nesting form of the north Atlantic Ocean” (*vide* Hartert 1920, *Vögel Pal. Fauna*: 1387).

Widespread. Six subspecies widely accepted: Europe and North America, *Ph. c. carbo*; Europe and Asia, *Ph. c. sinensis* (Blumenbach, 1798); Japan, *Ph. c. hanedae* Kuroda, 1925; north-west Africa, *Ph. c. maroccanus* Hartert, 1906; Africa, *Ph. c. lucidus* (Lichtenstein, 1823); and Australasia, *Ph. c. novaehollandiae* (see Dorst & Mougouin 1979; del Hoyo *et al.* 1992; Dickinson 2003). An additional race from north-east Africa (*Ph. c. lugubris* Rüppell, 1845) is sometimes accepted (Dickinson 2003). The form in Australasia (*Ph. c. novaehollandiae*) is sometimes considered to be a full species (e.g. Buller 1905–06; Siegel-Causey 1988; del Hoyo *et al.* 1992) with one subspecies in Australia, *Ph. n. novaehollandiae* – not *Ph. n. carbooides* Gould, 1838 *contra* Marchant & Higgins (1990: 810) and del Hoyo *et al.* (1992) – and another in New Zealand, *Ph. n. steadii* (Mathews & Iredale, 1913) (Dorst & Mougouin 1979). However, *Pelecanus major* Ellman, 1861 is a senior synonym for the New Zealand form. The African race *Ph. c. lucidus* is also sometimes considered to be a full species (del Hoyo *et al.* 1992). The six widely used races are accepted here, pending a full taxonomic review of the group.

Phalacrocorax carbo novaehollandiae Stephens

Black Shag | Māpunga

Phalacrocorax Novaehollandiae Stephens, 1826: in Shaw, *General Zool.* 13(1): 93 – New South Wales, Australia.

Phalacrocorax carbooides Gould, 1838: *Proc. Zool. Soc. London 1837* (5): 156 – Tasmania, Australia.

Graucalus carbooides (Gould); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201.

Gracalus carbooides (Gould); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 20.

Pelecanus flavirostris? Forster; Ellman 1861, *Zoologist 19*: 7472. Not *Phalacrocorax flavirostris* G.R. Gray, 1843.

Pelecanus major Ellman, 1861: *Zoologist 19*: 7472 – New Zealand.

Graculus carbooides (Gould); G.R. Gray 1862, *Ibis 4*: 251.

Graculus carbo; Finsch 1870, *Journ. für Ornith.* 18: 375. Not *Pelecanus carbo* Linnaeus, 1758.

Gaculus [sic] *novaehollandiae* (Stephens); G.R. Gray 1871, *Hand-list Birds 3*: 127.

Phalacrocorax (*Graculus*) *carbo*; Potts 1872, *Zoologist Jun. 1872*: 3092.

Phalacrocorax carbo; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds –1 (Appendix)*: 34. Not *Pelecanus carbo* Linnaeus, 1758.

Phalacrocorax novaehollandiae var. *major* Forbes, 1892: *Trans. Proc. N.Z. Inst.* 24: 189 – no locality = Te Aute Swamp, Hawke's Bay (*vide* Worthy 2000, *Journ. Royal Soc. N.Z.* 30: 10). Junior secondary homonym of *Pelecanus major* Ellman, 1861.

Phalacrocorax major (Ellman); Rothschild 1905, *Proc. IVth International Ornith. Congress*: 195.

Carbo carbo steadii Mathews & Iredale, 1913: *Ibis 1* (10th series): 411 – New Zealand.

Phalacrocorax carbo steadi (Mathews & Iredale); Oliver 1930, *New Zealand Birds*, 1st edition: 176.

Phalacrocorax carbosteadii; Stead 1932, *Life Histories New Zealand Birds*: 1. Unjustified emendation.

Phalacrocorax carbo novaehollandiae Stephens; Checklist Committee 1953, *Checklist N.Z. Birds*: 29.

Breeds throughout the main islands of New Zealand and on the Chatham Islands; straggling to Norfolk, Kermadec, Snares / Tini Heke, Auckland / Maukahuka, Campbell / Motu Ihupuku, and Macquarie Islands; also resident in Australia, Solomon Islands, and New Caledonia (Marchant & Higgins 1990; Barré & Géraux 2004; Veitch *et al.* 2004; Miskelly, Elliott *et al.* 2020). Common in Holocene deposits and middens, North and South Islands; a few Holocene records from Stewart Island / Rakiura and Chatham Islands (Millener 1991; Worthy 1998c).

► ***Phalacrocorax varius*** (Gmelin)

Pied Cormorant

Two subspecies: *Ph. v. varius* in New Zealand and *Ph. v. hypoleucos* (Brandt, 1837) in Australia (Marchant & Higgins 1990).

Phalacrocorax varius varius (Gmelin)

Pied Shag | Kāruhiruhi

Pelecanus varius Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 576. Based on the “Pied Shag” of Latham 1785, *Gen. Synop. Birds* 3(2): 605 – Queen Charlotte Sound, Marlborough.

Graucalus varius (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201.

Pelecanus pica J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 104 – Queen Charlotte Sound, Marlborough.

Graculus varius (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’*, *Birds* 1(8): 19.

Carbo fucosus Peale, 1848: *U.S. Expl. Exped.* 8: 268, 336 – Bay of Islands, Northland.

Hypoleucus varius (Gmelin); Reichenbach 1853, *Avium Syst. Nat.* 2(1): 7.

Carbo hypoleucus; Cassin 1858, *U.S. Expl. Exped. Ornithology*: 372. Not *Carbo hypoleucos* Brandt, 1837.

Carbo leucogaster; Cassin 1858, *U.S. Expl. Exped. Ornithology*: 372. Not *Hydrocorax leucogaster* Vieillot, 1817.

Graculus varius (Gmelin); G.R. Gray 1862, *Ibis* 4: 251.

Phalacrocorax varius (Gmelin); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 328.

Graculus leucogaster; Finsch 1882, *Ibis* 6 (4th series): 402. Not *Hydrocorax leucogaster* Vieillot, 1817.

Hypoleucus varius varius (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 411.

Phalacrocorax varius varius (Gmelin); Oliver 1930, *New Zealand Birds*, 1st edition: 181.

Breeds on coasts, harbours, estuaries, and offshore islands, from Manawatāwhi / Three Kings Group to Stewart Island / Rakiura (Marchant & Higgins 1990; C. Robertson *et al.* 2007). Straggles to Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Midden and Late Pleistocene or Holocene deposits, North, South, and Stewart Islands (Millener 1991; Worthy 1998c; Worthy & Grant-Mackie 2003).

► ***Phalacrocorax sulcirostris*** (Brandt)

Little Black Shag | Kawau Tūi

Carbo sulcirostris Brandt, 1837: *Bull. l’Acad. Imp. Sci., St Petersburg* 3: 56 – “Terra australis”, restricted to New South Wales, Australia (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 415).

Carbo purpuragula Peale, 1848: *U.S. Expl. Exped.* 8: 269, 336 – Manua Bay, Raglan, Waikato.

Microcarbo stictocephalus Bonaparte, 1857: *Consp. Gen. Avium* 2: 178 – New South Wales, Australia.

Graculus stictocephalus (Bonaparte); G.R. Gray 1862, *Ibis* 4: 252.

Graculus sulcirostris Brandt [sic]; Anon. 1870, *Cat. Colonial Mus.*: 76.

Graculus sulcirostris (Brandt); Finsch 1872, *Journ. für Ornith.* 20: 258.

Graculus? sulcirostris (Brandt); Finsch 1874, *Journ. für Ornith.* 22: 174, 214.

Phalacrocorax purpuragula (Peale); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’*, *Birds – I (Appendix)*: 34.

Phalacrocorax sulcirostris (Brandt); Hutton 1904, *Index Faunae N.Z.*: 33.

Mesocarbo ater purpuragula (Peale); Mathews & Iredale 1913, *Ibis* 1 (10th series): 415.

Mesocarbo sulcirostris purpuragula (Peale); Mathews 1929, *Ibis* 5 (12th series): 699.

Breeds in Indonesia, New Guinea, Australia, and New Zealand (Marchant & Higgins 1990). In New Zealand, widely distributed on lakes and estuaries of the North Island; numbers increasing (e.g. H. Robertson 1992) and now regularly seen in the South Island (e.g. Edgar 1972b; Bull *et al.* 1985; W. Cooper 1991; O’Donnell & West 1994, 1995; O’Donnell 2001; Pollock 2003); rarely south to Stewart Island / Rakiura (Bull *et al.* 1985). Breeds at scattered sites from Northland to Wairarapa, especially in Waikato and Rotorua districts (Oliver 1955; Marchant & Higgins 1990; H. Robertson 1992; Powlesland *et al.* 1993); disperses in winter, especially to the coast (Powlesland *et al.* 1993). Vagrant at Norfolk Island, Snares Islands / Tini Heke, and Auckland Islands / Maukahuka (Marchant & Higgins 1990; J. Moore 1999; Miskelly *et al.* 2015; Miskelly, Elliott *et al.* 2020) and probably at the Kermadec Islands / Rangitāhua (Morrison 1979; Veitch *et al.* 2004). The species probably arrived in New Zealand after human colonisation; no Holocene or midden records (Holdaway *et al.* 2001).

► ***Phalacrocorax punctatus*** (Sparrman)

Spotted Shag | Kawau Tikitiki

Pelicanus [sic] *punctatus* Sparrman, 1786: *Mus. Carlsonianum* 1: no X, pl. 10 – Queen Charlotte Sound, Marlborough.

Pelecanus naevius Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 575 – Queen Charlotte Sound, Marlborough.

Phalacrocorax naevius (Gmelin); Cuvier 1817, *Règne Anim.* 1: 525.

- Hydrocorax dilophus* Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 85. Unnecessary *nomen novum* for *Pelecanus naevius* Gmelin, 1789.
- Graucalus punctatus* (Sparrman); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201.
- Graculus punctatus* (Forster) [sic]; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(8): 20.
- Graculus naevius* (Gmelin); Reichenbach 1850, *Vollst. Naturg. Schwim. Aves Natatores*: pl. 33, fig. 369.
- Stictocarbo punctatus* (Sparrman); Bonaparte 1856, *Compt. Rend. Séa. Acad. Sci., Paris* 43: 574.
- Pelecanus cirrhatus* Gray; Ellman 1861, *Zoologist*: 19: 7472. Not *Pelecanus cirrhatus* Gmelin, 1789.
- Graculus punctatus* (Sparrman); G.R. Gray 1862, *Ibis* 4: 252.
- Phalacrocorax punctatus* (Sparrman); Hutton 1904, *Index Faunae N.Z.*: 33.
- Phalacrocorax punctatus*; Ogilvie-Grant 1905, *Ibis* 5 (8th series): 567. Not *Pelecanus punctatus* Sparrman, 1786.
- Stictocarbo punctatus sassi* Mathews, 1930. *Bull. Brit. Ornith. Club* 50: 19 – North Island.
- Stictocarbo steadi* Oliver, 1930: *Trans. N.Z. Inst.* 61: 139 – Otago. Junior secondary homonym of *Carbo steadi* Mathews & Iredale, 1913.
- Stictocarbo* [*punctatus*] *steadi* Oliver; Mathews 1931, *Ibis* 1 (13th series): 45.
- Phalacrocorax oliveri* Mathews, 1931: *Bull. Brit. Ornith. Club* 51: 18. *Nomen novum* for *Stictocarbo steadi* Oliver, 1930.
- Phalacrocorax punctatus oliveri* Mathews, 1930 [sic]; Peters 1931, *Check-list Birds World* 1: 92.
- Phalacrocorax* (*Stictocarbo*) *punctatus* (Sparrman); Checklist Committee 1953, *Checklist N.Z. Birds*: 30.
- Phalacrocorax* (*Stictocarbo*) *punctatus steadi*; Checklist Committee 1953, *Checklist N.Z. Birds*: 31. Not *Carbo steadi* Mathews & Iredale, 1913.
- Stictocarbo punctatus* (Sparrman); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.
- Stictocarbo punctatus steadi*; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33. Not *Carbo steadi* Mathews & Iredale, 1913.
- Leucocarbo punctatus* (Sparrman); van Tets 1976, *Proceedings 16th International Orn. Congress*: 122.
- Phalacrocorax punctatus* (Sparrman); Marchant & Higgins 1990, *HANZAB* 1: 838.
- Leucocarbo punctatus oliveri* (Mathews); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 315.
- Stictocarbo punctatus oliveri* (Mathews); Tennyson & Bartle 2008, *Tuhinga* 19: 195.

In the North Island, breeds on islands at the east end of Waiheke Island, and on Wellington islands (Kapiti, Makaro / Ward, Matiu / Somes, and Mokopuna) (Tennyson 1991b; H. Robertson 1992; Miskelly 2000; Cotter & Nicholson 2005; Rawlence, Rayner *et al.* 2019). In the South Island, breeds in the Marlborough Sounds, on Banks Peninsula, in Otago, along the South Island West Coast, (including The Steeples, Te Miko, Perpendicular Point, Motukiekie Rocks, Point Elizabeth, and Open Bay Islands), and on Stewart Island / Rakiura and its inshore islands; on Codfish / Whenua Hou, Omaui, Pig, and Centre Islands (Stead 1948; Oliver 1955; Kinsky 1970b; Edgar 1972b; W. Cooper 1991; W. Cooper & McClelland 1992; O'Donnell & West 1992; W. Cooper 1994; C. Robertson *et al.* 2007). Near Auckland, formerly bred on other islands of the inner Hauraki Gulf (The Noises, Motukawao group), Auckland west coast (Te Henga (Bethells Beach), Oaia Island), Waikato coast (Girdwood Point near Waikaretu) (Turbott 1956b; Checklist Committee 1970; A. Rowe *et al.* 2000; Rawlence, Rayner *et al.* 2019). Vagrant inland and to Snares Islands / Tini Heke and Macquarie Island (Buller 1887–88: 154; Ogilvie-Grant 1905; Oliver 1955; G. Taylor & Parrish 1991; Miskelly *et al.* 2001a). Common in midden and Late Pleistocene or Holocene deposits of North, South, and Stewart Islands (Millener 1991; Worthy 1998c; Worthy & Grant-Mackie 2003).

We follow Rawlence, Rayner *et al.* (2019) in not recognising any subspecies.

► *Phalacrocorax featherstoni* Buller

Pitt Island Shag | Kawau o Rangihau

- Graculus africanus*; Hutton 1872, *Ibis* 2 (3rd series): 249. Not *Pelecanus africanus* Gmelin, 1788.
- Phalacrocorax africanus*; Hutton 1873, *Trans. Proc. N.Z. Inst.* 5: 224. Not *Pelecanus africanus* Gmelin, 1788.
- Phalacrocorax featherstoni* Buller, 1873: *Ibis* 3 (3rd series): 90 – Chatham Islands.
- Graculus Featherstoni* (Buller); Finsch 1874, *Journ. für Ornith.* 22: 174, 215.
- Stictocarbo featherstoni* (Buller); Mathews & Iredale 1913, *Ibis* 1 (10th series): 414.
- Phalacrocorax* (*Stictocarbo*) *punctatus featherstoni* Buller; Checklist Committee 1953, *Checklist N.Z. Birds*: 31.
- Stictocarbo punctatus featherstoni* (Buller); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.
- Leucocarbo featherstoni* (Buller); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.
- Phalacrocorax punctatus featherstoni* Buller; Dorst & Mougín 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 172.
- Stictocarbo featherstoni* (Buller); Siegel-Causey 1988, *Condor* 90: 892.
- Leucocarbo* (*punctatus*) *featherstoni* (Buller); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 321.

Chatham Islands (M. Bell & Bell 2000b; Bester & Charteris 2005). Recorded from Holocene dune and midden deposits (Millener 1991). Rangihau is a proper noun and should have an initial capital.

Genus *Leucocarbo* Bonaparte

- Leucocarbo* Bonaparte, 1857: *Consp. Gen. Avium* 2: 176 – Type species (by subsequent designation) *Carbo bougainvillii* Lesson = *Leucocarbo bougainvillii* (Lesson).
- Euleucocarbo* Voisin, 1973: *Notornis* 20: 268 – Type species (by original designation) *Leucocarbo* (*Euleucocarbo*) *carunculatus* (Gmelin). As a subgenus of *Leucocarbo*.

Nesocarbo Voisin, 1973: *Notornis* 20: 268 – Type species (by original designation) *Leucocarbo* (*Nesocarbo*) *campbelli* (Filhol). As a subgenus of *Leucocarbo*.

Notocarbo Siegel-Causey, 1988: *Condor* 90: 891 – Type species (by original designation) *Notocarbo atriceps atriceps* (King) = *Leucocarbo atriceps atriceps* (King).

The species sequence is based on phylogenetic trees in Rawlence, Till *et al.* (2017) and Rawlence *et al.* (2022).

► ***Leucocarbo ranfurlyi*** (Ogilvie-Grant)

Bounty Island Shag

Phalacrocorax ranfurlyi Ogilvie-Grant, 1901: *Bull. Brit. Ornith. Club* 11: 66 – Bounty Islands.

Hypoleucus campbelli ranfurlyi (Ogilvie-Grant); Mathews & Iredale 1913, *Ibis* 1 (10th series): 413.

Phalacrocorax carunculatus ranfurlyi Ogilvie-Grant; Peters 1931, *Check-list Birds World* 1: 91.

Phalacrocorax (*Leucocarbo*) *campbelli ranfurlyi* Ogilvie-Grant; Checklist Committee 1953, *Checklist N.Z. Birds*: 30.

Leucocarbo campbelli ranfurlyi (Ogilvie-Grant); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.

Leucocarbo ranfurlyi (Ogilvie-Grant); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.

Phalacrocorax campbelli ranfurlyi Ogilvie-Grant; Dorst & Mougín 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 177.

Euleucocarbo ranfurlyi (Ogilvie-Grant); Siegel-Causey 1988, *Condor* 90: 892.

Leucocarbo (*carunculatus*) *ranfurlyi* (Ogilvie-Grant); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 283.

Breeds only on the Bounty Islands; possible vagrant at Antipodes Islands (Warham & Bell 1979; C. Robertson & van Tets 1982; G. Taylor 2000a).

► †***Leucocarbo septentrionalis*** Rawlence, Till, Easton, Spencer, Schuckard, Melville, Scofield, Tennyson, Rayner, Waters & Kennedy

Kohatu Shag | Kawau Kōhatu

Leucocarbo carunculatus; Worthy 1996, *New Zealand Journ. Zool.* 23(1): 95. Not *Pelecanus carunculatus* Gmelin, 1789.

Leucocarbo septentrionalis Rawlence, Till, Easton, Spencer, Schuckard, Melville, Scofield, Tennyson, Rayner, Waters & Kennedy, 2017: *Molec. Phylogen. Evolution* 115: 207 – Tokerau Beach, Doubtless Bay, Northland.

This extinct species was described by Rawlence, Till *et al.* (2017). It is known only from coastal Holocene bone deposits in Northland (Rawlence, Till *et al.* 2017). The Māori name should have a macron as shown here (and as gifted by Ngāti Kuri) – use of a macron was not permitted in the journal where the species was first named.

► ***Leucocarbo carunculatus*** (Gmelin)

New Zealand King Shag | Kawau Pāteketeke

Pelecanus carunculatus Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 576. Based on the “Carunculated Shag” of Latham 1785, *Gen. Synop. Birds* 3(2): 603 – Queen Charlotte Sound, Marlborough.

Pelecanus cirrhatus Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 576 – Queen Charlotte Sound, Marlborough.

Hydrocorax cirratus (Gmelin); Vieillot 1817, *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 84. Unjustified emendation.

Pelecanus cirratus Gmelin; Dumont 1818, in Levrault, *Dict. Sci. Nat.* 10: 453. Unjustified emendation.

Phalacrocorax cirrhatus (Gmelin); Stephens 1826, in Shaw, *General Zool.* 13(1): 95.

Graucalus carunculatus (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201.

Graucalus cirrhatus (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201.

Graculus cirrhatus (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(8): 19.

Graculus cirrhatus (Gmelin); G.R. Gray 1862, *Ibis* 4: 251.

Phalacrocorax carunculatus (Gmelin); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 332.

Graculus carunculatus (Gmelin); Finsch 1874, *Journ. für Ornith.* 22: 174.

Phalacrocorax finschii Buller, 1876: *Trans. Proc. N.Z. Inst.* 8: 197, 417 – Queen Charlotte Sound, Marlborough. Junior primary homonym of *Phalacrocorax finschii* Sharpe, 1875 = *Microcarbo melanoleucos brevirostris* (Gould).

Phalacrocorax cirrhatus (Gmelin); Hutton 1879, *Trans. Proc. N.Z. Inst.* 6: 336. In part.

Hypoleucus carunculatus carunculatus (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 412.

Phalacrocorax (*Leucocarbo*) *carunculatus carunculatus* (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 29.

Leucocarbo carunculatus carunculatus (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 32.

Leucocarbo carunculatus (Gmelin); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.

Phalacrocorax carunculatus carunculatus (Gmelin); Dorst & Mougín 1979, in Peters, *Check-list Birds World* 1 (2nd edition): 176.

Euleucocarbo carunculatus (Gmelin); Siegel-Causey 1988, *Condor* 90: 892.

Breeds only on islands on the western side of Cook Strait (i.e. outer Marlborough Sounds): White Rocks, Sentinel Rock, Duffers Reef, North Trio, Stewart (Tekuru Kuru; Marlborough), and Rahuinui Islands (A. Nelson 1971; Medway 1987; Schuckard 1994, 2006). Vagrant to Adele Island, Tasman Bay, and Farewell Spit (Bull *et al.* 1985; Miskelly, Crossland *et al.* 2017). May have reached the North Island: Lake Horowhenua in Jul. 1966 (Edgar 1972b) and Wellington Harbour in Jul. 2002 (Medway 2002f; Parrish 2006). Records of this species at Oamaru (Marchant & Higgins 1990) refer to the Otago shag. Holocene deposits and middens in the northern South Island (e.g. Worthy 1998d). *Leucocarbo* shag bones from Wairarapa were confirmed to be this species based on DNA analyses (McFadgen 2003; Rawlence, Till *et al.* 2017).

► ***Leucocarbo onslowi*** (Forbes)

Chatham Island Shag | Papua

Graculus carunculatus; Hutton 1872, *Ibis* 2 (3rd series): 249. Not *Pelecanus carunculatus* Gmelin, 1789.

Phalacrocorax carunculatus; Hutton 1873, *Trans. Proc. N.Z. Inst.* 5: 224. Not *Pelecanus carunculatus* Gmelin, 1789.

Graculus carunculatus; Finsch 1874, *Journ. für Ornith.* 22: 213. Not *Pelecanus carunculatus* Gmelin, 1789.

- Phalacrocorax cirrhatus*; Hutton 1879, *Trans. Proc. N.Z. Inst.* 6: 336. In part.
Phalacrocorax imperialis; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 153. Not *Phalacrocorax imperialis* King, 1831.
Phalacrocorax onslowi Forbes, 1893: *Ibis* 5 (6th series): 533 – Chatham Islands.
Phalacrocorax rothschildi Forbes, 1893: *Ibis* 5 (6th series): 537 – Chatham Islands.
Hypoleucus carunculatus onslowi (Forbes); Mathews & Iredale 1913, *Ibis* 1 (10th series): 412.
Phalacrocorax (Leucocarbo) carunculatus onslowi Forbes; Checklist Committee 1953, *Checklist N.Z. Birds*: 30.
Leucocarbo carunculatus onslowi (Forbes); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 32.
Leucocarbo onslowi (Forbes); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.
Phalacrocorax carunculatus onslowi Forbes; Dorst & Mougín 1979, in Peters, *Check-list birds World 1* (2nd edition): 176.
Euleucocarbo onslowi (Forbes); Siegel-Causey 1988, *Condor* 90: 892. Unjustified emendation.
Leucocarbo (carunculatus) onslowi (Forbes); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 275.

Chatham Islands (M. Bell & Bell 2000b; Bester & Charteris 2005). Recorded from both Holocene deposits and middens (Millener 1991).

► ***Leucocarbo chalconotus*** (G.R. Gray)

Otago Shag | Matapo

- Graucalus auritus*; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 201. Not *Carbo auritus* Lesson, 1831.
Graculus chalconotus G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(8): 20, pl. 21 – Otago.
Graculus glaucus Reichenbach, 1850: *Avium Syst. Nat.*: pl. 49, fig. 2553. Based on the “Cormoran glauque” of Hombron & Jacquinot, 1845 in Dumont d’Urville, *Voyage Pôle Sud, Zoologie*, Atlas pl. 31, fig. 1 – Otago.
Phalacrocorax glaucus Hombron & Jacquinot; Pucheran 1853, in Dumont d’Urville, *Voyage Pôle Sud, Zoologie*, 3: 127.
Graculus chalconotus (G.R. Gray); G.R. Gray 1862, *Ibis* 4: 252.
Phalacrocorax chalconotus (G.R. Gray); Buller 1873 (Mar.), *History of the Birds of N.Z.*, 1st edition (part 5): 334.
Phalacrocorax glaucus Hombron & Jacquinot; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 163.
Phalacrocorax huttoni Buller, 1888 (Mar.): *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 174 – near Dunedin.
Hypoleucus chalconotus (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 413.
Hypoleucus huttoni (Buller); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 141.
Phalacrocorax (Leucocarbo) carunculatus chalconotus (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 29. In part.
Leucocarbo carunculatus chalconotus (G.R. Gray); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 32. In part.
Leucocarbo chalconotus (G.R. Gray); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.
Phalacrocorax carunculatus chalconotus (G.R. Gray); Dorst & Mougín 1979, in Peters, *Check-list Birds World 1* (2nd edition): 176.
Euleucocarbo chalconotus (G.R. Gray); Siegel-Causey 1988, *Condor* 90: 892.
Leucocarbo chalconotus (G.R. Gray); Checklist Committee 1990, *Checklist Birds N.Z.*: 83. In part.
Phalacrocorax chalconotus (G.R. Gray); Marchant & Higgins 1990, *HANZAB 1*: 876. In part.
Leucocarbo (carunculatus) chalconotus (G.R. Gray); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 271.

Inhabits coastal waters and breeds only from near Oamaru south to The Sisters, Catlins coast (Rawlence *et al.* 2016). Ranges north to Banks Peninsula (Crossland 2021). Midden and Late Pleistocene or Holocene bone deposits, Cape Wanbrow, Otago, and Marfells Beach, Marlborough (Worthy 1998d; Worthy & Grant-Mackie 2003; Rawlence, Till *et al.* 2017).

The dimorphic *Leucocarbo* shags of Otago, Southland, and Stewart Island were considered a single species (Stewart Island shag *L. chalconotus*) until Rawlence *et al.* (2016) demonstrated that the Otago population was sister to the monomorphic Chatham Island shag (*L. onslowi*), meaning that either all three populations were conspecific, or that they should all be considered full species. We follow Rawlence *et al.* (2016) in separating the northern and southern populations of Stewart Island shag (*sensu* Checklist Committee 2010) as full species. The type specimen for *L. chalconotus* was from Otago (G.R. Gray 1845), and so this name is retained for the larger northern species, with Otago shag as the recommended English name.

► ***Leucocarbo stewarti*** (Ogilvie-Grant)

Foveaux Shag | Mapo

- Phalacrocorax colensoi* Buller, 1888 (Mar.): *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 161 – Bluff, Southland. Not *Phalacrocorax colensoi* Buller, 1888 – Auckland Islands.
Phalacrocorax stewarti Ogilvie-Grant, 1898: *Cat. Birds Brit. Mus.* 26: 385 – Bluff, Southland.
Hypoleucus campbelli stewarti (Ogilvie-Grant); Mathews & Iredale 1913, *Ibis* 1 (10th series): 413.
Phalacrocorax huttoni Buller; Oliver 1930, *New Zealand Birds*, 1st edition: 191. In part.
Phalacrocorax chalconotus (G.R. Gray); Oliver 1930, *New Zealand Birds*, 1st edition: 192. In part.
Phalacrocorax (Leucocarbo) carunculatus chalconotus (G.R. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 29. In part.
Leucocarbo carunculatus chalconotus (G.R. Gray); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 32. In part.
Leucocarbo chalconotus (G.R. Gray); Checklist Committee 1990, *Checklist Birds N.Z.*: 83. In part.
Phalacrocorax chalconotus (G.R. Gray); Marchant & Higgins 1990, *HANZAB 1*: 876. In part.

Foveaux Strait and Stewart Island / Rakiura; midden and Late Pleistocene or Holocene bone deposits from Stewart Island (Worthy 1998c).

See comments under *L. chalconotus* above. The type locality for *L. stewarti* was Bluff (Ogilvie-Grant 1898, p.386), not Stewart Island / Rakiura (*vide* Checklist Committee 2010; Rawlence *et al.* 2016). We follow Rawlence *et al.* (2016) in recommending that this smaller southern species be known as the Foveaux shag.

► ***Leucocarbo colensoi* (Buller)** **Auckland Island Shag | Kawau o Motu Maha**

- Phalacrocorax colensoi* Buller, 1888 (Mar.): *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 161 – Auckland Islands. In part.
Phalacrocorax campbelli Ogilvie-Grant, 1905: *Ibis* 5 (8th series): 573 – Auckland Islands. In part.
Hypoleucus campbelli colensoi (Buller); Mathews & Iredale 1913, *Ibis* 1 (10th series): 413.
Phalacrocorax carunculatus colensoi Buller; Peters 1931, *Check-list Birds World 1*: 91.
Phalacrocorax (Leucocarbo) campbelli colensoi Buller; Checklist Committee 1953, *Checklist N.Z. Birds*: 30.
Leucocarbo campbelli colensoi (Buller); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.
Leucocarbo colensoi (Buller); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.
Phalacrocorax campbelli colensoi Buller; Dorst & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 177.
Euleucocarbo colensoi (Buller); Siegel-Causey 1988, *Condor* 90: 892.
Leucocarbo (carunculatus) colensoi (Buller); Johnsgard 1993, *Cormorants, Darters and Pelicans*: 279.

Breeds only on the Auckland Islands / Maukahuka (G. Taylor 2000a; Miskelly, Elliott *et al.* 2020). One resident at Snares Islands / Tini Heke 1994–2001 (Miskelly *et al.* 2001a,b). Natural and midden remains have been found in dunes on Enderby Island (Anderson 2005; Tennyson 2020a).

Motu Maha is a proper noun and should have initial capitals.

► ***Leucocarbo campbelli* (Filhol)** **Campbell Island Shag**

- Urile campbelli* Filhol, 1878: *Bull. Soc. Philomath. Paris* 7(2): 132 – Campbell Island.
Phalacrocorax magellanicus; Hutton 1879, *Trans. Proc. N.Z. Inst.* 11: 338. Not *Pelecanus magellanicus* Gmelin, 1789.
Phalacrocorax nyctemerus; Hutton 1880, *Proc. Linn. Soc. New South Wales* 4: 357. Not *Phalacrocorax nyctemerus* Cabanis, 1855 = *nomen dubium*.
Phalacrocorax campbelli (Filhol); Buller 1906, *Suppl. Birds N.Z.* 2: 39.
Hypoleucus campbelli campbelli (Filhol); Mathews & Iredale 1913, *Ibis* 1 (10th series): 412.
Phalacrocorax carunculatus campbelli (Filhol); Peters 1931, *Check-list Birds World 1*: 91.
Hypoleucus campbelli (Filhol); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 135.
Phalacrocorax (Leucocarbo) campbelli campbelli (Filhol); Checklist Committee 1953, *Checklist N.Z. Birds*: 30.
Leucocarbo campbelli campbelli (Filhol); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.
Leucocarbo campbelli (Filhol); van Tets 1976, *Proc. 16th International Ornith. Congress*: 122.
Phalacrocorax campbelli campbelli (Filhol); Dorst & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 177.

Breeds only on Campbell Island / Motu Ihupuku (G. Taylor 2000a). Vagrant at Antipodes Islands (Tennyson *et al.* 2002).

► ***Leucocarbo purpurascens* (Brandt)** **Macquarie Island Shag**

- Carbo purpurascens* Brandt, 1837: *Bull. l'Acad. Imp. Sci., St Petersburg* 3: 56 – no locality = Macquarie Island (*vide* Rothschild 1898, *Bull. Brit. Ornith. Club* 8: 21).
Phalacrocorax carunculatus (Gmelin); Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 5): 155. In part.
Phalacrocorax traversi Rothschild, 1898: *Bull. Brit. Ornith. Club* 8: 21 – Macquarie Island.
Hypoleucus carunculatus traversi (Rothschild); Mathews & Iredale 1913, *Ibis* 1 (10th series): 412.
Phalacrocorax atriceps traversi Rothschild; Peters 1931, *Check-list Birds World 1*: 92.
Hypoleucus atriceps purpurascens (Brandt); Mathews 1936, *Suppl. Birds Norfolk & Lord Howe Islands*: 134.
Phalacrocorax (Leucocarbo) albiventer purpurascens (Brandt); Checklist Committee 1953, *Checklist N.Z. Birds*: 30.
Leucocarbo albiventer purpurascens (Brandt); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 33.
Phalacrocorax atriceps purpurascens (Brandt); Devillers & Terschuren 1978, *Le Gerfaut* 68: 76.
Phalacrocorax albiventer purpurascens (Brandt); Dorst & Mougouin 1979, in Peters, *Check-list Birds World 1* (2nd edition): 176.
Leucocarbo atriceps purpurascens (Brandt); Checklist Committee 1990, *Checklist Birds N.Z.*: 84.
Phalacrocorax purpurascens (Brandt); Marchant & Higgins 1990, *HANZAB* 1: 867.
Leucocarbo purpurascens (Brandt); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 129, 177.

Breeds only on Macquarie Island and adjacent Bishop and Clerk Islets (Brothers 1985). Vagrant to Auckland Islands / Maukahuka (two specimens collected in 1901; Miskelly & Cooper 2020). Recognised as a full species following Marchant & Higgins (1990) and Holdaway *et al.* (2001).

Order PELECANIFORMES: Pelicans, Herons, and Ibises

We follow the recommendations of Ericson *et al.* (2006), Hackett *et al.* (2008), Jarvis *et al.* (2014), Burleigh *et al.* (2015), Prum *et al.* (2015), and Kuhl *et al.* (2021) in moving Ardeidae (herons and bitterns) and Threskiornithidae (ibises and spoonbills) from Ciconiiformes into Pelecaniformes. The family sequence follows Clements *et al.* (2019) and Chesser *et al.* (2020). However, we note that removing the Pelecanidae from the Suliformes and associating them with the Ardeidae and Threskiornithidae is not in agreement with the genera of parasitic lice (Phthiraptera) which are found on these families of birds. Considering louse genera of the suborder Ischnocera, which are good indicators of host relationships, pelicans share the genus *Pectinopygus* Mjöberg, 1910 with all the members of the Suliformes, but not with any of the Ardeidae and Threskiornithidae (Price *et al.* 2003: 362). Furthermore, the Ardeidae and Threskiornithidae share two genera of lice (one of each suborder, Ischnocera and Amblycera) with the Ciconiidae (Price *et al.* 2003: 298), indicating that these three families may be closely related.

Family PELECANIDAE Rafinesque: Pelicans

Pelicania Rafinesque, 1815: *Analyse de la Nature*: 72 – Type genus *Pelecanus* Linnaeus, 1758.

Genus *Pelecanus* Linnaeus

Pelecanus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 132 – Type species (by subsequent designation) *Pelecanus onocrotalus* Linnaeus.

Catoptropelecanus Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 7 – Type species (by original designation) *Catoptropelecanus perspicillatus* Reichenbach = *Pelecanus conspicillatus* Temminck.

► *Pelecanus conspicillatus* Temminck

Australian Pelican | Perikana

Pelecanus conspicillatus Temminck, 1824: *Planch. Color. d' Oiseaux 47*: pl. 276 – Australia, restricted to New South Wales, Australia (*fide* Mathews 1912, *Novit. Zool.* 18(3): 244).

Pelecanus australis Stephens, 1826: *in Shaw, General Zool.* 13(1): 113 – New South Wales, Australia.

Catoptropelecanus perspicillatus Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 7 – New South Wales, Australia.

Pelecanus proavus De Vis, 1892: *Proc. Linn. Soc. New South Wales* 6: 449 – Queensland, Australia.

Pelecanus conspicillatus westralis Mathews, 1912: *Novit. Zool.* 18(3): 244 – Perth, Western Australia.

Pelecanus conspicillatus conspicillatus Temminck; Mathews & Iredale 1913, *Ibis* 1 (10th series): 419.

Catoptropelecanus conspicillatus conspicillatus (Temminck); Mathews 1913, *List Birds Australia*: 101.

Pelecanus conspicillatus Temminck; Checklist Committee 1953, *Checklist N.Z. Birds*: 28.

Pelecanus conspicillatus novaezealandiae Scarlett, 1966: *Notornis* 13: 209 – Poukawa, Hawke's Bay.

Pelecanus novaezealandiae Scarlett; Checklist Committee 1990, *Checklist Birds N.Z.*: 77.

Breeds in Australia; straggles to New Zealand: Whanganui River, 1890; near Dargaville, Aug.–Sep. 1976; Southland, Nov. 1977; South Canterbury, Dec. 1977–Jun. 1978 (at least three birds; Sagar 1978); Northland, centred on Wairoa River and Kaipara Harbour, from Aug. 2012 (at least 14 birds; Miskelly *et al.* 2013), peak count 18 bird in Apr. 2013, with the last sighting in Mar. 2015 (Miskelly *et al.* 2015). Recorded at Norfolk Island, late 1977 (Schodde *et al.* 1983). Pelicans are rare in New Zealand Holocene deposits and middens; they have been found at seven North Island sites and two South Island sites (B. Gill & Tennyson 2002; Lalas *et al.* 2014). New Zealand bones, including the type of *P. novaezealandiae* – an extinct supposedly endemic taxon – are inseparable from, and referred to, the Australian species (Worthy 1998d; B. Gill & Tennyson 2002; Scofield *et al.* 2003).

Family ARDEIDAE Leach: Herons and Bitterns | Matuku

Subfamily ARDEINAE Leach: Herons and Egrets

Ardeidae Leach, 1820: *Eleventh room. In Synopsis Contents British Museum 17th edition, London*: 69 – Type genus *Ardea*, Linnaeus 1758.

Ardeid taxonomy is unstable. Two major papers (McCracken & Sheldon 1998; Sheldon *et al.* 2000) showed that traditional arrangements may be flawed, but failed to recommend viable alternatives. The arrangement below reflects recent consensus (Dickinson 2003; Kushlan & Hancock 2005; Dickinson & Remsen 2013).

Bubulcus is included in the genus *Ardeola* Boie, 1822 in some classifications (e.g. Fjeldså & Krabbe 1990), but Wetmore (1965) and R. Payne & Risley (1976) listed many characters of *Bubulcus* that differ from those of other species in *Ardeola* Boie. R. Payne & Risley (1976) and R. Payne (1979) merged *Bubulcus* into *Egretta* based mainly on morphometric data, and this was followed by Haverschmidt & Mees (1994). Genetic data, however, do not support a close relationship between *Bubulcus* and *Egretta*, but suggest a close relationship to *Ardea* (Sheldon 1987; Sheldon *et al.* 1995; McCracken & Sheldon 1998; Kushlan & Hancock 2005). We follow Checklist Committee (1990), Sheldon *et al.* (2000), and Dickinson & Remsen (2013) in using *Bubulcus*.

Casmerodius was formerly regarded as a distinct genus (e.g. Pinto 1938; Hellmayr & Conover 1948; Phelps & Phelps 1958; Meyer de Schauensee 1970; AOU 1983), but morphometrics (R. Payne & Risley 1976), vocal analyses (McCracken

& Sheldon 1997), and genetic data (Sheldon 1987; Sheldon *et al.* 1995; McCracken & Sheldon 1998) do not support its separation from *Ardea*. Some classifications (e.g. Blake 1977) have placed *Ardea alba* in *Egretta*, but we follow Sheldon (1987), Sheldon *et al.* (1995, 2000), McCracken & Sheldon (1998), and Kushlan & Hancock (2005) in placing it in *Ardea*. *Mesophoyx* is sometimes placed in *Egretta*, but, using DNA hybridisation, Sheldon (1987) concluded that it should be included within *Ardea*. This was followed by Sibley & Monroe (1990), although a phylogenetic analysis of osteology still shows a closer relationship to *Egretta* (see Sheldon *et al.* 1995). We follow Kushlan & Hancock (2005) in including *A. intermedia* within *Ardea*.

Otago Museum holds a specimen of striated heron *Butorides striata* (Linnaeus, 1758) labelled as coming from the Kermadec Islands / Rangitāhua (Veitch *et al.* 2004). The provenance of this specimen requires more research before the species can be added to the New Zealand list.

Genus *Bubulcus* Bonaparte

Bubulcus Bonaparte (ex Pucheran MS), 1855: *Compt. Rend. Séa. Acad. Sci., Paris* 40: 722 – Type species (by subsequent designation) *Bubulcus ibis* “Hasselquist” = *Bubulcus ibis* (Linnaeus).

► *Bubulcus ibis* (Linnaeus)

Cattle Egret

Ardea Ibis Linnaeus, 1758: *Syst. Nat., 10th edition* 1(1): 144 – Egypt.

Southern Europe, Africa, and Asia. Also in northern South America, North America, Australia, and New Zealand (Marchant & Higgins 1990). Three subspecies, one in New Zealand.

Bubulcus ibis coromandus (Boddaert)

Eastern Cattle Egret

Cancroma Coromanda Boddaert, 1783: *Tables des Planches Enluminées d’Histoire Naturelle de M. d’Aubenton*: 54. Based on “Crabier de la côte de Coromandel” in Buffon 1765–81, *Hist. Nat. Oiseaux* 8: pl. 190 – Coromandel, India.

Ardea coromandeliensis Stephens, 1819: *General Zoology* 11: 577. Unjustified emendation.

Ardea affinis Horsfield, 1820: *Trans. Linn. Soc. London* 13: 189 – Java, Indonesia.

Ardea Flavirostris Vieillot, 1823: *Tableaux Encycl. Méthod. Ornith.* 3: 1124. Based on “Crabier de la côte de Coromandel” in Buffon 1765–81, *Hist. Nat. Oiseaux* 8: pl. 190 – Coromandel, India.

Ardea russata Wagler, 1827: *Syst. Avium, Ardea*: sp. 12 – Australia, and Java, Indonesia. In part.

Ardea Caboga Franklin, 1832: *Proc. Comm. Sci. Corresp. Zool. Soc. London* 2(20): 124 – India.

Ardea bubulcus; J.E. & G.R. Gray 1846, *Cat. Specimens Drawings Mamm. Birds Nepal Thibet*: 134 – Nepal. Not *Ardea bubulcus* Audouin, 1826.

Ardea coromanda (Boddaert); G.R. Gray 1847, *Gen. Birds* 3(37): 556.

Bubulcus coromandensis Bonaparte, 1855: *Conspectus Gen. Avium* 2: 125. Unjustified emendation.

Bubulcus ibis coromandus (Boddaert); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 35.

Egretta ibis coromanda (Boddaert); R. Payne 1979, in *Peters Check-list Birds World* 1 (2nd edition): 211.

Bubulcus ibis; J. Moore 1999, *Notornis* 46: 358. Not *Ardea ibis* Linnaeus, 1758.

Ardea ibis coromanda (Boddaert); Kushlan & Hancock 2005, *The Herons. Ardeidae*: 138.

Throughout south-east Asia, including south China and Japan, and south to Australia since about 1948 (Marchant & Higgins 1990). In New Zealand, first reported from Moutere, Nelson, in 1956 (B. Brown 1980). Annual migrant since 1963: north of Christchurch, 1963 (Turbott *et al.* 1963), 1964 (Turbott 1964); Otago, 1963 (B.E. Kelly *in* Sibson 1963); Greymouth, 1964 (Grant 1964); Masterton, 1964 (Boeson 1964); and Levin, 1964 (E. Jones 1964). Coincident with increases in breeding population in Australia, sizeable flocks developed in New Zealand through the 1970s and 1980s. By the mid-1980s, winter counts showed several thousand birds, reappearing annually in many favoured localities from Northland to Southland (Heather 1978, 1982, 1986; E. Pratt 1979; W. Jackson & Olsen 1988). At the peak of the irruptions, birds were recorded on the Chatham Islands in 1983 (Gaze 1985; Heather 1991) and Kermadec Islands / Rangitāhua in 1994 (Veitch *et al.* 2004). Recorded annually during this period on Norfolk Island (Hermes *et al.* 1986). Occasional to Snares Islands / Tini Heke (Miskelly *et al.* 2001a) and once to Auckland Islands / Maukahuka (Jun. 1983; Miskelly, Elliott *et al.* 2020). Single record from Macquarie Island, 1975 (Green 1989). Annual flock sizes in New Zealand declined markedly after the 1980s. Only three records of birds summering in New Zealand (Heather 1978). Reported breeding attempt (Westerskov 1974) now discredited (Heather 1978).

Genus *Ardea* Linnaeus

Ardea Linnaeus, 1758: *Syst. Nat., 10th edition* 1(1): 141 – Type species (by subsequent designation) *Ardea cinerea* Linnaeus.

Ardea Dumont, 1804: *in* Levrault, *Dict. Sci. Nat.*: 467. Unjustified emendation.

Casmerodius Gloger, 1841: *Gemein. Handb. Hilfsb. Naturgesch.*: 412 – Type species (by subsequent designation) *Ardea egretta* Gmelin = *Ardea alba* Linnaeus.

Cosmerodius Salvadori, 1882: *Ornitologia Papuasie Molucche* 3: 349. Unjustified emendation.

Mesophoyx Sharpe, 1894: *Bull. Brit. Ornith. Club* 3: 38 – Type species (by original designation) *Ardea intermedia* Wagler, 1829.

Myiola Mathews, 1913: *Austral Avian Rec.* 1: 195 – Type species (by original designation) *Ardea pacifica* Latham.

► ***Ardea cinerea* Linnaeus**

Grey Heron

Ardea cinerea Linnaeus, 1758: *Syst. Nat., 10th edition 1*(1): 143 – Europe, restricted to Sweden (*vide* Hartert 1920, *Vögel Pal. Fauna*: 1229).

Cosmopolitan except for Antarctica and Australasia (Dickinson & Remsen 2013). Four subspecies.

***Ardea cinerea jouyi* Clark**

Oriental Grey Heron

Ardea cinerea; Buller 1905, *Suppl. Birds N.Z. 1*: 193. Not *Ardea cinerea* Linnaeus, 1758.

Ardea cinerea jouyi Clark, 1907: *Proc. U.S. Nat. Mus.* 32: 468 – Seoul, Korea.

Ardea cinerea rectirostris; Checklist Committee 1953, *Checklist N.Z. Birds*: 31. Not *Ardea rectirostris* Gould, 1843.

Ardea cinerea jouyi Clark; Kushlan & Hancock 2005, *The Herons. Ardeidae*: 69.

Mongolia, China, Korea, Japan, Taiwan, Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaya, and Indonesia (Sumatra, Java). One accepted record from Australia (2002). Immature bird caught on board a boat off the east coast of the North Island about 1898 (Buller 1899). Parkes (1974) found this specimen in the Carnegie Museum, clearly labelled, and referred it to *A. c. jouyi*. He found no reason to doubt the specimen's provenance, but Marchant & Higgins (1990) excluded the record, considering it an assisted passage. Records from the 1940s (Dawson 1949, 1951a; Checklist Committee 1953) were retracted by the observer (Dawson 1974). Recorded at Fiji, 2005 (H.D. Pratt *et al.* 2008; most likely of this subspecies).

► ***Ardea pacifica* Latham**

Pacific Heron

Ardea pacifica Latham, 1801: *Index Ornith. Suppl. 1*: lxx – New South Wales, Australia.

Ardea Bullaragang Wagler, 1827: *Syst. Avium, Ardea*: sp. 5. Unnecessary *nomen novum* for *Ardea pacifica* Latham, 1801.

Ardea Bullaranjaus Wagler; J.E. Gray 1829, in E. Griffith, *Anim. Kingdom 8* (Aves, 3): 337. Unjustified emendation.

Myola pacifica (Latham); Mathews 1920, *Birds Australia (Suppl.) 1*: 52.

Notophox pacifica (Latham); Oliver 1955, *New Zealand Birds*, 2nd edition: 390.

Ardea pacifica Latham; Kushlan & Hancock 2005, *The Herons. Ardeidae*: 93.

Throughout Australia and Tasmania (Marchant & Higgins 1990). A scarce vagrant to New Zealand with 11 accepted records: Methven, Apr.–Jul. 1952 (Stidolph 1952); Matamata, Jul. 1978 (Lacey 1979); Onepu, Houhora, Oct. 1981 (Hensley 1982); Waipu, Jan. 1984 (L. Howell 1985); Hokitika, Jun.–Jul. 2002 (Medway 2002f); Totara, Otago, Jan. 2003 (Medway 2003a); Toko, Taranaki, Jun. 2003 (Medway 2003b); Otapiri / Hedgehope, Southland, May 2013; Wayby Valley, Wellsford, Sep. 2013; between Athol and Queenstown, Dec. 2013; Wakefield, Nelson, May 2014 (Miskelly *et al.* 2015). Unverified record from Macauley Island, Kermadec Islands / Rangitāhua, 1980 (R.H. Taylor in Veitch *et al.* 2004). Single record from Norfolk Island, 1978 (J. Moore 1981).

► ***Ardea alba* Linnaeus**

Great Egret

Ardea alba Linnaeus, 1758: *Syst. Nat., 10th edition 1*(1): 144 – Sweden.

We follow H.D. Pratt (2011) and Dickinson & Remsen (2013) in recognising a single species of great egret, with four subspecies: *alba* (southern Palaearctic from central Europe to Russian Far East), *modesta* (eastern Asia south to Australasia), *melanorhyncha* Wagler, 1827 (sub-Saharan Africa and Madagascar), and *egretta* Gmelin, 1789 (North and South America).

***Ardea alba modesta* J.E. Gray**

Kōtuku | White Heron

Ardea modesta J.E. Gray, 1831: *Zool. Miscell.*: 19 – India.

Ardea Torra Franklin, 1831: *Proc. Zool. Soc. London 1830–1831* (1): 123 – central India.

Ardea Putea Franklin, 1831: *Proc. Zool. Soc. London 1830–1831* (1): 124 – India.

Ardea timoriensis Lesson, 1831: *Traité d'Ornith. 1830*: 575 – Timor.

Herodias flavirostris (Wagler); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(8): 12. Not *Ardea flavirostris* Vieillot, 1823.

Herodias syrmatophorus Gould, 1846: *Birds of Australia 6*: pl. 56 – New South Wales, Australia.

Ardea alba Ellman, 1861: *Zoologist 19*: 7469 – New Zealand. Junior primary homonym of *Ardea alba* Linnaeus, 1758.

Ardea flavirostris Wagler; G.R. Gray 1862, *Ibis 4*: 235. Not *Ardea flavirostris* Vieillot, 1823.

Ardea syrmatophora (Gould); Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 4): 226. Emendation.

Ardea egretta; Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds – 1 (Appendix)*: 30. Not *Ardea egretta* Gmelin, 1789.

Herodias timoriensis (Lesson); Buller 1905, *Suppl. Birds N.Z. 1*: 194.

Egretta alba syrmatophora (Gould); Mathews 1912, *Novit. Zool. 18*(3): 230.

Egretta alba neglecta Mathews, 1912: *Novit. Zool. 18*(3): 230 – Parry's Creek, Western Australia.

Herodias alba syrmatophora Gould; Mathews 1913, *List Birds Australia*: 81.

Herodias alba maoriana Mathews & Iredale, 1913: *Ibis 1* (10th series): 404 – South Island.

Casmerodius albus maorianus (Mathews & Iredale); C.A. Fleming 1939, *Emu 38*: 389.

Egretta alba modesta (J.E. Gray); Checklist Committee 1953, *Checklist N.Z. Birds*: 32.

Ardea alba modesta J.E. Gray; R. Payne 1979, in Peters *Check-list birds World 1* (2nd edition): 204.

Egretta alba; J. Moore 1999, *Notornis* 46: 358. Not *Ardea alba* Linnaeus, 1758.

Casmerodius albus; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 129, 177. Not *Ardea alba* Linnaeus, 1758.

Sometimes considered a full species (e.g. Sibley & Monroe 1990; Kushlan & Hancock 2005; Christidis & Boles 2008). Known as the eastern great egret elsewhere in range. Distributed from India, China, and Japan to Australia and New Zealand (Marchant & Higgins 1990). In New Zealand, the only known breeding place is near Okarito, Westland (40–60 pairs; C. Miller 2001). Immature birds disperse widely, mainly north, but some even reach the subantarctic islands. Winter numbers are sometimes boosted, as in 1957, by vagrants from Australia (Andrew 1963). Vagrant to Snares Islands / Tini Heke, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku (Bailey & Sorensen 1962; Horning & Horning 1974; Miskelly *et al.* 2015; Miskelly, Elliott *et al.* 2020). Four records from Macquarie Island: 1951 and 1957 (Keith & Hines 1958), and 1975 and 1976 (Green 1989). Accidental to Norfolk Island (Basset-Hull 1910; Hermes *et al.* 1986). Holocene sand-dune deposits in the Far North (Tom Bowling Bay, Waikuku Beach) include bones of immature birds, and are numerous enough to suggest a former breeding colony in that area. Scattered records throughout New Zealand in dune deposits and middens (Millener 1981a; Scofield *et al.* 2003).

► ***Ardea intermedia* Wagler**

Plumed Egret

Ardea intermedia Wagler, 1829: *Isis von Oken*, Heft 6: col. 659 – Java, Indonesia.

Southern and eastern Africa, India, south-east Asia, Japan, Sunda Islands, New Guinea, and Australia (Marchant & Higgins 1990). Three subspecies.

***Ardea intermedia plumifera* (Gould)**

Plumed Egret

Herodias plumiferus Gould, 1848: *Proc. Zool. Soc. London 1847* (15): 221 – New South Wales, Australia.

Egretta intermedia plumifera (Gould); Mathews 1912, *Novit. Zool.* 18(3): 229.

Mesophoyx intermedia plumifera (Gould); Mathews 1913, *List Birds Australia*: 81.

Egretta intermedia; Checklist Committee 1990, *Checklist Birds N.Z.*: 90. Not *Ardea intermedia* Wagler, 1829.

Ardea intermedia plumifera (Gould); Kushlan & Hancock 2005, *The Herons. Ardeidae*: 109.

Southern Moluccas (Maluku Islands), Lesser Sundas, New Guinea, and Australia; straggling to New Zealand (Marchant & Higgins 1990). The first New Zealand record was of an adult in breeding plumage shot in the Manawatu River estuary near Foxton in May or Jun. during the period 1970–73, now in the Museum of New Zealand (Seddon & Seddon 1979). Subsequently at least 15 verified records, most in autumn and winter: Lower Waikato, Sep. 1979, 1981, Aug. 1985 & Apr. 1993 (Seddon & Seddon 1979; L. Howell 1987; Checklist Committee 1990; G. Taylor & Parrish 1994b; Medway 2000a); Kaikohe, May–Jun. 1986; (L. Howell 1987); Avon–Heathcote estuary May 1986 (Crossland 1992; Gaze 1987); Cobden, Greymouth, Mar.–Apr. 1990 (Guest 1991); three at Lake Ellesmere / Te Waihora, Aug. 1998 (O'Donnell 2001; Medway 2001a); Whangapoua estuary, Coromandel, Jul. 2001 (Medway 2002d); Motueka, Apr. 2004 (Rare Birds Committee 2005); Lawrence, Jun. 2004 (Rare Birds Committee 2005); Ngaruroro River, Hawke's Bay, Nov. 2005; Waiatarua wetland, Auckland, Nov. 2006 (Scofield 2008), four at Lake Ellesmere, Jun. 2011 (Miskelly *et al.* 2013); Tomahawk Lagoon, Dunedin, Nov. 2014 (Miskelly *et al.* 2013). Unverified records from Greymouth, 1995 (O'Donnell & West 1996) and Karamea, Nelson 1990–91 (Checklist Committee 2010). One record from Norfolk Island, 1985 (Hermes *et al.* 1986).

Genus *Egretta* T. Forster

Egretta T. Forster, 1817: *Synop. Cat. Brit. Birds*: 59 – Type species (by monotypy) *Ardea garzetta* Linnaeus = *Egretta garzetta garzetta* (Linnaeus).

Herodias Boie, 1822: *Isis von Oken*, Heft 5: col. 559 – Type species (by subsequent designation) *Ardea garzetta* Linnaeus = *Egretta garzetta garzetta* (Linnaeus).

Garzetta Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 76 – Type species (by tautonymy) *Ardea garzetta* Linnaeus = *Egretta garzetta garzetta* (Linnaeus).

Erodias Brehm, 1832: *Handb. Liebh. Stuben-Vög.*: 352. Unjustified emendation.

Erodus Macgillivray, 1842: *Man. Brit. Ornith.* 2: 130. Junior homonym of *Erodus* Fabricius, 1775.

Demigretta Blyth, 1846: *Journ. Asiatic Soc. Bengal* 15: 372 – Type species (by monotypy) *Demigretta concolor* Blyth = *Egretta sacra sacra* (Gmelin).

Demegretta Blyth, 1852: *Cat. Birds Mus. Asiatic Soc.* 1849: 365. Unjustified emendation.

Hemi-egretta Bonaparte, 1857: *Consp. Gen. Avium* 2: 120. Unjustified emendation.

Demigretta Baird, 1858: *Rep. Expl. Surv. Miss. River Pac. Ocean. Birds* 9(14): 660. Unjustified emendation.

Notophoyx Sharpe, 1895: *Bull. Brit. Ornith. Club* 5: 13 – Type species (by original designation) *Ardea novaehollandiae* Latham = *Egretta novaehollandiae novaehollandiae* Latham.

► ***Egretta novaehollandiae* (Latham)**

White-faced Heron

Sulawesi, Lesser Sunda Islands (Lombok to Timor), south and south-east New Guinea, New Caledonia, Australia, and New Zealand (Marchant & Higgins 1990). Two subspecies, *E. n. nana* (Amadon, 1942) in New Caledonia and Loyalty Islands, *E. n. novaehollandiae* elsewhere.

Egretta novaehollandiae novaehollandiae* (Latham)*White-faced Heron | Matuku Moana***

Ardea Novae Hollandiae Latham, 1790: *Index Ornith.*: 701 – “New Holland”, restricted to New South Wales, Australia (*vide* Mathews 1912, *Novit. Zool.* 18(3): 231).

Ardea leucops Wagler, 1827: *Syst. Avium, Ardea*: sp. 17. Unnecessary *nomen novum* for *Ardea novaehollandiae* Latham, 1790.

Ardea novae-hollandiae Latham; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187.

Notophox novaehollandiae (Latham); Hutton 1904, *Index Faunae N.Z.*: 31.

Notophox novaehollandiae (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 32.

Notophox novaehollandiae novaehollandiae (Latham); Oliver 1955, *New Zealand Birds*, 2nd edition: 388.

Ardea novaehollandiae Latham; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 34.

Egretta novaehollandiae (Latham); R. Payne 1979, in Peters *Check-list Birds World 1* (2nd edition): 211.

Ardea novaehollandiae novaehollandiae Latham; Checklist Committee 1990, *Checklist Birds N.Z.*: 88.

Egretta novaehollandiae novaehollandiae Latham; Martínez-Vilalta & Motis 1992, in del Hoyo, Elliot & Sargatal *Handb. Birds World 1*: 411.

Eastern Indonesia, south and south-east New Guinea, Australia, and New Zealand; vagrant to south-west Pacific islands (Marchant & Higgins 1990; Watling 2001). In New Zealand, sporadically reported from *c.* 1865 (Buller 1869). Now widely distributed. Breeding suspected in 1939 in Westland (Okarito) and Otago (Bushy Park); confirmed in 1941 at Shag River (Waihemo), Otago. It spread rapidly north, especially in the 1950s (for details see Carroll 1970). First recorded on Kermadec Islands / Rangitāhua 1965 (Merton 1970) but has not established (Veitch *et al.* 2004). First recorded on Norfolk Island 1900s (Basset-Hull 1910); now well established there, and also on Nepean and Philip Islands (Hermes *et al.* 1986; J. Moore 1985a). Present on Chatham Islands since 1966 (Carroll 1970); breeding since the 1970s, perhaps earlier (Hemmings & Chappell 1988). Straggler to subantarctic islands: Snares Islands / Tini Heke (Miskelly *et al.* 2001a), Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020), Campbell Island / Motu Ihupuku (1951–58; Carroll 1970), and Macquarie Island (1957, 1975, 1976; Green 1989).

*Also used for reef heron *E. sacra*.

► ***Egretta garzetta* (Linnaeus)****Little Egret**

Ardea Garzetta Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 237 – Oriente, error for Malalbergo, River Reno, south of Ferrara, Italy (*vide* Grant & Mackworth-Praed 1933, *Bull. Brit. Ornith. Club* 53: 194).

Southern Europe, Africa, east to India, south-east Asia, China, Japan, Indonesia, and Australia (Marchant & Higgins 1990). Amadon & Woolfenden (1952) split the yellow-lored and yellow-soled birds (*E. g. immaculata*) of north and east Australia and New Zealand from the greyish-lored and greyish-soled birds (*E. g. nigripes* (Temminck, 1840)) of south-east Asia and the south-west Pacific. We follow Amadon & Woolfenden (1952) and Martínez-Vilalta & Motis (1992) in recognising *E. g. immaculata*, but see Marchant & Higgins (1990).

Egretta garzetta immaculata* (Gould)*Little Egret**

Herodias immaculata Gould, 1846: *Birds of Australia 6* (part 25): pl. & text – “Northern portion of Australia”, restricted to Port Essington, Northern Territory, Australia (*vide* Mathews 1912, *Novit. Zool.* 18(3): 231).

Herodias melanopus Gould, 1865: *Handb. Birds Australia 2*: 304. Junior secondary homonym of *Ardea melanopus* Wagler, 1829.

Ardea nivea; Reichenow 1877, *Journ. für Ornith.*: 271. Not *Ardea nivea* Gmelin, 1770.

Egretta garzetta kempfi Mathews, 1916: *Austral Avian Rec.* 3: 56 – Cape York, Northern Queensland, Australia.

Egretta garzetta; Checklist Committee 1953, *Checklist N.Z. Birds*: 32. Not *Ardea garzetta* Linnaeus, 1766.

Egretta garzetta immaculata (Gould); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 34.

Egretta garzetta nigripes; Checklist Committee 1990, *Checklist Birds N.Z.*: 90. Not *Ardea nigripes* Temminck, 1840.

Indonesia (Sunda Islands), New Guinea, Australia (where commonest in north and east, including Tasmania) (Marchant & Higgins 1990); straggler to New Zealand. First recorded in New Zealand in 1945, but this record not recognised for many years (Wodzicki & Eyles 1946; Crossland 1992; Scofield 2006). Next recorded 1951 (Brathwaite 1952). An uncommon annual vagrant (generally in autumn) recorded from many localities, mainly coastal, throughout North and South Islands; also Kermadec Islands / Rangitāhua (two in 1974, C. Smuts-Kennedy in Veitch *et al.* 2004.). Records include birds banded in Australia (Marchant & Higgins 1990). At least two records from Norfolk Island (Hermes *et al.* 1986 cf. Marchant & Higgins 1990).

► ***Egretta sacra* (Gmelin)****Reef Heron**

Asia to Australia (including Tasmania) and New Zealand, and east through the tropical Pacific to the Marquesas, Tuamotu, and Austral Islands (Marchant & Higgins 1990). Two subspecies, with *E. s. albolineata* (G.R. Gray, 1859) in New Caledonia and Loyalty Islands.

Egretta sacra sacra* (Gmelin)*Reef Heron | Matuku Moana***

Ardea sacra Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 640. Based on the “Sacred Heron” of Latham 1785, *Gen. Synop. Birds 3*: 92 – Tahiti, French Polynesia, error for southern Tonga Islands (*vide* Medway *Notornis 51*:156).

Ardea matook Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd. 14*: 416 – Queen Charlotte Sound, Marlborough.

Ardea jugularis Wagler, 1827: *Syst. Avium, Ardea*: sp. 18 – islands of the South Pacific Ocean, and Queen Charlotte Sound, Marlborough.

Herodias matook (Vieillot); in E. Dieffenbach 1843, *Travels in N.Z.* 2: 196.

Ardea iugularis J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 172 – islands of the South Pacific Ocean, and Queen Charlotte Sound, Marlborough.

Herodias pannosus Gould, 1848: *Proc. Zool. Soc. London 1847* (15): 221 – Port Stephens, New South Wales, Australia.

Ardea pannosa (Gould); G.R. Gray 1849, *Gen. Birds* 3 (Appendix): 25.

Herodias pannosa (Gould); Bonaparte 1857, *Consp. Gen. Avium* 2: 120.

Herodias sacra (Gmelin); Bonaparte 1857, *Consp. Gen. Avium* 2: 121.

Ardea (Herodias) sacra (Gmelin); G.R. Gray 1859, *Cat. Birds Tropical Is Pacific Ocean*: 48.

Ardea cinerea Ellman, 1861: *Zoologist* 19: 7469 – New Zealand. Junior primary homonym of *Ardea cinerea* Linnaeus, 1758.

Demigretta sacra (Gmelin); Buller 1905, *Suppl. Birds N.Z.* 1: 198.

Demigretta sacra matook (Vieillot); Mathews & Iredale 1913, *Ibis* 1 (10th series): 405.

Demigretta matook (Vieillot); Mathews 1920, *Birds Australia (Suppl.)* 1: 52.

Egretta sacra sacra (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 32.

Demigretta sacra (Gmelin); Oliver 1955, *New Zealand Birds*, 2nd edition: 394.

Distribution as for species, excluding New Caledonia and Loyalty Islands. Breeds in the North and South Islands, mainly along rocky shores; most numerous in Northland; thinly distributed south of Marlborough Sounds; scarce on Stewart Island / Rakiura (Edgar 1978). Chatham Islands: rare (one at Owenga, *c.* 1985; Checklist Committee 1990; Freeman 1994); Auckland Islands / Maukahuka Feb.–Mar. 1982, and Jan.–Feb. 2019 (Miskelly, Elliott *et al.* 2020). One South Island midden record (Kaikoura; Checklist Committee 1990). Records from Kermadec Islands / Rangitāhua unverified (Veitch *et al.* 2004). Subspecies dimorphic elsewhere, but birds are grey in New Zealand, where only one report of a white-morph bird is accepted (1987, estuary of the Heathcote and Avon Rivers / Ihutai; Scofield 2006). Unconfirmed white-morph birds may be albinos or other species (E. Mayr & Amadon 1941; Wodzicki & Eyles 1945, Crossland 1992; Merton 1970; Veitch *et al.* 2004).

*Also used for white-faced heron *E. novaehollandiae*.

Subfamily NYCTICORACINAE Bonaparte: Night Herons

Nycticoracinae Bonaparte, 1854: *Ann. Sci. Nat., Zool. Paris*, 4th series 1: 142 – Type genus *Nycticorax* T. Forster, 1817.

Genus *Nycticorax* T. Forster

Nycticorax T. Forster, 1817: *Synop. Cat. Brit. Birds*: 59 – Type species (by monotypy) *Nycticorax infaustus* Forster = *Nycticorax nycticorax* (Linnaeus).

Caltherodius Bonaparte, 1855: *Consp. Gen. Avium* 2: 139 – Type species (by monotypy) *Ardea cucullata* Lichtenstein = *Nycticorax leuconotus* (Wagler).

► *Nycticorax caledonicus* (Gmelin)

Rufous Night Heron

Ardea caledonica Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 626. Based on the “Caledonian Night Heron” of Latham 1785, *Gen. Synop. Birds* 3: 55 – New Caledonia.

Philippines, Indonesia, New Guinea, Solomon Islands, New Caledonia, Australia (Marchant & Higgins 1990). Five subspecies.

Nycticorax caledonicus australasiae (Vieillot)

Nankeen Night Heron | Umu Kōtuku

Ardea maculata Latham, 1801: *Index Ornith. Suppl.*: lxiv – New South Wales, Australia. Junior primary homonym of *Ardea maculata* Boddaert, 1783.

Ardea novaehollandiae Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 14: 436 – New South Wales, Australia. Junior primary homonym of *Ardea novaehollandiae* Latham, 1790.

Ardea australasiae Vieillot, 1823: *Tableaux Encycl. Method. Ornith.* 3: 1130 – New South Wales, Australia (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 405).

Nycticorax caledonicus Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 74. Not *Ardea caledonica* Gmelin, 1789.

Nycticorax caledonicus (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Ardea caledonica* Gmelin, 1789.

Nycticorax caledonicus hilli Mathews, 1912: *Novit. Zool.* 18(3): 233 – Parry’s Creek, Western Australia.

Nycticorax caledonicus australasiae (Vieillot); Mathews & Iredale 1913, *Ibis* 1 (10th series): 405.

Nycticorax caledonicus (Gmelin) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 32.

Nycticorax caledonicus caledonicus; Oliver 1955, *New Zealand Birds*, 2nd edition: 390. Not *Ardea caledonica* Gmelin, 1789.

Nycticorax caledonicus; Checklist Committee 1990, *Checklist Birds N.Z.*: 92. Not *Ardea caledonica* Gmelin, 1789.

Indonesia, Sulawesi, Moluccas, Lesser Sundas, New Guinea, Australia, New Zealand (Marchant & Higgins 1990). In New Zealand, rare breeding resident, but whether breeding population native or introduced is unclear. Liberated in Wellington 1852 (Buller 1887–88) and 1982 (Checklist Committee 1990). A Wellington record in 1856 may have been one of the liberated birds, while 1980s sightings of birds with leg bands may refer to the 1982 release: Collingwood 1983, Lower Hutt 1984, Warkworth 1984 (Checklist Committee 1990). Occasional vagrant from Australia with *c.* 25

records of apparent vagrants since the first record at Maungatautari in 1842 (Colenso 1844, 1845). The sighting of two immatures near Blenheim in 1958 (B. Bell 1958) suggested local breeding; two breeding colonies now established along the Whanganui River: Jerusalem, 1995 (Marsh & Lovei 1997), Kemps Pole, 2001 (Parrish & Lock 1997).

Umu is a proper noun, in honour of Hohepa Te Umuroa, and should have an initial capital.

Subfamily BOTAURINAE Reichenbach: Bitterns

Botaurinae Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 15 – Type genus *Botaurus* Stephens, 1819.

“*Botaurus minuta* Haast” (Anon. 1870: *Cat. Colonial Mus.*: 74) may refer to *Ixobrychus novaehollandiae*; however, in the absence of a type specimen or description, we here regard it as a *nomen nudum*. An immature small bittern sighted in the Meremere area in 1962 and 1963 was the subject of much controversy regarding its identification (Falla 1963b; P. Howard 1963; P. Howard & McKenzie 1965; Miskelly *et al.* 2013).

Genus *Botaurus* Stephens

Botaurus Stephens, 1819: in Shaw, *General Zool.* 11: 592 – Type species (by subsequent designation) *Ardea stellaris* Linnaeus = *Botaurus stellaris* (Linnaeus).

► *Botaurus poiciloptilus* (Wagler)

Australasian Bittern | Matuku-hūrepo

Ardea poiciloptila Wagler, 1827: *Syst. Avium, Ardea*, sp. 28 – New South Wales, Australia.

Botaurus melanotus G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 196 – New Zealand. Junior primary homonym of *Botaurus melanotus* Brehm, 1842.

Botaurus poiciloptilus (Wagler); G.R. Gray 1847, *Gen. Birds* 3: 557.

Botaurus australis Gould, 1848: *Birds of Australia* 6: 54 – New South Wales, Australia.

Botaurus poicilopterus (Wagler); G.R. Gray 1862, *Ibis* 4: 236. Unjustified emendation.

Ardea poeciloptera Finsch, 1870: *Journ. für Ornith.* 18: 348. Unjustified emendation.

Ardea poiceloptera Hutton, 1871: *Cat. Birds N.Z.*: 28. Unjustified emendation.

Botaurus poeciloptilus (Wagler); Buller 1873 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 4): 238. Unjustified emendation.

Botaurus poiciloptilus poiciloptilus (Wagler); Mathews 1912, *Novit. Zool.* 18(3): 234.

Botaurus poiciloptilus melanotus G.R. Gray; Mathews & Iredale 1913, *Ibis* 1 (10th series): 406. Not *Botaurus melanotus* Brehm, 1842.

Botaurus poiciloptilus maorianus Iredale & Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 76. *Nomen novum* for *Botaurus melanotus* G.R. Gray, 1843.

Botaurus poiciloptilus mathewsi Hachisuka, 1931: *Bull. Brit. Ornith. Club* 52: 41 – New Caledonia.

Botaurus stellaris poiciloptilus (Wagler); Checklist Committee 1953, *Checklist N.Z. Birds*: 33.

Botaurus poiciloptilus (Wagler); Checklist Committee 1990, *Checklist Birds N.Z.*: 93.

New Caledonia, Australia (all coastal areas except the tropical north), Tasmania, and New Zealand (Marchant & Higgins 1990). Sometimes treated as a subspecies of the Eurasian *B. stellaris* (Linnaeus, 1758). Widely distributed in New Zealand (C. Robertson *et al.* 2007). Reported by Travers & Travers (1873) and Forbes (1893) on the Chatham Islands; Millener (1999) suggested that it formerly bred there, and Fleming (1939a) gave the date of extinction on the Chatham Islands as 1910. Aikman & Miskelly (2004) accepted it as a vagrant to the Chatham Islands. Two mainland “Holocene” bone records (Ngaroto and Poukawa) but it is unlikely that the bones are more than a few hundred years old. Holdaway *et al.* (2001) suggested that this species is a recent colonist in New Zealand.

Genus *Ixobrychus* Billberg

Ixobrychus Billberg, 1828: *Synop. Faun. Scand.* 1: 166 – Type species (by subsequent designation) *Ardea minuta* Linnaeus = *Ixobrychus minutus* (Linnaeus).

Ardetta G.R. Gray, 1842: *List Gen. Birds* (revised edition) – Appendix: 13 – Type species (by original designation) *Ardea minuta* Linnaeus = *Ixobrychus minutus* (Linnaeus).

Ardeola Bonaparte, 1852: *Ann. Lyc. Nat. Hist. N.Y.* 2: 307 – Type species (by monotypy) *Ardea exilis* Gmelin = *Ixobrychus exilis* (Gmelin). Junior homonym of *Ardeola* Boie 1822.

Nannocnus Stejneger, 1887: *Proc. U.S. Nat. Mus.* 10: 291 – Type species (by original designation) *Ardetta eurhythmia* Swinhoe = *Ixobrychus eurhythmus* (Swinhoe).

► *Ixobrychus minutus* (Linnaeus)

Little Bittern

Ardea minuta Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 240 – “Helvetia Aleppo”, restricted to Switzerland (*vide* Mathews 1913, *List Birds Australia*: 85).

Europe, Asia, Africa (except north), south New Guinea, and Australia (Marchant & Higgins 1990). Four subspecies.

Ixobrychus minutus dubius Mathews

Australian Little Bittern

Ardea pusilla Vieillot, 1817: *Nouv. Dict. Hist. Nat.*, nouv. éd. 14: 432 – New South Wales, Australia. Junior primary homonym of *Ardea pusilla* Statius Müller, 1776.

Ixobrychus minutus dubius Mathews, 1912: *Novit. Zool.* 18(3): 234 – Herdsman’s Lake, south-west Australia.

Ixobrychus minutus alisteri Mathews, 1913: *Austral Avian Rec.* 1: 188. Unnecessary *nomen novum* for *Ardea pusilla* Vieillot, 1817.

Ixobrychus minutus queenslandicus Mathews, 1914: *Austral Avian Rec.* 2: 89 – Kedron Brook, Brisbane, Australia.

Ixobrychus minutus victoria Mathews, 1915: *Austral Avian Rec.* 3: 24 – Geelong, Victoria, Australia.

Ixobrychus minutus dubius Mathews; Checklist Committee 1990, *Checklist Birds N.Z.*: 94.

Ixobrychus dubius Mathews; Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 20, 108.

Southern New Guinea and Australia (Marchant & Higgins 1990). One New Zealand record: Westport, Feb. 1987, caught and later released (O'Donnell & Dilks 1988).

► †***Ixobrychus novaezelandiae*** (Purdie)

New Zealand Little Bittern | Kaoriki

Ardeola Novae Zelandiae Purdie, 1871 (Jan.): *Proc. N.Z. Inst.* (Otago) 3: 99 – Lake Wakatipu, Fiordland.

Ardetta pusilla Gould; Potts 1871, *Trans. N.Z. Inst.* 3: 97. Not *Ardea pusilla* Vieillot, 1817.

Ardea pusilla; Hutton 1871, *Cat. Birds N.Z.*: 27. Not *Ardea pusilla* Vieillot, 1817.

Ardetta maculata Latham; Buller 1874, *Trans. Proc. N.Z. Inst.* 6: 119, pl. 21. Not *Ardea maculata* Gmelin, 1789.

Ardea maculata Latham; Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Not *Ardea maculata* Gmelin, 1789.

Ixobrychus minutus novaezelandiae (Potts) [sic]; Mathews & Iredale 1913, *Ibis* 1 (10th series): 406.

Ixobrychus minutus novaezelandiae; Oliver 1930, *New Zealand Birds*, 1st edition: 367.

Dupetor flavicollis (Linnaeus) [sic]; Horn 1980, *Notornis* 27: 401. Not *Ardea flavicollis* Latham, 1790.

Ixobrychus novaezelandiae (Potts) [sic]; Checklist Committee 1990, *Checklist Birds N.Z.*: 93.

Extinct, formerly in North and South Islands and Chatham Islands. Two putative specimens from the North Island: Tauranga, 1842 (Colenso 1844, 1845; Buller 1878a wrongly gave 1836 as the date of this record), and Whanganui (Buller 1905–06). Neither specimen is now traceable with certainty nor are the provenances definite. Thirteen specimens reported from the South Island (not all now locatable), the first from Lake Kaniere (1868), and all from Westland, except the type from Lake Wakatipu collected before 9 Aug. 1870 (Purdie 1871). Subfossil material known from swamp and midden sites in North Island (Millener 1991). Five subfossil bones of a small bittern from Lake Poukawa, Hawke's Bay, referred by Horn (1980) to the black bittern *Dupetor flavicollis* (Linnaeus) (sic) are believed to be *I. novaezelandiae*. Holocene remains from Chatham Islands (Holdaway *et al.* 2001) probably indicate an extinct population.

Family THRESKIORNITHIDAE Poche: Ibises and Spoonbills

Subfamily THRESKIORNITHINAE Poche: Ibises

Threskiornithidae Poche, 1904: *Zool. Anzeig.* 27: 498 – Type genus *Threskiornis* G.R. Gray, 1842.

Genus *Plegadis* Kaup

Plegadis Kaup, 1829: *Skizz. Entw.-Gesch. Eur. Thierw.*: 82 – Type species (by monotypy) *Tantalus Falcinellus* Linnaeus = *Plegadis falcinellus* (Linnaeus).

Tantalides Wagler, 1832: *Isis von Oken*, Heft 11: 1231 – Type species (by subsequent designation) *Tantalus Falcinellus* Linnaeus = *Plegadis falcinellus* (Linnaeus).

Plegadornis C.L.Brehm, 1855: *Naumannia*: 290. Unnecessary *nomen novum* for *Plegadis* Kaup, 1829.

Egatheus Lönnberg, 1906: *Journ. für Ornith.* 54: 533 – Type species (by monotypy) *Egatheus autumnalis* (Linnaeus) = *Plegadis falcinellus* (Linnaeus). Junior homonym of *Egatheus* Billberg, 1828.

► ***Plegadis falcinellus*** (Linnaeus)

Glossy Ibis

Tantalus Falcinellus Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 241 – Austria & Italy.

Ibis peregrina Bonaparte, 1855: *Consp. Gen. Avium* 2: 159 – Java & Sulawesi, Indonesia.

Plegadis falcinellus (Linnaeus); Buller 1905, *Suppl. Birds N.Z.* 1: 192.

Egatheus falcinellus (Linnaeus); Mathews 1912, *Novit. Zool.* 18(3): 228.

Plegadis falcinellus rogersi Mathews, 1916: *Austral Avian Rec.* 3: 256 – Parry's Creek, Western Australia.

Plegadis falcinellus peregrinus (Bonaparte); Checklist Committee 1953, *Checklist N.Z. Birds*: 33.

Plegadis falcinellus (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 94.

Southern North America, Europe, Africa, central Asia, India, Malaysia, Indonesia, New Guinea, Australia (Marchant & Higgins 1990). Vagrant to New Zealand, first recorded at Washdyke, Timaru, 1902. Sometimes irrupts in small flocks, as in 1953 (Sansom *et al.* 1954), 1968–69 (e.g. Child 1969), 1975 (Edgar 1976), 1988 (Keeley 1989). Chatham Islands: one, Dec. 1984 (Powlesland & Crockett 1986). Breeding first recorded at Wainono Lagoon, South Canterbury, Jan. 2015 (M. Thompson 2015), and since Dec. 2016 at Blenheim oxidation ponds (Miskelly, Crossland *et al.* 2019).

Genus *Threskiornis* G.R. Gray

Threskiornis G.R. Gray, 1842: *List Gen. Birds* (revised edition) – Appendix: 13 – Type species (by original designation) *Tantalus aethiopicus* Latham = *Threskiornis aethiopicus* (Latham).

Carphibis Reichenbach, 1853: *Avium Syst. Nat.* 2(1): 14 – Type species (by original designation) *Ibis spinicollis* Jameson = *Threskiornis spinicollis* (Jameson).

Setibis Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 43: 993. Unnecessary *nomen novum* for *Carphibis* Reichenbach, 1853.

► **Threskiornis molucca** (Cuvier)

White Ibis

Ibis molucca Cuvier, 1829: *Règne Anim.* (2nd edition) 1: 520 (note) – Moluccas, Indonesia.

Moluccas to New Guinea, Solomon Islands, and Australia (Marchant & Higgins 1990). Checklist Committee (2010) used *T. m. strictipennis* (Gould); however, we follow Lowe & Richards (1991) who sunk *T. m. strictipennis* under the nominate subspecies and recognised two subspecies only: *T. m. pygmaeus* Mayr, 1931 and *T. m. molucca*. In the original description, the species name *molucca* was used as a noun in apposition, and so it cannot be changed to *moluccus* (see Christidis & Boles 2008, p. 113).

Threskiornis molucca molucca (Cuvier)

White Ibis

Ibis molucca Cuvier, 1829: *Règne Anim.* (2nd edition) 1: 520 (note) – Moluccas, Indonesia.

Threskiornis molucca molucca (Cuvier); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 113.

Southern New Guinea and Australia. Straggler to Tasmania and New Zealand (Marchant & Higgins 1990). First recorded at Appleby, near Nelson, in 1925 (Moncrieff 1925). Minor irruptions in 1957 (Falla 1958) and 1975, probably of young (subadult) birds, which, during their stay, apparently drifted north (Heather 1978). Last record was Helensville, 1989 (G. Taylor 1990). Two records from Norfolk Island, 1975 (McKean *et al.* 1976) and 1976 (J. Moore 1981).

► **Threskiornis spinicollis** (Jameson)

Straw-necked Ibis

Ibis spinicollis Jameson, 1835: *Edinburgh New Philosophical Journal* 19: 213 – Murray River, New South Wales, Australia.

Ibis lamellicollis Lafresnaye, 1836: *Mag. Zool., Paris* (sér. 1): pl. 57 – New South Wales, Australia.

Ibis australis Jardine & Selby, 1837: *Illust. Ornith* (new series) 4: text, pl. 17 – New South Wales, Australia.

Carphibis spinicollis fitzroi [sic] Mathews, 1912: *Novit. Zool.* 18(3): 228 – Fitzroy River, north-west, Australia.

Threskiornis spinicollis (Jameson); Lindsay 1963, *Notornis* 10: 304.

Throughout Australia and New Guinea (Marchant & Higgins 1990). Vagrant to Tasmania, Lord Howe Island, and Norfolk Island (two records; Lindsay 1963; M. Hoare *in* Wakelin 1968). One near Tarras, Central Otago, Feb. 2010, was the first record of this species from New Zealand (Miskelly *et al.* 2011).

Subfamily PLATALEINAE Bonaparte: Spoonbills

Plataleinae Bonaparte, 1838: *Geogr. Comp. List. Birds*: 48 – Type genus *Platalea* Linnaeus, 1758.

Genus *Platalea* Linnaeus

Platalea Linnaeus, 1758: *Syst. Nat., 10th edition* 1(1): 139 – Type species (by subsequent designation) *Platalea leucorodia* Linnaeus.
Spatheroxia Reichenbach, 1852: *Avium Syst. Nat.* 2(1): 16 – Type species (by original designation) *Spatheroxia melanorhynchus* (Reichenbach) = *Platalea regia* Gould.

Platibis Bonaparte, 1855: *Compt. Rend. Séa. Acad. Sci., Paris* 40: 724 – Type species (by monotypy) *Platalea flavipes* Gould.

Platela; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 509. Misspelling.

Platalea; Scofield & Stephenson 2015, *Birds N.Z. Photographic Guide*. 2nd edition: 522. Misspelling.

► **Platalea regia** Gould

Royal Spoonbill | Kōtuku Ngutupapa

Platalea regia Gould, 1838: *Synop. Birds Australia* 4, *App.*: 7 – eastern coast of New South Wales, Australia.

Platalea melanorhynchus Reichenbach, 1845: *Vollst. Naturg. Schwim. Aves Natatores* 4: pl. 84, fig. 424 – New South Wales, Australia.

Ardea latirostrum Ellman, 1861: *Zoologist* 19: 7469 – New Zealand.

Platalea melanorhyncha Reichenbach; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 2 (part 4): 144. Unjustified emendation.

Platalea intermedia Ogilvie-Grant, 1889: *Ibis* 1 (6th series): 52, pl. 1, figs 2, 2a – Port Moresby, New Guinea.

Platalea regia stalkerii Mathews, 1912: *Novit. Zool.* 18(3): 229 – Alexandria, Northern Territories, Australia.

Spatheroxia regia (Gould); Mathews 1913, *List Birds Australia*: 78.

Platalea regia regia Gould; Mathews & Iredale 1913, *Ibis* 1 (10th series): 403.

Platalea (*Spatheroxia*) *regia*; Stidolph 1927, *Emu* 26: 218.

Platalea leucorodia regia Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 33.

Platalea leucorodia; J. Moore 1981, *Notornis* 28: 52. Not *Platalea leucorodia* Linnaeus, 1758.

Platalea regia Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 95.

Australia, except south-west; has wandered to Indonesia, New Guinea, and islands of the south-west Pacific (Marchant & Higgins 1990). Sometimes treated as a subspecies of the widespread *P. leucorodia*. In New Zealand, a rare straggler in the 19th Century, first reported at Castlepoint, Wairarapa, 1861 (Buller 1869). Breeding in south Westland suspected by mid-1940s (Stidolph 1948), and confirmed at Waitangiroto white heron colony (commonly called “Okarito”) in 1949 (Oliver 1955). The species has subsequently spread, with breeding reported at the Wairau Lagoons, 1979–80 (Holdaway 1980); Maukiekie Island, Moeraki, 1983–84 (P. Schweigman *in* Marchant & Higgins 1990); Green Island, Dunedin, 1988 (P. Schweigman *in* Marchant & Higgins 1990); Omaui Island, Southland, 1992 (O’Donnell & West 1995); Nilsson’s Dam, Parengarenga Harbour, 1993 (Parrish & Lock 1995); Kapiti Island, 1995; Nugget Point, 1995; Taieri Island / Moturata, 1997; Pig Island, Southland, 1998; Heywood Point, Otago, 2003 (Schweigman 2006); Wainono Lagoon (South

Canterbury), 2003 (Collins 2006b); Taiaroa Head, 2004; Waituna Lagoon, 2004; and the Catlins, 2004 (Schweigman 2006). The carrying of sticks or attempted nest-building has been recorded at Kaituna Lagoon, Lake Ellesmere / Te Waihora, 1983 (Booth 1984) and Western Springs, Auckland, 2000 (Parrish 2002). A census in Jun. 2000 counted 956 individuals (Schweigman 2000). Disperses in autumn, mainly north to coastal areas, and vagrants probably continue to arrive from Australia. Single record from Chatham Island, 2004 (Miskelly *et al.* 2006). One record on Raoul Island, Kermadec Islands / Rangitāhua, 1996 (J. Ballantyne in Veitch *et al.* 2004). No valid Holocene bone records; bones from Tom Bowling Bay and Waikuku Beach, reported by Scarlett (1979), were re-identified as *Ardea alba* (Millener 1981a). Four published records from Norfolk Island: 1892 (Basset-Hull 1910), 1963 (Wakelin 1968), 1971 & 1976 (J. Moore 1981).

► ***Platalea flavipes*** Gould

Yellow-billed Spoonbill

Platalea flavipes Gould, 1838: *Synop. Birds Australia, App.*: 7 – New South Wales, Australia.

Platalea flavipes flavipes Gould; Mathews 1912, *Novit. Zool.* 18(3): 229.

Platibis flavipes (Gould); Mathews 1913, *List Birds Australia*: 79.

Platalea flavipes Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 96.

Australia. Scarce straggler to New Zealand, with two records: Rangaunu Harbour, Northland, 1976–81 (Billing 1977; Edgar 1977, 1978; Heather 1978; Sibson 1979, 1981), and Te Whiti, Wairarapa, Dec. 1981 (Booth 1984; Guest 1991). Single record from Norfolk Island, late 1960s (Hermes *et al.* 1986).

Order ACCIPITRIFORMES: Kites, Hawks, and Eagles

The diurnal birds-of-prey (Accipitridae, Sagittariidae, Falconidae, and Cathartidae) were long grouped in a single order usually named Falconiformes (from Sharpe 1874, *Cat. Birds Brit. Mus. 1*: ix, 1 – suborder Falcones; type *Falco* Linnaeus), e.g. Peters (1934), Wetmore (1960), Stresemann & Amadon (1979), del Hoyo *et al.* (1994). However, the strict monophyly of this group is strongly doubted, as revealed by DNA-hybridisation (Sibley *et al.* 1988; Sibley & Ahlquist 1990) and karyological, pterylogical and morphological studies reviewed in Holdaway (1994a). This has resulted in the removal of Cathartidae, either to its own order or to within storks to which they are most closely related. Increasing evidence suggests that Falconidae and Accipitridae are not closely related (e.g. Fain & Houde 2004; Ericson *et al.* 2006). We follow Christidis & Boles (2008) in treating these two groups as separate orders. Within Accipitriformes as so defined, genera, as listed by, e.g. del Hoyo *et al.* (1994) and Dickinson (2003), are demonstrably non-monophyletic based on nuclear and mitochondrial genome data (Bunce *et al.* 2005; Helbig *et al.* 2005; Lerner & Mindell 2005; Griffiths *et al.* 2007). As a result of these and other phylogenetic studies concerning *Aquila*, Sangster *et al.* (2005) transferred *Hieraetus pennatus* Gmelin, 1788 to *Aquila pennata*, thereby making *Hieraetus* Kaup, 1844 a synonym of *Aquila* Brisson, 1760. As they restricted comment to Western Palaearctic species, it is not clear what the total advocated composition of *Aquila* is. However, in such a broadened definition of *Aquila*, *Harpagornis*, which was shown by Bunce *et al.* (2005) to be the sister taxon of *Hieraetus morphnoides* and *H. pennatus*, is a derivative of the common ancestor of all “booted eagles”. Given this, we follow Sangster *et al.* (2005), Barthel & Helbig (2005), Mebs & Schmidt (2006) and Commission de l’Avifaune Française (2007) in recognising only one genus for the “booted eagles” of the subfamily Aquilinae (*sensu* Lerner & Mindell 2005).

None of the family-group names in Vieillot’s *Analyse d’une nouvelle ornithologie élémentaire* (1816) were based on Linnaean generic names (Bock 1994), and so none are valid under ICZN (1999). Accipitrini Vieillot, 1816: 22, while designated as a family, does not provide the basis of a valid family-group name. ICZN (1999) does not rule on names above family-group level, and so Vieillot names are available for such names. Accipitriformes Vieillot may be used for Accipitridae and Sagittariidae. Brodkorb (1964) provided detailed synonymies of all nomenclatorial groupings that have been proposed.

Family ACCIPITRIDAE Vigors: Kites, Hawks, and Eagles

Subfamily ACCIPITRINAE Vigors: Kites, Hawks, and Eagles

Accipitrina Vigors, 1824: *Zoological Journ. 1*: 313 – Type genus *Accipiter* Brisson, 1760.

Within this subfamily we include: Milvinae Vigors, 1824; Aquilinae Vigors, 1824; and Circinae Bonaparte, 1838. The taxon *Haliaeetus australis* (Harrison & Walker, 1973) was deleted from the New Zealand list as it is considered to be based on bones of the Alaskan bald eagle *H. leucocephalus* mistakenly mixed with bones from the Chatham Islands after their collection by Forbes (Millener 1999; Worthy & Holdaway 2002).

Genus *Milvus* La Cépède

Milvus La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 4 – Type species (by tautonymy) *Falco milvus* Linnaeus = *Milvus milvus* (Linnaeus).

► *Milvus migrans* (Boddaert)

Black Kite

Falco migrans Boddaert, 1783; *Tables des Planches Enluminez d’Histoire Naturelle de M. d’Aubenton*: 28. Based on ‘Le Milan noir’ of Daubenton 1765–81, *Planches Enlum.*: pl. 472 – France.

Milvus affinis Gould, 1838: *Synop. Birds Australia 3*: pl. 47, fig. 1 – New South Wales, Australia.

Milvus korschun napieri Mathews, 1912: *Novit. Zool. 18*(3): 249 – Napier Broome Bay, Western Australia.

Milvus aterrimus Mathews, 1912: *Austral Avian Rec. 1*: 128 – New South Wales, Australia.

Milvus migrans (Boddaert); Stresemann & Amadon 1979, in Peters, *Check-list Birds World 1* (2nd edition): 297.

Milvus migrans; Medway 2000, *Notornis 47*(1): 65.

Widespread in Europe, Africa, Asia, and Australia. Vagrant to New Zealand with ten accepted records, all of single birds: Marlborough, Aug. 1992, Jul. 1993, Mar. 1994 (Medway 2000a); Waihopai Valley, Aug. 2000 (Medway 2000a) and still present 2015 (Hyde *et al.* 2017); Glentanner, Lake Pukaki, Mar. 1994 (Medway 2000a); Wanaka, Dec. 1996 (Miskelly *et al.* 2011); Auckland localities, Nov. 2001 (Medway 2002d); Mercer, South Auckland, Apr.–May 2002 and Mar. 2003 (Medway 2002f, 2003a); Pirinoa, Wairarapa, Sep. 2002 (Medway 2002f); Inglewood, Taranaki, Mar. 2009 (Miskelly *et al.* 2011); Meremere, Waikato, Nov. 2016 (Miskelly, Crossland *et al.* 2017); Hauraki Plains, Feb. 2020 (Miskelly, Crossland *et al.* 2021).

Genus *Circus* La Cépède

Circus La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 4 – Type species (by subsequent designation) *Falco aeruginosus* Linnaeus = *Circus aeruginosus* (Linnaeus).

Pygargus Koch, 1816: *Syst. Baierischen Zool.* 127: 32 – Type species (by tautonymy) *Falco pygargus* Linnaeus = *Circus pygargus* (Linnaeus).

Strigiceps Bonaparte, 1838: *Geogr. Comp. List. Birds*: 5 – Type species *Falco pygargus* Linnaeus = *Circus pygargus* (Linnaeus).

Glaucopteryx Kaup, 1844: *Classifn Säugeth. Vög.*: 113 – Type species (by monotypy) *Falco cineraceus* Temminck = *Circus pygargus* (Linnaeus). Junior homonym of *Glaucopteryx* Huebner, 1825.

Spizacircus Kaup, 1845: *Mus. Senckenb. Abh.* 3: 258 – Type species (by monotypy) *Circus macropterus* Vieillot.

Spilocircus Kaup, 1847: *Isis von Oken*, Heft 2: col. 89 – Type species (by monotypy) *Circus jardinii* Gould = *Circus assimilis* Jardine & Selby.

Pterocircus Kaup, 1850: *Arch. Naturgesch.* 16(1): 32. Unnecessary *nomen novum* for *Glaucopteryx* Kaup, 1844.

► *Circus approximans* Peale

Swamp Harrier | Kāhu

Circus assimilis; G.R. Gray 1844, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror'*, *Birds* 1(3): 2. Not *Circus assimilis* Jardine & Selby, 1828.

Circus approximans Peale, 1848: *U.S. Expl. Exped.* 8: 64, 308 – Mathuata, Vanua Levu, Fiji Islands.

Circus gouldi Bonaparte, 1850: *Consp. Gen. Avium* 1: 34 – New South Wales, Australia.

Falco aurioculus Ellman, 1861: *Zoologist* 19: 7464 – New Zealand.

Accipiter approximans (Peale); G.R. Gray 1862, *Ibis* 4: 215.

Circus Gouldi Bonaparte; A. Hamilton 1909, *Hand-list Birds New Zealand*: 12.

Circus approximans drummondi Mathews & Iredale, 1913: *Ibis* 1 (10th series): 419 – North Island.

Circus approximans approximans Peale; Checklist Committee 1953, *Checklist N.Z. Birds*: 36.

Circus approximans gouldi Bonaparte; Checklist Committee 1953, *Checklist N.Z. Birds*: 36.

Circus approximans Peale; Checklist Committee 1990, *Checklist Birds N.Z.*: 109.

Circus aeruginosus; J. Moore 1999, *Notornis* 46: 359. Not *Falco aeruginosus* Linnaeus, 1758.

South-east New Guinea, Australia (mainly north, east and south-west), Tasmania, New Zealand and offshore islands, Chatham Islands, Vanuatu, New Caledonia, and Loyalty Islands, Fiji, Tonga, and Wallis (Uvea) Island (Marchant & Higgins 1993). A regular visitor to the Kermadec Islands / Rangitāhua, and Norfolk and Lord Howe Islands; a straggler to New Zealand subantarctic islands (Bailey & Sorensen 1962; Miskelly *et al.* 2001a; Veitch *et al.* 2004; Miskelly, Elliott *et al.* 2020) and Samoa. Introduced to the Society Islands. Following Baker-Gabb (1979) and Checklist Committee (1990), we do not recognise any subspecies. Widely distributed on the New Zealand mainland (C. Robertson *et al.* 2007). Considered to have colonised New Zealand only after human settlement and the extinction of *Circus teauteensis* (Holdaway *et al.* 2001, as *C. eylesi*; Worthy & Holdaway 2002). As it is a recent colonist to New Zealand the former name “Australasian harrier” was discarded in favour of the Australian name, swamp harrier (Checklist Committee 1990). A few very late Holocene bones and numerous midden records from widely distributed sites in the North and South Islands and the Chatham Islands (Worthy & Holdaway 2002).

► †*Circus teauteensis* Forbes

Eyles' Harrier | Kēurangi

Circus teauteensis Forbes, 1892: *Trans. Proc. N.Z. Inst.* 24: 186 – Te Aute, Hawke's Bay.

Circus hamiltoni Forbes, 1892: *Trans. Proc. N.Z. Inst.* 24: 186 – Te Aute, Hawke's Bay.

Circus eylesi Scarlett, 1953: *Rec. Cant. Museum* 6: 247 – Pyramid Valley, Canterbury.

Forbes (1892) established the names *Circus hamiltoni* and *C. teauteensis* simultaneously for two extinct harriers without adequate descriptions, and with no reference to specimens or localities. These names were therefore *nomina dubia*. Casts and the original syntypes of these taxa are preserved, labelled as such, in the Palaeontology Department, Natural History Museum, London (Lambrecht 1933; Dawson 1958; Worthy 2000), which removes the status of *nomina dubia* from these names, *contra* Worthy (2000). The museum catalogue makes it clear that the specimens were the basis of Forbes' 1892 names (it cites the reference) and identifies their collection locality. Furthermore, it is clear they are synonyms of *Circus eylesi* Scarlett (Worthy 2000). Following Dawson's recommendation (1958), both *Circus hamiltoni* and *C. teauteensis* were accepted as senior synonyms of *C. eylesi* (Worthy 2000), and *C. teauteensis* (for which the right tibiotarsus BMNH A1534 is the only surviving syntype) was adopted as the senior name. Known from several Pleistocene–Holocene deposits and middens widely scattered in both North and South Islands (Worthy & Holdaway 2002).

Knapp *et al.* (2019) suggested that the spotted harrier (*Circus assimilis*) from Australia was the closest living relative of *C. teauteensis*, based on comparisons of mitochondrial DNA.

Genus *Haliaeetus* Savigny

Haliaeetus Savigny, 1809: *Descrip. Egypte Hist. Nat.* 1: 68, 85 – Type species (by monotypy) *Haliaeetus nisus* Savigny = *Haliaeetus albicilla* (Linnaeus).

Haliaeetus Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 24: 101. Unjustified emendation.

Haliaeetus Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 28: 273. Unjustified emendation.

Blagrus Blyth, 1846: *Journ. Asiatic Soc. Bengal* 15: 369 – Type species (by monotypy) *Blagrus dimidiatus* Raffles = *Haliaeetus leucogaster* (Gmelin).

► ***Haliaeetus leucogaster*** (Gmelin)**White-bellied Sea Eagle**

Falco leucogaster Gmelin, 1788; *Syst. Nat.*, 13th edition 1(1): 257 – New South Wales, Australia.

Haliaeetus sphenurus Gould, 1838: *Synop. Birds Australia* 3: pl. 39 – Tasmania, Australia.

Ichthyaetus leucogaster; Buller 1872 (Apr.), *History of the Birds of N.Z.*, 1st edition (part 1): 16.

Haliaeetus leucogaster pallidus Mathews, 1912: *Novit. Zool.* 18(3): 248 – Point Torment, Western Australia.

Haliaeetus leucogaster; Oliver 1955, *New Zealand Birds*, 2nd edition: 431.

Haliaeetus leucogaster (Gmelin); Stresemann & Amadon 1979, in Peters, *Check-list Birds World 1* (2nd edition): 299.

This entry is based on a specimen in the Museum of New Zealand Te Papa Tongarewa (NMNZ OR.001341) that was given to Buller by Gould after it was “said to have been procured in New Zealand” (Oliver 1955). This and other sightings of “eagles” in New Zealand were reviewed by Oliver (1955) who concluded that the various sightings may have referred to this species.

Genus *Aquila* Brisson

Aquila Brisson, 1760: *Ornithologie 1*: 28, 419 – Type species (by tautonymy) *Aquila* Brisson = *Falco chrysaetos* Linnaeus = *Aquila chrysaetos* (Linnaeus).

Hieraaetus Kaup, 1844: *Classifn Säugeth. Vög.*: 120 – Type species (by original designation) *Falco pennatus* Gmelin = *Aquila pennata* (Gmelin).

Harpagornis Haast, 1872: *Trans. N.Z. Inst.* 4: 193 – Type species (by monotypy) *Harpagornis moorei* Haast = *Aquila moorei* (Haast).

► †***Aquila moorei*** (Haast)**Haast's Eagle**

Harpagornis moorei Haast, 1872: *Trans. N.Z. Inst.* 4: 193 – Glenmark, Canterbury.

Harpagornis assimilis Haast, 1874: *Trans. N.Z. Inst.* 6: 64 – Glenmark, Canterbury.

Hieraaetus moorei (Haast); Bunce *et al.* 2004, *Public Library Science Biology* 39(1) E9: 1.

Aquila moorei (Haast); Checklist Committee 2010, *Checklist Birds N.Z.*: 172.

Holdaway (1990) synonymised *Harpagornis assimilis* with *H. moorei*, formalising the treatment that had been in use for some time. Based on a morphological skeletal analysis, Holdaway (1991, 1994a) found *Harpagornis* to be the sister taxon of *Aquila*, *contra* Oliver (1955) who provided reasons for *Haliaeetus* being the closest relative. Bunce *et al.* (2005) assessed the phylogenetic relationships of *Harpagornis* using mtDNA, and obtained data placing it in a clade with a group of small eagles in the genus *Hieraaetus*, specifically the little eagle *H. morphnoides* and the booted eagle *H. pennatus*. Bunce *et al.* (2005) advocated the synonymy of *Harpagornis* within *Hieraaetus* and not with *Aquila* as suggested by Holdaway (1994a). Following publication of several phylogenetic studies (Wink & Seibold 1996; Wink *et al.* 1996; Wink 2000; Wink & Sauer-Gürth 2000; Roulin & Wink 2004; Wink & Sauer-Gürth 2004; Helbig *et al.* 2005; Lerner & Mindell 2005; Haring *et al.* 2007) a reassessment of the taxonomy of *Hieraaetus* and *Aquila* eagles indicated that the species currently included in *Hieraaetus* and *Aquila* do not form separate monophyletic groups but a series of minor clades at a level below that of genus. Thus all “booted” eagle taxa, often previously included in Aquilinae, are now widely agreed to belong to a single genus *Aquila* (see Barthel & Helbig 2005; Sangster *et al.* 2005; Mebs & Schmidt 2006; Commission de l'Avifaune Française 2007) and, given the genetic evidence of Bunce *et al.* (2005) and the morphological evidence of Holdaway (1994a), we include *H. moorei* in this genus.

Widespread in South Island in Pleistocene–Holocene sites and in middens (Worthy & Holdaway 2002). No valid records from the North Island (Worthy 2000). Its range contracted at the end of the Pleistocene so that in the Holocene it was found only in mountainous areas and east of the Southern Alps / Kā Tiritiri o te Moana (Worthy & Holdaway 2002).

Order **STRIGIFORMES**: Owls

Regarding the following *nomina dubia*, see under genus *Aegotheles* Vigors & Horsfield:

Strix parvissima Ellman, 1861: *Zoologist* 19: 7465. *Nomen dubium*.

Strix parvissima Potts, 1871: *Trans. N.Z. Inst.* 3: 68 – Rangitata River, Canterbury. *Nomen dubium*.

Athene (Strix) parvissima Potts; Potts 1873, *Trans. N.Z. Inst.* 5: 172. *Nomen dubium*.

Family **TYTONIDAE** Ridgway: Barn OwlsSubfamily **TYTONINAE** Ridgway: Barn Owls

Tytonidae Ridgway, 1914: *Bull. U.S. Nat. Mus.* 50(6): 598 – Type genus: *Tyto* Billberg, 1828.

Genus **Tyto** Billberg

Strix Savigny, 1809: *Descrip. Egypte Hist. Nat.* 1: 69 – Type species (by monotypy) *Strix flammea* auctorum = *Tyto alba* (Scopoli). Junior homonym of *Strix* Linnaeus, 1758.

Aluco Fleming, 1822: *Phil. Zool.* 2: 236 – Type species (by monotypy) *Strix flammea* auctorum = *Tyto alba* (Scopoli). Junior homonym of *Aluco* Link, 1807.

Tyto Billberg, 1828: *Syn. Faun. Scand.* 1(2): tab. A – Type species (by monotypy) *Strix alba* Scopoli = *Tyto alba* (Scopoli).

Ulula Nitzsch, 1829: *Obs. Avium Arter. Carot. Comm.*: 20. Unnecessary *nomen novum* for *Strix* Savigny, 1809. Junior homonym of *Ulula* Cuvier, 1817.

Hybris Nitzsch, 1833: *Pterylogr. Avium*: 16 – Type species (by monotypy) *Strix alba* Scopoli = *Tyto alba* (Scopoli).

Flammea Fournel, 1836: *Faune Moselle*: 101 – Type species (by monotypy) *Strix vulgaris* Brehm = *Tyto alba* (Scopoli).

Eustrinx Webb, Berthelot & Moquin-Tandon, 1841: *Hist. Nat. Iles Canaries* 2: 8. Unnecessary *nomen novum* for *Strix* Savigny, 1809.

Stridula Selys-Longchamps, 1842: *Faune Belg.*: 60 – Type species (by monotypy) *Stridula flammea* Selys-Longchamps = *Tyto alba* (Scopoli).

Glyphidiura Reichenbach, 1850: *Avium Syst. Nat.*: pl. 92 – Type species (by subsequent designation) *Strix perlata* Lichtenstein = *Tyto alba tuidara* (J.E. Gray).

Glaux Blyth, 1851: *Journ. Asiatic Soc. Bengal.* 19(7): 513 – Type species (by monotypy) *Strix candida* Tickell = *Tyto capensis longimembris* (Jerdon). Junior homonym of *Glaux* Rylands, 1836.

Scelostrix Kaup, 1852: in Jardine, *Contrib. Ornith.*: 119 – Type species (by monotypy) *Strix candida* Tickell = *Tyto capensis longimembris* (Jerdon).

Dactylostrix Kaup, 1852: in Jardine, *Contrib. Ornith.*: 119 – Type species (by monotypy) *Strix castanops* Gould = *Tyto novaehollandiae castanops* (Gould).

Strigymnhemipus Des Murs, 1853: *Chenu's Encycl. Hist. Nat., Oiseaux* 1: 146 – Type species (by subsequent designation) *Strix perlata* Lichtenstein = *Tyto alba tuidara* (J.E. Gray).

Glaucostrix G.R. Gray, 1855: *Cat. Genera Subgen. Birds Brit. Mus.*: 135. Unnecessary *nomen novum* for *Glaux* Blyth, 1851.

► **Tyto alba** (Scopoli)

Barn Owl

Strix alba Scopoli, 1769: *Annus 1, Hist. Nat.*: 21 – Friuli, northern Italy.

Almost world-wide. More than 30 subspecies (Dickinson & Remsen 2013).

Tyto alba delicatula (Gould)

Australian Barn Owl

Strix delicatulus Gould, 1837: *Proc. Zool. Soc. London 1836* (4): 140 – “Novâ Cambriâ Australi” = New South Wales, Australia (fide Schodde 1997, *Zool. Cat. Australia* 37.2: 291).

Strix delicatula Gould; Anon. 1870, *Cat. Colonial Mus.*: 72.

Aluco delicatula (Gould); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1: 23.

Tyto alba alexandrae Mathews, 1912: *Novit. Zool.* 18(3): 256 – Alexandria, Northern Territory, Australia.

Tyto alba delicatula (Gould); Checklist Committee 1953, *Checklist N.Z. Birds*: 56.

Tyto (Tyto) alba delicatula (Gould); Schodde 1997, *Zool. Cat. Australia* 37.2: 290.

Tyto javanica delicatula (Gould); Fitolulu 2018, *Taxonomy Birds of the World*: 142.

Throughout mainland Australia. Rare in Tasmania, where it is probably a recent arrival (first recorded 1910; Checklist Committee 1990). Several records from Norfolk Island (Higgins 1999). Vagrant in New Zealand until 2008, when breeding was confirmed near Kaitaia (Hyde *et al.* 2009); now well-established in Northland (Hyde & Matthews 2017). Three records of birds shot or accidentally killed in Westland: Barrytown 1947, Haast River mouth 1955, Runanga 1960 (Falla 1948; Falla & Riney 1958; Grant 1960). Two birds near Auckland were linked to transport on aeroplanes: 1983 (one, alive, Papatoetoe, on flight-path to Auckland International Airport; B. Gill & Turbott 1984); and 1985 (remains of one, Auckland International Airport, in undercarriage of aeroplane from USA via Hawai'i; B. Gill & Turbott 1985). In addition to the colonising population in Northland, other records include: south Kaipara Head, Feb. 1986 (Guest 1990); New Plymouth, Aug. 1990 (specimen; Guest 1991); Whenuapai, Apr. 1992 (G. Taylor & Parrish 1994a); Hauturu / Little Barrier Island, Jun.–Sep. 1992 (Smuts-Kennedy & Lovegrove 1996); and Palmerston North, Apr. 2020 (Miskelly, Crossland *et al.* 2021). Captive birds are in private hands, and so some records may be of escaped cage-birds. Natural New

Zealand records are assumed to be of the Australian subspecies, but it is likely that other subspecies have also reached New Zealand (e.g. B. Gill & Turbott 1985). Some authors consider barn owls from south-east Asia, Australia, and the Pacific to be separable as *T. javanica* (Gmelin, 1788) (Christidis & Boles 2008), or treat *delicatula* as a full species (König & Weick 2008; Wink *et al.* 2009). Not known from Holocene deposits in New Zealand (see Millener 1983).

Family STRIGIDAE Leach: Typical Owls

Strigidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition, London*: 64 – Type genus *Strix* Linnaeus, 1758.

Subfamily BUBONINAE Vigors: Hawk-owls

Bubonina Vigors, 1825: *Zoological Journ.* 2: 393 – Type genus *Bubo* Dumeril, 1805.

Genus *Ninox* Hodgson

Ninox Hodgson, 1837: *Madras Journ. Lit. Sci.* 5: 23 – Type species (by original designation) *Ninox nipalensis* Hodgson = *Ninox scutulata lugubris* (Tickell).

Hieracoglaux Kaup, 1848: *Isis von Oken*, Heft 41: col. 768 – Type species (by subsequent designation) *Falco connivens* Latham = *Ninox connivens* (Latham). As a subgenus of *Ninox*.

Spiloglaux Kaup, 1848: *Isis von Oken*, Heft 41: col. 768 – Type species (by subsequent designation) *Strix boobook* Latham = *Ninox boobook* (Latham). As a subgenus of *Ninox*.

Sceloglaux Kaup, 1848: *Isis von Oken*, Heft 41: col. 768 – Type species (by monotypy) *Athene albifacies* G.R. Gray, 1844 = *Ninox albifacies* (G.R. Gray).

Ieraglaux Kaup, 1852: in Jardine, *Contrib. Ornith.*: 107 – Type species (by subsequent designation) *Falco connivens* Latham = *Ninox connivens* (Latham).

Rhabdoglaux Bonaparte, 1854: *Revue Mag. Zool.* 2 (2nd series): 543 – Type species (by subsequent designation) *Athene humeralis* Bonaparte = *Ninox rufa humeralis* (Bonaparte).

Berneyornis Mathews, 1916: *Birds Australia* 5: 305 – Type species (by original designation and monotypy) *Athene? Strenua* Gould = *Ninox strenua* (Gould).

► *Ninox novaeseelandiae* (Gmelin)

Ruru | Morepork

There are several taxa in this complex for which opinions are divided regarding taxonomic rank (Mees 1964, 1982; Schodde & Mason 1980; Christidis & Boles 1994; Schodde 1997a). Several forms from islands north of Australia were all accepted in the most recent morphological study (R. Johnstone & Darnell 1997): *N. n. plesseni* Stressemann, 1929 – Alor; *N. n. fusca* (Vieillot, 1817) – Timor; *N. n. moae* Mayr, 1914 – Moa, Romah, and Leti; *N. n. cinnamomina* Hartert, 1906 – Babar; *N. n. remigialis* Stressemann, 1930 – Kai; *N. n. rotiensis* Johnstone & Darnell, 1997 – Roti; and *N. n. pusilla* Mayr & Rand, 1935 – New Guinea. Australian boobooks i.e., *N. n. ocellata* (Bonaparte, 1850); *N. n. boobook* (Latham, 1801); *N. n. lurida* De Vis, 1887; *N. n. leucopsis* (Gould, 1838); and *N. n. halmaturina* Mathews, 1912, are sometimes considered to be subspecies of *N. novaeseelandiae* (e.g. Christidis & Boles 1994). Others (e.g. Schodde 1997a) assigned them to a species – *N. boobook* (Latham) – separate from *N. novaeseelandiae*, and including *N. b. undulata* (Latham, 1801) on Norfolk Island and *N. b. albaria* Ramsay, 1888 on Lord Howe Island. However, genetic studies (Norman, Christidis *et al.* 1998; Norman, Olsen *et al.* 1998) supported the conclusion of Christidis & Boles (1994) that the Australian, Norfolk, and New Zealand forms comprise one species with intrataxon genetic variation much less than between taxa whose distinction at species level is uncontested.

Ninox novaeseelandiae novaeseelandiae (Gmelin)

Ruru | Morepork

Strix novae Seelandiae Gmelin, 1788: *Syst. Nat.*, 13th edition 1(1): 296. Based on the “New Zealand Owl” of Latham 1782, *Gen. Synop. Birds*: 149 – Queen Charlotte Sound, Marlborough.

Strix fulva Latham, 1790: *Index Ornith.* 1: 65 – Queen Charlotte Sound, Marlborough.

Strix novae-seelandiae maculata Kerr, 1792: *Anim. Kingdom* 1: 538 – New Zealand.

Noctua zelandica Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool.* 1: 168 – Tasman Bay.

Athene Novae Seelandiae (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 186.

Strix fulva J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 71 – Queen Charlotte Sound, Marlborough. Junior primary homonym of *Strix fulva* Latham, 1790.

Noctua venatica Peale, 1848: *U.S. Expl. Exped.* 8: 75, 309 – Bay of Islands.

Ieraglaux novae zealandiae (Gmelin); Kaup 1852, *Trans. Zool. Soc. London* 4(6): 218. Unjustified emendation.

Athene nova zealandiae (Gmelin); Cassin 1858, *U.S. Expl. Exped. Ornithology* 8: 112. Unjustified emendation.

Athene novae zealandiae (Gmelin); G.R. Gray 1862, *Ibis* 4: 216. Unjustified emendation.

Athenae Novae Zelandiae Gmelin; Anon. 1870, *Cat. Colonial Mus.*: 72. Unjustified emendation.

Spiloglaux novae zealandiae (Gmelin); Buller 1872 (Apr.), *History of the Birds of N.Z.*, 1st edition (part 1): 17. Unjustified emendation.

Athene novae-zealandiae (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Ninox novae-zealandiae (Gmelin); Hutton 1904, *Index Faunae N.Z.*: 29. Unjustified emendation.

Spiloglaux novaeseelandiae novaeseelandiae (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 421.

Spiloglaux novaeseelandiae venatica (Peale); Mathews & Iredale 1913, *Ibis* 1 (10th series): 422.

Spiloglaux novae-zeelandiae (Gmelin); Mathews 1930, *Emu* 29: 282. Unjustified emendation.

Ninox novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 56.

New Zealand: North and South Islands, and Stewart Island / Rakiura plus most larger forested offshore islands from the Manawatāwhi / Three Kings Group to Codfish Island / Whenua Hou (C. Robertson *et al.* 2007). Absent from the Kermadec, Chatham, and subantarctic islands, except as a vagrant on the Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Widespread, but sparingly distributed in drier eastern areas. Late Pleistocene and Holocene bones and midden records from both North and South Islands. Its reported occurrence on Chatham Island (Forbes 1893) has not been verified by subsequent investigations of bone deposits there.

Two males were introduced to Norfolk Island in 1987, where at least one bred with the last surviving individual of *N. n. undulata*. A population of hybrids is slowly increasing (Olsen 1996; Higgins 1999).

► †***Ninox albifacies*** (G.R. Gray)

Laughing Owl | Whēkau

Extinct. Known from North and South Islands, and Stewart Island / Rakiura (G. Williams & Harrison 1972). Bones of this owl are abundant in drier eastern regions of both main islands, including at sites where they accumulated food remains (Worthy & Holdaway 2002). Its reported occurrence on Chatham Island has been discounted (Dawson 1960; Millener 1999). B. Gill (1996a) found significant size differences between North and South Island samples, and favoured subspecific distinction.

Sceloglaux Kaup, 1848, was formerly considered to be a monotypic genus endemic to New Zealand (Checklist Committee 2010). However, genetic research by J. Wood, Mitchell *et al.* (2017) provides strong evidence to support the inferences of previous authors who argued for a close relationship between *Sceloglaux* and species of *Ninox* (e.g. Olsen 1999; Weick 2006). *Sceloglaux* is now accepted as a junior synonym of *Ninox*.

†***Ninox albifacies rufifacies*** (Buller)

North Island Laughing Owl

Sceloglaux rufifacies Buller, 1904: *Ibis* 4 (8th series): 639 – Wairarapa District.

Sceloglaux albifacies rufifacies Buller; Mathews & Iredale 1913, *Ibis* 1 (10th series): 422.

Ninox albifacies rufifacies (Buller); Hume 2017, *Extinct Birds* (2nd edition): 233.

Extinct. North Island only. Two recent specimens only were taken (Buller 1905–06; Oliver 1955), both now lost (Worthy 1997c): near Mount Egmont / Mount Taranaki (1856) and Wairarapa (“about 50 miles from Wellington”, 1868–69, holotype). Only two early sight records seem reliable: Waikohu near Te Karaka (1889) and near Porirua (before 1892). Bones found at numerous sites, including swamps, caves, dunes, and in a few middens (B. Gill 1996a).

†***Ninox albifacies albifacies*** (G.R. Gray)

South Island Laughing Owl

Athene albifacies G.R. Gray, 1844: in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’*, *Birds* 1(3): 2, pl. 1 – Waikouaiti, Otago.

Ieraglaux albifacies (G.R. Gray); Kaup 1852, *Trans. Zool. Soc. London* 4(6): 219.

Athene (Sceloglaux) albifacies G.R. Gray; G.R. Gray 1862, *Ibis* 4: 216.

Strix haasti Buller, 1865: *Essay N.Z. Ornith.*, reprinted 1869, *Trans. N.Z. Inst.* 1 (2nd edition): 219 – Canterbury.

Athene albifrons R. Taylor, 1870: *Te Ika a Maui* (2nd edition): 612. Unjustified emendation.

Athenae albifacies G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 72. Unjustified emendation.

Athene ejulans Potts, 1871: *Trans. N.Z. Inst.* 3: 63 – Lindis Pass, Otago.

Sceloglaux albifacies (G.R. Gray); Buller 1872 (Apr.), *History of the Birds of N.Z.*, 1st edition (part 1): 21.

Strix haastii; Potts 1882: *Out in the Open*: 123 – Unjustified emendation.

Sceloglaux albifacies albifacies (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 422.

Ninox albifacies (G.R. Gray); J. Wood, Mitchell *et al.* 2017, *Zool. J. Linn. Soc.* 179: 912.

Ninox albifacies albifacies (G.R. Gray); Hume 2017, *Extinct Birds* (2nd edition): 231.

South Island (Nelson, Canterbury, Otago, Fiordland) and Stewart Island / Rakiura (G. Williams & Harrison 1972). Declined rapidly after about 1880, now extinct. Last specimen obtained Jul. 1914 (Blue Cliffs, South Canterbury). It apparently preferred rocky areas in open country or at the forest edge. Late Pleistocene and Holocene bones and midden records widespread, including Stewart Island / Rakiura (B. Gill 1996a).

Genus ****Athene*** Boie

Athene Boie, 1822: *Isis von Oken*, Heft 5: col. 549 – Type species (by subsequent designation) *Athene noctua* (Scopoli).

► ****Athene noctua*** (Scopoli)

Little Owl | Ruru Nohinohi

Strix noctua Scopoli, 1769: *Annus 1, Hist. Nat.*: 22 – Carniolia = Krain, Slovenia.

Athene noctua (Scopoli) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 57.

Athene noctua (Scopoli); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 61.

Europe, North Africa, Middle East, Central Asia. Thirteen subspecies (Dickinson & Remsen 2013). The subspecific status of the New Zealand population has not been determined. Introduced to New Zealand in 1906–11 (Thomson 1922; Marples 1942b), and now widespread in all eastern parts of the South Island; occasional sightings in Westland and Fiordland (C.

Robertson *et al.* 2007). No recent records from Stewart Island / Rakiura (present 1956–57) or the North Island (heard at Rotorua 1958; Higgins 1999).

Order **CORACIIFORMES**: Kingfishers, Bee-eaters, and Rollers

Suborder CORACII: Rollers

Family **CORACIIDAE** Rafinesque: Rollers

Coracina Rafinesque, 1815: *Analyse de la Nature*: 67 – Type genus *Coracias* Linnaeus, 1758.

Genus **Eurystomus** Vieillot

Eurystomus Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 37 – Type species (by monotypy) *Coracias orientalis* Linnaeus = *Eurystomus orientalis orientalis* (Linnaeus).

Hirundolanius Buller, 1882: *Man. Birds of N.Z.*: 7 – Type species (by monotypy) *Hirundolanius coeruleus* Buller = *Eurystomus orientalis pacificus* (Latham).

► **Eurystomus orientalis** (Linnaeus)**Dollarbird**

Coracias orientalis Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 159 – “India orientali” = Java, Indonesia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 386).

Asia and Australasia. Resident, nomadic, or migratory (Higgins 1999). Ten subspecies (Dickinson & Remsen 2013).

Eurystomus orientalis pacificus (Latham)**Dollarbird**

Coracias pacifica Latham, 1801: *Index Ornith. Suppl.*: xxvii – “Nova Hollandia”, restricted to Port Jackson, New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 387).

Eurystomus Australis Swainson, 1838: *Cabinet Cyclopaedia* 98: 326 – “New Holland”, restricted to New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 387).

Hirundolanius coeruleus Buller, 1882: *Man. Birds of N.Z.*: 7 – Westport.

Eurystomus pacificus (Latham); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187.

Eurystomus australis Swainson; Buller 1905, *Suppl. Birds N.Z.* 1: 96.

Eurystomus orientalis pacificus (Latham); Mathews & Iredale 1913, *Ibis* 1 (10th series): 428.

Eurystomus orientalis; Stidolph 1927, *Emu* 26: 218. Not *Coracias orientalis* Linnaeus, 1766.

Breeds in north and east Australia. Migrates at the end of summer to Indonesia and New Guinea (Higgins 1999). Irregular migrant on Norfolk Island (Schodde *et al.* 1983). Straggler to New Zealand (e.g. Brathwaite 1956; Barlow 1967; Clunie 1971); many records since 1882, mostly of young birds, singly or in small groups, usually between Dec. and May (the time of the northward migration) (Higgins 1999).

Suborder **ALCEDINES**: Kingfishers, Todies, and MotmotsFamily **ALCEDINIDAE** Rafinesque: Kingfishers

Alcedia Rafinesque, 1815: *Analyse de la Nature*: 66 – Type genus *Alcedo* Linnaeus, 1758.

We follow Moyle (2006) and Cracraft (2013) in recognising a single family of kingfishers, with three subfamilies (one of which occurs in New Zealand).

Subfamily **HALCYONINAE** Vigors: Forest Kingfishers

Halcyonidae Vigors, 1825: *Trans. Linn. Soc. London* 14(3): 428 – Type genus *Halcyon* Swainson, 1821.

Genus ***Dacelo** Leach

Dacelo Leach, 1815: *Zool. Miscell.* 2: 125 – Type species (by subsequent designation) *Alcedo gigantea* Latham = *Dacelo novaeguineae* (Hermann).

► ***Dacelo novaeguineae** (Hermann)**Laughing Kookaburra**

Eastern Australian mainland. Introduced to Western Australia, Tasmania, and New Zealand (Higgins 1999). Two subspecies, with *D. n. minor* Robinson 1900 restricted to northern Queensland (Higgins 1999).

***Dacelo novaeguineae novaeguineae** (Hermann)**Laughing Kookaburra**

Alcedo novae Guineae Hermann, 1783 (before Nov.): *Tabula Affinit. Animalium*: 192 – “Nouvelle Guinée”, error for Cumberland, New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 356).

Alcedo gigas Boddaert, 1783 (Dec.): *Tables des Planches Enluminées d’Histoire Naturelle de M. d’Aubenton*: 40 – “Nouvelle Guinée” and “New Holland”, restricted to Cumberland, New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 356).

Dacelo novaeguineae novaeguineae (Hermann); Checklist Committee 1953, *Checklist N.Z. Birds*: 58.

Dacelo gigas (Boddaert); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 63.

Dacelo novaeguineae (Hermann); Checklist Committee 1980, *Notornis (Suppl.)* 27: 21.

Eastern Australian mainland. Introduced to Western Australia, Tasmania, and New Zealand (Higgins 1999). In New Zealand a small number persist on Kawau Island and the adjacent mainland from Cape Rodney to the Whangaparaoa Peninsula. These are assumed to be descended from Sir George Grey's introduction of kookaburras to Kawau Island in the early 1860s (Thomson 1922). Some evidence of an increase southward into urban Auckland (C. Robertson *et al.* 2007). Stragglers occur more widely in Northland, and occasionally reach other parts of New Zealand as far afield as Otago (Heather & Robertson 1996).

Genus *Todiramphus* Lesson

Todiramphus Lesson, 1827: *Mém. Soc. Hist. Nat. Paris* 3: 420 – Type species (by subsequent designation) *Todiramphus sacer* Lesson = *Todiramphus tutus* (Gmelin).

Sauropatis Cabanis & Heine, 1860: *Mus. Heineanum* 2: 158 – Type species (by subsequent designation) *Halcyon sanctus* Vigors & Horsfield = *Todiramphus sanctus* (Vigors & Horsfield).

Todirhamphus Salvadori, 1880: *Ornitologia Papuasia Molucche* 1: 468. Unjustified emendation.

Todiramphus is now used for the Australasian and south-west Pacific kingfishers of this group, leaving *Halcyon* for the Afro-Asian species (e.g. Christidis & Boles 1994, 2008; Schodde 1997c). A molecular phylogeny supported this (Moyle 2006). Swainson (1821) figured and described the Micronesian kingfisher *Todiramphus cinnamominus* with a type locality of New Zealand, and Potts (1871) reported two further sightings. Subsequent workers have dismissed these as a mislabelling and mistaken identifications respectively (e.g. Finsch 1873).

► *Todiramphus sanctus* (Vigors & Horsfield)

Sacred Kingfisher

Halcyon sanctus Vigors & Horsfield, 1827: *Trans. Linn. Soc. London* 15: 206 – “New Holland”, restricted to New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 365).

Widespread in Australia (n nominate subspecies), Philippines, Indonesia, New Guinea, and Solomon Islands (Higgins 1999). Resident in New Zealand and Lord Howe Island (subspecies *T. s. vagans*), Norfolk Island (*T. s. norfolkiensis* (Tristram 1885)), the Loyalty Islands (*T. s. macmillani* (Mayr, 1940)), and New Caledonia (*T. s. canacorum* (Brasil, 1916)).

Todiramphus sanctus vagans (Lesson)

New Zealand Kingfisher | Kōtare

Alcedo vagans Lesson, 1828: *Manuel d'Ornith.* 2: 89 – Bay of Islands.

Halcyon vagans (Lesson); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 186.

Alcedo cyanea J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 76 – North Island.

Dacelo vagans (Lesson); Peale 1848, *U.S. Expl. Exped.* 8: 162.

Dacelo albifrons Peale, 1848: *U.S. Expl. Exped.* 8: 162 – Bay of Islands.

Todirhamphus vagans (Lesson); Bonaparte 1850, *Consp. Gen. Avium* 1: 157.

Halcyon cinnamominus; Potts 1871, *Trans. N.Z. Inst.* 3: 71. Not *Todiramphus cinnamominus* (Swainson, 1821).

Sauropatis sanctus vagans (Lesson); Mathews & Iredale 1913, *Ibis* 1 (10th series): 429.

Sauropatis sanctus forsteri Mathews & Iredale, 1913: *Ibis* 1 (10th series): 429 – South Island.

Halcyon sancta vagans (Lesson); Checklist Committee 1953, *Checklist N.Z. Birds*: 58.

Todiramphus (*Todiramphus*) *sanctus vagans* (Lesson); Schodde 1997, *Zool. Cat. Australia* 37.2: 367.

Widespread throughout North and South Islands, and Stewart Island / Rakiura – and on most offshore islands; also the Kermadec Islands / Rangitāhua. Especially common and widespread in the North Island; least numerous in inland and southern areas of the South Island (C. Robertson *et al.* 2007). There appears to be a movement in winter from inland high country and forest to lowland farmland and the coast (R.H. Taylor 1966). Straggler to Chatham Islands (Miskelly *et al.* 2006; Miskelly, Crossland *et al.* 2019), but no records from any of the subantarctic island groups. Poorly represented in Holocene deposits. This could mean that the species colonised New Zealand relatively recently (Millener 1990), or that it was confined to coastal habitats before the major episode of Māori deforestation 400–600 years ago (Holdaway *et al.* 2001: 136).

Order FALCONIFORMES: Falcons

We follow Holdaway (1994a), Holdaway *et al.* (2001), and Christidis & Boles (2008) in separating falcons from accipitrids at the ordinal level.

Family FALCONIDAE Leach: Falcons

Falconidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition, London*: 63 – Type genus *Falco* Linnaeus, 1758.

Genus *Falco* Linnaeus

Falco Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 88 – Type species (by subsequent designation) “*Falco peregrinus* Linnaeus” = *Falco peregrinus* Tunstall.

Cerchneis Boie, 1826: *Isis von Oken*, Heft 10: col. 970 – Type species (by monotypy) *Falco rupicolus* Daudin.

Hypotriorchis Boie, 1826: *Isis von Oken*, Heft 10: col. 976 – Type species (by monotypy) *Falco subbuteo* Linnaeus.

Rhynchodon Nitzsch, 1829: *Obs. Avium Arter. Carot. Comm.*: 20 – Type species (by subsequent designation) *Falco peregrinus* Tunstall.

Ieracidea Gould, 1838: *Synop. Birds Australia 3*: pl. 43 – Type species (by monotypy) *Falco berigora* Vigors & Horsfield.

Hieracidea Strickland, 1841: *Ann. Mag. Nat. Hist., London 6*: 416. Unjustified emendation.

Harpe Bonaparte, 1855: *Compt. Rend. Séa. Acad. Sci., Paris 41*: 652 – Type species (by original designation) *Falco novaeseelandiae* Gmelin. Junior homonym of *Harpe* La Cépède, 1802.

Harpa Sharpe, 1874: *Cat. Birds Brit. Mus 1*: 372. Unjustified emendation of *Harpe* Bonaparte and junior homonym of *Harpa* Lamarck, 1799.

Nesierax Oberholser, 1899: *Proc. Acad. Nat. Sci. Philad.*: 203 – Type species (by original designation) *Falco novaeseelandiae* Gmelin.

Notofalco Mathews, 1913: *Austral Avian Rec. 2*: 56 – Type species (by original designation) *Falco subniger* G.R. Gray.

Megacerchneis Roberts, 1922: *Ann. Transv. Museum 8*: 210 – Type species (by original designation) *Falco rupicoloides* A. Smith.

Palifalco Mathews, 1946: *Working List Aust. Birds*: 51 – Type species (by original designation) *Falco hypoleucos* Gould.

► *Falco cenchroides* Vigors & Horsfield

Nankeen Kestrel

Two subspecies: *Falco cenchroides cenchroides* (Australia, including Tasmania) and *F. c. baru* (New Guinea) (Marchant & Higgins 1993).

Falco cenchroides cenchroides Vigors & Horsfield

Nankeen Kestrel

Falco cenchroides Vigors & Horsfield, 1827: *Trans. Linn. Soc. London 15*: 183 – New South Wales, Australia.

Cerchneis immaculata Brehm, 1845: *Isis von Oken*, Heft 5: col. 357 – New South Wales, Australia.

Cerchneis unicolor Milligan, 1904: *Emu 6*: 2 – Yalgoo, Western Australia.

Cerchneis cenchroides (Vigors & Horsfield); Buller 1906, *Suppl. Birds N.Z. 2*: 60.

Cerchneis novae-zealandiae; A. Hamilton 1909, *Hand-list Birds New Zealand*: 13. Not *Falco novaeseelandiae* (Gmelin, 1788).

Cerchneis cenchroides milligani Mathews, 1912: *Novit. Zool. 18*(3): 253 – Parry’s Creek, Western Australia.

Cerchneis cenchroides cenchroides (Vigors & Horsfield); Mathews & Iredale, 1913 *Ibis 1* (10th series) 420.

Falco cenchroides Vigors & Horsfield; J. Moore 1981, *Notornis 28*: 53.

Falco cenchroides cenchroides Vigors & Horsfield; Checklist Committee 1990, *Checklist Birds N.Z.*: 111.

Throughout Australia (including Tasmania), migrating to Indonesia in winter; breeding on Lord Howe Island (since 1944) and Norfolk Island (since c. 1971) (J. Moore 1985a; McAllan *et al.* 2004). An infrequent straggler to mainland New Zealand (Oliver 1955; Marchant & Higgins 1993), Campbell Island, May 1942 (Miskelly, Crossland *et al.* 2019), and Antipodes Island, two birds, Feb. 2013 (Miskelly, Crossland *et al.* 2021). The numerous records since 1889 (e.g. Guest 1991; Marchant & Higgins 1993; Medway 2000a) include a small irruption in 1969 (sightings in nine localities in North and South Islands; Edgar & Grant 1969).

Falco novaeseelandiae Gmelin

New Zealand Falcon | Kārearea

Falco novae-Seelandiae Gmelin, 1788: *Syst. Nat., 13th edition 1*(1): 268. Based on the “New-Zealand Falcon” of Latham 1781, *Gen. Synop. Birds 1*: 57 – Queen Charlotte Sound, Marlborough.

Falco brunnea Gould, 1838: *Synop. Birds Australia 3*: 42 – New Zealand. Junior primary homonym of *Falco brunneus* Bechstein, 1805 = *Falco tinnunculus* Linnaeus.

Falco brunneus Gould, 1838: *Proc. Zool. Soc. London 1837* (5): 139 – New Zealand. Junior primary homonym of *Falco brunneus* Bechstein, 1805 = *Falco tinnunculus* Linnaeus.

Falco australis Hombron & Jacquinot, 1841: *Ann. Sci. Nat., Paris*, 2nd series 16: 312 – Otago. Junior primary homonym of *Falco australis* Gmelin, 1788 = *Phalcoboenus australis* (Gmelin).

Falco harpe “Forst. Icon. ined.”; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 186.

Hypotriorchis novae zealandiae (Gmelin); G.R. Gray 1844, *List Gen. Birds*: 20. Unjustified emendation.

Falco harpe J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 68 – Queen Charlotte Sound, Marlborough.

Falco ferox Peale, 1848: *U.S. Expl. Exped. 67*, 308 – Bay of Islands, Northland.

Harpe novae-zealandiae (Gmelin); Bonaparte 1855, *Compt. Rend. Séa. Acad. Sci., Paris 41*: 652. Unjustified emendation.

- Teracidea* [sic] *nova-zealandiae* (Gmelin); Cassin 1858, *U.S. Expl. Exped. Ornithology* 8: 89. Unjustified emendation.
- Hieracidea novae zealandiae* (Gmelin); G.R. Gray 1862, *Ibis* 4: 214. Unjustified emendation.
- Hieracidea brunnea* (Gould); G.R. Gray 1862, *Ibis* 4: 215.
- Ieracidea novae zealandiae* (Gmelin); G.R. Gray 1869, *Hand-list Birds* 1: 22. Unjustified emendation.
- Hieracidea novae-zealandiae* (Gmelin); Hutton 1870, *Ibis* 6 (new series): 392. Unjustified emendation.
- Falco Novae Zelandiae* Gmelin; Anon. 1870, *Cat. Colonial Mus.*: 72. Unjustified emendation.
- Harpa australis* (Hombron & Jacquinot); Sharpe, 1874: *Cat. Birds Brit. Mus* 1: 373.
- Harpa novae zealandiae* (Gmelin); Sharpe 1875, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds – 1 (Appendix)*: 21. Unjustified emendation.
- Harpa novae-zealandiae* (Gmelin); Hutton 1879, *Ibis* 3 (4th series): 456. Unjustified emendation.
- Hieracidea ferox* (Peale); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186.
- Nesierax novae-zealandiae* Gmelin; Oberholser, 1899: *Proc. Acad. Nat. Sci. Philad.*: 203. Unjustified emendation.
- Nesierax australis* (Hombron & Jacquinot); Oberholser, 1899: *Proc. Acad. Nat. Sci. Philad.*: 203.
- Nesierax (Harpa) novae-zealandiae* (Gmelin); A. Hamilton 1909, *Hand-list Birds New Zealand*: 13. Unjustified emendation.
- Nesierax australis* Peale [sic]; A. Hamilton 1909, *Hand-list Birds New Zealand*: 13.
- Nesierax novaeseelandiae* (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 420.
- Nesierax pottsii* Mathews & Iredale, 1913: *Ibis* 1 (10th series): 420 – Paroha Bay, Bay of Islands, Northland.
- Nesierax novae-seelandiae* (Gmelin); Mathews 1930, *Emu* 29: 282.
- Falco novaeseelandiae* Gmelin; Checklist Committee 1953, *Checklist N.Z. Birds*: 36.

New Zealand, including Great Barrier Island / Aotea and the Auckland Islands / Maukahuka (Marchant & Higgins 1993). Mainly in hilly and mountain districts; rare in the northern North Island (Fox 1978). Recently extinct on Stewart Island / Rakiura (G. Harper 2009). Fox (1988) alluded to three distinct forms of New Zealand falcons (eastern, southern, and bush) but these have not been taxonomically described. Late Pleistocene–Holocene and midden records from widely distributed sites in North, South, and Chatham Islands (Worthy & Holdaway 2002). Vagrant to Campbell Island and Macquarie Island (Buller 1887–88; Bailey & Sorensen 1962).

Trewick & Olley (2016) proposed recognising North Island and South Island subspecies of the New Zealand falcon based primarily on a size difference between islands. However, this conclusion was not supported by their genetic study, which did not include the holotype of *Falco novaeseelandiae* Gmelin, and did not adequately test the proposal of Fox (1988) to recognise three forms, one of which occurs in both the North Island and South Island (Marchant & Higgins 1993). Therefore the Checklist Committee continues to recognise no subspecies pending a more comprehensive study.

Order PSITTACIFORMES: Cockatoos, Parrots, and Parakeets

Joseph *et al.* (2012) synthesised molecular, palaeontological, and morphological evidence to produce a consensus classification, with formalised nomenclature, that included three superfamilies of parrots: Strigopoidea (kākāpō, kākā, and kea), Cacatuoidea (cockatoos), and Psittacoidea (parrots), and six parrot families: Strigopidae, Nestoridae, Cacatuidae, Psittacidae, Psittichasidae, and Psittaculidae. This system was amended by Cracraft (2013), who recognised four families (Strigopidae, Cacatuidae, Psittacidae, and Psittaculidae) and ten subfamilies of parrots. This included treating Strigopinae (kākāpō) and Nestorinae (kākā and kea) as subfamilies of Strigopidae (see also T. Wright *et al.* 2008, who demonstrated that the split between *Strigops* and *Nestor* was too recent for these genera to be placed in separate families). This is consistent with the classification used in the 2010 New Zealand checklist. Joseph *et al.* (2012) and Cracraft (2013) placed the parakeet genera *Cyanoramphus* and *Platycercus* in family Psittaculidae, with Cracraft recommending their placement in subfamily Loriinae. These genera were placed in Psittacidae in the 2010 checklist. Cracraft's (2013) modification of Joseph *et al.*'s (2012) classification system has been followed by most global bird checklists, including Dickinson & Remsen (2013), Clements *et al.* (2019), and F. Gill *et al.* (2021), and is adopted here.

Family STRIGOPIDAE Bonaparte: Kākāpō, and Kākā and Kea

Subfamily STRIGOPINAE Bonaparte: Kākāpō

Strigopidae Bonaparte, 1849: *Consp. Syst. Ornith.*: 1 – Type genus *Strigops* G.R. Gray, 1845.

Checklist Committee (2010) attributed Strigopinae to G.R. Gray (1848) in error. The correct author of Strigopidae and Strigopinae is Bonaparte (1849), as recognised by Worthy *et al.* (2011b) and Joseph *et al.* (2012).

Genus *Strigops* G.R. Gray

Strigops G.R. Gray, 1845: *Gen. Birds* 2: 426 – Type species (by monotypy) *Strigops habroptilus* G.R. Gray.

Strigopsis Bonaparte, 1849: *Consp. Gen. Avium* 1: 8. Unnecessary *nomen novum* for *Strigops* G.R. Gray, 1845.

Stringopsis van der Hoeven, 1855: *Handl. Dierk.* (2nd edition) 2: 692. Unjustified emendation.

Stringops Finsch, 1867: *Papageien*. 1: 233, 241. Unjustified emendation.

► *Strigops habroptila* G.R. Gray

Kākāpō | Kakapo

Strigops habroptilus G.R. Gray, 1845: *Gen. Birds* 2: 427 – Dusky Sound, Fiordland.

Strigopsis habroptilus (G.R. Gray); Bonaparte 1849, *Consp. Gen. Avium* 1: 8.

Strigops greyii G.R. Gray, 1862: *Ibis* 4: 230 – South Island.

Stringops (Strigops) habroptilus (G.R. Gray); Potts 1871, *Trans. N.Z. Inst.* 3: 90.

Stringops habroptilus G.R. Gray; Reichenow 1881, *Journ. für Ornith.* 29: 15.

Stringops Greyi G.R. Gray; Reichenow 1881, *Journ. für Ornith.* 29: 15. Unjustified emendation.

Strigops habroptilus habroptilus G.R. Gray; Mathews & Iredale 1913, *Ibis* 1 (10th series): 427.

Strigops habroptilus innominatus Mathews & Iredale, 1913: *Ibis* 1 (10th series): 427 – North Island.

Strigops habroptilus parsonsi Mathews & Iredale, 1913: *Ibis* 1 (10th series): 427 – north-west South Island.

Strigops habroptila G.R. Gray; Dickinson 2003, *Complete Checklist Birds World*: 181. Emendation.

New Zealand; historical records and Holocene bone deposits show a distribution at all altitudes throughout North and South Islands, and Stewart Island / Rakiura. Its range shrank considerably before European settlement, particularly in the North Island, but it remained fairly widespread, and even abundant, in certain localities in the south and west South Island until *c.* 1900. After 1980 the only remaining populations, in Fiordland and Stewart Island / Rakiura, declined severely, and all remaining birds were transferred to predator-free locations, including Codfish / Whenua Hou and Hauturu / Little Barrier Islands (Clout & Merton 1998). Now considered extinct in the wild. Reports of bones from the Chatham Islands are considered incorrect (Millener 1999). Genus *Strigops* was determined to be feminine by ICZN (1955: 262), hence the amended spelling of the original species name.

Subfamily NESTORINAE Bonaparte: Kākā and Kea

Nestorinae Bonaparte, 1849: *Consp. Syst. Ornith.*: 1 – Type genus *Nestor* Lesson, 1830.

Genus *Nestor* Lesson

Nestor Lesson, 1830: *Traité d'Ornith.* 3: 190 – Type species (by monotypy) *Nestor novaezealandiae* Lesson, 1830 = *Nestor meridionalis* (Gmelin).

Centrurus Swainson, 1837: *Cabinet Cyclopaedia* 92(2): 303 – Type species (by monotypy) *Psittacus australis* Shaw, 1792 = *Nestor meridionalis* (Gmelin).

Centrurus Strickland, 1841: *Ann. Mag. Nat. Hist., London* 7: 34. Unjustified emendation.

Doreenia Mathews, 1930: *Bull. Brit. Ornith. Club* 50: 41 – Type species (by original designation) *Nestor notabilis* Gould.

Endemic to the New Zealand region, plus Norfolk Island. The last known Norfolk Island kaka (*N. productus* (Gould 1836)) died in captivity in about 1851 (Tennyson & Martinson 2007).

► ***Nestor meridionalis*** (Gmelin)

Kākā | Kaka

We retain the North Island and South Island kaka subspecies, contrary to the recommendations in Sainsbury *et al.* (2006) and Dussex *et al.* (2015), on the basis that they did not adequately explore the described published morphological differences for these taxa, and that the haplotype patterns in the mitochondrial data are not sufficient to evaluate evolutionary history. We consider that further research is required to better understand the relationships.

Nestor meridionalis septentrionalis Lorenz

North Island Kaka

Nestor septentrionalis Lorenz, 1896: *Verh. zool.-bot. Ges. Wien* 46: 198 – North Island.

Nestor meridionalis septentrionalis Lorenz; Checklist Committee 1953, *Checklist N.Z. Birds*: 53.

North Island, from Mangamuka (Northland) to Rimutaka and Aorangi Ranges, and on offshore islands (Hen and Chickens, Great Barrier / Aotea, Hauturu / Little Barrier, Fanal / Motukino, Rakitu / Arid, Mayor / Tuhua, and Kapiti Islands) (Higgins 1999; C. Robertson *et al.* 2007). Straggles to isolated bush patches, sometimes to towns and cities and to other islands (e.g. Poor Knights). Common in Wellington city following 2002–07 re-introduction to Zealandia / Karori Sanctuary (Miskelly 2018a). Common in Holocene deposits throughout the North Island; common in middens, but seldom in large numbers.

Nestor meridionalis meridionalis (Gmelin)

South Island Kaka

Psittacus meridionalis Gmelin, 1788: *Syst. Nat.*, 13th edition 1(1): 333. Based on the “Southern Brown Parrot” of Latham 1781, *Gen. Synop. Birds* 1: 264 – Dusky Sound, Fiordland.

Psittacus nestor Latham, 1790: *Index Ornith.* 1: 110 – Dusky Sound, Fiordland.

Psittacus australis Shaw, 1792: *Mus. Leverianum*: 87 – Dusky Sound, Fiordland.

Psittacus hypopolius J.R. Forster, 1794: *Mag. merkwürdigen neuen Reise Beschreibungen* 11(3): 313, footnote – New Zealand and Norfolk Island, restricted to Dusky Sound, Fiordland (*vide* Steinheimer *et al.* 2008, *Notornis* 55(1): 35).

Psittacus (Kakadoe) nestor Latham; Kuhl 1820, *Consp. Psittacorum*: 86.

Nestor Novae Zelandiae Lesson, 1830: *Traité d’Ornith.* 3: 191 – Dusky Sound, Fiordland.

Nestor hypopolius Wagler, 1832: *Abh. Kl. Bayer Akad. Wiss.* 1: 505, 696 – Dusky Sound, Fiordland. Junior secondary homonym of *Psittacus hypopolius* J.R. Forster, 1794.

Centrourus australis (Shaw); Swainson 1837, *Cabinet Cyclopaedia* 92(2): 303.

Psittacus hypopolius J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 72 – South Island. Junior primary homonym of *Psittacus hypopolius* J.R. Forster, 1794.

Nestor australis (Shaw); G.R. Gray 1845, *Gen. Birds* 2: 426.

Nestor Hypopolius (J.R. Forster); Bonaparte 1854, *Revue Mag. Zool.* 6 (2nd series): 155.

Nestor Novae-Zelandiae Lesson; Bonaparte 1854, *Revue Mag. Zool.* 6 (2nd series): 155.

Nestor Esslingii Souancé, 1856: *Revue Mag. Zool.* 8 (2nd series): 223 – “Philips Island”, probably error for Marlborough District (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 424).

Nestor meridionalis (Gmelin); G.R. Gray, 1862: *Ibis* 4: 229.

Nestor esslingii Souancé; G.R. Gray, 1862: *Ibis* 4: 230.

Nestor superbus Buller, 1865: *Essay N.Z. Ornith.*: 11 – alpine districts of the South Island.

Nestor montanus Finsch, 1868: *Journ. für Ornith.* 16: 242 – alpine heights of the South Island.

Nestor occidentalis Buller, 1869: *Ibis* 5 (new series): 40 – Westland.

Nestor meridionalis var. *esslingii* Souancé; Buller 1888 (Mar.), *History of the Birds of N.Z.*, 2nd edition 1 (part 4): 152.

Nestor esslingi Souancé; Buller 1906, *Suppl. Birds N.Z.* 2: 77. Unjustified emendation.

Nestor meridionalis meridionalis (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 54.

South Island, Stewart Island / Rakiura, and some offshore islands (e.g. D’Urville, Nukuwaiata, Bench, Codfish / Whenua Hou, and Taukihepa / Big South Cape Islands). Chiefly west of the main divide and in Marlborough. Extends into Canterbury at lower mountain passes (e.g. Arthur’s Pass); also throughout the Southern Lakes District (Higgins 1999; C. Robertson *et al.* 2007). An occasional straggler to coastal Canterbury and Otago. Common in Holocene deposits throughout the South Island (Dawson 1952).

► †***Nestor chathamensis*** Wood, Mitchell, Scofield & Tennyson

Chatham Island Kaka

Nestor notabilis Gould; Forbes 1892, *Trans. N.Z. Inst.* 24: 189. In part.

Nestor meridionalis (Gmelin); Forbes, 1893: *Ibis* 5 (6th series): 544. In part.

Nestor meridionalis (Gmelin); Dawson 1959, *Notornis* 8: 114. In part.

Nestor ?n. sp. Tennyson & Millener 1994: *Notornis* 41 (supp.): 165.

Kaka (?sp.n.) Tennyson & Millener 1994: *Notornis* 41 (supp.): 172.

Nestor spp. Millener 1999: *Smithsonian Contrib. Paleobiology* 89: 97.

Nestor “Chatham Islands” Holdaway *et al.* 2001: *New Zealand Journ. Zool.* 28: 135.

Nestor chathamensis Wood, Mitchell, Scofield & Tennyson, 2014: *Zool. Journ. Linn. Soc.* 172: 191 – Chatham Island.

Known only from Holocene bone deposits on the Chatham Islands (J. Wood *et al.* 2014).

► ***Nestor notabilis*** Gould

Kea

Nestor notabilis Gould, 1856 (26 Apr.): *The Athenaeum* 1487: 524 – “the New Zeland [sic] group of islands”, restricted to South Island (*vide* Bruce & McAllan 1990, *Boll. Region. Sci. Natur. Torino* 8(2): 469).

Doreenia notabilis (Gould); Mathews 1930, *Bull. Brit. Ornith. Club* 50: 41.

Nestor notabilis Gould; Checklist Committee 1990, *Checklist Birds N.Z.*: 176.

South Island. High country from Fiordland to Nelson and Marlborough (C. Robertson *et al.* 2007). Breeds chiefly above 760 m, coming down to the West Coast after heavy snow (C. Clarke 1970). Holocene remains recorded rarely at some South Island deposits and abundantly at others (e.g. Oparara) – misidentification is a problem (see Worthy & Mildenhall 1989). One Pleistocene and several Holocene records from North Island deposits (Holdaway & Worthy 1993; Tennyson, Easton *et al.* 2014).

Family ***CACATUIDAE** G.R. Gray: Cockatoos

Subfamily ***CACATUINAE** G.R. Gray: Cockatoos

Cacatuidae G.R. Gray, 1840: *List Gen. Birds* (1st edition): 53 – Type genus *Cacatua* Vieillot, 1817.

Genus ****Cacatua*** Vieillot

Cacatua Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd. 17*: 6 – Type species (by subsequent designation) *Cacatua cristata* Vieillot, 1817 = *Cacatua alba* (Statius Müller, 1776).

► ****Cacatua galerita*** (Latham)

Sulphur-crested Cockatoo

Psittacus galeritus Latham, 1790: *Index Ornith. 1*: 109 – Turramurra, New South Wales, Australia.

Kakatoe galerita (Latham) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 54.

Cacatua galerita (Latham); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 57.

North, east, and south-east Australia, around Perth in Western Australia, Tasmania, New Guinea, and islands from the Moluccas to the Bismarck and Louisiade Archipelagos (Higgins 1999). Three subspecies. Probably introduced to New Zealand by escape from captivity (Thomson 1922), but possibly self-introduced (e.g. Martin & Bartlett 1963; Waller 1959). At least eight populations established, including Waitakere, Miranda, lower Waikato–Raglan area, Turakina Valley (near Whanganui, ranging to Hunterville and Marton), Paraparamu, Wainuiomata, Banks Peninsula, and Catlins (C. Robertson *et al.* 2007). The subspecies of the New Zealand birds has not been identified.

Genus ****Eolophus*** Bonaparte

Eolophus Bonaparte, 1854: *Revue Mag. Zool. 6* (2nd series): 155 – Type species (by monotypy) *Cacatua rosea* Vieillot = *Eolophus roseicapilla* (Vieillot).

► ****Eolophus roseicapilla*** (Vieillot)

Galah

Cacatua roseicapilla Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd. 17*: 12 – region of Shark Bay, Western Australia.

Eolophus roseicapillus (Vieillot); Higgins 1999, *HANZAB 4*: 105.

Eolophus roseicapilla (Vieillot); David & Gosselin 2002, *Bull. Brit. Ornith. Club* 122: 39.

Although the genus *Eolophus* is masculine, we follow David & Gosselin (2002a) and Dickinson & Remsen (2013) in changing the species epithet to “*roseicapilla*”, which should be treated as a noun in apposition, with the original spelling to be retained (ICZN 1999, Art. 31.2.1, 32.3, 34.2.1). Widespread throughout continental Australia and Tasmania. Polytypic; three subspecies (Schodde *et al.* 2016). Present in New Zealand as a cage-bird. Small population in South Auckland (Ponui Island, Mangatawhiri, Bombay, Clevedon). Presumed escapees recorded elsewhere (e.g. in C. Robertson *et al.* 2007). The subspecies of New Zealand birds has not been determined (Higgins 1999).

Family **PSITTACULIDAE** Vigors: Old World Parrots

Psittaculina Vigors, 1825: *Zoological Journ. 2*: 400 – Type genus *Psittacula* Cuvier, 1800.

Subfamily **LORIINAE** Selby: Lories, Rosellas, and Broad-tailed Parrots

Lorianae Selby, 1836: *Naturalist's Library, Ornith. 6*: 57, 141 – Type genus *Lorius* Vigors, 1825.

Genus ****Platycercus*** Vigors

Platycercus Vigors, 1825: *Zoological Journ. 1*: 527 – Type species (by original designation) *Psittacus pennantii* Latham = *Platycercus elegans* (Gmelin).

► ****Platycercus eximius*** (Shaw)

Eastern Rosella | Kākā Uhi Whero

Psittacus eximius Shaw, 1792: *Nat. Miscell. 3*(31): text to pls 93–95 – region of Port Jackson, New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia 37.2*: 180).

Platycercus eximius eximius (Shaw); Checklist Committee 1953, *Checklist N.Z. Birds*: 54.

Platycercus eximius (Shaw); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 58.

Platycercus eximus; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 394. Misspelling.

South-east Australia and Tasmania (Higgins 1999). Three subspecies. Introduced to New Zealand by escape from captivity (Oliver 1955; Higgins 1999). Well established in settled districts, native forests, and forest remnants throughout Northland, Auckland, Waikato, King Country, western Bay of Plenty, Rotorua, and Taupo (C. Robertson *et al.* 2007) as part of a gradual southward spread (D. Wright & Clout 2001). Also (mainly at edge of forest remnants and in adjacent farmland) in Wairarapa, Wellington, Waikanae, Upper Hutt Valley, and Otago (between Waikouaiti River and Waipori River gorge); isolated records elsewhere (C. Robertson *et al.* 2007). New Zealand birds have not been identified to subspecific level.

Genus **Cyanoramphus** Bonaparte

Cyanoramphus Bonaparte, 1854: *Revue Mag. Zool.* 6 (2nd series): 153 – Type species (by subsequent designation) *Cyanoramphus zealandicus* (Latham, 1790).

Cyanoramphus Sclater, 1858: *Journ. Linn. Soc. London, Zoology* 2: 164. Unjustified emendation.

Bulleria Iredale & Mathews, 1926: *Bull. Brit. Ornith. Club* 46: 76 – Type species (by original designation) *Platycercus unicolor* Lear = *Cyanoramphus unicolor* (Lear).

For general discussion of speciation in the genus see R.H. Taylor (1985), Boon, Daugherty *et al.* (2001), Kearvell *et al.* (2003), and Rawlence (2006). Identifications of *Cyanoramphus* in Holocene deposits are tentative because most bones (particularly isolated ones) cannot be reliably assigned to species due to overlap in size.

► **Cyanoramphus novaezealandiae** (Sparrman)

Red-crowned Parakeet | Kākāriki*

Lord Howe Island, New Zealand (including Kermadec, Chatham, and Auckland Islands / Maukahuka), and Macquarie Island. Taxonomic revision based on analysis of mtDNA control region sequences has reduced the number of recognised subspecies from eight to five: *C. n. subflavescens* Salvadori, 1891 (Lord Howe Island, extinct), *C. n. erythrotis* (Wagler, 1832) (Macquarie Island, extinct), and the three subspecies listed below. The closely related taxa *C. saisseti* Verreaux & Des Murs, 1860 (New Caledonia), *C. cookii* (G.R. Gray, 1859) (Norfolk Island), and *C. hochstetteri* (Antipodes Island) are now recognised as full species based on diagnostic nucleotide characters (Boon, Daugherty *et al.* 2001; Boon, Kearvell *et al.* 2001).

*Used as a generic name for *Cyanoramphus* parakeets.

Cyanoramphus novaezealandiae cyanurus Salvadori

Kermadec Parakeet

Cyanoramphus cyanurus Salvadori, 1891: *Ann. Mag. Nat. Hist., London* 7 (6th series): 68 – Raoul Island, Kermadec group.

Cyanoramphus novaezealandiae cyanurus Salvadori; Mathews & Iredale 1913, *Ibis* 1 (10th series): 425.

Kermadec Islands / Rangitāhua: Raoul Island, Herald Islets, and Macauley Island (Veitch *et al.* 2004). Molecular analyses by Rawlence (2006) showed this taxon forms a clade within the general group of *C. novaezealandiae* taxa and with minimal separation from other *C. novaezealandiae* subspecies. Data presented by Rawlence (2006) point towards diagnostic morphological and genetic differences between the Raoul Island and Macauley Island populations. These have been retained within subspecies *C. n. cyanurus*, pending further analyses.

Cyanoramphus novaezealandiae novaezealandiae (Sparrman)

Red-crowned Parakeet | Kākāriki*

Psittacus Novae Zelandiae Sparrman, 1787: *Mus. Carlsonianum* 2: no XXVIII, pl. 28 – Dusky Sound, Fiordland.

Psittacus pacificus Gmelin, 1788: *Syst. Nat., 13th edition* 1(1): 329. Based on the “Pacific Parrot” of Latham 1781, *Gen. Synop. Birds* 1: 252 – Dusky Sound, Fiordland.

Lathamus Sparmanii Lesson, 1831: *Traité d’Ornith.* 1: 206 – Dusky Sound, Fiordland.

Pezoporus novae zeelandiae (Sparrman); Voigt 1831, in F. Cuvier, *Thierreich* 1: 750. Unjustified emendation.

Platycercus Novae Seelandiae (Sparrman); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 192. Unjustified emendation.

Psittacus pacificus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 73 – South Island. Junior primary homonym and junior synonym of *Psittacus pacificus* Gmelin, 1788.

Cyanoramphus Pacificus (J.R. Forster); Bonaparte 1854, *Revue Mag. Zool.* 6 (2nd series): 153. Not *Psittacus pacificus* Gmelin, 1788.

Cyanoramphus Novae-Zelandiae (Sparrman); Bonaparte 1854, *Revue Mag. Zool.* 6 (2nd series): 153.

Cyanoramphus aucklandicus Bonaparte, 1856: *Naumannia* 6: 190 – New Zealand.

Platycercus novaeguineae G.R. Gray, 1859: *List Specimens Birds Brit. Mus. Psittacidae* 3(2): 14 – “New Guinea”, error for Dusky Sound, Fiordland (*vide* Mathews 1944, *Emu* 43: 245).

Platycercus Novae-Zelandiae (Sparrman); Ellman 1861, *Zoologist* 19: 7467. Unjustified emendation.

Platycercus pacificus (Gmelin); G.R. Gray 1862, *Ibis* 4: 228.

Platycercus aucklandicus (Bonaparte); G.R. Gray 1862, *Ibis* 4: 229.

Coriphilus Novae-Zelandiae (Sparrman); Schlegel 1864, *De Dierentuin*: 77. Unjustified emendation.

Euphema novae zeelandiae (Sparrman); Schlegel 1864, *Psittaci. Mus. d’Histoire Naturelle Pays-Bas*: 105. Unjustified emendation.

Platycercus Forsteri Finsch, 1868: *Papageien* 2: 287. *Nomen novum* for *Psittacus pacificus* J.R. Forster, 1844.

Platycercus Novae Zelandiae Sparrman [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73.

Platycercus novae zelandiae (Sparrman); Buller 1872 (Apr.), *History of the Birds of N.Z.*, 1st edition (part 1): 58.

Platycercus rowleyi Buller, 1875: *Trans. N.Z. Inst.* 7: 220 – North Canterbury.
Cyanoramphus novae-zeelandiae (Sparrman); Reichenow 1881, *Journ. für Ornith.* 29: 42. Unjustified emendation.
Cyanoramphus novae-zeelandiae rowleyi (Buller); Reichenow 1881, *Journ. für Ornith.* 29: 42. Unjustified emendation.
Cyanoramphus novae-zeelandiae aucklandicus (Bonaparte); Reichenow 1881, *Journ. für Ornith.* 29: 42. Unjustified emendation.
Cyanoramphus novae-zeelandiae forsteri (Finsch); Reichenow 1881, *Journ. für Ornith.* 29: 43. Unjustified emendation.
Platycercus novae-zeelandiae (Sparrman); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187.
Cyanoramphus aucklandicus (Bonaparte) [sic]; Hutton 1904, *Index Faunae N.Z.*: 29.
Cyanoramphus novae-zeelandiae (Sparrman); Buller 1906, *Suppl. Birds N.Z.* 2: 83. Unjustified emendation.
Cyanoramphus novae-zeelandiae novae-zeelandiae (Sparrman); Mathews & Iredale 1913, *Ibis* 1 (10th series): 424.
Cyanoramphus novae-zeelandiae aucklandicus (Bonaparte); Mathews & Iredale 1913, *Ibis* 1 (10th series): 425.
Cyanoramphus novae-zeelandiae (Sparrman); Mathews 1930, *Emu* 29: 282. Unjustified emendation.
Cyanoramphus novae-zeelandiae rowleyi (Buller); Mathews 1944, *Emu* 43: 245.
Cyanoramphus novae-zeelandiae sejunctus Mathews, 1944: *Emu* 43: 245 – North Island.

New Zealand. Very rare on the mainland, but common on many offshore islands (C. Robertson *et al.* 2007). North Island: occasionally reported from remaining areas of heavy forest, but apparently absent from Mount Egmont / Mount Taranaki, East Cape, and the Ruahine Ranges; present on Manawatāwhi / Three Kings, Poor Knights, Hen and Chickens, Mokohinau, Hauturu / Little Barrier, Rakitu / Arid, Mercury, The Aldermen, and Kapiti Islands. Introduced to Tiritiri Matangi, Cuvier / Repanga, Moutohora / Whale, Matiu / Somes, and Motuihe Islands, and Zealandia Sanctuary, Wellington city (Miskelly & Powlesland 2013). South Island: occasionally reported in the west. Quite widespread on Stewart Island / Rakiura and its outliers (Codfish / Whenua Hou, Taukihepa / Big South Cape, Bench, Ruapuke, and Green Islands). Widely distributed on the Auckland Islands / Maukahuka (Adams, Ewing, Enderby, and Rose Islands; Miskelly, Elliott *et al.* 2020) where molecular data from Boon, Kearvell *et al.* (2001) and Rawlence (2006) confirmed that it is still more or less genetically identical to the mainland type despite fairly extensive hybridisation with nominate *C. auriceps* present at the same locations (see below).

*Used as a generic name for *Cyanoramphus* parakeets.

***Cyanoramphus novae-zeelandiae chathamensis* Oliver**

Chatham Island Red-crowned Parakeet

Cyanoramphus novae-zeelandiae chathamensis Oliver, 1930: *New Zealand Birds*, 1st edition: 412 – Chatham Islands.

Chatham Islands: southern portion of Chatham Island and on Pitt, Mangere, and Rangatira Islands (Aikman & Miskelly 2004). Common in Holocene deposits and in middens. The taxonomic status of this taxon was supported by molecular phylogenetic analyses by Boon *et al.* (2000) and Boon, Kearvell *et al.* (2001).

► ***Cyanoramphus auriceps* (Kuhl)**

Yellow-crowned Parakeet | Kākāriki*

Psittacus pacificus variety δ Gmelin, 1788: *Syst. Nat., 13th edition* 1(1): 329. Based on the “Pacific Parrot, var. C” of Latham 1781, *Gen. Synop. Birds* 1: 252 – Dusky Sound, Fiordland. Junior primary homonym of *Psittacus pacificus* Gmelin, 1788.

Psittacus auriceps Kuhl, 1820: *Nova Acta Acad. Caesarea Leopold.-Carol.* 10: 46 – South Island.

Platycercus Auriceps (Kuhl); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 193.

Trichoglossus Aurifrons; G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 193. Not *Psittacus aurifrons* Lesson, 1831.

Cyanoramphus Auriceps (Kuhl); Bonaparte 1854, *Revue Mag. Zool.* 6 (2nd series): 153.

Euphema auriceps (Kuhl); Lichtenstein 1854, *Nomencl. Av.*: 72.

Platycercus auriceps (Kuhl); G.R. Gray, 1862: *Ibis* 4: 229.

Coriphilus auriceps (Kuhl); Schlegel 1864, *De Dierentuin*: 77.

Cyanoramphus auriceps (Kuhl); Reichenow 1881, *Journ. für Ornith.* 29: 43.

Cyanoramphus auriceps intermedia Reichenow, 1881: *Journ. für Ornith.* 29: 44 – New Zealand.

Cyanoramphus auriceps auriceps (Kuhl); Mathews & Iredale 1913, *Ibis* 1 (10th series): 426.

Cyanoramphus auriceps macleani Mathews & Iredale, 1913: *Ibis* 1 (10th series): 426 – North Island.

Cyanoramphus auriceps novana Mathews, 1930: *Bull. Brit. Ornith. Club* 50: 42 – Birch Ridge, “Maungahaumia” [= Maungahaumi], Gisborne.

New Zealand. Now more common on the mainland than the red-crowned parakeet (Higgins 1999). North Island: mainly restricted to central forested areas and the Tararua Range; present on Hauturu / Little Barrier Island. Introduced to Mana Island (Miskelly & Powlesland 2013). South Island: widespread in western Marlborough, Nelson, Westland, inland North Canterbury, western Otago, the Catlins and Fiordland; Chetwode Islands. Present on Stewart Island / Rakiura and outliers (Bench, Ulva, Jacky Lee / Pukeokaoka, Codfish / Whenua Hou and Taukihepa / Big South Cape Islands). Introduced to Motuara and Long Islands, Queen Charlotte Sound (Miskelly & Powlesland 2013). Auckland Islands / Maukahuka (Auckland and Ewing Islands; Miskelly, Elliott *et al.* 2020).

Cyanoramphus auriceps previously included the subspecies *C. a. malherbi* (South Island) and *C. a. forbesi* (Chathams), but these are now listed as full species. Specimens of *C. auriceps* on the Auckland Islands were revealed to be a distinct clade contained within the mainland form, but with some evidence of hybridisation with *C. malherbi* before 1942–43 (Rawlence 2006). There is now extensive hybridisation between *C. auriceps* and *C. n. novae-zeelandiae* on the Auckland Islands (Miskelly, Elliott *et al.* 2020).

*Used as a generic name for *Cyanoramphus* parakeets.

► **Cyanoramphus malherbi** Souancé **Orange-fronted Parakeet | Kākāriki Karaka**

Cyanoramphus Malherbi Souancé, 1857: *Revue Mag. Zool.* 9 (2nd series): 98 – “unknown locality” = South Island (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 426).

Platycercus malherbii (Souancé); G.R. Gray, 1862: *Ibis* 4: 229. Unjustified emendation.

Platycercus alpinus Buller, 1869: *Ibis* 5 (new series): 39 – high country of the South Island.

Cyanoramphus alpinus (Buller); Reichenow 1881, *Journ. für Ornith.* 29: 44.

Cyanoramphus auriceps Malherbi (Souancé); Reichenow 1881, *Journ. für Ornith.* 29: 44.

Cyanoramphus malherbei (Souancé); Hutton 1904, *Index Faunae N.Z.*: 29. Unjustified emendation.

Cyanoramphus malherbi Souancé; Mathews & Iredale 1913, *Ibis* 1 (10th series): 426.

Cyanoramphus auriceps auriceps; Checklist Committee 1990, *Checklist Birds N.Z.*: 179. Not *Psittacus auriceps* Kuhl, 1820.

New Zealand, formerly widespread but now confined to forested valleys in Canterbury region, notably the Hurunui River valley. Progeny from a captive breeding programme were released on Chalky, Maud, Mayor, and Blumine Islands, with limited success (Miskelly & Powlesland 2013). Until recently, classified as either a colour morph or as a subspecies of *C. auriceps* (see R.H. Taylor *et al.* 1986). Now established as a separate species based on field observation of assortative mating in sympatry, and molecular evidence (Kearvell *et al.* 2003).

► **Cyanoramphus forbesi** Rothschild **Forbes' Parakeet**

Cyanoramphus forbesi Rothschild, 1893: *Proc. Zool. Soc. London 1893* (35): 529 – Chatham Islands.

Cyanoramphus auriceps forbesi Rothschild; Mathews & Iredale 1913, *Ibis* 1 (10th series): 426.

Cyanoramphus forbesi Rothschild; Chan *et al.* 2006, *Conservation Genetics* 7: 493.

Chatham Islands; resident on Mangere and Little Mangere Islands, ranging to Pitt Island (T. Greene 1989). Recognised as a full species based on molecular evidence from allozyme electrophoresis (Triggs & Daugherty 1996) and mtDNA sequencing (Boon, Kearvell *et al.* 2001; Chan *et al.* 2006). Hybridises extensively with *C. n. chathamensis* on Mangere Island (Boon *et al.* 1999), but still persists as a distinct morphotype and genotype under active conservation management. Occasionally reported from the southern, forested part of the main island (Melville 1984; T. Greene 1989).

► **Cyanoramphus unicolor** (Lear) **Antipodes Island Parakeet**

Platycercus unicolor Lear, 1831: *Illustr. Psittac.* 4: pl. 25 – Antipodes Island.

Cyanoramphus unicolor (Lear); Reichenow 1881, *Journ. für Ornith.* 29: 41.

Platycercus fairchildii Hector, 1888: in Buller, *History of the Birds of N.Z.*, 2nd edition 1: 149 – Antipodes Island.

Pezoporus fairchildii (Hector); Hector 1895, *Trans. N.Z. Inst.* 27: 285.

Cyanoramphus unicolor (Lear); Mathews & Iredale 1913, *Ibis* 1 (10th series): 425.

Bulleria unicolor (Lear); Mathews 1944, *Emu* 43: 245.

Antipodes Island and its islets, including Bollons Island (Warham & Bell 1979). Relationships to other members of the genus were established by Boon, Kearvell *et al.* (2001).

► **Cyanoramphus hochstetteri** (Reischek) **Reischek's Parakeet**

Platycercus hochstetteri Reischek, 1889: *Trans. N.Z. Inst.* 21: 387 – Antipodes Island.

Cyanoramphus novaezelandiae hochstetteri (Reischek); Mathews & Iredale 1913, *Ibis* 1 (10th series): 425.

Cyanoramphus erythrotis hochstetteri (Reischek); Kearvell *et al.* 2003, *Notornis* 50: 28.

Cyanoramphus hochstetteri (Reischek); Chambers & Boon 2005, *Notornis* 52: 250.

Antipodes and Bollons Islands and all adjacent islets (Warham & Bell 1979). Molecular data from Boon, Kearvell *et al.* (2001), and discussions in Kearvell *et al.* (2003), make a strong case that this taxon is recognisable as a distinct species from all forms of *C. novaezelandiae*. However, their suggestion that it is a subspecies of the Macquarie Island parakeet, i.e. as *C. erythrotis hochstetteri* (after Salvadori 1891), must be disregarded as it is based on an incorrect identification of a museum specimen (Scofield 2005b). The species status adopted here follows Chambers & Boon (2005) and Rawlence (2006).

Order PASSERIFORMES: Passerine (Perching) Birds

Sibley *et al.* (1982) suggested that Acanthisittidae were basal among passerines, and proposed separating them as the infraorder Acanthisittides. Subsequent molecular work by Ericson *et al.* (2002) and F. Barker *et al.* (2004) confirmed New Zealand wrens as being the sister-taxon to all other passerines. We therefore place them in their own suborder (Acanthisitti). See Christidis & Boles (2008) and Cracraft (2014) for reviews of higher-level systematics of passerine birds.

Suborder ACANTHISITTI: New Zealand Wrens

Family ACANTHISITTIDAE Sundevall: New Zealand Wrens

Acanthisittinae Sundevall, 1872: *Methodi Naturalis Avium Tentamen 1*: 47 – Type genus *Acanthisitta* Lafresnaye, 1842.

Order of species follows Checklist Committee (2010), with *Dendroscansor* placed last in the sequence as it seems to be a highly modified form.

Genus *Acanthisitta* Lafresnaye

Acanthisitta Lafresnaye, 1842: *Mag. Zool., Paris* (ser. 2) 4: 1, pl. 27 – Type species (by monotypy) *Acanthisitta tenuirostris* Lafresnaye = *Acanthisitta chloris chloris* (Sparrrman).

Acanthisitta Buller, 1888 (Jan): *History of the Birds of N.Z.*, 2nd edition 1 (part 3): 113. Unjustified emendation.

Chlorisitta Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 113 – Type species (by original designation) *Sitta chloris* Sparrrman = *Acanthisitta chloris chloris* (Sparrrman).

► *Acanthisitta chloris* (Sparrrman)

Rifleman | Tititipounamu

New Zealand. Originally occurred widely in North and South Islands, Stewart Island / Rakiura, and outliers. Range reduced following settlement mainly to residual forests, although (unlike *Xenicus* spp.) capable of adapting to exotic vegetation and occurs widely in commercial pine plantations. Occurs in *Nothofagus* forests of mountainous areas of both main islands.

Acanthisitta chloris granti Mathews & Iredale

North Island Rifleman

Acanthisitta chloris granti Mathews & Iredale, 1913: *Ibis* 1 (10th series): 432 – North Island.

Chlorisitta chloris granti (Mathews & Iredale); Mathews 1935, *Bull. Brit. Ornith. Club* 55: 113.

North Island, and Hauturu / Little Barrier Islands. Widespread in forests of central and southern North Island, but signs of a recent range reduction in the west (C. Robertson *et al.* 2007). In Northland restricted to a small relict population at Warawara Forest, north of Hokianga Harbour (Pierce 1994). Bones in Holocene deposits have been found at Cape Reinga, Waitomo, and Hawke's Bay (Checklist Committee 1990; B. Gill 1996b; Worthy & Holdaway 2002).

Acanthisitta chloris chloris (Sparrrman)

South Island Rifleman

Sitta Chloris Sparrrman, 1787: *Mus. Carlsonianum* 2: no XXXIII, pl. 33 – “Cape of Good Hope”, error for Queen Charlotte Sound, Marlborough (*vide* Oliver 1955, *New Zealand Birds*, 2nd edition: 449).

Motacilla citrina Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 979. Based on the “Citrine Warbler” of Latham 1783, *Gen. Synop. Birds* 2: 464 – “Nova Seelandia”, restricted to Dusky Sound, Fiordland (*vide* Oliver 1955, *New Zealand Birds*, 2nd edition: 451).

Sylvia citrina (Gmelin); Latham 1790, *Index Ornith.* 2: 529.

Sitta punctata Quoy & Gaimard, 1830: in Dumont d'Urville, *Voyage Astrolabe Zool.* 1: 221 – Tasman Bay.

Acanthisitta punctata (Quoy & Gaimard); G.R. Gray 1841, *List Gen. Birds* (2nd edition) *Appendix*: 6.

Acanthisitta tenuirostris Lafresnaye, 1841: *Rev. de Zool., Paris* 4: 242 – New Zealand.

Acanthisitta citrina (Gmelin); G.R. Gray 1841, *List Gen. Birds* (2nd edition) *Appendix*: 6.

Acanthisitta tenuirostris (Lafresnaye); Lafresnaye 1842, *Mag. Zool., Paris* (ser. 2) 4: 1, pl. 27.

Motacilla citrinella J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 89 – South Island.

Acanthisitta chloris (Sparrrman); G.R. Gray 1862, *Ibis* 4: 219.

Acanthisitta chloris (Sparrrman); Buller 1888 (Jan.), *History of the Birds of N.Z.*, 2nd edition 1 (part 3): 113.

Acanthisitta citrina (Gmelin); Buller 1906, *Suppl. Birds N.Z.* 2: 103.

Acanthisitta chloris chloris (Sparrrman); Mathews & Iredale 1913, *Ibis* 1 (10th series): 431.

Chlorisitta chloris chloris (Sparrrman); Mathews 1935, *Bull. Brit. Ornith. Club* 55: 113.

Acanthisitta chloris citrina (Gmelin); Oliver 1955, *New Zealand Birds*, 2nd edition: 451.

Widespread from Nelson and Marlborough to Fiordland; also Codfish Island / Whenua Hou (from where introduced to Ulva Island; Leech *et al.* 2007). Formerly Stewart Island / Rakiura (now locally extinct; Harper 2009). Holocene remains have been found in cave sites in north-west Nelson, Punakaiki, and North Canterbury (e.g. Worthy 1993a; Worthy & Holdaway 1995).

Genus **Xenicus** G.R. Gray

Xenicus G.R. Gray, 1855: *Cat. Genera Subgenera Birds*: 31 – Type species (by original designation) *Motacilla longipes* Gmelin = *Xenicus longipes longipes* (Gmelin).

Xenicornis Mathews & Iredale, 1926: *Bull. Brit. Ornith. Club* 46: 76 – Type species (by original designation) *Xenicus gilviventris* Von Pelzeln.

Pachyplichas Millener, 1988: *Journ. Royal Soc. N.Z.* 18(4): 387 – Type species (by original designation) *Pachyplichas yaldwyni* Millener.

A molecular review of the relationships of New Zealand wrens has shown that stout-legged wrens (*Pachyplichas* sp.) are more closely related to the rock wren (*Xenicus gilviventris*) than either is to the bush wren (*X. longipes*). Therefore *Pachyplichas* Millener, 1988 should be synonymised with *Xenicus*, so that *Pachyplichas jagmi* and *P. yaldwyni* become *Xenicus jagmi* and *X. yaldwyni* respectively (Mitchell *et al.* 2016).

► †**Xenicus longipes** (Gmelin)**Bush Wren | Mātuhituhi**

Extinct. New Zealand. Formerly North Island, South Island, and Stewart Island / Rakiura and its outliers. Last reliable sighting 1972 on Kaimohu Island off Stewart Island / Rakiura, following transfer of birds to that island (Merton 2004).

†**Xenicus longipes stokesii** G.R. Gray**North Island Bush Wren | Matuhitui**

Xenicus stokesii G.R. Gray, 1862: *Ibis* 4: 219 – “Rima-Taka” = Rimutaka [Remutaka] Hills (*vide* Mathews & Iredale 1913, *Ibis* 1 (10th series): 434).

Xenicus Stokesii G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 72.

Xenicus stokesi G.R. Gray; Buller 1906, *Suppl. Birds N.Z.* 2: 107. Unjustified emendation.

Xenicus longipes stokesii G.R. Gray; Mathews & Iredale 1913, *Ibis* 1 (10th series): 434.

Xenicus longipes stokesi G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 58. Unjustified emendation.

Possible sightings on Kapiti Island, 1911 (Miskelly 2003b); near Wellington, 1918 (Stidolph 1926); and at Lake Waikaremoana, 1949 (Edgar 1949) and 1955 (St Paul 1977). Only three museum specimens (skins) known; two from Remutaka Range, 1850, and one from Taupo (Fisher 1981). Holocene bones from cave and dune sites (Checklist Committee 1990) show that the species was formerly widely distributed in the North Island.

†**Xenicus longipes longipes** (Gmelin)**South Island Bush Wren | Mātuhituhi**

Motacilla longipes Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 979. Based on the “Long-legged Warbler” of Latham 1783, *Gen. Synop. Birds* 2: 465 – “Nova Seelandia”, restricted to Dusky Sound, Fiordland (*vide* Oliver 1955, *New Zealand Birds*, 2nd edition: 453).

Sylvia longipes (Gmelin); Latham 1790, *Index Ornith.* 2: 529.

Acanthisitta longipes (Gmelin); G.R. Gray 1841, *List Gen. Birds* (2nd edition) Appendix: 6.

Motacilla longipes J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 88 – South Island. Junior primary homonym of *Motacilla longipes* Gmelin, 1789.

Xenicus longipes (Gmelin); G.R. Gray 1862, *Ibis* 4: 218.

Zenicus longipes (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Xenicus longipes longipes (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 434.

Formerly widespread, especially in forests of mountainous areas. Possible sightings near Lake Hauroko, Southland, 1947 (Dunckley & Todd 1949), and in Nelson Lakes National Park, 1968 (Creswell 1968). Bones found in cave deposits (Checklist Committee 1990).

†**Xenicus longipes variabilis** Stead**Stead's Bush Wren**

Xenicus longipes variabilis Stead, 1936: *Trans. Proc. Roy. Soc. N.Z.* 66: 313 – Islands south-west of Stewart Island.

Xenicornis longipes steadi Mathews, 1944: *Emu* 43: 245 – Solomon Island, off Stewart Island.

Formerly on Stewart Island / Rakiura (presumably this subspecies) and outlying islands to the south-west of there. The last natural population became extinct in 1965 after ship rats *Rattus rattus* reached Taukihepa / Big South Cape Island (B. Bell 1978; E. Bell *et al.* 2016). Birds transferred to nearby Kaimohu Island were last seen in 1972 (Merton 2004). Possible sightings on Stewart Island / Rakiura, 1950 (Tily 1951) and 1951 (Dawson 1951b).

► **Xenicus gilviventris** Von Pelzeln**Rock Wren | Pīwauwau**

Xenicus gilviventris Von Pelzeln, 1867: *Verh. zool.-bot. Ges. Wien* 17: 316 – New Zealand, restricted to headwaters of the Rakaia River, South Island (*vide* Verry *et al.* 2019, *Frontiers Ecol. Evol.* 7(496): 6).

Xenicus haasti Buller, 1869: *Ibis* 5 (new series): 37 – “Otago” = headwaters of the Rakaia River, South Island (*vide* Verry *et al.* 2019, *Frontiers Ecol. Evol.* 7(496): 6).

Acanthisitta gilviventris (Von Pelzeln); G.R. Gray 1869, *Hand-list Birds* 1: 183.

Acanthisitta haastii (Buller); G.R. Gray 1869, *Hand-list Birds* 1: 183. Unjustified emendation.

Xenicus Haastii Buller; Anon. 1870, *Cat. Colonial Mus.*: 72. Unjustified emendation.

Xenicus haastii Buller; Hutton 1871, *Cat. Birds N.Z.*: 72. Unjustified emendation.

Zenicus gilviventris (Von Pelzeln); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 187. Unjustified emendation.

Xenicornis longipes gilviventris (Von Pelzeln); Mathews 1944, *Emu* 43: 245.

Xenicus gilviventris rineyi Falla, 1953: *Notornis* 5: 142 – Lake McArthur, south-western Fiordland.

Xenicus gilviventris Von Pelzeln; Checklist Committee 1990, *Checklist Birds N.Z.*: 193.

Currently and historically restricted to South Island alpine and subalpine areas (Nelson to western Southland). Known from Holocene remains from caves in both North and South Islands (Millener 1990) although the North Island bones may have been incorrectly identified (Worthy & Holdaway 2002: 425). This theory was backed by the discovery that the only North Island skin was a mislabelled South Island bird (Verry *et al.* 2019). Bones especially common in certain north-west Nelson caves (e.g. Honeycomb Hill, Oparara). Resident in subalpine fellfields and, in Fiordland, at lower altitudes. Locally common in a few well-known areas, but in need of further management (K.-J. Wilson 2005). The name “rock wren” is also used for a North American species (*Salpinctes obsoletus*, Troglodytidae).

► †***Xenicus jagmi*** (Millener) **North Island Stout-legged Wren**

Pachyplichas jagmi Millener, 1988: *Journ. Royal Soc. N.Z.* 18(4): 395 – Ruakuri Cave, Waitomo, Waikato.

Xenicus jagmi (Millener); Mitchell *et al.* 2016, *Mol. Phyl. Evol.* 102: 302.

North Island. Bones found as Holocene remains in dune-sands in the Far North and in predator deposits and cave pitfall deposits in the King Country, Hawke’s Bay, and the Wairarapa (Millener 1988; Checklist Committee 1990).

► †***Xenicus yaldwyni*** (Millener) **South Island Stout-legged Wren**

Pachyplichas yaldwyni Millener, 1988: *Journ. Royal Soc. N.Z.* 18(4): 391 – Honeycomb Hill Cave, Oparara, north West Coast.

Xenicus yaldwyni (Millener); Mitchell *et al.* 2016, *Mol. Phyl. Evol.* 102: 302.

South Island. Bones found as Holocene remains in predator deposits and cave pitfall deposits in north-west Nelson, Westland, Canterbury, and Southland (Millener 1988). Known from one archaeological site (Worthy 1999b).

Genus †***Traversia*** Rothschild

Traversia Rothschild, 1894: *Bull. Brit. Ornith. Club* 4: 10 – Type species (by monotypy and original designation) *Traversia lyalli* Rothschild.

► †***Traversia lyalli*** Rothschild **Lyall’s Wren**

Traversia lyalli Rothschild, 1894: *Bull. Brit. Ornith. Club* 4: 10 – Stephens Island, Cook Strait.

Xenicus insularis Buller, 1895: *Ibis* 1 (7th series): 237, pl. 7 – Stephens Island, Cook Strait.

Traversia insularis (Buller); A. Hamilton 1909, *Hand-list Birds New Zealand*: 14.

Xenicus lyalli (Rothschild); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 64.

Traversia lyalli Rothschild; Checklist Committee 1990, *Checklist Birds N.Z.*: 194.

Formerly North and South Islands, and Stephens Island / Takapourewa, Cook Strait. Small relict population discovered on Stephens Island in 1894 quickly died out, probably due to predation from several feral cats, rather than, as suggested in most accounts, destruction by one lighthouse keeper’s cat (Galbreath & Brown 2004). Holocene bones from accumulations of laughing owl food remains, and other sites, on both main islands, show that Stephens Island birds were a relict of a formerly more widespread species. Traditionally called “Stephens Island wren”, but this name is clearly inappropriate and we follow others (e.g. Worthy & Holdaway 2002) in using “Lyall’s wren”.

Genus †***Dendroscansor*** Millener & Worthy

Dendroscansor Millener & Worthy, 1991: *Journ. Royal Soc. N.Z.* 21(2): 181 – Type species (by monotypy and original designation)

Dendroscansor decurvirostris Millener & Worthy.

► †***Dendroscansor decurvirostris*** Millener & Worthy **Long-billed Wren | Manu Paea**

Dendroscansor decurvirostris Millener & Worthy, 1991: *Journ. Royal Soc. N.Z.* 21(2): 182 – Moonsilver Cave, Takaka State Forest, north-west Nelson.

South Island. Extinct in late Holocene. The rarest species in the late Quaternary avifauna (Worthy & Holdaway 2002). Bones have been found at four Holocene deposits only (caves in north-west Nelson and Southland) and belong to fewer than six individuals in total. Apparently restricted to high-altitude habitats, and absent from lowlands of the eastern South Island.

Suborder PASSERES (or POLYMYODI): Oscines (Songbirds)

The arrangement of songbirds in the 1970 Checklist (Checklist Committee 1970) was based on the premise that the species endemic to the Australasian region were derived directly from Eurasian groups and belonged in Old World families (e.g. *Gerygone* and *Petroica* in Muscicapidae). The 1990 Checklist (Checklist Committee 1990) followed the Australian lead in allocating various native songbirds to their own Australasian families (e.g. *Gerygone* to Acanthizidae, and *Petroica* to Eopsaltriidae), but the sequence was still based largely on the old Peters-Mayr arrangement. Since the late 1980s, evidence from molecular biology has shown that most of the Australian and New Zealand endemic songbirds are the product of a major Australasian radiation parallel to the radiation of songbirds in Eurasia and elsewhere. Many superficial

morphological and ecological similarities between Australasian and Eurasian songbirds are the result of convergent evolution.

Sibley & Ahlquist (1985, 1990) and Sibley *et al.* (1988) recognised a division of the songbirds into two groups which they called Corvida and Passerida (Sibley & Ahlquist 1990). The parvorder Corvida contained songbirds with Australasian affinities – nearly all the endemic New Zealand songbirds plus the introduced Australian magpie. The parvorder Passerida contained songbirds with Old World affinities – nearly all the songbirds introduced to New Zealand, plus a few native songbirds (e.g. *Poodytes*, *Hirundo*, *Zosterops*).

Subsequent studies (e.g. F. Barker *et al.* 2004; Cracraft *et al.* 2004) partly supported the distinction between Corvida and Passerida, but questioned the monophyly of the Corvida. Passerida is now thought not to be the sister group to Corvida but to be embedded within it (see detailed discussion by Christidis & Boles 2008) with *Petroica* added to the list of native Australasian passeridans. The following arrangement of New Zealand songbirds is based largely on the sequences presented by Dickinson & Christidis (2014), Clements *et al.* (2019), Handbook of the Birds of the World and BirdLife International (2020), Fjeldså *et al.* (2020), and F. Gill *et al.* (2021).

Eradication or control of mammalian predators on islands, or in defined mainland areas, mean that some of the New Zealand endemic songbirds are being translocated (re-introduced) to growing lists of localities at which predators are absent or controlled to low densities. This is extending the ranges of the species concerned – ranges that were shrinking. Many of the more recent transfers are not mentioned in the species accounts because several years must pass before the viability of a given translocation can be assured. A summary of translocations up to 2012 was provided by Miskelly & Powlesland (2013).

“CORVIDA”: Australasian Songbirds

Corvida is not a monophyletic grouping and may be split further. Meanwhile, it is convenient to distinguish the songbirds of Australasian origin and affinity from those (Passerida) that derive from groups with immediate ancestry elsewhere. The three endemic families of New Zealand oscines – New Zealand wattlebirds (Callaeidae), stitchbird (Notiomystidae) and New Zealand creepers (Mohouidae) – have presumably all had long evolutionary histories in New Zealand, with relatively early divergence from other corvidan lineages.

Family MELIPHAGIDAE Swainson: Honeyeaters

Meliphagidae Swainson, 1825: *Zoological Journ.* 1: 463 – Type genus *Meliphaga* Lewin, 1808.

The hihi, *Notiomystis cincta*, long considered to be a honeyeater (e.g. Checklist Committee 1953, 1970, 1990), has been shown by molecular studies not to be a honeyeater at all and has been removed to its own family, sister to Callaeidae (Ewen *et al.* 2006; Driskell *et al.* 2007). Otherwise, the sequence of honeyeaters (below) follows Checklist Committee (1990). Molecular work by Driskell *et al.* (2007) estimated the divergence between *Anthornis* and *Prothemadera* at 2.9 Ma.

Genus *Anthornis* G.R. Gray

Anthornis Swainson, 1837: *Classification of Birds* 2: 326 – Type species (by monotypy) *Anthornis caeruleocephala* Swainson, 1837 = *Anthornis melanura melanura* (Sparrman). *Nomen oblitum* (fide Scofield *et al.* 2005, *Notornis* 52: 171).

Anthomyza G.R. Gray, 1840: *List Gen. Birds* (1st edition): 15. Unjustified emendation of *Anthornis* Swainson, 1837 and junior homonym of *Anthomyza* Fallén, 1810.

Anthornis G.R. Gray, 1840: *List Gen. Birds* (1st edition): 15. Unnecessary *nomen novum* for *Anthornis* Swainson, not junior homonym of *Anthomyza* Fallén, 1810. *Nomen protectum* (fide Scofield *et al.* 2005, *Notornis* 52: 171).

Bartle & Sagar (1987) regarded the Chatham Island bellbird as a “strong” subspecies with “overall similarity” to the mainland form. Holdaway *et al.* (2001) listed *A. melanocephala* as a separate species, citing differences that were outlined by Oliver (1955) and Bartle & Sagar (1987), and we follow that arrangement.

► *Anthornis melanura* (Sparrman)

Bellbird | Korimako

New Zealand. North and South Islands, Stewart Island / Rakiura, and many mainland offshore islands including Manawatāwhi / Three Kings; also Auckland Islands / Maukahuka.

Anthornis melanura obscura Falla

Three Kings Bellbird

Anthornis melanura obscura Falla, 1948: *Rec. Auck. Inst. Museum* 3: 337 – Three Kings Islands.

Manawatāwhi / Three Kings Islands: in forest and scrub, throughout the group.

Anthornis melanura oneho Bartle & Sagar

Poor Knights Bellbird

Anthornis melanura oneho Bartle & Sagar, 1987: *Notornis* 34(4): 297 – Poor Knights Islands.

Poor Knights Islands: throughout the group.

Anthornis melanura melanura (Sparrman)

Bellbird

- Certhia melanura* Sparrman, 1786: *Mus. Carlsonianum 1*: no V, pl. 5 – “Promontorium Bonae Spei”, error for Queen Charlotte Sound, Marlborough (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 446).
- Certhia sannio* Gmelin, 1788: *Syst. Nat., 13th edition 1*(1): 471. Based on the “Mocking Creeper” of Latham 1783, *Gen. Synop. Birds 2*: 735 – New Zealand.
- Philedon dumerilii* Lesson & Garnot, 1828: in L.I. Duperrey, *Voy. Coquille, Zool. 1 Atlas* (6): pl. 21, fig. 1 – New Zealand, restricted to Bay of Islands (*vide* Bartle & Sagar 1987, *Notornis 34*(4): 260).
- Anthornis caeruleocephala* Swainson, 1837: *Classification of Birds 2*: 327 – New Zealand. Unnecessary *nomen novum* for *Certhia melanura* Sparrman, 1786.
- Philedon sannio* (Gmelin); Lesson 1838, *Compléments Oeuvres Buffon 11*: 165.
- Anthornis melanura* (Sparrman); G.R. Gray 1840, *List Gen. Birds* (1st edition): 15.
- Certhia olivacea* J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 79 – New Zealand.
- Anthornis melanura* Ellman, 1861: *Zoologist 19*: 7466 – New Zealand. Junior secondary homonym of *Certhia melanura* Sparrman, 1786.
- Anthornis ruficeps* Von Pelzeln, 1867: *Verh. zool.-bot. Ges. Wien 17*: 316 – New Zealand.
- Anthornis incoronata* Bangs, 1911: *Proc. Biol. Soc. Washington 24*: 23 – Auckland Islands.
- Anthornis melanura melanura* (Sparrman); Mathews & Iredale 1913, *Ibis 1* (10th series): 446.
- Anthornis melanura dumerilii* (Lesson) [sic]; Mathews & Iredale 1913, *Ibis 1* (10th series): 447.
- Anthornis melanura incoronata* Bangs; Mathews & Iredale 1913, *Ibis 1* (10th series): 447.

North and South Islands, Stewart Island / Rakiura, and many offshore islands: present and often common throughout, excepting Northland, Waikato, southern Hawke’s Bay, Manawatu, Canterbury Plains, and Central Otago. Formerly abundant in Auckland and Northland but became locally extinct in these areas in the 1860s (see Lee 2005). In Northland, may occur on the mainland as a stray opposite the offshore islands (e.g. at Whangaparaoa Peninsula near Tiritiri Matangi Island), and has recently colonised Tawharanui Peninsula (Brunton *et al.* 2008). Found in forest and forest remnants; also in exotic vegetation of orchards, gardens, etc., especially in the South Island; also in large exotic plantations. On the Auckland Islands / Maukahuka, in forest throughout, apart from Disappointment Island (Miskelly, Elliott *et al.* 2020). Recorded at Campbell Island / Motu Ihupuku in 2003 and 2004 (Scofield 2005a, 2006). Holocene bones and midden records from widely scattered sites in North, South, and Auckland Islands / Maukahuka (Checklist Committee 1990; Tennyson 2020a).

▶ † **Anthornis melanocephala** G.R. Gray

Chatham Island Bellbird

- Anthornis melanocephala* G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z. 2*: 188 – Chatham Islands.
- Anthornis auriocula* Buller, 1865: *Essay N.Z. Ornith.*: 8 – Chatham Islands.
- Anthornis melanura melanocephala* G.R. Gray; Mathews & Iredale 1913, *Ibis 1* (10th series): 447.
- Anthornis melanocephala* G.R. Gray; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 138, 180.

Extinct since about 1906. Formerly throughout the Chatham Islands; last recorded on Little Mangere Island (Tennyson & Martinson 2007). Holocene bones from deposits on Chatham and Mangere Islands (Tennyson & Millener 1994; Millener 1999).

Genus **Prosthemadera** G.R. Gray

- Prosthemadera* G.R. Gray, 1840: *List Gen. Birds* (1st edition): 15 – Type species (by original designation) *Merops cinninatus* Latham = *Prosthemadera novaeseelandiae novaeseelandiae* (Gmelin).

▶ **Prosthemadera novaeseelandiae** (Gmelin)

Tūi | Tui

New Zealand: North, South, Stewart Island / Rakiura, Kermadec / Rangitāhua, Chatham, and Auckland / Maukahuka Islands. Further study may show that the Chatham Island form is a separate species (Holdaway *et al.* 2001).

Prosthemadera novaeseelandiae novaeseelandiae (Gmelin)

Tūi | Tui

- Merops novae Seelandiae* Gmelin, 1788: *Syst. Nat., 13th edition 1*(1): 464. Based on the “Poë Bee-eater” of Latham 1782, *Gen. Synop. Birds 2*: 682 – “Nova Seelandia”, restricted to Queen Charlotte Sound, Marlborough (*vide* Mathews & Iredale 1913, *Ibis 1* (10th series): 447).
- Merops cinninatus* Latham, 1790: *Index Ornith. 1*: 275 – New Zealand.
- Sturnis crispicollis* Daudin, 1800: *Traité Elém. Compl. Ornith. 2*: 314.
- Philemon cinninatus* (Latham); Bonnaterre & Vieillot 1822, *Tableaux Encycl. Méthod. Ornith.* 2(91): 613.
- Meliphaga novaehollandiae* Stephens, 1826: in G. Shaw, *General Zool. 14*: 259 – New Zealand.
- Prosthemadera concinnata* G.R. Gray, 1840: *List Gen. Birds* (1st edition): 15 – New Zealand.
- Prosthemadera novae seelandiae* (Gmelin); G.R. Gray 1841, *List Gen. Birds* (2nd edition): 20.
- Prosthemadera Novae Seelandiae* (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 187.
- Certhia cinninata* J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 78 – New Zealand. Junior secondary homonym of *Merops cinninatus* Latham, 1790.
- Prosthemadera circinata* Reichenbach, 1852: *Handb. Orn. Merop.*: 127, pl. 492, fig. 3466 – no locality.
- Meliphaga Novae-Zealandiae* (Gmelin); Ellman 1861, *Zoologist 19*: 7466. Unjustified emendation.

Lamprotonis Novae-Zelandiae (Gmelin); Schlegel 1868, *Jaarboek. K. Zool. Genootschap 'Nat. Art. Mag.'*: plate. Unjustified emendation.

Prothemadera Novae-Zelandiae (Gmelin); Finsch 1870, *Journ. für Ornith.* 18: 248. Unjustified emendation.

Prothemadera Novae Zelandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 72. Unjustified emendation.

Melliphaga circinata; Schlegel 1872, *De Dierentuin*: 125.

Prothemadera novae-zealandiae (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Prothemadera novae zealandiae (Gmelin); Buller 1888 (Jan.), *History of the Birds of N.Z.*, 2nd edition 1 (part 3): 94. Unjustified emendation.

Prothemadera novae-seelandiae phoebe Kemp, 1912: *Austral Avian Rec.* 1: 124 – Umawera, Hokianga.

Prothemadera novae-seelandiae kwini Kemp, 1912: *Austral Avian Rec.* 1: 124 – Auckland Islands.

Prothemadera novaeseelandiae kermadecensis Mathews & Iredale, 1914: *Austral Avian Rec.* 2: 113 – Sunday [= Raoul] Island, Kermadec Islands.

Prothemadera novae-seelandiae (Gmelin); Mathews 1930, *Emu* 29: 286.

Prothemadera novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 64.

North and South Islands, Stewart Island / Rakiura, and larger offshore islands; also Kermadec / Rangitāhua and Auckland Islands / Maukahuka. Recorded at Manawatāwhi / Three Kings Islands in 1887 (Cheeseman 1888a) but not subsequently (Turbott & Buddle 1948). One record from Snares Islands / Tini Heke (Warham 1967). Present through most of North Island, and over about half the South Island, being patchy in the east between Picton and Dunedin (C. Robertson *et al.* 2007). Widespread in forest and forest remnants. Present and breeding in some settled districts, including urban areas (e.g. greater Auckland, and Wellington), but mainly an occasional visitor in larger exotic plantations. In Holocene deposits and middens, abundant in both North and South Islands, including eastern South Island where rare today (Checklist Committee 1990; Worthy & Holdaway 2002). One Holocene bone found on Enderby Island, Auckland Islands / Maukahuka (Tennyson 2020a)

***Prothemadera novaeseelandiae chathamensis* Hartert**

Chatham Island Tui | Kōkō

Prothemadera novaeseelandiae chathamensis Hartert, 1928: *Novit. Zool.* 34(3): 204 – Chatham Islands.

Chatham Islands: in moderate numbers on Pitt Island, common on Rangatira and Mangere Islands, and a visitor to Star Keys. Successfully reintroduced to Chatham Island in 2009–10 (M. Bell *et al.* 2013). Holocene deposits and middens on Chatham Island (Millener 1990, 1999).

Genus *Anthochaera* Vigors & Horsfield

Creadion Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 34 – Type species (by subsequent designation) *Corvus paradoxus* Latham [sic] = *Anthochaera paradoxa* (Daudin). Suppressed and invalid (*vide* ICZN 2011, Opinion 2284. *Bull. Zool. Nomenclature* 68(3): 234).

Anthochaera Vigors & Horsfield, 1827: *Trans. Linn. Soc. London.* 15: 320 – Type species (by subsequent designation) *Certhia mellivora* Latham = *Anthochaera chrysoptera* (Latham).

Acanthochaera Giebel, 1872: *Thesaurus Ornith.* 1: 259. Unjustified emendation.

Dyotornis Mathews, 1912: *Austral Avian Rec.* 1: 116 – Type species (by original designation) *Corvus paradoxus* Daudin = *Anthochaera paradoxa* (Daudin).

Coleia Mathews, 1912: *Austral Avian Rec.* 1: 116 – Type species (by original designation) *Coleia carunculata* (Latham) = *Anthochaera carunculata* (Shaw). Junior homonym of *Coleia* Broderip, 1837.

Colena Mathews, 1931: *Bull. Brit. Ornith. Club* 52: 25. Unnecessary *nomen novum* for *Coleia* Mathews, 1912 not *Coleia* Broderip, 1837.

► ***Anthochaera carunculata* (Shaw)**

Red Wattlebird

Merops carunculatus Shaw, 1790: in J. White, *Journ. Voy. New South Wales, ed. 1*: 240 – New South Wales, Australia (*vide* Mathews 1925, *Birds Australia.* 12: 64).

Anthochaera carunculata (Latham) [sic]; Vigors & Horsfield 1827, *Trans. Linn. Soc. London.* 15: 321.

Creadion carunculatus Vieill. [sic]; Lesson 1837, *Compléments Oeuvres Buffon* 9: 7.

Mimus carunculatus Buller, 1865: *Essay N.Z. Ornith.*: 10 – extreme north of New Zealand. Junior secondary homonym of *Merops carunculatus* Shaw, 1790.

Anthochaera Bulleri Finsch, 1867: *Journ. für Ornith.* 15: 321, 342. Unnecessary *nomen novum* for *Mimus carunculatus* Buller, 1865.

Anthochaera carunculata (Latham) [sic]; Buller 1884, *Trans. N.Z. Inst.* 16: 313.

Acanthochaera carunculata (Latham) [sic]; Buller 1888 (Jan.), *History of the Birds of N.Z.*, 2nd edition 1 (part 3): 106.

Coleia carunculata (Latham) [sic]; Mathews & Iredale 1913, *Ibis* 1 (10th series): 448.

Anthochaera carunculata carunculata (White) [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 65.

Anthochaera carunculata (White) [sic]; Checklist Committee 1990, *Checklist Birds N.Z.*: 217.

South-east, southern, and south-west Australia, including coastal Great Australian Bight; moves altitudinally and at least partially migratory between south and north. Two New Zealand records (Buller 1887–88): Matakana, Northland (about 1855); and Rahotu, Taranaki (1882). The first record is particularly doubtful given poor documentation (Galbreath 1989: 89), and a locality “Matakana” in Australia. The specimen was seen by W.L. Buller at Auckland Museum in about 1855

(Galbreath 1989: 89), and is now at the Museum of New Zealand Te Papa Tongarewa (NMNZ OR.1331). While at Auckland, it was illustrated by Richard Laishley (see fig. 1 of Sibson 1987).

We have retained the red wattlebird in *Anthochaera* (cf. *Creadion*) based on the recommendations in ICZN 2011 (Opinion 2284).

Family ACANTHIZIDAE Bonaparte: Australasian Warblers

Acanthizeae Bonaparte, 1854: *Ann. Sci. Nat., Zool. Paris, 4th series 1*: 119 – Type genus *Acanthiza* Vigors & Horsfield, 1825.

Christidis & Boles (1994) placed these birds in the Pardalotidae, but we follow Schodde & Mason (1999) and Christidis & Boles (2008) in keeping Acanthizidae as a family separate from the pardalotes.

Genus *Gerygone* Gould

Psilopus Gould, 1838: *Synop. Birds Australia 4*: 61 – Type species (by subsequent designation) *Psilopus albogularis* Gould = *Gerygone albogularis* (Gould). Junior homonym of *Psilopus* Poli, 1795.

Gerygone Gould, 1841: in G. Grey, *Journ. Two Exped. Discovery Northwest Western Australia 2*: 417. *Nomen novum* for *Psilopus* Gould, 1838.

Ostiarius Gistel, 1848: *Naturg. Thierreichs*: x. Unnecessary *nomen novum* for *Psilopus* Gould, 1838.

Pseudogerygone Sharpe, 1879: *Notes Leyden Mus. 1*: 29 – Type species (by original designation) *Gerygone personata* Gould.

Hapolorhynchus Reichenow, 1908: *Journ. für Ornith. 56*: 488 – Type species (by original designation) *Pseudogerygone albofrontata* (G.R. Gray) = *Gerygone albofrontata* G.R. Gray.

Ethelornis Mathews, 1912: *Austral Avian Rec. 1*: 110 – Type species (by original designation) *Gerygone magnirostris* Gould, 1843.

Royigerygone Mathews, 1912: *Austral Avian Rec. 1*: 110 – Type species (by original designation) *Gerygone mathewsae* Mathews, 1912 = *Gerygone modesta* Von Pelzeln, 1860.

Wilsonavis Mathews, 1912: *Austral Avian Rec. 1*: 110 – Type species (by original designation) *Psilopus fusca* Gould, 1838 = *Gerygone fusca* (Gould, 1838).

Maorigerygone Mathews & Iredale, 1913: *Ibis 1* (10th series): 437 – Type species (by original designation) *Curruca igata* Quoy & Gaimard = *Gerygone igata* (Quoy & Gaimard).

The populations of *Gerygone* on Norfolk Island (*G. modesta* von Pelzeln, 1860) and Lord Howe Island (*G. insularis*, Ramsay, 1878, extinct) were regarded as subspecies of *G. igata* by Meise (1931) and Schodde & Mason (1999), but as separate species by Ford (1986) and Christidis & Boles (2008). We follow the latter arrangement.

► *Gerygone igata* (Quoy & Gaimard)

Grey Warbler | Riroriro

Curruca igata Quoy & Gaimard, 1830: in Dumont d'Urville, *Voyage Astrolabe Zool. 1*: 201 – Tasman Bay.

Acanthiza igata (Quoy & Gaimard); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 189.

Psilopus ? igata (Quoy & Gaimard); G.R. Gray 1844, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(3): 3.

Psilopus flaviventris G.R. Gray, 1844: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(3): 3, pl. 4, fig. 1 – Bay of Islands, Northland.

Gerygone igata (Quoy & Gaimard); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(3): 5.

Gerygone flaviventris (G.R. Gray); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1*(3): 5.

Gerygone assimilis Buller, 1865: *Essay N.Z. Ornith.*: 9 – New Zealand.

Gerygone aucklandica Von Pelzeln, 1865: *Reise der Oesterreich. Fregatte Novara Erde, Vögel*: 65 – New Zealand.

Acanthiza flaviventris (G.R. Gray); G.R. Gray 1869, *Hand-list Birds 1*: 219.

Gerygone sylvestris Potts, 1873: *Trans. N.Z. Inst. 5*: 177 – near Lake Mapourika, Westland.

Pseudogerygone flaviventris (G.R. Gray); Buller 1906, *Suppl. Birds N.Z. 2*: 117.

Pseudogerygone sylvestris (Potts); Buller 1906, *Suppl. Birds N.Z. 2*: 119.

Pseudogerygone macleani Ogilvie-Grant, 1907: *Ibis 1* (9th series): 545 – Mt Maungahaumi (2,000 feet a.s.l.), north-west of Poverty Bay.

Maorigerygone igata igata (Quoy & Gaimard); Mathews & Iredale 1913, *Ibis 1* (10th series): 437.

Maorigerygone igata sylvestris (Potts); Mathews & Iredale 1913, *Ibis 1* (10th series): 437.

Maorigerygone igata flaviventris (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 438.

Maorigerygone igata macleani (Ogilvie-Grant); Mathews & Iredale 1913, *Ibis 1* (10th ser.): 438.

Pseudogerygone igata (Quoy & Gaimard); Oliver 1930, *New Zealand Birds*, 1st edition: 454.

Gerygone igata (Quoy & Gaimard); Checklist Committee 1953, *Checklist N.Z. Birds*: 63.

Gerygone igata igata (Quoy & Gaimard); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 182.

New Zealand: common throughout North and South Islands, Stewart Island / Rakiura, and on most offshore islands. The most widely distributed endemic bird on the mainland (C. Robertson *et al.* 2007). Occurs up to 1,400–1,500 m a.s.l. Vagrant to the Snares Islands / Tini Heke (Miskelly *et al.* 2001a). Bones are rare in Holocene deposits, but, as with all small birds, this may be because the bones are small and fragile (Millener 1990; Checklist Committee 1990, 2010).

► **Gerygone albofrontata** G.R. Gray

Chatham Island Warbler

Gerygone? albofrontata G.R. Gray, 1845: in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds 1(3)*: 5, pl. 4, fig. 2 – Chatham Islands.

Acanthiza albofrontata (G.R. Gray); G.R. Gray 1869, *Hand-list Birds 1*: 219.

Gerygone albofrontata G.R. Gray; Anon. 1870, *Cat. Colonial Mus.*: 73.

Pseudogerygone albofrontata (G.R. Gray); Buller 1906, *Suppl. Birds N.Z. 2*: 119.

Hapolorhynchus albofrontatus (G.R. Gray); Mathews & Iredale 1913, *Ibis 1* (10th series): 439.

Gerygone albofrontata G.R. Gray; Checklist Committee 1953, *Checklist N.Z. Birds*: 63.

Gerygone (Hapolorhynchus) albofrontata G.R. Gray; Oliver 1955, *New Zealand Birds*, 2nd edition: 477.

Gerygone albofrontata; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 443. Misspelling.

Chatham Islands: present on Chatham, Houruakopara, Pitt, Rangatira, Mangere, and Little Mangere Islands, and Star Keys. A few Holocene records from cave, dune, and midden sites on Chatham Island (Checklist Committee 1990).

Family **CALLAEIDAE** Sundevall: New Zealand Wattlebirds

Callaeadides Sundevall, 1836: *Kungl. Svenska Vetenskapsakad. Handl. 1835*: 92 – Type genus *Callaeas* J.R. Forster, 1788.

Some authors use “Callaeatidae”, but Callaeidae is better established and was recommended by Bock (1994: 219). The relationships of this endemic New Zealand family, and hence its place in the sequence of passerine families, are uncertain, other than for a distant relationship to the hihi (Ewen *et al.* 2006; Driskell *et al.* 2007). F. Barker *et al.* (2004) reported a clade that included Callaeidae, cnemophiline birds-of-paradise, and Melanocharitidae (berrypeckers). Limited support for this was reported by Ewen *et al.* (2006) and Shepherd & Lambert (2007), while Irestedt & Ohlson (2008) found “reasonable support” for a passeridan affinity of Callaeidae and Cnemophilidae. Whatever the case, as families endemic to New Zealand, both Callaeidae and Notiomystidae are likely to have branched early from their sister taxa. Although *incertae sedis*, they are placed early in the oscine sequence until their exact position is resolved. The sequence of genera follows Checklist Committee (1990, 2010).

Genus **Callaeas** J.R. Forster

Callaeas J.R. Forster, 1788 (27 Mar.): *Enchiridion*: 35 – Type species (by monotypy) “great Wattle bird of N. Zealand” = *Callaeas cinerea* (Gmelin).

Glaucopis Gmelin, 1788 (25 Jul.): *Syst. Nat., 13th edition 1(1)*: 363 – Type species (by monotypy) *Glaucopis cinerea* Gmelin = *Callaeas cinerea* (Gmelin).

Cryptorhina Wagler, 1827: *Syst. Avium 1*: sign. 814. *Nomen novum* for *Crypsirina* Vieillot, 1816. In part.

Calloas Daudin, 1800: *Traité Elém. Compl. Ornith. 1*: 410. Unjustified emendation.

Callaeus G.R. Gray, 1840: *List Gen. Birds* (1st edition): 38. Unjustified emendation.

Two species of kōkako are recognised, reflecting differences in wattle colour, behaviour, and ecology. This follows Oliver (1955) and Holdaway *et al.* (2001). S. Murphy *et al.* (2006) confirmed a phylogenetic divergence between North and South Island taxa.

► **Callaeas wilsoni** (Bonaparte)

North Island Kokako | Kōkako

Glaucopis wilsoni Bonaparte, 1851: *Consp. Gen. Avium 1*: 368 – New Zealand.

Callaeas olivascens Von Pelzeln, 1867: *Verh. zool.-bot. Ges. Wien 17*: 317 – New Zealand.

Glaucopis olivascens (Von Pelzeln); Finsch 1870, *Journ. für Ornith. 18*: 324.

Callaeas Wilsoni G.R. Gray [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73.

Callaeas wilsoni (Bonaparte); Mathews & Iredale 1913, *Ibis 1* (10th series): 452.

Callaeas cinerea wilsoni (Bonaparte); Checklist Committee 1953, *Checklist N.Z. Birds*: 68.

At the time of European settlement found in forests of the mid-northern, central, and southern North Island, and on Great Barrier Island / Aotea Island; absent from extensive areas of the eastern North Island. Underwent steady decline apart from at managed sites (Innes *et al.* 1999, 2013). Still present in native forest in parts of Northland, Hunua Ranges, Bay of Plenty, and Te Urewera; very small remnant populations in west Waikato and north Taranaki. Mainland birds were successfully transferred to Hauturu / Little Barrier Island (1980–88), and two birds remaining in northern Great Barrier Island were moved to Hauturu / Little Barrier Island in 1994. Translocated successfully to Kapiti Island (1991–97); Tiritiri Matangi Island (1997–2010); Mount Bruce, Wairarapa (2003–10); Boundary Stream, Hawke’s Bay (2004–07); Ngapukeariki, East Cape (2005); other translocations underway (Miskelly & Powlesland 2013; Innes *et al.* 2013). Holocene remains are particularly numerous in deposits, indicating that it was formerly present in many areas (especially coastal) from which it was absent at the time of European settlement. Particularly abundant as bones in Far North sand-dune sites and King Country caves; also from a few middens (Checklist Committee 1990).

► † **Callaeas cinereus** (Gmelin)

South Island Kokako | Kōkā

Glaucopis cinerea Gmelin, 1788: *Syst. Nat., 13th edition 1(1)*: 363. Based on the “Cinereous Wattle-bird” of Latham 1781, *Gen. Synop. Birds 1*: 364, pl. 14 – Queen Charlotte Sound, Marlborough.

Cryptorhina Callaeas Wagler, 1827: *Syst. Avium 1*: sp. 5 – New Zealand.

Callaeas cinerea (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 191.

Callaeas cenerea Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.

Callaeas cinerea cinerea (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 68.

Callaeas cinereus (Gmelin); Dickinson & Christidis 2014, *Howard & Moore Complete Checklist Birds World*, 4th edition, 2: 174.

We follow David & Gosselin (2002b) and Dickinson & Christidis (2014) in regarding *Callaeas* as masculine, hence the species name should be *Callaeas cinereus* (*contra* Checklist Committee 2010). Regarded as extinct. Distribution on European settlement included western forest regions from north-west Nelson to Fiordland; also Banks Peninsula and, probably, large areas of beech forest adjacent to the mountains and subalpine scrub; in forest and scrub on Stewart Island / Rakiura. The last accepted sighting was in the Upper Inangahua Valley in Mar. 2007 (Miskelly *et al.* 2013), 40 years after the last previous accepted record (McBride 1981). Holocene deposits and midden records from widely distributed sites; one Stewart Island / Rakiura Holocene record (Checklist Committee 1990).

Genus *Philesturnus* Geoffroy St-Hilaire

Creadion of authors. Not *Creadion* Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 34 (*fide* Mathews 1925, *Bull. Brit. Ornith. Club* 45: 76).

Philesturnus Geoffroy St-Hilaire, 1832: *Nouv. Ann. Mus. Hist. Nat. Paris* 1: 390 – Type species (by monotypy) *Sturnus carunculatus* Gmelin = *Philesturnus carunculatus* (Gmelin).

Philsturus Lesson, 1837: *Compléments Oeuvres Buffon* 9: 51. Misspelling.

Oxystomus Swainson, 1837: *Classification of Birds* 2: 270 – Type species (by monotypy) *Sturnus carunculatus* Gmelin = *Philesturnus carunculatus* (Gmelin).

We follow Holdaway *et al.* (2001) in recognising two species of saddleback, reflecting differences in juvenile plumage and skeletal measurements.

► *Philesturnus rufusater* (Lesson)

North Island Saddleback | Tieke*

icterus [sic] *rufusater* Lesson, 1828 (Jun.): *Manuel d'Ornith.* 1: 355 – Bay of Islands, Northland.

Icterus novaezealandiae Lesson & Garnot, 1829 (4 Apr.): in L.I. Duperrey, *Voy. Coquille, Zool.* 1: 415 – Bay of Islands, Northland. Junior secondary homonym of *Creadion novaezealandiae* Stephens, 1826.

Icterus rufusater Lesson & Garnot, 1829 (4 Apr.): in L.I. Duperrey, *Voy. Coquille, Zool.* 1: pl. 23, fig. 1 – Bay of Islands, Northland. Junior primary homonym of *Icterus rufusater* Lesson, 1828.

Philesturnus carunculata rufusater (Lesson); Mathews 1944, *Emu* 43: 246. Unjustified emendation.

Philesturnus carunculatus rufusater (Lesson & Garnot); Checklist Committee 1953, *Checklist N.Z. Birds*: 67.

Creadion carunculatus rufusater (Lesson); Amadon in Peters 1962, *Check-list Birds World* 15: 158.

Philesturnus carunculatus rufusater (Lesson); Checklist Committee 1990, *Checklist Birds N.Z.*: 225.

Philesturnus rufusater (Lesson); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 138, 180.

Distribution on European settlement included the whole of the North Island; also Great Barrier / Aotea, Hauturu / Little Barrier, Hen and Chickens, and Cuvier / Repanga Islands. By about 1950 it had been reduced to a single population on Hen Island / Taranga Island (Hen and Chickens Group). From there, under the management programme of the Wildlife Service (later, Department of Conservation), beginning in 1964, it has been successfully transferred to: other islands of the Hen and Chickens Group, namely Whatupuke (1964), Lady Alice (1971), and from the former by self-introduction to Coppermine; islands of the Mercury Group, namely Red Mercury / Whakau (1966) and Kawhiti / Stanley (1977); Cuvier Island / Repanga (1968); Kapiti Island (1981–89); Hauturu / Little Barrier Island (1984–88); Tiritiri Matangi Island (1984); and Mokoia Island in Lake Rotorua (1992). There have been many subsequent translocations, including to predator-fenced mainland sites (Miskelly & Powlesland 2013). Unsuccessful transfers to Motukawanui (Cavalli Group) and Fanal Island / Motukino (Mokohinau Group). Holocene records numerous and widely distributed; relatively few midden records (Checklist Committee 1990).

*Also used for South Island saddleback *P. carunculatus*.

► *Philesturnus carunculatus* (Gmelin)

South Island Saddleback | Tieke*

Sturnus carunculatus Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 805. Based on the “Wattle Stare” of Latham 1783, *Gen. Synop. Birds* 3: 9, pl. 36 – Queen Charlotte Sound, Marlborough.

Creadion pharoides Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 8: 390. Unnecessary *nomen novum* for *Sturnus carunculatus* Gmelin, 1789.

Creadion novaezealandiae Stephens, 1826: in G. Shaw, *General Zool.* 14(1): 265. Unnecessary *nomen novum* for *Sturnus carunculatus* Gmelin, 1789.

Xanthornus carunculatus (Gmelin); Quoy & Gaimard 1830, in Dumont d'Urville, *Voyage Astrolabe Zool.* 1: 212, pl. 12, fig. 4.

Philesturnus carunculatus (Gmelin); Geoffroy St-Hilaire 1832, *Nouv. Ann. Mus. Hist. Nat. Paris* 1: 391.

Oxystomus carunculatus (Gmelin); Swainson 1837, *Classification Birds* 2: 270.

Sturnus carunculatus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 81 – South Island. Junior primary homonym of *Sturnus carunculatus* Gmelin, 1789.

Creadion carunculatus (J.R. Forster) [sic]; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(3): 8.

Creadion cinereus Buller, 1865: *Essay N.Z. Ornith.*: 10 – Banks Peninsula.

- Creadion cenereus* Buller; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.
Creadion carunculatus (Gmelin); Buller 1872 (Dec.), *History of the Birds of N.Z.*, 1st edition (part 3): 149.
Creadion (Philesturnus [sic]) carunculatus (Gmelin); Mathews 1930, *Emu* 29: 286. Unjustified emendation.
Philesturnus carunculata carunculata (Gmelin); Mathews 1944, *Emu* 43: 246. Unjustified emendation.
Philesturnus carunculatus carunculatus (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 67.
Creadion carunculatus carunculatus (Gmelin); Amadon in Peters 1962, *Check-list Birds World* 15: 158.
Philesturnus carunculatus (Gmelin); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 138, 180.

At the time of European settlement found throughout forests of northern, western, and southern South Island; also Banks Peninsula, D'Urville Island, Stephens Island / Takapourewa, Stewart Island / Rakiura, and various outliers. By about 1950 apparently survived only on three of the South Cape Islands (south-west of Stewart Island / Rakiura), but even there the accidental introduction of ship rats (*Rattus rattus*) in 1963–64 made it necessary to transfer the remaining birds to smaller islands nearby, namely Big (Stage) Island (Boat Group) and Kaimohu Islands. Since then successfully transferred to many other islands in the Stewart Island / Rakiura area, Fiordland, and Marlborough Sounds (Miskelly & Powlesland 2013). Unsuccessful transfers to other Marlborough Sounds islands (Nukuwaiata, Maud, Allports) and Fiordland islands (Bauza, Erin) (Miskelly & Powlesland 2013). Numerous in Holocene deposits, and a few midden records (Checklist Committee 1990).

*Also used for North Island saddleback *P. rufusater*.

Genus †*Heteralocha* Cabanis

- Neomorpha* Gould, 1837: *Synop. Birds Australia 1*: pl. 11 & text – Type species (by monotypy) *Neomorpha acutirostris* Gould = *Heteralocha acutirostris* Gould. Suppressed and invalid (*vide* ICZN 1958, Opinion 514. *Opinions & Declarations* 18(18): 305).
Heteralocha Cabanis, 1851: *Mus. Heineanum 1*: 218 – Type species (by original designation) *Heteralocha Gouldi* G.R. Gray = *Heteralocha acutirostris* Gould. Name placed in the *Official List of Generic Names in Zoology* (*vide* ICZN 1958, Opinion 514. *Opinions & Declarations* 18(18): 305).

► †*Heteralocha acutirostris* (Gould)

Huia

- Neomorpha acutirostris* Gould, 1837: *Synop. Birds Australia 1*: pl. 11 & text – North Island.
Neomorpha crassirostris Gould, 1837: *Synop. Birds Australia 1*: pl. 11 & text – North Island.
Neomorpha Gouldii G.R. Gray, 1841: *List Gen. Birds* (2nd edition): 15. Unnecessary *nomen novum* for *Neomorpha acutirostris* Gould, 1837.
Heteralocha Gouldi (G.R. Gray); Cabanis 1851, *Mus. Heineanum 1*: 218. Unjustified emendation.
Heteralocha gouldi (G.R. Gray); G.R. Gray 1862, *Ibis* 4: 217. Unjustified emendation.
Heteralocha acutirostris (Gould); Buller 1872 (Apr.), *History of the Birds of N.Z.*, 1st edition (part 1): 63.
Heteralocha auctirostris (Gould); Enys 1876, *Trans. Proc. N.Z. Inst.* 8: 204. Misspelling.

New Zealand. Recorded historically only from forests of the eastern and southern North Island (Raukumara Range and Turakina River south to Wellington) but, as indicated by Holocene bone remains, range probably included the whole of the North Island. Last generally accepted record 1907, but quite credible reports to mid-1920s (Tennyson & Martinson 2007: 126, 157). Recorded from Holocene cave and dune localities from North Cape (Otou) to the southern tip of the North Island (Checklist Committee 1990). Rarer than expected at inland cave sites; also from sand-dune midden sites (Checklist Committee 1990).

Family NOTIOMYSTIDAE Driskell, Christidis, Gill, Boles, Barker & Longmore: Hihi

- Notiomystidae Driskell, Christidis, Gill, Boles, Barker & Longmore, 2007: *Australian Journ. Zool.* 55: 76 – Type genus *Notiomystis* Richmond, 1908.

Preliminary DNA studies by Driskell (2001) suggested that the hihi is not a honeyeater, and this was confirmed with further samples (Ewen *et al.* 2006; Driskell *et al.* 2007). Molecular studies by Ewen *et al.* (2006) found a close relationship between the hihi and the single callaeid in their study (*Callaeas*); Driskell *et al.* (2007) found a similar relationship between hihi and *Philesturnus*. The divergence between *Notiomystis* and *Philesturnus* was estimated at 33.8 Ma (Oligocene) by Driskell *et al.* (2007) who placed the hihi in a new endemic family.

Genus *Notiomystis* Richmond

- Pogonornis* G.R. Gray, 1846: *Gen. Birds 1*: 123 – Type species (by monotypy) *Meliphaga cincta* du Bus de Gisignies = *Notiomystis cincta* (du Bus de Gisignies). Junior homonym of *Pogonornis* Billberg, 1828.
Notiomystis Richmond, 1908: *Proc. U.S. Nat. Mus.* 35: 634. *Nomen novum* for *Pogonornis* G.R. Gray, 1846.
Notiomystes Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 159. Unjustified emendation.

► *Notiomystis cincta* (du Bus de Gisignies)

Hihi | Stitchbird

- Meliphaga cincta* du Bus de Gisignies, 1839: *Bull. Acad. Roy. Sci. Bruxelles* 6(4): 295, & plate – New Zealand, restricted to North Island (*vide* Checklist Committee 1953, *Checklist N.Z. Birds*: 64).
Ptilotis auritus Lafresnaye, 1839: *Rev. de Zool., Paris* 2: 257 – New Zealand, restricted to North Island (*vide* Mathews 1935, *Bull. Brit. Ornith. Club* 55: 159 (as *auritris* [sic])).

- Ptilotis cincta* (du Bus de Gisignies); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 187.
Pogonornis cincta (du Bus de Gisignies); G.R. Gray 1862, *Ibis* 4: 218.
Notiomystes cincta hautura Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 159 – Little Barrier Island.
 [Notiomystes] *cincta cincta* (du Bus); Mathews 1935, *Bull. Brit. Ornith. Club* 55: 159.
 [Notiomystes] *auritris* [sic] Lafresnaye, 1839; Mathews 1935, *Bull. Brit. Ornith. Club* 55: 159.
Notiomystis cincta (du Bus de Gisignies); Checklist Committee 1953, *Checklist N.Z. Birds*: 64.

New Zealand: recorded only from the North Island. Up to the early 1870s said to have been comparatively common in southern parts of the North Island (as far north as the Waikato area), as well as on Hauturu / Little Barrier, Great Barrier / Aotea, and Kapiti Islands; a rapid decline followed and by 1885 the species had vanished from the mainland, Great Barrier, and Kapiti Islands, remaining only on Hauturu / Little Barrier Island. Holocene records from Far North sand-dune sites indicate that its original distribution included the whole of the North Island; also known from Holocene deposits in the King Country and Hawke's Bay (Checklist Committee 1990). Successful translocations to Kapiti Island (1990–2002), Tiritiri Matangi Island (1995–96), Zealandia / Karori Sanctuary (Wellington, 2005–10), and Maungatautari (Waikato, 2009–11) have required artificial nest-boxes and supplemental feeding (Miskelly & Powlesland 2013). Translocations to Cuvier / Repanga, Hen / Taranga and Mokoia Islands (the latter in Lake Rotorua), and Waitakere Ranges were unsuccessful (Miskelly & Powlesland 2013). Success of more recent transfers to several other predator-fenced sites not yet known. Angehr (2011) designated a lectotype for *Notiomystis cincta hautura* Mathews, 1935.

Family MOHOUIDAE Mathews: New Zealand Creepers

Mohouinae Mathews, 1946: *Working List Austr. Birds*: 173 – Type genus *Mohoua* Lesson, 1835.

Checklist Committee (2010) placed the three species in the genus *Mohoua* Lesson, 1837, in the subfamily Mohouinae Mathews, 1946, as a subfamily of Pachycephalidae. Several more recent genetic studies have found *Mohoua* to be basal in core Corvoidea (e.g. Aggerbeck *et al.* 2013; Aidala *et al.* 2013; Gibb *et al.* 2015), therefore placing them outside Pachycephalidae. We follow the recommendation of Aidala *et al.* (2013) who confirmed, using both nuclear and mitochondrial sequence data, the monophyly of the genus, and recommended its placement in the endemic family Mohouidae. Use of Mohouidae was followed by Dickinson & Christidis (2014: 174), who we follow in placing Mohouidae immediately after Notiomystidae (which follows Callaeidae). The common name used for the subfamily Mohouinae by Checklist Committee (2010) was “Whitehead and Allies” but we recommend using “New Zealand creepers”, recognising that one of the three species is the brown creeper (*Mohoua novaeseelandiae*).

The sequence of species follows Checklist Committee (1990). The endemic genus *Finschia* (for the brown creeper) was synonymised with *Mohoua* by Sibley & Ahlquist (1987).

Genus *Mohoua* Lesson

- Mohoua* Lesson, 1837: *Compléments Oeuvres Buffon* 9: 139 – Type species (by monotypy) *Certhia heteroclites* Quoy & Gaimard = *Mohoua ochrocephala* (Gmelin).
Mohoua Lesson, 1840: *Revue Zool.*: 268. Unjustified emendation.
Certhiparus Lafresnaye, 1842: *Rev. de Zool., Paris* 5: 69 – Type species (by original designation) *Parus senilis* du Bus de Gisignies = *Mohoua albicilla* (Lesson).
Clitonyx Reichenbach, 1849: *Avium Syst. Nat.* pl. 38 – Type species (by original designation) *Muscicapa ochrocephala* Gmelin = *Mohoua ochrocephala* (Gmelin).
Phyllodytes Finsch, 1873: *Journ. für Ornith.* 21 (series 4): 397 – Type species (by original designation) *Parus novaeseelandiae* Gmelin = *Mohoua novaeseelandiae* (Gmelin). Junior homonym of *Phyllodytes* Wagler, 1830.
Finschia Hutton, 1903: *Ibis* 3 (8th series): 319. Unnecessary *nomen novum* for *Phyllodytes* Finsch, 1873.

► *Mohoua albicilla* (Lesson)

Whitehead | Pōpokotea

- Fringilla albicilla* Lesson, 1830: in L.I. Duperrey, *Voy. Coquille, Zool. Atlas* 1(15): 662 – Bay of Islands, Northland.
Parus senilis du Bus de Gisignies, 1839: *Bull. Acad. Roy. Sci. Bruxelles* 6(4): 297 – Bay of Islands, Northland.
Certhiparus senilis (du Bus de Gisignies); Lafresnaye 1842, *Rev. de Zool., Paris* 5: 69.
Certhiparus albicillus (Lesson); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(3): 6, pl. 5, fig. 2.
Certhiparus cinerea Ellman, 1861: *Zoologist* 19: 7465 – New Zealand.
Mohoua ? albicilla (Lesson); G.R. Gray 1862, *Ibis* 4: 220.
Mohoua albicilla Lesson [sic]; Anon. 1870, *Cat. Colonial Mus.*: 72.
Orthonyx (Mohoua) albicillus (Lesson); Potts 1871, *Trans. N.Z. Inst.* 3: 74.
Phyllodytes albicilla Lesson; Finsch 1873, *Journ. für Ornith.* 21 (series 4): 398.
Orthonyx albicilla (Lesson); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 101.
Clitonyx albicapilla (Lesson); Buller 1887 (Oct.), *History of the Birds of N.Z.*, 2nd edition 1 (part 2): 53. Unjustified emendation.
Certhiparus albicilla [sic] (Lesson); Hutton 1903, *Ibis* 3 (8th series): 319.
Certhiparus albicillus (Lesson); Mathews & Iredale 1913, *Ibis* 1 (10th series): 443.
Certhiparus albicilla hautura Mathews, 1935: *Bull. Brit. Ornith. Club* 55: 160 – Little Barrier Island.
Certhiparus albicilla albicilla (Lesson); Mathews, 1935, *Bull. Brit. Ornith. Club* 55: 160.

Mohoua ochrocephala albicilla (Lesson); Checklist Committee 1953, *Checklist N.Z. Birds*: 62.

Mohoua albicilla (Lesson); Checklist Committee 1990, *Checklist Birds N.Z.*: 204.

North Island only: largely restricted to central and southern forested areas plus Hauturu / Little Barrier and Kapiti Islands. Successfully transferred from Hauturu / Little Barrier to Tiritiri Matangi Island (1989), with numerous subsequent translocations to other islands and predator-fenced mainland sites (Miskelly & Powlesland 2013). Has colonised exotic pine forests in central North Island. Extinct on Rakitu Island (Arid Island), east of Great Barrier Island / Aotea, where last seen in 1957 (Bellingham *et al.* 1982). Holocene records from cave, predator, and dune sites throughout North Island (Checklist Committee 1990).

► ***Mohoua ochrocephala*** (Gmelin)

Mohua | Yellowhead

Muscicapa ochrocephala Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 944. Based on the “Yellowheaded Flycatcher” of Latham 1783, *Gen. Synop. Birds 2*: 342 – Queen Charlotte Sound, Marlborough.

Certhia heteroclites Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool. 1*: 223, pl. 17, fig. 1 – Tasman Bay.

Mohoua hua Lesson, 1837: *Compléments Oeuvres Buffon 9*: 139 – South Island.

Orthonyx icterocephalus Lafresnaye, 1839: *Rev. de Zool., Paris 2*: 257 – South Island.

Orthonyx heteroclitus [sic] Lafresnaye, 1839: *Mag. Zool., Paris*: pl. 8 – South Island.

Muscicapa Chloris J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 87 – South Island.

Clitonyx (Muscicapa) ochrocephala (Gmelin); Reichenbach 1851, *Handb. Spec. Ornith. 1*: 167.

Mohoua ochrocephala (Gmelin); G.R. Gray 1862, *Ibis 4*: 220.

Orthonyx ochrocephala (Gmelin); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 103.

Certhiparus ochrocephalus (Gmelin); Gadow 1883, *Cat. Birds Brit. Mus.* 8: 76.

Clitonyx ochrocephala (Gmelin); Buller 1887 (Oct.), *History of the Birds of N.Z.*, 2nd edition 1 (part 2): 56.

Mohua [sic] *ochrocephala* (Gmelin); Hutton 1903, *Ibis 3* (8th series): 319.

Mohoua ochrocephala ochrocephala (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 62.

Formerly widespread in South Island and Stewart Island / Rakiura forests, now absent from most of its former range and threatened at unmanaged sites. Well established only in or near Fiordland and Mount Aspiring National Parks, with remnant populations at Arthur’s Pass National Park and Southland. Recently extinct at Mount Stokes (Marlborough Sounds; Gaze 2003). Translocated to several predator-free islands in Fiordland, Marlborough Sounds, and near Stewart Island / Rakiura (Miskelly & Powlesland 2013). Holocene records from widespread South Island sites, especially laughing owl food deposits (Checklist Committee 1990).

► ***Mohoua novaeseelandiae*** (Gmelin)

Brown Creeper | Pīpi

Parus novae Seelandiae Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 1013. Based on the “New Zealand Titmouse” of Latham 1783, *Gen. Synop. Birds 2*: 558 – Dusky Bay = Dusky Sound, Fiordland.

Parus zelandicus Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool. 1*: 210, pl. 11, fig. 3 – Tasman Bay.

Certhiparus Novae-Zelandiae (Gmelin); Lafresnaye 1842, *Rev. de Zool., Paris 5*: 69. Unjustified emendation.

Certhiparus Novae Seelandiae (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z. 2*: 189.

Certhiparus maculicaudus G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z. 2*: 189 – New Zealand.

Parus urostigma J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 90 – South Island.

Certhiparus urostigma (J.R. Forster); Ellman 1861, *Zoologist 19*: 7465.

Certhiparus novae seelandiae (Gmelin); G.R. Gray 1862, *Ibis 4*: 221.

Certhiparus Novae Zelandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.

Phyllodytes Novae-Zelandiae (Gmelin); Finsch 1873, *Journ. für Ornith. 21* (series 4): 397. Unjustified emendation.

Finschia novaeseelandiae (Gmelin); Hutton 1903, *Ibis 3* (8th series): 319.

Certhiparus novae-zealandiae (Gmelin); Buller 1906, *Suppl. Birds N.Z. 2*: 136. Unjustified emendation.

Finschia novae-seelandiae (Gmelin); Mathews 1930, *Emu 29*: 285.

Mohoua novaeseelandiae (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 205.

Widespread in South Island and Stewart Island / Rakiura forests and scrub; on several islands off Stewart Island / Rakiura and in the Marlborough Sounds. Holocene records from widespread South Island sites, especially laughing owl food deposits (Checklist Committee 1990). The name brown creeper is also used for a North American species (*Certhia americana*, Certhiidae).

Family **ORIOLIDAE** Vigors: Old World Orioles, Pitohuis, Figbirds, and Piopio

Oriolina Vigors, 1825: *Zoological Journ. 2*(7): 395 – Type genus *Oriolus* Linnaeus, 1766.

Checklist Committee (2010) followed the conclusions of Christidis, Leeton *et al.* (1996) who found that piopio were basal to the bowerbirds. However, more recent research has shown that Christidis, Leeton *et al.* (1996) possibly had a misidentified DNA sample, and that piopio should actually be placed in Oriolidae (Johansson *et al.* 2011; Zuccon & Ericson 2012; Gibb *et al.* 2015). Therefore the family Oriolidae is added to the New Zealand Checklist, and the family Turnagridae Buller, 1888, becomes a junior synonym of Oriolidae. We follow Dickinson & Christidis (2014) in placing *Turnagra* in the endemic subfamily Turnagrinae.

Subfamily †TURNAGRINAE Buller: Piopio

Turnagridae Buller, 1888: *History of the Birds of N.Z.*, 2nd edition 1: 30 – Type genus *Turnagra* Lesson, 1837.

Genus †*Turnagra* Lesson

Turnagra Lesson, 1837: *Compléments Oeuvres Buffon* 8: 216 – Type species (by monotypy) *Tanagra macularia* Quoy & Gaimard = *Turnagra capensis* (Sparrrman).

Keropia G.R. Gray, 1840: *List Gen. Birds* (1st edition): 28 – Type species (by monotypy) *Turdus crassirostris* Gmelin = *Turnagra capensis* (Sparrrman).

Otagon Bonaparte, 1851: *Consp. Gen. Avium* 1: 374 – Type species (by monotypy) *Loxia turdus* J.R. Forster = *Turnagra capensis* (Sparrrman).

Ceropia Sundevall, 1857: *Kungl. Svenska Vetenskapsakad. Handl.* 2(3): 9. Unjustified emendation.

Two species of *Turnagra* are recognised, based on plumage differences, and following Oliver (1955) and Holdaway *et al.* (2001).

► †*Turnagra tanagra* (Schlegel)

North Island Piopio | Piopio*

Otagon tanagra Schlegel, 1866: *Ned. Tijdsch. Dierk.* 3: 190 – no locality = North Island (*vide* Checklist Committee 1953, *Checklist N.Z. Birds*: 68).

Turnagra hectori Buller, 1869: *Ibis* 5 (new series): 39 – North Island.

Turnagra Hectorsi Buller; Anon. 1870, *Cat. Colonial Mus.*: 73.

Keropia tanagra (Schlegel); Finsch 1870, *Journ. für Ornith.* 18: 323.

Turnagra tanagra (Schlegel); Mathews & Iredale 1913, *Ibis* 1 (10th series): 445.

Turnagra capensis tanagra (Schlegel); Checklist Committee 1953, *Checklist N.Z. Birds*: 68.

At the time of European settlement found in forest, and even common, over most of the North Island, but had all but disappeared by 1900. Early records suggest that it was rare in Northland. Sight records (unconfirmed) claimed from: inland from Patea (1923), inland from Te Araroa (*c.* 1927), between Gisborne and Wairoa (May 1947), Whanganui River (Mar. 1950), Okataina, and Waikaremoana (Checklist Committee 1990). Holocene and midden records from widely distributed deposits over the North Island, including the Far North (Checklist Committee 1990).

*Also used for South Island piopio *T. capensis*.

► †*Turnagra capensis* (Sparrrman)

South Island Piopio | Piopio*

South Island and Stephens Island / Takapourewa.

†*Turnagra capensis minor* J.H. Fleming

Stephens Island Piopio

Turnagra capensis minor J.H. Fleming, 1915: *Proc. Biol. Soc. Washington* 38: 121 – Stephens Island.

Turnagra capensis capensis (Sparrrman); Checklist Committee 1990, *Checklist Birds N.Z.*: 229. In part.

Turnagra capensis minor J.H. Fleming; Medway 2004, *Notornis* 51: 232.

Stephens Island / Takapourewa in Cook Strait. Birds from this population are distinctive in their plumage and small size, and so are recognised as a subspecies here following Medway (2004c). Said to have been numerous in 1894 and a specimen was collected in Jan. 1897 (Medway 2004c); presumably the population died out soon after.

†*Turnagra capensis capensis* (Sparrrman)

South Island Piopio | Piopio*

Tanagra capensis Sparrrman, 1787: *Mus. Carlsonianum* 2: no XLV, pl. 45 – “Cape of Good Hope”, error for Dusky or Queen Charlotte Sound (*vide* Oliver 1930, *New Zealand Birds*, 1st edition: 447).

Turdus crassirostris Gmelin, 1789: *Syst. Nat.*, 13th edition 1(2): 815. Based on the “Thick-billed Thrush” of Latham 1783, *Gen. Synop. Birds* 2: 34, pl. 37 – Dusky Sound, Fiordland.

Campephaga ferruginea Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 10: 48 – New Zealand.

Tanagra macularia Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool.* 1: 186, pl. 7, fig. 1 – Tasman Bay.

Keropia crassirostris (Gmelin); G.R. Gray 1840, *List Gen. Birds* (1st edition): 28.

Loxia Turdus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 85 – South Island.

Otagon turdus (J.R. Forster); Bonaparte 1851, *Consp. Gen. Avium* 1: 374.

Ceropia crassirostris (Gmelin); Sundevall 1857, *Kungl. Svenska Vetenskapsakad. Handl.* 2(3): 9.

Turnagra crassirostris (Gmelin); G.R. Gray 1862, *Ibis* 4: 225.

Turnagra turdus (J.R. Forster); G.R. Gray 1869, *Hand-list Birds* 1: 284.

Otagon crassirostris (Gmelin); Sundevall 1872, *Methodi Naturalis Avium Tentamen*: 19.

Turnagra capensis (Sparrrman); Mathews & Iredale 1913, *Ibis* 1 (10th series): 445.

Turnagra capensis capensis (Sparrrman); Checklist Committee 1953, *Checklist N.Z. Birds*: 68.

Widespread in forested areas throughout the South Island at the time of European settlement. Although early records refer to it as abundant in several localities, it was “a fast expiring species” at the time of Buller’s *Supplement* (Buller 1905–06). Unconfirmed sight records claimed from: west Nelson (Jan. 1948); Southland (Dec. 1947); Waiuna Lagoon, Fiordland (Aug. 1962); and Fiordland (May 1963). Holocene, and midden, records widely distributed (Checklist Committee 2010).

*Also used for North Island piopio *T. tanagra*.

Family CAMPEPHAGIDAE Vigors: Cuckoo-shrikes and Trillers

Campephagina Vigors, 1825: *Zoological Journ.* 2(7): 395 – Type genus *Campephaga* Vieillot, 1816.

Genus *Coracina* Vieillot

Coracina Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 37 – Type species (by subsequent designation) “Choucari” of Buffon = *Coracina papuensis* (Gmelin).

► *Coracina novaehollandiae* (Gmelin)

Black-faced Cuckoo-shrike

Turdus Novae Hollandiae Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 814 – “terra van Diemen” = Adventure Bay, Tasmania (*vide* E. Mayr in Peters 1960, *Check-list Birds World* 9: 172).

Colluricincla concinna Hutton, 1871: *Cat. Birds N.Z.*: 15 – Motueka, Nelson.

Graucalus concinnus (Hutton); Hutton 1872, *Trans. N.Z. Inst.* 5: 225.

Graucalus melanops; Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 148. Not *Corvus melanops* Latham, 1801.

Coracina robusta robusta; Mathews & Iredale 1913, *Ibis* 1 (10th series): 442. Not *Lanius robustus* Latham, 1801.

Coracina novaehollandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 59.

Coracina novaehollandiae novaehollandiae (Gmelin); E. Mayr in Peters 1960, *Check-list Birds World* 9: 172.

Throughout Australia (including Tasmania); also Lesser Sunda Islands, New Guinea, and west Solomon Islands; southern Australian birds partly migratory. Rare straggler to New Zealand, with at least 21 records: Motueka, c. 1869; Invercargill, Apr. 1870 (F. Hutton 1871; Stidolph 1927); Westport, c. 1895, 1931 (Checklist Committee 1953), Lake Ellesmere / Te Waihora and Nelson, Jun. 1904 (F. Hutton 1905; Oliver 1955); Okato, Taranaki, 1914; Greymouth, ?1914 (Checklist Committee 1953); north Kaipara Heads, Jan.–Sep. 1953 (Turbott 1954); Himatangi, Jan. 1955 (R. Wilson 1955); Feilding 1965; Okuru, south Westland, 1966 (Checklist Committee 1970); Waikanae, Jun. 1984 (Miskelly *et al.* 2015); Rotorua, Jun. 1987 (Checklist Committee 2010); Tarras, Central Otago, Mar. 1990 (Guest 1991); Halfmoon Bay, Stewart Island / Rakiura, Jul. 2001 (Medway 2002f); New Plymouth, May 2005 (Scofield 2006); Kapiti Island, Nov. 2006 (Scofield 2008); Horseshoe Bay, Stewart Island / Rakiura, May 2011 (Miskelly *et al.* 2013); near Marton, Jul. 2015 (Miskelly, Crossland *et al.* 2017); Wairamarama, Waikato, Jul. 2019 (Miskelly, Crossland *et al.* 2021). The subspecific identity of New Zealand birds has not been determined; they are presumed to be from Australia where there are three subspecies (Schodde & Mason 1999).

Genus *Lalage* Boie

Lalage Boie, 1826: *Isis von Oken*, Heft 10: col. 973 – Type species (by monotypy) *Turdus orientalis* Gmelin = *Lalage nigra* J.R. Forster.

Symmorphus Gould, 1838: *Synop. Birds Australia*: 3 – Type species (by monotypy) *Symmorphus leucopygus* 1838 = *Lalage leucopyga* (Gould). Junior homonym of *Symmorphus* Wesmael, 1836.

Diaphoropterus Oberholser, 1899: *Proc. Acad. Nat. Sci. Philad.* 1899 (1): 214. Unnecessary *nomen novum* for *Symmorphus* Gould, 1838.

► *Lalage tricolor* (Swainson)

White-winged Triller

Ceblepyris tricolor Swainson, 1825: *Zoological Journ.* 1: 467 – Australia, restricted to Sydney (*vide* Mathews 1930, *Synop. Av. Australia*: 546).

Lalage tricolor (Swainson); Checklist Committee 1990, *Checklist Birds N.Z.*: 199.

Throughout mainland Australia; vagrant to Tasmania; southern populations migratory. Rare straggler to New Zealand; one sight record, Feb.–Jun. 1969, Macandrew Bay, Otago Peninsula (McPherson 1973). Sometimes united with *L. sueurii* (Vieillot, 1818) (Timor) under that name (e.g. Christidis & Boles 2008).

Family ARTAMIDAE Blyth: Butcherbirds, Currawongs, and Woodswallows

Artamidae Blyth, 1849: *Cat. Birds Mus. Asiatic Soc.*: 199 – Type genus *Artamus* Vieillot, 1816.

Checklist Committee (2010) adopted recommendations by Australian authorities to unite woodswallows, magpies, butcherbirds, and currawongs in the family Artamidae, therefore synonymising Cracticidae within Artamidae. Kearns *et al.* (2013) found Artamidae (*sensu* Schodde & Mason 1999 and Christidis & Boles 2008) to be paraphyletic; however, they recommended further work using increased locus and taxon-sampling within the context of a rigorous multilocus coalescent species tree approach before considering raising Cracticinae to family-level.

Subfamily ARTAMINAE Blyth: Woodswallows

Artamidae Blyth, 1849: *Cat. Birds Mus. Asiatic Soc.*: 199 – Type genus *Artamus* Vieillot, 1816.

Genus *Artamus* Vieillot

Artamus Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 41 – Type species (by monotypy) “Langraien (Buffon)” = *Lanius leucorhynchus* Linnaeus = *Artamus leucorhynchus* (Linnaeus).

- **Artamus personatus** (Gould) **Masked Woodswallow**
Ocypterus personatus Gould, 1841: *Proc. Zool. Soc. London 1840* (8): 149 – southern and western Australia.
Artamus personatus (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 227.
 Mainland Australia (not Tasmania), particularly inland; migratory and nomadic. Associates with the white-browed woodswallow on migration and in breeding colonies. Straggler to Norfolk Island (J. Moore 1999). Two records in New Zealand: a pair at Naseby Forest, Central Otago, Jan. 1972 to Aug. 1973 bred and reared two chicks (Darby 1972; Child 1974, 1975a); with them were associated four white-browed woodswallows (*q.v.*); one at Waitawheta, Bay of Plenty, Nov. 2019 (Miskelly, Crossland *et al.* 2021).
- **Artamus superciliosus** (Gould) **White-browed Woodswallow**
Ocypterus superciliosus Gould, 1837: *Synop. Birds Australia 1*: pl. 1, fig. 2 – interior of New South Wales, Australia.
Artamus superciliosus (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 227.
 East and central Australia (not Tasmania); particularly inland. Straggler to Norfolk Island (J. Moore 1999). Rare straggler to New Zealand. Four at Naseby Forest, Central Otago, Dec. 1971 to Jul. 1973, associating with a pair of masked woodswallows (Darby 1972; Child 1974, 1975a). One at Miranda, Firth of Thames, Sep. 1991 (Guest 1992); one at Dannevirke, Sep. 2007 (Birds New Zealand Unusual Bird Report database, <http://rare.birds.org.nz/>, viewed Feb. 2022).
- **Artamus cyanopterus** (Latham) **Dusky Woodswallow**
Loxia cyanoptera Latham, 1801: *Index Ornith. Suppl.*: xlvi – “New Holland” = Sydney, New South Wales, Australia (*vide* E. Mayr & Greenway 1962, in Peters *Check-list Birds World 15*: 165).
Turdus sordidus Latham, 1801: *Index Ornith. Suppl.*: xliii. Not *Turdus sordidus* Statius Müller, 1776.
Artamus lineatus Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd. 17*: 297 – “Nouvelle-Hollande” = Australia.
Ocypterus albo-vittatus Valenciennes, 1820: *Mém. Mus. Nat. d’Hist. natur., Paris 6*: 23, pl. 8 – Timor.
Artamus albovittatus (Valenciennes); Vigors & Horsfield 1826: *Trans. Linn. Soc. London 15*: 210.
Leptopteryx albovittata (Valenciennes); Wagler 1827: *Syst. Avium*: sp. 5.
Artamus sordidus (Latham); Sharpe 1890, *Cat. Birds Brit. Mus. 13*: 19.
Artamus cyanopterus cyanopterus (Latham); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 568.
Artamus cyanopterus (Latham); Christidis & Boles 2008: *Syst. Taxon. Australian Birds*: 35, 196.
 Southern and eastern Australia (Higgins *et al.* 2006). The sole record of this species in New Zealand was a bird seen at Oban, Stewart Island, in Sep. 2014 (Kakishima & Morimoto 2015).

Subfamily CRACTICINAE Chenu & des Murs: Butcherbirds, Currawongs, and Bell Magpies

Cracticinés Chenu & des Murs, 1853: *Encycl. d’Hist. Nat., Oiseaux 5*: 77 – Type genus *Cracticus* Vieillot, 1816.

We follow Checklist Committee (2010) and Cake *et al.* (2018) in using genus *Gymnorhina* for Australian magpie (cf. *Cracticus*, as recommended by Christidis & Boles 2008 and Kearns *et al.* 2013). This approach (Australian magpie in genus *Gymnorhina*, in family Artamidae) has also been followed by Dickinson & Christidis (2014), Clements *et al.* (2019), Handbook of the Birds of the World and BirdLife International (2020), and F. Gill *et al.* (2021).

Genus **Gymnorhina* G.R. Gray

Gymnorhina G.R. Gray, 1840: *List Gen. Birds* (1st edition): 37 – Type species (by original designation) *Coracias tibicen* Latham = *Gymnorhina tibicen* (Latham).

- ****Gymnorhina tibicen*** (Latham) **Australian Magpie | Makipai**
Coracias tibicen Latham, 1801: *Index Ornith. Suppl.*: xxvii – New South Wales, Australia.
Gymnorhina leuconota Gould, 1844: *Birds of Australia 2*: pl. 47 – South Australia.
Gymnorhina leuconota Gould; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 151.
Gymnorhina hypoleuca; Oliver 1930, *New Zealand Birds*, 1st edition: 521. Not *Cracticus hypoleucus* Gould, 1837.
Gymnorhina tibicen (Latham); Checklist Committee 1953, *Checklist N.Z. Birds*: 67.
Gymnorhina tibicen tibicen (Latham); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 73.
Gymnorhina tibicen hypoleuca; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 73. Not *Cracticus hypoleucus* Gould, 1837.
Cracticus tibicen (Latham); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 35, 196.
Gymnorhina tibicen tibicien; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 460. Misspelling.
 Australia and southern New Guinea. New Zealand: successfully introduced to both North and South Islands during the 1860s. Now common and widespread throughout the North Island, and much of the South Island, from sea level to 1,700 m a.s.l. Least evident along the South Island West Coast and on Stewart Island / Rakiura (C. Robertson *et al.* 2007). It used to be thought that two forms, the black-backed magpie and white-backed magpie, were introduced, with various degrees of inter-breeding and hybridisation around the country: see 1990 Checklist (Checklist Committee 1990) for details. The situation is less clear now that Schodde & Mason (1999) have recognised eight subspecies from Australia and Tasmania, with extensive zones of intergradation between abutting subspecies.

Family RHIPIDURIDAE Sundevall: Fantails

Rhipiduridae Sundevall, 1872: *Methodi Naturalis Avium Tentamen 1*: 25 – Type genus *Rhipidura* Vigors & Horsfield, 1827.

We follow Christidis & Boles (2008) in placing *Rhipidura* in its own family rather than in Dicuridae. We follow Schodde & Mason (1999) in recognising *Rh. fuliginosa* as a species endemic to New Zealand and Lord Howe Island, and distinct from *Rh. albiscapa* of mainland Australia and Norfolk Island.

Genus *Rhipidura* Vigors & Horsfield

Rhipidura Vigors & Horsfield, 1827: *Trans. Linn. Soc. London 15*: 246 – Type species (by subsequent designation) *Muscicapa flabellifera* Gmelin = *Rhipidura fuliginosa* Sparrman.

Leucocirca Swainson, 1838: *Naturalist's Library, Ornith. 21*(10): 126, pl. 11 – Type species (by monotypy) *Leucocirca laticauda* Swainson = *Rhipidura leucophrys* (Latham).

Leucocerca Strickland, 1841: *Ann. Mag. Nat. Hist., London 7*: 28. Unjustified emendation.

► *Rhipidura fuliginosa* (Sparrman)

New Zealand Fantail | Pīwakawaka

New Zealand (including Chatham Islands); Lord Howe Island (subspecies *Rh. f. cervina*; extinct). Forms a superspecies with *Rh. albiscapa* of Australia, and taxa on islands of the Melanesian region of the south-west Pacific (Schodde & Mason 1999).

Rhipidura fuliginosa placabilis Bangs

North Island Fantail

Rhipidura flabellifera kempii Mathews & Iredale, 1913: *Ibis 1* (10th series): 441 – North Island. Junior primary homonym of *Rhipidura rufifrons kempii* Mathews, 1912.

Rhipidura flabellifera placabilis Bangs, 1921: *Bull. Am. Mus. Nat. Hist. 44*: 583. *Nomen novum* for *Rhipidura flabellifera kempii* Mathews & Iredale, 1913.

Rhipidura flabellifera melandae [sic] Mathews, 1926: *Bull. Brit. Ornith. Club 47*: 40. Unnecessary *nomen novum* for *Rhipidura flabellifera kempii* Mathews & Iredale, 1913.

Rhipidura fuliginosa placabilis Bangs; Checklist Committee 1953, *Checklist N.Z. Birds*: 60.

North Island and offshore islands. Common throughout, both in forest and in settled districts wherever there are trees and shrubs; accepted modified conditions from the earliest days of European settlement. Scattered Holocene and midden records (Checklist Committee 1990). The species is dimorphic (see account for next subspecies), but melanistic individuals are rare in the North Island.

Rhipidura fuliginosa fuliginosa (Sparrman)

South Island Fantail

Muscicapa fuliginosa Sparrman, 1787: *Mus. Carlsonianum 2*: no XLVII, pl. 47 – “In Deserto Africano inter rivulum Heuj et Fontem Quamedacka”, error for South Island (*vide* E. Mayr in Peters 1986, *Check-list Birds World 11*: 546).

Muscicapa flabellifera Gmelin, 1789: *Syst. Nat., 13th edition 1*(2): 943. Based on the “Fantail Flycatcher” of Latham 1783, *Gen. Synop. Birds 2*(1): 340, pl. 49 – Dusky Sound, Fiordland.

Muscicapa deserti Gmelin, 1789: *Syst. Nat. 13th edition 1*(2): 949 – ?New Zealand.

Mostacilla [sic] *ventilabrum* J.R. Forster, 1794: *Mag. merkwürdigen neuen Reise Beschreibung 11*(3): 313, footnote – New Zealand and Norfolk Island, restricted to South Island (*vide* Steinheimer *et al.* 2008, *Notornis 55*(1): 35).

Rhipidura melanura G.R. Gray, 1843: *in* E. Dieffenbach, *Travels in N.Z. 2*: 190 – “Cook’s Straits”.

Muscicapa Ventilabrum J.R. Forster, 1844: *in* M.H.C. Lichtenstein, *Descrip. Animalium*: 86 – South Island. Junior secondary homonym of *Motacilla ventilabrum* J.R. Forster, 1794.

Rhipidura flabellifera (Gmelin); G.R. Gray 1845, *in* Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds 1*(3): 8.

Leucocerca melanura (G.R. Gray); Bonaparte 1850, *Consp. Gen. Avium 1*: 324.

Rhipidura tristis Hombron & Jacquinot, 1853: *in* Dumont d’Urville, *Voyage Pôle Sud, Zoologie 3*: 76, pl. 2, fig. 5 – Otago.

Rhipidura sombre Hombron & Jacquinot, 1853: *in* Dumont d’Urville, *Voyage Pôle Sud, Zoologie Atlas*: pl. 11, fig. 4 – South Island.

Rhipidura fuliginosa Sparrman [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73.

Rhipidura trestis Hombron [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.

Rhipidura fuliginosa (Sparrman); Buller 1887 (Oct.), *History of the Birds of N.Z.*, 2nd edition 1 (part 2): 72.

Rhipidura flabellifera flabellifera (Gmelin); Mathews & Iredale 1913, *Ibis 1* (10th series): 441.

Rhipidura fuliginosa fuliginosa (Sparrman); Checklist Committee 1953, *Checklist N.Z. Birds*: 60.

South Island, Stewart Island / Rakiura, and outliers. Widespread throughout excepting alpine tops and tussock (C. Robertson *et al.* 2007). Colonised Snares Islands / Tini Heke *c.* 1980, but died out following a storm event in 2001 (Miskelly *et al.* 2001a; Miskelly & Sagar 2008). A few scattered Holocene and midden records, but more common in laughing owl food deposits (Checklist Committee 1990). The species is dimorphic in the South Island, the proportion of “black” (melanistic) to “pied” birds varying locally (Craig 1972; Atkinson & Briskie 2007).

Rhipidura fuliginosa penita Bangs

Chatham Island Fantail | Tchitake

Rhipidura flabellifera [sic] *penitus* Bangs, 1911: *Proc. Biol. Soc. Washington 24*: 41 – Chatham Islands.

Rhipidura flabellifera penitus Bangs; Mathews & Iredale 1913, *Ibis 1* (10th series): 441.

Rhipidura fuliginosa penitus [sic] Bangs; Checklist Committee 1953, *Checklist N.Z. Birds*: 60.

Rhipidura fuliginosa penita Bangs; Sibson 1980, *Notornis 27*: 93.

Rhipidura fuliginosa penita Bangs; Checklist Committee 1990, *Checklist Birds N.Z.*: 208.

Chatham, Pitt, Rangatira, and Mangere Islands of the Chatham Islands (Aikman & Miskelly 2004). A few Holocene cave, dune, and midden records from Chatham Island.

► ***Rhipidura leucophrys* (Latham)**

Willie Wagtail

Turdus leucophrys Latham, 1801: *Index Ornith. Suppl.*: xlv – “New Holland”, restricted to Sydney, Australia (*vide* Mathews 1930, *Syst. Avium Australasianarum* 2: 496).

Leucocirca leucophrys leucophrys (Latham); Mathews 1930, *Syst. Avium Australasianarum* 2: 496.

Rhipidura leucophrys (Latham); E. Mayr in Peters 1986, *Check-list Birds World* 11: 537.

Moluccas, New Guinea, Solomon Islands, Australia. Vagrant to Tasmania. Rare straggler to New Zealand: one record (Mangere Island, Chatham Islands, Oct. 1999; Gummer 2002). Subspecies reaching New Zealand not known, but probably the nominate race, from southern and eastern Australia.

Family **MONARCHIDAE** Bonaparte: Monarch Flycatchers

Monarchinae Bonaparte, 1854: *Ann. Sci. Nat., Zool. Paris, 4th series* 1: 126 – Type genus *Monarcha* Vigors & Horsfield, 1827.

Genus ***Myiagra*** Vigors & Horsfield

Myiagra Vigors & Horsfield, 1827: *Trans. Linn. Soc. London* 15: 250 – Type species (by subsequent designation) *Myiagra rubeculoides* Vigors & Horsfield = *Myiagra rubecula* (Latham).

Submyiagra Mathews, 1913: *Austral Avian Rec.* 2: 61 – Type species (by original designation) *Platyrhynchos vanikorensis* Quoy & Gaimard = *Myiagra vanikorensis* (Quoy & Gaimard).

► ***Myiagra cyanoleuca* (Vieillot)**

Satin Flycatcher

Platyrhynchos cyanoleucus Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.*, 27: 11 – “Timor”, error for Sydney, Australia (*vide* Mathews 1930, *Syst. Avium Australasianarum* 2: 502).

Submyiagra cyanoleuca cyanoleuca (Vieillot); Mathews 1930, *Syst. Avium Australasianarum* 2: 502.

Myiagra cyanoleuca (Vieillot); Blackburn 1963, *Notornis* 10: 262.

Eastern Australia from Cape York to Tasmania; migratory from southern part of range to northern Queensland and New Guinea. Rare straggler to New Zealand: sight record, Hexton, near Gisborne, Jun. 1963 (Blackburn 1963); one found dead, Motueka, Dec. 1988 (Guest 1990).

Genus ***Monarcha*** Vigors & Horsfield

Monarcha Vigors & Horsfield, 1827: *Trans. Linn. Soc. London* 15: 254 – Type species (by monotypy) *Muscipeta carinata* Swainson = *Monarcha melanopsis* (Vieillot).

► ***Monarcha melanopsis* (Vieillot)**

Black-faced Monarch

Muscipeta melanopsis Vieillot, 1818: *Nouv. Dict. Hist. Nat., nouv. éd.* 21: 450 – “New South Wales”, restricted to Sydney, Australia.

Monarcha melanopsis (Vieillot); Tennyson 1997, *Notornis* 44: 267.

East coast of Australia, migrating north in winter to Cape York Peninsula and New Guinea. No subspecies. Rare straggler to New Zealand: one record (Stratford, Taranaki, Apr. 1996; Tennyson 1997).

Genus ***Grallina*** Vieillot

Tanypus Oppel, 1812: *Denkschrift Königl. Baier. Akad. Wissen. München*: 164. Type species (by monotypy) *Tanypus australis* Oppel. Not *Tanypus* Meigen, 1803.

Grallina Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 42. – Type species (by monotypy) *Grallina melanoleuca* Vieillot = *Grallina cyanoleuca* (Latham).

► ***Grallina cyanoleuca* (Latham)**

Magpie-lark

Gracula picata Latham, 1801: *Index Ornith. Suppl.*: xxix. “New Holland” = Australia. Suppressed and invalid (*vide* ICZN 2009, Opinion 2240, *Bull. Zool. Nomenclature* 66(4): 375).

Corvus cyanoleucus Latham, 1801: *Index Ornith. Suppl.*: xxv – Sydney, New South Wales, Australia. Name placed in the *Official List of Specific Names in Zoology* (*vide* ICZN 2009, Opinion 2240, *Bull. Zool. Nomenclature* 66(4): 375).

Tanypus australis Oppel, 1812: *Denkschrift Königl. Baier. Akad. Wissen. München*: 164 – Australia.

Grallina melanoleuca Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 68 – “Nouvelle-Hollande” = Australia.

Merops picatus Shaw, 1812: *Gen. Zool., Syst. Natur. Hist. Aves* 8: 165 – “New Holland” = Australia.

Grallina cyanoleuca cyanoleuca (Latham); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 507.

Grallina cyanoleuca (Latham); Christidis & Boles 2008: *Syst. Taxon. Australian Birds*: 36, 200.

Throughout mainland Australia other than the arid interior; also Lord Howe Island (introduced) and Timor. Two subspecies recognised: *G. c. neglecta* Mathews, 1912 in northern Australia and Timor, and *G. c. cyanoleuca* throughout the remainder of Australia plus Lord Howe Island (Higgins *et al.* 2006). The sole record of this species in New Zealand (other than failed

introductions c. 1900; Appendix 2) was a bird seen at Gorge River, South Westland, Apr. 2008 (Miskelly, Crossland *et al.* 2017).

Family CORVIDAE Leach: Crows and Jays

Corvidae Leach, 1820: *Eleventh room*. In *Synopsis Contents British Museum 17th edition, London*: 67 – Type genus *Corvus* Linnaeus, 1758.

Genus *Corvus* Linnaeus

Corvus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 105 – Type species (by tautonymy) “*Corvus*” = *Corvus corax* Linnaeus.

Palaeocorax Forbes, 1892: *Bull. Brit. Ornith. Club 1*(4): 21 – Type species (by original designation) *Corvus moriorum* Forbes.

Based on genetic results and a lack of osteological differences, Scofield *et al.* (2017) did not support the separation of the extinct New Zealand taxa at species level, and recommended that *Corvus antipodum* (Forbes, 1893) be considered a subspecies of *Corvus moriorum* Forbes, 1892. They also recommended that *Corvus antipodum pycrafti* Gill, 2003 be considered a junior synonym of *Corvus antipodum* (Forbes, 1893). However, the North Island subspecies *Corvus antipodum antipodum* was not analysed as part of the study and therefore the validity of the two mainland subspecies has not been re-examined. In B. Gill’s (2003) original description of the South Island raven *Corvus antipodum pycrafti*, he discussed Bergmann’s Rule with regards to larger birds being in the South Island but pointed out that several other bird sister taxa are separated at Cook Strait. Therefore, we have taken a conservative approach by still recognising both mainland subspecies.

➤ †*Corvus moriorum* Forbes

New Zealand Raven

†*Corvus moriorum antipodum* (Forbes)

North Island Raven

Palaeocorax antipodum Forbes, 1893: *Ibis 5* (6th series): 544 – North Island, restricted to Tokerau Beach, Doubtless Bay, Northland (*vide* Gill 2003, *Journ. Syst. Palaeont. 1*(1): 53).

Corvus antipodum antipodum (Forbes); Gill 2003, *Journ. Syst. Palaeont. 1*: 53.

Corvus moriorum antipodum (Forbes); Scofield *et al.* 2017, *Mol. Phyl. Evol. 106*: 142.

North Island: widespread in coastal Holocene deposits and midden sites throughout (B. Gill 2003; Scofield *et al.* 2017). Present at Poukawa and Te Aute (Hawke’s Bay) within 25 km of the sea, but absent from the Waitomo karst sites further inland.

†*Corvus moriorum pycrafti* Gill

South Island Raven

Corvus antipodum pycrafti Gill 2003, *Journ. Syst. Palaeont. 1*: 54 – Marfell’s Beach, Marlborough.

Corvus moriorum pycrafti Gill; REPAD: The Recently Extinct Plants and Animals Database (accessed Jul. 2021).

Widespread in coastal Holocene deposits and midden sites along the South Island east coast (B. Gill 2003; Scofield *et al.* 2017). Present on West Coast at now-forested areas (e.g. Punakaiki, Oparara) when these were open habitats in the Pleistocene. Also recorded on Stewart Island / Rakiura (Holocene deposits and midden). Rarer inland, e.g. Pyramid Valley, Ngapara, and Bannockburn (Holdaway & Worthy 1997; NMNZ S.23396, S.38935). A bone found on Enderby Island, Auckland Islands / Maukahuka may have been from a vagrant individual (Dawson 2020).

†*Corvus moriorum moriorum* Forbes

Chatham Island Raven

Corvus moriorum Forbes, 1892: *Nature 46*(1185): 252 – Chatham Islands, restricted to main Chatham Island (*vide* Gill 2003, *Journ. Syst. Palaeont. 1*(1): 53).

Palaeocorax moriorum (Forbes); Checklist Committee 1990, *Checklist Birds N.Z.*: 230.

Corvus moriorum moriorum Forbes; Scofield *et al.* 2017, *Mol. Phyl. Evol. 106*: 142.

Known from abundant Holocene remains in sand-dunes on Chatham Island, and a few bones from Pitt Island (Millener 1999; B. Gill 2003). Present in midden deposits on Chatham Island (Checklist Committee 1990).

➤ **Corvus frugilegus* Linnaeus

Rook

Corvus frugilegus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 105 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna 1*: 13).

Corvus frugilegus Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 67.

Northern and central Europe, west and central Asia, east Siberia, and north and central China. Northern populations migratory; winters to North Africa, India, southern China, and Japan. New Zealand: introduced to Auckland, Napier, and Christchurch during the 1870s. After an initial increase, the Auckland population disappeared about 1905. The Hawke’s Bay population prospered; now widely distributed on farmlands of the east coast of the North Island from northern Hawke’s Bay to southern Wairarapa (Coleman 1971; Bull & Porter 1975). Smaller isolated colonies, many ephemeral, and stragglers, have been recorded at widely scattered localities throughout the North and South Islands, and one bird from Chatham Island (Heather & Robertson 1996; C. Robertson *et al.* 2007). The population peaked in 1978 (c. 30,000 birds), but has since been reduced by frequent poisoning and shooting by local authorities.

“PASSERIDA”: Eurasian and New World Songbirds

Petroica is regarded as a passeridan genus rather than a corvidan one, for the reasons discussed by Christidis & Boles (2008). Niethammer (1971) attempted to assign subspecific attributions to all the populations of European songbirds established in New Zealand. However, in some cases this is problematical for a list of reasons discussed by Checklist Committee (1990: xii), and until more work is done on these taxa some are best named at just the binomial level.

Family PETROICIDAE Mathews: Australasian Robins

Petroicinae Mathews, 1920: *Birds Australia*. 8: 80 – Type genus *Petroica* Swainson, 1830.

Genus *Petroica* Swainson

Petroica Swainson, 1830: *Zool. Illustr.* (series 2) 80: pl. 36 & text – Type species (by monotypy) *Muscicapa multicolor* Gmelin = *Petroica multicolor* (Gmelin).

Miro Lesson, 1831: *Traité d’Ornith.* 5(1): 389 – Type species (by monotypy) *Muscicapa longipes* Garnot = *Petroica longipes* (Garnot).

Myiomoira Reichenbach, 1850: *Avium Syst. Nat.*: pl. 67 – Type species (by monotypy) *Muscicapa toitoi* Lesson = *Petroica macrocephala toitoi* (Lesson).

Myioscopus Reichenbach, 1850: *Avium Syst. Nat.*: pl. 67 – Type species (by monotypy) *Muscicapa longipes* Garnot = *Petroica longipes* (Garnot).

Nesomiro Mathews & Iredale, 1913: *Ibis* 1 (10th series): 440 – Type species (by original designation) *Miro traversi* Buller = *Petroica traversi* (Buller).

Several studies using both nuclear and mitochondrial DNA revealed New Zealand robins (which were formerly placed in the subgenus *Miro*) to be embedded with the Australo-Pacific genus *Petroica* (H. Miller & Lambert 2006; Kearns, Joseph *et al.* 2019; Kearns, Malloy *et al.* 2019). These same studies also showed black robin (which was formerly included in subgenus *Miro*) to be more closely related to tomtits than it is to North Island and South Island robins. We therefore no longer recognise subgenera within the genus *Petroica*.

Kearns, Malloy *et al.* (2019) showed that all New Zealand taxa were in a monophyletic clade that is basal to the Australo-Pacific radiation, and that these lineages have been separated for *c.* 7 million years. *Miro* is available as a genus name for all New Zealand taxa (i.e. both robins and tomtits). We have chosen to leave all species in *Petroica* pending further analyses.

Based on an analysis of mtDNA sequences, H. Miller & Lambert (2006) supported the separation of North and South Island robins at the specific level. The North Island robin is considerably smaller than its South Island congener, with marked plumage differences, as detailed in the major study by Fleming (1950a,b). However, the Stewart Island / Rakiura population is poorly distinguished, both genetically (H. Miller & Lambert 2006) and morphologically, and is retained here as a subspecies of the South Island robin. H. Miller & Lambert (2006) recommended retaining the tomtit populations as subspecies; the greatest genetic distinction, in the sequences they studied, was for the Chatham Island tomtit rather than the melanistic Snares Island tomtit. Given this, we have retained the status quo (Checklist Committee 1990, 2010) with the tomtit taxa kept as subspecies. Fleming’s hypothesis (1950a,b) that the black robin is an insular derivative of the mainland robins, was not supported by H. Miller & Lambert (2006), Kearns, Joseph *et al.* (2019), or Kearns, Malloy *et al.* (2019), who found that it grouped strongly with the tomtit instead. We therefore place black robin after tomtit in the species sequence, rather than after North and South Island robins.

A. Hamilton (1909: 15) listed “*Petroeca vittata*, Quoy et Gaim. (Dusky Robin.)”, as a species present in New Zealand. That species, currently known as *Melanodryas (Amaurodryas) vittata* (Quoy & Gaimard, 1830), is endemic to Tasmania (Green 1989) and has not been recorded in New Zealand. Hamilton’s “*Petroeca vittata*” is almost certainly a misidentification.

► *Petroica macrocephala* (Gmelin)

Tomtit

New Zealand. North, South, Stewart / Rakiura, Chatham, Snares / Tini Heke, and Auckland / Maukahuka Islands. Still widely established in remaining native forests and scrublands, and has entered many exotic forests, but is not a permanent inhabitant of gardens and settled areas.

Petroica macrocephala toitoi (Lesson)

North Island Tomtit | Miromiro*

Muscicapa toitoi Lesson, 1828: *Manuel d’Ornith.* 1: 188 – Bay of Islands, Northland.

Miro toitoi (Lesson); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 191.

Petroica toitoi (Lesson); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’*, *Birds* 1(3): 6.

Muscicapa albopectus Ellman, 1861: *Zoologist* 19: 7465 – New Zealand.

Myiomoira toitoi (Garnot) [sic]; Buller 1896, *Trans. Proc. N.Z. Inst.* 28: 337.

Petroeca [sic] *toitoi* (Garnot) [sic]; Buller 1906, *Suppl. Birds N.Z.* 2: 114.

Myiomoira toitoi (Lesson); Mathews & Iredale 1913, *Ibis* 1 (10th series): 436.

Petroica macrocephala toitoi (Lesson); C.A. Fleming 1950, *Trans. Roy. Soc. N.Z.* 78(1): 33.

Petroica (Petroica) macrocephala toitoi (Lesson); Checklist Committee 1990, *Checklist Birds N.Z.*: 209.

Petroica toitoi (Lesson); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 137, 180.

North Island: widespread in forested areas of Northland, Coromandel, central areas from Taranaki to East Cape, and the south; also on larger offshore islands including Hen and Chickens, Hauturu / Little Barrier, Great Barrier / Aotea, and Kapiti Islands. Holocene remains in several cave sites (Checklist Committee 1990).

*Also used for *P. m. chathamensis* and *P. m. dannefaerdi*

***Petroica macrocephala macrocephala* (Gmelin)**

South Island Tomtit | Ngrungiruru

Parus macrocephalus Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 1013. Based on the “Great-headed Titmouse” of Latham 1783, *Gen. Synop. Birds* 2: 557 – Queen Charlotte Sound, Marlborough.

Pachycephalus ? australis Stephens, 1826: in G. Shaw, *General Zool.* 13(2): 267 – New Zealand. Unnecessary *nomen novum* for *Parus macrocephalus* Gmelin, 1789.

Rhipidura macrocephala (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 190.

Miro Forsterorum G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 191 – Queen Charlotte Sound, Marlborough.

Miro dieffenbachii G.R. Gray, 1843: in E. Dieffenbach, *Travels in N.Z.* 2: 191 – “Chatham Islands”, probably error for South Island (fide C.A. Fleming 1950, *Trans. Roy. Soc. N.Z.* 78(1): 29).

Turdus minutus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 83 – Queen Charlotte Sound, Marlborough.

Petroica macrocephala (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(3): 6.

Petroica dieffenbachii (G.R. Gray); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(3): 6, pl. 6, fig. 1.

Miro macrocephala (Gmelin); Bonaparte 1850, *Consp. Gen. Avium* 1: 299.

Muscicapa macrocephala (Gmelin); Ellman 1861, *Zoologist* 19: 7465.

Muscicapa minutus (J.R. Forster); Ellman 1861, *Zoologist* 19: 7465.

Myiomoira dieffenbachii (G.R. Gray); G.R. Gray 1869, *Hand-list Birds* 1: 229.

Petroica Dieffenbachii G.R. Gray [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.

Petroica dieffenbachii (G.R. Gray); Hutton 1871, *Cat. Birds N.Z.*: 12. In part.

Myiomoira macrocephala (Gmelin); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 126.

Petroeca [sic] *macrocephala* (Gmelin); Buller 1906, *Suppl. Birds N.Z.* 2: 114.

Myiomoira macrocephala macrocephala (Gmelin); Mathews & Iredale 1913, *Ibis* 1 (10th series): 436.

Myiomoira macrocephala dieffenbachii (G.R. Gray); Mathews & Iredale 1913, *Ibis* 1 (10th series): 436.

Petroica macrocephala macrocephala (Gmelin); C.A. Fleming 1950, *Trans. Roy. Soc. N.Z.* 78(1): 28.

Petroica (Petroica) macrocephala macrocephala (Gmelin); Checklist Committee 1990, *Checklist Birds N.Z.*: 209.

South Island and outliers, Stewart Island / Rakiura and outliers, Solander Island (Hautere). Widespread in most areas excepting Central Otago, the Canterbury Plains, and parts of Marlborough (C. Robertson *et al.* 2007). Holocene bone remains rare except in laughing owl food deposits (Checklist Committee 1990).

***Petroica macrocephala chathamensis* C.A. Fleming**

Chatham Island Tomtit | Miromiro*

Petroica macrocephala chathamensis C.A. Fleming, 1950: *Trans. Roy. Soc. N.Z.* 78(1): 36 – Rangatira [= South-East] Island, Chatham Islands.

Petroica (Petroica) macrocephala chathamensis C.A. Fleming; Checklist Committee 1990, *Checklist Birds N.Z.*: 209.

Chatham Islands. Extinct since *c.* 1975 on Chatham Island; well established in residual forest and scrub on Pitt, Mangere, and Rangatira Islands (Aikman & Miskelly 2004). Recorded in Holocene deposits (Millener 1999).

*Also used for *P. m. toitoi* and *P. m. dannefaerdi*.

***Petroica macrocephala dannefaerdi* (Rothschild)**

Snares Island Tomtit | Miromiro*

Myiomoira traversi; Finsch 1888, *Ibis* 6 (5th series): 308. Not *Miro traversi* Buller, 1872.

Miro dannefaerdi Rothschild, 1894: *Novit. Zool.* 1: 688 – Snares Islands.

Miro dannefordi Rothschild; Buller 1906, *Suppl. Birds N.Z.* 2: 125. Unjustified emendation.

Nesomiro traversi dannefaerdi (Rothschild); Mathews & Iredale 1913, *Ibis* 1 (10th series): 440.

Petroica macrocephala dannefaerdi (Rothschild); Checklist Committee 1953, *Checklist N.Z. Birds*: 61.

Petroica dannefaerdi (Rothschild); Oliver 1955, *New Zealand Birds*, 2nd edition: 484.

Petroica (Petroica) macrocephala dannefaerdi (Rothschild); Checklist Committee 1990, *Checklist Birds N.Z.*: 210.

Snares Islands / Tini Heke, inhabiting mainly the *Olearia* scrub that covers much of the two main islands, but also in tussock areas (Miskelly *et al.* 2001a).

*Also used for *P. m. toitoi* and *P. m. chathamensis*

***Petroica macrocephala marrineri* (Mathews & Iredale)**

Auckland Island Tomtit

Petroica dieffenbachii (G.R. Gray); Hutton 1871, *Cat. Birds N.Z.*: 12. In part.

Myiomoira macrocephala marrineri Mathews & Iredale, 1913: *Ibis* 1 (10th series): 436 – Auckland Islands.

Petroica macrocephala marrineri (Mathews & Iredale); Oliver 1930, *New Zealand Birds*, 1st edition: 459.

Myiomoira macrocephala enderbyi Mathews, 1930: *Bull. Brit. Ornith. Club* 51: 21 – Enderby Island, Auckland Islands.

Petroica (Petroica) macrocephala marrineri (Mathews & Iredale); Checklist Committee 1990, *Checklist Birds N.Z.*: 210.

Petroica marrineri (Mathews & Iredale); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 137, 174.

Auckland Islands / Maukahuka: forest and scrub on Auckland, Adams, Ocean, Enderby, and Ewing Islands. Became locally extinct on Rose Island following the eradication of rabbits in 1993 (Miskelly, Elliott *et al.* 2020).

► ***Petroica traversi* (Buller)**

Black Robin | Karure

Miro traversi Buller, 1872 (Jun.): *History of the Birds of N.Z.*, 1st edition (part 2): 123 – Chatham Islands.

Petroica traversi Hutton, 1872 (Jul.): *Ibis* 2 (3rd series): 245 – “Mangare”, Chatham Islands. Junior secondary homonym of *Miro traversi* Buller, 1872.

Petroica traversii Hutton; Travers & Travers 1873, *Trans. Proc. N.Z. Inst.* 5: 216. Unjustified emendation.

Myiomoira Traversii (Hutton); Finsch 1874, *Journ. für Ornith.* 22: 189. Unjustified emendation.

Myiomoira traversi (Buller); Finsch 1888, *Ibis* 6 (5th series): 308. In part.

Nesomiro traversi traversi (Buller); Mathews & Iredale 1913, *Ibis* 1 (10th series): 440.

Petroica (Miro) traversi (Buller); Checklist Committee 1953, *Checklist N.Z. Birds*: 61.

Chatham Islands. Presumed to have occurred on all the larger islands; by 1937 restricted to Little Mangere Island (Fleming 1939b). When the Wildlife Service management programme began in 1976, the total remaining population on Little Mangere Island (five males, two females) was transferred to Mangere Island. Now established and breeding on Mangere and Rangatira Islands. Recorded in Holocene deposits on Chatham and Mangere Islands (Tennyson & Millener 1994; Millener 1999).

► ***Petroica longipes* (Garnot)**

North Island Robin | Toutouwai*

Muscicapa longipes Garnot, 1827: in L.I. Duperrey, *Voy. Coquille, Zool. Atlas* 1(3): pl. 19, fig. 1 – Bay of Islands, Northland.

Myiothera novae-zelandiae Lesson, 1828: *Manuel d’Ornith.* 1: 248. Unnecessary *nomen novum* for *Muscicapa longipes* Garnot, 1827.

Miro longipes (Garnot); Lesson 1831, *Traité d’Ornith.* 5(1): 389.

Petroica australis; G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(3): 7. Not *Turdus australis* Sparrman, 1788.

Petroica longipes (Garnot); G.R. Gray 1862, *Ibis* 4: 223.

Myioscopus longipes (Lesson) [sic]; Finsch 1872, *Journ. für Ornith.* 20: 112.

Miro australis; Buller 1906, *Suppl. Birds N.Z.* 2: 122. Not *Turdus australis* Sparrman, 1788.

Miro australis longipes (Garnot); Mathews & Iredale 1913, *Ibis* 1 (10th series): 439.

Petroica (Miro) australis longipes (Lesson, 1828) [sic]; Checklist Committee 1953, *Checklist N.Z. Birds*: 61.

Petroica longipes (Garnot); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 138, 180.

North Island: widespread in native and older exotic forests of the central North Island; Hauturu / Little Barrier and Kapiti Islands. Translocated or re-introduced to numerous islands and mainland sites, with varying success (Parlato & Armstrong 2012; Miskelly & Powlesland 2013). Found in Holocene deposits and middens at many localities, including areas well outside the present range (and, in the Far North, outside the historical range) (Checklist Committee 1990).

*Also used for *P. australis rakiura*

► ***Petroica australis* (Sparrman)**

South Island Robin | Kakarui

South Island and many inshore islands; Stewart Island / Rakiura and its outliers.

***Petroica australis australis* (Sparrman)**

South Island Robin | Kakarui

Turdus australis Sparrman, 1788: *Mus. Carlsonianum* 3: no LXIX, pl. 69 – Dusky Sound, Fiordland.

Turdus albifrons Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 882. Based on the “White-fronted Thrush” of Latham 1783, *Gen. Synop. Birds* 2(1): 71 – Dusky Sound, Fiordland.

Miro albifrons (Gmelin); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 190.

Aplonis australis (Sparrman); G.R. Gray 1843, in E. Dieffenbach, *Travels in N.Z.* 2: 192.

Petroica albifrons (Gmelin); G.R. Gray 1845, in Richardson & J.E. Gray (Eds), *Zool. Voy. ‘Erebus’ & ‘Terror’, Birds* 1(3): 7, pl. 6, fig. 2.

Turdus ochrotarsus J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 82 – Dusky Sound, Fiordland.

Muscicapa saxicolina Bonaparte, 1851: *Consp. Gen. Avium* 1: 300 – New Zealand.

Muscicapa albifrons (Gmelin); Ellman 1861, *Zoologist* 19: 7465.

Myioscopus albifrons (Gmelin); Finsch 1872, *Journ. für Ornith.* 20: 112.

Miro ochrotarsus (J.R. Forster); Buller 1896, *Trans. Proc. N.Z. Inst.* 28: 337.

Miro albifrons (Gmelin); Buller 1906, *Suppl. Birds N.Z.* 2: 120.

Miro bulleri Sharpe, 1906: in Buller, *Suppl. Birds N.Z.* 2: 123 – Karamea Saddle, north West Coast.

Miro australis bulleri Buller [sic]; Mathews & Iredale 1913, *Ibis* 1 (10th series): 439.

Miro australis australis (Sparrman); Mathews & Iredale 1913, *Ibis* 1 (10th series): 439.

Miro australis (Sparrman); Oliver 1930, *New Zealand Birds*, 1st edition: 466.

Petroica (Miro) australis australis (Sparrman); Checklist Committee 1990, *Checklist Birds N.Z.*: 210.

Petroica australis (Sparrman); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 138, 180.

South Island: native and older exotic forests especially in the northern third of the island and the south-west (Fiordland); otherwise of restricted and local distribution. Present on numerous islands in Marlborough Sounds and Fiordland, including sites colonised through natural dispersal after translocation to nearby islands (Miskelly & Powlesland 2013; Miskelly, Tennyson, Edmonds *et al.* 2017; Miskelly, Bishop *et al.* 2018; Miskelly, Greene *et al.* 2021). Widely distributed Holocene and midden records, several outside the present range (Checklist Committee 1990).

Petroica australis rakiura C.A. Fleming

Stewart Island Robin | Toutouwai*

Petroica (Miro) australis rakiura C.A. Fleming, 1950: *Trans. Roy. Soc. N.Z.* 78(1): 141 – Jacques Lees [= Jacky Lee] Island, off east coast of Stewart Island.

Miro australis rakiura (C.A. Fleming); Oliver 1955, *New Zealand Birds*, 2nd edition: 489.

Stewart Island / Rakiura and outliers.

*Also used for *P. longipes*.

Family *ALAUDIDAE Vigors: Larks

Alaudina Vigors, 1825: *Zoological Journ.* 2(7): 398 – Type genus *Alauda* Linnaeus, 1758.

Genus **Alauda* Linnaeus

Alauda Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 165 – Type species (by subsequent designation) *Alauda arvensis* Linnaeus.

At various times, all forms of *Alauda* have been united as one species, or separated into two or more species.

► ****Alauda arvensis* Linnaeus**

Eurasian Skylark | Kairaka

Alauda arvensis Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 165 – Europe, restricted to Uppsala, Sweden (*vide* Meinertzhagen 1951, *Fauna Svecica*: 128).

Alauda arvensis Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 59.

Alauda arvensis arvensis Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 64.

Alauda arvensis scotica Tschusi, 1903; Niethammer 1971, *Journ. für Ornith.* 112(2): 205.

North Palaearctic from Europe to north Japan; migrating south to winter at lower latitudes. New Zealand: introduced on several occasions during the 1860s and 1870s (Thomson 1922). Now common from North Cape (Otou) to Stewart Island / Rakiura in open farmland, sand-dunes, tussock grasslands, and subalpine herb fields to an altitude of 1,900 m a.s.l. (breeding to at least 1,700 m a.s.l.; Child 1975b). Absent from dense forest and thick scrub; evidence of a recent reduction on the South Island West Coast (C. Robertson *et al.* 2007). Breeds also at Chatham Islands, and stragglers have reached the Kermadec, Snares / Tini Heke, Antipodes, Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku (Kinsky 1969; Miskelly *et al.* 2001a; Tennyson *et al.* 2002; Veitch *et al.* 2004; Miskelly, Elliott *et al.* 2020). Assigned to nominate subspecies in Checklist Committee (1970), but to *A. a. scotica* by Niethammer (1971); subspecies in New Zealand therefore uncertain, but probably nominate (see discussion in Schodde & Mason 1999).

Family ACROCEPHALIDAE Salvin: Reed-warblers

Acrocephalinae Salvin, 1882: *Cat. Coll. Birds H.E. Strickland*: 49 – Type genus *Acrocephalus* Naumann & Naumann, 1811.

We follow Christidis & Boles (2008) in recognising Acrocephalidae (cf. Sylviidae) for the genus *Acrocephalus*.

Genus *Acrocephalus* Naumann & Naumann

Acrocephalus Naumann & Naumann, 1811: *Naturgesch. Land-Wasser-Vögel Nördl. Deutsch.*: 199 – Type species (by subsequent designation) *Turdus arundinaceus* Linnaeus = *Acrocephalus arundinaceus* (Linnaeus).

► ***Acrocephalus australis* (Gould)**

Australian Reed-warbler

Calamoherpe australis Gould, 1838: in J. Lewin, *Nat. Hist. Birds New South Wales*: index to synonyms to pl. 18 – Parramatta, New South Wales, Australia.

Acrocephalus australis (Gould); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 698.

Acrocephalus australis; Scofield 2005, *Southern Bird* 23: 8.

Australia. Widespread in western and eastern regions, including Tasmania; non-breeding migrant to northern Australia. Two subspecies (Schodde & Mason 1999). One New Zealand record: St Anne's Lagoon, Cheviot, Nov. 2004 (Scofield 2005a; subspecies not known).

Family LOCUSTELLIDAE Bonaparte: Grassbirds

Locustelleae Bonaparte, 1854: *Ann. Sci. Nat., Zool. Paris, 4th series 1*: 118 – Type genus *Locustella* Kaup, 1829.

Megaluridae Blyth, 1875: *Journ. Asiatic Soc. Bengal (new series)* 43(2) (extra number): 117 – Type genus *Megalurus* Horsfield, 1821.

We follow Bock (1994), Alström *et al.* (2011), and Dickinson & Christidis (2014) in giving Locustellidae Bonaparte, 1854 priority over Megaluridae Blyth, 1875.

Genus **Poodytes** Cabanis

Poodytes Cabanis, 1850–1851: *Mus. Heineanum* 1: 42 – Type species (by original monotypy) *Sphaenoaecus gramineus* Gould = *Poodytes gramineus* (Gould).

Bowdleria Rothschild, 1896: *Novit. Zool.* 3: 539 – Type species (by subsequent designation) *Synallaxis punctata* Quoy & Gaimard = *Poodytes punctatus* (Quoy & Gaimard).

Eremiornis North, 1900: *Vict. Nat.* 17: 79 – Type species (by original monotypy) *Eremiornis carteri* North = *Poodytes carteri* (North).

We follow Dickinson & Christidis (2014) and Alström *et al.* (2018) in synonymising *Bowdleria* and *Eremiornis* with *Poodytes*. The Chatham Islands species is very distinctive morphologically. The status (species versus subspecies) of the morphologically more homogeneous allopatric mainland populations is problematic. Holdaway *et al.* (2001) and del Hoyo & Collar (2016) considered the Snares Islands / Tini Heke population (*P. p. caudata*) to be a full species, and Holdaway *et al.* (2001) suggested that the Codfish Island (Whenua Hou) population (*B. p. wilsoni*) might be likewise. They are all retained as one species here pending further genetic and morphological comparisons. Cabanis (1850–51) did not provide an etymology for *Poodytes*, but it is likely based on Greek ‘po’ = grass, and ‘dyt’ = a burrower or diver.

► **Poodytes punctatus** (Quoy & Gaimard)

Fernbird | Mātātā

New Zealand. Originally widespread in swamp, fernland, and low scrub on North Island, South Island, Stewart Island, and a few offshore islands; less abundant now. Five subspecies recognised.

Poodytes punctatus vealeae (Kemp)

North Island Fernbird | Koroātito

Bowdleria punctata vealeae Kemp, 1912: *Austral Avian Rec.* 1: 124 – Umawera, Hokianga, Northland.

Megalurus punctatus vealeae (Kemp); Dickinson 2003, *Complete Checklist Birds World*: 577.

Poodytes punctatus vealeae (Kemp); Dickinson & Christidis 2014, *Complete Checklist Birds World* 2: 468.

Now of limited range, restricted to particular areas of residual swampland and scrubland and, in some localities, scrub adjacent to shorelines. Still fairly plentiful in north and central North Island, but rare in the south and east (C. Robertson *et al.* 2007). Present on Great Barrier Island / Aotea; translocated to Tiritiri Matangi Island (2001) and Mana Island (2019). Formerly present on Manawatāwhi / Great Island in the Manawatāwhi / Three Kings Islands, and the Aldermen Islands (Turbott & Buddle 1948; Miskelly 2013). Holocene and midden records from widely distributed sites (Checklist Committee 1990).

Poodytes punctatus punctatus (Quoy & Gaimard)

South Island Fernbird | Mātātā

Synallaxis punctata Quoy & Gaimard, 1830: in Dumont d’Urville, *Voyage Astrolabe Zool.* 1: 225 – Tasman Bay.

Sphenoaecus punctatus (Quoy & Gaimard); G.R. Gray 1862, *Ibis* 4: 220.

Sphenoaecus fulvus G.R. Gray, 1862: *Ibis* 4: 221 – “New Zealand”, restricted to Tasman Bay.

Megalurus fulvus (G.R. Gray); G.R. Gray 1869, *Hand-list Birds* 1: 206.

Bowdleria punctata (Quoy & Gaimard); Buller 1906, *Suppl. Birds N.Z.* 2: 131.

Bowdleria fulva (G.R. Gray); Buller 1906, *Suppl. Birds N.Z.* 2: 131.

Bowdleria punctata punctata (Quoy & Gaimard); Checklist Committee 1953, *Checklist N.Z. Birds*: 62.

Megalurus punctatus (Quoy & Gaimard); Sibley & Monroe 1990, *Distr. and Taxon. Birds of the World*: 625.

Poodytes punctatus punctatus (Quoy & Gaimard); Dickinson & Christidis 2014, *Complete Checklist Birds World* 2: 468.

Now restricted, as in North Island, to residual areas of suitable habitat, especially in Nelson, Westland, Otago, and Southland; rare in the east north of Dunedin (C. Robertson *et al.* 2007). Holocene and midden records from a few sites (Checklist Committee 1990).

Poodytes punctatus stewartianus (Oliver)

Stewart Island Fernbird | Mātā*

Bowdleria punctata stewartiana Oliver, 1930: *New Zealand Birds*, 1st edition: 451 – Stewart Island, restricted to Kundy Island (*vide* Miskelly 2012, *Notornis* 59: 10).

Bowdleria punctata stewartiae Oliver; Stead 1936, *Trans. Proc. Roy. Soc. N.Z.* 66: 312. Unjustified emendation.

Bowdleria punctata insularis Stead, 1936: *Trans. Proc. Roy. Soc. N.Z.* 66: 312 – Stewart Island, restricted to Kundy Island (*vide* Miskelly 2012, *Notornis* 59: 10).

Megalurus punctatus stewartianus (Oliver); Dickinson 2003, *Complete Checklist Birds World*: 577.

Poodytes punctatus stewartianus (Oliver); Dickinson & Christidis 2014, *Complete Checklist Birds World* 2: 468.

Stewart Island / Rakiura, and outliers except Codfish Island / Whenua Hou. The type population died out after 1956, following the introduction of weka *Gallirallus australis* to Kundy Island; the fernbirds now on Kundy Island were reintroduced from nearby Big Island in 1995 (Miskelly 2012a).

*Used for several subspecies of fernbird

Poodytes punctatus wilsoni (Stead)

Codfish Island Fernbird | Mātā*

Bowdleria punctata wilsoni Stead, 1936: *Trans. Proc. Roy. Soc. N.Z.* 66: 312 – Codfish Island.*Megalurus punctatus wilsoni* (Stead); Dickinson 2003, *Complete Checklist Birds World*: 577.*Poodytes punctatus wilsoni* (Stead); Dickinson & Christidis 2014, *Complete Checklist Birds World 2*: 468.

Codfish Island / Whenua Hou, west of Stewart Island / Rakiura. Introduced to Putauhinu Island in 1997–98 (McClelland 2002b).

*Used for several subspecies of fernbird

Poodytes punctatus caudatus (Buller)

Snares Island Fernbird | Mātā*

Sphenoeacus fulvus; Finsch 1888, *Ibis* 6 (5th series): 308. Not *Sphenoeacus fulvus* G.R. Gray, 1862.*Sphenoeacus caudatus* Buller, 1894: *Ibis* 6 (6th series): 523 – Snares Islands.*Bowdleria caudata* (Buller); Buller 1906, *Suppl. Birds N.Z.* 2: 132.*Bowdleria punctata caudata* (Buller); Checklist Committee 1953, *Checklist N.Z. Birds*: 62.*Megalurus punctatus caudatus* (Buller); Dickinson 2003, *Complete Checklist Birds World*: 577.*Poodytes punctatus caudatus* (Buller); Dickinson & Christidis 2014, *Complete Checklist Birds World 2*: 468.*Poodytes caudatus* (Buller); del Hoyo & Collar 2016, *Illustrated Checklist Birds World 2*: 444.

The most abundant land-bird on the Snares Islands / Tini Heke, occupying all vegetated habitats on North East Island, Broughton Island and Alert Stack (Miskelly *et al.* 2001a). Retained here as a subspecies, but large size and more uniform brown coloration may justify recognition as a species (Holdaway *et al.* 2001; del Hoyo & Collar 2016).

*Used for several subspecies of fernbird

➤ †**Poodytes rufescens** (Buller)

Chatham Island Fernbird

Sphenoeacus rufescens Buller, 1869: *Ibis* 5 (new series): 38 – Chatham Islands.*Megalurus rufescens* (Buller); G.R. Gray 1869, *Hand-list Birds 1*: 206.*Bowdleria rufescens* (Buller); Mathews & Iredale 1913, *Ibis* 1 (10th series): 445.*Bowdleria punctata rufescens* (Buller); Checklist Committee 1953, *Checklist N.Z. Birds*: 62.*Megalurus punctatus rufescens* (Buller); Dickinson 2003, *Complete Checklist Birds World*: 577.*Poodytes punctatus rufescens* (Buller); Dickinson & Christidis 2014, *Complete Checklist Birds World 2*: 468.*Poodytes rufescens* (Buller); del Hoyo & Collar 2016, *Illustrated Checklist Birds World 2*: 444.

The osteology of *P. rufescens* (see Olson 1990), together with evidence from plumage characteristics, indicate that it is specifically distinct from *P. punctatus*. Estimated to have split from *P. punctatus* c. 2.6 million years ago (Alström *et al.* 2018). Extinct since about 1892 (Tennyson & Millener 1994). Formerly on Chatham, Pitt, and Mangere Islands. Recorded in Holocene deposits and in midden sites (Checklist Committee 1990; Tennyson & Millener 1994; Millener 1999).

Family **HIRUNDINIDAE** Rafinesque: Swallows and Martins

Hirundia Rafinesque, 1815: *Analyse de la Nature*: 68 – Type genus *Hirundo* Linnaeus, 1758.

Taxonomy and order of species follows Schodde & Mason (1999).

Genus **Hirundo** Linnaeus

Hirundo Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 191 – Type species (by subsequent designation) *Hirundo rustica* Linnaeus.

➤ **Hirundo neoxena** Gould

Welcome Swallow

Australia including Tasmania; breeding in the south and extending north and inland during the winter. Also Norfolk and Lord Howe Islands. Self-introduced to New Zealand. Two subspecies (eastern and western) recognised in Australia. See Schodde & Mason (1999) for separation of this species from *H. tahitica* (south-east Asia, New Guinea, Melanesia, Polynesia except New Zealand).

Hirundo neoxena neoxena Gould

Welcome Swallow | Warou

Hirundo neoxena Gould, 1842: *Birds of Australia* 9: pl. 13 – “the whole southern portions of Australia”.*Hirundo neoxena* Gould; Checklist Committee 1953, *Checklist N.Z. Birds*: 59.*Hirundo tahitica neoxena* Gould; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 64.*Hirundo neoxena neoxena* Gould; Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 669.

South-east Australia including Tasmania; a partial migrant within Australia, many staying in winter in the south while others move north. Recent colonist in New Zealand; at first recorded only as a rare straggler (Northland, 1920; Auckland Islands / Maukahuka, 1943; Awhitu peninsula, 1944; Stewart Island / Rakiura, 1953; Farewell Spit, 1955). First recorded breeding near Awanui, Northland, in 1958 (Michie 1959). By 1965, common throughout Northland, spreading elsewhere in the North Island and breeding in the South Island (Turbott 1965; Edgar 1966). Now common throughout the North Island and most of the South Island except the south-west (C. Robertson *et al.* 2007). Common on Chatham Islands having bred there since c. 1976 (Aikman & Miskelly 2004). Straggler to Snares Islands / Tini Heke; first recorded 1981

(Miskelly *et al.* 2001a); Auckland Islands / Maukahuka (Miskelly, Elliott *et al.* 2020); and Campbell Island; first recorded 1946 (Bailey & Sorensen 1962). Recorded since 1958 from Kermadec Islands / Rangitāhua. First recorded at Norfolk Island in 1969 (Schodde *et al.* 1983).

Genus **Petrochelidon** Cabanis

Petrochelidon Cabanis, 1850: *Mus. Heineanum* 1: 47 – Type species (by subsequent designation) *Hirundo melanogaster* Swainson = *Petrochelidon pyrrhonota* (Vieillot).

Hylochelidon Gould, 1865: *Handb. Birds Australia* 1: 111 – Type species (by original designation) *Hirundo nigricans* Vieillot = *Petrochelidon nigricans* (Vieillot).

► **Petrochelidon ariel** (Gould)

Fairy Martin

Collocalia Ariel Gould, 1842: *Birds of Australia* 9: pl. 15 – New South Wales, Australia.

Hirundo ariel (Gould); Checklist Committee 1990, *Checklist Birds N.Z.*: 197.

Petrochelidon ariel (Gould); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 673.

Throughout mainland Australia; migratory in the south. Straggler to Tasmania and New Guinea. First recorded in New Zealand when nests believed to be of this species were found at Te Hopai, southern Wairarapa, in 1978 (B. Bell 1984). Subsequent sight records: near base of Farewell Spit, Nov. 1982; Totaranui, Nelson, Feb. 1983 (B. Bell 1984); Lake Holm Farm, Taieri Plain, 1981–84 (Nevill 1984); Cape Reinga, Nov. 1983 (Riddell & Taylor 1984); Leigh, Nov. 1984; Papakura, Jan. 1985 (Fennell 1985); between Te Paki and Cape Reinga (Te Rerengawairua), Aug. 2001 (Medway 2002d); Rahotu, Cape Egmont, Sep. 2001 (Medway 2001d); Tabora, Kaipara Harbour, Jul. 2004 (Scofield 2005a); Snares Islands / Tini Heke, Nov. 2004 (Scofield 2005a, 2006); and Tawharanui, Mar. 2008 (Miskelly *et al.* 2011).

► **Petrochelidon nigricans** (Vieillot)

Tree Martin

Hirundo nigricans Vieillot, 1817: *Nouv. Dict. Hist. Nat., nouv. éd.* 14: 523 – “New Holland”, error for Hobart, Tasmania (*vide* Mathews 1913, *Austral Avian Rec.* 2: 65).

Hylochelidon nigricans; Anon. 1870, *Cat. Colonial Mus.*: 73.

Hylochelidon nigricans (Vieillot); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 141.

Petrochelida [sic] *nigricans* (Vieillot); Hutton 1904, *Index Faunae N.Z.*: 37.

Petrochelidon nigricans (Vieillot); Buller 1906, *Suppl. Birds N.Z.* 2: 113.

Hylochelidon nigricans nigricans (Vieillot); Checklist Committee 1953, *Checklist N.Z. Birds*: 59.

Hirundo nigricans nigricans (Vieillot); Checklist Committee 1990, *Checklist Birds N.Z.*: 197.

The population breeding in Tasmania (*P. n. nigricans*) migrates to the eastern Australian mainland. Another population breeding throughout southern Australia (*P. n. neglecta*) also migrates north. The differentiation is between the mainland and Tasmanian populations rather than eastern and western populations (Schodde & Mason 1999). Also present on Lesser Sunda Islands and Timor (*P. n. timoriensis*). A returning Tasmanian bird overshoot to Macquarie Island (Schodde & Mason 1999). Which subspecies reaches New Zealand needs further investigation. Vagrant to New Zealand, both singly and in small flocks, mainly in autumn (A. Wright 1960; Nevill 1984; Medway 2000a): Hicks Bay; Mahia; Cape Campbell; Collingwood; Wakapuaka; Blenheim; Mokihinui; Christchurch; Oamaru; Featherston (May to Sep. 1946); Farewell Spit, Jan. 1960, Jan. 1988, Dec. 2019; Punakaiki River estuary, Jun. 1977; Miranda, Feb. 1979; Vernon Lagoons, Apr. 1980; Nelson, Nov. 1983; Lake Holm Farm, Taieri Plain, 1981–84; Eglinton Valley, 1983; Pukete, Hamilton, Feb. 1992; Bromley, Christchurch, Feb. 2017; Lake Ellesmere / Te Waihora, Feb. 2020; Wainono Lagoon, South Canterbury, Oct. 2020. May have nested at Oamaru around 1893 (Buller 1895; Oliver 1955). Recorded on Snares Islands / Tini Heke 1969, 1982, and 1984 (Warham & Keeley 1969; Miskelly *et al.* 2001a; Miskelly, Crossland *et al.* 2017). One record from Chatham Islands (Miskelly *et al.* 2006).

Family **ZOSTEROPIDAE** Bonaparte: White-eyes

Zosteropinae Bonaparte, 1853: *Compt. Rend. Séa. Acad. Sci., Paris* 37: 644 – Type genus *Zosterops* Vigors & Horsfield, 1827.

Christidis & Boles (2008) moved *Zosterops* to the Timaliidae (true babblers) on the strength of a study by Cibois (2003). However, we follow Dickinson & Christidis (2014), Clements *et al.* (2019), Handbook of the Birds of the World and BirdLife International (2020), and F. Gill *et al.* (2021) in recognising Zosteropidae as a separate family.

Genus **Zosterops** Vigors & Horsfield

Zosterops Vigors & Horsfield, 1827: *Trans. Linn. Soc. London* 15: 234 – Type species (by subsequent designation) *Motacilla maderaspatana* Linnaeus = *Zosterops maderaspatana* (Linnaeus).

Nesozosterops Mathews, 1912: *Novit. Zool.* 18(3): 451 – Type species (by original designation) *Zosterops strenuus* Gould, 1855.

► **Zosterops lateralis** (Latham)

Silvereye

Coastal Australia (from northern Queensland to the western tip of Western Australia), Tasmania, and south-west Pacific islands (New Caledonia, Loyalty Islands, Vanuatu, Banks Islands, Fiji). Recent colonist of Norfolk Island and New Zealand. Schodde & Mason (1999) recognised nine subspecies in Australia with some zones of intergradation between abutting taxa.

Zosterops lateralis lateralis (Latham)

Silvereye | Tauhou

- Sylvia lateralis* Latham, 1801: *Index Ornith. Suppl.*: lv – Tasmania, Australia.
Zosterops dorsalis Vigors & Horsfield, 1827: *Trans. Linn. Soc. London* 15: 235 – New South Wales, Australia.
Zosterops dorsalis Vigors & Horsfield; Hutton 1870, *Ibis* 6 (new series): 398.
Zosterops lateralis Latham [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73.
Zosterops lateralis (Latham); Buller 1872 (Jun.), *History of the Birds of N.Z.*, 1st edition (part 2): 80.
Zosterops caerulescens; Buller 1888 (Jan.), *History of the Birds of N.Z.*, 2nd edition 1 (part 3): 77. Not *Motacilla caerulescens* Latham, 1801 = *Rhipidura albiscapa alisteri* Mathews, 1911.
Zosterops lateralis tasmanica Mathews, 1912: *Novit. Zool.* 18(3): 385 – Tasmania, Australia.
Zosterops lateralis tasmanica Mathews; Mathews & Iredale 1913, *Ibis* 1 (10th series): 449.
Zosterops lateralis investigator Mathews, 1923: *Birds Australia. II*: 153 – northern North Island, New Zealand.
Zosterops halmaturina tasmanica Mathews; Oliver 1930, *New Zealand Birds*, 1st edition: 479.
Zosterops halmaturina Campbell, 1906; Stead 1932, *Life Histories New Zealand Birds*: 139.
Zosterops lateralis (Latham) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 65.
Zosterops lateralis lateralis (Latham); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 69.

Breeds in Tasmania; migrates north to coastal eastern Australia from South Australia to Queensland. New Zealand: apparently colonised permanently by silvereyes of this race in 1856, when large numbers were first recorded (Oliver 1955); before this, noticed by explorers and settlers as early as 1832 (Milford Sound / Piopiotahi) and 1851 (Otago). The bird had not been known to the Māori, and was called tauhou (meaning “stranger”). Now one of New Zealand’s commonest non-introduced passerines, found throughout in orchards, gardens, exotic plantations, and in native forest and scrub. Has reached the Kermadec, Chatham, Snares / Tini Heke, Auckland / Maukahuka, Antipodes, Campbell / Motu Ihupuku, and Macquarie Islands. Colonised Norfolk Island (possibly from New Zealand) in 1904; now abundant and widespread, more so than the two endemic species of *Zosterops* there (Schodde *et al.* 1983; J. Moore 1999).

Family ***STURNIDAE** Rafinesque: Starlings and Mynas

Sturnidia Rafinesque, 1815: *Analyse de la Nature*: 68 – Type genus *Sturnus* Linnaeus, 1758.

Aplonis zelandica (Quoy & Gaimard, 1830) and *A. obscura* (du Bus de Gisignies, 1839) were described in error as originating from New Zealand (G.R. Gray 1862: 227; Buller 1876b). The former is from Vanikoro, Santa Cruz Islands and the latter – a junior synonym of *Aplonis striata* (Gmelin, 1788) (see E. Mayr 1934) – is from New Caledonia (Amadon 1962: 76, 78).

Genus ***Sturnus** Linnaeus

Sturnus Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 167 – Type species (by tautonymy) *Sturnus* = *Sturnus vulgaris* Linnaeus.

► ***Sturnus vulgaris** Linnaeus

Common Starling | Tāringi

Europe and central and south-west Asia; migrates to Spain, North Africa, Iran, and north India.

***Sturnus vulgaris vulgaris** Linnaeus

Common Starling | Tāringi

- Sturnus vulgaris* Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 167 – Sweden.
Sturnus vulgaris vulgaris Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 71.
Sturnus vulgaris Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 222.

Introduced to New Zealand. Now ubiquitous over much of the country, especially in the North Island and eastern South Island; less evident in the western South Island and on Stewart Island / Rakiura (C. Robertson *et al.* 2007). Also recorded from the Kermadec, Chatham, Snares / Tini Heke, Auckland / Maukahuka, Antipodes, Campbell / Motu Ihupuku, Bounty, and Macquarie Islands (Higgins *et al.* 2006). Self-introduced to Norfolk and Lord Howe Islands. Assigned to nominate subspecies by Niethammer (1971), with agreement by Schodde & Mason (1999).

Genus ***Acridotheres** Vieillot

Acridotheres Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 42 – Type species (by subsequent designation) *Paradisea tristis* Linnaeus = *Acridotheres tristis* (Linnaeus).

Christidis & Boles (2008) placed the common myna in *Sturnus* as *S. tristis*. However, we follow Dickinson & Christidis (2014), Clements *et al.* (2019), Chesser *et al.* (2020), Handbook of the Birds of the World and BirdLife International (2020), and F. Gill *et al.* (2021) in retaining the genus *Acridotheres*.

► ***Acridotheres tristis** (Linnaeus)

Common Myna | Maina

Paradisea tristis Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 167 – “Philippines”, probably error for Pondicherry, India (*vide* Stresemann 1952, *Ibis* 94(3): 515).

Acridotheres tristis (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 66.

Afghanistan, Turkistan, India, Andamans, Sri Lanka; as the result of recent extensions of range or introductions has reached much of south-east Asia. Widely introduced and established (tropical islands in all oceans, Australia, New Zealand, South Africa). New Zealand: introduced to both North and South Islands during the 1870s. Persisted in the South Island (Nelson, Christchurch, and Dunedin) only until about 1890 (Thomson 1922). In the North Island they became common in Taranaki, Hawke’s Bay, and southern parts of the Auckland provincial area, and during the late 1940s and early 1950s they spread almost explosively. They remain common in the northern half of the North Island south to Taranaki, Whanganui, and southern Hawke’s Bay (C. Robertson *et al.* 2007). Odd birds appear sporadically further south. Mynas have spread to offshore islands, including Poor Knights Islands. Vagrant on Norfolk Island; recorded once, in Sep. 1971 (J. Moore 1981). The subspecies in New Zealand is not confirmed but is probably the nominate one, as in Australia (Schodde & Mason 1999).

Family ***TURDIDAE** Rafinesque: Thrushes

Turdinia Rafinesque, 1815: *Analyse de la Nature*: 67 – Type genus *Turdus* Linnaeus, 1758.

We follow Christidis & Boles (2008) in the use of Turdidae. Order of species follows Schodde & Mason (1999).

Genus ***Turdus** Linnaeus

Turdus Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 168 – Type species (by subsequent designation) *Turdus viscivorus* Linnaeus.

Merula Leach, 1816: *Syst. Cat. Specimens Mamm. Birds Brit. Museum*: 20 – Type species (by monotypy) *Merula nigra* Leach = *Turdus merula* Linnaeus.

Planesticus Bonaparte, 1854: *Compt. Rend. Séa. Acad. Sci., Paris* 38: 3 – Type species (by subsequent designation) *Turdus lereboulleti* Bonaparte = *Turdus jamaicensis* Gmelin.

► ***Turdus merula** Linnaeus

Eurasian Blackbird | Manu Pango

Europe, North Africa, western and southern Asia, Indian subcontinent (except south-west), Sri Lanka, southern China. Migratory in northern part of its range and in the Far East.

***Turdus merula merula** Linnaeus

Eurasian Blackbird | Manu Pango

Turdus Merula Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 170 – Europe, restricted to Sweden (*vide* Hartert 1910, *Vögel Pal. Fauna* 1: 665).

Merula merula (Linnaeus); A. Hamilton 1909, *Hand-list Birds New Zealand*: 18.

Turdus merula Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 63.

Turdus merula merula Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 69.

New Zealand: introduced to both North and South Islands several times during 1860s and 1870s. Now widespread from Manawatāwhi / Three Kings Islands to Stewart Island / Rakiura. Has successfully colonised the Kermadec, Chatham, Snares / Tini Heke, Auckland / Maukahuka, and Campbell / Motu Ihupuku Islands, and strays have reached Antipodes Island. Common in suburban gardens, hedgerows, orchards, plantations, and scrub, and widespread in native forest, reaching at least 1500 m a.s.l. By far the most widespread species reported during the 1969–79 and 1999–2004 surveys for the New Zealand bird distribution atlases (Bull *et al.* 1985; C. Robertson *et al.* 2007). Introduced to Norfolk Island in the first half of the 20th Century, where now very common and widespread (Schodde *et al.* 1983). Assigned to nominate subspecies by Checklist Committee (1970) and Niethammer (1971), with agreement by Schodde & Mason (1999).

► ***Turdus philomelos** Brehm

Song Thrush | Manu-kai-hua-rakau

Turdus musicus Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 292 – Europe. Suppressed and invalid (*vide* ICZN 1959, Opinion 551. *Opinions & Declarations* 20: 199).

Turdus Ericetorum Turton, 1807: *British Fauna* 1: 35 – Great Britain, restricted to North Kent, England (*vide* Clancey 1943, *Ibis* 85: 90). Suppressed and invalid (*vide* ICZN 1956, Opinion 405. *Opinions & Declarations* 13: 107).

Turdus philomelos Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 382 – central Germany.

Turdus musicus Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 56.

Turdus philomelus Brehm; Oliver 1930, *New Zealand Birds*, 1st edition: 514. Unjustified emendation.

Turdus ericetorum Turton; Checklist Committee 1953, *Checklist N.Z. Birds*: 63.

Turdus philomelos clarkei Hartert, 1909; Niethammer 1971, *Journ. für Ornith.* 112(2): 223.

Turdus philomelos Brehm; Checklist Committee 1990, *Checklist Birds N.Z.*: 202.

Europe, west and central Asia. Migratory in northern part of range; winters to North Africa and south Asia. New Zealand: introduced to both the North and South Islands several times during the 1860s and 1870s. Now widespread from North Cape (Otou) to Stewart Island / Rakiura (C. Robertson *et al.* 2007) and has spread to the Kermadec, Chatham, Snares / Tini Heke, Antipodes, Auckland / Maukahuka, Campbell / Motu Ihupuku, and Macquarie Islands, breeding on all except

Antipodes and Macquarie. Common in gardens, hedgerows, and orchards; especially common along farmland hedgerows, but scarce in native forest. Norfolk Island: introduced or self-introduced (from New Zealand); first noted in 1913 and now moderately common (Schodde *et al.* 1983). New Zealand birds were assigned to subspecies *T. ph. clarkei* Hartert, 1909 by Niethammer (1971) and in the amendments of Checklist Committee (1980), but see Schodde & Mason (1999) for doubts about subspecific status of Australian birds.

Family *PRUNELLIDAE Richmond: Accentors

Prunellidae Richmond, 1909: *Proc. U.S. Nat. Mus.* 35: 585 – Type genus *Prunella* Vieillot, 1816.

Genus **Prunella* Vieillot

Accentor Bechstein, 1802: *Ornith. Taschenb. Deutschland 1*: 191 – *Motacilla alpina* Gmelin = *Prunella collaris* (Scopoli). Junior homonym of *Accentor* Bechstein, 1797.

Prunella Vieillot, 1816: *Analyse Nouv. Ornith. Elem.*: 43 – Type species (by monotypy) “Fauvette de haie” Buffon = *Prunella modularis* (Linnaeus).

► **Prunella modularis* (Linnaeus)

Dunnock

Motacilla modularis Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 184 – Europe, restricted to Sweden (*vide* Hartert 1910, *Vögel Pal. Fauna 1*: 772).

Accentor modularis (Linnaeus); Thomson 1922, *Naturalisation Animals Plants New Zealand*: 148.

Prunella modularis occidentalis (Hartert, 1910); Checklist Committee 1953, *Checklist N.Z. Birds*: 63.

Prunella modularis (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 200.

Europe and western Asia; wintering to Mediterranean and North Africa. New Zealand: introduced to both North and South Islands on several occasions between 1868 and 1882. Now widespread from Manawatāwhi / Three Kings Islands to Stewart Island / Rakiura. Breeding at Chatham Islands, Auckland Islands / Maukahuka, Campbell Island / Motu Ihupuku, and Antipodes Islands; vagrant to Snares Islands / Tini Heke (Miskelly *et al.* 2001a; Checklist Committee 2010; Miskelly, Elliott *et al.* 2020). A common garden bird in Wellington, Christchurch, and Dunedin, but rare in urban Auckland. Assigned to subspecies *P. m. occidentalis* (Hartert, 1910) by Checklist Committee (1970) and Niethammer (1971), but this requires critical evaluation.

Family *PASSERIDAE Rafinesque: Old World Sparrows

Passernia Rafinesque, 1815: *Analyse de la Nature*: 68 – Type genus *Passer* Brisson, 1760.

We follow Schodde & Mason (1999) and Christidis & Boles (2008) in placing *Passer* in a more narrowly defined Passeridae, rather than in the Ploceidae as in Checklist Committee (1990).

Genus **Passer* Brisson

Passer Brisson, 1760: *Ornithologie 1*: 36 – Type species (by subsequent designation) *Fringilla domestica* Linnaeus = *Passer domesticus* (Linnaeus).

► **Passer domesticus* (Linnaeus)

House Sparrow | Tiu

Europe and Asia (except eastern and south-east Asia), Nile Valley, north-west Africa. Essentially sedentary.

**Passer domesticus domesticus* (Linnaeus)

House Sparrow | Tiu

Fringilla domestica Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 183 – Sweden.

Passer domesticus (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 66.

Passer domesticus domesticus (Linnaeus); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 71.

New Zealand: introduced to both North and South Islands on several occasions between 1866 and 1871. Now ubiquitous over much of New Zealand, especially in the North Island and eastern South Island; less evident in the western South Island and on Stewart Island / Rakiura (C. Robertson *et al.* 2007). Also on the Chatham Islands. Vagrant to Snares / Tini Heke, Auckland / Maukahuka, Campbell / Motu Ihupuku, and Antipodes Islands. Common on Norfolk Island, but whether introduced or self-introduced, and whether from Australian or New Zealand populations, is not known (Schodde *et al.* 1983). Subspecies in New Zealand and Norfolk Island is probably nominate (Checklist Committee 1970; Niethammer 1971; Schodde & Mason 1999: 730).

Family MOTACILLIDAE Vigors: Pipits and Wagtails

Motacillina Vigors, 1825: *Zoological Journ.* 2(7): 396 – Type genus *Motacilla* Linnaeus, 1758.

Genus *Anthus* Bechstein

Anthus Bechstein, 1805: *Gemein. Nat. Deutschl.* 2: 247, 302, 465 – Type species (by subsequent designation) *Alauda pratensis* Linnaeus = *Anthus pratensis* (Linnaeus).

Corydalla Vigors, 1825: *Zoological Journ.* 2(7): 397 – Type species (by original designation) *Anthus Richardi* Vieillot.

Until recently, pipit populations widely distributed in Africa, Eurasia (except the north where a winter vagrant), and south-east through Indonesia to Australia and New Zealand were frequently united as one species (Richard's pipit, *Anthus novaeseelandiae*). Multiple species (forming a superspecies) are now recognised (Dickinson & Christidis 2014). Schodde & Mason (1999: 739) recognised the Australian pipit *A. australis* Vieillot, 1818 as a species distinct from the New Zealand form, which we follow. However, Christidis & Boles (2008) preferred to unite Australian, New Zealand, and New Guinean birds as *A. novaeseelandiae*. There are a few records of pipits straggling to Norfolk Island (J. Moore 1999), but it is not known whether these are from Australia or New Zealand.

► *Anthus novaeseelandiae* (Gmelin)

New Zealand Pipit | Pihoihoi

New Zealand and outlying islands. Foggo *et al.* (1997) considered allozyme loci and morphometric data from populations in the New Zealand area and found a two-way separation between mainland and other (insular) populations. However, in the absence of comparisons with Australian and other foreign populations, they refrained from any taxonomic recommendations. Without further clarification we retain the status quo for New Zealand populations as in Checklist Committee (1990, 2010).

Anthus novaeseelandiae novaeseelandiae (Gmelin)

New Zealand Pipit | Pihoihoi

Alauda novae Seelandiae Gmelin, 1789: *Syst. Nat., 13th edition* 1(2): 799. Based on the “New-Zealand Lark” of Latham 1783, *Gen. Synop. Birds* 2: 384, pl. 21 – Queen Charlotte Sound, Marlborough.

Anthus novae zealandiae (Gmelin); G.R. Gray 1844, in Richardson & J.E. Gray (Eds), *Zool. Voy. 'Erebus' & 'Terror', Birds* 1(3): 4. Unjustified emendation.

Alauda littorea J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 90 – South Island.

Anthus grayi Bonaparte, 1850: *Consp. Gen. Avium* 1: 249 – New Zealand.

Corydalla novae zealandiae (Gmelin); G.R. Gray 1869, *Hand-list Birds* 1: 253. Unjustified emendation.

Anthus Novae Zelandiae Gmelin [sic]; Anon. 1870, *Cat. Colonial Mus.*: 73. Unjustified emendation.

Anthus novae-zealandiae (Gmelin); Travers 1883, *Trans. Proc. N.Z. Inst.* 15: 186. Unjustified emendation.

Anthus novaezealandiae reischeki Lorenz-Liburnau, 1902: *Ann. k.-k. Naturhist. Hofmus. Wien* 17: 308 – Little Barrier Island and Waikato. Unjustified emendation.

Anthus novae-seelandiae (Gmelin); Mathews 1930, *Emu* 29: 286.

Anthus novaeseelandiae taupoensis Mathews, 1930: *Bull. Brit. Ornith. Club* 50: 42 – Lake Taupo.

Anthus novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 64. In part.

Anthus novaeseelandiae (Gmelin); Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 137, 179.

North and South Islands, Stewart Island / Rakiura, and offshore islands; a straggler to the Kermadec Islands / Rangitāhua and Snares Islands / Tini Heke. No recent records from the Kermadecs (Veitch *et al.* 2004). Originally probably restricted to mountain and lowland tussock grasslands, riverbeds and the coastal zone, but with European settlement its range increased greatly; now avoids pure pasture land, but still fairly common in rougher farmland and open country generally (including alpine). Widely distributed in Holocene deposits and middens in the North and South Islands, and Stewart Island / Rakiura (Checklist Committee 1990).

Anthus novaeseelandiae chathamensis Lorenz-Liburnau

Chatham Island Pipit

Anthus novaezealandiae chathamensis Lorenz-Liburnau, 1902: *Ann. k.-k. Naturhist. Hofmus. Wien* 17: 309 – Chatham Islands. Unjustified emendation.

Anthus novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 64. In part.

Anthus novaeseelandiae chathamensis Lorenz-Liburnau; Checklist Committee 1990, *Checklist Birds N.Z.*: 198.

Anthus chathamensis Lorenz-Liburnau; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 174, 179.

Chatham Islands: common throughout. Also in Holocene deposits and middens (Checklist Committee 1990).

Anthus novaeseelandiae aucklandicus G.R. Gray

Auckland Island Pipit

Anthus aucklandicus G.R. Gray, 1862: *Ibis* 4: 224 – Auckland Islands.

Corydalla aucklandica (G.R. Gray); G.R. Gray 1869, *Hand-list Birds* 1: 253.

Anthus novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 64. In part.

Anthus novaeseelandiae aucklandicus G.R. Gray; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 65.

Anthus aucklandicus G.R. Gray; Holdaway *et al.* 2001, *New Zealand Journ. Zool.* 28(2): 179.

Auckland Islands / Maukahuka and Campbell Island / Motu Ihupuku. At Campbell Island / Motu Ihupuku, restricted to small offshore islands when rats were present on the main island, but recolonised there following eradication of rats

(D. Thompson *et al.* 2005). Three Holocene bones found on Enderby Island, Auckland Islands / Maukahuka (Tennyson 2020a).

***Anthus novaeseelandiae steindachneri* Reischek**

Antipodes Island Pipit

Anthus steindachneri Reischek, 1889: *Trans. N.Z. Inst.* 21: 388 – Antipodes Islands.

Anthus novaeseelandiae novaeseelandiae (Gmelin); Checklist Committee 1953, *Checklist N.Z. Birds*: 64. In part.

Anthus novaeseelandiae steindachneri Reischek; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 65.

Antipodes Islands.

Family *FRINGILLIDAE Leach: Finches, Euphonias, and Hawai'ian Honeycreepers

Subfamily *FRINGILLINAE Leach: Chaffinches

Fringillidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition, London*: 65 – Type genus *Fringilla* Linnaeus, 1758.

Genus **Fringilla* Linnaeus

Fringilla Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 179 – Type species (by subsequent designation) *Fringilla coelebs* Linnaeus.

► ****Fringilla coelebs* Linnaeus**

Chaffinch | Pahirini

Fringilla coelebs Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 179 – Sweden.

Fringilla caelebs [sic] Linnaeus; A. Hamilton 1909, *Hand-list Birds New Zealand*: 18.

Fringilla coelebs; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 170.

Fringilla coelebs gengleri Kleinschmidt, 1909; Checklist Committee 1953, *Checklist N.Z. Birds*: 65.

Fringilla coelebs coelebs Linnaeus; E. Mayr 1968, in *Peters Check-list Birds World 14*: 204.

Fringilla coelebs Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 218.

Europe, west and central Asia, and north-west Africa; northern populations migratory. New Zealand: introduced on several occasions during the 1860s and 1870s to both the North and South Islands. Now the second-most widely distributed bird, common throughout the three main islands of New Zealand except for South Island mountain tops (C. Robertson *et al.* 2007). Has spread to the Chatham, Snares / Tini Heke, Auckland / Maukahuka, and Campbell / Motu Ihupuku Islands. Recorded once at both the Kermadec and Antipodes Islands (Tennyson *et al.* 2002; Veitch *et al.* 2004). Common in urban areas, farmland, orchards, scrub lands, pine forests and, to a lesser extent, native forest. Assignment to the subspecies *F. c. gengleri* in Checklist Committee (1970) and by Niethammer (1971) requires critical evaluation.

Subfamily *CARDUELINAE Vigors: Cardueline Finches

Carduelina Vigors, 1825: *Zoological Journ.* 2(7): 398 – *Carduelis* Brisson, 1760.

Generic placement and order of species follows Zuccon *et al.* (2012) and Dickinson & Christidis (2014).

Genus **Chloris* Cuvier

Chloris Cuvier, 1800: *Lecons Anat. Comp. 1*: pl. 2 – Type species (by tautonymy) *Loxia chloris* Linnaeus = *Chloris chloris* (Linnaeus).

Ligurinus Koch, 1816: *Syst. Baierischen Zool. 1*: 229 – Type species (by subsequent designation) *Loxia chloris* Linnaeus = *Chloris chloris* (Linnaeus).

► ****Chloris chloris* (Linnaeus)**

European Greenfinch

Loxia chloris Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 174 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 61).

Fringilla chloris (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 60.

Ligurinus chloris; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 174.

Chloris chloris (Linnaeus); Checklist Committee 1953, *Checklist N.Z. Birds*: 65.

Carduelis chloris chloris (Linnaeus); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 71.

Carduelis chloris aurantiventris (Cabanis, 1851); Niethammer 1971, *Journ. für Ornith.* 112(2): 223.

Carduelis chloris (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 219.

Europe, south-west Asia, North Africa; northern populations partly migratory. New Zealand: introduced several times during the 1860s. Now common throughout much of the country, but least evident in parts of the central North Island, and along the western South Island (C. Robertson *et al.* 2007). Present on Stewart Island / Rakiura and the Chatham Islands; straggler to Snares Islands / Tini Heke, Auckland Islands / Maukahuka, Campbell Island / Motu Ihupuku, and Kermadec Islands / Rangitāhua. Particularly favours farmland, edges of pine plantations, orchards, and large gardens, but winter flocks range over open paddocks and along seashores. Widespread but uncommon on Norfolk Island (Schodde *et al.* 1983) where self-introduced from Australia or New Zealand. The subspecies of New Zealand birds is uncertain; they

were assigned to the nominate race in Checklist Committee (1970), and to *C. c. aurantiiventris* (Cabanis) by Niethammer (1971); see also discussion in Schodde & Mason (1999: 777).

Genus **Acanthis* Borkhausen

Acanthis Borkhausen, 1797: *Deutsche Fauna* 1: 248 – Type species (by subsequent designation) *Fringilla linaria* Linnaeus = *Acanthis flammea* (Linnaeus).

► **Acanthis flammea* (Linnaeus)

Common Redpoll

Fringilla flammea Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 182 – Europe, restricted to Norrland, Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 77).

Fringilla linaria Linnaeus, 1766: *Syst. Nat., 12th edition* 1: 322 – Europe.

Fringilla linaria Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 61.

Linota rufescens; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 172. Not *Linaria rufescens* Vieillot, 1816.

Acanthis cabaret (Statius Müller, 1776); Oliver 1930, *New Zealand Birds*, 1st edition: 509.

Carduelis flammea cabaret (Statius Müller); Checklist Committee 1953, *Checklist N.Z. Birds*: 65.

Acanthis flammea cabaret (Statius Müller); Paynter 1968, in *Peters Check-list Birds World* 14: 252.

Acanthis flammea (Linnaeus); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 71.

Carduelis flammea (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 220.

Northern Eurasia and North America. Partial migrant; winters to southern Europe and Asia, and northern United States. Some authorities in Europe (Sangster *et al.* 1999; Sangster, Knox *et al.* 2002) and North America (R.C. Banks *et al.* 2002) proposed that two species should be recognised – lesser redpoll *A. cabaret* (monotypic) and common redpoll *A. flammea* (polytypic) – based on behavioural data (Lifjeld & Bjerke 1996) and morphological data and interpretation (Knox *et al.* 2001). However, a subsequent study (Ottvall *et al.* 2002) failed to show significant differences between the mtDNA of the taxa.

New Zealand: introduced to both North and South Islands on several occasions between 1862 and 1875. Now present from North Cape (Otou) to Stewart Island / Rakiura in coastal sand-dunes, farmlands, forest margins, and subalpine scrub to at least 1,750 m a.s.l. Tends to be more common at higher altitudes than at sea level, and in the South Island than the North (C. Robertson *et al.* 2007). Has spread to Kermadec / Rangitāhua, Chatham, Snares / Tini Heke, Antipodes, Auckland / Maukahuka, Campbell / Motu Ihupuku, and Macquarie Islands

Stenhouse (1960, 1962) gave evidence to suggest that the migratory *A. f. flammea* was among birds imported to New Zealand in 1862. Based on the morphology of contemporary New Zealand birds, *A. f. flammea* may have been present and interbred with *A. f. cabaret*, according to Stenhouse (1962), but Westerskov (1953b) and Niethammer (1971) determined that only *A. f. cabaret* (British Isles, and mountainous areas of central Europe) was present. Fennell, Sagar *et al.* (1985) found that in many but not all characteristics, New Zealand birds deviated little from the taxon *A. f. cabaret*. These authors recommended that “redpolls in New Zealand should not be defined trinomially in terms of the European races”. Until there is more study of New Zealand birds, and further clarification from Europe and North America, we recommend listing New Zealand birds as *Acanthis flammea* and without indicating a subspecies.

Genus **Carduelis* Brisson

Carduelis Brisson, 1760: *Ornithologie* 1: 36 – Type species (by tautonymy) *Fringilla carduelis* Linnaeus = *Carduelis carduelis* (Linnaeus).

► **Carduelis carduelis* (Linnaeus)

European Goldfinch | Kōurarini

Fringilla carduelis Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 180 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 67).

Europe, central and south-west Asia, North Africa; northern populations migratory.

**Carduelis carduelis britannica* (Hartert)

European Goldfinch | Kōurarini

Fringilla carduelis; Hutton 1871, *Cat. Birds N.Z.*: 60. Not *Fringilla carduelis* Linnaeus, 1758.

Acanthis carduelis britannica Hartert, 1903: *Vögel Pal. Fauna*: 68 – Rottingdean, Sussex, England.

Carduelis elegans; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 173. Not *Carduelis elegans* Stephens, 1826.

Carduelis carduelis; Oliver 1930, *New Zealand Birds*, 1st edition: 510. Not *Fringilla carduelis* Linnaeus, 1758.

Carduelis carduelis britannica (Hartert); Checklist Committee 1953, *Checklist N.Z. Birds*: 65.

New Zealand: introduced to both North and South Islands on several occasions between 1862 and 1883. Now present throughout New Zealand (similar distribution to that of greenfinch), especially in orchards and farmlands, but scarce or absent at higher altitudes and in unbroken areas of native forest (C. Robertson *et al.* 2007). Also present on Chathams, and has straggled to Kermadec / Rangitāhua, Snares / Tini Heke, Auckland / Maukahuka, Campbell / Motu Ihupuku, Antipodes, and Macquarie Islands (Keith & Hines 1958; Westerskov 1960; Sorensen 1964; Warham & Bell 1979; Miskelly *et al.* 2001a; Aikman & Miskelly 2004; Veitch *et al.* 2004; Miskelly, Elliott *et al.* 2020). Resident on Norfolk Island (Schodde *et al.* 1983) where self-introduced from Australia or New Zealand. New Zealand birds were assigned to

subspecies *C. c. britannica* (Hartert, 1903) by Checklist Committee (1970) and by Niethammer (1971). Australian birds are similarly assigned (Schodde & Mason 1999).

Family ***EMBERIZIDAE** Brehm: Buntings and New World Sparrows

Subfamily ***EMBERIZINAE** Brehm: Buntings and New World Sparrows

Emberizidae Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 261, 289, 1049 – Type genus *Emberiza* Linnaeus, 1758.

Genus ***Emberiza** Linnaeus

Emberiza Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 176 – Type species (by subsequent designation) *Emberiza citrinella* Linnaeus.

► ***Emberiza citrinella** Linnaeus **Yellowhammer | Hurukōwhai**

Emberiza citrinella Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 177 – Europe, restricted to Sweden (*vide* Hartert 1904, *Vögel Pal. Fauna*: 167).

Emberiza citrinella citrinella Linnaeus; Checklist Committee 1953, *Checklist N.Z. Birds*: 66.

Emberiza citrinella caliginosa Clancey, 1940; Niethammer 1971, *Journ. für Ornith.* 112(2): 223.

Emberiza citrinella Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 217.

Emberiza citronella; Scofield & Stephenson 2013, *Birds N.Z. Photographic Guide*. 1st edition: 509. Misspelling.

Europe and west Asia, wintering to south-west and central Asia, and North Africa. In New Zealand: successfully introduced to both main islands during the 1860s. Now common and widespread from North Cape (Otou) to Stewart Island / Rakiura, and has spread to the Kermadec Islands / Rangitāhua. Rare on the Chatham Islands and may not be resident (Miskelly *et al.* 2006). Strays have reached Snares Islands / Tini Heke, Auckland Islands / Maukahuka, Antipodes, and Campbell Island / Motu Ihupuku (Bailey & Sorensen 1962; Miskelly *et al.* 2001a; Miskelly, Elliott *et al.* 2020), and also Lord Howe Island (Hindwood & Cunningham 1950). Mainly a bird of open country, especially farmland with nearby scrub. Winter flocks are common in farmland, city parks, and along coasts. Assignment to subspecies *E. c. caliginosa* Clancey, 1940 by Niethammer (1971) requires critical evaluation.

► ***Emberiza cirlus** Linnaeus **Cirl Bunting**

Emberiza cirlus Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 311 – southern Europe.

Emberiza cirlus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 175.

Emberiza cirlus cirlus Linnaeus; Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 70.

Emberiza cirlus Linnaeus; Checklist Committee 1990, *Checklist Birds N.Z.*: 218.

Central and southern Europe (including southern England) to Mediterranean islands, Asia Minor, and North Africa. Mainly sedentary. Currently regarded as monotypic (Knox *et al.* 2002). New Zealand: only two small introductions have been documented (seven birds to Otago in 1871 and four to Wellington in 1880–81), but probably others were made and not recorded. By far the rarest introduced passerine; more common in the South Island, especially in parts of Marlborough (T.J. Taylor 1978), Nelson, Canterbury, and Otago (C. Robertson *et al.* 2007). North Island records sporadic and isolated. Most records are from farmland with hedgerows or scattered scrub.

APPENDIX 1

Fossil Birds of New Zealand

This Appendix lists birds recorded as fossils in New Zealand from sediments older than the middle Pleistocene (≥ 1 Ma). It therefore includes material from the Kaimatira Pumice Sand of the Kai Iwi Group (Oxygen Isotope Stage 25–27, *c.* 1 Ma) found at Marton (Worthy 1997a; Tennyson & Tomotani 2021a). All younger extinct birds are members of the Recent fauna; all are species that persisted to human arrival and are covered in the main text. Before 2007, the pre-Pleistocene record of birds in New Zealand comprised mainly penguins, as reviewed by Fordyce (1991b). Until then, the record of the Tertiary terrestrial avifauna was restricted to two undescribed anatids from the Miocene lacustrine deposits at St Bathans, Otago (Fordyce 1991b). Subsequent investigations in this area have recovered a rich avifauna comprising at least 40 taxa (Tennyson, Worthy *et al.* 2013; Mather *et al.* 2019). In addition to the diverse taxa named below, the St Bathans assemblage includes moa (Dinornithiformes), geese (Anatidae: Anserinae), an eagle (Accipitridae), and several passerines (Passeriformes). Elsewhere, G. Mayr & Scofield (2015) attributed a partial humerus and a partial carpometacarpus from Paleocene marine sediments of the Waipara Greensand, North Canterbury, to a tropicbird. The remains were too fragmentary to be assigned to family, genus or species. Ages of taxa are described using the New Zealand geological timescale (R. Cooper 2004).

Order **APTERYGIFORMES**: Kiwi

Family **APTERYGIDAE** G.R. Gray: Kiwi

Genus †**Proapteryx** T. Worthy, J. Worthy, Tennyson, Salisbury, Hand & Scofield

Proapteryx T. Worthy, J. Worthy, Tennyson, Salisbury, Hand & Scofield, 2013: *Proc. 8th Int. Meeting Soc. Avian Paleont. Evol.*: 67 – Type species (by original designation) *Proapteryx micromeros* T. Worthy, J. Worthy, Tennyson, Salisbury, Hand & Scofield.

- †**Proapteryx micromeros** T. Worthy, J. Worthy, Tennyson, Salisbury, Hand & Scofield **St Bathans Kiwi**
Proapteryx micromeros T. Worthy, J. Worthy, Tennyson, Salisbury, Hand & Scofield, 2013: *Proc. 8th Int. Meeting Soc. Avian Paleont. Evol.*: 67 – St Bathans, Central Otago.

Known from two fossil remains only, from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy, Worthy, Tennyson, Salisbury *et al.* 2013).

Genus **Apteryx** Shaw

Apteryx Shaw, 1813: *Nat. Miscell.* 24(286): pls 1057–1060 – Type species (by monotypy) *Apteryx australis* Shaw.

- †**Apteryx littoralis** Tennyson & Tomotani **Marton Kiwi**
Apteryx littoralis Tennyson & Tomotani, 2021: *Historical Biology* 34: 353 – Marton, North Island.

Known from a Pleistocene (1 Ma) epoch tarsometatarsus found in shallow marine sediment north of Marton (Tennyson & Tomotani 2021a).

Order **ANSERIFORMES**: Duck-like Birds

Suborder **ANSERES**: Swans, Geese, and Ducks

Family **ANATIDAE** Leach: Swans, Geese, and Ducks

Anatidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition*, London: 67 – Type genus *Anas* Linnaeus, 1758.

Subfamily **OXYURINAE** J.C. Phillips: Stiff-tailed Ducks

Oxyurinae J.C. Phillips, 1926: *Nat. Hist. Ducks* 4: 201 – Type genus *Oxyura* Bonaparte, 1827.

When described by Worthy *et al.* (2007), *Manuherikia* was placed in the extinct subfamily Dendrocheninae, created by Livezey & Martin (1988), and *Dunstanetta* in *Tribus incertae sedis*. However, Worthy & Lee (2008) and Worthy (2009) conducted extensive phylogenetic analyses of *Manuherikia* and *Dunstanetta* and found no support for Dendrocheninae, and that both the New Zealand genera are basal in a clade inclusive of traditional oxyurines. Accordingly, they advocated that Oxyurinae be expanded to encompass an enlarged set of taxa that included the fossil European Oligo-Miocene *Mionetta* and New Zealand *Manuherikia* and *Dunstanetta*, as well as the modern genera *Malacorhynchus*, *Stictonetta*, *Thalassornis*, *Nomonyx*, *Oxyura*, and *Biziura*. We follow this course here.

Genus †**Manuherikia** T. Worthy, Tennyson, Jones, McNamara & Douglas

Manuherikia T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 9 – Type species (by original designation) *Manuherikia lacustrina* T. Worthy, Tennyson, Jones, McNamara & Douglas.

- †**Manuherikia lacustrina** T. Worthy, Tennyson, Jones, McNamara & Douglas **Manuherikia Duck**
Manuherikia lacustrina T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 10, figs 4G, H, 5D, H, I, 6D – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).
- †**Manuherikia minuta** T. Worthy, Tennyson, Jones, McNamara & Douglas **Minute Manuherikia Duck**
Manuherikia minuta T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 12, figs 4B, D, 5B, E, F, 6A – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).
- †**Manuherikia douglasi** T. Worthy, Tennyson, Hand & Scofield **Douglas' Duck**
Manuherikia douglasi T. Worthy, Tennyson, Hand & Scofield, 2008: *Journ. Royal Soc. N.Z.* 38(2): 100, fig. 1A–H – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007, 2008).

Genus †**Dunstanetta** T. Worthy, Tennyson, Jones, McNamara & Douglas

Dunstanetta T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 17 – Type species (by monotypy) *Dunstanetta johnstoneorum* T. Worthy, Tennyson, Jones, McNamara & Douglas.

- †**Dunstanetta johnstoneorum** T. Worthy, Tennyson, Jones, McNamara & Douglas **Johnstones' Duck**
Dunstanetta johnstoneorum T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 18, figs 7C, 8C, 9E – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).

Subfamily TADORNINAE Reichenbach: Shelducks

Tribe TADORNINI Reichenbach: Shelducks

Tadorninae Reichenbach, 1849: *Avium Syst. Nat.*: 10 – Type genus *Tadorna* J.D.D. Fleming, 1822.

Genus †**Miotadorna** T. Worthy, Tennyson, Jones, McNamara & Douglas

Miotadorna T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 14 – Type species (by monotypy) *Miotadorna sanctibathansi* T. Worthy, Tennyson, Jones, McNamara & Douglas.

- †**Miotadorna sanctibathansi** T. Worthy, Tennyson, Jones, McNamara & Douglas **St Bathans Shelduck**
Miotadorna sanctibathansi T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 14, figs 7A, D, 8A, D, 9A, B – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).

Subfamily ANATINAE Leach: Ducks

Tribe ?ANATINI Leach: Typical Ducks

Anatidae Leach, 1819: *Eleventh room*. In *Synopsis Contents British Museum 15th edition*, London: 67 – Type genus *Anas* Linnaeus, 1758.

Genus †**Matanas** T. Worthy, Tennyson, Jones, McNamara & Douglas

Matanas T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 19 – Type species (by monotypy) *Matanas enrighti* T. Worthy, Tennyson, Jones, McNamara & Douglas.

- †**Matanas enrighti** T. Worthy, Tennyson, Jones, McNamara & Douglas **Enright's Duck**
Matanas enrighti T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 20, figs 4A, C, 5A, C, 6C – St Bathans, Central Otago.

Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).

Order †**ODONOPTERYGIFORMES**: Pseudotoothed Birds

We follow Bourdon (2005), Bourdon *et al.* (2010), and G. Mayr *et al.* (2021) in placing the family Pelagornithidae in its own order, and in using the common name ‘Pseudotoothed Birds’ for the order and family.

Family †**PELAGORNITHIDAE** Fürbringer: Pseudotoothed Birds

Pelagornithinae Fürbringer, 1888: *Untersuch. Morph. Syst. Vögel* 2: 1565, footnote – Type genus *Pelagornis* Lartet, 1857.

Common names are based on Bourdon *et al.* (2010). Fossil bones from Tangahoe Formation, Hawera, North Island, of middle Pliocene age were described as the first record of pseudodontornids, possibly of *Pseudodontornis* [now *Pelagornis* *vide* G. Mayr & Rubilar-Rogers 2010], from the North Island (McKee 1985). McKee subsequently reported the discovery of isolated pseudodontorn bones of Pliocene age from Hawera and Hawke’s Bay, in the *Society of Avian Paleontology and Evolution Newsletter (SAPE)* as follows: *SAPE* 4, 1990; *SAPE* 5, 1991; *SAPE* 10, 1996, first Miocene (10–9 Ma) North Island record; *SAPE* 12, 1998, two pelagornithid humeri; *SAPE* 13, 1999; *SAPE* 16, 2002. However, all remain undescribed.

Genus †**Protodontopteryx** G. Mayr, De Pietri, Love, Mannering & Scofield

Protodontopteryx G. Mayr, De Pietri, Love, Mannering & Scofield, 2021: *Papers Palaeont.* 7: 218 – Type species (by original designation) *Protodontopteryx ruthae* G. Mayr, De Pietri, Love, Mannering & Scofield.

- †**Protodontopteryx ruthae** G. Mayr, De Pietri, Love, Mannering & Scofield **Ruth’s Pseudotoothed Bird**
Protodontopteryx ruthae G. Mayr, De Pietri, Love, Mannering & Scofield, 2021: *Papers Palaeont.* 7: 219 – Waipara River, North Canterbury.

Described from a partial skeleton found in an early Paleocene (*c.* 62–61.5 Ma) deposits at the Waipara River (G. Mayr *et al.* 2021).

Genus †**Pelagornis** Lartet

Pelagornis Lartet, 1857: *Compt. Rend. Séa. Acad. Sci., Paris* 44: 740 – Type species (by monotypy) *Pelagornis miocaenus* Lartet.

Pseudodontornis Lambrecht, 1930: *Geol. Hungarica, Ser. Palaeont.* 7: 10 – Type species (by subsequent designation) *Odontopteryx longirostris* Spulski = *Pelagornis longirostris* (Spulski).

Osteodontornis Howard, 1957: *Santa Barbara Mus. Nat. Hist. Dept. Geol. Bull.* 1: 3 – Type species (by original designation) *Osteodontornis orri* Howard = *Pelagornis orri* (Howard).

Neodontornis Harrison & Walker, 1976: *Tertiary Res. Spec. Pap.* 2: 22 – Type species (by original designation) *Pseudodontornis stirtoni* Howard & Warter = *Pelagornis stirtoni* (Howard & Warter).

We follow G. Mayr & Rubilar-Rogers (2010) in synonymising *Neodontornis* with *Pelagornis*.

- †**?Pelagornis miocaenus** Lartet **Miocene Pseudotoothed Bird**
Pelagornis miocaenus Lartet, 1857: *Compt. Rend. Séa. Acad. Sci., Paris* 44: 740 – France.

Known from the middle Miocene of France (C. Harrison & Walker 1976). In New Zealand: middle to late Miocene, near mouth of Waipara River, North Canterbury (Scarlett 1972). The assignment by Harrison & Walker (1976) of the single proximal humerus described by Scarlett (1972) to *Pelagornis miocaenus* was tentative.

- †**Pelagornis stirtoni** (Howard & Warter) **Stirton’s Pseudotoothed Bird**
Pseudodontornis stirtoni Howard & Warter, 1969: *Rec. Cant. Museum* 8: 348 – Motunau Beach, North Canterbury.
Neodontornis stirtoni (Howard & Warter); C. Harrison & Walker 1976: *Tertiary Res. Spec. Pap.* 2: 22.
Pelagornis stirtoni (Howard & Warter); G. Mayr & Rubilar-Rogers 2010: *Journ. Vert. Paleont.* 30: 1327.

Age uncertain, within the range Otaian to Waipipian Stage (early Miocene–Pliocene; 21.7–3.0 Ma), probably late Pliocene; Motunau Beach, North Canterbury (H. Howard & Warter 1969).

Order **PHOENICOPTERIFORMES**: Flamingoes and PalaelodidsFamily †**PALAELODIDAE** Stejneger: PalaelodidsGenus †**Palaelodus** Milne-Edwards

- †**Palaelodus aotearoa** T. Worthy, Tennyson, Archer & Scofield **New Zealand Palaelodus**
Palaelodus aotearoa T. Worthy, Tennyson, Archer & Scofield, 2010: *Rec. Aust. Mus.* 62: 80 – St Bathans, Central Otago.
 Known only from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy, Tennyson *et al.* 2010).

Order **COLUMBIFORMES**: Pigeons and Doves

Suborder COLUMBAE: Pigeons and Doves

Family **COLUMBIDAE** Illiger: Pigeons and Doves

Columbini Illiger, 1811: *Prodromus Syst. Mamm. Avium*: 243 – Type genus *Columba* Linnaeus, 1758.

Subfamily RAPHINAE Wetmore: Fruit Doves

Raphidae Wetmore, 1930: *Proc. U.S. Nat. Mus.* 76(24): 5 – Type genus *Raphus* Brisson, 1760.

Genus †**Deliaphaps** De Pietri, Scofield, Tennyson, Hand & T. Worthy

Deliaphaps De Pietri, Scofield, Tennyson, Hand & T. Worthy, 2018: *Paleontología y Evolución de las Aves*: 57 – Type species (by original designation) *Deliaphaps zealandiensis* De Pietri, Scofield, Tennyson, Hand & T. Worthy.

- †**Deliaphaps zealandiensis** De Pietri, Scofield, Tennyson, Hand & T. Worthy **Zealandian Dove**
Deliaphaps zealandiensis De Pietri, Scofield, Tennyson, Hand & T. Worthy, 2018: *Paleontología y Evolución de las Aves*: 57 – Manuherikia River, Otago.
 Known only from a carpometacarpus and two tentatively referred bones from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (De Pietri *et al.* 2018). *Deliaphaps* displays a combination of features also present in the extant genera *Caloenas*, *Didunculus*, and *Goura* (De Pietri *et al.* 2018). Based on placement of these genera within Raphinae (Pereira *et al.* 2007; Dickinson & Renssen 2013; Nowak *et al.* 2019), we include *Deliaphaps* in Raphinae.

Genus †**Rupephaps** T. Worthy, Hand, J. Worthy, Tennyson & Scofield

Rupephaps T. Worthy, Hand, J. Worthy, Tennyson & Scofield, 2009: *Auk* 126: 651 – Type species (by original designation) *Rupephaps taketake* T. Worthy, Hand, J. Worthy, Tennyson & Scofield.

- †**Rupephaps taketake** T. Worthy, Hand, J. Worthy, Tennyson & Scofield **St Bathans Pigeon**
Rupephaps taketake T. Worthy, Hand, J. Worthy, Tennyson & Scofield, 2009: *Auk* 126: 651 – St Bathans, Central Otago.
 Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2009). De Pietri *et al.* (2018) considered *Rupephaps* to be part of a clade including *Ptilinopus* and *Hemiphaga*.

Order **APODIFORMES**: Swifts, Hummingbirds, and Owlet-nightjarsFamily **AEGOTHELIDAE** Bonaparte: Owlet-nightjars

Aegothelinae Bonaparte, 1853: *Compt. Rend. Séa. Acad. Sci., Paris* 37(18): 645 – Type genus *Aegotheles* Vigors & Horsfield, 1827.

Genus **Aegotheles** Vigors & Horsfield

Aegotheles Vigors & Horsfield, 1826: *Trans. Linn. Soc. London* 15(1): 194 – Type species (by monotypy) *Caprimulgus novaehollandiae* Latham = *Aegotheles cristatus* (White).

- **Aegotheles** sp. indet. **(owlet-nightjar)**
Aegotheles sp. indet. T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 25, figs 15B, D, F.
 Worthy *et al.* (2007) referred a specimen from the St Bathans assemblage to *Aegotheles* sp. but did not name it. From the Altonian Stage (early Miocene; 19–16 Ma), lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago.

Family **APODIDAE** Olphe-Galliard: Swifts and Swiftlets

Apodidae Olphe-Galliard, 1887: *Contrib. Faune Ornith. Europe Occidentale* 22: 90 – Type genus *Apus* Scopoli 1777.

Genus **Collocalia** G.R. Gray

Collocalia G.R. Gray, 1840: *List Gen. Birds*: 8 – Type species (by original designation) *Hirundo esculenta* Linnaeus = *Collocalia esculenta* (Linnaeus).

► **Collocalia** sp. indet. (swiftlet)

Collocalia sp. indet. T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 26, fig. 16A.

Worthy *et al.* (2007) referred a specimen from the St Bathans assemblage to *Collocalia* sp. but did not name it. From the Altonian Stage (early Miocene; 19–16 Ma), lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago.

Order **GRUIFORMES**: Rails and CranesFamily †**APTORNITHIDAE** Bonaparte: AdzebillsGenus †**Aptornis** G.A. Mantell

Aptornis G.A. Mantell, 1848 (2 Feb.): *Quart. Journ. Geol. Soc. London* 4: 233 – Type species (by monotypy) *Dinornis otidiformis* Owen = *Aptornis otidiformis* (Owen).

► †**Aptornis proasciarostratus** T. Worthy, Tennyson & Scofield **St Bathans Adzebill**

?*Aptornis proasciarostratus* T. Worthy, Tennyson & Scofield, 2011: *Journ. Ornith.* 152: 671 – St Bathans, Central Otago.

Known only from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy *et al.* 2011a).

Family **RALLIDAE** Rafinesque: Rails, Gallinules, and CootsSubfamily **RALLINAE** Rafinesque: Rails, Gallinules, and Coots

Rallia Rafinesque, 1815: *Analyse de la Nature*: 70 – Type genus *Rallus* Linnaeus, 1758.

Genus †**Priscaweke** Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy

Priscaweke Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy, 2019: *Journ. Syst. Palaeont.* 17: 432 – Type species (by original designation) *Priscaweke parvales* Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy.

► †**Priscaweke parvales** Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy **Bannockburn Crake**

Priscaweke parvales Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy, 2019: *Journ. Syst. Palaeont.* 17: 438 – St Bathans, Central Otago.

Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Mather *et al.* 2019). Phylogenetic relationships uncertain, but many features shared with *Gallirallus* and related genera (Mather *et al.* 2019).

Genus †**Litorallus** Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy

Litorallus Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy, 2019: *Journ. Syst. Palaeont.* 17: 441 – Type species (by original designation) *Litorallus livezeyi* Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy.

► †**Litorallus livezeyi** Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy **Livezey's Rail**

Litorallus livezeyi Mather, Tennyson, Scofield, De Pietri, Hand, Archer, Handley & T. Worthy, 2019: *Journ. Syst. Palaeont.* 17: 441 – St Bathans, Central Otago.

Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Mather *et al.* 2019). Phylogenetic relationships uncertain, but likely from the same lineage as *Priscaweke* (Mather *et al.* 2019).

Genus †**Pleistorallus** T. Worthy

Pleistorallus T. Worthy, 1997: *Alcheringa* 21: 74 – Type species (by original designation) *Pleistorallus flemingi* T. Worthy.

► †**Pleistorallus flemingi** T. Worthy **Fleming's Rail**

Pleistorallus flemingi T. Worthy, 1997: *Alcheringa* 21: 74 – Marton, Manawatu.

Known from the Kaimatira Pumice Sand of the Kai Iwi Group, Lower Castlecliffian, Oxygen Isotope Stage 25–27, *c.* 1 Ma, near Marton. Known from the holotype tibiotarsus and paratype femur. Relationships to Recent rails unresolved, but most like *Gallirallus* group (Worthy 1997a).

Order CHARADRIIFORMES: Waders, Gulls, & Terns

Suborder CHARADRII

Superfamily CHIONOIDEA Lesson

Family INCERTAE SEDIS

Genus †*Neilus* De Pietri, Scofield, Hand, Tennyson & T. Worthy

Neilus De Pietri, Scofield, Hand, Tennyson & T. Worthy, 2016: *Journ. Roy. Soc. N.Z.* 46: 186 – Type species (by original designation)
Neilus sansomae De Pietri, Scofield, Hand, Tennyson & T. Worthy.

- †*Neilus sansomae* De Pietri, Scofield, Hand, Tennyson & T. Worthy **Sansom's Plover**
Neilus sansomae De Pietri, Scofield, Hand, Tennyson & T. Worthy, 2016: *Journ. Roy. Soc. N.Z.* 46: 186 – St Bathans, Central Otago.
Known only from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (De Pietri, Scofield, Hand *et al.* 2016).

Suborder SCOLOPACI

Superfamily THINOCOROIDEA Sundevall

Family INCERTAE SEDIS

Genus †*Hakawai* De Pietri, Scofield, Tennyson, Hand & T. Worthy

Hakawai De Pietri, Scofield, Tennyson, Hand & T. Worthy, 2016: *Journ. Syst. Palaeont.* 14: 605 – Type species (by original designation)
Hakawai melvillei De Pietri, Scofield, Tennyson, Hand & T. Worthy.

- †*Hakawai melvillei* De Pietri, Scofield, Tennyson, Hand & T. Worthy **New Zealand Lake-wanderer**
Hakawai melvillei De Pietri, Scofield, Tennyson, Hand & T. Worthy, 2016: *Journ. Syst. Palaeont.* 14: 605 – St Bathans, Central Otago.
Known only from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (De Pietri, Scofield, Tennyson *et al.* 2016).

Order SPHENISCIFORMES: Penguins

We follow J. Clarke *et al.* (2003) and Ksepka *et al.* (2006, 2012) in restricting the family Spheniscidae to the common ancestor of living penguin taxa plus *Marplesornis*, and the descendants of this common ancestor. Several subfamilies have been used in the past for fossil penguins (e.g. Simpson 1971, 1975). If families are intended to be monophyletic, at least 12 new families would be required to contain the known diversity among fossil penguins, based on phylogenetic diagrams presented by Ksepka *et al.* (2012) and G. Mayr *et al.* (2018). We have therefore placed all fossil penguin taxa, other than *Marplesornis* and modern genera, in Families *incertae sedis*.

New Zealand has a rich record of fossil penguins (24 named species in 20 genera) extending from the Paleocene through to the Holocene, as reviewed by Fordyce (1991a,b) and Fordyce & Jones (1990). Rich records of fossil penguins are also known from the Eocene of Seymour Island, Antarctica (e.g. Myrcha *et al.* 2002 and references therein); Patagonia in Argentina (Simpson 1972a, 1981; Cione & Tonni 1981; Cozzuol *et al.* 1993; Acosta Hospitaleche *et al.* 2004); Chile (Walsh & Hume 2001); and Perú (Noriega & Tambussi 1989; Stucchi 2002; Stucchi *et al.* 2003; Acosta Hospitaleche & Stucchi 2005). To date, no species or genera overlap in ranges between New Zealand and South America (Acosta Hospitaleche *et al.* 2004) and there is only limited co-occurrence of genera in Seymour Island, Australia and New Zealand (Fordyce 1991a,b; Myrcha *et al.* 2002). Common names of fossil species follow Checklist Committee (2010), apart from the more recently named Rosie's penguin, Stilwell's penguin, Waipara Crossvallia penguin, Bice's penguin, Maxwell's penguin, Waitaki penguin, Grebneff's penguin, and dawn crested penguin, plus Huxley's penguin used here for the first time.

Families *INCERTAE SEDIS*: Fossil penguinsGenus †*Waimanu* Jones, Ando & Fordyce

Waimanu Jones, Ando & Fordyce, 2006: in Slack *et al.*, *Molec. Biol. Evolution* 23(6): 1145 – Type species (by original designation) *Waimanu manningi* Jones, Ando & Fordyce, 2006.

- †*Waimanu manningi* Jones, Ando & Fordyce **Manning's Penguin**
Waimanu manningi Jones, Ando & Fordyce, 2006: in Slack *et al.*, *Molec. Biol. Evolution* 23(6): 1145 – Waipara River, North Canterbury.
 Known from the Teurian Stage (late early Palaeocene; 61.6–60.5 Ma), basal Waipara Greensand, Waipara River, Canterbury (Slack *et al.* 2006).

Genus †*Muriwaimanu* G. Mayr, De Pietri, Love, Manning & Scofield

Muriwaimanu G. Mayr, De Pietri, Love, Manning & Scofield, 2018: *Journ. Vert. Paleont.* 37(6: e1398169-3): 3 – Type species (by original designation) *Waimanu tuatahi* Ando, Jones & Fordyce.

- †*Muriwaimanu tuatahi* (Ando, Jones & Fordyce) **Waipara Penguin**
Waimanu tuatahi Ando, Jones & Fordyce, 2006: in Slack *et al.*, *Molec. Biol. Evolution* 23(6): 1146 – Waipara River, North Canterbury.
Muriwaimanu tuatahi (Ando, Jones & Fordyce); G. Mayr *et al.* 2018, *Journ. Vert. Paleont.* 37(6: e1398169-3): 3.
 Known from the Teurian Stage (late early Palaeocene; 60–58 Ma), middle-upper Waipara Greensand, Waipara River, Canterbury (Slack *et al.* 2006). Originally named as *Waimanu tuatahi*, this fossil species was considered to have sufficiently distinct tarsometatarsus morphology to be placed in its own genus by G. Mayr *et al.* (2018).

Genus †*Sequiwaimanu* G. Mayr, De Pietri, Love, Manning & Scofield

Sequiwaimanu G. Mayr, De Pietri, Love, Manning & Scofield, 2018: *Journ. Vert. Paleont.* 37(6: e1398169-3): 3 – Type species (by original designation) *Sequiwaimanu rosieae* G. Mayr, De Pietri, Love, Manning & Scofield.

- †*Sequiwaimanu rosieae* G. Mayr, De Pietri, Love, Manning & Scofield **Rosie's Penguin**
Sequiwaimanu rosieae G. Mayr, De Pietri, Love, Manning & Scofield, 2018: *Journ. Vert. Paleont.* 37(6: e1398169-3): 4 – Waipara River, North Canterbury.
 Described from a partial skeleton found in a late Teurian stage (late early Paleocene) deposit (61 Ma) at the Waipara River (G. Mayr *et al.* 2018).

Genus †*Kupoupou* Blokland, Reid, T. Worthy, Tennyson, Clarke & Scofield

Kupoupou Blokland, Reid, T. Worthy, Tennyson, Clarke & Scofield, 2019: *Palaeontologia Electronica* 22.3.78: 8 – Type species (by original designation) *Kupoupou stilwelli* Blokland, Reid, T. Worthy, Tennyson, Clarke & Scofield.

- †*Kupoupou stilwelli* Blokland, Reid, T. Worthy, Tennyson, Clarke & Scofield **Stilwell's Penguin**
Kupoupou stilwelli Blokland, Reid, T. Worthy, Tennyson, Clarke & Scofield, 2019: *Palaeontologia Electronica* 22.3.78: 16 – Maunganui Beach, Chatham Island.
 Described by Blokland *et al.* (2019) from several fossils found in late early-middle Paleocene (62.5–60 Ma) deposits east of Tahatika Creek, north-western Chatham Island.

Genus †*Crossvallia* Tambussi, Reguero, Marensi & Santillana

Crossvallia Tambussi, Reguero, Marensi & Santillana, 2005: *Geobios* 38: 669 – Type species (by original designation) *Crossvallia unienwillia* Tambussi, Reguero, Marensi & Santillana.

One species known from Seymour Island, Antarctica (Tambussi *et al.* 2005) and another New Zealand specimen tentatively referred to this genus.

- †?*Crossvallia waiparensis* G. Mayr, De Pietri, Love, Manning & Scofield **Waipara Crossvallia Penguin**
 ?*Crossvallia waiparensis* G. Mayr, De Pietri, Love, Manning & Scofield, 2019: *Alcheringa* 44: 195 – Waipara River, North Canterbury.
 Described from a fossil found in a Teurian Paleocene deposit (62–58 Ma), Waipara River, Canterbury (G. Mayr *et al.* 2019).

Genus †*Kumimanu* G. Mayr, Scofield, De Pietri & Tennyson

Kumimanu G. Mayr, Scofield, De Pietri & Tennyson, 2017: *Nature Communications* 8: 1927 (doi.org/10.1038/s41467-017-01959-6) 3 – Type species (by original designation) *Kumimanu biceae* G. Mayr, Scofield, De Pietri & Tennyson.

- †***Kumimanu biceae*** G. Mayr, Scofield, De Pietri & Tennyson **Bice's Penguin**
Kumimanu biceae G. Mayr, Scofield, De Pietri & Tennyson, 2017: *Nature Communications* 8: 1927 (doi.org/10.1038/s41467-017-01959-6) 3 – Hampden Beach, Otago.

Described from a partial skeleton from the late Paleocene Moeraki Formation (60–55 Ma) near Oamaru (G. Mayr *et al.* 2017).

Genus †***Kaiika*** Fordyce & Thomas

Kaiika Fordyce & Thomas, 2011: *New Zealand Journ. Geol. Geophys.* 54: 45 – Type species (by original designation) *Kaiika maxwelli* Fordyce & Thomas.

- †***Kaiika maxwelli*** Fordyce & Thomas **Maxwell's Penguin**
Kaiika maxwelli Fordyce & Thomas, 2011: *New Zealand Journ. Geol. Geophys.* 54: 45 – Waihao River, South Canterbury.

Known from a single fossil humerus cast from the early Eocene (c. 54 Ma), Waihao River, South Canterbury (Fordyce & Thomas 2011).

Genus †***Palaeudyptes*** Huxley

Palaeudyptes Huxley, 1859: *Quart. Journ. Geol. Soc. London* 15: 675 – Type species (by monotypy) *Palaeudyptes antarcticus* Huxley.

Eosphaenicus Wiman, 1905: *Bull. Geological Inst. Uppsala* 6: 250 – Type species (by monotypy) *Eosphaenicus Gunnari* Wiman = *Palaeudyptes gunnari* (Wiman).

Several indeterminate specimens from New Zealand, Australia, southern Chile, and Seymour Island (Antarctic Peninsula) have been referred to the genus (Hector 1872; Marples 1952, 1962; Simpson 1971, 1975; Fordyce 1991a,b; Sallaberry *et al.* 2010; Ksepka *et al.* 2012; T. Park & Fitzgerald 2012). Two extralimital fossil species, *Palaeudyptes klekowskii* Myrcha, Tatur & del Valle, 1990 and *P. gunnari* (Wiman, 1905) have been named from the Eocene La Meseta formation of Seymour Island, Antarctica (Myrcha *et al.* 2002).

- †***Palaeudyptes antarcticus*** Huxley **Huxley's Penguin**
Palaeudyptes antarcticus Huxley, 1859: *Quart. Journ. Geol. Soc. London* 15: 675 – Kakanui, near Oamaru.

Huxley (1859) named *Palaeudyptes antarcticus* from a tarsometatarsus (BMNH A1048) from Kakanui, North Otago. Oliver (1930) followed Hector (1872) in referring a second specimen (NMNZ S.1449, which includes a humerus) from Seal Rock (near Punakaiki) to the same taxon, for which Oliver coined the name ‘Narrow-flipped Penguin’. This nomenclature was followed by Checklist Committee (2010). Ksepka *et al.* (2012) considered that NMNZ S.1449 could not be assigned to a currently recognised genus, and placed it in “Sphenisciformes indet.” Further, Ksepka *et al.* (2012) accepted two specimens only within a much constrained *Palaeudyptes antarcticus*: the holotype, and a second tarsometatarsus from Burnside Quarry, Dunedin (OM GL430 (C47:17)). Therefore “Narrow-flipped penguin” is not an appropriate name for a taxon known from leg elements only. A name derived from Huxley’s specific epithet *antarcticus* is also not appropriate for a penguin known from the Otago Province only. We consider that a more appropriate name for *P. antarcticus* is Huxley’s penguin, in recognition of Thomas Huxley’s contribution in recognising and naming this, the first named fossil penguin.

Age uncertain within the range Whaingaroan Stage (early Oligocene; 34.3 Ma) to Waitakian Stage (late Oligocene–early Miocene; 21.7 Ma) (Simpson 1971; Fordyce & Jones 1990; Fordyce 1991a,b). Records of this taxon from Australia (Simpson 1957; Brodkorb 1963) are now referred to *Palaeudyptes* sp. indet. (Simpson 1971; R. Jenkins 1974). The referral of humeri from Seymour Island to this species (Tambussi *et al.* 2006) has been challenged by Jadwiszczak (2006b).

- †***Palaeudyptes marplei*** Brodkorb **Marples' Penguin**
Palaeudyptes cf. *antarcticus* Huxley, 1859; Marples 1952, *New Zealand Geol. Surv. Pal. Bull.* 20: 31.
Palaeudyptes marplei Brodkorb, 1963: *Bull. Florida State Museum (Biol. Sci.)* 7: 231 – Burnside, near Dunedin, Otago.

Known from a Kaiatan or Runangan Stage (late Eocene; 37.0–34.3 Ma) deposit at Burnside, Otago (Brodkorb 1963; Simpson 1971, 1975; Fordyce 1991a,b). A specimen from the Upper Eocene, Blanche Point Marls, Christie’s Beach, Adelaide, South Australia (South Australian Museum P.10870; Simpson 1957), was referred first to this taxon (Brodkorb 1963) but later to *Palaeudyptes* sp. indet. (Simpson 1971).

Genus †***Pachydyptes*** Oliver

Pachydyptes Oliver, 1930: *New Zealand Birds*, 1st edition: 85 – Type species (by original designation) *Pachydyptes ponderosus* Oliver.

Pachydyptes simpsoni Jenkins, 1974 from Australia was regarded as conspecific with *Anthropornis nordenskjöldii* Wiman, 1905 from Seymour Island (Fordyce 1991a; Vickers-Rich 1991). However, Simpson (1971: 347) considered *Anthropornis* Wiman, 1905 to be tentatively distinct from *Pachydyptes*. More recently, Ksepka & Clarke (2010) and T. Park & Fitzgerald (2012) concluded the generic position of *Pachydyptes simpsoni* to be uncertain.

- †***Pachydyptes ponderosus*** Oliver **New Zealand Giant Penguin**
Palaeodyptes antarcticus; Hector 1873, *Trans. Proc. N.Z. Inst.* 5: 438. Not *Palaeodyptes antarcticus* Huxley, 1859.
Pachydyptes ponderosus Oliver, 1930: *New Zealand Birds*, 1st edition: 86 – Fortification Hill, Oamaru.
Pachydyptes ponderosa Oliver; Lowe 1939, *Ibis* 3 (14th series): 282. Unjustified emendation.
Anthropornis ponderosus (Oliver); Lowe 1939, *Ibis* 3 (14th series): 291.
Anthropornis ponderosa (Oliver); Lowe 1939, *Ibis* 3 (14th series): 291. Unjustified emendation.
Anthropornis (Pachydyptes) ponderosus (Oliver); Lowe 1939, *Ibis* 3 (14th series): 292.
Anthropornis nordenskjöldii; Lowe 1939, *Ibis* 3 (14th series): 293. Not *Anthropornis nordenskjöldii* Wiman, 1905.
 Runangan Stage (late Eocene; 36.0–34.3 Ma); near Oamaru, Otago (Marples 1952; Brodkorb 1963; Simpson 1971, 1975; Fordyce 1991a,b).

Genus †***Kairuku*** Ksepka, Fordyce, Ando & Jones

Kairuku Ksepka, Fordyce, Ando & Jones, 2012: *Journ. Vert. Paleont.* 32: 239 – Type species (by original designation) *Kairuku waitaki* Ksepka, Fordyce, Ando & Jones.

- †***Kairuku waewaeroa*** Giovanardi, Ksepka & Thomas **Junats' Penguin**
Kairuku waewaeroa Giovanardi, Ksepka & Thomas, 2021: *Journ. Vert. Paleont.* 41: 4 – Kawhia Harbour.
 Described from a single skeleton from Kawhia Harbour, from the Oligocene, 35–27 Ma (Giovanardi *et al.* 2021). Junats is a constrictor of the Hamilton Junior Naturalist Club, who were involved in the discovery of the holotype; Junats' penguin should have an initial capital.
- †***Kairuku waitaki*** Ksepka, Fordyce, Ando & Jones **Waitaki Penguin**
Kairuku waitaki Ksepka, Fordyce, Ando & Jones, 2012: *Journ. Vert. Paleont.* 32: 239 – Waihao River, South Canterbury.
 Described from a single skeleton from the Waihao River, South Canterbury, from the late Oligocene, 27–26 Ma (Ksepka *et al.* 2012).
- †***Kairuku grebneffi*** Ksepka, Fordyce, Ando & Jones **Grebneff's Penguin**
Kairuku grebneffi Ksepka, Fordyce, Ando & Jones, 2012: *Journ. Vert. Paleont.* 32: 245 – Waipati catchment, North Otago.
 Known from two fossils from the late Oligocene, 27–26 Ma, from the Waipati catchment of the Maerewhenua River near Duntroon, North Otago, and a specimen from the bank of the Waihao River, South Canterbury (Ksepka *et al.* 2012).

Genus †***Platydyptes*** Marples

Platydyptes Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 37 – Type species (by original designation) *Pachydyptes novaezealandiae* Oliver = *Platydyptes novaezealandiae* (Oliver).

- †***Platydyptes marplei*** Simpson **Simpson's Penguin**
Platydyptes novaezealandiae (Oliver, 1930); Marples 1952, *New Zealand Geol. Surv. Pal. Bull.* 20: 38. In part.
 ? *Platydyptes marplei* Simpson, 1971: *Bull. Am. Mus. Nat. Hist.* 144 (5): 354 – Waitaki Valley, north Otago.
 ? *Platydyptes marplesigi*; Simpson 1975, in Stonehouse (Ed.) *Biology of Penguins*: 31. Unjustified emendation.
 “*Platydyptes*” *marplei* Simpson; Checklist Committee 1990, *Checklist Birds N.Z.*: 64.
 Known from a Duntroonian Stage (late Oligocene; 27.3–25.2 Ma) deposit; probably Wharekuri, Otago (Simpson 1971; Fordyce 1991a,b). Simpson (1971) assigned this species to *Platydyptes* but considered this assignation “quite doubtful”.
- †***Platydyptes novaezealandiae*** (Oliver) **Wide-flipped Penguin**
Pachydyptes novaezealandiae Oliver, 1930: *New Zealand Birds*, 1st edition: 86 – Oamaru district.
Pachydyptes novae-zelandiae Oliver; Lowe 1939, *Ibis* 3 (14th series): 282. Unjustified emendation.
Platydyptes novaezealandiae (Oliver); Marples 1952, *New Zealand Geol. Surv. Pal. Bull.* 20: 38. In part.
 Known from a Duntroonian to Waitakian Stage (late Oligocene–early Miocene; 27.3–21.7 Ma) deposit; Oamaru, Otago (Simpson 1971, Fordyce 1991b).
- †***Platydyptes amiesi*** Marples **Amies' Penguin**
Platydyptes amiesi Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 39 – Hakataramea Valley, South Canterbury.
 Known from Duntroonian to Waitakian Stage (late Oligocene–early Miocene; 27.3–21.7 Ma) deposits; Hakataramea (Canterbury), and Duntroon (Otago) (Marples 1952; Fordyce 1991a,b). Known from many specimens (Fordyce 2003).

Genus †***Archaeospheniscus*** Marples

Archaeospheniscus Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 40 – Type species (by original designation) *Archaeospheniscus lowei* Marples.
Notodyptes Marples, 1953: *Falkland Islands Dependencies Survey Scientific Reports* 5: 11 – Type species (by original designation) *Notodyptes wimani* Marples = *Archaeospheniscus wimani* (Marples).

An extralimital fossil species, *Archaeospheniscus wimani* (Marples, 1953), is known from the Eocene in La Meseta Formation of Seymour Island, Antarctica (Myrcha *et al.* 2002; Jadwiszczak 2006a).

► †***Archaeospheniscus lowei*** Marples **Lowe's Penguin**

Archaeospheniscus lowei Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 41 – Duntroon, North Otago.

Known from Duntroonian Stage (late Oligocene; 27.3–25.2 Ma) deposits; Duntroon, Otago (Marples 1952; Fordyce 1991a,b).

► †***Archaeospheniscus lopdellorum*** Marples **Lopdells' Penguin**

Archaeospheniscus lopdelli Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 41 – Duntroon, North Otago.

Archaeospheniscus lopdellorum Marples, 1952; Tennyson *et al.* 2010, *Notornis* 57: 54. Emendation.

Known from Duntroonian Stage (late Oligocene; 27.3–25.2 Ma) deposits; Duntroon, Otago (Marples 1952; Fordyce 1991a,b). The referral of humeri from Seymour Island, Antarctica, to this species (Tambussi *et al.* 2006) has been challenged by Jadwiszczak (2006b).

The specific name should be *A. lopdellorum* (Lopdells' penguin) rather than *A. lopdelli* (Lopdell's penguin) (see Tennyson *et al.* 2010).

Genus †*Duntroonornis* Marples

Duntroonornis Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 42 – Type species (by original designation) *Duntroonornis parvus* Marples.

► †***Duntroonornis parvus*** Marples **Duntroon Penguin**

Duntroonornis parvus Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 42 – Duntroon, North Otago.

Known from Duntroonian Stage (late Oligocene; 27.3–25.2 Ma) deposits; Duntroon, Otago (Marples 1952; Fordyce 1991a,b). Possibly also Waitakian Stage (late Oligocene–early Miocene; 25.2–21.7 Ma) deposits at Hakataramea Valley, South Canterbury (Fordyce & Jones 1990).

Genus †*Korora* Marples

Korora Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 43 – Type species (by original designation) *Korora oliveri* Marples.

► †***Korora oliveri*** Marples **Oliver's Penguin**

Korora oliveri Marples, 1952: *New Zealand Geol. Surv. Pal. Bull.* 20: 43 – Hakataramea Valley, South Canterbury.

Known from Waitakian Stage (late Oligocene–early Miocene; 25.2–21.7 Ma) deposits; Hakataramea Valley, South Island (Marples 1952; Fordyce & Jones 1990; Fordyce 1991a,b).

Family SPHENISCIDAE Bonaparte: Penguins

Spheniscidae Bonaparte, 1831: *Giornale Arcadico di Scienze, Lettere ed Arti* 49: 62 – Type genus *Spheniscus* Brisson, 1760.

We follow J. Clarke *et al.* (2003) and Ksepka *et al.* (2006, 2012) in restricting the family Spheniscidae to the common ancestor of living penguin taxa plus *Marplesornis*, and the descendants of this common ancestor.

Scarlett (1984) proposed the name *Tereingaornis moisleyi* for Waipipian Stage (Pliocene; 3.6–3.0 Ma), Hawke's Bay penguin fossils that he considered to be closely related to, if not congeneric with, *Spheniscus*. McKee (1988) referred two Taranaki fossils to the same genus and species. However, Thomas, Ksepka *et al.* (2020) showed that fossils referred to *Tereingaornis* could not be distinguished from either *Eudyptes* or *Megadyptes*, and so we regard both *Tereingaornis* and *T. moisleyi* as *nomina dubia*.

Genus †*Marplesornis* Simpson

Marplesornis Simpson, 1972: *Rec. Cant. Museum* 9: 162 – Type species (by original designation) *Palaeospheniscus novaezealandiae* Marples = *Marplesornis novaezealandiae* (Marples).

► †***Marplesornis novaezealandiae*** (Marples) **Harris' Penguin**

Palaeospheniscus novaezealandiae Marples, 1960: *Rec. Cant. Museum* 7: 194 – Motunau Beach, North Canterbury.

Marplesornis novaezealandiae (Marples); Simpson 1972, *Rec. Cant. Museum* 9: 162.

Age uncertain, within the range Otaian to Waipipian Stage (early Miocene–Pliocene; 21.7–3.0 Ma), probably late Pliocene; Motunau, North Canterbury (Simpson 1972b; Fordyce 1991a,b).

Genus *Aptenodytes* J.F. Miller

Aptenodytes J.F. Miller, 1778: *Icones Animalium* 4: pl. 23 – Type species (by monotypy) *Aptenodytes patagonicus* J.F. Miller.

► †***Aptenodytes ridgeni*** Simpson **Ridgen's Penguin**

Aptenodytes ridgeni Simpson, 1972: *Rec. Cant. Museum* 9: 167 – Motunau Beach, North Canterbury.

Age uncertain within the range Otaian to Waipipian Stage (early Miocene–Pliocene; 21.7–3.0 Ma), probably late Pliocene; Motunau, North Canterbury (Simpson 1972b; Fordyce 1991a,b).

Genus *Pygoscelis* Wagler

Pygoscelis Wagler, 1832: *Isis von Oken*, Heft 2: col. 281 – Type species (by monotypy) *Aptenodytes papua* J.R. Forster = *Pygoscelis papua* (J.R. Forster).

► †*Pygoscelis tyreei* Simpson

Tyree's Penguin

Pygoscelis tyreei Simpson, 1972: *Rec. Cant. Museum* 9: 166 – Motunau Beach, North Canterbury.

Age uncertain within the range Otaian to Waipipian Stage (early Miocene–Pliocene; 21.7–3.0 Ma), probably late Pliocene; Motunau, North Canterbury (Simpson 1972b; Fordyce 1991a,b).

Genus *Eudyptes* Vieillot

Eudyptes Vieillot, 1816 (Apr.): *Analyse Nouv. Ornith. Elem.*: 67, 70 – Type species (by subsequent designation) *Aptenodytes chrysocome* J.R. Forster = *Eudyptes chrysocome* (J.R. Forster).

► †*Eudyptes atatu* Thomas, Tennyson, Scofield & Ksepka

Dawn Crested Penguin

Eudyptes atatu Thomas, Tennyson, Scofield & Ksepka, 2020: *Proc. R. Soc. B* 287(1932): 2 – southern Taranaki.

Described from multiple well-preserved late Pliocene (3.36–3.06 Ma) fossils from southern Taranaki (Thomas, Tennyson *et al.* 2020).

Genus *Eudyptula* Bonaparte

Eudyptula Bonaparte, 1856: *Compt. Rend. Séa. Acad. Sci., Paris* 42: 775 – Type species (by monotypy) *Aptenodytes minor* J.R. Forster = *Eudyptula minor* (J.R. Forster).

The reference to a “*Eudyptula* fossil in New Zealand about 24 mya” (A. Baker *et al.* 2006) appears to refer to a specimen of a small penguin that has no close affinity with *Eudyptula*, as discussed by Fordyce & Jones (1990), Fordyce (1991b), and Acosta Hospitaleche *et al.* (2004).

► *Eudyptula minor* (J.R. Forster)

Little Penguin

Aptenodytes minor J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 135, 147 – Dusky Sound, Fiordland and Queen Charlotte Sound, Marlborough Sounds.

Eudyptula minor (J.R. Forster); Simpson 1975, in Stonehouse, B. (Ed.) *Biology of Penguins*: 23, 26.

Possible late Pliocene record (Simpson 1975). This species is extant.

Order PROCELLARIIFORMES: Albatrosses, Petrels, and Shearwaters

Family DIOMEDEIDAE G.R. Gray: Albatrosses

Genus †*Aldiomedes* G. Mayr & Tennyson

Aldiomedes G. Mayr & Tennyson, 2019: *Ibis* 162: 724 – Type species (by original designation) *Aldiomedes angustirostris* G. Mayr & Tennyson, 2019.

► †*Aldiomedes angustirostris* G. Mayr & Tennyson

Alastair's Albatross

Aldiomedes angustirostris G. Mayr & Tennyson, 2019: *Ibis* 162: 724 – Ohawe Beach, south Taranaki.

Known only from a fossil skull found in a late Pliocene (3.4–3.0 Ma) deposit on the south Taranaki coast (G. Mayr & Tennyson, 2019).

Family PROCELLARIIDAE Leach: Fulmars, Petrels, Prions, and Shearwaters

Genus *Procellaria* Linnaeus

Procellaria Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 131 – Type species (by subsequent designation) *Procellaria aequinoctialis* Linnaeus.

► †*Procellaria altirostris* Tennyson & Tomotani

Deep-billed Petrel

Procellaria altirostris Tennyson & Tomotani, 2021: *Pap. Avulsos Zool.* 61: e20216116: 4 – Ohawe Beach, south Taranaki.

Known from a late Pliocene (3.6–3.0 Ma) partial skeleton found on the south Taranaki coast (Tennyson & Tomotani 2021b).

Genus ***Ardenna*** Reichenbach

Ardenna Reichenbach, 1853: *Handb. Spec. Ornith* 3: iv – Type species (by original designation and monotypy) *Puffinus major* (Faber) = *Ardenna gravis* (O'Reilly).

N. Henderson & Gill (2010) described a shearwater skull similar in size and proportions to “*Puffinus pacificus*” (now *Ardenna pacifica*) from a mid-Pliocene deposit near Taihape, North Island.

► †***Ardenna davealleni*** Tennyson & Mannering **Pom's Shearwater**

Ardenna davealleni Tennyson & Mannering, 2018: *Tuhinga* 29: 3 – Ohawe Beach, south Taranaki.

Known from two late Pliocene (3.4–3.0 Ma) partial skeletons found on the south Taranaki coast (Tennyson & Mannering 2018).

Genus ***Pelecanoides*** La Cépède

Pelecanoides La Cépède, 1799: *Tableaux Method. Mamm. Oiseaux*: 13 – Type species (by monotypy) *Procellaria urinatrix* Gmelin = *Pelecanoides urinatrix* (Gmelin).

An indeterminate *Pelecanoides* specimen qualitatively distinct from modern taxa was reported from the Waiauan, middle Miocene, Double Corner Shell Beds of North Canterbury (Scofield *et al.* 2006). It is represented by elements not yet known for *P. miokuaka* and so direct comparison is not yet possible.

► †***Pelecanoides miokuaka*** T. Worthy, Tennyson, Jones, McNamara & Douglas **Miocene Diving Petrel**

Pelecanoides miokuaka T. Worthy, Tennyson, Jones, McNamara & Douglas, 2007: *Journ. Syst. Palaeont.* 5(1): 8, figs 3A, D – St Bathans, Central Otago.

Known from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, from the lower Bannockburn Formation, Manuherikia Group; near St Bathans, Otago (Worthy *et al.* 2007).

Order **PELECANIFORMES**: Pelicans, Herons, and IbisesFamily **ARDEIDAE** Leach: Herons & BitternsSubfamily **ARDEINAE** Leach: Herons and EgretsGenus †***Matuku*** Scofield, T. Worthy & Tennyson

Matuku Scofield, T. Worthy & Tennyson, 2010: *Rec. Aust. Mus.* 62: 93 – Type species (by original designation) *Matuku otagoense* Scofield, T. Worthy & Tennyson.

► †***Matuku otagoense*** Scofield, T. Worthy & Tennyson **St Bathans Heron**

Matuku otagoense Scofield, T. Worthy & Tennyson, 2010: *Rec. Aust. Mus.* 62: 93 – St Bathans, Central Otago.

Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Scofield, Worthy *et al.* 2010).

Subfamily **BOTAURINAE** Reichenbach: BitternsGenus †***Pikaihao*** T. Worthy, J. Worthy, Tennyson & Scofield

Pikaihao T. Worthy, J. Worthy, Tennyson & Scofield, 2013: *Palaeont. Journ.* 47: 1333 – Type species (by original designation) *Pikaihao bartlei* T. Worthy, J. Worthy, Tennyson & Scofield.

► †***Pikaihao bartlei*** T. Worthy, J. Worthy, Tennyson & Scofield **Bartle's Bittern**

Pikaihao bartlei T. Worthy, J. Worthy, Tennyson & Scofield, 2013: *Palaeont. Journ.* 47: 1333 – St Bathans, Central Otago.

Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy, Worthy, Tennyson & Scofield 2013).

Order **PSITTACIFORMES**: Cockatoos, Parrots, and ParakeetsFamily **STRIGOPIDAE** Bonaparte: Kākāpō, and Kākā and KeaSubfamily **INCERTAE SEDIS**Genus †**Heracles** T. Worthy, Hand, Archer, Scofield & De Pietri

Heracles T. Worthy, Hand, Archer, Scofield & De Pietri, 2019: *Biology Letters* 15: 3 – Type species (by original designation)
Heracles inexpectatus T. Worthy, Hand, Archer, Scofield & De Pietri.

- †**Heracles inexpectatus** T. Worthy, Hand, Archer, Scofield & De Pietri **St Bathans Giant Parrot**
Heracles inexpectatus T. Worthy, Hand, Archer, Scofield & De Pietri, 2019: *Biology Letters* 15: 3 – Manuherikia River, Otago.
 Known from two partial tibiotarsi from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy *et al.* 2019, 2021).

Subfamily **NESTORINAE** Bonaparte: Kākā and Kea

Nestoridae Bonaparte, 1849: *Consp. Syst. Ornith.*: 1 – Type genus *Nestor* Lesson, 1830.

Genus †**Nelepsittacus** T. Worthy, Tennyson & Scofield

Nelepsittacus T. Worthy, Tennyson & Scofield, 2011: *Journ. Vert. Paleont.* 31: 1104 – Type species (by original designation)
Nelepsittacus minimus T. Worthy, Tennyson & Scofield.

We recognise genus *Nelepsittacus* as part of subfamily Nestorinae (cf. Worthy *et al.* 2011b, who treated Nestoridae as a family).

- †**Nelepsittacus minimus** T. Worthy, Tennyson & Scofield **Little St Bathans Parrot**
Nelepsittacus minimus T. Worthy, Tennyson & Scofield, 2011: *Journ. Vert. Paleont.* 31: 1104 – St Bathans, Central Otago.
 Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy *et al.* 2011b).
- †**Nelepsittacus donmertoni** T. Worthy, Tennyson & Scofield **Merton's Parrot**
Nelepsittacus donmertoni T. Worthy, Tennyson & Scofield, 2011: *Journ. Vert. Paleont.* 31: 1110 – St Bathans, Central Otago.
 Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy *et al.* 2011b).
- †**Nelepsittacus daphneleeae** T. Worthy, Tennyson & Scofield **Lee's Parrot**
Nelepsittacus daphneleeae T. Worthy, Tennyson & Scofield, 2011: *Journ. Vert. Paleont.* 31: 1112 – St Bathans, Central Otago.
 Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy *et al.* 2011b).

Order **PASSERIFORMES**: Passerine (Perching) BirdsFamily **ACANTHISITTIDAE** Sundevall: New Zealand WrensGenus †**Kuiornis** T. Worthy, Hand, Nguyen, Tennyson, J. Worthy, Scofield, Boles & Archer

Kuiornis T. Worthy, Hand, Nguyen, Tennyson, J. Worthy, Scofield, Boles & Archer, 2010: *Journ. Vert. Paleont.* 30: 482 – Type species (by original designation) *Kuiornis indicator* T. Worthy, Hand, Nguyen, Tennyson, J. Worthy, Scofield, Boles & Archer.

- †**Kuiornis indicator** T. Worthy, Hand, Nguyen, Tennyson, J. Worthy, Scofield, Boles & Archer **St Bathans Wren**
Kuiornis indicator T. Worthy, Hand, Nguyen, Tennyson, J. Worthy, Scofield, Boles & Archer, 2010: *Journ. Vert. Paleont.* 30: 482 – St Bathans, Central Otago.
 Known from fossil remains from the Altonian Stage (early Miocene; 19–16 Ma) St Bathans assemblage, Otago (Worthy, Hand *et al.* 2010).

INCERTAE SEDIS
Order (unknown)

Genus †*Manu* Marples

Manu Marples, 1946: *Trans. Roy. Soc. N.Z.* 76: 133 – Type species (by monotypy) *Manu antiquus* Marples.

The former placement of *Manu* in family Diomedidae (order Procellariiformes), based on a part furcula (being the only material available) is uncertain (Olson 1985b). G. Mayr (2009) suggested that *Manu antiquus* was possibly a pelagornithid, but see G. Mayr & Rubilar-Rogers (2010).

► †*Manu antiquus* Marples (bird of unknown affinities)

Manu antiquus Marples, 1946: *Trans. Roy. Soc. N.Z.* 76: 133 – Duntroon, North Otago.

Known from a middle to late Oligocene deposit, near Duntroon, North Otago (Marples 1946b).

Genus †*Australornis* G. Mayr & Scofield

Australornis G. Mayr & Scofield, 2014: *Journ. Roy. Soc. N.Z.* 44: 49 – Type species (by original designation) *Australornis lovei* G. Mayr & Scofield.

► †*Australornis lovei* G. Mayr & Scofield Love's Paleocene Seabird

Australornis lovei G. Mayr & Scofield, 2014: *Journ. Roy. Soc. N.Z.* 44: 49 – Waipara River, North Canterbury.

Known from one fossil only, from the Waipara River, North Canterbury, from a late early Paleocene deposit, 61.6–60.5 Ma (G. Mayr & Scofield 2014).

APPENDIX 2

Failed Introductions of Foreign Birds to New Zealand

This appendix lists introduced foreign birds that failed to become established in New Zealand, under three categories:

1. Deliberately or accidentally released but the presence of the species may (or may also) have been natural.
2. Release documented, but with no record of reproduction in the wild.
3. Deliberate introduction documented, and published records indicate the species bred (or probably bred), but it is no longer extant.

Section 1

Species that are not established, that are assumed to have been deliberately or accidentally released in New Zealand, but for which there is some possibility that their presence may (or may also) have been natural.

CUCULIDAE

Genus *Eudynamys* Vigors & Horsfield

Eudynamys Vigors & Horsfield, 1826: *Trans. Linn. Soc. London* 15(1): 303 – Type species (by subsequent designation) *Cuculus orientalis* Linnaeus = *Eudynamys orientalis* (Linnaeus).

Eudynamys species uncertain

A single specimen of a koel *Eudynamys* sp. was found at Lees Valley, Canterbury, Mar. 1997 (Medway 2001a). Specimen originally believed to be of Australian origin and, therefore, self-introduced. However, it shows measurements and plumage more typical of Asian koel *Eudynamys scolopacea* (Linnaeus, 1758) (R.B. Payne pers. comm. to P. Scofield, 2005). Due to its age and sex (1st winter male moulting into 1st summer plumage) it is not possible at present to determine which population it originated from. Most *Eu. scolopacea* populations are sedentary, and so the New Zealand bird may have arrived on a ship at nearby Lyttelton Harbour / Whakaraupō. Taxonomy unsettled, split by Mason (1997: 248) into Pacific koel *Eu. orientalis* (Linnaeus, 1766) and Asian koel *Eu. scolopacea*.

SPHENISCIDAE

Spheniscus magellanicus (J.R. Forster)

Magellanic Penguin

Aptenodytes magellanicus J.R. Forster, 1781: *Comment. Phys. Soc. Reg. Sci. Gottingensis* 3: 134, 143, pl. 5 – Straits of Magellan, South America.

Aptenodytes magellanica [sic] J.R. Forster, 1844: in M.H.C. Lichtenstein, *Descrip. Animalium*: 351 – Tierra del Fuego, Falkland Islands, Staten Island, and Straits of Magellan, South America. Junior primary homonym and junior synonym of *Aptenodytes magellanicus* J.R. Forster, 1781.

Spheniscus magellanicus (J.R. Forster); Checklist Committee 1980, *Notornis (Suppl.)* 27: 6.

Breeds on islands and coasts of southern South America, and on Falkland and Juan Fernandez Islands (Boswall & MacIver 1975; Marchant & Higgins 1990). Migrates generally northward in the non-breeding season, sometimes as far as Perú and southern Brazil (Marchant & Higgins 1990). Two New Zealand records: Mar. 1972, beach at Waimarama, Hawke's Bay (C. Robertson *et al.* 1972); and Mar. 1990, Otago Harbour (Darby 1991; Guest 1991). Magellanic penguins are typically timid; the bold behaviour of both these birds indicated previous habituation to humans, and so they may have reached New Zealand by ship (C. Robertson *et al.* 1972; Darby 1991; Guest 1991).

Section 2

Species for which a viable release has been documented, but with no record of reproduction in the wild.

Checklist Committee (2010) incorrectly listed that ‘a viable release’ of the squatter pigeon (*Geophaps scripta*) had occurred when there is no record of the species being released (Thomson 1922). Long (1981) incorrectly ascribed this record to the partridge pigeon *Geophaps smithii* (Jardine & Selby, 1830). A pair of “Australian owls” of unknown species (but considered likely to be southern boobooks *Ninox boobook* by Checklist Committee (2010)) was released at Waikouaiti but failed to establish (Thomson 1922).

DROMAIIDAE

Dromaius novaehollandiae (Latham)

Emu

Casuaris N. Hollandiae Latham, 1790: *Index Ornith.* 2: 665 – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (fide Mathews 1910, *Birds Australia* 1: 3).

Dromaius novae-hollandiae; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 99.

Dromaius novaehollandiae (Latham); Condon 1975, *Checklist Birds Australia* 1: 1.

Introduced to Kawau Island in 1868 but “all died” (Thomson 1922). Subspecies not known.

ANATIDAE

Branta hutchinsii (Richardson)

Cackling Goose

Anser Hutchinsii Richardson, 1832: in Swainson & Richardson, *Fauna Boreali-Americana, Birds* 2: 470 – Melville Peninsula, Canada.

Branta canadensis hutchinsii (Richardson); Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 443.

Branta hutchinsii (Richardson); R.C. Banks *et al.* 2004, *Auk* 121: 986.

R.C. Banks *et al.* (2004) split the Canada goose (*Branta canadensis* (Linnaeus)) into two species: Canada goose (*B. canadensis*) and cackling goose (*B. hutchinsii*). The larger subspecies previously recognised (*B. c. maxima*) is included under *B. canadensis*, with the smaller subspecies included under *B. hutchinsii*. The surviving birds in New Zealand are from the *B. c. maxima* stock (see Imber 1971), now included in *B. canadensis (sensu stricto)*, but some of the many independent introductions made by local Acclimatisation Societies were of the smaller species.

Anser caerulescens caerulescens (Linnaeus)

Lesser Snow Goose

Anas caerulescens Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 124 – Canada, restricted to Hudson Bay (fide Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 439).

Anser hyperboreus Pallas, 1769: *Spicilegia Zool.* 6: 25 – north-eastern Siberia.

Chen hyperboreus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 106.

Anser caerulescens caerulescens (Linnaeus); Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 439.

Released at Matamata in the late 1870s but failed to establish (Thomson 1922).

Biziura lobata (Shaw)

Musk Duck

Anas lobata Shaw, 1796: in Shaw & Nodder, *Nat. Miscell.* 8: pl. 255 and text – New South Wales, error for King George Sound, Western Australia (fide Mathews 1915, *Birds Australia* 4: 143).

Biziura lobata (Shaw); Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 504.

A. Hamilton (1909) listed the species as “established”, but it was not mentioned by Thomson (1922).

Aix galericulata (Linnaeus)

Mandarin Duck

Anas galericulata Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 128 – China.

Aix galericulata; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 103.

Aix galericulata (Linnaeus); Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 457.

Released in Canterbury (1871, 1885), Otago (1907), and possibly elsewhere, but failed to establish (Thomson 1922).

Anas crecca Linnaeus

Common Teal

Anas Crecca Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 126 – Europe, restricted to Sweden (fide Linnaeus 1761, *Fauna Svecica*, 2nd edition: 45).

Nettion crecca; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 100.

Anas crecca Linnaeus; Johnsgard 1979, in Peters *Check-list Birds World* 1, 2nd edition: 464.

Released in Wellington, Canterbury, Nelson, and elsewhere (1897) but failed to establish (Thomson 1922).

Mareca penelope (Linnaeus) **Eurasian Widgeon**
Anas penelope Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 126 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 44).
Mareca penelope; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 100.
Anas penelope Linnaeus; Johnsgard 1979, in *Peters Check-list Birds World 1*, 2nd edition: 462.
 Released on Lake Kaniere, Westland (1904), but failed to establish (Thomson 1922).

Aythya ferina (Linnaeus) **Common Pochard**
Anas ferina Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 126 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 45).
Anas Ferina Linnaeus; A. Hamilton 1909, *Hand-list Birds New Zealand*: 19.
Nyroca ferina; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 99.
Aythya ferina (Linnaeus); Johnsgard 1979, in *Peters Check-list Birds World 1*, 2nd edition: 483.
 Released in Wellington (1894, 1895), Taranaki (1898), and elsewhere, but failed to establish (Thomson 1922).

Aythya (fuligula?) (Linnaeus) **Indian Black Duck**
Anas Fuligula Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 128 – Europe, restricted to Sweden (*vide* Linnaeus 1761, *Fauna Svecica*, 2nd edition: 47).
Anas cristata J.B. Fischer, 1778: *Versuch Natur. Livland*: 81 – Eurasia.
 “Black Indian Duck” *Fuligula cristata*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 103.
Aythya fuligula (Linnaeus); Johnsgard 1979, in *Peters Check-list Birds World 1*, 2nd edition: 486.
 Long (1981) considered that the “Indian black duck (golden-eye)” released at Lake Okareka (1906) that failed to establish (Thomson 1922) belonged to this species. However, it could have been any of several species of *Aythya* from India, for example, the ferruginous pochard, *Aythya nyroca* Guldenstadt, 1770 (Checklist Committee 2010).

MEGAPODIIDAE

Alectura lathami J.E. Gray **Australian Brush-turkey**
Alectura lathami J.E. Gray, 1831: *Zool. Miscell. 1*: 4 – near Sydney, New South Wales, Australia.
Tallegallus lathami (J.E. Gray); Hutton 1871, *Cat. Birds N.Z.*: 65.
Catheturus lathami; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 107.
Alectura lathami J.E. Gray; Condon 1975, *Checklist Birds Australia 1*: 92.
 Released at Kaipara (before 1869), but failed to establish (Thomson 1922). Subspecies not known, but probably *A. l. lathami* from south-east Queensland (Checklist Committee 2010).

ODONTOPHORIDAE

Oreortyx pictus (Douglas) **Mountain Quail**
Oryx picta Douglas, 1829: *Phil. Magaz. (new series) 5*: 74 – “Interior of New California” = headwaters of the Umpqua River near the Calapooia Mountains, USA (*vide* Peters 1934, *Check-list Birds World 2*: 43).
Oreortyx pictus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 119.
Oreortyx picta (Douglas); Peters 1934, *Check-list Birds World 2*: 43.
Oregon pictus (Douglas); McDowall 1994, *Gamekeepers for the Nation*: 326.
 Released at Matamata (1877), Lake Omapere in Northland (1881), south of Dunedin and northern Southland (1881), and in the Rock and Pillar Range (1882), but failed to establish (Thomson 1922). Subspecies not known.

PHASIANIDAE

Coturnix coturnix coturnix (Linnaeus) **Eurasian Quail**
Tetrao Coturnix Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 161 – Europa, Asia, and Africa, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World 2*: 92).
 “Egyptian Quail (species?)”; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 120.
Coturnix coturnix coturnix (Linnaeus); McGowan in del Hoyo *et al.* 1994, *Handb. Birds World 2*: 509.
 Released in the Waitaki River valley (c. 1883) and Auckland (before 1914), but failed to establish (Thomson 1922).

Coturnix coromandelica (Gmelin) **Rain Quail**
Tetrao coromandelicus Gmelin, 1789: *Syst. Nat., 13th edition 1(2)*: 764. Based on the “Coromandel Quail” of Latham 1783, *Gen. Synop. Birds 2(2)*: 789 – Coromandel Coast, India.
Coturnix coromandelica; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 120.
Coturnix coromandelica (Gmelin); McDowall 1994, *Gamekeepers for the Nation*: 326.

Recorded in McDowall (1994) as introduced to Otago (c. 1880) “without successful establishment”; however, Thomson (1922; as Indian quail) questioned whether any were released.

Coturnix pectoralis Gould

Stubble Quail

Coturnix pectoralis Gould, 1837: *Synop. Birds Australia* 2: pl. 29, fig. 1 – Sydney, New South Wales, Australia.

Coturnix pectoralis Gould; Hutton 1871, *Cat. Birds N.Z.*: 67.

Coturnix pectoralis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 119.

Introduced to Auckland and Canterbury (F. Hutton 1871), and subsequently to the Hokianga (Kemp in Thomson 1922), but failed to establish (Thomson 1922). Subspecies not known, but probably *C. p. pectoralis* from eastern Australia (Checklist Committee 2010). The stubble quail and New Zealand quail (*C. novaezelandiae*, q.v.) have sometimes been regarded as subspecies of the same species (e.g. Checklist Committee 1990), but are now considered specifically distinct.

Synoicus chinensis chinensis (Linnaeus)

Asian Blue-breasted Quail

Tetrao chinensis Linnaeus, 1766: *Syst. Nat., 12th edition* 1: 277 – China and Philippines, restricted to Nanking, China (*vide* Peters 1934, *Check-list Birds World* 2: 95).

Excalfphatoria [sic] *sinensis*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 118. Unjustified emendation.

Excalfactoria chinensis chinensis (Linnaeus); Peters 1934, *Check-list Birds World* 2: 95.

Excalfphatoria [sic] *sinensis*; McDowall 1994, *Gamekeepers for the Nation*: 326. Unjustified emendation.

Coturnix chinensis chinensis (Linnaeus); McGowan in del Hoyo *et al.* 1994, *Handb. Birds World* 2: 511.

Excalfactoria chinensis (Linnaeus); Christidis & Boles 2008, *Syst. Taxon. Australian Birds*: 14, 61.

Synoicus chinensis chinensis (Linnaeus); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 34.

Recorded in McDowall (1994) as introduced to Otago “without successful establishment”; however, Thomson (1922) did not document any release.

Tragopan temminckii (J.E. Gray)

Temminck’s Tragopan

Satyra Temminckii J.E. Gray, 1831: in Hardwicke, *Illust. Indian Zool.* 1(9): pl. 50 – no locality = China (*vide* Peters 1934, *Check-list Birds World* 2: 109).

Cerionis temminckii; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 117.

Tragopan temminckii (J.E. Gray); Peters 1934, *Check-list Birds World* 2: 109.

Two apparently released in Auckland, but failed to establish (Thomson 1922).

Syrmaticus reevesii (J.E. Gray)

Reeves’ Pheasant

Phasianus Reevesii J.E. Gray, 1829: in E. Griffith, *Anim. Kingdom* 8 (Aves, 3): 25 – China.

Phasianus reevesii; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 117.

Syrmaticus reevesii (J.E. Gray); Peters 1934, *Check-list Birds World* 2: 128.

Released “up the Wanganui River” (c. 1899), but failed to establish (Thomson 1922).

Chrysolophus pictus (Linnaeus)

Golden Pheasant

Phasianus pictus Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 158 – China.

Thaumalea picta (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 69.

Chrysolophus pictus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 110.

Chrysolophus pictus (Linnaeus); Peters 1934, *Check-list Birds World* 2: 130.

Imported by Auckland, Wellington, Christchurch, and Otago Acclimatisation Societies. Thomson (1922) stated, “I do not think these birds were liberated at any time”. However, A. Hamilton (1909) listed it as introduced and established.

Lophura nycthemera (Linnaeus)

Silver Pheasant

Phasianus nycthemerus Linnaeus, 1758: *Syst. Nat., 10th edition* 1: 159 – China.

Gallophasis nycthemerus (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 69.

Gennaues nycthemerus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 117.

Lophura nycthemera (Linnaeus); Howard & Moore 1991, *Complete Checklist Birds World*, 2nd edition: 54.

Released before 1868 near Whangarei (R. Taylor 1868), but failed to establish (Thomson 1922).

Lagopus lagopus scotica (Latham)

Red Grouse

Tetrao scoticus Latham, 1789: *Gen. Synop. Birds, Suppl.* 1: 290 – Scotland.

Lagopus scoticus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 128.

Lagopus scoticus (Latham); Peters 1934, *Check-list Birds World* 2: 30.

Lagopus lagopus scotica (Latham); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 45.

Introduced to Matamata (1872, 1873) but failed to establish (Thomson 1922).

Lyrurus tetrrix (Linnaeus)**Black Grouse**

Tetrao Tetrrix Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 159 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World 2*: 27)

Lyrurus tetrrix; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 128.

Lyrurus tetrrix (Linnaeus); Peters 1934, *Check-list Birds World 2*: 27.

Introduced to south Otago (1879) but failed to establish (Thomson 1922). Subspecies not known, but probably *L. t. britannicus* Witherby & Lonnberg, 1913, from Great Britain (Checklist Committee 2010).

Tympanuchus phasianellus (Linnaeus)**Sharp-tailed Grouse**

Tetrao Phasianellus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 160 – Canada, restricted to Hudson Bay, North America (*vide* Peters 1934, *Check-list Birds World 2*: 40).

Pedioecetes phasianellus (Linnaeus); G. Williams 1969, *Natural History Canterbury*: 442.

Tympanuchus phasianellus (Linnaeus); Howard & Moore 1991, *Complete Checklist Birds World*, 2nd edition: 44.

Birds of unspecified subspecies were released in South Canterbury in 1927, but were not seen again (G. Williams 1969).

Tympanuchus phasianellus columbianus (Ord)**Columbian Sharp-tailed Grouse**

Phasianus Columbianus Ord, 1815: *in* Guthrie, *Geography*, 2nd edition, 2: 317 – Great Plains of the Columbia River.

Podioecetus [sic] *columbianus*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 129.

Pedioecetes phasianellus columbianus (Ord); Peters 1934, *Check-list Birds World 2*: 40.

Tympanuchus phasianellus columbianus (Ord); Howard & Moore 1991, *Complete Checklist Birds World*, 2nd edition: 44.

Introduced to Piako (1876), but failed to establish (Thomson 1922).

Tympanuchus cupido pinnatus (Brewster)**Greater Prairie-chicken**

Cupidonia pinnata Brewster, 1885: *Auk* 2: 82 – Vermilion, South Dakota, USA.

Tympanuchus americanus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 127. Not *Cupidonia americana* Reichenbach, 1853.

Tympanuchus cupido pinnatus (Brewster); Peters 1934, *Check-list Birds World 2*: 41.

Tympanuchus cupido; G. Williams 1969, *Natural History Canterbury*: 442. Not *Tetrao cupido* Linnaeus, 1758.

Introduced to central Canterbury (1879) and Auckland (1881), but failed to establish (Thomson 1922; G. Williams 1969).

COLUMBIDAE

Streptopelia turtur (Linnaeus)**European Turtle-dove**

Columba Turtur Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 164 – India, error for England (*vide* Peters 1937, *Check-list Birds World 3*: 89).

Turtur auritus; Hutton 1871, *Cat. Birds N.Z.*: 64. Not *Columba aurita* Temminck, 1811.

Turtur turtur; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 134.

Streptopelia turtur (Linnaeus); Peters 1937, *Check-list Birds World 3*: 89.

Released in Nelson and Auckland before 1871 (F. Hutton 1871) but failed to establish. Subspecies not known.

Streptopelia bitorquata (Temminck)**Island Collared Dove**

Columba Bitorquata Temminck, 1811: *in* Knip, *Les Pigeons, les Colombes* 9: 86, pl. 40 – Indies, restricted to Timor (*vide* Hellmayr 1914, *Avif. Timor*: 91).

Streptopelia bitorquata (Temminck); Peters 1937, *Check-list Birds World 3*: 97.

Five “Java doves” were released at Green Island, Dunedin, in 1867 (Thomson 1922). The Nelson and Wellington Acclimatisation Societies introduced some but it is unclear whether they were released (Thomson 1922). Long (1981) assumed that this species was the “Java dove”.

Phaps histrionica (Gould)**Flock Bronzewing**

Peristera histrionica Gould, 1841: *Birds of Australia* 5: pl. 66 & text – plains in interior of New South Wales = Liverpool Plains, New South Wales, Australia (*vide* Peters 1937, *Check-list Birds World 3*: 120).

Phaps histrionica (Gould); Hutton 1871, *Cat. Birds N.Z.*: 64.

Phaps histrionica; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 132.

Introduced to Auckland (1869; Thomson 1922) and apparently released (F. Hutton 1871), but failed to establish (Thomson 1922). Subspecies not known.

Ocyphaps lophotes (Temminck)**Crested Pigeon**

Columba lophotes Temminck, 1822: *in* Temminck & Laugier de Chartrouse, *Nouv. Recueil Planch Color. d'Oiseaux* 2(24): text to pl. 142 – New South Wales, west of Blue Mountains, Australia.

Ocyphaps lophotes; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 132.

Ocyphaps lophotes (Temminck); Peters 1937, *Check-list Birds World 3*: 118.

Released in Wellington (1876, 1877) and Auckland (1887) but failed to establish (Thomson 1922).

Genus and species uncertain

Green pigeon (*Drepanoptila holosericea* (Temminck, 1811)), Solomon Island crowned pigeon (*Microgoura meeki* Rothschild, 1904) (now considered extinct) and diamond dove (*Geopelia cuneata* (Latham, 1801)) were all mentioned by F. Hutton (1871) as introduced to Auckland, but the identifications are considered questionable (Checklist Committee 2010). The “Moreton Bay dove”, considered to be *Chalcophaps indica* by Checklist Committee (2010), was released in Canterbury in 1867, but failed to establish (Thomson 1922).

PTEROCLIDIDAE

Pterocles alchata (Linnaeus)**Pin-tailed Sandgrouse**

Tetrao Alchata Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 276 – Europe.

“probably *Pterochlorus alchatus*”; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 132.

Pterocles alchata (Linnaeus); Howard & Moore 1991, *Complete Checklist Birds World*, 2nd edition: 80.

Released in the Rock and Pillar Range (1882), but failed to establish (Thomson 1922). Subspecies not known.

CHARADRIIDAE

Pluvialis apricaria (Linnaeus)**European Golden Plover**

Charadrius apricarius Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 150 – “Oelandia, Canada”, restricted to Lapland (*vide* Peters 1934, *Check-list Birds World 2*: 244).

Charadrius pluvialis Linnaeus, 1766: *Syst. Nat.*, 12th edition 1: 254 – Northern Europe.

Charadrius pluvialis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 130.

Pluvialis apricaria (Linnaeus); Peters 1934, *Check-list Birds World 2*: 244.

Released in Otago (1897) and possibly elsewhere, but failed to establish (Thomson 1922).

Vanellus vanellus (Linnaeus)**Eurasian Lapwing**

Tringa Vanellus Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 148 – Europe and Africa, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World 2*: 235).

Vanellus cristatus Wolf & Meyer, 1805: *Hist. Nat. Oiseaux 1*: 110 – Eurasia.

Vanellus aristatus [sic] (Linnaeus); A. Hamilton 1909, *Hand-list Birds New Zealand*: 18.

Vanellus cristatus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 130.

Vanallus [sic] *cristatus*; Drummond 1907, *N.Z. Dept. Agriculture, Biology Horticulture Bulletin 16*: vii, 15.

Vanellus vanellus (Linnaeus); Peters 1934, *Check-list Birds World 2*: 235.

Released in Auckland (1872), Canterbury (1873), Otago (1897), Wellington (1904; Thomson 1922), and Westland (1904; Drummond 1907). It is doubtful whether any releases resulted in viable populations (Thomson 1922).

TURNICIDAE

Turnix varius (Latham)**Painted Buttonquail**

Perdix varia Latham, 1801: *Index Ornith. Suppl.*: lxiii – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* Condon 1975, *Checklist Birds Australia 1*: 98).

Turnix varius (Latham); Hutton 1871, *Cat. Birds N.Z.*: 67.

Turnix varia (Latham); Condon 1975, *Checklist Birds Australia 1*: 98.

Introduced to Auckland and Canterbury (F. Hutton 1871) but failed to establish (Thomson 1922). Subspecies not known, but probably nominate (Checklist Committee 2010).

TYTONIDAE

Tyto alba alba (Scopoli)**European Barn Owl**

Strix alba Scopoli, 1769: *Annus 1, Hist. Nat.*: 21 – Friuli, northern Italy.

Strix flammea; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 138. Not *Strix flammea* Pontopidan, 1763.

Tyto alba alba (Scopoli); Peters 1940, *Check-list Birds World 4*: 77.

Released west Taieri (1899) but failed to establish (Thomson 1922). Subspecies probably *T. a. alba* from Britain (Checklist Committee 2010), unlike genuine vagrants to New Zealand which are *T. a. delicatula*.

STRIGIDAE

Strix aluco Linnaeus**Tawny Owl**

Strix Aluco Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 93 – Europe, restricted to Sweden (*vide* Peters 1940, *Check-list Birds World 4*: 159).

Syrnium aluco (Linnaeus); Buller 1888, *History of the Birds of N.Z.*, 2nd edition 1: xlvii.
Smyrnum [sic] *aluco*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 140.
Strix aluco Linnaeus; Peters 1940, *Check-list Birds World* 4: 159.

A pair released at Napier in 1873 (Buller 1887–88) failed to establish (Thomson 1922). Subspecies not known.

PSITTACULIDAE

***Trichoglossus chlorolepidotus* (Kuhl)**

Scaly-breasted Lorikeet

Psittacus chlorolepidotus Kuhl, 1820: *Nova Acta Acad. Caesarea Leopold.-Carol.* 10: 48 – “Nova Hollandia”, restricted to central east coast, New South Wales, Australia (*fide* Mathews 1912, *Novit. Zool.* 18(3): 259).

Trichoglossus chlorolepidotus (Kuhl); Schodde 1997, *Zool. Cat. Australia* 37.2: 132.

In 2000–01, the Department of Conservation trapped two free-living birds on the North Shore, Auckland, presumably as a result of deliberate release from captivity (Polkanov & Keeling 2002).

***Melopsittacus undulatus* (Shaw)**

Budgerigar

Psittacus undulatus Shaw, 1805: in Shaw & Nodder, *Nat. Miscell.* 16: text to pl. 673 – “Australasia/New Holland”, restricted to coastal south and west Australia (*fide* Schodde 1997, *Zool. Cat. Australia* 37.2: 151).

Melopsittacus undulatus (Shaw); Hutton 1871, *Cat. Birds N.Z.*: 63.

Melopsittacus undulatus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 136.

Released in Canterbury (F. Hutton 1871) and Auckland (1871), but failed to establish (Thomson 1922).

MALURIDAE

***Malurus cyaneus cyanochlamys* Sharpe**

Eastern Superb Fairy-wren

Malurus cyanochlamys Sharpe, 1881: *Proc. Zool. Soc. London* 1881 (50): 788 – Moreton Bay, south-eastern Queensland, Australia.

Malurus cyaneus; Westerskov 1953, *Notornis* 5(3): 106. Not *Motacilla cyanea* Latham, 1783.

Malurus cyaneus cyanochlamys Sharpe; E. Mayr 1986, in Peters *Check-list Birds World* 11: 396.

Twelve birds from Sydney Zoo were released in 1923 at three localities around Lake Rotorua, and at the base of Mount Tongariro (Westerskov 1953a). No subsequent reports.

MELIPHAGIDAE

***Philemon corniculatus* (Latham)**

Noisy Friarbird

Merops corniculatus Latham, 1790: *Index Ornith.* 1: 276 – “Nova Hollandia”, restricted to New South Wales, Australia (*fide* Salomonsen 1967, in Peters *Check-list Birds World* 12: 411).

Philemon corniculatus (Latham); Salomonsen 1967, in Peters *Check-list Birds World* 12: 411.

“Naturalised in N. Wellington” (F. Hutton undated).

CORVIDAE

***Corvus monedula* Linnaeus**

Jackdaw

Corvus Monedula Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 106 – Europe, restricted to Sweden (*fide* Hartert 1903, *Vögel Pal. Fauna*: 15).

Corvus monedula Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 57.

Corvus monedula; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 154.

Released in Canterbury before 1871 (F. Hutton 1871), but failed to establish (Thomson 1922).

ESTRILDIDAE

***Lonchura oryzivora* (Linnaeus)**

Java Sparrow

Loxia oryzivora Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 173 – Asia and Ethiopia, restricted to Java (*fide* E. Mayr 1968, in Peters *Check-list Birds World* 14: 388).

Padda oryzivora (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 62.

Munia orizyvora [sic] Linnaeus; A. Hamilton 1909, *Hand-list Birds New Zealand*: 18.

Munia oryzivora; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 163.

Lonchura oryzivora (Linnaeus); Christidis & Boles 1994, *Taxonomy Species Birds Australia* 2: 26.

Introduced to Nelson (1862) and Auckland (1867), but failed to establish (F. Hutton 1871; Drummond 1907; Thomson 1922).

Stagonopleura bella (Latham)**Beautiful Firetail**

Loxia bella Latham, 1801: *Index Ornith. Suppl.*: xlv – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* E. Mayr 1968, in *Peters Check-list Birds World 14*: 354).

Zonaeginthus bellus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 164.

Stagonopleura bella (Latham); Christidis & Boles 1994, *Taxonomy Species Birds Australia 2*: 26.

Birds of unspecified subspecies were received by the Auckland Acclimatisation Society in 1870, but apparently not released; a further eight birds were introduced in Wellington before 1885, but failed to establish (Thomson 1922).

Stagonopleura bella samueli (Mathews)**South-east Australian Beautiful Firetail**

Zonaeginthus bellus samueli Mathews, 1912: *Austral Avian Rec. 1*: 102 – Kangaroo Island, Australia.

Stagonopleura bella samueli (Mathews); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 745.

Introduced from Tasmania and released in Auckland (F. Hutton undated), but failed to establish.

Neochmia temporalis (Latham)**Red-browed Finch**

Fringilla temporalis Latham 1801 *Index Ornith. Suppl.*: xlviii – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* E. Mayr 1968, in *Peters Check-list Birds World 14*: 353).

Estrela temporalis (Latham); Hutton 1871, *Cat. Birds N.Z.*: 59.

Aegintha temporalis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 163.

Neochmia temporalis (Latham); Christidis & Boles 1994, *Taxonomy Species Birds Australia 2*: 26.

Introduced from Queensland to Otago in 1867 and Auckland in 1871 (F. Hutton 1871; Thomson 1922). Subspecies not known but probably *N. t. temporalis* Checklist Committee (2010). Thomson (1922) inferred from the common name “nutmeg sparrow” that Hutton (1871) actually referred to *Lonchura punctulata* and not to *Neochmia temporalis* but, if Hutton’s information about the birds coming from Queensland is correct, *L. punctulata* is ruled out as this species was not introduced to Queensland until the 1930s (Schodde & Mason 1999).

Poephila cincta (Gould)**Black-throated Finch**

Amadina cincta Gould, 1837: *Proc. Zool. Soc. London 1836* (4): 105 – Upper Hunter River district, New South Wales, Australia.

Poephila cincta (Gould); E. Mayr 1968, in *Peters Check-list Birds World 14*: 361.

Released in Auckland from Queensland (F. Hutton undated), but failed to establish. Subspecies not known, but probably *P. c. cincta* (Checklist Committee 2010).

Taeniopygia guttata castanotis (Gould)**Australian Zebra Finch**

Amadina castanotis Gould, 1837: *Synop. Birds Australia 1*: pl. 10, fig. 1 – interior of New South Wales, Australia.

Taeniopygia castanotis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 164.

Taeniopygia guttata castanotis (Gould); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 761.

Twelve birds introduced in Wellington before 1885, but failed to establish (Thomson 1922). A common cage-bird species, which regularly escapes and is occasionally reported from the wild (C. Robertson *et al.* 2007), but without confirmed self-sustaining populations.

PASSERIDAE

Passer montanus (Linnaeus)**Tree Sparrow**

Fringilla montana Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 183 – Europe, restricted to Bagnacavallo, Ravenna, Italy (*vide* Clancey 1948, *Bull. Brit. Ornith. Club 68*: 135).

Passer montanus (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 62.

Passer montanus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 170.

Released in Otago (1868) and Auckland (1868, 1871), but failed to establish (Thomson 1922). Subspecies not known.

FRINGILLIDAE

Pyrrhula pyrrhula (Linnaeus)**Bullfinch**

Loxia Pyrrhula Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 171 – Europe.

Pyrrhula rubicilla Pallas, 1811: *Zoogr. Rosso-Asiatica 2*: 7 – Russia.

Pyrrhula europoea Vieillot, 1816: *Nouv. Dict. Hist. Nat., nouv. éd. 4*: 286 – Europe, restricted to western France (*vide* Mayaud 1933, *Alauda 5*: 462).

Pyrrhula rubicilla Pallas; Hutton 1871, *Cat. Birds N.Z.*: 59.

Pyrrhula europoea; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 175.

Pyrrhula pyrrhula (Linnaeus); Paynter 1968, in *Peters Check-list Birds World 14*: 296.

F. Hutton (1871) refers to six birds released in Nelson, but see Thomson (1922). There are sight records, notably in Hawke’s Bay by H. Guthrie-Smith (Drummond 1907), but no definite records of release there. However, Thomson (1922)

suggested that releases were made in the 1870s. Probably *P. p. pileata* MacGillivray, 1837 from the British Isles (Checklist Committee 2010).

***Linaria flavirostris* (Linnaeus)**

Twite

Fringilla flavirostris Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 182 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 76).

Linota flavirostris; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 172.

Carduelis flavirostris (Linnaeus); Cramp & Perrins 1994, *Birds Western Palearctic* 8: 625.

Linaria flavirostris (Linnaeus); Zuccon, Prŷs-Jones, Rasmussen & Ericson 2012, *Mol. Phyl. Evol.* 62: 594.

Released in Dunedin (1871) but failed to establish (Thomson 1922). Probably *L. f. pipilans* from the British Isles (Checklist Committee 2010).

***Serinus canaria* (Linnaeus)**

Canary

Fringilla Canaria Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 181 – Islas Canarias, Spain.

Fringilla canaria Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 60.

Serinus canarius [sic]; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 176.

Serinus canaria (Linnaeus); Paynter 1968, in *Peters Check-list Birds World 14*: 210.

There was no serious attempt to introduce this species by Acclimatisation Societies, but deliberate private releases to establish it had no success (Thomson 1922).

EMBERIZIDAE

***Schoeniclus schoeniclus* (Linnaeus)**

Reed Bunting

Fringilla schoeniclus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 182 – Europe, restricted to Sweden (*vide* Hartert 1904, *Vögel Pal. Fauna*: 194).

Emberiza schoeniculus [sic] (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 63.

Emberiza schoeniclus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 175.

Emberiza schoeniclus (Linnaeus); Paynter 1970, in *Peters Check-list Birds World 13*: 31.

Schoeniclus schoeniclus (Linnaeus); Dickinson & Christidis 2014, *Howard & Moore Complete Checklist Birds World*, 4th edition, 2: 356.

Released in Otago (1871) but failed to establish (Thomson 1922). Probably the nominate subspecies from western Europe (Checklist Committee 2010).

ICTERIDAE

***Sturnella neglecta* Audubon**

Western Meadowlark

Sturnella neglecta Audubon, 1844: *Birds Amer.* 7: 339, pl. 489 – Missouri River above Fort Croghan = old Fort Vernon, North Dakota, USA (*vide* Blake 1968, in *Peters Check-list Birds World 14*: 180).

Sturnula ludoviciana Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 58.

Sturnella neglecta; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 164.

Sturnella neglecta Audubon; Blake 1968, in *Peters Check-list Birds World 14*: 180.

Two introduced to Auckland from California in 1869, but failed to establish (F. Hutton 1871; Thomson 1922).

***Agelaius phoeniceus* (Linnaeus)**

Red-winged Blackbird

Oriolus phoeniceus Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 161 – North America, restricted to Charleston, South Carolina, USA (*vide* Howell & van Rossem 1928, *Auk* 45: 157).

Agelaius phaeniceus [sic] Dand. [sic]; Hutton 1871, *Cat. Birds N.Z.*: 58.

Agelaius phoeniceus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 164.

Agelaius phoeniceus (Linnaeus); Blake 1968, in *Peters Check-list Birds World 14*: 171.

Two introduced to Auckland from California in 1869, but failed to establish (F. Hutton 1871; Thomson 1922). Subspecies not known.

PARIDAE

***Cyanistes caeruleus* (Linnaeus)**

Blue Tit

Parus caeruleus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 190 – Europe, restricted to Sweden (*vide* Snow in *Peters 1967, Checklist Birds World 12*: 113).

Parus caeruleus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 152.

Cyanistes caeruleus (Linnaeus); Sangster *et al.* 2005, *Ibis* 147(4): 826.

Released in Canterbury (*c.* 1871) but failed to establish (Thomson 1922). Subspecies not known.

ALAUDIDAE

Lullula arborea (Linnaeus)**Woodlark**

Alauda arborea Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 166 – Europe, restricted to Sweden (*vide* Peters 1960, *Check-list Birds World 9*: 65).

Lullula arborea; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 142.

Lullula arborea (Linnaeus); Peters 1960, *Check-list Birds World 9*: 65.

Three (F. Hutton undated) or five birds (Thomson 1922) were introduced to Auckland. Probably of the nominate subspecies from western Europe (Checklist Committee 2010).

SYLVIIDAE

Sylvia atricapilla (Linnaeus)**Blackcap**

Motacilla atricapilla Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 187 – Europe, restricted to Sweden (*vide* Hartet 1909, *Vögel Pal. Fauna*: 583).

Sylvia atricapilla; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 150.

Sylvia atricapilla (Linnaeus); Watson 1986, in Peters *Check-list Birds World 11*: 271.

Five released in Auckland in 1872, but failed to establish (Thomson 1922). Subspecies not known.

Curruca communis (Latham)**Whitethroat**

Sylvia communis Latham, 1787: *Gen. Synop. Birds Suppl.*: 287 – England, restricted to Kent (*vide* Clancey 1950, *Auk 67*: 393).

Sylvia cinerea Bechstein, 1803: *Ornith. Taschenb. Deutschland*: 170 – Germany.

Sylvia cinerea Latham [sic]; Hutton 1871, *Cat. Birds N.Z.*: 55.

Sylvia cinerea; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 149.

Sylvia communis Latham; Watson 1986, in Peters, *Check-list Birds World 11*: 273.

Curruca communis (Latham); Dickinson & Christidis 2014, *Howard & Moore Complete Checklist Birds World*, 4th edition, 2: 511.

Two released in Auckland in 1868, but failed to establish (Thomson 1922). Subspecies not known.

MUSCICAPIDAE

Luscinia megarhynchos (Brehm)**Common Nightingale**

Luscinia megarhynchos C.L. Brehm, 1831: *Handb. Naturgesch. Vög. Deutschl.*: 356 – Germany.

Oedon luscinia; A. Hamilton 1909, *Hand-list Birds New Zealand*: 18. Not *Motacilla luscinia* Linnaeus, 1758.

Daulias luscinia; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 148. Not *Motacilla luscinia* Linnaeus, 1758.

Luscinia megarhynchos Brehm; Cramp 1988, *Birds Western Palearctic 5*: 626.

Thomson (1922) described three failed importation attempts by the Otago, Auckland, and Canterbury Acclimatisation Societies from 1871 to 1879, including a single bird released into Hagley Park, Christchurch (Drummond 1907). Although listed by A. Hamilton (1909) as introduced and established, it failed to establish (Thomson 1922). Probably of the nominate subspecies from western Europe (Checklist Committee 2010).

Family, genus and species uncertain

An “Australian shrike” was released in Wellington (1877, 1878) but failed to establish (Thomson 1922).

Section 3

Species for which a deliberate introduction took place, and published records indicate that the species bred, but it is no longer considered to be extant.

ANATIDAE

Aix sponsa (Linnaeus)**American Wood Duck**

Anas sponsa Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 128 – North America, restricted to Carolina, USA (*vide* Johnsgard 1979, in Peters *Check-list Birds World 1*, 2nd edition: 457).

Dafila acuta; A. Hamilton 1909, *Hand-list Birds New Zealand*: 18. Not *Anas acuta* Linnaeus, 1758.

Aex [sic] *sponsa*; A. Hamilton 1909, *Hand-list Birds New Zealand*: 19.

Aix sponsa; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 103.

Aix sponsa (Linnaeus); Johnsgard 1979, in Peters *Check-list Birds World 1*, 2nd edition: 457.

Released in Auckland (1867), Christchurch (before 1871), Wellington (1894, 1899), Otago (1906), and Lake Okareka near Rotorua (1906). The Christchurch population was apparently “thriving” in 1906, but the population did not persist (Thomson 1922).

Cairina moschata (Linnaeus)**Muscovy Duck**

Anas moschata Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 124 – India.

Cairina moschata; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 99.

Cairina moschata (Linnaeus); Johnsgard 1979, in Peters *Check-list Birds World 1*, 2nd edition: 454.

Six birds released on Adams Island, Auckland Islands / Maukahuka (1865) but failed to establish (Thomson 1922). A number of feral populations reported from various parts of New Zealand, but their status needs further investigation (C. Robertson *et al.* 2007).

Alopochen aegyptiaca (Linnaeus)**Egyptian Goose**

Anas aegyptiaca Linnaeus, 1766: *Syst. Nat., 12th edition 1*: 197 – Egypt.

Chenalopex aegyptiacus (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 69.

Chenalopex aegyptiaca; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 103.

Alopochen aegyptiaca (Linnaeus); Johnsgard 1979, in Peters *Check-list Birds World 1*, 2nd edition: 449.

Introduced to Kawau Island (1860) and possibly elsewhere; spread throughout North Island but became extinct in the late 1800s (Thomson 1922).

ODONTOPHORIDAE

Colinus virginianus taylori Lincoln**Midwestern Northern Bobwhite Quail**

Ortyx virginianus [sic]; A. Hamilton 1909, *Hand-list Birds New Zealand*: 19.

Colinus virginianus taylori Lincoln, 1915: *Proc. Biol. Soc. Washington* 28: 103 – Laird, Yuma County, Colorado, USA.

Ortyx virginiana; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 127. Not *Tetrao virginianus* Linnaeus, 1758.

Colinus virginianus; McDowall 1994, *Gamekeepers for the Nation*: 326. Not *Tetrao virginianus* Linnaeus, 1758.

Colinus virginianus (Linnaeus) subspecies; Checklist Committee 1953, *Checklist N.Z. Birds*: 37.

Colinus virginianus; Checklist Committee 1990, *Checklist Birds N.Z.*: 113. Not *Tetrao virginianus* Linnaeus, 1758.

Colinus virginianus taylori Lincoln; McGowan in del Hoyo *et al.* 1994, *Handb. Birds World 2*: 425.

Introduced and liberated throughout the North and South Islands (summer 1899–1900) with a later release on the east coast of the North Island (1902). Persisted in South Auckland until at least 1922 and possibly in the Wairoa area until 1970 (Thomson 1922; Westerskov 1956; Checklist Committee 1990). Released unsuccessfully in Otago (1947–48; Gurr 1953; McDowall 1994).

PHASIANIDAE

Synoicus ypsilophorus ypsilophorus (Bosc)**Tasmanian Brown Quail**

Coturnix ypsilophorus Bosc, 1792: *Journ. d’Hist. Natur.* 2: 297, pl. 39 – no locality = Tasmania (*vide* Mathews Mathews 1913, *List Birds Australia*: 7).

Synoicus Diemenensis Gould, 1847: *Proc. Zool. Soc. London 1847* (15): 33 – “Van Diemen’s Land” = Tasmania, Australia.

Coturnix australis; Hutton 1871, *Cat. Birds N.Z.*: 66. Not *Perdix australis* Latham, 1801.

Synoecus [sic] *australis*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 118. Not *Perdix australis* Latham, 1801.

Synoecus [sic] *diemenensis*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 119.

Coturnix ypsilophora ypsilophora Bosc; Marchant & Higgins 1993, *HANZAB 2*: 404.

Synoicus ypsilophorus ypsilophorus (Bosc); Dickinson & Remsen 2013, *Howard & Moore Complete Checklist Birds World*, 4th edition, 1: 34.

Recorded as introduced by the Auckland Acclimatisation Society in 1869 (F. Hutton 1871; A. Hamilton 1909; Thomson 1922). An unverified specimen record from Pirongia (Jun. 1916; specimen not located) may indicate persistence after release (Thomson 1922) but more likely represents a misidentification (Checklist Committee 2010).

***Alectoris barbara barbara* (Bonnaterre)**

Barbary Partridge

Perdix Barbara Bonnaterre, 1792: *Tableaux Encycl. Méthod. Ornith.* 1(51): 208, pl. 94, fig. 2 – no locality = Morocco (*vide* Peters 1934, *Check-list Birds World 2*: 67).

Perdix petrosa Meyer; Hutton 1871, *Cat. Birds N.Z.*: 66. Not *Tetrao petrosus* Gmelin, 1788.

Caccabis petrosa; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 124. Not *Tetrao petrosus* Gmelin, 1788.

Alectoris barbara barbara (Bonnaterre); Peters 1934, *Check-list Birds World 2*: 67.

Two birds released in Auckland (1868), and 13 on Kapiti Island (1892) where it apparently bred successfully but failed to establish (Thomson 1922). Subspecies of Kapiti birds not known.

***Alectoris rufa* (Linnaeus)**

Red-legged Partridge

Tetrao rufus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 160 – southern Europe, restricted to northern Italy (*vide* Peters 1934, *Check-list Birds World 2*: 66).

Caccabis rufa; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 123.

Alectoris rufa (Linnaeus); Peters 1934, *Check-list Birds World 2*: 66.

Caccabis rufa (Linnaeus); McDowall 1994, *Gamekeepers for the Nation*: 329.

Originally released in Wellington (before 1897), Stewart Island / Rakiura (1899), and probably elsewhere (Thomson 1922). Released east of Huntly in the 1970s, and widely over the northern half of the North Island between 1984 and 1987 (Checklist Committee 1990). From these releases, a few birds survived near Te Kauwhata, Waikato, until the mid-1990s (McDowall 1994). Releases in Manawatu, North and South Canterbury, and Marlborough in the 1980s are believed to have had limited success, with five records from these areas between 1999 and 2004 (C. Robertson *et al.* 2007). Subspecies not known but probably *A. r. rufa* (Checklist Committee 2010).

***Gallus gallus gallus* (Linnaeus)**

Feral Chicken

Phasianus Gallus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 158 – “India orientali, Pouli condor ...”, restricted to Island of Pulo Condor, mouth of the Mekong River (*vide* Peters 1934, *Check-list Birds World 2*: 118).

Gallus Bankiva; Hutton 1871, *Cat. Birds N.Z.*: 69. Not *Gallus bankiva* Temminck, 1813.

Gallus bankiva; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 109. Not *Gallus bankiva* Temminck, 1813.

Gallus gallus; Hermes *et al.* 1986, *Notornis* 33: 142.

Gallus gallus gallus (Linnaeus); Fumihito *et al.* 1994, *Proc. Natl. Acad. Sci. U.S.A.* 91: 12509.

Eastern Thailand, Cambodia, central and southern Laos, central and southern Vietnam; widely introduced around the world and established in Europe, the Americas, Australia, and islands in the Pacific and Indian Oceans (Long 1981). Feral on Norfolk Island (Hermes 1985, Hermes *et al.* 1986), and since at least 1838 on Philip Island (J. Moore 1985b) where it is now extinct. Status on New Zealand mainland uncertain. First released by Cook in Queen Charlotte Sound in 1773 and a population still present in 1777 (J. Cook 1777; J. Cook & King 1784). Many unsuccessful introductions in North and South Islands, on the Auckland Islands / Maukahuka, and Campbell Island / Motu Ihupuku (Thomson 1922). In recent years, reports of ephemeral populations have been made, but none has lasted. Assignment of subspecies based on genetic results by Fumihito *et al.* (1994). Also called the Thai red junglefowl.

***Perdix perdix perdix* (Linnaeus)**

Grey Partridge

Tetrao Perdix Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 160 – Europe, restricted to Sweden (*vide* Peters 1934, *Check-list Birds World 2*: 88).

Perdix cinerea Brisson, 1760: *Ornithologie 1*: 219 – Europe.

Perdix cinerea Brisson; Hutton 1871, *Cat. Birds N.Z.*: 66.

Perdix cinerea; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 120.

“*Caccabis saxatilis*?”; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 124. Not *Perdix saxatilis* Bechstein, 1805.

Perdix perdix perdix (Linnaeus); Checklist Committee 1990, *Checklist Birds N.Z.*: 115.

Perdix perdix (Linnaeus); McDowall 1994, *Gamekeepers for the Nation*: 326.

Released around Auckland (1867–68, 1871, 1875, *c.* 1912), Waikato (*c.* 1912), Taranaki (1894, 1939), Wellington (1889, 1891, 1897), Christchurch (1867?, 1875, 1880), Otago (1869, 1871, 1896–97, 1900, 1909, 1911), Hawera (1898), Southland (*c.* 1879), and Stewart Island / Rakiura (1900). Some of these early introductions were briefly successful but all ultimately failed (Thomson 1922, McDowall 1994). In 1961, a concerted attempt was made with releases in South Canterbury, Otago, and Southland. Releases continued apace and, between 1964 and 1970, 11,000 grey partridges were released in North Canterbury alone. These releases also failed. The last published record of a bird in the wild was for 1975 (McDowall 1994). Subspecies not recorded but in most cases probably *P. p. perdix* from United Kingdom and Europe (Checklist Committee 2010). Some early releases were of the “Hungarian partridge” but this bird – sometimes misidentified as *Perdix saxatilis* – is now included in *P. p. perdix*.

COLUMBIDAE

Leucosarcia melanoleuca (Latham)**Wonga Pigeon**

Columba melanoleuca Latham, 1801: *Index Ornith. Suppl.*: lix – Port Jackson, New South Wales, Australia.

Columba picata Latham, 1801: *Index Ornith. Suppl.*: lix – Port Jackson, New South Wales, Australia.

Phaps picata (Latham); Hutton 1871, *Cat. Birds N.Z.*: 65.

Leucosarcia picata; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 133.

Leucosarcia melanoleuca (Latham); Schodde 1997, *Zool. Cat. Australia* 37.2: 39.

Released in South Canterbury (c. 1890), Otago (c. 1869), and Wellington (1875–76). Wellington population survived for “some considerable time” and spread, but ultimately failed to establish (Thomson 1922).

Phaps chalcoptera (Latham)**Common Bronzewing**

Columba chalcoptera Latham, 1790: *Index Ornith.* 2: 604 – Norfolk Island, error for Sydney, New South Wales, Australia (*vide* Mathews 1921, *Man. Birds of Australia*: 251).

Phaps chalcoptera (Latham); Hutton 1871, *Cat. Birds N.Z.*: 64.

Phaps chalcoptera; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 132.

Released in Christchurch (1867 and possibly later), Otago (1867), and Kaipara (1867, 1869). Christchurch birds spread to Banks Peninsula and may have increased, but ultimately failed to establish (Thomson 1922).

Oena capensis (Linnaeus)**Namaqua Dove**

Columba capensis Linnaeus, 1766: *Syst. Nat., 12th edition* 1: 286 – Cape of Good Hope, South Africa.

Oena capensis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 136.

Oena capensis (Linnaeus); Peters 1937, *Check-list Birds World* 3: 111.

Released Kawau Island (c. 1860) and became “very numerous” but ultimately failed to establish (Thomson 1922). Probably nominate subspecies (Checklist Committee 2010).

PSITTACULIDAE

Psittacula krameri (Scopoli)**Rose-ringed Parakeet**

Psittacus krameri Scopoli, 1769: *Annus 1, Hist. Nat.*: 31 – no locality = Senegal (*vide* Neumann 1915, *Orn. Monatsb.* 23: 73).

Psittacula krameri (Scopoli, 1769); Peters 1937, *Check-list Birds World* 3: 242.

Accidental and deliberate illegal releases of cage birds since c. 2005, mainly in the northern North Island (including Auckland, Hamilton, Rotorua, and Hastings), plus an accidental release of 30 birds in Christchurch in 2016 (Miskelly 2018b). Listed as an Unwanted Organism under the Biosecurity Act, with efforts made to recapture or kill free-flying birds. Subspecies unknown but likely to be either or both *P. k. borealis* (Neumann, 1915) and *P. k. manillensis* (Bechstein, 1800) from India, Pakistan, Nepal, Myanmar, and Sri Lanka (Miskelly 2018b).

Platycercus elegans (Gmelin)**Crimson Rosella**

Psittacus elegans Gmelin, 1788: *Syst. Nat., 13th edition* 1(1): 318 – New South Wales, Australia.

Psittacus pennantii Latham, 1790: *Index Ornith.* 1: 90 – Botany Bay and Port Jackson, New South Wales, Australia.

Platycercus pennantii (Latham); G.R. Gray 1862, *Ibis* 4: 227.

Platycercus elegans (Gmelin); Checklist Committee 1970, *Annot. Checklist Birds N.Z.*: 58.

East and south-east Australia. Polytypic, with three colour-types including seven subspecies (Higgins 1999). Introduced to Wellington (c. 1963) and Otago (c. 1910 and possibly later) via escape from captivity (Checklist Committee 1970). Became established in the north-west suburbs of Wellington, and was seen regularly around the Dunedin district, where they may have partly hybridised with *P. eximius* (see Hamel 1970). Last recorded in Otago c. 1950, and in Wellington in 1993 (Hamel 1970; H. Robertson 1995; Stracy & Stracy 1995), and now considered extinct in the wild in New Zealand. Birds introduced into the New Zealand region have not been identified to subspecific level.

Trichoglossus haematodus moluccanus (Gmelin)**Eastern Australian Rainbow Lorikeet | Kākā Ōpure**

Psittacus moluccanus Gmelin, 1788: *Syst. Nat. 13th edition* 1(1): 316 – Sydney, New South Wales, Australia (*vide* Schodde 1997, *Zool. Cat. Australia* 37.2: 135).

Trichoglossus haematodus moluccanus (Gmelin); Schodde 1997, *Zool. Cat. Australia* 37.2: 135.

Deliberately and illegally released c. 1992, mainly on the North Shore, Auckland (up to 120 individuals). Spread over an area from Maraetai and Manurewa in south Auckland, to Whangaparaoa in the north, with the highest concentration on the North Shore. They bred successfully and reached a maximum of 150–200 individuals in the wild. The Department of Conservation began eradication in late 1999, removing the viable population by 2002. Since then, 20–34 per year have been released, but most are captured before they become established. Most individuals are *T. h. moluccanus*, but two caught in 2001–02 were either of the Indonesian “red-necked” subspecies, or hybrids between *T. h. moluccanus* and the “red-necked” subspecies (Boyd 1999; Polkanov & Keeling 2002).

MELIPHAGIDAE

Manorina melanocephala melanocephala* (Latham)*Victorian Noisy Miner**

Gracula melanocephala Latham, 1801: *Index Ornith. Suppl.*: xxviii – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* Salomonsen 1967, in *Peters Check-list Birds World 12*: 440).

Merops garrulus Latham, 1801: *Index Ornith. Suppl.*: xxxiv – “Nova Hollandia”, restricted to Sydney, New South Wales, Australia (*vide* Salomonsen 1967, in *Peters Check-list Birds World 12*: 440).

Myzantha garrula Vigors & Horsfield [sic]; Hutton 1871, *Cat. Birds N.Z.*: 55.

Myzantha garrula; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 160.

Manorina melanocephala melanocephala (Latham); Salomonsen 1967, in *Peters Check-list Birds World 12*: 440.

Released in Nelson and Canterbury before 1871 (F. Hutton 1871) and possibly in Canterbury (1879), Otago, and Wellington (1874, 1876–78). “A colony was seen for a time at Taita” and, following a release in Nelson (*c.* 1870), they “flourished” there “for a time” (Huddleston in Thomson 1922). All introductions ultimately failed to establish (Thomson 1922). The introductions before 1871 were from Victoria (Hutton 1871) but it is not clear that all were of the Victorian subspecies.

MONARCHIDAE

Grallina cyanoleuca cyanoleuca* (Latham)*Southern Magpie-lark**

Corvus cyanoleucus Latham, 1801: *Index Ornith. Suppl.*: xxv – Sydney, New South Wales, Australia.

Tanypus australis Oppel, 1812: *Denkschr. Ak. Wissen. Münch.*: 164 – New South Wales, Australia.

Saxicola picata; A. Hamilton 1909, *Hand-list Birds New Zealand*: 18. Not *Saxicola picata* Blyth, 1847.

Grallina australis; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 151.

Grallina cyanoleuca cyanoleuca (Latham); Schodde & Mason 1999, *Directory Australian Birds. Passerines*: 507.

Released on the west coast of the North Island (1898) and began nesting (Thomson 1922); also at Auckland, Hawke’s Bay, and Wellington (1900), where it spread widely (Kirk in Drummond 1907). However, it ultimately failed to establish (Thomson 1922).

ESTRILDIDAE

Lonchura castaneothorax castaneothorax* (Gould)*Australian Chestnut-breasted Munia**

Amadina castaneothorax Gould, 1837: *Synop. Birds Australia 2*: pl. 21, fig. 2 & text – Australia, restricted to interior of New South Wales (*vide* E. Mayr 1968, in *Peters Check-list Birds World 14*: 385).

Donacola castaneothorax Latham [sic]; Hutton 1871, *Cat. Birds N.Z.*: 59.

Munia castaneithorax [sic]; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 163.

Lonchura castaneothorax castaneothorax (Gould); E. Mayr 1968, in *Peters Check-list Birds World 14*: 385.

Introduced from Queensland (F. Hutton 1871); released in Nelson before 1864 and Auckland (1867, 1871), where they became “thoroughly acclimatized” but ultimately failed to establish (Thomson 1922).

Stagonopleura guttata* (Shaw)*Diamond Firetail**

Loxia guttata Shaw, 1796: *Mus. Leverianum 6*: 47 – Australia, restricted to Sydney, New South Wales (*vide* Mayr 1968, in *Peters Check-list Birds World 14*: 355).

Pardalotus punctatus Temminck; Hutton 1871, *Cat. Birds N.Z.*: 56.

Steganopleura [sic] *guttata*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 163.

Stagonopleura guttata (Shaw); Christidis & Boles 1994, *Taxonomy Species Birds Australia 2*: 26.

Released in Nelson before 1871 (F. Hutton 1871), Wellington in 1874 (Thomson 1922), and Canterbury (1864), where “flocks” were seen by 1866 (Anon. 1866), but it ultimately failed to establish. Also released, but not established, on Kawau Island (Thomson 1922). We accept Thomson’s contention that Hutton (1871) mistook this species for that given in his list as *Pardalotus punctatus*, since Hutton (1871: v, as “diamond sparrow”) stated that he had not seen this bird.

FRINGILLIDAE

Fringilla montifringilla* Linnaeus*Brambling**

Fringilla montifringilla Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 179 – Sweden.

Fringilla montifringilla; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 171.

Fringilla montifringilla Linnaeus; E. Mayr 1968, in *Peters Check-list Birds World 14*: 206.

Released in Canterbury (1868, 1871), Wellington (1874, 1877), and subsequently seen in 1885, suggesting that breeding occurred (Thomson 1922). No further records.

Linaria cannabina* (Linnaeus)*Eurasian Linnet**

Fringilla cannabina Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 182 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 73).

Linaria cannabina (Linnaeus); Bechstein 1802, *Ornith. Taschenb. Deutschland 1*: 191.

Fringilla cannabina Linnaeus; Hutton 1871, *Cat. Birds N.Z.*: 61.

Linota cannabina; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 171.

Carduelis cannabina (Linnaeus); Cramp & Perrins 1994, *Birds Western Palearctic 8*: 604.

Linaria cannabina (Linnaeus); Zuccon, Prŷs-Jones, Rasmussen & Ericson 2012, *Mol. Phyl. Evol.* 62: 594.

Released Otago (1867–68), Canterbury (1867–69, 1875), Auckland (1865, 1867–68), and Wellington (before 1882). Apparently present in south Westland before 1930 (Oliver 1930), but the status of this species was questioned by Fleming (1953). It was not mentioned in Oliver (1955) despite claims that it was at Pleasant Point, South Canterbury, in 1953 (N. Macdonald 1954). Inclusion here (in Section 3) is based on the statement by the Auckland Acclimatisation Society (c. 1874) that the species was “thoroughly established” (in Thomson 1922), and records from Westland and between Wellington and Whanganui “within last few years” (Thomson 1926). No further records. Subspecies not known.

Note: many early records of linnets were probably misidentifications (e.g. account in Lamb 1964: 43–44).

***Spinus spinus* (Linnaeus)**

Eurasian Siskin

Fringilla Spinus Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 181 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 71).

Spinus spinus (Linnaeus); Koch 1816, *Syst. Baierischen Zool. 1*: 232.

Chrysomitris spinus (Linnaeus); A. Hamilton 1909, *Hand-list Birds New Zealand*: 18.

Carduelis spinus; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 173.

Carduelis spinus (Linnaeus); Paynter 1968, in *Peters Check-list Birds World 14*: 238.

Spinus spinus (Linnaeus); Zuccon, Prŷs-Jones, Rasmussen & Ericson 2012, *Mol. Phyl. Evol.* 62: 594.

Released in Wellington (1876) and in Canterbury (1879) without success (Thomson 1922), but it was apparently present south and west of New Plymouth c. 1919 (Thomson 1922, 1926). No further records.

EMBERIZIDAE

***Emberiza hortulana* Linnaeus**

Ortolan Bunting

Emberiza hortulana Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 177 – Europe, restricted to Sweden (*vide* Hartert 1903, *Vögel Pal. Fauna*: 165).

Emberiza hortulana; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 176.

Emberiza hortulana Linnaeus; Paynter 1970, in *Peters Check-list Birds World 13*: 14.

Released at Otaki (1885), successfully breeding in the following year and forming a small flock, but they ultimately failed to establish (Thomson 1922).

CARDINALIDAE

***Piranga rubra* (Linnaeus)**

Summer Tanager

Fringilla rubra Linnaeus, 1758: *Syst. Nat., 10th edition 1*: 181 – America, restricted to South Carolina (*vide* Storer 1970, in *Peters Check-list Birds World 13*: 306).

Pyrranga [sic] *rubra* Wils. [sic]; Hutton 1871, *Cat. Birds N.Z.*: 59.

Pyrrangra [sic] *rubra*; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 162.

Piranga rubra (Linnaeus); Storer 1970, in *Peters Check-list Birds World 13*: 306.

Released in Auckland in 1868 (F. Hutton 1871; Thomson 1922) and bred, becoming “not rare in the vicinity of the gardens”, but they ultimately failed to establish (Thomson 1922). Subspecies not known.

PYCNONOTIDAE

***Pycnonotus cafer bengalensis* Blyth**

Indian Red-vented Bulbul

Pycnonotus bengalensis Blyth, 1845: *Journ. Asiatic Soc. Bengal 14*: 566 – Bengal.

Pycnonotus cafer; Turbott 1956, *Notornis 6*(7): 185. Not *Turdus cafer* Linnaeus, 1766.

Pycnonotus cafer bengalensis Blyth; Checklist Committee 1990, *Checklist Birds N.Z.*: 200.

Released in the eastern suburbs of Auckland in 1952, and bred successfully. Fifty birds were present by 1954, but they were exterminated by 1955 (Turbott 1956a). More recent reports to the present time suggest subsequent releases, but none has been viable (with several birds deliberately killed by authorities).

MUSCICAPIDAE

Erithacus rubecula (Linnaeus)**Eurasian Robin**

Motacilla Rubecula Linnaeus, 1758: *Syst. Nat.*, 10th edition 1: 188 – Europe, restricted to Sweden (*vide* Ripley 1964, in Peters *Check-list Birds World* 10: 36).

Erithacus rubecula (Linnaeus); Hutton 1871, *Cat. Birds N.Z.*: 56.

Erithacus rubeculus (Linnaeus); A. Hamilton 1909, *Hand-list Birds New Zealand*: 18. Unjustified emendation.

Erithacus rubecula; Thomson 1922, *Naturalisation Animals Plants New Zealand*: 147.

Released at Nelson (before 1871; F. Hutton 1871), Auckland (1868, 1871–72), Canterbury (1879), Wellington (1883), and Otago (1885–86) (Thomson 1922). Indications of survival in Wellington (3 years) and in Otago (6 years). Some may have bred successfully but they ultimately failed to establish (Thomson 1922). Subspecies probably *E. r. melophilus* from the British Isles (Checklist Committee 2010).

Recommended citations for information from this Appendix and the Supplementary Materials database

- Miskelly, C.M. 2022. Alternative English, Māori, and Moriori names for New Zealand birds. Pp. 262–281 (Appendix 3) in Checklist Committee, *Checklist of the birds of New Zealand* (Fifth edition). Wellington, Birds New Zealand (published online as a pdf – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/checklist-2022-appendix3.pdf> and as an HTML webpage – <https://www.birdsnz.org.nz/society-publications/checklist/appendix-3-alternative-names-for-new-zealand-birds/>).
- Miskelly, C.M. 2022. Database of alternative names for New Zealand birds. Supplementary Materials 2 in Checklist Committee, *Checklist of the birds of New Zealand*. (Fifth edition). Ornithological Society of New Zealand Occasional Publication No. 1. Wellington, Ornithological Society of New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>).

APPENDIX 3

Alternative English, Māori, and Moriori names for New Zealand birds

Selecting preferred Māori and English names for New Zealand birds is a difficult and often controversial task, as multiple names are used for many species. Māori often named different ages, sexes, and growth stages of birds, based on the species' use and whakapapa (genealogy). For example, the name “tītī” has gained wide acceptance in recent decades as the Māori name for the sooty shearwater *Ardenna grisea*. However, it is not the name that many Rakiura Māori would give an individual adult *A. grisea* seen in flight. “Tītī” is mainly used for chicks of *A. grisea* at an age when they are ready for harvest. There is no agreement among muttonbirders on the name for adult *A. grisea*, with at least four different names in local use. Under-weight, unharvestable chicks have yet another name.

Furthermore, Māori apparently did not recognise as different, and separately name, certain similar-looking or closely-related species of birds. Different iwi (tribes) also have different dialects, and thus the spelling of essentially the same name may differ between different regions in the country (Table 2). In the late 19th Century, Māori bird names were taken from the works of prominent Pākehā (Europeans) who lived and worked with particular iwi. This is how the names used by certain iwi became more prevalent in recent usage than other tribal names for the same bird.

Table 2. New Zealand birds with more than 20 Māori names and/or with 30 or more variants of these names (i.e. the same sequence of letters, but with varying use of macrons, hyphens and/or spaces between words). The number of names is derived from this Appendix, with information on the source of all names and variants provided in the Supplementary Materials database.

ENGLISH NAME	SCIENTIFIC NAME(S)	MĀORI NAMES	TOTAL VARIANTS
Kaka	<i>Nestor meridionalis</i>	44	71
Bellbird	<i>Anthornis melanura</i>	44	70
New Zealand robins	<i>Petroica australis</i> + <i>P. longipes</i>	44	70
New Zealand fantail	<i>Rhipidura fuliginosa</i>	37	64
Whitehead	<i>Mohoua albicilla</i>	31	51
Banded rail	<i>Gallirallus philippensis</i>	28	50
Rifleman	<i>Acanthisitta chloris</i>	31	46
Stitchbird	<i>Notiomystis cincta</i>	25	41
Tomtit	<i>Petroica macrocephala</i>	24	41
Parakeets	<i>Cyanoramphus novaeseelandiae</i> + <i>C. auriceps</i>	24	41
New Zealand dotterel	<i>Charadrius obscurus</i>	30	38
Tui	<i>Prothemadera novaeseelandiae</i>	25	38
Grey warbler	<i>Gerygone igata</i>	25	34
New Zealand scaup	<i>Aythya novaeseelandiae</i>	20	31

We here provide a preliminary list of alternative English, Māori, and Moriori names for New Zealand birds, to supplement the names presented in the main Checklist, and to allow users to link to species of interest, that may be searched for using an alternative name. The list was based on a database of 915 Māori and Moriori bird names compiled by Paul Scofield and Geoff Chambers, with input from the Māori Language Commission, during preparation of the 2010 Checklist. This was expanded to a database of 2,822 English and 2,515 Māori and Moriori names for New Zealand birds compiled by Colin Miskelly during preparation of the 2022 Checklist. Additional names were sourced primarily from Māori language dictionaries, and general publications on New Zealand birds. Eight Māori or Moriori names for New Zealand birds were sourced from recent single-species scientific publications, and 44 were created for the Te Taiao natural history exhibition in Te Papa (which opened in May 2019).

Birds are listed alphabetically by their scientific name, with superscripts used to provide an example of where the name was published. Multiple superscripts for a single name denote where the name has more than one variation (i.e. the same sequence of letters, but differing in the use of spaces, hyphens, macrons, apostrophes, or other diacritical marks) or where an earlier use of the name was imprecise about which species the name applied to. The recommended spellings of

Māori bird names were mainly derived from Appendix 3 in the 2010 Checklist, and from the Māori Dictionary website (<https://maoridictionary.co.nz> – viewed Aug. 2021). All variations and early imprecise use of names, and also the page reference for each name, are provided in the Supplementary Materials database (<https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>).

The Checklist Committee intends to expand this list during subsequent revisions of the Checklist. We invite submissions of additional names that have been used in publications (including websites, signage, and brochures) – please email examples of these to checklist@birdsnz.org.nz (please include a pdf, hyperlink, scan, or photograph showing the name in print).

Authors and editors of Birds New Zealand publications may use alternative bird names from this list, provided an explanation is given for why the name is used in preference to that in the main Checklist. Languages, and usage of bird names, evolve over time. If and when an alternative name is demonstrably the most frequently used name for a bird over the previous decade (at least) in *Notornis* (the scientific journal of Birds New Zealand / Ornithological Society of New Zealand), it will be moved to the main Checklist.

Standardised spellings have been used for the following English bird names: albatross includes albatros, dotterel includes dottrel and dotterell, mollymawk includes mollyhawk, mollymawk and molly-mawk, and parakeet includes parrakeet, paroquet and parroquet. Abbreviations: ch = chick, f = female, juv = juvenile, m = male, var = variety or colour variant.

The database is restricted to English, Māori and Moriori names that have been applied to New Zealand birds in New Zealand, plus English names that have been applied elsewhere to species that breed only in New Zealand. Some names were applied incorrectly, or names may have been switched between taxa over time. The main Checklist provides current names used for New Zealand birds.

Recommended citations for information from this Appendix and the Supplementary Materials database

Miskelly, C.M. 2022. Alternative English, Māori, and Moriori names for New Zealand birds. Appendix 3 in Checklist Committee, *Checklist of the birds of New Zealand*. Fifth edition. Wellington, Birds New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/checklist-2022-appendix3.pdf>).

Miskelly, C.M. 2022. Database of alternative names for New Zealand birds. Supplementary Materials 2 in Checklist Committee, *Checklist of the birds of New Zealand*. Fifth edition. Wellington, Birds New Zealand (published online – <https://www.birdsnz.org.nz/wp-content/uploads/2022/05/supp-2-bird-names-database.xlsx>).

Acanthis flammea common redpoll¹⁰⁸, lesser redpoll⁵², redpole^{16,16}, redpoll⁴⁷

Acanthisitta chloris rifleman¹⁹, tītītipounamu^{19,39,81}, bush wren³², Chuck Connors¹⁰⁰, citrine warbler³⁵, creeper¹⁶, goldfinch¹⁰, hōutuutu^{54,74}, kikumatu⁸⁵, kikumutu⁷, kikipounamu³⁶, kikirimutu¹⁹, kikitara³⁶, kōhurehure^{36,81}, kōrurerure (f)^{36,81}, kotikotipa⁵⁴, kotikotipae³⁶, kōtipatipa^{54,81}, kōtītītī^{54,81}, mako¹⁰, miru miru^{11,13}, momotawai^{36,113}, momoutu³⁶, mountain wren¹⁰, mōutuutu^{19,54,81}, muhumuhu⁵⁴, pihipihī^{6,8,10}, pipiriki⁵⁴, pipiriri⁷, piwauwau⁵, piwauwaw¹¹, rifleman wren⁵⁴, spotted wren¹⁰, tāpahipare (m)^{36,81}, thumbie⁷⁸, tīti-ponamu¹⁶, tītipounamu^{14,52,93}, tītiripounamu⁹², toirua³⁶, tokepiripiri^{19,81,93}; *A. c. granti* North Island rifleman⁴³; *A. c. chloris* South Island rifleman⁴³, alpine rifleman³⁴

Acridotheres tristis common myna⁸⁸, maina¹³⁴, house myna⁴⁷, Indian minah⁴⁷, Indian myna⁴⁷, minah⁴⁶, myna⁵⁸, mynah⁸⁶

Acrocephalus australis Australian reed warbler¹⁰⁸

Actitis hypoleucos common sandpiper⁷⁹

Aegotheles novaezealandiae New Zealand owl-nightjar⁸⁸, ruru hinapō¹²², little owl¹⁰, ruruwekau¹⁰

Aegotheles sp. indet. St Bathans owl-nightjar¹³⁷

Alauda arvensis Eurasian skylark¹¹¹, kairaka⁹², common skylark¹³⁵, pakeha pioioi⁹², pakeha piopio⁹², skylark¹⁶

Aldiomedes angustirostris Alastair's albatross¹³⁷

Alectoris chukar chukor⁷², chukar⁸⁶, chukar partridge⁸⁶, chukor partridge¹³⁵, Indian chukar⁸⁶, Persian chukar⁸⁶

Anarhynchus frontalis wrybill^{32,50}, ngutu pare^{24,54,81}, blackringed plover¹⁰, crockbill⁹¹, crook-bill^{85,135}, crook-bill plover¹⁶, crook-billed plover^{17,91}, dotterel¹⁰, ngutu-parore^{54,79,88}, parore⁹³, pohoera¹⁰, scissor-bill^{14,85}, tuturiwatu¹⁰, wrybill plover⁵², wrybilled plover^{19,58}

Anas acuta northern pintail¹¹¹

Anas aucklandica Auckland Island teal⁷², metawetanga¹⁴, Auckland Island duck^{24,35}, Auckland Islands duck^{43,48,51}, Auckland Island flightless duck⁷³, Auckland Islands teal¹¹⁵, Auckland teal⁸⁹, flightless duck³², flightless teal¹³⁵, red teal¹⁴, tētē kākārīki¹²²

Anas castanea chestnut teal⁹⁴, Australian teal³⁴, black teal⁸⁵, chestnut-breasted teal⁸⁵, mountain teal⁸⁵, red teal⁸⁵

Anas chathamica Chatham Island duck⁷³

Anas chlorotis brown teal⁷², pāteke^{14,81}, brown duck¹⁹, hoho⁹², patake²⁴, pateka¹¹, red teal¹⁶, South Island brown teal¹¹⁹, tarawhatu^{19,54}, tata⁹², teal¹⁴, teal duck⁸⁶, tei⁷, tētē^{24,81}, tētē-whero^{19,36,58,81,134}, tokitoki⁵⁴

Anas gracilis grey teal³², tētē-moroiti^{24,81,93,99}, Australian teal⁴³, green-headed teal⁴⁸, little teal¹⁶, pohoriki²⁴, tētē^{19,81,134}, tētē-wai^{54,81,134}, wood-teal²⁴

- Anas nesiotis* Campbell Island teal⁷², Campbell Island duck⁵⁷, Campbell Island flightless duck⁷³, Campbell Island flightless teal⁷⁶, Campbell Islands teal¹¹⁵, Campbell teal⁸⁹
- Anas platyrhynchos* mallard¹⁶, rakiraki¹¹³, feral duck¹¹³, matakīrea ōrangīuri¹²², pāreera⁹³
- Anas superciliosa* grey duck¹⁴, pāreera^{5,8}, black duck⁵³, gray duck¹⁰, he parrera¹¹, karakahia⁸¹, manua⁵⁴, māunu^{24,81}, Pacific black duck⁸⁹, pāreera maunu (moulting)¹³⁴, supercilious duck⁸⁵, tahora¹⁰, tāwaka⁸¹, topatopa (ch)³⁶, turuki⁹
- Anhinga melanogaster* darter⁵², needle-beaked shag⁸⁶, snakebird^{86,135}; *A. m. novaehollandiae* Australian darter²⁴, South Australian darter⁴³
- Anomalopteryx didiformis* little bush moa⁹⁰, moariki¹²²
- Anous minutus* black noddy³⁴, lesser noddy⁷², titerack⁸⁶, white-capped noddy³², white-capped tern⁵⁶
- Anous stolidus* brown noddy⁷⁸, common noddy³⁴, gogo⁸⁶, greater noddy⁸⁶, noddy¹⁶, noddy tern⁷⁸
- Anser anser* greylag goose⁹⁴, kuihi⁸, common goose⁴⁷, domestic goose⁹⁴, feral goose⁹⁴, grey-lay goose⁴⁷, kuuhi⁹², wild goose¹³⁵
- Anthochaera carunculata* red wattlebird^{52,53,78,88}, Australian honey-eater²⁴, wattled honeyeater⁸⁶, yellow wattle bird^{43,48}
- Anthornis melanocephala* Chatham Island bellbird^{19,48}, kōmako^{29,109}, bell-bird⁴⁹, Chatham Islands bellbird^{43,115}, mako-mako¹¹
- Anthornis melanura* bellbird^{10,13,48}, korimako⁷, Auckland Islands' bell bird⁴³, he-ghobarra¹¹, kēkerematua (m)^{36,81}, kerekere matutū (m)^{36,93}, kerekerematātū (m)^{54,81}, kohimako^{8,19}, kōhoimako^{5,36,81}, kōhorimako^{5,81}, kōkōmako^{6,7,81}, kōkorihimako (m)^{38,81}, kōkorimako^{9,81}, kokorimoko⁷, kōkorohimako (m)^{19,81}, kōkoromako^{14,81}, kōmako^{19,81}, kōmakohua⁹⁹, kōmakohuariki (m)^{36,99}, komakomako⁵⁴, kōmamako^{36,81}, kōpaopao^{7,93}, kōpara^{9,81}, kōparapara^{36,81}, korihako⁵⁴, korihimako³⁸, korimaku⁵, korimoko⁷, koromako¹⁴, kotaiahu³⁶, kukari (ch)³⁶, mako¹⁹, makomako^{5,7}, mocker¹⁶, mockie⁷⁸, mockiemock¹⁰⁰, mocking-creeper^{1,85}, moko-moko¹⁶, New Zealand bellbird^{53,101}, North Island bell bird⁴³, para (f)⁵⁴, rearea¹⁹, South Island bell bird⁴³, tītapu (f)^{19,81}, titiapu⁵⁴, tītīmako^{6,7,8,81}, titimoko⁹³, titoaireka⁵⁴, tītōmako^{14,81,93}, tōtōaireka (f)^{36,81}, totoara⁷, tukumako⁵⁴, tūtūmako^{36,81}; *A. m. obscura* Three Kings bellbird⁷²; *A. m. oneho* Poor Knights bellbird⁸⁸
- Anthus novaeseelandiae* New Zealand pipit¹⁹, pīhoihoi^{5,8,81}, Australasian pipit¹⁰⁸, Australian pipit⁸⁸, common lark³³, groundlark^{16,19,86}, ground-pipit⁸⁵, hīoi^{6,7,8}, kātaitai^{5,81}, kitaitai¹³³, kogoo-aroure¹¹, lark¹⁰, manu kahaki^{81,93,99}, manukāwhaki⁹⁹, native lark²², New Zealand lark¹¹, North Island pipit⁴³, okiuai⁷, pīoioi^{6,8,10,36,81}, pīpipi-tai^{54,81,99}, pipit⁵¹, Richard's pipit⁸⁸, sandlark⁷⁸, South Island pipit⁴³, whāioio^{8,36,81}, whioi^{10,99}, whioioi⁹², wioi kaitaitai⁹; *A. n. chathamensis* Chatham Island pipit⁶¹, Chatham Islands' pipit⁴³; *A. n. aucklandicus* Auckland Island pipit³⁴, Auckland Islands pipit^{43,79}, southern islands pipit⁷³, subantarctic pipit¹⁰¹; *A. n. steindachneri* Antipodes Island pipit⁴⁰, Antipodes lark³², Antipodes pipit⁷⁹, Steindachner's pipit³⁵
- Aptenodytes forsteri* emperor penguin⁷⁹
- Aptenodytes patagonicus* king penguin²⁴, tokoraki⁹²
- Aptenodytes ridgeni* Ridgen's penguin⁹⁰
- Apteryx* spp. kiwi⁵, eastern kiwi¹⁰¹, kiwi-ma⁹², ngutu-roa⁵⁴, rire (juv)⁵⁴, rirerire (juv)⁷
- Apteryx australis* southern brown kiwi¹⁰¹, tokoeka^{9,14,79}, big kiwi⁸⁵, brown kiwi³², common kiwi⁸⁹, great kiwi¹⁴, kiwi¹¹, kiwi⁵, kiwikiwi¹¹, kiwi roa⁹³, roa²³, rowi²⁰, southern kiwi³², tokoweka³⁶, totoweka⁹²; *A. australis* subsp. South Island brown kiwi⁷⁹, Fiordland tokoeka¹³⁵, Haast tokoeka¹¹⁹, north Fiordland tokoeka¹¹³, northern Fiordland tokoeka¹¹⁹, South Island kiwi¹⁹, southern Fiordland tokoeka¹¹⁹, West Coast kiwi⁸⁵; *A. a. australis* Stewart Island brown kiwi⁸³, Rakiura tokoeka¹¹⁹, Stewart Island kiwi³⁴, Stewart Island tokoeka¹¹³
- Apteryx haastii* Potts' kiwi¹³⁷
- Apteryx littoralis* Marton kiwi¹³⁷
- Apteryx mantelli* North Island brown kiwi⁸³, kiwi-nui^{11,81}, brown kiwi¹⁶, Buller's kiwi³⁴, common brown kiwi¹⁴, common kiwi⁸⁹, kiwikiwi⁵, kiwi-korako (white bird)⁵⁴, kiwi-kura^{54,81}, kiwi parure^{19,81}, Mantell's kiwi³⁴, North Island kiwi¹⁹, northern brown kiwi¹⁰¹
- Apteryx maxima* great spotted kiwi³², roroa⁹⁶, fireman¹¹, great grey kiwi⁴³, great kiwi¹⁶, grey kiwi⁵³, Haast's kiwi²⁰, kiwi-karuai¹⁹, kiwi-karuwai^{36,81}, kiwi parure¹¹, kiwi roa⁹⁹, kiwi roaroa⁹⁹, large grey kiwi¹⁹, roa¹⁹, roaroa^{11,14,16}, South Island kiwi⁵⁴
- Apteryx owenii* little spotted kiwi⁷², kiwi pukupuku^{19,81}, blue-hen²⁰, grey kiwi¹⁴, kivi-iti¹¹, kiwi²⁰, kiwi-hoihoi¹⁰, ⁵⁴, little apteryx¹⁰, little grey kiwi¹⁹, little kiwi⁵⁸, Owen's kiwi³⁴, spotted kiwi³², straight-billed kiwi²⁰, West Coast kiwi³⁴
- Apteryx rowi* rowi⁹⁶, Okarito brown kiwi¹¹¹
- Aptornis defossor* South Island adzebill¹⁰¹, ngutu hahau¹²², adzebill⁹⁰, greater aptornis⁵², South Island aptornis⁸⁸
- Aptornis otidiformis* North Island adzebill¹⁰¹, adzebill⁹⁰, lesser aptornis⁵², North Island aptornis⁸⁸
- ?*Aptornis proasciarostratus* St Bathans adzebill¹³⁷
- Apus pacificus* fork-tailed swift⁷², Australian swift²⁴, large white-rumped swift¹³⁵, Pacific swift¹³⁵, white-rumped swift⁴³

- Aquila moorei* Haast's eagle¹⁰¹, extinct New Zealand eagle⁸⁸, giant eagle¹³⁵, greater extinct eagle⁵², harpagomis¹³⁵, hokioi⁵⁴, lesser extinct eagle⁵², New Zealand eagle⁹⁰, pouakai^{81,87}
- Archaeospheniscus loppellorum* Loppells' penguin^{90,137}
- Archaeospheniscus lowei* Lowe's penguin⁹⁰
- Ardea alba* kōtuku^{6,7,8,81}, white heron¹⁰, eastern great white egret⁷³, eastern great white heron³⁴, great egret⁸⁸, great white egret⁸⁵, great white heron⁴⁸, katuka¹¹, kotukutuku³⁴, koutuku¹⁰, large egret⁸⁶, New Zealand great white heron⁴³, white crane¹², white egret⁵²
- Ardea cinerea* grey heron⁴⁸, common heron³⁴, gray heron¹³⁵; *A. c. jouyi* oriental grey heron¹¹¹, Asiatic grey heron⁷², Australian grey heron⁴³
- Ardea intermedia* plumed egret⁸⁴, intermediate egret⁸³, lesser egret¹³⁵, short-billed egret¹³⁵, yellow-billed egret¹³⁵
- Ardea pacifica* Pacific heron⁷⁸, white-necked heron⁷²
- Ardenna* spp. hakoakoa⁷, hakuakua³⁶, titi-wahine⁹²
- Ardenna bulleri* Buller's shearwater^{24,52}, rako¹³¹, ashy-back shearwater⁵⁵, ashy-backed petrel⁵³, ashy-backed shearwater⁴⁸, ashy-backed wedge-tailed petrel⁴³, Buller's petrel²⁴, gray-backed shearwater⁵⁹, grey-backed shearwater⁸⁶, long-tailed shearwater³², New Zealand shearwater⁵⁵
- Ardenna carneipes* flesh-footed shearwater²⁴, toanui⁸⁶, fleshy-footed petrel⁵³, fleshy-footed shearwater⁴⁸, hakoakoa²⁴, New Zealand flesh-footed petrel⁴³, pale-footed shearwater⁸⁶, pink-footed shearwater³², taonui⁵⁴, tuanui¹¹³
- Ardenna creatopus* pink-footed shearwater⁸⁸
- Ardenna davealleni* Pom's shearwater¹³⁷
- Ardenna gravis* great shearwater⁷⁹
- Ardenna grisea* sooty shearwater³⁵, tītī^{8,24,81}, akoko⁹⁸, grey petrel⁵⁰, hakeke³⁶, hākēkeke⁹⁹, hakoakoa^{8,24}, hakoke³⁶, hakoko³⁶, hakuakua³⁶, koakoa³⁶, mutton-bird^{16,24}, New Zealand muttonbird^{32,72}, ngungu (small bird)³⁶, ōi (ch)^{36,81}, oii¹⁶, sombre petrel⁴³, sombre shearwater²⁴, takakau³⁶, totorore²⁴
- Ardenna pacifica* wedge-tailed shearwater^{24,88}, black burrower⁸⁶, dark wedge-tailed shearwater⁵⁵, Kermadec wedge-tailed petrel⁴³, mourningbird¹³⁵, wedge-shaped shearwater⁴⁸, wedge-tailed muttonbird¹³⁵, wedge-tailed petrel⁵³
- Ardenna tenuirostris* short-tailed shearwater⁴⁸, Bonaparte's shearwater³⁴, Brandt's shearwater¹⁹, hakoakoa²⁴, hakoko⁹⁹, hakuakua²⁴, ngungu¹³⁴, ōi⁸¹, short-tailed petrel⁴³, slender-billed shearwater⁸⁶, Tasmanian muttonbird^{32,72}, titi¹⁹
- Arenaria interpres* ruddy turnstone⁸⁵, eastern turnstone⁴³, turnstone¹⁶
- Artamus cyanopterus* dusky woodswallow¹³⁷
- Artamus personatus* masked woodswallow^{83,88}, blue jay⁸⁶, blue martin⁸⁶, bush martin⁸⁶, skimmer⁸⁶
- Artamus superciliosus* white-browed woodswallow^{83,88}, blue martin⁸⁶, summer-bird⁸⁶
- Athene noctua* little owl⁵², ruru nohinohi¹²², brown owl⁸⁶, German owl⁷⁸, little brown owl⁵⁸, small brown owl⁴⁷
- Australornis lovei* Love's Paleocene seabird¹³⁷
- Aythya australis* Australian white-eyed duck⁴³, karakahia¹⁴, barwing⁸⁵, copperhead⁸⁵, hardhead⁷⁹, punkari⁸⁵, white-eyed duck¹⁹, white-wing⁸⁵, white-winged duck^{14,16}
- Aythya novaeseelandiae* New Zealand scaup¹⁹, pāpango^{10,81}, black duck¹⁰, black teal¹⁶, black widgeon²², he patek¹¹, kaiharopia³⁶, kukupako⁹², matamatapōuri^{36,93}, matapo⁹³, matapōuri^{6,7,8,81}, New Zealand duck¹¹, New Zealand scarp⁵¹, New Zealand widgeon⁵⁴, papanga¹⁴, pārera matapouri^{36,54,81}, pōkeke⁸¹, pūakiaki^{36,81}, pupango³², raipo¹⁹, repo¹¹, scaup⁴⁸, scaup duck⁵⁴, tētē⁸¹, tētēpango^{19,54,81}, tētēwai pango⁹³, tētēwhero⁹³, tītīpōrangi^{19,81}, tītītipō^{38,99}, widgeon¹⁴
- Bartramia longicauda* upland sandpiper⁸³, Bartram's sandpiper⁸⁴, prairie whistler⁸⁴, quailie⁸⁴, upland plover⁷⁹
- Biziura delatouri* New Zealand musk duck¹⁰¹, de Lautour's duck⁹⁰
- Botaurus poiciloptilus* Australasian bittern⁸³, matuku-hūrepo^{6,7,8,10,19,81}, Australian bittern⁷², Australian brown bittern⁸⁶, bittern¹⁰, black-backed bittern¹⁹, boomer¹³⁵, brown bittern⁵², common bittern⁵⁸, hūrepo^{36,81}, hūroto^{36,81}, kāka^{36,81}, kautuku³⁶, matuku^{5,8}, matuku-kāka^{36,81}, matuku-kurepo⁵², matuku-nurepo¹³, matuku-urepo⁵, New Zealand bittern²⁴, New Zealand black-backed bittern⁴³
- Branta canadensis* Canada goose⁵², kuihi¹¹³, Canadian goose⁴⁷, honker⁸⁶; *B. c. maxima* giant Canada goose⁸⁶
- Bubulcus ibis* cattle egret⁷⁸, buff-backed heron⁷⁸; *B. i. coromanda* eastern cattle egret¹¹
- Bulweria bulwerii* Bulwer's petrel¹¹¹
- Cabalus modestus* Chatham Island rail⁵², mātirakahu^{36,109}, Chatham Island little rail⁵³, Chatham Islands little rail⁵¹, Hutton's rail²⁴, little Chatham Island rail⁴⁸, little Chatham Islands' rail⁴³, Mangare rail³², Mangere rail⁴⁹
- Cacatua galerita* sulphur-crested cockatoo⁴⁷, white cockatoo⁵²
- Cacomantis flabelliformis* fan-tailed cuckoo⁷⁹, ash-coloured cuckoo⁸⁶
- Calidris acuminata* sharp-tailed sandpiper⁴³, kohutapu³⁴, marsh sandpiper²⁰, pectoral sandpiper³⁵, sandpiper²⁴, sharp-tailed stint⁴⁸, Siberian pectoral sandpiper⁷²
- Calidris alba* sanderling⁴⁸, beach-bird¹³⁵, whitey¹³⁵

- Calidris alpina dunlin*⁸³, black-bellied sandpiper⁸⁶, blackcrop¹³⁵, red-backed sandpiper⁸⁶
- Calidris bairdii* Baird's sandpiper⁸³
- Calidris canutus* red knot⁸⁶, huahou^{24,93}, common knot¹¹³, eastern knot⁷³, knot¹⁶, lesser knot^{84,111,137}
- Calidris falcinellus* broad-billed sandpiper⁷⁸; *C. f. sibirica* eastern broad-billed sandpiper⁸³
- Calidris ferruginea* curlew sandpiper^{34,35}, curlew stint⁸⁶
- Calidris fuscicollis* white-rumped sandpiper⁸³, Bonaparte's sandpiper⁸⁶
- Calidris himantopus* stilt sandpiper¹¹¹
- Calidris mauri* western sandpiper⁷⁹
- Calidris melanotos* pectoral sandpiper⁴⁸, American pectoral sandpiper⁷²
- Calidris minuta* little stint⁴⁸
- Calidris minutilla* least sandpiper⁷², American stint⁸⁴, mud peep⁸⁴
- Calidris paramelanotos* Cox's sandpiper¹³⁷
- Calidris pugnax* ruff⁷⁹, reeve (f)⁸⁴
- Calidris pusilla* semipalmated sandpiper^{79,84}, sand peep⁸⁴
- Calidris ruficollis* red-necked stint⁴⁸, eastern little stint⁷², red-necked sandpiper³², red-throated stint³⁵, rufous-necked sandpiper⁸⁶, rufous-necked stint¹³⁵
- Calidris subminuta* long-toed stint⁷⁹, Middendorf's stint¹³⁵
- Calidris subruficollis* buff-breasted sandpiper¹¹⁵, grasspiper¹³⁵
- Calidris tenuirostris* great knot⁷⁹, Asiatic knot⁸⁶, eastern knot⁸⁶, greater knot⁸⁶, greater sandpiper⁸⁶
- Callaeas* spp. *kōkako*^{5,9,11,81,99}, cinereous wattlebird^{11,108}, crow¹⁰, gillbird^{78,108}, hōkako^{54,81}, hōngā^{36,81}, hōngē^{36,81}, kakako⁵, manu-whakaounga³⁶, New Zealand crow³², ōngā^{54,81}, ōngē^{7,8,81}, organ-bird⁷⁸, pakara^{36,81}, wattlebird^{85,108}, wattled crow⁵¹, werewere¹⁰⁸, werewere-kokako⁵⁴
- Callaeas cinerea* South Island kokako^{72,109}, *kōkā*^{92,111}, blue crow³³, great wattled bird⁸⁵, orange wattle crow⁴⁴, orange-wattled crow^{16,86}, orange-wattled kokako¹⁰⁸, South Island crow³², wattled-bird²², yellow-wattled crow²⁸
- Callaeas wilsoni* North Island kokako⁷², *kōkako*⁹³, blue crow³³, bluegill^{78,86}, blue-gills⁸⁵, blue-wattled crow^{16,86}, North Island crow³²
- Callipepla californica* California quail⁸³, tikaokao⁵⁴, Californian quail¹², callie⁸⁶, koera¹¹³, kuera⁹³, kuera Karipōnia¹²², McPherson quail¹³⁵, plumed quail¹³⁵, tikaukau⁵⁴, tikoukou⁵⁴
- Calonectris borealis* Cory's shearwater⁸⁶, Mediterranean great shearwater⁵⁷, Mediterranean shearwater⁷³, North Atlantic shearwater⁷²
- Calonectris leucomelas* streaked shearwater¹¹¹
- Capellirallus karamu* snipe-rail^{90,101}, cave rail⁷³, New Zealand snipe-rail⁸⁸
- Carduelis carduelis* European goldfinch¹⁰⁸, *kōurarini*¹²², goldfinch¹⁶, goldie⁷⁸
- Cereopsis novaehollandiae* Cape Barren goose¹⁶, pig goose⁸⁶
- Charadrius bicinctus* banded dotterel¹⁹, pohowera¹⁶, dotterel¹⁶, double-banded dotterel⁴³, double-banded plover⁸⁶, mountain plover⁸⁴, piopio^{6,7,99}, redwinged plover¹⁰, turituri whatu⁹³, turiwhati⁸¹, turiwhatu⁸¹, turuatu^{6,8,134}, turuturuwhatu¹³⁴, turuwhatu¹³⁴, tuturiwatu¹⁰, tuturiwhata¹⁹, tūturiwhati^{24,134}, tūturiwhatu^{14,93}, tuturuatu¹³⁴, tuturuwhatu¹³⁴;
- C. b. exilis* Auckland Island banded dotterel⁷³, Auckland Island banded plover¹⁰³
- Charadrius leschenaultii* greater sand plover^{84,135}, Geoffroy's sand plover⁷⁸, greater sand dotterel¹¹³, large sand dotterel⁷², large sand plover⁹¹, large-billed dotterel⁸⁴, long-billed sand plover⁸⁶
- Charadrius mongolus* lesser sand plover^{78,84}, lesser sand dotterel¹¹³, Mongolian dotterel⁷⁸, Mongolian plover⁸⁶, Mongolian sand dotterel¹¹³, Mongolian sand plover^{113,135}, short-billed sand plover⁸⁶, Tibetan plover¹³⁵
- Charadrius obscurus* New Zealand dotterel¹⁹, tūturiwhatu^{24,81}, dotterel¹⁴, dusky plover³, ha-poho-era¹¹, kūkuruatu⁸¹, moakura¹¹, paturiwhata⁸⁶, pohoera¹⁰, pukunui⁷, putoto⁷, putoto¹¹, rako⁵⁴, red-breasted dotterel⁷², red-breasted plover¹⁶, spotted plover¹⁰, tākahikahi^{7,81}, tākaikaha^{36,81}, tākaikai^{36,81}, tituriwhatu-pukunui⁸⁵, totoripa⁹², turiwhati³⁶, turiwhatu³⁶, turuatu^{7,8,36}, turuturuwhatu³⁶, turuwhatu³⁶, tuturiwata¹³, tuturiwata pukunui¹¹, tuturiwatu⁵, tuturiwhata¹⁹, tūturiwhati^{24,81}, tūturiwhatu^{24,81}, tuturiwhatu-pukunui³⁶, tuturuatu³⁶, tuturuwhati⁸¹, tuturuwhatu^{36,81}, tūwhaipapa⁹³; *C. o. aquilonius* northern New Zealand dotterel¹¹¹; *C. o. obscurus* southern New Zealand dotterel¹¹¹
- Charadrius ruficapillus* red-capped plover⁸⁶, red-capped dotterel²⁴, red-capped sandplover¹³⁵, red-necked dotterel¹³⁵, red-necked plover¹³⁵, sandlark¹³⁵
- Charadrius semipalmatus* semipalmated plover¹¹¹
- Charadrius veredus* oriental dotterel⁴³, eastern long-legged sand plover⁸⁶, eastern sand plover⁸⁶, oriental plover⁴⁸
- Chenonetta finschi* Finsch's duck⁹⁰, manutahora¹²², extinct New Zealand duck⁷³, extinct New Zealand teal⁵²
- Chenonetta jubata* Australian wood duck⁷³, maned duck⁸³, maned goose⁷²

- Chlidonias albostratus* black-fronted tern²⁴, tarapirohe^{54,99,134}, common tern¹⁶, gray tern¹⁰, grey tern¹⁹, inland tern⁵⁶, plough bird⁸⁵, ploughboy^{78,85}, riverbed tern⁷⁸, sea martin⁷⁸, tara¹⁰, taraiti⁹³, tara piroe^{11,115}
- Chlidonias hybridus* whiskered tern⁸³
- Chlidonias leucopterus* white-winged black tern¹⁹, eastern white-winged black tern⁴³, white-winged marsh tern⁵², white-winged tern¹⁶
- Chloris chloris* European greenfinch¹⁰⁸, green linnet¹⁶, greenfinch²², greenie¹³⁵
- Chroicocephalus bulleri* black-billed gull¹⁶, tarāpuka^{92,111,113}, black bill gull⁹², Buller's gull³⁴, lake gull⁸⁵, rapunga⁵⁴, tarapua⁵⁴, tarapuke⁹², tarāpunga^{6,8,10,24,134}, toie (juv)⁵⁴
- Chroicocephalus novaehollandiae* silver gull⁵³, Australian gull³⁴, *C. n. scopulinus* red-billed gull²⁴, tarāpunga^{6,7,8,11,14,81,81}, akiaki^{5,24}, ash-backed gull⁴, brown-billed gull²⁴, hakorā^{36,81}, he talle¹¹, jackie⁶¹, karae⁵⁴, karehākoa^{36,81}, katatē^{36,81}, katete⁹³, kittiwake⁴⁴, kittywake⁸⁵, little gull¹⁰, mackerel gull^{16,35}, makorā^{24,81,99}, New Zealand red-billed gull⁴³, New Zealand silver gull⁷², piapuka¹¹, sea martin⁹², taketake³⁶, tarāpua^{81,99}
- Chrysococcyx lucidus* shining cuckoo¹², pīpīwharaurōa^{8,33,81}, bronze cuckoo³³, bronze-winged cuckoo²², cuckoo⁵⁴, cuckoo's mate⁴¹, dog-whistler⁸⁵, glistening cuckoo⁴¹, goldenspotted cuckoo¹⁰, golden-winged cuckoo⁴¹, green cuckoo⁴¹, nakonako³⁶, New Zealand shining cuckoo⁴³, pipiaurōa^{19,81}, pipiriwharaurōa⁵⁴, pipiwarōa^{16,16}, pipiwararōa¹⁴, pipiwaraurōa^{6,7}, pipiwarourōa¹¹, pipiwararōa⁵, pipiwararou¹¹, pipiriwharaurōa³⁶, piwaraurōa⁹, poopoo arourōa¹¹, pūpūwharaurōa^{36,81}, rauroa⁸¹, shining bronze-cuckoo^{51,97}, shining cuckoo¹¹, shiny cuckoo¹⁴, short-tailed cuckoo⁴¹, te manu a Māui⁹⁹, waraurōa⁷, whakaraurōa⁵⁴, wharau⁸¹, wharaurōa³⁶, whēnako^{41,81}, whistler¹⁶, whistling cuckoo²²
- Circus approximans* swamp harrier⁷⁸, kāhu^{6,8}, austral harrier⁹³, Australasian harrier⁷², common brown hawk¹⁰, common hawk²⁵, Fiji harrier⁷², goldeneyed hawk¹⁰, Gould's harrier¹⁹, harrier¹⁴, harrier hawk⁴⁶, hawk¹³, kāho⁹⁹, kāhu-komokomo^{24,81,99}, kāhu-kōrako (old bird)^{19,81,99}, kahu korakorako¹⁰, kahu-kura⁵⁴, kāhu maiepa^{24,81,99}, kāhu-pango (juv)^{19,58,81,134}, kahu papango¹⁰, kāhu pōkere o te whenua (juv)⁸¹, kērangī^{54,81}, manu-tahae^{24,54}, marsh harrier⁸⁶, native harrier³³, New Zealand harrier²⁸, swamp hawk^{53,85}, tapukōrako (old bird)¹³⁴, tikaka³⁶, white hawk¹⁰
- Circus teauteensis* Eyles' harrier⁹⁰, kērangī¹²², extinct harrier⁸⁸, Forbes' harrier¹⁰⁹, giant harrier¹³⁵, large extinct harrier⁷³, New Zealand harrier¹³⁵
- Cnemioornis* spp. New Zealand goose¹³⁵, giant extinct goose⁵², tarepo⁵⁴
- Cnemioornis calcitrans* South Island goose⁹⁰, South Island extinct goose⁷³
- Cnemioornis gracilis* North Island goose⁹⁰, tarepo¹³⁵, North Island extinct goose⁷³, tarepo nō Te Ika-a-Māui¹²²
- Coenocorypha* spp. bush snipe⁶⁶, hākawai^{94,99}, hōkioi^{94,99}, island snipe⁹⁵, native snipe⁹⁵, New Zealand semi-woodcock⁹⁵, semi-woodcock⁵³, snipe⁴⁰, southern islands snipe⁹⁵, subantarctic snipe^{95,95}, tutukiwi⁸⁴
- Coenocorypha aucklandica* subantarctic snipe^{78,111}, native snipe²⁷, New Zealand snipe⁴⁸, semi woodcock (New Zealand)⁵¹, semi-woodcock⁸⁵, *C. a. aucklandica* Auckland Island snipe^{19,35}, Auckland Islands snipe^{43,95}; *C. a. meinertzhagenae* Antipodes Island snipe⁴³; *C. a. perseverance* Campbell Island snipe¹⁰¹
- Coenocorypha barrierensis* North Island snipe¹⁰⁴, Little Barrier snipe⁷³
- Coenocorypha chathamica* Forbes' snipe¹⁰⁹, extinct Chatham Island snipe⁵², Forbes's snipe¹⁰⁴, giant Chatham Island snipe⁹⁰
- Coenocorypha huegeli* Snares Island snipe^{35,43}, tutukiwi⁵⁴, bush snipe⁸⁵, Snares snipe³²
- Coenocorypha iredalei* South Island snipe¹⁰⁴, tutukiwi¹⁰⁹, hākawai⁹⁹, hākua^{92,99}, hākua^{99,134}, hōkio⁹⁹, hōkio⁹⁹, hōkiwai⁹⁹, Iredale's snipe¹⁰¹, kākuikui⁹⁹, ōkio^{6,7,8,81,99}, Stewart Island snipe⁷²
- Coenocorypha pusilla* Chatham Island snipe²⁴, Chatham Islands snipe^{48,43}, Chatham snipe¹¹³, little snipe⁹⁵, native snipe¹⁶
- Collocalia* sp. indet. St Bathans swiftlet¹³⁷
- Columba livia* rock pigeon⁵², kererū aropari¹²², blue rock dove⁷⁸, blue rock pigeon²², common pigeon⁴⁷, domestic pigeon¹¹³, feral pigeon⁸⁶, homing pigeon¹¹³, pigeon¹⁶, racing pigeon¹³⁵, rock dove⁴⁷, street pigeon¹³⁵
- Coracina novaehollandiae* black-faced cuckoo-shrike^{52,72}, Australian greybird¹³⁵, Australian little cuckoo-shrike⁴³, Australian shrike²⁴, bificus¹³⁵, black-faced greybird¹³⁵, black-faced shrike¹⁹, blue jay⁸⁶, blue peter¹³⁵, cherry hawk¹³⁵, greater cuckoo-shrike¹³⁵, grey jay¹³⁵, large cuckoo-shrike⁸⁶, little cuckoo shrike⁴⁸, rainbird¹³⁵, shrike thrush¹⁶, shufflewing⁸⁶, small-billed cuckoo-shrike¹³⁵, stormbird¹³⁵, summerbird⁸⁶, white-vented cuckoo-shrike¹³⁵
- Corvus frugilegus* rook¹⁶, crow⁸⁶
- Corvus moriorum* New Zealand raven¹⁰¹, extinct New Zealand crow⁷³, New Zealand crow⁹⁰; *C. m. antipodum* North Island raven¹³⁷; *C. m. pycrafti* South Island raven¹³⁷; *C. m. moriorum* Chatham Island raven¹⁰¹, extinct Chatham Island crow⁵²
- Coturnix novaehollandiae* New Zealand quail¹⁹, koreke⁹, kāreke^{38,81}, koikoiareke³⁶, koitareka⁹³, koitareke^{9,99}, kōkōreke^{6,7,8,81}, koreka¹⁴, kōriki^{54,93}, koutareke^{7,8,9}, koweka⁵⁴, moho-koreke^{10,11}, native quail¹⁶, quail¹⁴, stubble quail⁸⁸, tāreka⁹³, tāreke^{36,81}, tāwaka^{54,81}, tikaokao⁵⁴, tikaukau⁵⁴, tikoukou⁵⁴, tūpererū⁸¹, whēwhē⁸¹
- Coturnix ypsilophora* brown quail⁴⁷; *Coturnix ypsilophora australis* Australian brown quail⁷⁸, kuera⁹³, Australian quail⁴⁶, koera¹³⁴, rat quail⁸⁰, swamp quail⁴⁷, Tasmanian quail¹⁶

- Crex crex* **corncrake**^{48,72}, land-rail^{43,52}
- ?*Crossvallia waiparensis* **Waipara Crossvallia penguin**¹³⁷
- Cuculus optatus* **oriental cuckoo**⁴⁸, Australian cuckoo³⁴, hawk cuckoo⁸⁶, Himalayan cuckoo⁸⁶, Horsfield's cuckoo¹³⁵
- Cuculus pallidus* **pallid cuckoo**⁷², brainfever bird⁸⁶, rain bird¹³⁵, storm bird⁸⁶
- Cyanoramphus auriceps* & *C. novaezelandiae* **kakaiki**^{16,16}, **kākāriki**^{7,8,29,81}, **kākāwaiariki**^{36,81}, **kākāwairiki**^{81,97}, **kākāwariki**^{24,81,97,99}, **kawariki**³⁶, **kawatere**³⁶, New Zealand parakeet⁹⁶, parakeet¹⁴, **parewaka**^{92,92}, **porere**⁹², **porete**^{36,93}, **pōreterete**^{36,81}, **porete-torete**^{58,58}, **poroti**^{81,99}, **pouwaitere**⁹, **powaitere**⁷, **pōwhaitere**^{8,14,81}, **tatariki**^{8,36}, **torete**¹⁹, **tōreterete**^{54,81}
- Cyanoramphus auriceps* **yellow-crowned parakeet**⁷², **kākāriki**^{5,93}, auriceps parakeet⁴⁴, goldenheaded parakeet¹⁰, kakariki porere⁹, North Island yellow-fronted parakeet⁴³, potarakina¹⁰, South Island yellow-fronted parakeet⁴³, yellow-fronted New Zealand parakeet⁸⁵, yellow-fronted parakeet¹⁹, yellow-fronted parrot⁵³, yellow-top¹⁴, yellow-top parakeet¹⁶
- Cyanoramphus forbesi* **Forbes' parakeet**^{72,85}, Chatham Island parakeet³², Chatham Island yellow-crowned parakeet⁷⁹, Chatham Island yellow-fronted parakeet⁷³, Chatham Islands' yellow-fronted parakeet⁴³, Chatham parakeet¹³², Forbes's parakeet¹⁰⁴
- Cyanoramphus hochstetteri* **Reischek's parakeet**⁷², Antipodes Island red-crowned parakeet¹¹³, Antipodes Island red-fronted parakeet⁴³, Antipodes red-crowned parakeet⁸⁶, Hochstetter's parakeet¹⁰¹, red-eared parakeet⁸⁶
- Cyanoramphus malherbi* **orange-fronted parakeet**²⁴, **kākāriki karaka**^{112,127,135}, alp-parakeet⁸⁵, alpine parakeet⁷², **kākāriki**^{97,113}, **kākāriki-rae-karaka**¹³⁶, Malherbe's parakeet¹⁰⁵, orange-fronted **kākāriki**¹³⁶, orange-fronted parrot⁵³
- Cyanoramphus novaezelandiae* **red-crowned parakeet**⁷⁸, **kākāriki**^{5,81}, Auckland-Island parakeet³⁵, Auckland Islands' parakeet⁴³, crimson-top¹⁴, crimson-top parakeet¹⁶, kakiriki¹¹, lesser red-fronted parrot³⁰, New Zealand parakeet⁷², red-fronted kakariki⁹⁷, red-fronted parakeet¹⁹, red-fronted parrot⁵³, red-headed parakeet^{10,135}, red-topped parakeet⁸⁵, red-topped parrot⁸⁵; *C. n. cyanurus* **Kermadec parakeet**⁷², Kermadec Island parakeet³², Kermadec Islands' parakeet⁴³; *C. n. novaezelandiae* **red-crowned parakeet**⁷⁸, **kākāriki**^{5,99}, kakariki matua⁹, po-e-tere^{5,11}, New Zealand red-crowned parakeet⁸⁶; *C. n. chathamensis* **Chatham Island red-crowned parakeet**⁷⁹, Chatham Island parakeet⁷²
- Cyanoramphus unicolor* **Antipodes Island parakeet**²⁴, Antipodes green parakeet⁸⁵, Antipodes Island green parakeet⁷³, Antipodes Island parrot⁵³, Antipodes Islands parakeet¹¹⁵, Antipodes parakeet³⁵, green parakeet⁸⁵, uniform parakeet¹³⁵
- Cygnus atratus* **black swan**¹⁶, **kakānau**¹³⁵, Australasian black swan¹⁰⁴, wāna¹¹³, wani¹¹³
- Cygnus olor* **mute swan**⁷², wāna¹³⁴, wani¹³⁴, white swan¹⁶
- Cygnus sumnerensis* **New Zealand swan**⁹⁰, **matapu**⁵⁴, extinct New Zealand swan⁵², pouwa¹¹⁷; *C. s. sumnerensis* **New Zealand swan**⁹⁰, **matapu**⁵⁴, New Zealand black swan¹⁰⁴; *C. s. chathamicus* **Chatham Island swan**⁷³ **pouwa**¹¹⁷, Chatham Island black swan¹⁰⁴
- Dacelo novaeguineae* **laughing kookaburra**⁵², great brown kingfisher⁸⁶, kookaburra⁷², laughing jackass⁴⁷
- Daption capense* **Cape petrel**¹⁹, **karetai hurukoko**¹²², Cape pigeon¹⁰, pintado petrel²⁴, speckled haglet⁸⁵, spotted petrel⁴⁸; *D. c. australe* **Snares Cape petrel**¹¹¹, New Zealand Cape petrel¹⁰³, Snares Cape pigeon⁷²; *D. c. capense* **Antarctic Cape petrel**¹¹³
- Deliahyphs zealandiensis* **Zealandian dove**¹³⁷
- Dendrocygna eytoni* **plumed whistling duck**^{53,89}, Eyton's tree-duck⁸⁶, Eyton's whistling duck¹³⁵, grass whistle duck⁸⁶, grass whistling duck⁸⁴, plumed tree-duck⁸⁶, plumed whistle duck¹³⁵, plumed whistling tree-duck⁷⁸, whistling duck¹⁶
- Dendroscansor decurvirostris* **long-billed wren**¹⁰⁴, **manu paea**¹²²
- Diaphorapteryx hawkinsi* **Hawkins' rail**¹⁰¹, **mehonui**¹⁰⁹, giant Chatham Island rail⁵², hopiritu²⁹, moakirua⁵⁴, moakurua⁵⁴
- Dinornis novaezealandiae* **North Island giant moa**¹⁰⁹, **kuranui**⁵⁴, giant moa⁹⁰, large bush moa⁹⁰, moa tipua¹²², po-waka-i¹¹, New Zealand ostrich⁵⁴, slender bush moa⁹⁰
- Dinornis robustus* **South Island giant moa**¹⁰⁹, **moa nunui**¹²², giant moa⁴⁸, large bush moa⁴⁸, slender bush moa⁴⁸
- Dinornithiformes* **moa**⁶, **kuratai**⁵⁴, **poua**⁵⁴, **pouakai**⁵⁴, **te kura**¹⁰⁴
- Diomedea* spp. **toroa**^{5,8}, **toroa-teo**⁵⁴, **toroa-teoteo**⁵⁴, **toroa whakairo**^{54,81}, **toroa whara**^{54,81}
- Diomedea antipodensis* **Antipodean albatross**⁷³, **toroa**¹², Antipodes wandering albatross¹²⁴, Australian wandering albatross⁴³, wanderer⁶⁵, wandering albatross²²; *D. a. gibsoni* **Gibson's albatross**⁷³, Gibson's wandering albatross¹²⁴
- Diomedea epomophora* & *Diomedea sanfordi* (royal albatrosses), **tapu-korako**⁵⁴, **toroa ingoingo**^{81,98}, **toroa whakaingo**^{81,134}, **toroa whakairo**⁹⁹
- Diomedea epomophora* **southern royal albatross**^{72,134}, **toroa**, Campbell Island royal albatross⁴³, Enderby Island royal albatross⁴³, royal albatross³²
- Diomedea exulans* **wandering albatross**⁹⁴, **toroa**, albatross¹⁴, gony⁸⁵, hopo⁹⁸, huianui^{54,85}, leopard gony (juv)⁸⁰, snowy albatross³², tapu-korako^{54,81,85}, teoteo (ch)⁹⁹, torea¹⁹, wanderer⁸⁶
- Diomedea sanfordi* **northern royal albatross**^{72,134}, **toroa**, Chatham Island royal albatross⁷³, hopo (ch)¹⁰⁶, royal albatross⁵²
- Dunstanetta johnstoneorum* **Johnstones' duck**¹¹¹
- Dunroonornis parvus* **Dunroon penguin**⁹⁰
- Egretta garzetta* **little egret**⁷²

- Egretta novaehollandiae* white-faced heron⁵², **matuku moana**^{19,134}, blue crane⁷⁸, blue heron⁸⁵, matuku³⁹, white-fronted heron¹⁹
- Egretta sacra* reef heron^{34,53}, **matuku moana**^{36,78}, blue crane¹⁴, blue heron¹⁰, blue reef heron⁷³, eastern reef egret⁸⁹, eastern reef heron⁸⁶, heron¹³, kākatai^{6,8,36,81}, kotuku-wai-tai⁹², matook³, matou-cou³, matuku^{8,9}, matuku nui^{24,99}, matuku tai^{24,134}, mātukutuku^{6,8,24,81}, matuku waitai^{10,36,134}, New Zealand blue heron⁴³, New Zealand heron³, reef egret¹¹³, sacred heron³, tīkāka^{36,81,93}
- Elseyornis melanops* black-fronted dotterel⁷³, black-fronted plover⁸⁶
- Emberiza cirrus* ciril bunting¹⁶
- Emberiza citrinella* yellowhammer^{16,46,58}, **hurukōwhai**¹²², yellow bunting⁷²
- Emeus crassus* eastern moa⁹⁰, moa mōmona¹²²
- Eolophus roseicapillus* galah⁹⁴, rose cockatoo¹³⁵, roseate cockatoo¹³⁵, rose-breasted cockatoo¹³⁵, Willock cockatoo¹³⁵
- Erythronyx cinctus* red-kneed dotterel⁸³
- Eudynamis taitensis* long-tailed cuckoo^{12,14,49}, **koekoeā**, cuckoo¹⁰, home owl⁹⁷, karere-o-mahuru⁵⁴, kawakaweā¹¹, kaweau⁵⁴, kawekaweā^{7,81}, kawekaweau⁵⁴, koehoperoa^{8,33}, koekoa¹⁴, koekoea^{6,7,8,81}, koekoeau⁵⁴, koekoia⁵, kohaperoa⁵, kohapiroa⁵, koheperoa⁵, kohepuroa¹¹, kohihi^{6,7}, kōhoperoa^{7,81}, kokoea³⁶, kuekuea³⁶, long-tailed koel⁹⁴, manu-o-mahuru⁵⁴, New Zealand koel⁸⁵, screamer⁸⁵, screecher⁸⁶, Society cuckow¹¹, sparrow hawk⁹⁷
- Eudyptes atatu* dawn crested penguin¹³⁷
- Eudyptes chrysolophus* western rockhopper penguin⁸⁸, southern rockhopper penguin¹³⁵
- Eudyptes chrysolophus macaroni penguin*²⁴, *E. c. schlegeli* royal penguin²⁴, macaroni penguin⁴³, Schlegel's penguin³⁴
- Eudyptes filholi* eastern rockhopper penguin⁸⁸, **tawaki piki toka**¹²², Campbell Island crested penguin⁴³, crested penguin⁴³, rock-hopper³⁵, rockhopper penguin^{65,71}, tufted penguin²⁴, Victoria penguin³⁴, yellow-crested penguin⁸⁵
- Eudyptes moseleyi* northern rockhopper penguin¹¹⁵, Moseley's rockhopper penguin⁸³
- Eudyptes pachyrhynchus* Fiordland crested penguin⁷³, **tawaki**⁷, crested penguin¹⁶, drooping-crested penguin⁶⁷, Fiordland penguin⁸⁶, great penguin¹⁴, New Zealand crested penguin⁷², pokotiwha²⁴, popotiwha⁵⁴, tauake¹¹, tawake^{81,92,99}, tawhaki⁷, thick-billed penguin⁵³, tufted penguin⁴⁴, Victoria penguin⁴⁰, yellow-crested penguin¹⁹
- Eudyptes robustus* Snares crested penguin⁷², **pokotiwha**⁹⁶, rock-hopper penguin³⁵, Snares Island crested penguin⁸⁹, Snares Island penguin⁶⁷, Snares penguin⁸⁶, tawaki nana hō¹²²
- Eudyptes sclateri* erect-crested penguin⁶², **tawaki nana hī**¹²², big-crested penguin^{32,40}, great-crested penguin⁶⁰, Sclater's penguin²⁴, Sclater's rock-hopper³⁵, tawaki⁸⁶
- Eudyptes warhami* Chatham Island crested penguin¹³⁷, Chatham crested penguin¹⁰¹, Warham's crested penguin¹³⁵, Warham's penguin¹³⁵
- Eudyptula minor* little penguin¹⁰, **kororā**^{5,8,81}, blue penguin¹⁴, fairy penguin⁸⁶, little blue penguin¹⁹, rockhopper^{44,50}; *E. m. minor* New Zealand little penguin¹³⁷, Chatham Island blue penguin⁸³, Chatham Islands' little penguin⁴³, Cook Strait blue penguin⁷⁸, karora⁵⁴, korara⁸⁶, northern blue penguin⁷², penu^{81,92}, silver penguin⁴⁸, southern blue penguin⁷², white-flipped blue penguin⁸³, white-flipped penguin³²; *E. m. novaehollandiae* Australian little penguin¹¹⁹, fairy penguin⁸⁹
- Euryapteryx curtus* stout-legged moa¹⁰⁹, moa hakahaka¹²², moa waewae hakahaka¹²²; *E. c. curtus* coastal moa⁹⁰, broad-billed moa¹³⁵, North Island coastal moa¹¹⁹; *E. c. gravis* stout-legged moa⁹⁰, South Island coastal moa¹¹⁹
- Eurystomus orientalis* dollarbird^{30,72,88}, Australian roller²⁴, broad-billed roller⁷², eastern broad-billed roller⁵², roller⁴⁸
- Falco cenchroides* nankeen kestrel³⁴, Australian kestrel⁸⁶, Australian windhover⁷⁸, hoverer⁷⁸
- Falco novaeseelandiae* New Zealand falcon¹¹, **kārearea**^{6,8,11,81}, bush falcon⁸⁶, bush hawk^{19,43,71}, eastern falcon⁸⁶, falcon¹⁴, kāeaea^{19,81}, kahu¹¹, kahu papango¹¹, kāiaia^{6,7,8,81}, kaiawa⁵⁴, kāieie^{36,99}, kākarapiti (m)^{19,81}, kakaratiti⁵⁸, kārewarewa^{7,81}, kārewarewa tara^{19,81}, kari-area¹¹, kāuaua^{5,8,81}, little falcon¹⁰, pimirimuru^{6,7}, pouakai⁹², quail hawk^{16,19}, southern falcon⁸⁶, sparrowhawk^{13,16,86}, tawaka^{19,81}
- Fregata* spp. man-o'-war bird^{86,135}, man-o'-war hawk^{86,135}, pirate bird¹³⁵, sea-hawk¹³⁵
- Fregata ariel* lesser frigatebird^{43,53,88}, least frigatebird⁸⁹, least man-o'-war⁷⁸, small frigatebird¹⁹
- Fregata minor* great frigatebird^{19,34,89}, eastern tropic bird⁴³, frigate bird^{14,16}, greater frigatebird^{52,88}, hakuai³⁶, hakuwai²⁴, hokioi²⁴, hokiwai³⁶, okioi^{6,36}, Pacific man-o'-war bird⁸⁶
- Fregatta grallaria* white-bellied storm petrel^{72,89}, broad-tailed storm petrel¹³⁵, Vieillot's storm petrel¹³⁵
- Fregatta maoriana* New Zealand storm petrel^{73, 124}, **takahikare-raro**¹¹³, lined storm-petrel⁵³, Peninsula storm petrel^{55,57}, Samoan storm petrel⁴³, streaked storm-petrel¹²⁴
- Fregatta tropica* black-bellied storm petrel^{19,43}, **takahikare-rangi**⁵⁴, black-bellied petrel⁵⁸, storm petrel⁵⁴, stormy petrel¹⁶, takahikare⁵⁴, takahikare-moana⁵⁴, takahikare-raro⁵⁴
- Fringilla coelebs* chaffinch¹⁶, **pahirini**⁹⁹, common chaffinch¹⁰⁸, whitira korepe⁹⁹
- Fulica atra* Eurasian coot⁸⁸, coot⁴⁸; *F. a. australis* Australian coot³⁴, Australasian coot⁸⁶, eastern Australian coot⁴³, Murray coot⁴⁷

- Fulica chathamensis* Chatham Island coot⁸⁸, extinct Chatham Island coot⁵², New Zealand coot⁷³
Fulica prisca New Zealand coot⁷³, extinct South Island coot⁵²
Fulmarus glacialis northern fulmar¹³⁷, Arctic fulmar¹³⁵; *F. g. rodgersii* Pacific northern fulmar¹³⁷
Fulmarus glacialoides Antarctic fulmar⁷⁸, silver-grey fulmar⁷², silver-grey petrel³², silvery-grey fulmar⁴⁰, silvery-grey petrel¹⁹, southern fulmar⁸⁶
Gallinago hardwickii Japanese snipe⁵², Australian snipe³⁴, Latham's snipe⁸⁶, longbill⁸⁶
Gallinula chloropus common moorhen¹¹¹, common gallinule¹³⁵, common waterhen¹³⁵, Indian waterhen⁷⁹, moorhen¹³⁵
Gallinula tenebrosa dusky moorhen⁷⁹, black gallinule¹³⁵, black moorhen¹³⁵, dusky gallinule¹³⁵, sombre gallinule¹³⁵, sombre moorhen¹³⁵
Gallirallus australis weka^{5,96}, brown wood-hen⁵³, hoā^{36,54,81}, kelp-hen^{21,91}, Māori hen^{85,91,113}, moho¹¹, mokakaweka^{54,85}, mokaweka⁵⁴, mū^{54,81}, troglodyte rail¹¹, weka rail^{22,35}, wekaweka^{5,36}, woodhen^{5,10,14,16}, woodrail⁷⁸; *G. a. greyi* North Island weka¹⁴, brown woodhen⁵⁸, North Island woodhen^{19,43}; *G. a. australis* western weka⁷², black weka²⁸, black woodhen^{16,19,35}, brown weka⁴⁸, brown woodhen^{34,48}, dark wood hen¹⁴, Earl's weka⁵⁴, mohopango¹⁴, South Island weka²¹, South Island woodhen^{19,35}, southern woodhen³⁰, water hen⁸⁵, weka-pango (black morph)^{19,81}; *G. a. hectori* buff weka⁷², buff woodhen³⁴, eastern buff weka⁹⁸, eastern weka⁷², hill woodhen^{32,85}, South Island weka⁴⁸, South Island woodhen^{43,48}, southern woodhen^{53,85}; *G. a. scotti* Stewart Island weka⁷², Stewart Island wood-hen⁴³
Gallirallus dieffenbachii Dieffenbach's rail¹⁹, moeriki⁵, Chatham Island rail⁴⁸, Chatham Islands rail^{43,51}, mehoriki¹⁰⁹, meriki⁹¹, moerihī⁹¹, moho¹⁴
Gallirallus philippensis banded rail²⁴, moho pererū^{11,14,19,81,81}, banded landrail⁸⁵, buff-banded rail⁴⁸, kata tei⁹¹, katatai^{5,81}, konini⁵, landrail^{12,24,78}, mioweka⁷⁸, moho^{8,81}, moho kākatai⁹³, moho kātātai^{11,36,81}, moho-koreke³⁶, moho-kura³⁶, moho-pango³⁶, moho-patarai⁵⁸, moho pātātai^{10,19,81,81}, moho-popotai^{81,81}, moho pūhotata^{54,81}, moho-ririwai^{36,54}, moho tātai^{19,36,81}, moho-tupereru³⁶, moririwai⁵⁴, motarua³⁶, New Zealand banded rail⁷², New Zealand buff-banded rail⁴³, oho³⁶, ohomauri^{36,38}, patarai⁵⁸, pātātai^{19,81}, pectoral rail³², pepe⁵⁴, pōpōtai^{7,19,81}, pūhotata^{24,81}, striped land rail¹⁴, striped rail¹⁶, tātai¹³³
Garrodia nereis grey-backed storm petrel^{19,35}, reoreo^{6,8,36}, storm-petrel⁴⁰
Gelochelidon nilotica gull-billed tern⁷³; *G. n. macrotarsa* Australian gull-billed tern¹³⁷, Australian tern¹³⁵, long-legged tern⁸⁶
Gerygone albofrontata Chatham Island warbler²⁴, Chatham gerygone¹³², Chatham Island gerygone¹⁰⁵, Chatham Islands warbler^{43,53}, warbler⁶¹, white-faced warbler¹⁹, white-fronted warbler⁵¹, woodpecker⁴⁹
Gerygone igata grey warbler¹⁶, riroriro^{10,13}, ashcoloured wren¹⁰, bartailed wren¹⁰, black cap¹⁴, bush warbler³⁴, gray gerygone¹²¹, grey fairy-warbler¹¹³, grey gerygone¹⁰², hīrorirori^{36,81}, hōrirerire^{10,81}, hororirori⁵⁴, igata⁵, kariroriro⁵⁸, kōrire^{54,81}, kōrirerire^{36,81}, kōriroriro^{6,8,19,81}, momohoua¹⁴, New Zealand gerygone¹³⁵, New Zealand grey warbler⁵³, nonoroheke³⁶, nonoroheko³⁶, North Island grey warbler⁴³, North Island mountain warbler⁴³, piripiri¹⁴, pītongatonga^{81,93}, rainbird¹³⁵, rirerire³⁶, rirerite¹³³, riretori⁸¹, riretoro⁵⁴, riririro¹³³, South Island bush warbler⁴³, South Island grey warbler⁴³, South-Island warbler³⁵, teetotum⁸⁶, titiripaenamu¹¹, tōtoroie^{54,81}, totorori³⁸, tōtororire^{36,81}, warbler³³, whiringa⁵⁴, whiringa-ā-tau⁸¹
Glareola maldivarum oriental pratincole⁷⁹, Australian pratincole³⁴, eastern collared pratincole⁸⁶, eastern pratincole⁸⁶, large Indian pratincole¹³⁵, oriental collared pratincole⁷⁸, swallow-plover⁸⁶
Grallina cyanoleuca magpie-lark¹³⁷, Australian magpie-lark⁴⁷, mudlark^{47,135}, peewee^{47,135}, peewit¹³⁵, pied grallina⁴⁷
Grus sp. unidentified crane¹³⁵
Gygis alba white tern³², angel tern¹¹³, fairy tern⁷⁸, love tern⁷⁸, Pacific tern⁸⁶, silky white tern²⁶, white noddy⁷⁸
Gymnorhina tibicen Australian magpie¹⁶, makipai¹¹³, bell-magpie¹¹³, black-backed magpie⁵², makipae⁹³, timohina⁹⁹, white-backed crow-shrike⁴⁷, white-backed magpie⁵²
Haematopus chathamensis Chatham Island oystercatcher⁷², tōrea tai¹³⁴, Chatham Islands oystercatcher¹¹⁵, Chatham oystercatcher¹¹³, oyster-catcher⁶¹, redbill⁸⁶, torea²⁹
Haematopus finschi South Island pied oystercatcher⁷², tōrea^{6,7,8,81}, common oystercatcher⁵⁴, Finsch's oystercatcher¹⁰¹, korea⁵⁴, New Zealand oyster-catcher⁴³, New Zealand pied oystercatcher¹³⁵, oystercatcher⁵⁴, pied oystercatcher^{10,16}, pied piper⁸⁴, pied redbill⁸⁵, redbill^{14,16,78}, sea-pie²², SIPO⁸⁵, torea-nui¹⁰, tōrea tai^{24,99}, tōrea tuawhenua¹¹³, toria¹¹, toria nui¹¹
Haematopus unicolor variable oystercatcher⁷⁸, tōrea pango (black morph)^{19,22,81,88}, black oystercatcher^{10,16}, black redbill²², korea⁵⁴, mudpigeon^{78,84}, musselpicker⁸⁴, New Zealand black oyster-catcher⁴³, North Island oyster-catcher⁷⁰, North Island pied oystercatcher⁷³, northern oystercatcher⁷², redbill^{13,54,56}, sooty oyster-catcher⁵³, tōrea^{6,7,8,81}, torea-nui¹⁰, tōrea tai⁸¹, VOC¹¹³
Hakawai melvillei New Zealand lake-wanderer¹³⁷
Haliaeetus leucogaster white-bellied sea eagle^{73,91}
Halobaena caerulea blue petrel¹⁹
Hemiphaga chathamensis parea⁹⁴, Chatham Island pigeon³², Chatham Islands pigeon^{43,48}, Chatham pigeon¹¹³, kuku⁵², parē²⁹

- Hemiphaga novaeseelandiae* kererū^{6,8}, **New Zealand pigeon**¹¹, cucupyī¹¹, hagarerero¹¹, karoro tangi harau⁸¹, keriru⁹, kokopa¹³⁵, kūkū^{5,8,81}, kūkupa^{5,8}, manu-tute (m)⁵⁴, native pigeon⁴⁴, New Zealand wood pigeon⁵⁸, parea⁵⁴, pigeon¹⁰, rupe (large bird)³⁶, tarariki (small bird)³⁶, woodpigeon^{16,22,94}
- Heracles inexpectatus* **St Bathans giant parrot**¹³⁷
- Heteralocha acutirostris* **huia**^{6,7,93}, ellia¹¹, huianui (f)⁹⁹, New Zealand woodpecker¹³⁵, paoke⁵⁴
- Himantopus* sp. tukararoa⁵⁴
- Himantopus himantopus leucocephalus* **ped stilt**¹⁰, **poaka**¹⁴, Australasian pied stilt⁸⁸, barker⁷⁸, black-throated stilt²⁰, black-winged stilt⁹¹, daddy longlegs⁷⁸, New Zealand stilt⁴³, pied stilt plover¹⁶, pip⁷⁸, popourangi^{81,99}, rerewaka⁹², stilt⁷⁸, tarapunga^{6,9}, tōrea^{6,24,81}, torea-iti^{10,10}, toria⁵, turituri pourewa^{6,8,36,54,93}, turiturupourewa³⁶, tututuru-pourewa^{54,134}, tutumata¹⁰, tuturi pourewa^{24,39,134}, tuturu-pourewa^{54,134}, waewae tōrea⁹⁹, white-headed stilt¹⁹, white-necked stilt³⁴, white-necked stilt-plover²⁴
- Himantopus novaeseelandiae* **kakī**^{19,81}, **black stilt**¹⁰, black stilt plover¹⁶, kanohi¹³³, (New Zealand) black stilt⁵¹, poaka¹⁴, poaki¹¹, pōkāka^{81,99}, stilt¹⁴, stilt plover¹², torea aiti¹¹, torea-iti^{10,11}, tōrea pango^{24,81,81}, tūarahia^{24,81}, tutumata⁵
- Hirundapus caudacutus* **white-throated needletail**⁹⁴, needle-tailed swift⁹⁴, northern needletail¹³⁵, spine-tailed swift³⁴, white-throated needle-tailed swift⁸⁶
- Hirundo neoxena* **welcome swallow**⁷², **warou**⁹³, Australian swallow⁴⁷, house swallow⁹⁴, Pacific swallow⁹⁴, swallow⁸⁶
- Hydroprogne caspia* **Caspian tern**¹⁶, **taranui**^{10,19,36,81}, great tern¹⁰, kāhawai^{36,81}, New Zealand Caspian tern⁴³, tara¹⁴, tara-a-punga³⁶, tara kakao¹⁰, tara punga^{81,99}, tara-whaka-rara⁹², tern¹⁴
- Hymenolaimus malacorhynchus* **whio**¹⁰, **blue duck**¹⁶, blue mountain-duck^{14,30}, he-wee-go¹¹, korowhio⁵⁴, korowhiowhio⁹³, kōwhiowhio⁹⁶, lapped bill duck¹⁰, mountain duck^{16,37}, parera-kowhio⁹², soft-billed duck¹¹, whiho¹¹, whiorau^{8,36}, whistling duck⁸⁵, wio⁷, wiorau⁶
- Ixobrychus minutus* **little bittern**⁸⁸; *Ixobrychus minutus dubius* **Australian little bittern**⁸⁸
- Ixobrychus novaeseelandiae* **New Zealand little bittern**⁴³, **kaoriki**¹⁹, kioriki⁵⁴, little bittern¹⁶, New Zealand bittern¹⁰⁹
- Kaiika maxwelli* **Maxwell's penguin**¹³⁷
- Kairuku grebneffi* **Grebneff's penguin**¹³⁷
- Kairuku waewaeroa* **Junats' penguin**¹³⁷
- Kairuku waitaki* **Waitaki penguin**¹³⁷
- Korora oliveri* **Oliver's penguin**⁹⁰
- Kuiornis indicator* **St Bathans wren**¹³⁷
- Kumimanu biceae* **Bice's penguin**¹³⁷, colossal penguin¹³⁷
- Kupoupou stilwelli* **Stilwell's penguin**¹³⁷
- Lalage tricolor* **white-winged triller**⁷⁹, Australian white-winged triller⁸⁸, peewee-lark⁸⁶, white-shouldered caterpillar-eater⁸⁶
- Larus dominicanus* **southern black-backed gull**¹⁹, **karoro**^{6,7}, Antarctic black-backed gull⁸⁵, black-backed gull⁴, brown gull¹⁰, common gull¹⁰, dominican gull⁸³, eagle gull⁵⁴, kaiē (juv)⁸¹, kelp gull⁸⁵, koiro (ch)²⁴, koriro (ch)⁵⁴, kōtingotingo (juv)^{36,81}, mollyhawk (juv)¹³⁵, New Zealand black-backed gull⁴³, ngōiro (ch)^{19,81}, pohio^{81,92,134}, punua (ch)²⁴, rāpunga⁸¹, seagull⁵⁴, southern black-back gull³¹, tangiharau⁸¹, toie (juv)³⁶
- Leucocarbo* spp. kauau⁷, kauwau⁵, kawau⁹³, kōau^{36,81}
- Leucocarbo campbelli* **Campbell Island shag**^{24,35}, black-backed cormorant⁵⁷, Campbell Island cormorant⁷⁶, Campbell Islands shag¹¹⁵, Campbell shag⁸⁹, Magellanic shag²⁷, white-rumped cormorant⁵³
- Leucocarbo carunculatus* **New Zealand king shag**⁷², **kawau pāteketeke**¹³⁴, carunculated shag⁸⁶, Cook Strait cormorant⁸⁶, Cook-Straits cormorant³⁵, king shag⁷⁹, koau-pateketeke⁹², Marlborough shag⁷², Marlborough Sounds shag⁸⁶, New Zealand king cormorant¹³⁵, rough-faced cormorant⁵³, rough-faced shag¹⁹, te kawau-a-Toru¹¹³
- Leucocarbo chalconotus* **Otago shag**¹³⁷, **matapo**⁵⁴, bronze cormorant⁵³, bronze shag⁴³, brown shag²⁴, Gray's shag¹⁹, Hutton's shag²⁴, mapo⁵⁴, mapua¹¹, parekareka⁷, pink-footed shag³², Stewart cormorant¹¹³, Stewart Island cormorant¹³⁵, Stewart Island shag⁷², Stewart shag⁸⁹, white-rumped cormorant⁵³
- Leucocarbo colensoi* **Auckland Island shag**^{24,35}, **kawau o Motu Maha**¹²², Auckland cormorant¹¹³, Auckland Islands shag^{43,115}, Auckland shag⁸⁹, white-rumped cormorant⁵³
- Leucocarbo onslowi* **Chatham Island shag**⁵², **papua**⁵⁴, Chatham cormorant¹¹³, Chatham Island cormorant⁶⁰, Chatham Islands shag¹¹⁵, Chatham Islands white-breasted shag⁴⁹, Chatham shag⁸⁹, emperor shag²⁴, kawau o Rēkohu¹²², kawau o Wharekauri¹²², Lord Onslow's shag³⁵, Onslow's shag³⁴, Pitt Island shag³²
- Leucocarbo purpurascens* **Macquarie Island shag**^{32,35}, blue-eyed shag⁸⁸, emperor shag⁸⁶, imperial cormorant⁸⁶, imperial shag⁸⁸, king shag⁸⁸, Macquarie Island cormorant⁵⁷, Macquarie shag⁸⁹, subantarctic king shag⁸⁶
- Leucocarbo ranfurlyi* **Bounty Island shag**^{32,35}, Bounty cormorant¹¹³, Bounty Island cormorant⁸⁵, Bounty Islands shag^{43,115}, Bounty shag⁸⁹, Ranfurly's shag³⁴, white-rumped cormorant⁵³
- Leucocarbo septentrionalis* **kōhatu shag**^{118,128}, **kawau kōhatu**^{118,137}

- Leucocarbo stewarti* Foveaux shag¹³⁷, **mapo**⁵⁴, bronze cormorant⁵³, bronze shag⁵², matapo⁵⁴, Stewart cormorant¹¹³, Stewart Island cormorant¹³⁵, Stewart Island shag^{32,35}, Stewart shag⁸⁹, white-backed cormorant⁵⁷, white-rumped cormorant⁵³
- Leucophaeus atricilla* laughing gull¹³⁷
- Leucophaeus pipixcan* Franklin's gull¹¹¹
- Lewinia muelleri* Auckland Island rail³², Auckland Islands rail^{43,115}, Lewin's rail⁹⁴
- Limnodromus semipalmatus* Asiatic dowitcher⁸⁸, Asian dowitcher⁹⁵
- Limosa haemastica* Hudsonian godwit³⁵, American black-tailed godwit⁷⁸, American godwit⁴⁸, Hudsonian sandpiper⁵³, hudwit¹³⁵, red-breasted godwit³⁴
- Limosa lapponica* bar-tailed godwit¹⁹, **kuaka**^{6,7,8,81}, barred godwit⁵⁸, barred-rumped godwit¹⁹, barwit¹³⁵, curlew¹⁶, godwit¹⁰, goodwit¹⁶; *L. l. baueri* eastern bar-tailed godwit⁷², **kuaka**^{6,7,8,81}, eastern barred-rumped godwit⁴³, grey stilt¹⁴, hakakao (old bird)²⁴, kakao (old bird)³⁶, karoro⁸¹, kohikuhikuaka¹⁰, kuako⁵⁴, kuhikuiwaka⁵⁴, kuhikuiwaka⁸⁵, kura (breeding plumage)³⁶, New Zealand godwit²¹, Pacific bar-tailed godwit⁷⁸, Pacific godwit⁸⁶, pāeraera (juv)⁹⁹, pārerarera (juv)^{36,81}, poaka⁹², pouaka⁹², powaka⁹², rakakao (old bird)³⁶, rīrīwaka^{11,81}, southern godwit²⁴, tapukōrako⁹⁹, tarakakao^{36,54,81}
- Limosa limosa* black-tailed godwit⁸⁸; *L. l. melanuroides* Asiatic black-tailed godwit⁷⁸, eastern black-tailed godwit⁸⁶
- Litorallus livezeyi* Livezey's rail¹³⁷
- Lugensa brevirostris* Kerguelen petrel⁷²
- Macronectes* spp giant petrel¹⁹, **pāngurunguru**^{54,81,134}, giant fulmar^{55,86,86}, glutton^{85,85}, nellie^{85,85}, nelly^{16,27,85}, omakura⁹³, pāngurungaru⁹⁹, sea vulture¹³⁵, stinker^{85,85,86}, stinkpot^{56,71,85}
- Macronectes giganteus* southern giant petrel^{79,89}, **pāngurunguru**^{54,81,113}, Antarctic giant petrel⁴³, white nelly (white morph)³⁵
- Macronectes halli* northern giant petrel^{79,89}, **pāngurunguru**^{54,81,113}, Hall's giant petrel⁸⁶, New Zealand giant petrel⁴³
- Malacorhynchus membranaceus* pink-eared duck⁹⁴, pink-ear¹³⁵, pink-eye¹³⁵, pink-eyed duck⁹⁴, pinkie¹³⁵, whistler¹³⁵, whistling teal¹³⁵, wigeon¹³⁵, zebra duck¹³⁵, zebra teal¹³⁵
- Malacorhynchus scarletti* Scarlett's duck⁹⁰, New Zealand pink-eared duck¹⁰⁴
- Manu antiquus* extinct albatross (?)⁹⁰
- Manuherikia douglasi* Douglas' duck¹¹¹
- Manuherikia lacustrina* Manuherikia duck¹¹¹
- Manuherikia minuta* minute Manuherikia duck¹¹¹
- Marplesornis novaeseelandiae* Harris' penguin⁹⁰
- Matanas enrighti* Enright's duck¹¹¹
- Matuku otagoense* St Bathans heron¹³⁷
- Megadyptes antipodes* yellow-eyed penguin⁴⁴, **hoiho**^{7,10,93}, common penguin¹⁴, grand penguin⁴⁰, great penguin¹⁰, hoihoi^{54,85}, korara¹¹, takaraha¹³⁴, takaraka⁸⁶, yellow-crested penguin⁴⁸, yellow-crowned penguin¹⁹, yellow-headed penguin²⁷; *M. a. waitaha* Waitaha penguin¹¹¹; *M. a. richdalei* Richdale's penguin¹³⁷
- Megalapteryx didinus* upland moa⁹⁰, moa pukepuke¹²²
- Meleagris gallopavo* wild turkey⁷³, **korukoru**¹¹³, feral turkey¹³⁵, pīpipi^{6,7}, turkey¹⁶; *M. g. gallopavo* Gould's wild turkey¹¹¹
- Mergus australis* Auckland Island merganser^{24,53}, **miuweka**⁹², Auckland Islands merganser^{43,48}, Auckland Island's muganser⁵¹, Auckland merganser⁸⁹, merganser⁵⁸, New Zealand merganser¹¹¹, ngutu niniho¹²², southern merganser³²
- Mergus milleneri* Chatham Island merganser¹³⁷
- Microcarbo melanoleucos* little pied cormorant⁸⁵, little cormorant^{53,85}, little pied shag⁵²; *M. m. brevirostris* little shag⁷², **kawaupaka**^{19,58,81}, aroarotea³⁶, frilled shag¹⁶, kauau⁷, kauwau⁵, kawau⁹³, kawau tatariki³⁸, kawau teoteo^{54,81}, kawau fieke (pied morph)^{54,81}, kōau^{36,81}, little river shag⁸⁶, pohotea⁸¹, teoteo³⁶, white-throated shag¹⁶
- Milvus migrans* black kite⁹⁴, fork-tailed kite⁹⁴, Kimberley kite¹³⁵, kite hawk¹³⁵
- Miotadorna sanctibathansi* St Bathans shelduck¹¹¹, St Bathans duck¹³⁵
- Mohoua albicilla* whitehead^{16,32,44}, **pōpokotea**^{6,10,81}, bush canary⁴⁸, canary³³, hihī popokera^{11,85}, hihīpopokero^{14,36}, hore³⁶, horehore⁵⁴, mohoua³⁶, mohua³⁶, mohuahua³⁶, momoroua⁷, mōriorio^{54,81}, mōtengitengi^{54,81}, ōriorio¹³³, pōpokatea^{8,11,93}, pōporoihewa^{6,8,81}, popotea¹⁹, porihawa^{6,54}, poriporihewa^{36,85}, poupoutea¹⁹, riroriro⁹², tātāeko^{33,36,81}, tātāeto^{33,81}, tātāhore^{36,81}, tātāiato^{7,36,81}, tātāihore^{33,81,99}, tātāngaeko^{36,81}, tātāranaeko^{54,81}, tātārangeako^{36,81}, tātāriheko^{36,81}, toitoi^{5,7}, upokotea¹⁹, white-headed canary³³, whiteheaded tit¹⁰
- Mohoua novaeseelandiae* brown creeper¹⁶, **pīpipi**^{7,11}, brown canary⁸⁵, brown linnet¹⁶, brown wren⁴¹, bush creeper⁴⁴, horirerire¹¹, momohoua^{5,11}, momohua⁷, New Zealand creeper¹⁹, New Zealand titmouse¹⁰², pipirihika³⁶, reed wren¹⁴, riroriro^{5,7}, fītirihika^{36,81}, titoitoi^{7,54,81}, toetoe^{5,7}, toitoi¹⁶

- Mohoua ochrocephala mohua***^{36,93}, **yellowhead**^{16,43,44}, bush canary³², canary¹⁶, hihipopokera^{36,54,93}, hihipopokero³⁶, hore³⁶, mohoua⁷, mohoua houa⁵, mōhuahua^{36,81}, momohua⁵⁴, native canary³³, New Zealand canary⁸⁵, popokatea⁵, popokotea^{6,19}, popotea¹⁹, poriporihewa³⁶, poupoutea¹⁹, South Island canary³³, tataeko³⁶, tataeto³⁶, tatahore³⁶, tataiatō^{7,36}, tataihore³⁶, tatangaeko³⁶, tatarangaeko³⁶, tatarihoko³⁶, tatariki^{6,92}, upokotea¹⁹, yellow-head canary³⁰, yellow-headed canary³³, yellow-headed flycatcher¹⁰²
- Monarcha melanopsis black-faced monarch***¹¹¹, black-faced flycatcher¹³⁵, black-faced monarch-flycatcher¹³⁵, carinated flycatcher¹³⁵, grey-winged monarch-flycatcher¹³⁵, pearly-winged flycatcher¹³⁵
- Morus capensis Cape gannet***¹¹¹, South African gannet¹³⁵
- Morus serrator Australasian gannet***⁸³, **tākapu**^{10,81}, Australian gannet¹⁹, gannet¹⁰, karake³⁶, New Zealand gannet⁴³, Pacific gannet¹³⁵, solan goose⁸⁶, taiko⁷, tākupu^{6,7,8}, tākupu kareke⁸¹, tara⁵, tātākī^{36,93,99}, the gannet⁴⁸, toroa-haoika^{24,81}, toroa-horoika^{36,81}, toroa tatakī^{54,81}
- Muriwaimanu tuatahi Waipara penguin***¹¹¹
- Myiagra cyanoleuca satin flycatcher***⁷⁸
- Neilus samsonae Sansom's plover***¹³⁷
- Nelepsittacus daphneleae Lee's parrot***¹³⁷
- Nelepsittacus donmertonii Merton's parrot***¹³⁷
- Nelepsittacus minimus little St Bathans parrot***¹³⁷
- Nestor chathamensis Chatham Island kaka***¹⁰¹, Chatham Island parrot¹³⁵, Chatham kaka¹³⁵, Chatham parrot¹³⁵
- Nestor meridionalis kākā***^{5,8,93}, **kaka**⁵, brown parrot¹⁶, bush parrot⁸⁶, huripā (var)^{36,99}, kaea⁵⁴, kaka huripa (var)⁹, kākā kereru (var)^{12,54,81}, kākā kōrako (var)^{12,81}, kākā kura (var)^{12,54,81}, kaka motaraua (var)⁹, kākā nihoriki (var)^{54,81}, kākā parakiwai (var)^{54,134}, kaka parrot¹⁹, kaka-pipiwarauaroa¹⁹, kākā pipiwharauaroa (var)^{54,81}, kākā reko (var)^{24,81}, karoro tea (var)^{36,54,81}, karoro uri (var)^{36,54,81}, kawkaw¹³⁵, kēkētoi (fat bird)^{38,81}, kereru (var)³⁶, korako³⁶ (var), kōri^{54,81}, kōriwhai^{36,81}, kura (var)³⁶, maimoa⁵⁴, manu-tuauru (var)⁵⁴, mokai⁵⁴, motaraua (var)³⁶, moutī (decoy bird)^{54,81}, mū, New Zealand kaka¹⁰⁴, niho (var)⁸¹, nihonui (var)^{36,54}, nihoriki (var)^{36,54}, pakipaki⁵⁴, parrot¹⁰, perehere³⁶, perua⁵⁴, pipiriwharauaroa (var)³⁶, reko (var)³⁶, southern brown parrot¹, tamaire (var)³⁶, tarariki (f)³⁶, tātāapopo (m)^{36,38,81}, tātārariki (flock leader)^{38,81}, tātāriki (flock leader)^{38,81}, tatarikuha (flock leader)^{54,99}, tāwaka (m)^{38,81}, tiaka (flock leader)⁸¹, tuaru (var)³⁶, western kaka parrot¹⁹, whakakope⁵⁴; ***N. m. septentrionalis North Island kaka***⁷², brown kaka⁵², North Island brown kaka⁵⁸, North Island kaka parrot⁴³; ***N. m. meridionalis South Island kaka***⁷², green kaka⁵², South Island green kaka⁵⁸, South Island kaka parrot⁴³
- Nestor notabilis kea***¹¹, alpine parrot⁸⁵, green parrot²², kaieo²², kea parrot¹⁹, keha²⁴, keorangi⁵⁴, kia⁸¹, mountain parrot^{14,19}, New Zealand mountain parrot¹³⁵
- Ninox albifacies laughing owl***^{16,19}, **whēkau**^{19,81}, big morepork⁹², big owl⁸⁵, hakoke³⁶, kakaha¹⁹, kopake⁹³, laughing jackass^{16,19}, open country owl⁹², rock owl⁸⁶, ruruwekau¹¹, ruru-whēkau^{19,81,81,99}, ruru-whenua⁹², wekau¹¹, wekaukau⁵⁴, whēkaukau^{36,81}; ***N. a. rufifacies North Island laughing owl***⁴³, rufous-faced owl³⁴, rufous laughing owl⁷³; ***N. a. albifacies South Island laughing owl***⁴³
- Ninox novaeseelandiae ruru***⁶, **morepork**^{10,13,19}, boobook⁹⁴, boobook owl⁵³, common owl¹⁰, eou hou¹¹, herooro¹¹, heruru¹³, kao-kao^{11,85}, karu peho (large-eyed)⁹⁹, koukou^{5,6,8,13}, kuru³⁹, morepork owl⁵¹, New Zealand owl¹⁹, North Island morepork owl⁴³, peho¹⁴, pehopeho³⁶, peopeo⁹², piopio⁹², ruru koukou^{92,92}, rurupeho^{5,22}, ruru-ruru^{11,36,85}, South Island morepork owl⁴³, southern boobook⁹⁷
- Notiomystis cincta hihī***^{7,113}, **stitchbird**^{16,19,48}, hihī-matakiore (f)¹⁹, hihī-paka (m)^{14,19}, hihī-pakawera³⁶, hioi¹¹, honey-bird⁸⁵, ihe¹³³, ihi⁵, kōhihi (m)^{6,36,81}, kōtihe^{5,81}, kōtihe wera (m)^{19,54,81,134}, kōtihetihe (m)^{6,7,8,54,81}, kotihetike (m)⁸⁵, matakiore (f)³⁶, mōtihe¹³³, mōtihetihe^{36,81}, pogonornis¹⁰⁰, tihe¹⁰, tihe-kiore (f)¹⁹, tihe-ora (m)^{24,54}, tihe-wai (f)^{36,38}, tihe-wera (m)^{36,38}, tihi-kiore (f)⁸⁵, tihi-ora (m)⁸⁵, tiora (m)²⁴, tioria⁹³, tiora^{54,81}, yellowwinged finch¹⁰
- Numenius hudsonicus American whimbrel***⁷², Hudsonian curlew⁷², Hudsonian whimbrel⁷³
- Numenius madagascariensis eastern curlew***⁷³, Australian curlew²⁴, curlew⁵², far-eastern curlew^{83,84}, long-billed curlew⁷²
- Numenius minutus little whimbrel***³⁴, least whimbrel¹³⁵, little curlew⁸⁶, pygmy curlew⁸⁶
- Numenius phaeopus Eurasian whimbrel***¹³⁷, little curlew⁸⁶, whimbrel⁵²; ***N. p. variegatus Asiatic whimbrel***⁷², Australian whimbrel³⁴, eastern whimbrel⁷³
- Numenius tahitiensis bristle-thighed curlew***⁷⁹
- Numida meleagris helmeted guineafowl***⁸⁶, crowned guineafowl⁸⁶, guineafowl^{16,72,86}, guineahen¹¹³, pintado⁸⁶, tufted guineafowl^{84,86}
- Nycticorax caledonicus nankeen night heron***¹⁹, **Umu kōtuku**¹³⁵, Australian night heron⁴³, Caledonian night-heron³, night heron^{14,53}, rufous night heron⁷³
- Oceanites oceanicus Wilson's storm petrel***^{24,52,89}, Australian yellow-webbed storm-petrel⁴³, Wilson's petrel⁸⁵, yellow-webbed storm petrel^{148,53}
- Oceanodroma leucorhoa Leach's storm petrel***^{86,89}, fork-tailed storm petrel⁷³, Leach's fork-tail petrel⁵⁷, Leach's fork-tailed petrel⁷², Leach's fork-tailed storm petrel⁷⁸, Leach's petrel⁸⁶
- Onychoprion anaethetus bridled tern***⁸⁸, brown-winged tern⁸⁸

- Onychoprion fuscatus* sooty tern³², Australian sooty tern⁴³, egg bird⁸⁵, whale bird⁸⁶, wideawake⁷⁸, wideawake tern^{56,85}
Onychoprion lunatus grey-backed tern¹¹¹, spectacled tern¹¹⁵
Oxyura vantetsi New Zealand blue-billed duck¹¹¹, blue-billed duck⁸⁸, New Zealand stiff-tailed duck¹⁰⁹
Pachydyptes ponderosus New Zealand giant penguin⁹⁰, greater wide-flipped penguin⁵²
Pachyornis australis crested moa⁹⁰, moa koukou¹²²
Pachyornis elephantopus heavy-footed moa⁹⁰, moa waewae taumaha¹²²
Pachyornis geranoides Mantell's moa¹⁰⁹, moa ruarangi¹²², Mappin's moa⁹⁰
Pachyptila spp. hakora³⁶, taketake³⁶, tarapunga^{6,36}, totoro³⁶, whiroia³⁶
Pachyptila belcheri thin-billed prion⁴⁸, korotangi⁵⁴, narrow-billed prion⁷², slender-billed prion⁸⁶
Pachyptila crassirostris fulmar prion⁷², cliff prion⁸⁶, fulmar-billed prion⁵⁵, thick-billed prion⁸⁶; *P. c. crassirostris*, Bounty Island prion⁷³, Bounty Islands dove-petrel⁴³; *P. c. pyramidalis* Chatham fulmar prion⁷², Pyramid Rock prion⁷³; *P. c. flemingi* lesser fulmar prion⁷²
Pachyptila desolata Antarctic prion⁷², totoro^{81,113}, Auckland Island prion⁷², Auckland Islands' dove-petrel⁴³, Banks' dove-petrel²¹, Bank's petrel⁵⁴, Banks's dove petrel¹⁹, Banks's petrel³⁵, blue petrel⁸⁵, dove-petrel^{34,35}, dove prion⁴⁸, Kerguelen prion⁸⁸, pekehā^{7,93}, South Georgian prion⁷², totoro¹³³, whalebird^{16,40,72}, whiroia³²
Pachyptila salvini Salvin's prion⁸⁶, Crozet Island prion⁷², Crozet Islands prion⁸⁶, lesser broad-billed prion⁷², Marion Island prion⁷³, medium-billed prion⁸⁶
Pachyptila turtur fairy prion⁴⁸, tītī wainui^{44,44,54,81,93}, ariel prion⁵⁴, Chatham fairy prion⁵⁵, Chatham Island dove petrel⁴⁹, dove-petrel^{19,30}, dove prion¹¹³, flake-billed fairy prion⁵⁵, Gould's dove petrel²⁴, laughing jackass¹⁶, narrow-billed prion⁶⁵, northern fairy prion⁷³, short-billed dove petrel³⁴, smooth-billed fairy prion⁵⁵, southern fairy prion⁷³, subantarctic fairy prion⁷³, tītī⁹⁶, totoro²⁴, whale-bird^{13,16}, whiroia¹⁹
Pachyptila vittata broad-billed prion⁴⁸, parara^{44,81}, blue billy^{60,86}, broad-billed dove petrel¹⁹, broad-billed petrel¹¹, New Zealand broad-billed prion⁴³, parera⁴⁴, parikoko⁹², pekehā^{7,81}, pepekehā^{54,81}, scooper⁸⁶, southern prion²⁰, tītī⁹⁶, whalebird^{11,72}
Palaeudyptes antarcticus Huxley's penguin¹³⁷, narrow-flipped penguin⁵²
Palaeudyptes marplei Marples' penguin⁹⁰
Palaelodus aotearoa New Zealand palaelodus¹³⁷
Passer domesticus house sparrow^{33,72}, tiu⁹⁹, English sparrow⁸⁶, kai witi⁹², manukino⁹², spadger⁸⁶, sparrow¹⁶
Pavo cristatus peafowl^{47,72}, pīkako⁹³, common peafowl¹¹³, Indian peafowl⁸⁶, peacock (m)¹⁶, peahen (f)¹¹³, pīkake (m)¹¹³
Pelagodroma albiclunis Kermadec storm petrel⁷², Kermadec Island storm petrel¹⁰¹, Kermadec white-faced storm petrel⁷³
Pelagodroma marina white-faced storm petrel^{19,40}, takahikare⁸¹, frigate petrel⁸⁶; *P. m. dulciae* Australian white-faced storm petrel⁸⁶; *P. m. maoriana* New Zealand white-faced storm petrel^{43,73}, takahikare⁸¹, dancing dolly⁸⁶, J.C. bird⁷⁸, Jesus Christ bird⁷⁸, kaiwhakararu⁹³, Mother Carey's bird¹¹³, Mother Carey's chicken¹³⁵, skipjack⁷⁸, takahikare rangi⁸¹, takahikare raro⁸¹, takahikare-moana^{64,78,81,93}, tītī⁹⁶
Pelagornis stirtoni Stirton's pseudotoothed bird¹³⁷, Stirton's false-toothed pelican⁹⁰
? *Pelagornis miocaenus* Miocene pseudotoothed bird¹³⁷, Miocene false-toothed pelican⁹⁰
Pelecanoides georgicus South Georgian diving petrel^{52,89}, South Georgia diving-petrel¹²⁴, sub-Antarctic diving-petrel¹¹³; *P. g. whenuahouensis* Whenua Hou diving petrel¹²⁹, kuaka Whenua Hou¹²⁹, Codfish diving-petrel¹²⁴, tītī⁹⁶
Pelecanoides miokuaka Miocene diving petrel¹¹¹
Pelecanoides urinatrix common diving petrel^{52,89}, kuaka^{44,122}, dipchick⁷⁸, diver¹³⁵, diving petrel^{11,60}, larger diving petrel³⁴, small diving petrel⁵⁷, smaller diving petrel³⁴, teete¹¹, tītī^{11,96}; *P. u. urinatrix* northern diving petrel⁷², New Zealand diving petrel⁸⁶; *P. u. chathamensis* southern diving petrel⁷², Chatham Island diving petrel⁷³, Richdale's diving petrel¹⁰¹; *P. u. exsul* subantarctic diving petrel^{72,78}, Kerguelen diving petrel⁵³
Pelecanus conspicillatus Australian pelican⁵², perikana^{93,134}, eastern Australian pelican⁴³, New Zealand pelican⁸⁸, pelican⁵³, spectacled pelican⁸⁶
Petrochelidon ariel fairy martin⁸⁸, bottle swallow¹³⁵, cliff swallow¹³⁵, land swallow¹³⁵
Petrochelidon nigricans tree martin⁸⁶, Australian tree martin^{52,78}, Australian tree-swallow^{19,43}, tree swallow⁷⁸
Petroica australis & *P. longipes* bush robin⁸⁶, hātoitoi^{36,81}, kakaruawai⁸⁵, kakaruwai³⁶, karae⁹⁹, karuae³⁶, karuai⁵⁴, karuwai³⁶, kātoitoi^{10,36,81}, kātuhitui⁸¹, miromiro^{5,7,10}, mōioio^{54,81}, mokorā (f)^{36,81}, New Zealand robin⁵³, New Zealand wood robins³², pie⁹⁹, pier^{36,99}, pīhaua^{7,81}, pīhere^{36,81}, pirangirangi⁸⁵, pītoitoi^{6,8,10,36,81}, robin^{10,51}, tarapō (f)^{8,134}, tariwai⁵⁴, taruwai⁵⁴, tātaruwai^{36,81}, tātāwai^{7,54,81}, tītīketeketemanawa (call)^{36,134}, tītīwahanui^{36,54,81}, toitoireka³⁶, toroire⁹⁹, totawara⁷, tōtōara^{9,81}, totoi⁵⁴, totoireka³⁶, tōtōrori^{81,99}, tōtōwai⁸¹, tōtōwara^{36,81}, toutou^{6,8,19}, toutouai⁷, toutouwai^{7,14,81}, wheko-pō^{54,54,81,134}, wood robin¹⁶
Petroica australis South Island robin^{19,35}, kakaruai⁹², alpine robin³⁴, kakariwai⁹², South Island wood-robin^{30,32}, southern robin⁶³, stonechat¹⁰, white-fronted thrush¹¹; *P. a. rakiura* Stewart Island robin⁷², toutouwai⁹⁶
Petroica longipes North Island robin¹⁹, toutouwai¹⁹, North Island wood robin³²

- Petroicamacrocephalatomtit***^{49,85}, browntit¹⁰, butcherbird^{78,102}, hōmiromiro^{36,54,81}, kikitore⁹⁹, kikitōri⁵⁴, kōmiromiro^{6,7,19,19,36,81}, large-headed tit¹⁰, large-headed tomtit^{53,85}, māuipōtiki^{36,54,81,93,134}, mīmiro^{36,54,99}, miromiro^{5,6,8,10,19,99}, mirumiru^{36,54}, New Zealand tit³², New Zealand tomtit^{53,88}, ngirungiru^{5,7}, pīmiromiro^{24,24,36,99,134}, pīmirumiru^{6,8,36,54,81,134}, pīngirungiru^{24,24,36,54,93,134}, pipitōre^{54,81}, pipitōri^{7,24,24,36}, pirangirangi^{5,7,81,134}, robin¹⁴, tāne-te-waiora^{36,54,81,85,93}, tarapō (f)^{6,8,36,81}, tit²², toitoi^{10,36}, wheedler⁷⁸; ***P. m. toitoi*** North Island tomtit²⁴, miromiro¹⁹, mirotōitoi⁷, nirungiru¹¹, North Island tit⁸⁶, pied tit^{16,37}, pied tomtit¹⁰², pitongatonga⁵⁴, to-i-toe⁵, white-breasted tit^{10,32}, white-breasted tomtit⁷³; ***P. m. macrocephala*** South Island tomtit^{24,44}, ngirungiru^{19,32}, great-headed titmouse¹¹, mirro mirro¹¹, pirau¹³³, piropiro³⁶, South Island tit^{35,54}, southern tit⁴⁴, southern tomtit¹⁰², yellow breast tit²², yellow-breasted robin²², yellow-breasted tit^{10,16}, yellow-breasted tomtit⁷³; ***P. m. chathamensis*** Chatham Island tomtit⁷³, miromiro²⁹, Chatham Island tit⁷², Chatham Islands' tomtit⁴³, yellow-breasted tit⁶¹; ***P. m. danneferdi*** Snares Island tomtit⁷³, miromiro⁹⁶, black robin⁵⁶, black tit⁷⁹, black tomtit²⁷, little wood robin³², Snares black tit⁷², Snares Island robin^{34,35}, Snares robin⁴⁰, Snares tit⁸⁶, Snares tomtit¹⁰³; ***P. m. marrineri*** Auckland Island tomtit⁷³, Auckland Island tit⁷², Auckland Islands' tomtit⁴³
- Petroica traversi*** black robin⁴⁸, karure¹³⁰, black wood robin³², Chatham Island black robin⁸⁵, Chatham Island robin¹⁹, Chatham Island tit²¹, Chatham Islands robin^{43,53}, kakaruai⁹⁸
- Phaethon lepturus*** white-tailed tropicbird^{73,83}, bo'sun bird⁸⁶, longtail¹³⁵, marlin-spike¹³⁵, white-tailed bosunbird¹³⁵, yellow-billed tropicbird^{86,111}
- Phaethon rubricauda*** red-tailed tropicbird^{24,53,88}, amokura²⁴, bosun bird^{86,115}, hawe⁷, rakorako⁵⁴, ruddy tropic bird⁴³, strawtail⁷⁸, tawake^{81,135}, western Pacific red-tailed tropic bird⁷³
- Phalacrocorax* spp.** kaha⁹², kahia⁹², kauau^{6,7}, kauwau^{5,9}, kawau^{9,13,16,93}, kōau^{36,54,81,85,93}, koauteko⁹², rori⁹²
- Phalacrocorax carbo*** great cormorant⁸⁶, common cormorant³⁵; ***P. c. novaehollandiae*** black shag¹⁶, māpunga^{54,81,99}, black cormorant³⁵, common black shag⁵⁴, cormorant¹⁶, great black shag²², great green cormorant¹⁰, great shag¹⁸, houmea⁵⁴, kaihau⁵⁴, kauau nui¹⁰, kauau pango¹⁰, kauau tua-whenua^{10,11}, kawau¹⁴, kawau-marō⁵⁴, kawau pū^{54,81}, kawau tuawhenua^{22,54,81}, koau-mapua⁹², koau-pango⁹², large black shag¹¹³, māpo⁹³, māpua⁹⁹, matapo^{81,93}, matapu^{38,99}, New Zealand cormorant⁵⁴, papu³⁸, pāpua^{38,81}, sea shag³⁴, shag¹⁴, whitethighed cormorant¹⁰
- Phalacrocorax featherstoni*** Pitt Island shag⁵², kawau o Rangihau¹²², Chatham Island cormorant⁵³, Chatham Island shag^{19,35}, Chatham Islands' shag⁴³, double-crested shag⁶⁰, kawau o Rangiauria¹²², Pitt Island cormorant⁶⁰, Pitt Island spotted shag⁴⁹, Pitt shag⁸⁹
- Phalacrocorax punctatus*** spotted shag¹¹, kawau tikitiki^{54,81}, blue shag⁵², crested cormorant¹⁰, crested shag²⁰, flip-flap²⁰, kauau pari¹⁰, kawau pāteketeki^{54,81}, king shag³⁰, koau tai⁹², ocean shag²⁰, pa-degga-degga¹¹, papua⁵⁴, pārekareka^{36,81}, pāteketeki⁸¹, spotted cormorant⁵³
- Phalacrocorax sulcirostris*** little black shag³¹, kawau tūr^{54,81,93}, black shag³⁴, little black cormorant⁵³
- Phalacrocorax varius*** pied cormorant⁵³; ***P. v. varius*** pied shag¹¹, kāruhiruhi^{6,9,81}, aroarotea⁸¹, kauāu^{8,10}, large pied shag¹³⁵, māpunga⁹³, teoteo⁹³, yellow-faced cormorant⁸⁶
- Phalaropus fulicaria*** grey phalarope²⁴, red phalarope⁵²
- Phalaropus lobatus*** red-necked phalarope⁵³, northern phalarope⁵²
- Phalaropus tricolor*** Wilson's phalarope⁸⁸
- Phasianus colchicus*** common pheasant²², peihana⁹³, black-necked pheasant⁸⁶, Chinese pheasant¹⁶, English pheasant¹⁶, Mongolian pheasant⁸⁶, pheasant⁷², ringed pheasant⁴⁷, ring-necked pheasant⁸⁸
- Philesturnus* spp.** saddleback^{16,28,43}, tieke^{8,11,93}, pūrourou^{5,8,81}, redbacked thrush¹⁰, saddle bird¹⁴, tiaka¹¹, tiakanga¹³³, tiake⁵, tiaki^{7,11}, tieke-rere^{36,54,81}, tieki⁷, tierawaki⁷, tira-ouake^{5,11}, tiraueke^{54,81}, tiraueke^{19,81}, tiraueke^{14,81}, wattled stare³
- Philesturnus carunculatus*** South Island saddleback⁷², tieke^{5,93}, jackbird (juv)^{24,56}, southern saddleback⁶⁶
- Philesturnus rufusater*** North Island saddleback⁷², tieke⁹³, urourou³⁶
- Phoebastria immutabilis*** Laysan albatross¹¹¹
- Phoebastria nigripes*** black-footed albatross⁷², black-footed mollymawk⁵³, black gooney⁸⁶
- Phoebetria fusca*** sooty albatross⁴⁸, Australian sooty albatross⁴³
- Phoebetria palpebrata*** light-mantled sooty albatross⁴⁸, toroa pango^{11,24}, Cape hen¹⁶, grey-mantled albatross⁵³, kōputa⁹³, kōputu^{54,81}, New Zealand light-mantled sooty albatross⁴³, pee-arr⁸⁵, pee-oo⁸⁶, pēō¹³⁴, piew⁸⁵, pio⁸⁵, sooty albatross¹⁹, torea-pango¹⁹, toroa-a-ruru^{54,99}, toroa haunui^{7,14,54}, toroa ruru^{54,81}
- Pikaihao bartlei*** Bartle's bittern¹³⁷, St Bathans bittern¹³⁵
- Platalea flavipes*** yellow-billed spoonbill⁸³
- Platalea regia*** royal spoonbill²⁴, kōtuku ngutupapa^{24,81,93,111}, black-billed spoonbill^{53,135}, koutuku ngutu-papa^{10,11}, kuru whengi⁹³, spoonbill¹⁰
- Platycercus eximius*** eastern rosella⁵², kākā uhi whero¹²², Rose-hill parakeet⁴⁷, rosella⁴⁷, roselle parakeet⁴⁷, white-cheeked rosella¹³⁵
- Platydyptes amiesi*** Amies' penguin⁹⁰
- Platydyptes marplesi*** Simpson's penguin¹¹¹

- Platydyptes novaezealandiae* wide-flipped penguin⁹⁰, lesser wide-flipped penguin⁵²
- Plegadis falcinellus* glossy ibis³⁴
- Pleistorallus flemingi* Fleming's rail¹¹¹
- Pluvialis dominicus* American golden plover⁹¹
- Pluvialis fulva* Pacific golden plover⁷², kuriri¹³⁴, Asiatic golden plover⁷⁸, eastern golden plover¹⁹, golden plover¹⁶, least golden plover⁸³, lesser golden plover⁴⁸, pakihitaki¹¹, spotted plover³², tuturiwatu¹⁴, tuturiwhata¹¹, tuturuata¹¹
- Pluvialis squatarola* grey plover⁷², black-bellied plover⁸⁶, grey sandpiper¹³⁵, silver plover¹³⁵
- Podiceps cristatus* great crested grebe¹⁹; *P. c. australis* Australasian crested grebe⁸⁸, pūteketete^{52,93}, crested grebe¹⁰, diver⁸⁵, kāha^{36,81}, kāmana^{38,81}, manapou³⁸, New Zealand crested grebe⁴³, pāteketete^{24,81}, southern crested grebe^{72,77}, totokepio¹³³
- Poliocephalus poliocephalus* hoary-headed grebe⁸³, taihoropi⁹³, hoary-headed dabchick⁸⁶, Tom Pudding⁸⁶
- Poliocephalus rufopectus* New Zealand dabchick¹⁹, weweia¹⁹, dabchick^{16,16}, diver⁹², grebe⁵⁶, koikoipia³⁶, little grebe¹⁰, New Zealand grebe¹¹³, red-necked grebe⁸⁵, taihoropi^{24,81}, taratimoho²⁴, taratimohi³⁶, tekotekopia³⁶, tokitoki^{7,36}, tokitokipia³⁶, tokitokipio⁵⁴, tongitongipia³⁶, torokipia⁸⁵, totoipio⁵⁴, totokipia³⁶, totokipio¹¹, weiweia¹⁰, whiroia⁹³, whirowhiro³⁶
- Poodytes punctatus* fernbird^{24,44,56}, mātātā^{5,81}, common utick⁸⁵, grassbird^{14,16,108}, grass-pheasant⁸⁵, haumata⁹², koretī¹³⁴, koroātito^{9,81}, korowātito^{7,81}, kōtātā^{6,8,11,81}, kūkurutoki^{36,81}, maata⁵⁴, maataa⁹², māta^{5,81,96}, mataa⁹², mātuhi^{54,81}, nako¹⁹, New Zealand fernbird¹⁰¹, ngako⁵⁴, potata¹³³, reed sparrow⁴⁴, reed wren¹⁰, swamp-bird⁸⁵, swamp-lark²⁷, swamp sparrow¹⁰⁸, swamp thrush⁸⁶, tatakī⁹², tatakī thrush⁷⁸, toetoe¹¹, toitoi⁹², tutaki⁹², utick⁸⁵, wetito⁵⁴, whetito⁵⁴; *P. p. vealeae* North Island fernbird^{43,72}, koroātito⁹³, common utick¹⁹; *P. p. punctatus* South Island fernbird^{43,72}, mātātā⁹³, fulvous fernbird²⁴, fulvous utick¹⁹; *P. p. stewartiana* Stewart Island fernbird⁷², māta⁹⁶; *P. p. wilsoni* Codfish Island fernbird⁷³, māta⁹⁶, Codfish fernbird⁷²; *P. p. caudatus* Snares Island fernbird^{43,73}, māta⁹⁶, Snares fernbird^{34,56}, tawny fernbird^{32,108}, The Snares fernbird¹¹³
- Poodytes rufescens* Chatham Island fernbird^{24,48,61}, Chatham Island utick¹⁹, Chatham Islands fern-bird^{43,51}
- Porphyrio hochstetteri* South Island takahe⁹², takahē^{9,81}, Mantell's notornis¹⁹, moho^{7,8}, moho keo^{36,81}, moho rākau^{54,81}, moho rangi^{54,81}, notornis¹⁰, pass bird⁸⁶, takahea¹⁴, tokohea¹⁹
- Porphyrio mantelli* North Island takahe⁸⁸, moho^{8,14,81}, extinct takahe⁵², mohoau¹³⁵
- Porphyrio porphyrio* pūkeko^{5,8}, pukeko⁵, Australasian swamphen¹³⁵, Australian swamphen¹⁰¹, Chatham Island pukeko⁶¹, Chatham Island swamp hen⁴⁹, Chatham Islands' swamp-hen⁴³, eastern swamp-hen⁵³, moorhen¹⁰, old swampie⁸⁴, pakaki⁴⁵, pākura^{6,8}, pook⁷⁸, pukaki⁷⁸, puke⁸⁶, purple gallinule⁸⁵, purple swamphen⁸⁸, rauhara⁹, southwest Pacific swamphen^{111,115}, swamphen^{14,19,88}, tangata-tawhito^{54,81}
- Porzana fluminea* Australian crane⁹¹, Australian spotted crane⁷⁹
- Priscaweka parvaes* Bannockburn crane¹³⁷
- Proapteryx micromeros* St Bathans kiwi¹³⁷
- Procellaria aequinoctialis* white-chinned petrel³², karetai kauae mā¹²², Cape hen⁵³, New Zealand white-chinned petrel⁴³, oi¹¹, shoemaker⁷³, stink-pot⁴⁰, stink-pot petrel³⁴, storm petrel¹⁰, takupu¹¹
- Procellaria altirostris* deep-billed petrel¹³⁷
- Procellaria cinerea* grey petrel³⁴, kuia²⁴, black-tailed petrel¹³⁵, black-tailed shearwater¹³⁵, brown petrel¹⁶, great grey shearwater⁸⁵, hākuikui^{54,81}, night-hawk⁸⁵, pediunker⁷²
- Procellaria parkinsoni* black petrel¹⁹, tāiko^{8,11,81}, black fulmar⁸⁹, brown petrel⁸⁵, karetai⁵⁴, kuia²⁴, kuihi⁹³, night demon⁸⁵, Parkinson's petrel⁵⁹, ruru-tāiko^{54,81,81}, tākoketai^{120,125}, taonui³⁹, toanui^{16,32}, tuānuī⁹³
- Procellaria westlandica* Westland petrel⁸⁸, tāiko^{113,134}, tūtū⁹⁶, Westland black petrel⁷², Westland shoemaker⁷³
- Procelsterna cerulea* blue-grey noddy⁸⁶; *P. c. albivitta* grey noddy²⁵, blue-billy⁸⁶, grey ternlet⁷², little blue petrel⁸⁶, little grey noddy⁴³, little grey tern⁵³, little noddy²⁴
- Prothemadera novaeseelandiae* tūi^{4,8,81}, tui⁵, Auckland Islands' tui⁴³, kogo¹¹, kōkō^{6,81,81}, kōkōtaua (m)^{54,81}, kōkōtea (f)^{38,54}, kōkōuri (m)^{38,81}, kopureha⁵⁴, kōpūrehe (m)^{38,81}, kouwha (f)³⁸, kukari (ch)³⁶, mocking bird¹⁰, North Island tui⁴³, parson bird^{10,30,98}, pi (ch)^{7,9}, pikari (ch)⁹, pikōkō^{6,8}, pi-tui (ch)^{19,58}, poe⁵, poe bird⁸⁵, poey bird¹⁰⁰, pōhe¹¹, pureke (juv)⁹, rōghee etooee¹¹, South Island tui⁴³, tākaha (m)^{36,81}, teoteo (f)³⁶, toi⁵, toui¹¹, tui-koko^{10,14}, tui-teoteo (f)⁵⁴, tute (m)³⁶; *P. n. chathamensis* Chatham Island tui⁶¹, kōkō^{29,98}
- Protodontoptyx ruthae* Ruth's pseudotoothed bird¹³⁷
- Prunella modularis* dunnock⁷², British hedge sparrow⁷², hedge accentor^{40,113}, hedge sparrow^{22,40,83}, hedgie⁷⁸
- Pseudobulweria rostrata* Tahiti petrel⁸⁸
- Pterodroma alba* Phoenix petrel⁷², Christmas Island petrel⁷³, Pacific petrel⁴⁸, Phoenix Island petrel⁵², short-billed petrel⁵³, small-billed petrel⁵⁷, white-bellied petrel⁵³
- Pterodroma axillaris* Chatham petrel⁸⁸, ranguru⁷³, Chatham Island petrel³², Chatham Islands' blue-footed petrel⁴³, Chatham Islands petrel¹¹⁵, karetai⁹³, Salvin's petrel³⁴

- Pterodroma brevipes* collared petrel¹³⁷, magnificent petrel¹³⁵
- Pterodroma cervicalis* white-naped petrel⁸³, black-capped petrel³², Salvin's capped petrel³⁵, Sunday Island petrel³⁴, white-necked petrel⁸⁹
- Pterodroma cookii* Cook's petrel^{19,52}, blue-footed petrel⁴³, e-titi¹¹, tītī^{5,8,81}, white-winged petrel;⁴⁸ *Pt. c. cookii* northern Cook's petrel¹³⁷; *Pt. c. orientalis* southern Cook's petrel¹³⁷
- Pterodroma externa* Juan Fernandez petrel⁸³, white-necked petrel⁸⁶
- Pterodroma gouldi* grey-faced petrel¹⁶, ōi^{36,81}, Gould's petrel⁸⁵, gray-faced petrel¹²⁴, great-winged petrel⁵³, grey-headed petrel¹⁰³, kuia (juv)⁷⁵, long-winged petrel¹⁹, muttonbird⁸⁶, New Zealand grey-faced petrel⁴³, New Zealand mutton bird⁵⁴, northern muttonbird⁹⁴, ohi⁸⁵, oii²⁴, sooty petrel⁸⁵, titi⁷⁵
- Pterodroma heraldica* Herald petrel¹³⁷
- Pterodroma imber* Imber's petrel¹³⁷
- Pterodroma inexpectata* mottled petrel²⁴, kōrure^{73,99}, Dawson's petrel⁵⁰, karae⁹², korari⁵², laughing petrel²⁴, mottled fulmar⁴⁰, pakahā⁹³, Peale's petrel⁸⁶, rainbird^{32,52}, scaled petrel⁸⁵, tītī^{86,96}
- Pterodroma lessonii* white-headed petrel¹⁶, eastern white-headed petrel⁴³
- Pterodroma leucoptera* Gould's petrel⁷⁸, Gould petrel⁷², sooty-capped petrel¹³⁵, white-throated petrel¹³⁵, white-winged fulmar¹³⁵, white-winged petrel¹³⁵; *Pt. l. caledonica* New Caledonian petrel⁸⁶
- Pterodroma longirostris* Stejneger's petrel⁷⁸
- Pterodroma magentae* Chatham Island taiko⁷⁹, tāiko^{84,135}, Chatham Islands taiko¹¹⁵, Chatham taiko¹⁰⁴, Magenta petrel⁵⁵, tchaik⁸⁶
- Pterodroma mollis* soft-plumaged petrel²⁴
- Pterodroma neglecta* Kermadec petrel⁴⁸, pia koia⁸⁵, doubtful petrel²⁴, karetai Rangitahua¹²², Kermadec Island mutton bird³², Kermadec Islands' petrel⁴³, Kermadec muttonbird⁸⁵, Kermadec petrel "summer"⁴⁸, Kermadec petrel "winter"⁴⁸, neglected petrel⁵⁵, Phillip's fulmar⁸⁵, Schlegel's petrel³⁴, summer surface mutton bird⁸⁵, winter petrel⁵⁶
- Pterodroma nigripennis* black-winged petrel³⁵, karetai kapa mangu¹²², Kermadec blue-footed petrel⁴³, Rothschild's petrel³⁴
- Pterodroma pycrofti* Pycroft's petrel^{52,72}
- Pterodroma solandri* providence petrel⁸⁸, big-hill muttonbird⁸⁶, bird of providence⁷², brown-headed petrel⁸⁶, Mount Pitt bird¹³⁵, Phillips' petrel³⁴, Solander's petrel⁸⁶
- Ptilinopus regina* rose-crowned fruit-dove¹³⁷, pink-capped fruit-dove¹³⁵, red-crowned fruit-dove¹¹¹, Swainson's fruit-dove¹³⁵
- Puffinus* spp. hakoakoa⁷, hakuakua³⁶, titi-wahine⁹²
- Puffinus assimilis* little shearwater⁵³, totoro⁵², allied shearwater²⁴, mutton-bird^{11,14}, small shearwater²⁵, whistler⁸⁶, titi¹⁴; *P. a. assimilis* Norfolk Island little shearwater⁷⁹, allied petrel⁴³, Norfolk Island allied shearwater⁷²; *P. a. kermadecensis* Kermadec little shearwater⁷⁹, allied petrel⁴³, Kermadec allied shearwater⁷², Kermadec Island little shearwater¹⁰¹; *P. a. haurakiensis* North Island little shearwater⁷⁹, New Zealand allied shearwater⁷³, New Zealand little shearwater¹⁰⁴, North Island allied shearwater⁷²
- Puffinus elegans* subantarctic little shearwater⁷⁹, allied shearwater⁵², Chatham Island allied shearwater⁷³, Chatham Islands' allied petrel⁴³, Giglioli's shearwater⁸⁵, subantarctic allied shearwater⁷², subantarctic shearwater¹²⁴, Tristan shearwater⁸⁵
- Puffinus gavia* fluttering shearwater⁵², pakahā^{36,81}, brown-backed petrel⁴³, brown-beaked shearwater⁸⁹, flutterer¹³⁵, Forster's petrel⁸⁹, Forster's shearwater¹⁹, hākoakoa^{8,13,81}, hākuakua⁸¹, laughing jackass¹⁶, New Zealand allied petrel⁴³, pakahaa²⁴, rainbird^{16,24}, shearwater¹⁶, takaha⁵⁴, wet-bird^{16,16}
- Puffinus huttoni* Hutton's shearwater^{72,73}, Kaikōura tītī¹¹⁶, muttonbird⁸⁶, pakahā^{86,113}, Snares brown-backed petrel⁴³, tītī^{86,96}
- Puffinus nativitatis* Christmas Island shearwater⁸³, black shearwater⁸⁶, Christmas shearwater⁸⁴, Kiritimati shearwater¹³⁵
- Puffinus newelli* Newell's shearwater¹¹¹, black-vented shearwater¹³⁵
- Puffinus puffinus* Manx shearwater⁸³, common shearwater⁸⁶
- Puffinus spelaeus* Scarlett's shearwater¹⁰¹, ōiruki¹²²
- Pygoscelis adeliae* Adelle penguin^{73,73}
- Pygoscelis antarctica* chinstrap penguin⁷⁹, bearded penguin⁸⁶, ringed penguin⁸⁶
- Pygoscelis papua* gentoo penguin⁷², jackass penguin⁸⁵, Johnny⁸⁶, Johnny penguin⁸⁶, rock-hopper^{24,32,85}; *P. p. papua* northern gentoo penguin⁸⁸
- Pygoscelis tyreei* Tyree's penguin⁹⁰
- Recurvirostra novaehollandiae* red-necked avocet¹⁹, piwari¹⁰, Australian avocet⁷², Australian red-necked avocet⁸⁸, avocet¹⁰, cobbler¹³⁵, cobbler's awl¹³⁵, eastern red-necked avocet⁴³, painted lady¹³⁵, red-necked stilt⁸⁵, scooper¹³⁵, trumpeter¹³⁵, yelper¹³⁵

- Rhipidura fuliginosa* New Zealand fantail⁵³, pīwakawaka^{5,7,8,81}, black fantail^{16,16}, black flycatcher¹², diggowaghwagh¹¹, fantail¹⁴, fan-tailed flycatcher^{2,10}, grey fantail⁸⁸, hee-waka-waka¹¹, hinai⁸⁵, hīrairaka^{36,81}, hītakataka^{36,81}, hīwai^{54,81}, hīwaiwaka^{36,81}, hīwakawaka^{6,8,11}, kōtiutiu^{54,81}, pied fantail^{16,16}, pied fantail-flycatcher³⁵, pied flycatcher²², pi-oua-ka-oua-ka¹¹, pīrairaka^{24,81}, pīrakaraka^{36,93}, pīrangirangi^{54,81}, pītakataka^{24,81}, pīwaiwaka^{19,81}, sooty fantail-flycatcher³⁵, tewakawaka^{7,11}, tīaiaka^{36,99}, tīaka⁸¹, tīakaaka^{36,81}, tieaka³⁶, tīrairaka^{24,81}, tīrairaka pango (black morph)¹³⁴, tīrakaraka^{7,9,81}, tiraueka⁵⁴, tīraueke⁹³, tīraureka^{36,81}, tītaiwaka^{92,123}, tītakataka^{36,81}, tīrairaka^{36,81}, titiwaiko¹⁰, tiwaewaka⁷, tiwaikawaka²², tīwaiwaka^{14,81}, tīwakawaka^{10,16,81}, wakawaka⁵⁴; **R. f. placabilis** North Island fantail⁷², North Island pied fantail⁴³; **R. f. fuliginosa** South Island fantail⁷², South Island pied fantail⁴³; **R. f. penita** Chatham Island fantail⁷², tchitake²⁹, Chatham fantail⁶¹, Chatham Island pied fantail⁷³, Chatham Islands' pied fantail⁷³
- Rhipidura leucophrys* willie wagtail¹¹¹, black-and-white fantail¹³⁵, black-and-white flycatcher¹³⁵, fantail flycatcher¹³⁵, pied fantail¹³⁵, shepherd's companion¹³⁵, water wagtail¹³⁵, white-browed fantail¹³⁵
- Rostratula benghalensis* painted snipe⁸⁸, Australian painted snipe¹³⁵
- Rupephaps taketake* St Bathans pigeon¹¹¹
- Scythrops novaehollandiae* channel-billed cuckoo⁷², channel-bill⁷³, flood bird⁸⁶, flying walking-stick¹³⁵, storm bird⁸⁶
- Sequiwaimanu rosieae* Rosie's penguin¹³⁷
- Spatula clypeata* northern shoveler⁷⁹
- Spatula rhynchotis* Australasian shoveler⁸⁸, kuruwhengi^{19,93}, hoho⁹², kāhoho^{19,81}, kukupaki¹¹, kūkuruwhetū^{54,81,99}, kukuruwhitu⁹², kuruengo⁷, kuruhenga⁹⁹, kuruwhengu²⁴, kuruwhetu¹³³, New Zealand shoveler⁷², New Zealand shoveller¹⁹, papaungūngu⁹⁹, papaunguungu^{24,54}, pāteke^{24,81}, paungu-ungu⁸⁵, pakau-kuku¹⁰, pikau-kuku¹¹, pūtaitai^{19,81}, rangi-tauharuru^{10,11}, shoveler²², shoveler duck⁵⁴, shoveller¹⁰, shoveller duck²⁸, spoonbill^{14,54}, spoonbill duck^{19,58}, spoonie⁷⁸, tataa⁹², tētē^{14,81}, wetawetangū^{19,81}, whetawetangu⁸⁵
- Stercorarius antarctica* southern skua^{19,85}, great skua^{48,95}, southern great skua⁸³; **C. a. lonnbergi** subantarctic skua⁸⁶, hākoakoa^{8,54,73,81}, Antarctic great skua⁷⁶, Antarctic skua¹¹³, bonxie⁸⁵, brown skua⁸⁶, dark southern skua⁵³, hakaokao³⁶, hakoko⁵⁴, hākuakua^{36,54,81}, New Zealand great skua⁴³, plundering gull⁸⁵, pohio^{81,92}, raptorial gull⁴, sea-hawk^{32,40,56,85}, sea hen^{14,16}, skua gull²⁷, southern skua gull⁷¹
- Stercorarius longicaudus* long-tailed skua⁷⁹, long-tailed jaeger⁸⁶
- Stercorarius maccormicki* South Polar skua⁴³, Antarctic skua⁵², MacCormick's skua³⁴, McCormick's skua⁸⁶
- Stercorarius parasiticus* Arctic skua⁴³, Arctic jaeger⁹⁵, Buffon's skua¹⁹, parasitic jaeger⁵², parasitic skua¹¹³, Richardson's skua²⁴, Richardson's skua gull³¹, skua gull¹⁶
- Stercorarius pomarinus* pomarine skua⁷², pomarine jaeger⁷³, pomatorhine skua⁸⁶
- Sterna hirundo* common tern⁸⁸; **S. h. longipennis** eastern common tern⁸⁸
- Sterna paradisaea* Arctic tern⁵²
- Sterna striata* white-fronted tern¹⁹, tara^{6,7,8,16}, Auckland Islands white-fronted tern⁴³, barracouta bird^{85,92}, black-billed tern⁹⁵, blackcap^{78,86}, black-legged tern¹⁰, grenadier⁷⁸, kahawai bird⁷⁸, New Zealand white-fronted tern⁴³, noddy⁷⁸, sea-swallow^{16,19}, southern tern⁹⁵, southern white-fronted tern¹¹⁹, swallowtail⁷⁸, tara iti^{93,93}, tara kakao⁹³, tara nui¹⁰, tara pirohe⁹², tikkitak⁷⁸, whale bird²², whitefront tern⁹²
- Sterna vittata* Antarctic tern⁶⁹, southern tern³⁴, subantarctic tern^{48,51,52}, swallow-tailed tern³²; **S. v. bethunei** New Zealand Antarctic tern⁸⁸, Bethune's tern³⁴, New Zealand subantarctic tern⁴³
- Sternula albifrons* little tern⁷⁸, black-lored tern⁸⁶, sea-swallow⁸⁶, white-shafted ternlet⁸⁶; **S. a. sinensis** eastern little tern⁷⁹, tara teo^{93,134}, Asiatic little tern⁸⁶, tara iti¹³⁴, tara teoteo^{54,134}
- Sternula nereis* fairy tern⁴⁸; **S. n. davisae** New Zealand fairy tern⁴³, tara iti^{19,36,81}, little tern¹⁰, little white tern¹⁹, tara paku¹⁰, tara-teo^{54,81,81}, tara-teoteo^{54,81}, tara-titi⁵⁸
- Streptopelia chinensis* spotted dove⁷⁸, Chinese dove¹³⁵, Indian spotted dove⁷³, laceneck⁷⁸, laceneck dove⁸⁶, Malay spotted dove⁷², pearl-necked dove¹³⁵, spotted-necked dove⁷⁸, spotted turtledove^{86,94}, turtle dove⁷⁸
- Streptopelia risoria* Barbary dove⁸³, African collared dove¹¹³, African ring-necked dove¹³⁵, domestic collared dove⁸⁶, Java dove⁸⁶, ring dove¹⁶, ring-neck dove¹¹³, ringed turtle dove⁸⁶
- Strigops habroptila* kākāpō^{7,81}, kakapo⁷, great night parrot¹⁰, ground parrot^{14,19}, kākātarapō^{6,8,36,81}, night parrot¹², North Island kakapo⁴³, owl parrot^{19,94}, South Island kakapo⁴³, tarapō^{6,7,8,81}, tarepō^{9,81}, tātarapō^{54,81}, tātarapū⁹³
- Sturnus vulgaris* common starling⁵², tāringi⁹⁹, European starling¹³⁵, starling¹⁶
- Sula dactylatra* masked booby⁷², blue-faced booby⁵², masked gannet²⁶, Tasman booby¹¹⁵, whistling booby⁸⁶, white booby⁸⁶
- Sula leucogaster* brown booby⁵², Brewster's booby⁸⁶, brown gannet³⁴, common booby⁸⁶, white-bellied booby⁸⁶
- Sula sula* red-footed booby¹³⁷, red-legged gannet¹⁶; **S. s. rubripes** Indo-Pacific red-footed booby¹³⁷; **S. s. websteri** eastern Pacific red-footed booby¹³⁷
- Tachybaptus novaehollandiae* eastern little grebe⁸⁸, little grebe¹¹³, tricolored grebe¹¹³; **T. n. novaehollandiae** Australasian little grebe⁷⁹, tokitokipio⁹³, Australasian grebe⁸⁹, Australian dabchick⁸⁶, Australian grebe¹³⁵, Australian little grebe⁸⁶, black-throated grebe⁸⁶

- Tadorna tadornoides* chestnut-breasted shelduck⁷³, Australian shelduck⁸⁶, chestnut shelduck¹³⁵, chestnut-coloured shelduck¹³⁵, grunter¹³⁵, mountain duck⁸⁶, mountain shelduck¹³⁵
- Tadorna variegata* paradise shelduck⁸³, pūtangitangi^{5,7,81}, New Zealand sheldrake¹⁹, painted duck⁸⁵, paradise duck^{5,53}, pari⁸⁶, parrie¹¹³, pooa duggie duggie¹¹, pūpūtangi-ā-tama^{36,81,81}, pūpūtangi-ā-toa^{36,81}, pūtakitaki^{11,81}, putangetangi¹⁴, putangitange¹⁵, pūtangitangi-ā-tama^{8,36,81,99}, pūtangitangi-ā-toa^{8,36,81,99}, pututangiata⁷, Rangitata goose⁷⁸, sheldrake²⁸, variegated goose¹¹
- Tereingaornis moisleyi* Moisley's penguin⁹⁰
- Thalassarche* spp. toroa^{8,36}, toroa teoteo⁸¹, totoria⁹²
- Thalassarche bulleri* Buller's albatross³⁴, toroa¹¹³, Buller's mollymawk^{52,72}, white-capped mollymawk³²; *T. b. bulleri* southern Buller's albatross¹⁰¹, toroa¹³⁷, Snares Island mollymawk⁴³, southern Buller's mollymawk⁸⁶; *T. b. platei* northern Buller's albatross¹⁰¹, Chatham Island Buller's mollymawk⁸², hopo (ch)¹⁰⁶, northern Buller's mollymawk⁸⁶, Pacific albatross¹⁰³, Pacific mollymawk¹⁰⁶
- Thalassarche carteri* Indian Ocean yellow-nosed albatross¹¹¹, Carter's mollymawk¹³⁵, east Australian yellow-nosed mollymawk⁴³, eastern yellow-nosed mollymawk¹¹⁹, Indian Ocean yellow-nosed mollymawk¹¹³, Indian yellow-nosed albatross¹⁰³, Indian yellow-nosed mollymawk¹⁰⁶, yellow-nosed albatross¹⁹, yellow-nosed mollymawk³²
- Thalassarche cauta* white-capped albatross^{101,101}, toroa¹¹³, Bounty Island mollymawk⁴⁸, Layard's albatross³⁵, shy albatross²⁴, shy mollymawk⁵⁸, white-capped mollymawk^{52,52}; *T. c. cauta* Tasmanian albatross¹¹¹, shy albatross¹¹³, Tasmanian mollymawk¹¹³, Tasmanian shy albatross¹²⁴; *T. c. steadi* New Zealand white-capped albatross¹¹¹, Auckland shy albatross¹²⁴, New Zealand shy mollymawk⁸⁸, New Zealand white-capped mollymawk⁸⁸
- Thalassarche chlororhynchos* Atlantic yellow-nosed albatross¹¹¹, Atlantic yellow-nosed mollymawk⁸⁸, western yellow-nosed albatross¹³⁵, western yellow-nosed mollymawk¹³⁵, yellow-nosed albatross⁸⁹, yellow-nosed mollymawk⁸⁸
- Thalassarche chrystostoma* grey-headed albatross¹⁹, toroa¹¹³, Campbell Island flat-billed mollymawk⁴³, flat-billed mollymawk⁴⁸, grey-headed mollymawk³²
- Thalassarche eremita* Chatham Island albatross¹⁰¹, toroa⁹⁸, Chatham albatross¹⁰³, Chatham Island mollymawk⁵², Chatham Islands mollymawk¹¹⁵, Chatham mollymawk¹¹³, hopo (ch)⁹⁸
- Thalassarche impavida* Campbell black-browed albatross¹¹¹, toroa²⁴, Australian black-browed mollymawk⁴³, black-browed mollymawk⁴⁸, black-eyebrowed albatross¹⁹, Campbell albatross¹⁰³, Campbell black-browed mollymawk¹³⁵, Campbell Island albatross¹⁰¹, Campbell Island mollymawk¹¹³, Campbell Islands albatross¹¹⁵, Campbell Islands mollymawk¹¹⁵, Campbell mollymawk¹³⁵, common mollymawk⁴⁰, mollymawk^{16,32}, New Zealand black-browed mollymawk⁷², torea¹⁹, yellow-billed mollymawk⁵⁶
- Thalassarche melanophris* black-browed albatross³⁵, toroa⁸¹, black-browed mollymawk⁷², king gannet¹³⁵
- Thalassarche salvini* Salvin's albatross³⁴, toroa¹¹³, Bounty Island mollymawk⁴³, grey-backed mollymawk³², Salvin's mollymawk⁷², shy albatross³⁵, white-capped albatross⁵⁹, white-capped mollymawk⁵²
- Thalasseus bergii* crested tern⁴⁸, Fijian crested tern⁴³, great crested tern¹³⁵, greater crested tern⁸⁶, swift tern⁸⁶, yellow-billed tern¹³⁵
- Thalassoica antarctica* Antarctic petrel²⁴
- Thinornis novaeseelandiae* shore plover⁴⁸, tuturuatu¹⁹, Auckland Island plover⁴⁰, doodooro attoo¹¹, kohutapu²⁴, kukuruatu¹¹, masked plover⁹¹, New Zealand plover¹¹, New Zealand sand-plover¹⁹, New Zealand shore plover^{24,51}, sand plover¹⁶, shore dotterel¹¹³, stone plover⁸⁵, tuturuatu¹⁹
- Threskiornis molucca* white ibis⁸⁶, Australian white ibis⁵²
- Threskiornis spinicollis* straw-necked ibis¹¹⁵
- Todiramphus sanctus* sacred kingfisher⁵²; *T. s. vagans* New Zealand kingfisher¹⁹, kōtare^{7,81}, ghotarre¹¹, kingfisher^{10,13}, kōkare^{54,99}, kōtarepopo^{5,11,36,81,93}, kōtaretare^{6,7,8,7}, kotaritari⁵, kotoretaro¹¹, native kingfisher³³, New Zealand sacred kingfisher⁷³, North Island kingfisher⁴³, South Island kingfisher⁴³, warehenga³⁶
- Traversia lyalli* Lyall's wren¹⁰¹, Lyall's rockwren¹¹⁴, rock wren¹⁰⁷, Stephen Island wren⁴⁸, Stephens Island rockwren¹²⁶, Stephens Island wren^{32,53,88}
- Tribonyx hodgenorum* Hodgens' waterhen¹⁰¹, Hodgen's rail⁸⁸, New Zealand gallinule⁷³
- Tribonyx ventralis* black-tailed native-hen^{78,88}, black-tailed waterhen^{48,135}, gallinule¹³⁵, swamphen¹³⁵, turbo-chicken¹³⁵, waterhen¹³⁵
- Tringa brevipes* grey-tailed tattler⁷², ashen tringine sandpiper¹³⁵, grey sandpiper¹³⁵, grey-rumped sandpiper⁸⁴, grey-rumped tattler⁷³, Siberian tattler⁷⁸
- Tringa flavipes* lesser yellowlegs⁷⁹, yellowshank⁸⁶
- Tringa incana* wandering tattler⁵², Alaskan tattler⁷⁸, American grey-rumped sandpiper⁸⁶, American tattler⁸⁶, grey sandpiper²⁴
- Tringa nebularia* common greenshank⁹⁴, greenshank³⁴
- Tringa stagnatilis* marsh sandpiper⁷⁸, little greenshank⁷⁸

- Turdus merula* Eurasian blackbird¹¹¹, manu pango⁹³, blackbird^{16,22}, common blackbird¹⁰⁸, merle²²**
***Turdus philomelos* song thrush^{16,35}, manu-kai-hua-rakau⁹², English thrush⁴⁴, mavis⁸⁶, piopio¹²², thrush²²**
***Turnagra capensis* & *Turnagra tanagra*, kakarao⁸⁵, keropia^{11,85}, koho eou^{11,85}, korohea^{19,36}, korokio⁵⁴, koropio^{10,24}, native thrush^{16,68}, New Zealand native thrush¹⁰⁸, New Zealand thrush⁷⁸, piopio^{5,6,7,8,11,16}, piopio-kata^{122,135}, thrush^{10,14}, tiotio^{7,54}, tiotio-kata¹³⁵, tiutiu^{6,7,8,54,81}, tiutiukata^{19,36}**
***Turnagra capensis* South Island piopio⁷³, piopio⁷, golobio¹¹, kakarao¹¹, korowhio⁹², South Island thrush^{19,35}, thick-billed thrush¹¹; *T. c. minor* Stephens Island piopio¹¹¹**
***Turnagra tanagra* North Island piopio⁷³, piopio^{6,9}, korowhea⁵⁸, North Island thrush¹⁹**
***Tyto alba* barn owl⁷³; *T. a. delicatula* Australian barn owl⁷², delicate owl⁸⁶, eastern barn owl¹¹³, lesser masked owl⁸⁶, screech owl⁷⁸, white owl⁷⁸**
***Vanellus miles* masked lapwing⁹¹, Australian masked plover²⁴, masked plover⁸⁸; *V. m. novaehollandiae* spur-winged plover⁴³, spur-wing¹³⁵**
***Waimanu manneringi* Mannering's penguin¹¹¹**
***Xenicus gilviventris* rock wren^{16,19}, pīwauwau¹¹³, alpine rock wren^{105,114}, alpine wren⁴³, Fiordland rock wren⁷³, hurupounamu⁹⁹, mātuhi¹¹³, mātuhitui¹³⁴, mātuitui⁹⁹, mountain wren¹⁴, New Zealand rock wren^{104,114}, northern rock wren¹¹⁹, rock wren “northern”¹¹⁹, rock wren “southern”¹¹⁹, South Island wren¹¹⁰, southern rock wren¹¹⁹, take¹¹³**
***Xenicus jagmi* North Island stout-legged wren⁸⁸, Grant-Mackie's wren⁹⁰, stout-legged wren¹⁰¹**
***Xenicus longipes* bush wren^{19,48,114}, mātuhitui^{19,81}, e-tecte tee pomou¹¹, green wren¹⁶, heno⁹², hino⁹², hurupounamu^{19,54}, kakaruai¹⁰, kōtipatipa⁹³, long-legged warbler¹¹, longlegged wren¹⁰, mātuhi^{36,109}, mātuitui⁹⁹, mirō-mirō¹¹, momotawai³⁸, New Zealand bush wren¹⁰⁴, pīwauwau^{19,81}, puano²⁴, rifleman¹⁶, rock wren¹⁶, stripe-faced wren¹⁶, toirua³⁸, Tom Thumb bird⁷⁸, white-legged wren⁸⁵, wren¹⁴; *X. l. stokesii* North Island bush wren⁴³, matuhitui¹⁴, North Island wren³⁴; *X. l. longipes* South Island bush wren⁴³; *X. l. variabilis* Stead's bush wren⁷², Stewart Island bush wren⁷³**
***Xenicus yaldwyni* South Island stout-legged wren⁸⁸, stout-legged wren¹⁰¹, Yaldwyn's wren⁹⁰**
***Xenus cinereus* Terek sandpiper⁷², avocet sandpiper⁸⁶**
***Zapornia pusilla* Baillon's crake⁹¹, Baillon's rail¹¹⁵; *Z. p. affinis* marsh crake⁵², kotoreke³⁶, kāreke^{36,81}, koikoiareke⁵⁴, koitareke¹⁹, koitareki¹⁴, kōkōreke^{6,8,36,81}, koreke³⁶, kōriki⁸¹, little crake⁵³, marsh rail^{24,32}, moho katatai¹⁰, moho patatai¹¹, patatai⁹, popotai⁹, spotted rail¹⁶, swamp-crake³⁰, swamp rail¹⁴, tāreke⁸¹, toitoi⁹², water crake^{19,85}**
***Zapornia tabuensis* spotless crake⁵², pūweto^{6,8,39}, black rail¹⁴, blue rail¹⁶, kueto⁵⁴, kuiato⁵⁴, kūweto^{7,8,36}, mehotatai¹¹, moakerua⁷, moakoru⁷, moho^{8,9}, moho pereru¹⁰, moho periru⁹, motarua⁹, Polynesian rail⁵⁶, pūeto^{19,81}, pūetoeto^{7,8,81}, puheto⁵⁴, puketo⁸⁵, pūtoto^{14,81}, pūwetoweto^{36,81}, puwheto⁵⁴, slate-colored rail¹², sooty rail⁷⁸, spotless rail⁵⁸, swamp crake^{19,28}, swamp rail^{24,32}, Tabuan rail¹¹, tītipitō^{54,81}, totoriwai⁹**
***Zosterops lateralis* silvereye^{19,43,52}, tauhou^{14,32,81}, blightbird^{14,16,54}, blightie⁷⁸, chestnut flanked white-eye¹¹³, gold-eye⁴⁷, grey-breasted silver-eye⁵³, hiraka²⁴, iringatai¹⁹, kanohi mōwhiti^{14,19,93,134}, kanohi-mowhitiwhiti⁵⁴, karu-hiriwha¹⁹, karu-patene¹⁹, karu-ringi²⁴, mōtengitengi⁸¹, motingitingi^{7,24}, mowhiti⁵⁴, mowhitiwhiti⁵⁴, notingitingi³⁶, pihipihi^{6,8,36}, pikaraihe⁸¹, poporehe⁹⁹, poporohe¹⁹, ring-eye^{54,92}, stranger⁸⁵, tauhou¹⁴, titiri pounamu⁹², twinkie⁴⁷, waxeye^{16,42,44}, whiorangi²⁴, white-eye^{13,16}**

References

- ¹J. Latham 1782, ²J. Latham 1783, ³J. Latham 1785, ⁴McCormick 1842, ⁵J.E. Gray 1843, ⁶W. Williams 1844, ⁷R. Taylor 1848, ⁸W. Williams 1852, ⁹R. Taylor 1855, ¹⁰Ellman 1861, ¹¹G.R. Gray 1862, ¹²Buller 1869, ¹³F. Hutton 1869, ¹⁴Anon. 1870, ¹⁵R. Taylor [1870], ¹⁶F. Hutton 1871, ¹⁷Potts 1872b, ¹⁸Potts 1872c, ¹⁹Buller 1872–73, ²⁰Potts 1873, ²¹Buller 1875b, ²²Potts 1882, ²³Reischek 1885, ²⁴Buller 1887–88, ²⁵Cheeseman 1888b, ²⁶Cheeseman 1889, ²⁷Reischek 1889, ²⁸W. Smith 1889, ²⁹A. Shand 1895, ³⁰Handly 1896, ³¹Pycroft 1899, ³²F. Hutton & Drummond 1904, ³³Fulton 1904, ³⁴Buller 1905–06, ³⁵Ogilvie-Grant 1905, ³⁶H.W. Williams 1906, ³⁷J. McLean 1907, ³⁸E. Best 1909, ³⁹F. Hutton & Drummond 1909, ⁴⁰Waite 1909, ⁴¹Fulton 1910, ⁴²Guthrie-Smith 1910, ⁴³Mathews & Iredale 1913, ⁴⁴Guthrie-Smith 1914, ⁴⁵Anon. 1917, ⁴⁶Guthrie-Smith 1921, ⁴⁷Thomson 1922, ⁴⁸Oliver 1923, ⁴⁹Archey & Lindsay 1924, ⁵⁰Guthrie-Smith 1925, ⁵¹Mathews 1930b, ⁵²Oliver 1930, ⁵³Mathews 1931, ⁵⁴J. Walker [1931], ⁵⁵Mathews 1934b, ⁵⁶Guthrie-Smith 1936, ⁵⁷Mathews 1936b, ⁵⁸Moncrieff 1936, ⁵⁹R. Murphy 1936, ⁶⁰Fleming 1939a, ⁶¹Fleming 1939b, ⁶²Richdale 1941, ⁶³Richdale [1942], ⁶⁴Richdale 1943, ⁶⁵Richdale 1944, ⁶⁶Richdale [1945], ⁶⁷Richdale [1948], ⁶⁸Richdale [1949], ⁶⁹Richdale [1950], ⁷⁰Buddle 1951, ⁷¹Sorensen 1951, ⁷²Checklist Committee 1953, ⁷³Oliver 1955, ⁷⁴H.W. Williams 1957, ⁷⁵Phillipps 1958, ⁷⁶Westerskov 1960, ⁷⁷Bailey & Sorensen 1962, ⁷⁸Falla *et al.* 1966, ⁷⁹Checklist Committee 1970, ⁸⁰Falla *et al.* 1970, ⁸¹H.W. Williams 1971, ⁸²Soper 1976, ⁸³Checklist Committee 1980, ⁸⁴Falla *et al.* 1981, ⁸⁵Fleming 1982, ⁸⁶C. Robertson 1985, ⁸⁷Holdaway 1989, ⁸⁸Checklist Committee 1990, ⁸⁹Marchant & Higgins 1990, ⁹⁰B. Gill & Martinson 1991, ⁹¹Marchant & Higgins 1993, ⁹²Beattie 1994, ⁹³Ryan 1995, ⁹⁴Heather & Robertson 1996, ⁹⁵Higgins & Davies 1996, ⁹⁶Ngāi Tahu 1998, ⁹⁷Higgins 1999, ⁹⁸Department of Conservation 1999, ⁹⁹A. Crowe 2001, ¹⁰⁰Higgins *et al.* 2001, ¹⁰¹Holdaway *et al.* 2001, ¹⁰²Higgins & Peter 2002, ¹⁰³Shirihai 2002, ¹⁰⁴Worthy & Holdaway 2002, ¹⁰⁵Dickinson 2003, ¹⁰⁶Aikman & Miskelly 2004, ¹⁰⁷Medway 2004d, ¹⁰⁸Higgins *et al.* 2006, ¹⁰⁹Tennyson & Martinson 2006, ¹¹⁰BirdLife International 2007, ¹¹¹Checklist Committee 2010, ¹¹²Ewen *et al.*

2013, ¹¹³Scofield & Stephenson 2013, ¹¹⁴Dickinson & Christidis 2014, ¹¹⁵Heather & Robertson 2015, ¹¹⁶Deppe *et al.* 2017, ¹¹⁷Rawlence, Kardamaki *et al.* 2017, ¹¹⁸Rawlence, Till *et al.* 2017, ¹¹⁹H. Robertson *et al.* 2017, ¹²⁰E. Bell *et al.* 2018, ¹²¹Clements *et al.* 2019, ¹²²Te Papa 2019, ¹²³Wehi *et al.* 2019, ¹²⁴S. Howell & Zufelt 2019, ¹²⁵E. Bell *et al.* 2020, ¹²⁶Handbook of the Birds of the World and BirdLife International 2020, ¹²⁷Galla *et al.* 2020, ¹²⁸Evans 2021, ¹²⁹Fischer *et al.* 2021, ¹³⁰Forsdick *et al.* 2021, ¹³¹Friesen *et al.* 2021, ¹³²F. Gill *et al.* 2021, ¹³³He Pātaka Kupu 2021, ¹³⁴Māori Dictionary 2003–21, ¹³⁵Miskelly 2013–21, ¹³⁶Predator Free NZ 2022, ¹³⁷Checklist Committee 2022 (this publication).

REFERENCES

- Abbott, C.L. & Double, M.C. 2003a. Genetic structure, conservation genetics and evidence of speciation by range expansion in shy and white-capped albatrosses. *Molecular Ecology* 12: 2953–2962.
- Abbott, C.L. & Double, M.C. 2003b. Phylogeography of shy and white-capped albatrosses inferred from mitochondrial DNA sequences: implications for population history and taxonomy. *Molecular Ecology* 12: 2747–2758.
- Abbott, C.L.; Double, M.C.; Gales, R.P.; Baker, G.B.; Lashko, A.; Robertson, C.J.R. & Ryan, P.G. 2006. Molecular provenance analysis for shy and white-capped albatrosses killed by fisheries interactions in Australia, New Zealand, and South Africa. *Conservation Genetics* 7: 531–542.
- Acosta Hospitaleche, C. & Stucchi, M. 2005. Nuevos restos terciarios de Spheniscidae (Aves, Sphenisciformes) procedentes de la costa del Perú. *Revista Española de Paleontología* 20: 1–5.
- Acosta Hospitaleche, C.; Tambussi, C. & Cozzuol, M. 2004. *Eretiscus tonnii* (Simpson) (Aves, Sphenisciformes): materiales adicionales, status taxonomico y distribucion geografica. *Revista del Museo Argentino de Ciencias Naturales, nueva serie* 6: 233–237.
- Aggerbeck, M.; Fjeldsã, J.; Christidis, L.; Fabre, P.-H. & Jonsson, A. 2013. Resolving deep lineage divergences in core corvid passerine birds supports a proto-Papuan island origin. *Molecular Phylogenetics and Evolution* 70: 272–285.
- Ahlers, W. 1988. In: Gaze, P.D. (Comp.). Classified summarised notes, South Island, 1 July 1986 to 30 June 1987. *Notornis* 35: 311–323.
- Aidala, Z.; Chong, N.; Anderson, M.G.; Ortiz-Catedral, L.; Jamieson, I.G.; Briskie, J.V.; Cassey, P.; Gill, B.J. & Hauber, M.E. 2013. Phylogenetic relationships of the genus *Mohoua*, endemic hosts of New Zealand's obligate brood parasitic long-tailed cuckoo (*Eudynamys taitensis*). *Journal of Ornithology* 154: 1127–1133.
- Aikman, H. & Miskelly, C.M. 2004. *Birds of the Chatham Islands*. Wellington: New Zealand Department of Conservation. xii + 116 pp.
- Ainley, D.G. 2002. *The Adélie penguin – bellwether of climate change*. New York: Columbia University Press. xiv + 310 pp.
- Ainley, D.G.; Morrell, S.H. & Wood, R.C. 1986. South polar skua breeding colonies in the Ross Sea region, Antarctica. *Notornis* 33: 155–163.
- Alderman, R.; Double, M.C.; Valencia, J. & Gales, R.P. 2005. Genetic affinities of newly sampled populations of wandering and black-browed albatross. *Emu* 105: 169–179.
- Allen, N. 2005. Canterbury. *Southern Bird* 24: 18–19.
- Alström, P.; Cibois, A.; Irestedt, M.; Zuccon, D.; Gelang, M.; Fjeldsã, J.; Andersen, M.J.; Moyle, R.G.; Pasquet, E. & Olsson, U. 2018. Comprehensive molecular phylogeny of the grassbirds and allies (Locustellidae) reveals extensive non-monophyly of traditional genera, and a proposal for a new classification. *Molecular Phylogenetics and Evolution* 127: 367–375.
- Alström, P.; Fregin, S.; Norman, J.A.; Ericson, P.G.P.; Christidis, L. & Olsson, U. 2011. Multilocus analysis of a taxonomically densely sampled dataset reveal extensive non-monophyly in the avian family Locustellidae. *Molecular Phylogenetics and Evolution* 58: 513–526.
- Amadon, D. 1962. Family Sturnidae. Pp. 75–121. In: Mayr, E. & Greenway, J.C. (Eds). *Check-list of the birds of the world. A continuation of the work of James L. Peters*. Volume 15. Cambridge, Massachusetts: Museum of Comparative Zoology. x + 315 pp.
- Amadon, D. & Woolfenden, G. 1952. Notes on the Mathews' collection of Australian birds. The order Ciconiiformes. *American Museum Novitates* 1564: 1–16.
- Amerson, A.B. & Shelton, P.C. 1976. The natural history of Johnston Island, central Pacific Ocean. *Atoll Research Bulletin* 192: i–xx + 1–479.
- Amey, J.M.; McAllister, A.K.; Houston, D.M. & Tennyson, A.J.D. 2001. Census of the Snares crested penguin breeding population. *New Zealand Journal of Zoology* 28: 432–433.
- Anderson, A. 1992. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands, 1 July 1990 to 30 June 1991. *Notornis* 39: 211–232.
- Anderson, A. 2005. Subpolar settlement in South Polynesia. *Antiquity* 79: 791–800.
- Andersson, M. 1999a. Hybridization and skua phylogeny. *Proceedings of the Royal Society of London series B* 266: 1579–1585.
- Andersson, M. 1999b. Phylogeny, behaviour, plumage evolution and neoteny in skuas Stercorariidae. *Journal of Avian Biology* 30: 205–215.
- Andrew, I.G. 1963. White heron invasion, 1957. *Notornis* 10: 311–315.
- Angehr, G.R. 2011. Designation of a lectotype for *Notiomystis cincta hautura* Mathews, 1935 (Aves: Passeriformes: Meliphagidae). *Zootaxa* 2754: 67–68.
- Anon. 1866. North Canterbury Acclimatisation Society Annual Report No 2: 1865–1866. Christchurch: North Canterbury Acclimatisation Society. 22 pp.
- Anon. 1870. *Catalogue of the Colonial Museum, Wellington, New Zealand*. Wellington, Colonial Museum. 237 pp.
- Anon. 1917. Primeval forest, "The Wood". *Colonist*, 20 September 1917: 7.
- Anon. 1973. A duck returns. *Notornis* 20: 185.
- Anon. 1990. Recovery round-up. *Corella* 14: 65–66.
- Anon. 2003. Updates! – Little tern. *Miranda Naturalists' Trust News* 48: 8.
- Anon. 2004a. Recovery round-up. *Corella* 28: 31–32.
- Anon. 2004b. What's happening to our shy albatrosses in South Africa? *World Wildlife Fund – New Zealand* 14: 10.
- Anon. 2005. Bird news. *Southern Bird* 22: 12–13.
- Anon. 2006a. Recovery round-up. *Corella* 29: 99–100.
- Anon. 2006b. Short reports. *Southern Bird* 25: 7.
- Anon. 2006c. Short reports. *Southern Bird* 26: 12.
- Anon. 2007a. Canada geese removed. *Wingspan* 18: 9.
- Anon. 2007b. Short reports. *Southern Bird* 29: 6–7.
- Anon. 2007c. Bird news. *Southern Bird* 32: 8.

- Anon. 2018. Paradise...duck? *Bird Band* (April 2018): 3–4.
- AOU [American Ornithologists' Union]. 1983. *Check-list of North American birds*. Sixth edition. Lawrence, Kansas: Allen Press, Inc. 877 pp.
- Arata, J. 2003. New record of Salvin's albatross (*Thalassarche salvini*) at the Diego Ramirez Islands, Chile. *Notornis* 50: 169–171.
- Archey, G. 1941. The moa. *Bulletin of the Auckland Institute and Museum* 1: 1–119, 15 pls.
- Archey, G. & Lindsay, C. 1924. Notes on the birds of the Chatham Islands. *Records of the Canterbury Museum* 2(4): 187–201.
- Atkinson, K. & Briskie, J.V. 2007. Frequency distribution and environmental correlates of plumage polymorphism in the grey fantail *Rhipidura fuliginosa*. *New Zealand Journal of Zoology* 34: 273–281.
- Austin, J.J. 1996. Molecular phylogenetics of *Puffinus* shearwaters: preliminary evidence from mitochondrial cytochrome *b* gene sequences. *Molecular Phylogenetics and Evolution* 6: 77–88.
- Austin, J.J.; Bretagnolle, V. & Pasquet, E. 2004. A global molecular phylogeny of the small *Puffinus* shearwaters and implications for systematics of the little-Audubon's shearwater complex. *Auk* 121: 847–864.
- Backhouse, J. 1843. *Narrative of a visit to the Australian colonies*. London: Hamilton, Adams. 560 pp.
- Bailey, A.M. & Sorensen, J.H. 1962. *Subantarctic Campbell Island*. Denver, Colorado: Denver Museum of Natural History. 305 pp.
- Baird, K. & Imber, M.J. 2006. Discovery of nesting site of the Kermadec storm petrel. *Southern Bird* 28: 8–9.
- Baker, A.J.; Daugherty, C.H.; Colbourne, R. & McLennan, J.L. 1995. Flightless brown kiwis of New Zealand possess extremely subdivided population structure and cryptic species like small mammals. *Proceedings of the National Academy of Sciences of the United States of America* 92: 8254–8258.
- Baker, A.J.; Gray, R.; Edge, K.-A. & Paterson, A. 2001. A molecular analysis of penguin phylogeny. *New Zealand Journal of Zoology* 28: 436.
- Baker, A.J.; Haddrath, O.; McPherson, J.D. & Cloutier, A. 2014. Genomic support for a moa-tinamou clade and adaptive morphological convergence in flightless ratites. *Molecular Biology and Evolution* 31: 1686–1696.
- Baker, A.J.; Miskelly, C.M. & Haddrath, O. 2010. Species limits and population differentiation in New Zealand snipes (Scolopacidae: *Coenocorypha*). *Conservation Genetics* 11: 1363–1374.
- Baker, A.J.; Pereira, S.L.; Haddrath, O.P. & Edge, K.-A. 2006. Multiple gene evidence for expansion of extant penguins out of Antarctica due to global cooling. *Proceedings of the Royal Society B* 273: 11–17.
- Baker, A.J.; Pereira, S.L. & Paton, T.A. 2007. Phylogenetic relationships and divergence times of Charadriiformes genera: multigene evidence for the Cretaceous origin of at least 14 clades of shorebirds. *Biology Letters* 3: 205–209.
- Baker, A.J.; Pereira, S.L.; Rogers, D.I.; Elbourne, R. & Hassell, C.J. 2007. Mitochondrial-DNA evidence shows the Australian painted snipe is a full species, *Rostratula australis*. *Emu* 107: 185–189.
- Baker, G.B.; Gales, R.; Hamilton, S. & Wilkinson, V. 2002. Albatrosses and petrels in Australia: a review of their conservation and management. *Emu* 102: 71–97.
- Baker-Gabb, D.J. 1979. Remarks on the taxonomy of the Australasian harrier (*Circus approximans*). *Notornis* 26: 325–329.
- Banks, J.C.; Cruickshank, R.H.; Drayton, G.M. & Paterson, A.M. 2008. Few genetic differences between Victorian and Western Australian blue penguins, *Eudyptula minor*. *New Zealand Journal of Zoology* 35: 265–270.
- Banks, J.C.; Mitchell, A.D.; Waas, J.R. & Paterson, A.M. 2002. An unexpected pattern of molecular divergence within the blue penguin (*Eudyptula minor*) complex. *Notornis* 49: 29–38.
- Banks, J.C. & Paterson, A.M. 2007. A preliminary study of the genetic differences in New Zealand oystercatcher species. *New Zealand Journal of Zoology* 34: 141–144.
- Banks, J.C.; van Buren, A.; Cherel, Y. & Whitfield, J.B. 2006. Genetic evidence for three species of rockhopper penguins, *Eudyptes chrysocome*. *Polar Biology* 30: 61–67.
- Banks, R.C. 2012. Classification and nomenclature of the sandpipers (Aves: Arenariinae). *Zootaxa* 3513: 86–88.
- Banks, R.C.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Rasmussen, P.C.; Remsen, J.V.; Rising, J.D. & Stotz, D.F. 2002. Forty-third supplement to the American Ornithologists' Union *Check-list of North American Birds*. *Auk* 119: 897–906.
- Banks, R.C.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Rasmussen, P.C.; Remsen, J.V.; Rising, J.D. & Stotz, D.F. 2004. Forty-fifth supplement to the American Ornithologists' Union *Check-list of North American Birds*. *Auk* 121: 985–995.
- Banks, R.C.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Rasmussen, P.C.; Remsen, J.V.; Rising, J.D. & Stotz, D.F. 2006. Forty-seventh supplement to the American Ornithologists' Union *Check-list of North American Birds*. *Auk* 123: 926–936.
- Barker, D.; Carroll, J.W.A.; Edmonds, H.K.; Fraser, J.R. & Miskelly, C.M. 2005. Discovery of a previously unknown *Coenocorypha* snipe in the Campbell Island group, New Zealand subantarctic. *Notornis* 52: 143–149.
- Barker, F.K.; Cibois, A.; Schikler, P.; Feinstein, J. & Cracraft, J.A. 2004. Phylogeny and diversification of the largest avian radiation. *Proceedings of the National Academy of Sciences of the United States of America* 101: 11040–11045.
- Barlow, M. 1967. Broad-billed roller in Southland. *Notornis* 14: 82–83.
- Barlow, M. 1969. Dusky moorhen on Lake Hayes. *Notornis* 16: 81–84.
- Barlow, M. 1972. The establishment, dispersal and distribution of the spur-winged plover in New Zealand. *Notornis* 19: 201–211.
- Barlow, M. 1976. Breeding of hoary-headed grebe in Southland. *Notornis* 23: 183–187.
- Barlow, M. 1979. Antarctic petrels around Foveaux Strait. *Notornis* 26: 313.
- Barlow, M. 1989. Establishment of the black-fronted dotterel in Southland. *Notornis* 36: 76–78.
- Barlow, M. 1993. New Zealand dotterel: South Island historical notes and Southland coastal records. *Notornis* 40: 15–25.
- Barlow, M. 1998. Movements of Caspian terns (*Sterna caspia*) from a colony near Invercargill, New Zealand, and some notes on their behaviour. *Notornis* 45: 193–220.
- Barlow, M.L. & Dowding, J.E. 2002. Breeding biology of Caspian terns (*Sterna caspia*) at a colony near Invercargill, New Zealand. *Notornis* 49: 76–90.
- Barrat, A. 1976. Quelques aspects de la biologie et de l'écologie du manchot royal (*Aptenodytes patagonicus*) des Iles Crozet. *Comité National Français des Recherches Antarctiques* 40: 9–52.

- Barrat, A.; Despin, B. & Mougin, J.-L. 1973. Note sur le baguage des oiseaux de l'archipel Crozet de 1968 à 1971. *L'Oiseau et la Revue Française d'Ornithologie* 43: 32–50.
- Barré, N. & Géaux, H. 2004. Great cormorant (*Phalacrocorax carbo*) breeds in New Caledonia. *Notornis* 51: 113–114.
- Barrowclough, G.F.; Groth, J.G. & Mertz, L.A. 2006. The RAG-1 exon in the avian order Caprimulgiformes: phylogeny, heterozygosity, and base composition. *Molecular Phylogenetics and Evolution* 41: 238–248.
- Barthel, P.H. & Helbig, A.J. 2005. Artenliste der Vogel Deutschlands. *Limicola* 19S: 89–111.
- Bartle, J.A. 1968. Observations on the breeding habits of Pycroft's petrel. *Notornis* 15: 70–99.
- Bartle, J.A. 1974. Seabirds of eastern Cook Strait, New Zealand, in autumn. *Notornis* 21: 135–166.
- Bartle, J.A. 1990. Sexual segregation of foraging zones in procellariiform birds: implications of accidental capture on commercial fishery longlines of grey petrels (*Procellaria cinerea*). *Notornis* 37: 146–150.
- Bartle, J.A.; Hu, D.; Stahl, J.-C.; Pyle, P.; Simons, T.R. & Woodby, D. 1993. Status and ecology of gadfly petrels in the temperate North Pacific. Pp. 101–111. In: Vermeer, K.; Briggs, K.T.; Morgan, K.H. & Siegel-Causey, D. (Eds). *The status, ecology, and conservation of marine birds of the North Pacific*. Ottawa: Canadian Wildlife Service Special Publication. 263 pp.
- Bartle, J.A. & Sagar, P.M. 1987. Intraspecific variation in the New Zealand bellbird *Anthornis melanura*. *Notornis* 34: 253–306.
- Basset-Hull, A.F. 1910. The birds of Lord Howe and Norfolk Islands. *Proceedings of the Linnean Society of New South Wales* 34: 636–693.
- Battley, P.F. 1991. Northern shovelers near Wanganui. *Notornis* 38: 48–50.
- Battley, P.F. & Pulham, G. 2005. A fairy tern in the Firth. *Miranda Naturalists' Trust News* 58: 20–21.
- Baum, D.A. & Donoghue, M.J. 1995. Choosing among alternative “phylogenetic” species concepts. *Systematic Botany* 20: 560–573.
- Beaman, M. & Madge, S. 1998. *The handbook of bird identification for Europe and the Western Palearctic*. New Jersey USA: Princeton. 869 pp.
- Beattie, J.H. 1994. *Traditional lifeways of the southern Maori*. Anderson, A. (Ed.). University of Otago: Dunedin. 640 pp.
- Beauchamp, A.J. 2019. Australasian little grebe (*Tachybaptus novaehollandiae*) breeding on Whangarei sewerage wetlands, New Zealand, 2015–2017. *Notornis* 66: 16–22.
- Beauchamp, A.J.; Butler, D.J. & King, D. 1999. *Weka (Gallirallus australis) recovery plan*. Wellington: New Zealand Department of Conservation. vi + 94 pp.
- Beauchamp, A.J.; Staples, G.C.; Staples, E.O.; Graeme, A.; Graeme, B. & Fox, E. 2000. Failed establishment of North Island weka (*Gallirallus australis greyi*) at Karangahake Gorge, North Island, New Zealand. *Notornis* 47: 90–96.
- Beck, J.R. & Brown, D.W. 1971. The breeding biology of the black-bellied storm-petrel *Fregetta tropica*. *Ibis* 113: 73–90.
- Beddard, F.E. 1898. *The structure and classification of birds*. London: Longmans, Green & Co. 548 pp.
- Bell, B.D. 1958. Nankeen night-herons at Blenheim. *Notornis* 8: 52.
- Bell, B.D. 1978. The Big South Cape Islands rat irruption. Pp. 33–40. In: Dingwall, P.R.; Atkinson, I.A.E. & Hay, C. (Eds). *The ecology and control of rodents in New Zealand nature reserves*. Wellington: Department of Lands & Survey. 237 pp.
- Bell, B.D. 1984. The fairy martin (*Petrochelidon ariel*) in New Zealand. *Notornis* 31: 172–173.
- Bell, D. & Bell, M. 2000. Discovery of a second natural wild population of the New Zealand shore plover (*Thinornis novaeseelandiae*). *Notornis* 47: 166–167.
- Bell, E.A.; Bell, B.D. & Merton, D.V. 2016. The legacy of Big South Cape: rat irruption to rat eradication. *New Zealand Journal of Ecology* 40: 212–218.
- Bell, E.A.; Burgin, D.; Sim, J.; Dunleavy, K.; Fleishman, A. & Scofield, R.P. 2018. Population trends, breeding distribution and habitat use of black petrels (*Procellaria parkinsoni*) – 2016/2017 operational report. New Zealand Aquatic Environment and Biodiversity Report No. 198. 50 pp.
- Bell, E.; Ray, S.; Crowe, P.; Butler, D.; Bell, M. & McArthur, N. 2020. Population trends, at-sea distribution, and breeding population size of black petrels (*Procellaria parkinsoni*) – 2018/19 operational report. New Zealand Aquatic Environment and Biodiversity Report No. 246. 63 pp.
- Bell, E.A.; Sim, J.L. & Scofield, P. 2007. Demographic parameters of the black petrel (*Procellaria parkinsoni*). *DOC Research & Development Series* 273: 1–32. Wellington: New Zealand Department of Conservation.
- Bell, M.; Bell, B.D. & Bell, E.A. 2005. Translocation of fluttering shearwater (*Puffinus gavia*) chicks to create a new colony. *Notornis* 52: 11–15.
- Bell, M. & Bell, D. 2000a. First wrybill (*Anarhynchus frontalis*) record from the Chatham Islands. *Notornis* 47: 6.
- Bell, M. & Bell, D. 2000b. Census of the three shag species in the Chatham Islands. *Notornis* 47: 148–153.
- Bell, M. & Bell, D. 2002. Two unusual tern records from the Chatham Islands. *Notornis* 49: 49–50.
- Bell, M. & Bell, D. 2003. The recolonisation of Mangere Island by New Zealand white-faced storm petrels. *Notornis* 50: 57–58.
- Bell, M.; Tuanui, E. & Tuanui, B. 2013. Returning Chatham Islands tui (*Prothemadera novaeseelandiae chathamensis*) to Chatham Island. *Notornis* 60: 49–54.
- Bellingham, P.J.; Hay, J.R.; Hitchmough, R.A. & McCallum, J. 1982. Birds of Rakitu (Arid) Island. *Tane* 28: 141–147.
- Bemmels, J.B.; Mikkelsen, E.K.; Hadrath, O.; Colbourne, R.M.; Robertson, H.A. & Weir, J.T. 2021. Demographic decline and lineage-specific adaptations characterize New Zealand kiwi. *Proceedings of the Royal Society B* 288: 20212362. <https://doi.org/10.1098/rspb.2021.2362>
- Benham, W.B. 1910. The discovery of moa remains on Stewart Island. *Transactions and Proceedings of the New Zealand Institute* 42: 354–356.
- Bertelli, S. & Giannini, N.P. 2005. A phylogeny of extant penguins (Aves: Sphenisciformes) combining morphology and mitochondrial sequences. *Cladistics* 21: 209–239.
- Best, E. 1909. Maori forest lore: being some account of native forest lore and woodcraft, as also of many myths, rites, customs, and superstitions connected with the flora and fauna of the Tuhoe or Ure-wera District – Part 2. *Transactions and Proceedings of the New Zealand Institute* 41: 231–286.
- Best, H.A. 1976. First sightings of the hoary-headed grebe (*Podiceps poliocephalus*) in New Zealand. *Notornis* 23: 182–183.

- Best, H.A. & Owen, K.L. 1976. Distribution of breeding sites of the Westland black petrel (*Procellaria westlandica*). *Notornis* 23: 233–242.
- Bester, A. 2007. Birds of the mist. *Wingspan* 17: 32–33.
- Bester, A.J. & Charteris, M. 2005. The second census of Chatham Island shag and Pitt Island shag – are numbers declining? *Notornis* 52: 6–10.
- Billing, A.E. 1977. The first occurrence of the yellow-billed spoonbill (*Platalea flavipes*) in New Zealand. *Notornis* 24: 192.
- BirdLife International 2000. *Threatened birds of the world*. Barcelona and Cambridge, United Kingdom: Lynx Edicions and BirdLife International. xii + 852 pp.
- BirdLife International 2004. *Tracking ocean wanderers: the global distribution of albatrosses and petrels. Results from the global procellariiform tracking workshop, 1–5 September, 2003, Gordon's Bay, South Africa*. Cambridge, United Kingdom: BirdLife International. xii + 100 pp.
- BirdLife International. 2007. The BirdLife checklist of the birds of the world with conservation status and taxonomic sources. Version 0. Available at www.birdlife.org/datazone/species/downloads/BirdLife_Checklist_Version_0.zip
- BirdLife International 2016. *Calidris ruficollis*. *The IUCN red list of threatened species 2016*: doi: 10.2305/IUCN.UK.2016-3.RLTS.T22693383A93401907.en. Viewed on 26 Jun. 2021.
- BirdLife International. 2021. Species factsheet: *Pachyptila macgillivrayi*. Downloaded from <http://www.birdlife.org> on 21 Sep. 2021.
- Black, A.; Parker, G.C.; Rexer-Huber, K.; Sommer, E.C. & Cuthbert, R.J. 2012. Kerguelen petrel *Lugensa brevirostris*: a new breeding species for South Georgia. *Antarctic Science* 25: 69–70.
- Blackburn, A. 1963. The satin flycatcher: a new record for New Zealand. *Notornis* 10: 262–265.
- Blackburn, A. 1965. Muttonbird islands diary. *Notornis* 12: 191–207.
- Blackburn, A. & Bell, B.D. 1965. A record of the western sandpiper on Farewell Spit. *Notornis* 12: 109–110.
- Blake, E.R. 1977. *Manual of neotropical birds*. Volume 1: *Spheniscidae (penguins) to Laridae (gulls and allies)*. Chicago: University of Chicago Press. xlix + 674 pp.
- Blakers, M.; Davies, S.J.J.F. & Reilly, P.N. 1984. *The atlas of Australian birds*. Carlton: Melbourne University Press. xlvi + 738 pp.
- Blokland, J.C.; Reid, C.M.; Worthy, T.H.; Tennyson, A.J.D.; Clarke J.A. & Scofield, R.P. 2019. Chatham Island Paleocene fossils provide insight into the palaeobiology, evolution, and diversity of early penguins (Aves, Sphenisciformes). *Palaeontologia Electronica* 22.3.78 (doi.org/10.26879/1009): 1–92.
- Boast, A.P.; Chapman, B.; Herrera, M.B.; Worthy, T.H.; Scofield, R.P.; Tennyson, A.J.D.; Houde, P.; Bunce, M.; Cooper, A. & Mitchell, K.J. 2019. Mitochondrial genomes from New Zealand's extinct adzebills (Aves: Aptornithidae: *Aptornis*) support a sister-taxon relationship with the Afro-Madagascan Sarothruridae. *Diversity* 11(2): Article 24. doi:10.3390/d11020024.
- Bock, W.J. 1994. History and nomenclature of avian family-group names. *Bulletin of the American Museum of Natural History* 222: 1–281.
- Boeson, B.W. 1964. Cattle egret near Masterton. *Notornis* 11: 135–136.
- Boessenkool, S.; Austin, J.J.; Worthy, T.H.; Scofield, P.; Cooper, A.; Seddon, P.J. & Waters, J.M. 2009. Relict or colonizer? Extinction and range expansion of penguins in southern New Zealand. *Proceedings of the Royal Society B* 276: 815–821.
- Bogert, C. 1937. Birds collected during the Whitney South Sea Expedition. XXXIV. The distribution and the migration of the long-tailed cuckoo (*Urodynamis taitensis* Sparrman). *American Museum Novitates* 933: 1–12.
- Boie, H.C. 1844. Auszüge aus dem System der Ornithologie. *Isis von Oken* 37(3): 164–198.
- Bonaparte, C.L. 1849. *Conspectus systematis ornithologiae. Editio altera reformata additis synonymis Grayanis (a) Classis II Aves*. M. Westerman & Fil: Amsterdam. 2 pp.
- Bonaparte, C.L. 1857. *Conspectus generum avium*. Volume 2. Lugduni Batavorum (Leiden, Netherlands): E.J. Brill. 232 pp.
- Boon, W.M.; Chambers, G.K. & Daugherty, C.H. 1999. Genetic analysis of Forbes' parakeet. *Conservation Science Advisory Notes* 262: 1–6. Wellington: New Zealand Department of Conservation.
- Boon, W.M.; Daugherty, C.H. & Chambers, G.K. 2001. The Norfolk Island green parrot and New Caledonian red-crowned parakeet are distinct species. *Emu* 101: 113–121.
- Boon, W.M.; Kearvell, J.C.; Daugherty, C.H. & Chambers, G.K. 2000. Molecular systematics of *Cyanoramphus* parakeets: conservation of orange-fronted and Forbes' parakeets. *Bird Conservation International* 10: 211–239.
- Boon, W.M.; Kearvell, J.C.; Daugherty, C.H. & Chambers, G.K. 2001. Molecular systematics and conservation of kakariki (*Cyanoramphus* spp.). *Science for Conservation* 176: 1–46. Wellington: New Zealand Department of Conservation.
- Booth, D.F. 1982. Classified summarised notes – 30 June 1980 to 30 June 1981. *Notornis* 29: 49–74.
- Booth, D.F. 1984. Classified summarised notes – 30 June 1982 to 30 June 1983. *Notornis* 31: 40–85.
- Boswall, J. & MacIver, D. 1975. The Magellanic penguin *Spheniscus magellanicus*. Pp. 271–305. In: Stonehouse, B. (Ed.). *The biology of penguins*. London & Basingstoke: The MacMillan Press Ltd. ix + 555 pp.
- BOU Records Committee 1991. Fifteenth Report (April 1991). *Ibis* 133: 438–441.
- Bourdon, E. 2005. Osteological evidence for sister group relationship between pseudo-toothed birds (Aves: Odontopterygiformes) and waterfowls (Anseriformes). *Naturwissenschaften* 92: 586–591.
- Bourdon, E.; Amaghaz, M. & Bouya, B. 2010. Pseudotoothed birds (Aves, Odontopterygiformes) from the early Tertiary of Morocco. *American Museum Novitates* 3704: 1–71.
- Bourdon, E.; Bouya, B. & Iarochene, M. 2005. Earliest African neornithine bird: a new species of Prophaethontidae (Aves) from the Paleocene of Morocco. *Journal of Vertebrate Paleontology* 25: 157–170.
- Bourne, W.R.P. 1964. The relationship between the Magenta petrel and the Chatham Island taiko. *Notornis* 11: 139–144.
- Bourne, W.R.P. 1967. Subfossil petrel bones from the Chatham Islands. *Ibis* 109: 1–7.
- Bourne, W.R.P. 1968. Notes on the diving-petrels. *Bulletin of the British Ornithologists' Club* 88: 77–85.
- Bourne, W.R.P. 1971. Letter – Pacific sight-records of great shearwaters. *Notornis* 18: 222.
- Bourne, W.R.P. 1983. The soft-plumaged petrel, the gon-gon and the freira, *Pterodroma mollis*, *P. feae* and *P. madeira*. *Bulletin of the British Ornithologists' Club* 103: 52–58.

- Bourne, W.R.P. 1987. The classification and nomenclature of the petrels. *Ibis* 129: 404.
- Bourne, W.R.P. 1989. The evolution, classification and nomenclature of the great albatrosses. *Le Gerfaut* 79: 105–116.
- Bourne, W.R.P. 1995. Could the black-toed petrel (*Procellaria melanopus*) have been Murphy's Petrel (*Pterodroma ultima*)? *Notornis* 42: 48–49.
- Bourne, W.R.P. 1999. Albatross names. *Notornis* 46: 498–499.
- Bourne, W.R.P. 2001. The status of the genus *Lugensa* Mathews and the birds collected by Carmichael on Tristan da Cunha in 1816–1817. *Bulletin of the British Ornithologists' Club* 121: 215–216.
- Bourne, W.R.P. 2002. The classification of albatrosses. *Australasian Seabird Bulletin* 38: 10–12.
- Bourne, W.R.P. & Elliott, H.F.I. 1965. The correct scientific name for the Kerguelen petrel. *Ibis* 107: 548–550.
- Bourne, W.R.P. & Jouanin, C. 2004. The origin of specimens of New Zealand storm petrel (*Pealeornis maoriana* Mathews, 1932). *Notornis* 51: 57–58.
- Bourne, W.R.P.; Jouanin, C. & Catto, J.V.F. 2004. The original specimens of the New Zealand storm petrel. *Notornis* 51: 191.
- Boyd, S. 1999. *Rainbow lorikeet, a threat to New Zealand's biodiversity*. Unpublished report. Auckland: New Zealand Department of Conservation. 46 pp.
- Brash, K. 1982. Sunday Island petrel. *OSNZ News* 24: 6.
- Brathwaite, D.H. 1952. Occurrence of little egret in Hawke's Bay. *Notornis* 5: 78–79.
- Brathwaite, D.H. 1955. Waders on Ahuriri Lagoon, Napier. *Notornis* 6: 145–150.
- Brathwaite, D.H. 1956. Notes on some rare birds recently recorded in Hawke's Bay. *Notornis* 7: 56–58.
- Braun, M.J. & Brumfield, R.T. 1998. Enigmatic phylogeny of skuas: an alternative hypothesis. *Proceedings of the Royal Society of London series B* 265: 995–999.
- Brazil, M. 2009. *Birds of east Asia*. London: Christopher Helm. 528 pp.
- Bretagnolle, V. 1989. Calls of Wilson's storm petrel: functions, individual and sexual recognitions, and geographic variation. *Behaviour* 111: 98–112.
- Bretagnolle, V. 1995. Systematics of the soft-plumaged petrel *Pterodroma mollis* (Procellariidae): new insight from the study of vocalizations. *Ibis* 137: 207–218.
- Bretagnolle, V.; Attie, C. & Pasquet, E. 1998. Cytochrome-*b* evidence for validity and phylogenetic relationships of *Pseudobulweria* and *Bulweria* (Procellariidae). *Auk* 115: 188–195.
- Bretagnolle, V.; Zotier, R. & Jouventin, P. 1990. Comparative population biology of four prions (genus *Pachyptila*) from the Indian Ocean and consequences for their taxonomic status. *Auk* 107: 305–316.
- Bridge, E.S.; Jones, A.W. & Baker, A.J. 2005. A phylogenetic framework for the terns (Sternini) inferred from mtDNA sequences: implications for taxonomy and plumage evolution. *Molecular Phylogenetics and Evolution* 35: 459–469.
- Briggs, K.T. & Chu, E.W. 1986. Sooty shearwaters off California: distribution, abundance and habitat use. *Condor* 88: 355–364.
- Brinkley, E.S.; Howell, S.N.G.; Force, M.P.; Spear, L.B. & Ainley, D.C. 2000. Status of the Westland petrel (*Procellaria westlandica*) off South America. *Notornis* 47: 179–183.
- Brisson, M.J. 1760. *Ornithologie ou méthode contenant la division des oiseaux en ordres, sections, genres, especes & leurs variétés*. Volume 1. Paris: Bauche. xxiv + 526 pp., lxxiii + 37 pls.
- Brodkorb, P. 1963. Catalogue of fossil birds. Part 1 (Archaeopterygiformes through Ardeiformes). *Bulletin of the Florida State Museum, Biological Sciences Series* 7: 179–293.
- Brodkorb, P. 1964. Catalogue of fossil birds. Part 2 (Anseriformes through Galliformes). *Bulletin of the Florida State Museum, Biological Sciences Series* 8: 195–335.
- Brodkorb, P. 1967. Catalogue of fossil birds. Part 3 (Ralliformes, Ichthyornithiformes, Charadriiformes). *Bulletin of the Florida State Museum, Biological Sciences Series* 11: 99–220.
- Brodkorb, P. 1971. Catalogue of fossil birds. Part 4 (Columbiformes through Piciformes). *Bulletin of the Florida State Museum, Biological Sciences Series* 15: 163–266.
- Brodkorb, P. 1978. Catalogue of fossil birds. Part 5 (Passeriformes). *Bulletin of the Florida State Museum, Biological Sciences Series* 23: 139–228.
- Brooke, M.L. 1987. Population estimates and breeding biology of the petrels *Pterodroma externa* and *P. longirostris* on Isla Alejandro Selkirk, Juan Fernandez Archipelago. *Condor* 89: 581–586.
- Brooke, M.L. 1990. *The Manx shearwater*. London: T. & A.D. Poyser. xviii + 246 pp.
- Brooke, M.L. 2004. *Albatrosses and petrels across the world*. Oxford: Oxford University Press. xviii + 499 pp.
- Brooke, R.K. 1978. The *Catharacta* skuas (Aves: Laridae) occurring in South African waters. *Durban Museum Novitates* 11: 295–308.
- Brooke, R.K.; Sinclair, J.C. & Berruti, A. 1980. Geographical variation in *Diomedea chlororhynchos* (Aves: Diomedidae). *Durban Museum Novitates* 12: 171–180.
- Brothers, N.P. 1985. Breeding biology, diet and morphometrics of the king shag, *Phalacrocorax albiventer purpurascens*, at Macquarie Island. *Australian Wildlife Research* 12: 81–94.
- Brothers, N. & Bone C. 2008. The response of burrow-nesting petrels and other vulnerable bird species to vertebrate pest management and climate change on sub-Antarctic Macquarie Island. *Papers and Proceedings of the Royal Society of Tasmania* 142: 123–148.
- Brothers, N.P.; Gales, R.P.; Hedd, A. & Robertson, G. 1998. Foraging movements of the shy albatross *Diomedea cauta* breeding in Australia; implications for interactions with longline fisheries. *Ibis* 140: 446–457.
- Brothers, N. & Ledingham, R. 2008. The avifauna of Bishop and Clerk Islets and its relationship to nearby Macquarie Island. *Papers and Proceedings of the Royal Society of Tasmania* 142: 117–121.
- Brothers, N.P.; Reid, T.A. & Gales, R.P. 1997. At-sea distribution of shy albatrosses *Diomedea cauta cauta* derived from records of band recoveries and colour-marked birds. *Emu* 97: 231–239.
- Brown, B. 1975. Sight record of a dunlin in New Zealand. *Notornis* 22: 241–255.
- Brown, B. 1979. Dunlin in the Firth of Thames. *Notornis* 26: 202–203.

- Brown, B. 1980. Possible early record of cattle egrets in New Zealand. *Notornis* 27: 400.
- Brown, B. & Latham, P.C.M. 1978. Grey phalarope in the Bay of Plenty. *Notornis* 25: 198–202.
- Brown, D.A. 1991. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1989 to 30 June 1990. *Notornis* 38: 315–341.
- Brown, D.A. 1995. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 263–279.
- Brown, D.A. & Wilson, P.R. 2004. Establishment and growth of an Australasian gannet colony at Waimaru, Pelorus Sound, and a new colony at Arapawa Island, Queen Charlotte Sound. *Notornis* 51: 227–229.
- Brown, J.; Brown, B.; McKenzie, H.R. & Sibson, R.B. 1971. Ringed plover in the Firth of Thames. *Notornis* 18: 262–266.
- Brown, R.G.B. 1977. *Atlas of eastern Canadian seabirds. Supplement 1. Halifax–Bermuda transects*. Ottawa: Canadian Wildlife Service. 24 pp.
- Brown, R.G.B.; Nettleship, D.N.; Germain, P.; Tull, C.E. & Davis, T. 1975. *Atlas of eastern Canadian seabirds*. Ottawa: Canadian Wildlife Service. 220 pp.
- Brown, S.R. 1973. First record of white-tailed tropic bird in New Zealand. *Notornis* 20: 380–381.
- Browning, M.R. & Monroe, B.L. Jr. 1991. Clarifications and corrections of the dates of issue of some publications containing descriptions of North American birds. *Archives of Natural History* 18: 381–405.
- Bruce, M.D. & McAllan, I.A.W. 1990. Some problems in vertebrate nomenclature. II. Birds. Part 1. *Bolletino del Museo Regionale di Scienze Naturali Torino* 8: 453–485.
- Bruch, N.D. 1853. Monographische Uebersicht der Gattung *Larus* Lin. *Journal für Ornithologie* 1: 96–108.
- Brunton, D.H.; Evans, B.A. & Ji, W. 2008. Assessing natural dispersal of New Zealand bellbirds using song type and song playbacks. *New Zealand Journal of Ecology* 32: 147–154.
- Brush, A.H. 1976. Waterfowl feather proteins: analysis of use in taxonomic studies. *Journal of Zoology London* 179: 467–498.
- Buddle, G.A. 1951. *Bird secrets*. Wellington: Reed. 71 pp.
- Bull, P.C.; Gaze, P.D. & Robertson, C.J.R. 1985. *The atlas of bird distribution in New Zealand*. Wellington: The Ornithological Society of New Zealand. 296 pp.
- Bull, P.C. & Porter, R.E.R. 1975. Distribution and numbers of the rook (*Corvus frugilegus* L.) in the North Island of New Zealand. *New Zealand Journal of Zoology* 2: 63–92.
- Buller, W.L. 1869. On the ornithology of New Zealand. *Transactions of the New Zealand Institute* 1: 1–20.
- Buller, W.L. 1872–73. *A history of the birds of New Zealand*. London: John van Voorst. xxiv + 384 pp.
- Buller, W.L. 1875a. On the occurrence of *Plotus novae-hollandiae* in New Zealand. *Transactions and Proceedings of the New Zealand Institute* 7: 217–218.
- Buller, W.L. 1875b. On the ornithology of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 7: 197–211.
- Buller, W.L. 1876a. On the occurrence of *Apteryx oweni* at high altitudes in the North Island. *Transactions and Proceedings of the New Zealand Institute* 8: 193–194.
- Buller, W.L. 1876b. Remarks on various species of New Zealand birds, in explanation of specimens exhibited at meetings of the Wellington Philosophical Society, 1875–6. *Transactions and Proceedings of the New Zealand Institute* 8: 194–199.
- Buller, W.L. 1878a. Notes on the ornithology of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 10: 191–201.
- Buller, W.L. 1878b. On the species forming the genus *Ocydromus*, a peculiar group of brevipennate rails. *Transactions and Proceedings of the New Zealand Institute* 10: 213–216.
- Buller, W.L. 1882. *Manual of the birds of New Zealand*. Wellington: Government Printer. xii + 107 pp.
- Buller, W.L. 1887–88. *A history of the birds of New Zealand*. Second edition. London: published by the author. Volume 1: lxxxiv + 250 pp., 24 pls; Volume 2: xvi + 359 pp., 26 pls.
- Buller, W.L. 1891. An exhibition of new and interesting forms of New Zealand birds, with remarks thereon. *Transactions and Proceedings of the New Zealand Institute* 23: 36–43.
- Buller, W.L. 1893. Further notes on the birds of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 25: 63–88.
- Buller, W.L. 1895. Notes on the ornithology of New Zealand; with an exhibition of rare specimens. *Transactions of the New Zealand Institute* 27: 104–126.
- Buller, W.L. 1899. On the ornithology of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 31: 1–37.
- Buller, W.L. 1905–06. *Supplement to the "Birds of New Zealand"*. London: published by the author. Volume 1: xlix + 200 pp., 5 pls; Volume 2: iii + 178 pp., 7 pls.
- Bunce, M.; Szulkin, M.; Lerner, H.R.L.; Barnes, I.; Shapiro, B.; Cooper, A. & Holdaway, R.N. 2005. Ancient DNA provides new insights into the evolutionary history of New Zealand's extinct giant eagle. *Public Library of Science Biology* 3(1): e (9), 4 pp.
- Bunce, M.; Worthy, T.H.; Ford, T.; Hoppitt, W.; Willerslev, E.; Drummond, A. & Cooper, A. 2003. Extreme reversed sexual size dimorphism in the extinct New Zealand moa *Dinornis*. *Nature* 425: 172–175.
- Bunce, M.; Worthy, T.H.; Phillips, M.J.; Holdaway, R.N.; Willersley, E.; Haile, J.; Shapiro, B.; Scofield, R.P.; Drummond, A.; Kamp, P.J.J. & Cooper, A. 2009. The evolutionary history of the extinct ratite moa and New Zealand neogene paleogeography. *Proceedings of the National Academy of Sciences USA* 106: 20646–20651.
- Burbidge, M.L.; Colbourne, R.M.; Robertson, H.A. & Baker, A.J. 2003. Molecular and other biological evidence supports the recognition of at least three species of brown kiwi. *Conservation Genetics* 4: 167–177.
- Burg, N.A. 2018. Using molecular markers to trace the population history of volant organisms at differing temporal scales. PhD Thesis. New York, City University of New York. Retrieved from https://academicworks.cuny.edu/gc_etds/2577/ 122 pp.
- Burg, T.M. & Croxall, J.P. 2001. Global relationships amongst black-browed and grey-headed albatrosses: analysis of population structure using mitochondrial DNA and microsatellites. *Molecular Ecology* 10: 2647–2660.
- Burg, T.M. & Croxall, J.P. 2004. Global population structure and taxonomy of the wandering albatross species complex. *Molecular Ecology* 13: 2345–2355.

- Burleigh, J.G.; Kimball, R.T. & Braun, E.L. 2015. Building the avian tree of life using a large-scale, sparse supermatrix. *Molecular Phylogenetics and Evolution* 84: 53–63.
- Burton, P.J.K. 1972. Some anatomical notes on the wrybill. *Notornis* 19: 26–32.
- Burton, R. & Croxall, J. 2012. *A field guide to the wildlife of South Georgia*. Princeton: Princeton University Press. 200 pp.
- Cabanis, J. 1850–51. *Verzeichniss der ornithologischen sammlung des Oderamtmann Ferdinand Heine, auf Gut St. Burchard vor Halberstadt; mit kritischen Anmerkungen und Beschreibung der neuen Arten, systematisch bearbeitet. Vol. 1, die singvögel enthaltend*. Halberstadt: Museum Heineanum. 233 pp.
- Cake, M.; Black, A. & Joseph, L. 2018. The generic taxonomy of the Australian magpie and Australo-Papuan butcherbirds is not all black-and-white. *Bulletin of the British Ornithologists' Club* 138: 346–359.
- Callaghan, D. & Harshman, J. 2005. Taxonomy and systematics. Chapter 2. Pp. 14–26. In: Kear, J. (Ed.). *Ducks, geese and swans*. Oxford: Oxford University Press. 908 pp.
- Camphuysen, C.J. & van der Meer, J. 2001. Pelagic distribution, moult and (sub-)specific status of Cory's shearwaters *Calonectris [d.] diomedea/borealis* wintering off Southern Africa. *Marine Ornithology* 29: 89–96.
- Carboneras, C. 1992a. Family Hydrobatidae (storm-petrels). Pp. 258–271. In: del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). *Handbook of the birds of the world. Ostrich to ducks*. Volume 1. Barcelona: Lynx Edicions. 696 pp.
- Carboneras, C. 1992b. Family Sulidae (gannets and boobies). Pp. 312–325. In: del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). *Handbook of the birds of the world. Ostrich to ducks*. Volume 1. Barcelona: Lynx Edicions. 696 pp.
- Carroll, A.L.K. 1970. The white-faced heron in New Zealand. *Notornis* 17: 3–24.
- Carter, M. 2006. Port Fairy, Victoria, pelagic trip, 29 January 2005. *Australasian Seabird Bulletin* 45/46: 27.
- Challies, C.N. & Langlands, P.A. 1992. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1990 to 30 June 1991. *Notornis* 39: 211–232.
- Chambers, G.K. & Boon, W.M. 2005. Molecular systematics of Macquarie Island and Reischek's parakeets. *Notornis* 52: 249–250.
- Chan, C.-H.; Ballantyne, K.N.; Aikman, H.; Fastier, D.; Daugherty, C.H. & Chambers, G.K. 2006. Genetic analysis of interspecific hybridisation in the world's only Forbes' parakeet (*Cyanoramphus forbesi*) natural population. *Conservation Genetics* 7: 493–506.
- Chance, G.R. 1969. A new bird for New Zealand – Australian little grebe, at Arrowtown. *Notornis* 16: 3–4.
- Checklist Committee (C.A. Fleming, Convener). 1953. *Checklist of New Zealand birds*. First edition. Wellington: A.H. & A.W. Reed. 80 pp.
- Checklist Committee (F.C. Kinsky, Convener). 1970. *Annotated checklist of the birds of New Zealand including the birds of the Ross Dependency*. Second edition. Wellington: A.H. & A.W. Reed. 96 pp.
- Checklist Committee (F.C. Kinsky, Convener). 1980. Amendments and additions to the 1970 annotated checklist of the birds of New Zealand. *Notornis* 27 (Supplement): 1–23.
- Checklist Committee (E.G. Turbott, Convener). 1990. *Checklist of the birds of New Zealand and the Ross Dependency, Antarctica*. Third edition. Auckland: Ornithological Society of New Zealand & Random Century New Zealand Ltd. xvi + 247 pp.
- Checklist Committee (B.J. Gill, Convener). 2010. *Checklist of the birds of New Zealand, Norfolk and Macquarie Islands, and the Ross Dependency, Antarctica*. Fourth edition. Ornithological Society of New Zealand & Te Papa Press, Wellington. 500 pp.
- Cheeseman, T.F. 1888a. Notes on the Three Kings Islands. *Transactions and Proceedings of the New Zealand Institute* 20: 141–150.
- Cheeseman, T.F. 1888b. On the flora of the Kermadec Islands, with notes on fauna. *Transactions and Proceedings of the New Zealand Institute* 20: 151–181.
- Cheeseman, T.F. 1889. On some birds from the Kermadec Islands. *Transactions and Proceedings of the New Zealand Institute* 21: 121–124.
- Cheeseman, T.F. 1891. On the birds of the Kermadec Islands. *Transactions and Proceedings of the New Zealand Institute* 23: 216–226.
- Chen, A.; White, N.D.; Benson, R.B.J.; Braun, M.J. & Field, D.J. 2019. Total-evidence framework reveals complex morphological evolution in nightbirds (Strisores). *Diversity* 11(9):143. doi.org/10.3390/d11090143
- Cherel, Y.; Waugh, S. & Hanchet, S. 1999. Albatross predation of juvenile southern blue whiting (*Micromesistius australis*) on the Campbell Plateau. *New Zealand Journal of Marine and Freshwater Research* 33: 437–441.
- Cheshire, N.G. 1999. Research vessel *Franklin* in NW Australian waters, June to July 1999. *Australasian Seabird Group Newsletter* 35: 9–11.
- Chesser, R.T.; Billerman, S.M.; Burns, K.J.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Lovette, I.J.; Mason, N.A.; Rasmussen, P.C.; Remsen, J.V. Jr.; Stotz, D.F. & Winker, K. 2020. *Check-list of North American birds* (online). American Ornithological Society. <http://checklist.aou.org/taxa>
- Chesser, R.T.; Burns, K.J.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Lovette, I.J.; Rasmussen, P.C.; Remsen, J.V.; Rising, J.D.; Stotz, D.F. & Winker, K. 2016. Fifty-seventh supplement to the American Ornithologists' Union *Check-list of North American Birds*. *Auk* 133: 544–560.
- Chesser, R.T.; Burns, K.J.; Cicero, C.; Dunn, J.L.; Kratter, A.W.; Lovette, I.J.; Rasmussen, P.C.; Remsen, J.V.; Rising, J.D.; Stotz, D.F. & Winker, K. 2019. Sixtieth supplement to the American Ornithologists' Union *Check-list of North American Birds*. *Auk Ornithological Advances* 136: 1–23.
- Child, P. 1969. Glossy ibis in Otago. *Notornis* 16: 62.
- Child, P. 1974. First breeding of woodswallows in New Zealand. *Notornis* 21: 85–87.
- Child, P. 1975a. The Central Otago wood-swallows. *Notornis* 22: 67–68.
- Child, P. 1975b. Observations on altitudes reached by some birds in central and northwest Otago. *Notornis* 22: 143–150.
- Christian, P.D.; Christidis, L. & Schodde, R. 1992. Biochemical systematics of the Australian dotterels and plovers (Charadriiformes: Charadriidae). *Australian Journal of Zoology* 40: 225–233.
- Christidis, L. & Boles, W.E. 1994. The taxonomy and species of birds of Australia and its territories. *Royal Australasian Ornithologists Union Monograph* 2: iv + 112 pp.
- Christidis, L. & Boles, W.E. 2008. *Systematics and taxonomy of Australian birds*. Collingwood, Australia: CSIRO Publishing. x + 277 pp.

- Christidis, L.; Davies, K.; Westerman, M.; Christian, P.D. & Schodde, R. 1996. Molecular assessment of the taxonomic status of Cox's sandpiper. *Condor* 98: 459–463.
- Christidis, L.; Leeton, P.R. & Westerman, M. 1996. Were bowerbirds part of the New Zealand fauna? *Proceedings of the National Academy of Sciences of the United States of America* 93: 3898–3901.
- Chu, P.C. 1998. A phylogeny of the gulls (Aves: Larinae) inferred from osteological and integumentary characters. *Cladistics* 14: 1–43.
- Chu, P.C.; Eisenschenk, S.K. & Zhu, S.-T. 2009. Skeletal morphology and the phylogeny of skuas (Aves: Charadriiformes, Stercorariidae). *Zoological Journal of the Linnean Society* 157: 612–621.
- Chudleigh, B. 1998. Tern identification. *OSNZ News* 86: 4.
- Cibois, A. 2003. Mitochondrial DNA phylogeny of babblers (Timaliidae). *Auk* 120: 35–54.
- Cibois, A.; Thibault, J.-C.; Rocamora, G. & Pasquet, E. 2016. Molecular phylogeny and systematics of blue and grey noddies (*Procelsterna*). *Ibis* 158: 433–438.
- Cione, A. & Tonni, E. 1981. Un pinguino de la Formacion Puerto Madryn (Mioceno Tardio) de Chubut, Argentina. Comentarios acerca del origen, la paleoecologia y zoogeografia de los Spheniscidae. *Anais II Congresso Latino-Americano Paleontologia, Porto Alegre* 2: 591–604.
- Clancey, P.A.; Brooke, R.K. & Sinclair, J.C. 1981. Variation in the current nominate subspecies of *Pterodroma mollis* (Gould) (Aves: Procellariidae). *Durban Museum Novitates* 12: 203–213.
- Clark, G.S.; Cowan, A.; Harrison, P. & Bourne, W.R.P. 1992. Notes on the seabirds of the Cape Horn Islands. *Notornis* 39: 133–144.
- Clark, G.S.; Goodwin, A.J. & von Meyer, A.P. 1984. Extension of the known range of some seabirds on the coast of southern Chile. *Notornis* 31: 320–324.
- Clark, W.C. & Dawson, E.W. 1957. The trans-Tasman dispersal of the white-fronted tern (*Sterna striata*, Gm.). *Notornis* 7: 65–69.
- Clarke, C.M.H. 1970. Observations on population, movements and food of the kea (*Nestor notabilis*). *Notornis* 17: 105–114.
- Clarke, J.A.; Olivero, E.B. & Puerta, P. 2003. Description of the earliest fossil penguin from South America and first Paleogene vertebrate locality of Tierra del Fuego, Argentina. *American Museum Novitates* 3423: 1–18.
- Clarke, R. 2005. Port Fairy, Victoria, pelagic trip, 15 February 2004. *Australasian Seabird Bulletin* 43/44: 18.
- Clarkson, D. & Walker, J. 2001. Canterbury. *Southern Bird* 6: 14.
- Clements, J.F.; Schulenberg, T.S.; Iliff, M.J.; Billerman, S.M.; Fredericks, T.A.; Sullivan, B.L. & Wood, C.L. 2019. The eBird/Clements Checklist of Birds of the World: v2019. Downloaded from <https://www.birds.cornell.edu/clementschecklist/download/>
- Clifford, H.J. 2000a. In: Tennyson, A.J.D. & Lock, J.W. (*Comps*). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Clifford, H.J. 2000b. Waikato. *Southern Bird* 4: 12–13.
- Clifford, H.J. & Lawrie, D.A. 1997. New and rare bird records for Raoul Island. *Notornis* 44: 171–173.
- Clout, M.N. & Merton, D.V. 1998. Saving the kakapo: the conservation of the world's most peculiar parrot. *Bird Conservation International* 8: 281–296.
- Clunie, C.D. 1971. Dollar-bird near Dargaville. *Notornis* 18: 261.
- Cohen, B.L.; Baker, A.J.; Blechschmidt, K.; Dittmann, D.L.; Furness, R.W.; Gerwin, J.A.; Helbig, A.J.; de Korte, J.; Marshall, H.D.; Palma, R.L.; Peter, H.-U.; Ramli, R.; Siebold, I.; Willcox, M.S.; Wilson, R.H. & Zink, R.M. 1997. Enigmatic phylogeny of skuas (Aves: Stercorariidae). *Proceedings of the Royal Society of London series B* 264: 181–190.
- Cole, L.W. 2000. A first shy albatross, *Thalassarche cauta*, in California and a critical re-examination of northern hemisphere records of the former *Diomedea cauta* complex. *North American Birds* 54: 124–135.
- Cole, T.L.; Dutoit, L.; Dussex, N.; Hart, T.; Alexander, A.; Younger, J.L.; Clucas, G.V.; Frugone, M.J.; Cherel, Y.; Cuthbert, R.; Ellenberg, U.; Fiddaman, S.R.; Hiscock, J.; Houston, D.; Jouventin, P.; Mattern, T.; Miller, G.; Miskelly, C.; Nolan, P.; Polito, M.J.; Quillfeldt, P.; Ryan, P.G.; Smith, A.; Tennyson, A.J.D.; Thompson, D.; Wienecke, B.; Vianna, J.A. & Waters, J.M. 2019. Receding ice drive parallel expansions in Southern Ocean penguins. *Proceedings of the National Academy of Sciences* 116: 26690–26696.
- Cole, T.L.; Ksepka, D.T.; Mitchell, K.J.; Tennyson, A.J.D.; Thomas, D.B.; Pan, H.; Zhang, G.; Rawlence, N.J.; Wood, J.R.; Bover, P.; Bouzat, J.L.; Cooper, A.; Fiddaman, S.; Hart, T.; Miller, G.; Ryan, P.G.; Shepherd, L.D.; Wilmshurst, J.M. & Waters, J.M. 2019. Mitogenomes uncover extinct penguin taxa and reveal island formation as a key driver of speciation. *Molecular Biology and Evolution* 36: 784–797.
- Coleman, J.D. 1971. The distribution, numbers and food of the rook, *Corvus frugilegus frugilegus* L. in Canterbury, New Zealand. *New Zealand Journal of Science* 14: 494–506.
- Colenso, W. 1844. Journal of a naturalist. *London Journal of Botany* 3: 1–62.
- Colenso, W. 1845. Memoranda of an excursion, made in the Northern Island of New Zealand, in the summer of 1841–2; Intended as a contribution towards the ascertaining of the natural productions of the New Zealand Groupe; with particular reference to their botany. *The Tasmanian Journal of Natural Science, Agriculture, Statistics, &c.* 2: 241–308.
- Collins, A. 2006a. In: Pollock, G. (*Comp.*). Classified summarised notes, South Island and outlying islands, 1 July 2002 to 30 June 2003. *Notornis* 53: 248–251.
- Collins, A. 2006b. First breeding of royal spoonbill in Canterbury. *Southern Bird* 27: 11, 14.
- Commission de l'Avifaune Francaise 2007. En direct de la CAF: Liste officielle des oiseaux de France (categories A, B et C). *Ornithos* 14(4): 234–246.
- Condon, H.T. 1975. *Checklist of the birds of Australia – Part 1. Non-passerines*. Melbourne: Royal Australasian Ornithologists Union. xx + 311 pp.
- Conklin, J.R.; Verkuil, Y.I.; Battley, P.F.; Hassell, C.J.; ten Horn, J.; Johnson, J.A.; Tomkovich, P.S.; Baker, A.J.; Piersma, T. & Fontaine, M.C. 2022. Global flyway evolution in red knots *Calidris canutus* and genetic evidence for a Nearctic refugium. *Molecular Ecology*, 00, 1–16, doi.org/10.1111/mec.16379
- Connors, P.G.; McCaffery, B.J. & Maron, J.L. 1993. Speciation in golden-plovers, *Pluvialis dominica* and *P. fulva*: evidence from the breeding grounds. *Auk* 110: 9–20.

- Conroy, J.W.H. 1972. Ecological aspects of the biology of the giant petrel, *Macronectes giganteus* (Gmelin), in the maritime Antarctic. *British Antarctic Survey Scientific Reports* 75: 1–74.
- Conroy, J.W.H. & White, M.G. 1973. The breeding status of the king penguin (*Aptenodytes patagonica*). *British Antarctic Survey Bulletin* 32: 31–40.
- Convey, P.; Morton, A. & Poncet, J. 1999. Survey of marine birds and mammals of the South Sandwich Islands. *Polar Record* 35: 107–124.
- Cook, J. 1777. *A voyage towards the South Pole and round the world, performed in His Majesty's Ships the "Resolution" and "Adventure", in the years 1772, 1773, 1774, and 1775*. London: W. Strahan & T. Cadell. Volume 1: xl + 378 pp.; Volume 2: iv + 396 pp.
- Cook, J. & King, J. 1784. *A voyage to the Pacific Ocean undertaken by the command of His Majesty, for making discoveries in the Northern Hemisphere, to determine the position and extent of the west side of North America, its distance from Asia, and the practicability of a northern passage to Europe, performed under the direction of Captains Cook, Clerke, and Gore, in His Majesty's Ships the "Resolution" and "Discovery", in the years 1776, 1777, 1778, 1779 and 1780*. London: W. & A. Strahan, G. Nicoland & T. Cadell. Volume 1: xcvi + 421 pp.; Volume 2: xii + 549 pp.; Volume 3: xii + 558 pp.; Atlas; 87 engraved plates & charts.
- Cook, W.A.; Cooper, D.; Foes-Lamb, P.; Foes-Lamb, J.; Gdanitz, J.; Davies, G.; Field, C.; Field, P. & Melville, D.S. 2016. First and second breeding of Australian wood duck (*Chenonetta jubata*) in New Zealand. *Notornis* 63: 105–108.
- Cooper, A. 1997. Ancient DNA and avian systematics: From Jurassic Park to modern island extinctions. Pp. 345–373. In: Mindell, D. (Ed.). *Avian molecular evolution and molecular systematics*. New York: Academic Press. 382 pp.
- Cooper, A.; Lalueza-Fox, C.; Anderson, S.; Rambaut, A.; Austin, J. & Ward, R. 2001. Complete mitochondrial genome sequences of two extinct moas clarify ratite evolution. *Nature* 409: 704–707.
- Cooper, A.; Mourer-Chauvire, C.; Chambers, G.K.; Haeseler, A.; Wilson, A.C. & Paabo, S. 1992. Independent origins of New Zealand moas and kiwis. *Proceedings of the National Academy of Sciences of the United States of America* 89: 8741–8744.
- Cooper, J.; Marais, A.V.N.; Bloomer, J.P. & Bester, M.N. 1995. A success story: breeding of burrowing petrels (Procellariidae) before and after the eradication of feral cats *Felis catus* at subantarctic Marion Island. *Marine Ornithology* 23: 33–37.
- Cooper, J.H. & Tennyson, A.J.D. 2008. Wrecks and residents: the fossil gadfly petrels (*Pterodroma* spp.) of the Chatham Islands, New Zealand. *Oryctos* 7: 227–248.
- Cooper, R.A. (Ed.) 2004. The New Zealand geological timescale. *Institute of Geological and Nuclear Sciences Monograph* 22: 1–284.
- Cooper, W.J. 1991. Birds of Centre Island. *Notornis* 38: 103–109.
- Cooper, W.J. 1992. Rockhopper penguins at the Auckland Islands. *Notornis* 39: 66–67.
- Cooper, W.J. 1994. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 167–188.
- Cooper, W.J. & McClelland, P. 1992. The birds of Omaui and Pig Islands, Foveaux Strait. *Notornis* 39: 316–318.
- Cooper, W.J.; Miskelly, C.M.; Morrison, K. & Peacock, R.J. 1986. Birds of the Solander Islands. *Notornis* 33: 77–89.
- Cossee, R.O. 1995. New Zealand-banded sooty tern (*Sterna fuscata*) breeds in the Seychelles. *Notornis* 42: 280.
- Cossee, R.O. & Mills, J.A. 1993. First live record of an Adelie penguin in New Zealand. *Notornis* 40: 308–309.
- Cotter, R. & Nicholson, S. 2005. Ward Island expedition. *Southern Bird* 21: 2.
- Court, G.S. & Davis, L.S. 1990. First report of the southern great skua (*Stercorarius skua lönnbergi*) at Cape Bird, Ross Island. *Notornis* 37: 25–26.
- Cozzuol, M.A.; Tambussi, C. & Noriega, J. 1993. Un pinguino (Aves: Spheniscidae) de Formacion Puerto Madryn (Mioceno Medio) en Peninsula Valdes, Chubut, Argentina, con importantes implicancias filogeneticas. *Ameghiniana* 30: 327–328.
- Cracraft, J. 1974. Phylogeny and evolution of the ratite birds. *Ibis* 116: 494–521.
- Cracraft, J. 1976. The species of moas (Aves: Dinornithidae). *Smithsonian Contributions to Paleobiology* 27: 189–205.
- Cracraft, J. 1982. Phylogenetic relationships and transantarctic [sic] biogeography of some gruiform birds. *Geobios Memoires Speciale* 6: 393–402.
- Cracraft, J. 1983. Species concepts and speciation analysis. *Current Ornithology* 1: 159–187.
- Cracraft, J. 2013. Avian higher-level relationships and classification: Nonpasseriforms. Pp. xxi–xlii. In: Dickinson, E.C. & Remsen, J.V. (Eds). 2013. *The Howard & Moore complete checklist of the birds of the world*. Fourth edition. Vol. 1, Non-passerines. Eastbourne, UK: Aves Press.
- Cracraft, J. 2014. Avian higher-level relationships and classification: Passeriforms. Pp. xvii–xlv in: Dickinson, E.C. & Christidis, L. (eds). 2014. *The Howard & Moore complete checklist of the birds of the world*. Fourth edition. Vol. 2, Passerines. Eastbourne, UK: Aves Press.
- Cracraft, J.; Barker, F.K.; Braun, M.; Harshman, J.; Dyke, G.J.; Feinstein, J.; Stanley, S.; Cibois, A.; Schikler, P.; Beresford, P.; Garcia-Moreno, J.; Sorenson, M.D.; Yuri, T. & Mindell, D.P. 2004. Chapter 27. Phylogenetic relationships among modern birds (Neornithes). Pp. 468–489. In: Cracraft, J. & Donoghue, M.J. (Eds). *Assembling the tree of life*. New York: Oxford University Press. 576 pp.
- Craig, J.L. 1972. Investigation of the mechanism maintaining polymorphism in the New Zealand fantail, *Rhipidura fuliginosa* (Sparman). *Notornis* 19: 42–55.
- Cramp, S. & Simmons, K.E.L. (Eds). 1983. *Handbook of the birds of Europe, the Middle East and North Africa. The birds of the Western Palearctic*. Volume 3. Oxford, New York: Oxford University Press. 913 pp.
- Crane, R. & Gill, B.J. 2018. William Smyth (1838–1913), a commercial taxidermist of Dunedin, New Zealand. *Archives of Natural History* 45: 292–308.
- Creswell, R.A. 1968. Sighting of South Island bush wren. *Notornis* 15: 125.
- Crocker, T.C.; Harrison, K.; Hill, C.; O'Donnell, C.F.J. & Petch, S. 2002. First and second sightings of a little stint (*Calidris minuta*) in New Zealand. *Notornis* 49: 182–184.
- Crockett, D.E. 1961. Red-necked phalarope at Washdyke Lagoon. *Notornis* 9: 266.

- Crockett, D.E. 1975. Kermadec Islands Expedition reports: the wedge-tailed shearwater (*Puffinus pacificus pacificus*) in the northern Kermadecs. *Notornis* 22: 1–9.
- Crockett, D.E. 1977. First record of the Christmas Island shearwater in New Zealand. *Notornis* 24: 285–286.
- Crockett, D.E. 1994. Rediscovery of Chatham Island taiko *Pterodroma magentae*. *Notornis (Supplement)* 41: 49–60.
- Crossland, A.C. 1992. First record of white phase reef heron (*Egretta sacra*) in New Zealand. *Notornis* 39: 233–234.
- Crossland, A.C. 2011. First record of whiskered tern (*Chlidonias hybridus*) for the South Island, New Zealand. *Notornis* 58: 173–174.
- Crossland, A.C. 2021. Northward expansion of the non-breeding range of Otago shag (*Leucocarbo chalconotus*) along the Canterbury coast towards Banks Peninsula, eastern South Island, New Zealand. *Notornis* 68: 167–170.
- Crowe, A. 2001. *Which New Zealand bird?: A simple step-by-step guide to the identification of New Zealand's native and introduced birds*. Auckland: Penguin. 96 pp.
- Crowe, P.; Willis, K.; Butler, D. & Whitehead, E. 2021. Second record of Buller's shearwater breeding outside of the Poor Knights Islands. *Notornis* 68: 72–75.
- Crowe, T.M.; Bowie, R.C.K.; Bloomer, P.; Mandiwana, T.G.; Hedderson, T.A.J.; Randi, E.; Pereira, S.L. & Wakeling, J. 2006. Phylogenetics, biogeography and classification of, and character evolution in, gamebirds (Aves: Galliformes): effects of character exclusion, data partitioning and missing data. *Cladistics* 22: 495–532.
- Croxall, J.P. & Gales, R.P. 1998. An assessment of the conservation status of albatrosses. Pp. 46–65. *In*: Robertson, G. & Gales, R.P. (Eds). *Albatross biology and conservation*. Chipping Norton, New South Wales: Surrey Beatty & Sons. xii + 300 pp.
- Croxall, J.P.; McInnes, S.J. & Prince, P.A. 1984. The status and conservation of seabirds at the Falkland Islands. Pp. 271–291. *In*: Croxall, J.P.; Evans, P.G.H. & Schreiber, R.W. (Eds). *Status and conservation of the world's seabirds. International Council for Bird Protection Technical Publication 2*: i–x + 1–779.
- Croxall, J.P. & Prince, P.A. 1990. Recoveries of wandering albatrosses *Diomedea exulans* ringed at South Georgia 1958–1986. *Ringling & Migration* 11: 43–51.
- Cuming, P. 2003. Waikato. *Southern Bird* 13: 13.
- Cuming, P. 2007. Bay of Plenty. *Southern Bird* 29: 12.
- Cuming, P. & Barnard, T. 2005. Volcanic Plateau / Bay of Plenty. *Southern Bird* 21: 13.
- Cunningham, D.M. & Moors, P.J. 1994. The decline of rockhopper penguins *Eudyptes chrysocome* at Campbell Island, Southern Ocean and the influence of rising sea temperatures. *Emu* 94: 27–36.
- Curtis, W.F. 1988. First occurrence of Buller's albatross in the Atlantic Ocean. *Sea Swallow* 37: 62–63.
- Cuthbert, R.J.; Phillips, R.A. & Ryan, P.G. 2003. Separating the Tristan albatross and the wandering albatross using morphometric measurements. *Waterbirds* 26: 338–344.
- Cuthbert, R.; Ryan, P.G.; Cooper, J. & Hilton, G. 2003. Demography and population trends of the Atlantic yellow-nosed albatross. *Condor* 105: 439–452.
- Darby, J.T. 1972. The Australian white-browed wood swallow in New Zealand. *Notornis* 19: 114–117.
- Darby, J.T. 1991. A second Magellanic penguin in New Zealand. *Notornis* 38: 36.
- Darby, J.T. & Schweigman, P. 1993. White-bellied storm petrel revisited. *Notornis* 40: 304.
- Darby, J.T. & Wright, A.W. 1973. First New Zealand record of the gentoo penguin (*Pygoscelis papua*). *Notornis* 20: 28–30.
- Daugherty, C.H.; Williams, M. & Hay, J.M. 1999. Genetic differentiation, taxonomy and conservation of Australasian teals *Anas* spp. *Bird Conservation International* 9: 29–42.
- David, N. & Gosselin, M. 2000. The supposed significance of originally capitalized species-group names. *Bulletin of the British Ornithologists' Club* 120: 261–266.
- David, N. & Gosselin, M. 2002a. Gender agreement of avian species names. *Bulletin of the British Ornithologists' Club* 122: 14–49.
- David, N. & Gosselin, M. 2002b. The grammatical gender of avian genera. *Bulletin of the British Ornithologists' Club* 122: 257–282.
- Davidson, J. 1978. Archaeological salvage excavations at Paremata, Wellington, New Zealand. *National Museum of New Zealand Records* 1: 203–236.
- Davies, D. 2005a. Far North. *Southern Bird* 21: 12.
- Davies, D. 2005b. Far North. *Southern Bird* 22: 16.
- Davies, D. 2005c. Far North. *Southern Bird* 23: 16.
- Davies, D. 2007. Far North. *Southern Bird* 31: 15.
- Davis, A. 1994. Status, distribution and population trends of the New Zealand shore plover. *Notornis* 41 (Supplement): 179–194.
- Davis, L.S. & Renner, M. 2003. *Penguins*. London: T. & A.D. Poyser. 212 pp.
- Dawson, E.W. 1949. Grey heron (*Ardea cinerea*). Classified summarised notes. *Notornis* 3: 88.
- Dawson, E.W. 1951a. Grey heron (*Ardea cinerea*). Classified summarised notes. *Notornis* 4: 41.
- Dawson, E.W. 1951b. Bird notes from Stewart Island. *Notornis* 4: 146–149.
- Dawson, E.W. 1952. Subfossil *Nestor* (Psittacidae) from New Zealand. *Emu* 52: 259–272.
- Dawson, E.W. 1958. Re-discoveries of the New Zealand subfossil birds named by H.O. Forbes. *Ibis* 100: 232–237.
- Dawson, E.W. 1960. New evidence of the former occurrence of the kakapo (*Strigops habroptilus*) in the Chatham Islands. *Notornis* 9: 65–67.
- Dawson, E.W. 1964. Antarctic oceanography 1963–1964. *Antarctic* 3: 430–432.
- Dawson, E.W. 1974. Sight records of grey heron in New Zealand: an elucidation. *Notornis* 21: 124–128.
- Dawson, E.W. 2020. An extinct New Zealand raven (*Corvus antipodum*) on the Auckland Islands – an osteographic enigma? *Notornis* 67: 295–297.
- de Moya, R.S.; Allen, J.M.; Sweet, A.D.; Walden, K.K.O.; Palma, R.L.; Smith, V.S.; Cameron, S.L.; Valim, M.P.; Galloway, T.D.; Weckstein, J.D. & Johnson, K.P. 2019. Extensive host-switching of avian feather lice following the Cretaceous-Paleogene mass extinction event. *Communications Biology* 2: 445. doi.org/10.1038/s42003-019-0689-7

- De Pietri, V.L.; Scofield, R.P.; Hand, S.J.; Tennyson, A.J.D. & Worthy, T.H. 2016. Sheathbill-like birds (Charadriiformes: Chionoidea) from the Oligocene and Miocene of Australasia. *Journal of the Royal Society of New Zealand* 46: 181–199.
- De Pietri, V.L.; Scofield, R.P.; Tennyson, A.J.D.; Hand, S.J. & Worthy, T.H. 2016. Wading a lost southern connection: Miocene fossils from New Zealand reveal a new lineage of shorebirds (Charadriiformes) linking Gondwanan avifaunas. *Journal of Systematic Palaeontology* 14: 603–616.
- De Pietri, V.L.; Scofield, R.P.; Tennyson, A.J.D.; Hand, S.J. & Worthy, T.H. 2018. The diversity of early Miocene pigeons (Columbidae) in New Zealand. Pp 49–68. In: Acosta Hospitaleche, C.; Agnolin, F.L.; Haidr, N.; Noriega, J.I.; Tambussi, C.P. (Eds) *Paleontología y Evolución de las Aves*. Proceedings of the 9th International Meeting of the Society of Avian Paleontology and Evolution. Contribuciones del MACN 7, 2017.
- Delacour, J. 1965. La sarcelle brune (*Anas aucklandica chlorotis*) en Nouvelle-Calédonie. *L'Oiseau et la Revue Française d'Ornithologie* 35: 66.
- Delacour, J. & Mayr, E. 1945. The family Anatidae. *Wilson Bulletin* 57: 3–55.
- del Hoyo, J. & Collar, N.J. 2014. *Handbook of the Birds of the World and BirdLife International illustrated checklist of birds of the world*. Volume 1. Non-passerines. Barcelona, Lynx Edicions. 904 pp.
- del Hoyo, J. & Collar, N.J. 2016. *Handbook of the Birds of the World and BirdLife International illustrated checklist of the birds of the world*. Volume 2. Passerines. Barcelona: Lynx Edicions. 1013 pp.
- del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). 1992. *Handbook of the birds of the world. Ostrich to ducks*. Volume 1. Barcelona: Lynx Edicions. 696 pp.
- del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). 1994. *Handbook of the birds of the world. New world vultures to guineafowl*. Volume 2. Barcelona: Lynx Edicions. 638 pp.
- del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). 1996. *Handbook of the birds of the world. Hoatzin to auks*. Volume 3. Barcelona: Lynx Edicions. 821 pp.
- del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). 1999. *Handbook of the birds of the world. Barn-owls to hummingbirds*. Volume 5. Barcelona: Lynx Edicions. 759 pp.
- Delord, K.; Poupart, T.; Gasco, N.; Weimerskirch, H. & Barbraud, C. 2022. First evidence of migration across the South Pacific in endangered Amsterdam albatross and Conservation implications. *Marine Policy* 136 (2022) doi.org/10.1016/j.marpol.2021.104921
- Department of Conservation, 1999. *Chatham Islands Conservation Management Strategy*. Wellington: Department of Conservation. 326 pp.
- Deppe, L.; Rowley, O.; Rowe, L.K.; Shi, N.; McArthur, N.; Gooday, O. & Goldstien, S.J. 2017. Investigation of fallout events in Hutton's shearwaters (*Puffinus huttoni*) associated with artificial lighting. *Notornis* 64: 181–191.
- Devillers, P. 1977. The skuas of the North American Pacific coast. *Auk* 94: 417–429.
- Devillers, P. 1978. Distribution and relationships of South American skuas. *Le Gerfaut* 68: 374–417.
- Dickinson, E.C. 2001. Systematic notes on Asian birds. 9. The “Nouveau recueil de planches coloriées” of Temminck & Laugier (1820–1839). *Zoologisches Verhandelingen (Leiden)* 335: 7–53.
- Dickinson, E.C. (Ed.). 2003. *The Howard and Moore complete checklist of the birds of the world*. Revised and enlarged third edition. Princeton and Oxford: Princeton University Press. 1040 pp.
- Dickinson, E.C.; Bruce, M.D. & Dowsett, R.J. 2006. Vivarium naturae or the naturalist's miscellany (1789–1813) by George Shaw: an assessment of the dating of the parts and volumes. *Archives of Natural History* 33: 322–343.
- Dickinson, E.C. & Christidis, L. (Eds). 2014. *The Howard & Moore complete checklist of the birds of the world*. Fourth edition. Vol. 2, Passerines. Eastbourne, UK: Aves Press. liii + 752 pp.
- Dickinson, E.C. & Remsen, J.V. (Eds). 2013. *The Howard & Moore complete checklist of the birds of the world*. Fourth edition. Vol. 1, Non-passerines. Eastbourne, UK: Aves Press. 1 + 461 pp.
- Dilley, B. J.; Davies, D.; Bond, A. L. & Ryan, P. 2015. Effects of mouse predation on burrowing petrel chicks at Gough Island. *Antarctic Science* 27: 543–553.
- Donne-Goussé, C.; Laudet, V. & Hanni, C. 2002. A molecular phylogeny of Anseriformes based on mitochondrial DNA analysis. *Molecular Phylogenetics and Evolution* 23: 339–356.
- Dorst, J. & Mougín, J.-L. 1979. Order Pelecaniformes. Pp. 155–193. In: Mayr, E. & Cottrell, G.W. (Eds). *Check-list of birds of the world*. Volume 1. Second edition. Cambridge, Massachusetts: Museum of Comparative Zoology. xviii + 547 pp.
- Double, M.C.; Gales, R.; Reid, T.; Brothers, N. & Abbott, C.L. 2003. Morphometric comparison of Australian shy and New Zealand white-capped albatrosses. *Emu* 103: 287–294.
- Dowding, J.E. 1987. A beach-wrecked white-naped petrel. *Notornis* 34: 325–326.
- Dowding, J.E. 2020. Changes in the number and distribution of northern New Zealand dotterels (*Charadrius obscurus aquilonius*): results of four censuses undertaken between 1989 and 2011. *Notornis* 67: 717–728.
- Dowding, J.E. & Chamberlin, S. 1991. Annual movement patterns and breeding-site fidelity of the New Zealand dotterel (*Charadrius obscurus*). *Notornis* 38: 89–102.
- Dowding, J.E. & Kennedy, E.S. 1993. Size, age structure and morphometrics of the shore plover population on South East Island. *Notornis* 40: 213–222.
- Dowding, J.E. & Murphy, E.C. 1993a. Decline of the Stewart Island population of the New Zealand dotterel. *Notornis* 40: 1–13.
- Dowding, J.E. & Murphy, E.C. 1993b. Distribution and breeding of the spur-winged plover on Stewart Island. *Notornis* 40: 227–229.
- Dowding, J.E. & Murphy, E.C. 2001. The impact of predation by introduced mammals on endemic shorebirds in New Zealand: a conservation perspective. *Biological Conservation* 99: 47–64.
- Dowding, J.E. & Taylor, M.J. 1987. Genetics of polymorphism in the little shag. *Notornis* 34: 51–57.
- Downes, M.C.; Ealey, E.H.M.; Gwynn, A.M. & Young, P.S. 1959. The birds of Heard Island. *ANARE Scientific Reports, series B (I) Zoology*: 1–135.
- Drake, J.R. 1980. Inland breeding of black-billed gulls in southern Hawkes Bay and northern Wairarapa. *Notornis* 27: 86–88.
- Drew, S.H. 1897. Natural history notes. *Transactions and Proceedings of the New Zealand Institute* 29: 284–287.

- Driskell, A.C. 2001. Molecular systematics, biogeography, and evolution of the Meliphagidae (Passeriformes). Unpublished PhD thesis. Chicago, U.S.A.: University of Chicago. 205 pp.
- Driskell, A.C.; Christidis, L.; Gill, B.J.; Boles, W.E.; Barker, F.K. & Longmore, N.W. 2007. A new endemic family of New Zealand passerine birds: adding heat to a biodiversity hotspot. *Australian Journal of Zoology* 55: 73–78.
- Drummond, J. 1907. Our feathered immigrants: evidence for and against introduced birds in New Zealand: together with notes on the native avifauna. *New Zealand Department of Agriculture. Divisions of Biology and Horticulture Bulletin* 16: i–viii + 1–49, 8 pls.
- Dumbacher, J.P.; Pratt, T.K. & Fleischer, R.C. 2003. Phylogeny of the owlet-nightjars (Aves: Aegothelidae) based on mitochondrial DNA sequence. *Molecular Phylogenetics and Evolution* 29: 540–549.
- Dunckley, J.V. & Todd, C.M. 1949. Birds west of the Waiau River. *New Zealand Bird Notes* 3: 163–164.
- Durey, K. 1992. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1990 to 30 June 1991. *Notornis* 39: 161–210.
- Dusseux, N.; Sainsbury, J.; Moorhouse, R.; Jamieson, I.G. & Robertson, B.C. 2015. Evidence for Bergmann's Rule not allopatric subspeciation in the threatened kaka (*Nestor meridionalis*). *Journal of Heredity* 106: 679–691.
- Dwight, J. 1925. The gulls (Laridae) of the world; their plumages, moults, variations, relationships and distribution. *Bulletin of the American Museum of Natural History* 52: 63–408.
- Eagle, M. 1980. Black-winged petrels on Portland Island. *Notornis* 27: 171–175.
- Eagle, M.K.; Gill, B.J. & Grant-Mackie, J.A. 2005. Pliocene bird bones from Pitt Island, Chatham Islands, New Zealand. *Records of the Auckland Museum* 42: 67–73.
- Edgar, A.T. 1949. Winter notes on New Zealand birds. *New Zealand Bird Notes* 3: 170–174.
- Edgar, A.T. 1966. Welcome swallows in New Zealand, 1958–1965. *Notornis* 13: 27–60.
- Edgar, A.T. 1968. Oriental dotterel in Northland. *Notornis* 15: 211–212.
- Edgar, A.T. 1971a. Sightings of rare waders in the far north. *Notornis* 18: 116–117.
- Edgar, A.T. 1971b. Field study course, Far North 11–18 January, 1971. *Notornis* 18: 118–130.
- Edgar, A.T. (Comp.). 1972a. Classified summarised notes. *Notornis* 19: 339–364.
- Edgar, A.T. (Comp.). 1972b. Classified summarised notes 1963–1970. *Notornis* 19 (Supplement): 1–91.
- Edgar, A.T. (Comp.). 1973. Classified summarised notes. *Notornis* 20: 346–376.
- Edgar, A.T. (Comp.). 1975. Classified summarised notes. *Notornis* 22: 313–340.
- Edgar, A.T. (Comp.). 1976. Classified summarised notes. *Notornis* 23: 323–353.
- Edgar, A.T. (Comp.). 1977. Classified summarised notes. *Notornis* 24: 246–279.
- Edgar, A.T. 1978. The reef heron (*Egretta sacra*) in New Zealand. *Notornis* 25: 25–58.
- Edgar, A.T. & Grant, P. 1969. Nankeen kestrels in New Zealand. *Notornis* 16: 288–298.
- Edgar, A.T.; McKenzie, H.R. & Sibson, R.B. 1969. Arctic waders in northern New Zealand summer 1968–69. *Notornis* 16: 285–287.
- Egevang, C.; Stenhouse, I.J.; Phillips, R.A.; Petersen, A.; Fox, J.W. & Silk, J.R.D. 2010. Tracking of Arctic terns *Sterna paradisaea* reveals longest animal migration. *PNAS* 107: 2078–2081.
- Eller, G.J.; Haslett, C.M. & Sibson, R.B. 1991. Pink-eared duck at Mangere. *Notornis* 38: 109–110.
- Elliott, G. 1989. The distribution of banded rails and marsh crakes in coastal Nelson and the Marlborough Sounds. *Notornis* 36: 117–123.
- Elliott, G. & Walker, K. 2005. Detecting population trends of Gibson's and antipodean wandering albatrosses. *Notornis* 52: 215–222.
- Elliott, G.; Walker, K. & Buckingham, R. 1991. The Auckland Island rail. *Notornis* 38: 199–209.
- Elliott, G.P.; Walker, K.J.; Parker, G.C.; Rexer-Huber, K. & Miskelly, C.M. 2020. Subantarctic Adams Island and its birdlife. *Notornis* 67: 153–187.
- Ellis, B.A. 1975. Sighting of grass whistle-ducks. *Notornis* 22: 244.
- Ellman, J.B. 1861. Brief notes on the birds of New Zealand. *The Zoologist: a Popular Miscellany of Natural History* 19: 7464–7473.
- Engelmoer, M. & Roselaar, C.S. 1998. *Geographical variation in waders*. Dordrecht: Kluwer Academic Publishers. 292 pp.
- Enticott, J.W. 1986. The pelagic distribution of the royal albatross. *Cormorant* 13: 143–156.
- Ericson, P.G.P.; Anderson, C.L.; Britton, T.; Elzanowski, A.; Johansson, U.S.; Kallersjo, M.; Ohlson, J.I.; Parsons, T.J.; Zuccon, D. & Mayr, G. 2006. Diversification of Neoaves: integration of molecular sequence data and fossils. *Biology Letters* 2: 543–547.
- Ericson, P.G.P.; Christidis, L.; Cooper, A.; Irestedt, M.; Jackson, J.; Johansson, U.S. & Norman, J.A. 2002. A Gondwanan origin of passerine birds supported by DNA sequences of the endemic New Zealand wrens. *Proceedings of the Royal Society, London series B* 269: 235–241.
- Erritzøe, J.; Mann, C.F.; Brammer, F. & Fuller, R.A. 2012. *Cuckoos of the world* (Helm Identification Guides) London: Bloomsbury. 544 pp.
- Esler, L. 2001. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 1998 to 30 June 1999. *Notornis* 48: 100–107.
- Estandia, A.; Chesser, R.T.; James, H.F.; Levy, M.A.; Obiol, J.F.; Bretagnolle, V.; González-Solís, J. & Welch, A.J. 2021. Substitution rate variation in a robust procellariiform seabird phylogeny is not solely explained by body mass, flight efficiency, population size or life history traits. *BioRxiv* preprint doi: 10.1101/2021.07.27.453752. 18 pp.
- Evans, K. 2021. Where do shags come from? *New Zealand Geographic* 171: 10–11.
- Everett, W. & Pitman, R.L. 1993. Status and conservation of shearwaters of the North Pacific. Pp. 93–100. In: Vermeer, K.; Briggs, K.T.; Morgan, K.H. & Siegel-Causey, D. (Eds). *The status, ecology, and conservation of marine birds of the North Pacific*. Ottawa: Canadian Wildlife Service Special Publication. 263 pp.
- Ewen, J.G.; Adams, L. & Renwick, R. 2013. New Zealand species recovery groups and their role in evidence-based conservation. *Journal of Applied Ecology* 50: 281–285.

- Ewen, J.G.; Flux, I. & Ericson, P.G.P. 2006. Systematic affinities of two enigmatic New Zealand passerines of high conservation priority, the hihi or stitchbird *Notiomystis cincta* and the kokako *Callaeas cinerea*. *Molecular Phylogenetics and Evolution* 40: 281–284.
- Fain, M.G. & Houde, P. 2004. Parallel radiations in the primary clades of birds. *Evolution* 58: 2558–2573.
- Falla, R.A. 1930. The Arctic tern (*Sterna paradisica* [sic] Brünnich [sic]). An occurrence in New Zealand. *New Zealand Journal of Science and Technology* 12: 27.
- Falla, R.A. 1933. Notes on New Zealand petrels; with descriptions of new forms and some new records. *Records of the Auckland Institute and Museum* 1(4): 173–180.
- Falla, R.A. 1934. The distribution and breeding habits of petrels in northern New Zealand. *Records of the Auckland Institute and Museum* 1(5): 245–260.
- Falla, R.A. 1936. Arctic birds as migrants in New Zealand. *Records of the Auckland Institute and Museum* 2(1): 3–14.
- Falla, R.A. 1940a. Occurrences of the McCormick skua on the coast of New Zealand. *Emu* 40: 119–120.
- Falla, R.A. 1940b. The genus *Pachyptila* Illiger. *Emu* 40: 218–236.
- Falla, R.A. 1948. Classified summarised notes. *New Zealand Bird Notes* 2: 171.
- Falla, R.A. 1958. Some records of Australian birds in New Zealand, 1957. *Notornis* 8: 29–32.
- Falla, R.A. 1959. Pratincole records in New Zealand. *Notornis* 8: 126–127.
- Falla, R.A. 1962a. New Zealand records of *Pterodroma longirostris* (Stejneger) and a new record of *Pterodroma leucoptera* (Gould). *Notornis* 9: 275–277.
- Falla, R.A. 1962b. A wedge-tailed shearwater in New Zealand. *Notornis* 9: 278–279.
- Falla, R.A. 1963a. The oriental pratincole, another record. *Notornis* 10: 355.
- Falla, R.A. 1963b. Note on the little bittern. *Notornis* 10: 412–413.
- Falla, R.A. 1964. The Porirua yellowlegs. *Notornis* 11: 104–106.
- Falla, R.A. 1965. Distribution of Hutton's shearwater in New Zealand. *Notornis* 12: 66–70.
- Falla, R.A. 1967. An Auckland Island rail. *Notornis* 14: 107–113.
- Falla, R.A. 1970. Grey ternlets in the Bay of Plenty. *Notornis* 17: 83–86.
- Falla, R.A. 1978. Banded dotterel at the Auckland Islands: description of a new sub-species. *Notornis* 25: 101–108.
- Falla, R.A. & Mougín, J.-L. 1979. Order Sphenisciformes. Pp. 121–134. In: Mayr, E. & Cottrell, G.W. (Eds). *Check-list of birds of the world*. Volume 1. Second edition. Cambridge, Massachusetts: Museum of Comparative Zoology. xviii + 547 pp.
- Falla, R.A. & Riney, T. 1958. Australian barn owl in Westland. *Notornis* 7: 208–209.
- Falla, R.A.; Sibson, R.B. & Turbott, E.G. 1966. *A field guide to the birds of New Zealand and outlying islands*. London: Collins. 254 pp.
- Falla, R.A.; Sibson, R.B. & Turbott, E.G. 1970. *A field guide to the birds of New Zealand and outlying islands*. Second edition. London: Collins. 256 pp.
- Falla, R.A.; Sibson, R.B. & Turbott, E.G. 1981. *The new guide to the birds of New Zealand and outlying islands*. Auckland: Collins. 247 pp.
- Farrell, J. 2006. Recovery round-up. *Corella* 30: 27–28.
- Fennell, J. 1983a. Rare Birds Committee. *OSNZ News* 27: 8.
- Fennell, J. 1983b. OSNZ Rare Bird recording scheme. *OSNZ News* 29: 3.
- Fennell, J. 1985. News from the Rare Birds Committee. *OSNZ News* 34: 1.
- Fennell, J.; Fennell, J.S.; Crossland, A. & Langlands, P. 1985. Asiatic dowitcher at the Heathcote-Avon Estuary, Christchurch. *Notornis* 32: 322–323.
- Fennell, J.; Fennell, J.S.; Sagar, P. & Harrison, K. 1983. First sighting of chestnut-breasted shelduck in New Zealand. *Notornis* 30: 85–86.
- Fennell, J. & Merton, D. 1984. A paradise shelduck in the Chatham Islands. *Notornis* 31: 311.
- Fennell, J.; Sagar, P.M. & Fennell, J.S. 1985. Variation within the redpolls of Canterbury. *Notornis* 32: 245–253.
- Fennell, J.F.M. 1986. Annual report of the OSNZ Rare Birds Committee. *OSNZ News* 39: 3.
- Fennell, J.F.M. 1987. Annual report of the Rare Birds Committee 1986/87. *OSNZ News* 43: 3–4.
- Finsch, O. 1869. Notes on Mr Walter Buller's "Essay on the Ornithology of New Zealand". *Transactions and Proceedings of the New Zealand Institute* 1 [Second edition]: 58–73.
- Finsch, O. 1873. Remarks on some birds of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 5: 206–212.
- Finsch, O. 1875a. On two apparently new species of penguin from New Zealand. *Ibis* 5 (3rd series): 112–114.
- Finsch, O. 1875b. Preliminary remarks on some New Zealand birds. *Transactions and Proceedings of the New Zealand Institute* 7: 226–236.
- Fischer, J.H.; Debski, I.; Miskelly, C.M.; Bost, C.-A.; Fromant, A.; Tennyson, A.J.D.; Tessler, J.; Cole, R.; Hiscock, J.H.; Taylor, G.A. & Wittmer, H.U. 2018. Analyses of phenotypic differentiations among South Georgian diving petrel (*Pelecanoides georgicus*) populations reveal an undescribed and highly endangered species from New Zealand. *PLOS One* 13(6): e0197766.
- Fischer, J.H.; Debski, I.; Taylor, G.A. & Wittmer, H.U. 2021. Consistent offshore artificial light at night near the last breeding colony of a critically endangered seabird. *Conservation Science and Practice* 2021: 00482.
- Fisher, C.T. 1981. Specimens of extinct, endangered or rare birds in the Merseyside County Museums, Liverpool. *Bulletin of the British Ornithologists' Club* 101: 276–285.
- Fjeldså, J. & Krabbe, N. 1990. *Birds of the high Andes*. Copenhagen: Apollo Books. 876 pp.
- Fjeldså, J.; Christidis, L. & Ericson, P.G.P. (Eds). 2020. The largest avian radiation: the evolution of perching birds, or the order Passeriformes. Barcelona: Lynx Edicions. 445 pp.
- Fleming, C.A. 1939a. Birds of the Chatham Islands. Part 1. *Emu* 38: 380–413.
- Fleming, C.A. 1939b. Birds of the Chatham Islands. Part 2. *Emu* 38: 492–509.

- Fleming, C.A. 1950a. New Zealand flycatchers of the genus *Petroica* Swainson. Part I. *Transactions of the Royal Society of New Zealand* 78: 14–47.
- Fleming, C.A. 1950b. New Zealand flycatchers of the genus *Petroica* Swainson. Part II. *Transactions of the Royal Society of New Zealand* 78: 127–160.
- Fleming, C.A. 1953. The geology of Wanganui Subdivision. *New Zealand Department of Scientific and Industrial Research Bulletin* (new series) 52: 1–362.
- Fleming, C.A. 1963. The greater yellowlegs: a New Zealand sight record. *Notornis* 10: 258–262.
- Fleming, C.A. 1979. *The geological history of New Zealand and its life*. Auckland: Auckland University Press. 141 pp.
- Fleming, C.A. 1982. George Edward Lodge; the unpublished New Zealand paintings. Wellington: Nova Pacifica. xiv + 409 pp.
- Fleming, C.A. & Fleming, M.A. 1985. Record numbers of black-fronted terns at Waikanae. *OSNZ News* 36: 1.
- Fleming, C.A. & Serventy, D.L. 1943. The races of *Puffinus assimilis* in Australia and New Zealand. *Emu* 43: 113–125.
- Fletcher, A.W.J.; Fletcher, M. & Patterson, R.M. 1989. An apparent New Zealand stilt in Tasmania. *Stilt* 15: 37.
- Flood, B. 2003. The New Zealand storm-petrel is not extinct. *Birding World* 16: 479–482.
- Flood, B.; Saville, S.; Southey, I.; Stephenson, B. & Thomas, B. 2004. Digital resurrection of the New Zealand storm petrel. *Southern Bird* 17: 6–7.
- Flood, R.L.; Zufelt, K.; Bretagnolle, V. & Shirihai, H. 2021. Pelagic birds around Rapa and Marotiri, French Polynesia, October–December 2019, with notes on Rapa shearwater *Puffinus myrtae* and titan storm petrel *Fregetta [grallaria] titan*. *Bulletin of the British Ornithologists' Club* 141: 387–411.
- Flux, I.A. 2002. New Zealand white-capped mollymawk (*Diomedea cauta stadi*) chicks eaten by pigs (*Sus scrofa*). *Notornis* 49: 175–176.
- Foggo, M.N.; Hitchmough, R.A. & Daugherty, C.H. 1997. Systematic and conservation implications of geographic variation in pipits (*Anthus*: Motacillidae) in New Zealand and some off shore islands. *Ibis* 139: 366–373.
- Fooks, P. 1978. Leach's fork-tailed storm petrel. *Notornis* 25: 278.
- Forbes, H.O. 1892. Preliminary notice of additions to the extinct avifauna of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 24: 185–189.
- Forbes, H.O. 1893. The Chatham Islands and their story. *The Fortnightly Review* 53: 669–690.
- Ford, J. 1986. Phylogeny of the acanthizid warbler genus *Gerygone* based on numerical analyses of morphological characters. *Emu* 86: 12–22.
- Fordeyce, R.E. 1991a. The Australasian marine vertebrate record and its climatic and geographic implications. Pp. 1165–1190. In: Vickers-Rich, P.; Monaghan, J.M.; Baird, R.F. & Rich, T.H. (Eds). *Vertebrate palaeontology of Australasia*. Melbourne: Pioneer Design Studio in cooperation with the Monash University Publications Committee. 1437 pp.
- Fordeyce, R.E. 1991b. A new look at the fossil vertebrate record of New Zealand. Pp. 1191–1316. In: Vickers-Rich, P.; Monaghan, J.M.; Baird, R.F. & Rich, T.H. (Eds). *Vertebrate palaeontology of Australasia*. Melbourne: Pioneer Design Studio in cooperation with the Monash University Publications Committee. 1437 pp.
- Fordeyce, R.E. 2003. Fossils and the history of life. Pp. 35–64. In: Darby, J.; Fordeyce, R.E.; Mark, A.; Probert, K. & Townsend, C. (Eds). *The natural history of southern New Zealand*. Dunedin: University of Otago. 387 pp.
- Fordeyce, R.E. & Jones, C.M. 1990. Penguin history and new fossil material from New Zealand. Pp. 419–446. In: Davis, L.S. & Darby, J.T. (Eds). *Penguin biology*. San Diego: Academic Press, Inc. xx + 467 pp.
- Fordeyce, R.E. & Thomas, D.B. 2011. *Kaiika maxwelli*, a new early Eocene archaic penguin (Sphenisciformes, Aves) from Waihao Valley, South Canterbury, New Zealand. *New Zealand Journal of Geology and Geophysics* 54: 43–51.
- Foreman, G.A. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Foreman, G.A. 1992. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1990 to 30 June 1991. *Notornis* 39: 161–210.
- Foreman, G.A. 1994. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1992 to 30 June 1993. *Notornis* 41: 235–274.
- Foreman, G.A. 1996. In: Parrish, G.R. & Lock, J.W. (Comps). Classified summarised notes. North Island, 1 July 1994 to 30 June 1995. *Notornis* 43: 117–145.
- Foreman, G.A. 1998. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1996 to 30 June 1997. *Notornis* 45: 279–309.
- Foreman, G.A. 2000. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Foreman, G.A. 2001. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 1999 to 30 June 2000. *Notornis* 48: 165–174.
- Foreman, G.A. 2002. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2000 to 30 June 2001. *Notornis* 49: 100–110.
- Forsdick, N.J.; Cubrinovska, I.; Massaro, M. & Hale, M.L. 2021. Microsatellite genotyping detects extra-pair paternity in the Chatham Island black robin, a highly inbred, socially monogamous passerine. *Emu – Austral Ornithology* 121: 68–74.
- Forster, J.R. 1781. *Historia Aptenodytæ, generis avium orbi australi proprii. Commentarii Phys. Societatis Regiæ Scientiarum Göttingensis* 3: 121–148.
- Fox, N.C. 1978. The distribution and numbers of New Zealand falcons (*Falco novaeseelandiae*). *Notornis* 25: 317–331.
- Fox, N.C. 1988. A taxonomic redescription of the New Zealand falcon, *Falco novaeseelandiae* Gmelin, 1788. *Notornis* 35: 270–272.
- Fraser, M.; Robertson, C.J.R.; Fordham, R. & Minot, E. 2005. Characteristics of white-chinned petrels (*Procellaria aequinoctialis*) in New Zealand waters (Abstract). *Notornis* 52: 175.
- Fraser, P.A.; Rogers, M.J. & the Rarities Committee. 2007. Report on rare birds in Great Britain in 2005 – Part I: non-passerines. *British Birds* 100: 16–61.

- Freeman, A. 1992. Petrels on the Mernoo Bank and Chatham Rise. *Notornis* 39: 57–58.
- Freeman, A.N.D. 1994. Landbirds recorded at the Chatham Islands, 1940 to December 1993. *Notornis* 41 (Supplement): 127–141.
- Freeman, A.N.D.; Wilson, K.-J. & Nicholls, D.G. 2001. Westland petrels and the hoki fishery: determining co-occurrence using satellite telemetry. *Emu* 101: 47–56.
- Friedmann, H. 1941. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part IX. Family Gruidae – the cranes; family Rallidae – the rails, coots, and gallinules; family Heliornithidae – the sun-grebes; family Eurypygididae – the sun-bitterns. *Bulletin of the United States National Museum* 50: ix + 254 pp.
- Friedmann, H. 1946. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part X. Family Cracidae – the curassows, guans, and chachalacas; family Tetraonidae – the grouse, ptarmigan, etc.; family Phasianidae – the American quails, partridges, and pheasants; family Numididae – the guineafowls; family Meleagrididae – The turkeys. *Bulletin of the United States National Museum* 50: xii + 484 pp.
- Friedmann, H. 1950. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part XI. Family Cathartidae – the American vultures; family Accipitridae – the hawks, eagles, kites, harriers and old world vultures; family Pandionidae – the ospreys; family Falconidae – the falcons and caracaras. *Bulletin of the United States National Museum* 50: 1–793.
- Friesen, M.R.; Simpkins, C.E.; Ross, J.; Anderson, S.H.; Ismar-Rebitz, S.M.H.; Tennyson, A.J.D.; Taylor, G.A.; Baird, K.A. & Gaskin, C.P. 2021. New population estimate for an abundant marine indicator species, rako or Buller's shearwater (*Ardenna bulleri*). *Emu – Austral Ornithology* 121: 231–238.
- Friesen, V.L. & Anderson, D.J. 1997. Phylogeny and evolution of the Sulidae (Aves: Pelecaniformes): a test of alternative modes of speciation. *Molecular Phylogenetics and Evolution* 7: 252–260.
- Frith, H.J. 1977. *Waterfowl in Australia*. Sydney: A.H. & A.W. Reed. 328 pp.
- Fromant, A.; Arnould, J.P.Y.; Delord, K.; Sutton, G.J.; Carravieri, A.; Bustamante, P.; Miskelly, C.M.; Kato, A.; Brault-Favrou, M.; Cherel, Y.; Bost, C.-A. 2021. Stage-dependent niche segregation: insights from a multi-dimensional approach of two sympatric sibling seabirds. *Oecologia*: DOI 10.21203/rs.3.rs-1052090/v1
- Fromant, A.; Bost, C.-A.; Bustamante, P.; Carravieri, A.; Cherel, Y.; Delord, K.; Eizenberg, Y.H.; Miskelly, C.M.; Arnould, J.P.Y. 2020. Temporal and spatial differences in the post-breeding behaviour of a ubiquitous Southern Hemisphere seabird, the common diving petrel. *Royal Society Open Science* 7: 200670 (15 pp).
- Fromant, A.; Delord, K. & Quintin, M. 2018. Great shearwater *Ardenna gravis* in the eastern Indian Ocean: a photo-documented record and summary of recent sightings. *Marine Ornithology* 46: 89–91.
- Frugone, M.J.; López, M.E.; Segovia, N.I.; Cole, T.L.; Lowther, A.; Pistorius, P.; Dantas, G.P.M.; Petry, M.V.; Bonadonna, F.; Trathan, P.; Polanowski, A.; Wienecke, B.; Bi, K.; Wang-Claypool, C.Y.; Waters, J.M.; Bowie, R.C.K.; Poulin, E. & Vianna, J.A. 2019. More than the eye can see: genomic insights into the drivers of genetic differentiation in royal/macaroni penguins across the Southern Ocean. *Molecular Phylogenetics and Evolution* 139: 106563.
- Fryer, P. 2004. Taranaki. *Southern Bird* 18: 16–17.
- Fulton, R. 1904. The kohoperoa or koekoea, long-tailed cuckoo (*Urodynamis taitensis*): an account of its habits, description of a nest containing its (supposed) egg, and a suggestion as to how the parasitic habit in birds has become established. *Transactions of the New Zealand Institute* 36: 113–148.
- Fulton, R. 1910. Pipiwharuroa, or bronze cuckoo (*Chalcococcyx lucidus*), and an account of its habits. *Transactions and Proceedings of the New Zealand Institute* 42: 392–408.
- Fumihito, A.; Miyake, T.; Sumi, S.; Takada, M.; Ohno, S. & Kondo, N. 1994. One subspecies of the red junglefowl (*Gallus gallus gallus*) suffices as the matriarchic ancestor of all domestic breeds. *Proceedings of the National Academy of Sciences of the United States of America* 91: 12505–12509.
- Furbringer, M. 1888. *Untersuchungen zur Morphologie und Systematik der Vögel zugleich ein Beitrag zur Anatomie der Stütz- und Bewegungsgorgane*. Amsterdam: Theil Van Holkema. Two volumes: xlix + 1751 pp, 30 pls.
- Furness, R.W. 1987. *The skuas*. Calton: T. & A.D. Poyser. 363 pp.
- Furness, R.W. 1996. Family Stercorariidae (skuas). Pp. 556–571. In: del Hoyo, J.; Elliot, A. & Sargatal, J. (Eds). *Handbook of the birds of the world. Hoatzin to auks*. Volume 3. Barcelona: Lynx Edicions. 821 pp.
- Galbreath, R. 1989. *Walter Buller: The reluctant conservationist*. Wellington: Government Printing Office. 336 pp.
- Galbreath, R. & Brown, D. 2004. The tale of the lighthouse-keeper's cat: discovery and extinction of the Stephens Island wren (*Traversia lyalli*). *Notornis* 51: 193–200.
- Gales, R. 1993. *Co-operative mechanisms for the conservation of albatross*. Hobart: Tasmanian Government Printer. 132 pp.
- Gales, R. 1998. Albatross populations: status and threats. Pp. 20–45. In: Robertson, G. & Gales, R.P. (Eds). *Albatross biology and conservation*. Chipping Norton, New South Wales: Surrey Beatty & Sons. xii + 300 pp.
- Galla, S.J.; Moraga, R.; Brown, L.; Cleland, S.; Hoepfner, M.P.; Maloney, R.F.; Richardson, A.; Slater, L.; Santure, A.W. & Steeves, T.E. 2020. A comparison of pedigree, genetic and genomic estimates of relatedness for informing pairing decisions in two critically endangered birds: implications for conservation breeding programmes worldwide. *Evolutionary Applications* 13: 991–1008.
- Garcia-R, J.C.; Gibb, G.C. & Trewick, S.A. 2014. Deep global evolutionary radiation in birds: diversification and trait evolution in the cosmopolitan bird family Rallidae. *Molecular Phylogenetics and Evolution* 81: 96–108.
- Garner, M.; Lewington, I. & Slack, R. 2003. Mongolian and lesser sand plovers: an identification overview. *Birding World* 16: 377–385.
- Garnett, S.T. & Crowley, G.M. 2002. *The action plan for Australian birds 2000*. Canberra: Environment Australia and Birds Australia. ix + 673 pp.
- Gaskin, C. & Baird, K. 2005. Observations of black and white storm petrels in the Hauraki Gulf, November 2003 to June 2005: were they of New Zealand storm petrels? *Notornis* 52: 181–194.

- Gaze, P.D. 1975. Brown booby in Wellington Harbour. *Notornis* 22: 253–255.
- Gaze, P.D. 1985. Classified summarised notes: South Island. 1 July 1983 to 30 June 1984. *Notornis* 32: 140–151.
- Gaze, P.D. 1987. Classified summarised notes 1 July 1985 to 30 June 1986: South Island. *Notornis* 34: 148–166.
- Gaze, P.D. 2000. The response of a colony of sooty shearwater (*Puffinus griseus*) and flesh-footed shearwater (*P. carneipes*) to the cessation of harvesting and the eradication of Norway rats (*Rattus norvegicus*). *New Zealand Journal of Zoology* 27: 375–379.
- Gaze, P.D. 2001. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 1998 to 30 June 1999. *Notornis* 48: 100–107.
- Gaze, P.D. 2003. The rise and fall of mohua (*Mohoua ochrocephala*) on Mt Stokes (Abstract). *Notornis* 50: 176–177.
- Germano, J.; Barlow, S.; Castro, I.; Colbourne, R.; Cox, M.; Gillies, C.; Hackwell, K.; Harawira, J.; Impey, M.; Reuben, A.; Robertson, H.; Scrimgeour, J.; Sporle, W. & Yong, S. 2018. *Kiwi recovery plan 2018–2028 mahere whakaora kiwi 2018–2028*. Department of Conservation Threatened Species Recovery Plan 64. Wellington: Department of Conservation. 60 pp.
- Giannini, N.P. & Bertelli, S. 2004. Phylogeny of extant penguins based on integumentary and breeding characters. *Auk* 121: 422–434.
- Gibb, G.C.; England, R.; Hartig, G.; McLenachan, P.A.; Taylor Smith, B.L.; McComish, B.J.; Cooper, A. & Penny, D. 2015. New Zealand passerines help clarify the diversification of major songbird lineages during the Oligocene. *Genome Biology and Evolution* 7: 2983–2995.
- Gibson, J.D. 1959. Fork-tailed swift at Macquarie Island. *Emu* 59: 64.
- Gibson, J.D. & Sefton, A.R. 1959. An Australian record of the Georgian diving petrel. *Emu* 59: 267.
- Gibson, R. & Baker, A. 2012. Multiple gene sequences resolve phylogenetic relationships in the shorebird suborder Scolopaci (Aves: Charadriiformes). *Molecular Phylogenetics and Evolution* 64: 66–72.
- Gill, B.J. 1983. Morphology and migration of *Chrysococcyx lucidus*, an Australasian cuckoo. *New Zealand Journal of Zoology* 10: 371–381.
- Gill, B.J. 1996a. Geographic variation in the bone length of laughing owls (*Sceloglaux albifacies*). *Notornis* 43: 85–90.
- Gill, B.J. 1996b. A fossil bone of the rifleman (*Acanthisitta chloris*) from Cape Reinga. *Notornis* 43: 113–114.
- Gill, B.J. 2003. Osteometry and systematics of the extinct New Zealand ravens (Aves: Corvidae: *Corvus*). *Journal of Systematic Palaeontology* 1: 43–58.
- Gill, B.J. & Driessen, J. 1993. Common noddy *Anous stolidus* at Muriwai Beach. *Notornis* 40: 43–44.
- Gill, B.J.; Grant-Mackie, J. & Hayes, B. 2005. A middle Pleistocene goose bone (Anserinae: *Cnemiornis*) from Hawke's Bay, New Zealand. *Records of the Auckland Museum* 42: 75–79.
- Gill, B.J. & Hauber, M.E. 2012. Piecing together the epic transoceanic migration of the long-tailed cuckoo (*Eudynamys taitensis*): an analysis of museum and sighting records. *Emu* 112: 326–332.
- Gill, B.J. & Hauber, M.E. 2013. Distribution and age-specific plumage states of the long-tailed cuckoo (*Eudynamys taitensis*). *Notornis* 60: 158–170.
- Gill, B.J. & Martinson, P. 1991. *New Zealand's extinct birds*. Auckland: Random Century. ix + 109 pp.
- Gill, B.J. & Tennyson, A.J.D. 2002. New fossil records of pelicans (Aves: Pelecanidae) from New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 13: 39–44.
- Gill, B.J. & Turbott, E.G. 1984. Fourth record of a barn owl in New Zealand, with comments on long-distance aircraft as a possible means of dispersal. *Notornis* 31: 177–179.
- Gill, B.J. & Turbott, E.G. 1985. Barn owls transported by aircraft – a postscript. *Notornis* 32: 260.
- Gill, F.; Donsker, D.; Rasmussen, P. (Eds). 2021. IOC world bird list (v 11.2). doi: 10.14344/IOC.ML.11.2. <http://www.worldbirdnames.org/>
- Giovanardi, S.; Ksepka, D.T. & Thomas, D.B. 2021. A giant Oligocene fossil penguin from the North Island of New Zealand. *Journal of Vertebrate Paleontology* 41 (3): e1953047, doi: 10.1080/02724634.2021.1953047 (13 pp).
- Given, A.D.; Mills, J.A. & Baker, A.J. 2005. Molecular evidence for recent radiation in Southern Hemisphere masked gulls. *Auk* 122: 268–279.
- Gmelin, J.F. 1789. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Regnum Animalium*. Thirteenth edition. 1(2): 501–1032. Lipsiae (Leipzig): G.E. Beer.
- Gochfeld, M. & Burger, J. 1996. Family Sternidae (terns). Pp. 624–667. In: del Hoyo, J.; Elliot, A. & Sargatal, J. (Eds). *Handbook of the birds of the world. Hoatzin to auks*. Volume 3. Barcelona: Lynx Edicions. 821 pp.
- Godman, F.D.C. 1907–1908. *A monograph of the petrels (order Tubinares)*. Volume 1. London: Witherby & Co. 152 pp., 39 pls.
- Gonzales, J.; Düttmann, H. & Wink, M. 2009. Phylogenetic relationships based on two mitochondrial genes and hybridization patterns in Anatidae. *Journal of Zoology* 279: 310–318.
- Gordon, A. 1989. Northland. *OSNZ News* 50: 10–11.
- Gould, J. 1844 (May). On the family Procellariidae, with a description of ten new species. *Annals and Magazine of Natural History* (1) 13: 360–368.
- Gould, P.; Ostrom, P. & Walker, W. 1998. Foods of Buller's shearwaters (*Puffinus bulleri*) associated with driftnet fisheries in the central North Pacific Ocean. *Notornis* 45: 81–93.
- Grant, P. 1960. Another Australian barn-owl in Westland. *Notornis* 9: 110.
- Grant, P. 1964. Cattle egret near Greymouth. *Notornis* 11: 86.
- Grant, P. 1968. Red-necked avocet at Westport. *Notornis* 15: 268–269.
- Grant, P. 1989. A 1973 record of chestnut-breasted shelduck. *Notornis* 36: 284.
- Grant, P.R. & Grant, B.R. 1992. Hybridization of bird species. *Science* 256: 193–197.
- Grant, P.R. & Grant, B.R. 1997. Genetics and the origin of bird species. *Proceedings of the National Academy of Sciences of the United States of America* 94: 7768–7775.
- Gray, J.E. 1843. Fauna of New Zealand. Pp. 177–296. In: Dieffenbach, E. *Travels in New Zealand; with contributions to the geography, geology, botany, and natural history of that country*. Vol. 2. London: John Murray.

- Gray, G.R. 1844–45. Birds of New Zealand. Pp. 1–20. In: Richardson, J. & Gray, J.E. (Eds) *The zoology of the voyage of H.M.S. Erebus & Terror, under the command of Captain Sir James Clark Ross, during the years 1839 to 1843*. Vol. 1. London: Janson.
- Gray, G.R. 1848. *List of the specimens of birds in the collection of the British Museum*. Second edition. London: Trustees of the British Museum (Natural History).
- Gray, G.R. 1862. A list of the birds of New Zealand and the adjacent islands. *Ibis* 4: 214–252.
- Gray, G.R. 1871. *Hand-list of genera and species of birds distinguishing those contained in the British Museum*. Part 3. London: The Trustees. xii + 350 pp.
- Grealy, A.; Phillips, M.; Miller, G.; Gilbert, M.T.P.; Rouillard, J.-M.; Lambert, D.; Bunce, M. & Haile, J. 2017. Eggshell palaeogenomics: Palaeognath evolutionary history revealed through ancient nuclear and mitochondrial DNA from Madagascan elephant bird (*Aepyornis* sp.) eggshell. *Molecular Phylogenetics and Evolution* 109: 151–163.
- Green, R.H. 1989. *Birds of Tasmania. An annotated checklist with photographs*. Revised third edition. Launceston: Potoroo Publishing. xvi + 84 pp.
- Greene, B. 1999. Genetic variation and hybridisation of black stilts (*Himantopus novaeseelandiae*) and pied stilts (*H. h. leucocephalus*), order Charadriiformes. *New Zealand Journal of Zoology* 26: 271–277.
- Greene, B.S. 2003. Fence removal benefits gannets (*Morus serrator*) at Muriwai, northwest Auckland, New Zealand. *Notornis* 50: 100–102.
- Greene, T. 1989. Forbes' parakeet on Chatham Island. *Notornis* 36: 326–327.
- Greenway, J.C. 1958. *Extinct and vanishing birds of the world*. Special Publication No. 13. New York: American Committee for International Wild Life Protection. 518 pp.
- Grieve, S. 1913. Notes on some rare New Zealand birds, and exhibition of skins, skeletons and eggs. *Proceedings of the Royal Physical Society Edinburgh* 19: 63–78.
- Griffiths, C.S.; Barrowclough, G.F.; Groth, J.G. & Mertz, L.A. 2007. Phylogeny, diversity, and classification of the Accipitridae based on DNA sequences of the RAG-1 exon. *Journal of Avian Biology* 38: 587–602.
- Grosser, S.; Burrridge, C.P.; Peucker, A.J. & Waters, J.M. 2015. Coalescent modelling suggests recent secondary-contact of cryptic penguin species. *PLoS ONE*: doi: 10.1371/journal.pone.0144966. 17 pp.
- Grosser, S.; Rawlence, N.J.; Anderson, C.N.K.; Smith, I.W.G.; Scofield, R.P. & Waters, J.M. 2016. Invader or resident? Ancient-DNA reveals rapid species turnover in New Zealand little penguins. *Proceedings of the Royal Society B*. 283: doi: 10.1098/rspb.2015.2879. 8 pp.
- Grosser, S.; Robertson, F.; Shepherd, L.D.; Tennyson, A.J.D.; Miskelly, C.M.; Taylor, G.A. & Robertson, B.C. 2021. Phylogenetic affinities of the Whenua Hou diving petrel: implications for conservation. *Emu - Austral Ornithology* 121: 102–112.
- Grosser, S.; Scofield, R.P. & Waters, J.M. 2017. Multivariate skeletal analyses support a taxonomic distinction between New Zealand and Australian *Eudyptula* penguins (Sphenisciformes: Spheniscidae). *Emu* 117: 276–283.
- Guest, R. 1990. Annual report of the Rare Birds Committee 1989–90. *OSNZ News* 55: 6.
- Guest, R. 1991. 1990 report on rare birds in New Zealand. *Notornis* 38: 240–244.
- Guest, R. 1992. Rare bird reports in 1991. *Notornis* 39: 319–321.
- Guest, R. & Bell, B. 1989. Annual report of the Rare Birds Committee 1988–89. *OSNZ News* 51: 5.
- Gummer, H. 2002. First record of willie wagtail (*Rhipidura leucophrys*) in New Zealand. *Notornis* 49: 186–188.
- Gummer, H.; Taylor, G.; Wilson, K.-J. & Rayner, M.J. 2015. Recovery of the endangered Chatham petrel (*Pterodroma axillaris*): a review of conservation management techniques from 1990 to 2010. *Global Ecology and Conservation* 3: 310–323.
- Gunby, E. 2018. First record of Cox's sandpiper (*Calidris x paramelanotos*) for New Zealand. *Notornis* 65: 51–53.
- Gurr, L. 1953. A recent attempt to introduce Virginian quail into New Zealand. *Notornis* 5: 164.
- Gurr, L. & Kinsky, F.C. 1965. The distribution of breeding colonies and status of the red-billed gull in New Zealand and its outlying islands. *Notornis* 12: 223–240.
- Gurunathan, K. 2004 (2nd February). Bird lover – from the Falkland Islands to Kapiti. *Kapiti Observer*: 2.
- Guthrie-Smith, H. 1910. *Birds of the water, wood and waste*. Wellington: Whitcombe & Tombs Ltd. viii + 196 pp.
- Guthrie-Smith, H. 1914. *Mutton birds and other birds*. Christchurch: Whitcombe & Tombs Ltd. vii + 207 pp.
- Guthrie-Smith, H. 1921. *Tutira: the story of a New Zealand sheep station*. Edinburgh: Blackwood. xxi + 400 pp.
- Guthrie-Smith, H. 1925. *Birdlife on island and shore*. Christchurch: Whitcombe & Tombs Ltd. xix + 195 pp.
- Guthrie-Smith, H. 1936. *Sorrows and joys of a New Zealand naturalist*. Dunedin: Reed. 252 pp.
- Guzman, J.R. & Myres, M.T. 1983. The occurrence of shearwaters (*Puffinus* spp.) off the west coast of Canada. *Canadian Journal of Zoology* 61: 2064–2077.
- Habraken, A.M. 1980. A dunlin at Karaka shellbanks. *Notornis* 27: 300–301.
- Habraken, A.M. 1997. In: Parrish, G.R. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1995 to 30 June 1996. *Notornis* 44: 79–109.
- Habraken, T. 2002. Terning over years. *Miranda Naturalists' Trust News* 47: 10.
- Hackett, S.J.; Kimball, R.T.; Reddy, S.; Bowie, R.C.K.; Braun, E.L.; Braun, M.J.; Chojnowski, J.L.; Cox, W.A.; Han, K.L.; Harshman, J.; Huddleston, C.J.; Marks, B.D.; Miglia, K.J.; Moore, W.S.; Sheldon, F.H.; Steadman, D.W.; Witt, C.C. & Yuri, T. 2008. A phylogenomic study of birds reveals their evolutionary history. *Science* 320: 1763–1768.
- Haddrath, O. & Baker, A.J. 2001. Complete mitochondrial DNA genome sequences of extinct birds: ratite phylogenetics and the vicariance biogeography hypothesis. *Proceedings of the Royal Society London series B* 268: 939–945.
- Halse, S.A. 1981. Migration by Hutton's shearwater. *Emu* 81: 42–44.
- Hamel, J. 1970. Hybridisation of eastern and crimson rosellas in Otago. *Notornis* 17: 126–129.
- Hamilton, A. 1909. *Hand-list of birds inhabiting New Zealand and those birds from other countries that have been observed in New Zealand as occasional visitors*. Wellington: Dominion Museum. 19 pp.
- Hamilton, S.A.; Moller, H. & Robertson, C.J.R. 1997. Distribution of sooty shearwater (*Puffinus griseus*) breeding colonies along the Otago coast, New Zealand, with indication of countrywide population trends. *Notornis* 44: 15–25.

- Handbook of the Birds of the World and BirdLife International. 2020. *Handbook of the birds of the world and BirdLife International digital checklist of the birds of the world*. Version 5. Available at http://datazone.birdlife.org/userfiles/file/Species/Taxonomy/HBW-BirdLife_Checklist_v5_Dec20.zip.
- Handly, J.W. 1896. Notes on some species of New Zealand birds. *Transactions and Proceedings of the New Zealand Institute* 28: 360–367.
- Hansen, B.D.; Fuller, R.A.; Watkins, D.; Rogers, D.I.; Clemens, R.S.; Newman, M.; Woehler, E.J. & Weller, D.R. 2016. Revision of the East Asian Australasian Flyway population estimates for 37 listed migratory shorebird species. Unpublished report for the Department of the Environment. Melbourne: BirdLife Australia. 90 pp.
- Haring, E.; Kvaloy, K.; Gjershaug, J.-O.; Rov, N. & Gamauf, A. 2007. Convergent evolution and paraphyly of the hawk-eagles of the genus *Spizaetus* (Aves, Accipitridae) – phylogenetic analyses based on mitochondrial markers. *Journal of Zoological Systematics and Evolutionary Research* 45: 353–365.
- Harper, G.A. 2009. The native forest birds of Stewart Island / Rakiura: patterns of recent declines and extinctions. *Notornis* 56: 63–81.
- Harper, P.C. 1972. The field identification and distribution of the thin-billed prion (*Pachyptila belcheri*) and the Antarctic prion (*Pachyptila desolata*). *Notornis* 19: 140–175.
- Harper, P.C. 1973. The field identification and supplementary notes on the soft-plumaged petrel (*Pterodroma mollis* Gould, 1844). *Notornis* 20: 193–201.
- Harper, P.C. 1976. Breeding biology of the fairy prion (*Pachyptila turtur*) at the Poor Knights Islands, New Zealand. *New Zealand Journal of Zoology* 3: 351–371.
- Harper, P.C. 1980. The field identification and distribution of the prions (genus *Pachyptila*), with particular reference to the identification of storm-cast material. *Notornis* 27: 235–286.
- Harper, P.C. 1983. Biology of the Buller's shearwater (*Puffinus bulleri*) at the Poor Knights Islands, New Zealand. *Notornis* 30: 299–318.
- Harper, P.C. & Imber, M.J. 1985. Buller's shearwater. P. 93. In: Robertson, C.J.R. (Ed.). *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 320 pp.
- Harper, P.C.; Knox, G.A.; Spurr, E.B.; Taylor, R.H.; Wilson, G.J. & Young, E.C. 1984. The status and conservation of birds in the Ross Sea sector of Antarctica. Pp. 593–608. In: Croxall, J.P.; Evans, P.G.H. & Schreiber, R.W. (Eds). *Status and conservation of the world's seabirds. International Council for Bird Protection Technical Publication 2*: i–x + 1–779.
- Harrison, C.J. & Walker, C.A. 1976. A review of the bony-toothed birds (Odontopterygiformes): with descriptions of some new species. *Tertiary Research Special Paper 2*: 1–62.
- Harrison, K.C.; Fennell, J. & Fennell, J.S. 1985. Ruff (*Philomachus pugnax*) at Lake Ellesmere. *Notornis* 32: 332–333.
- Harrison, K.C. & Mulligan, S. 1987. Painted snipe (*Rostratula benghalensis*) at Lake Ellesmere. *Notornis* 34: 78–79.
- Harrison, P. 1983. *Seabirds – an identification guide*. Wellington: A.H. & A.W. Reed. 448 pp.
- Harrison, P. 1984. Letter – shy albatross, tangible field-marks and Dr Bourne. *British Birds* 77: 427–428.
- Harrop, H. 1994. Albatrosses in the Western Palearctic. *Birding World* 7: 241–245.
- Harrow, G. 1976. Some observations of Hutton's shearwater. *Notornis* 23: 269–288.
- Harshman, J.; Braun, E.L.; Braun, M.J.; Huddleston, C.J.; Bowie, R.C.K.; Chojnowski, J.L.; Hackett, S.J.; Han, K.-L.; Kimball, R.T.; Marks, B.D.; Miglia, K.J.; Moore, W.S.; Reddy, S.; Sheldon, F.H.; Steadman, D.W.; Steppan, S.J.; Witt, C.C. & Yuri, T. 2008. Phylogenomic evidence for multiple losses of flight in ratite birds. *Proceedings of the National Academy of Sciences of the USA* 105: 13462–13467.
- Hartley, B.A. 2000. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Haverschmidt, F. & Mees, G.F. 1994. *The birds of Suriname*. Paramaribo: Vaco Uitgeversmaatschappij. 579 pp.
- Hawke, D. 1989. Gould's petrel from Dunedin City. *Notornis* 36: 189–190.
- Hawkins, J.M. & Cook, W. 1994. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 167–188.
- Hawkins, J.M.; Cook, W. & Smit, H. 1992. Brown booby on Farewell Spit gannet colony. *Notornis* 39: 111.
- Hayman, P.; Marchant, J. & Prater, T. 1986. *Shorebirds. An identification guide to the waders of the world*. London & Sydney: Croom Helm. 412 pp.
- He Pātaka Kupu, 2021. He pātaka kupu; te kai a te rangatira. <https://hepatakakupu.nz> [viewed Sep. 2021].
- Heather, B.D. 1978. The cattle egret in New Zealand in 1977. *Notornis* 25: 218–234.
- Heather, B.D. 1982. The cattle egret in New Zealand 1978–1980. *Notornis* 29: 241–268.
- Heather, B.D. 1986. Cattle egret numbers in New Zealand in 1984. *Notornis* 33: 185–188.
- Heather, B.D. 1987. The chestnut-breasted shelduck in New Zealand 1983–1986. *Notornis* 34: 71–77.
- Heather, B.D. 1988. A South Island puzzle – where have all the dabchicks gone? *Notornis* 35: 185–191.
- Heather, B.D. 1991. Cattle egret numbers in New Zealand, 1986 to 1990. *Notornis* 38: 165–169.
- Heather, B.D. & Jones, E.B. 1979. The whiskered tern in New Zealand – first records. *Notornis* 26: 185–195.
- Heather, B.D. & Robertson, H.A. 1996. *The field guide to the birds of New Zealand*. Auckland: Viking. 432 pp.
- Heather, B.D. & Robertson, H.A. 2015. *The field guide to the birds of New Zealand*. Fourth edition. New Zealand: Penguin. 464 pp.
- Hector, J. 1872. On the remains of a gigantic penguin (*Palaeudyptes antarcticus*, Huxley) from the Tertiary rocks on the west coast of Nelson. *Transactions and Proceedings of the New Zealand Institute* 4: 341–346.
- Hedd, A. & Gales, R. 2005. Breeding and overwintering ecology of shy albatrosses in southern Australia: year-round patterns of colony attendance and foraging-trip durations. *Condor* 107: 375–387.
- Hedd, A.; Gales, R. & Brothers, N. 2001. Foraging strategies of shy albatross *Thalassarche cauta* breeding at Albatross Island, Tasmania, Australia. *Marine Ecology Progress Series* 224: 267–282.
- Helbig, A.J.; Knox, A.G.; Parkin, D.T.; Sangster, G. & Collinson, M. 2002. Guidelines for assigning species rank. *Ibis* 144: 518–525.

- Helbig, A.J.; Kocum, A.; Seibold, I. & Braun, M.J. 2005. A multi-gene phylogeny of aquiline eagles (Aves: Accipitriformes) reveals extensive paraphyly at the genus level. *Molecular Phylogenetics and Evolution* 35: 147–164.
- Hellmayr, C.E. & Conover, B. 1948. Catalogue of birds of the Americas and the adjacent islands. *Zoological Series, Field Museum of Natural History* 13(1) No. 2: 1–434.
- Hemmings, A.D. & Chappell, R.G. 1988. Nesting of white-faced herons at the Chatham Islands. *Notornis* 35: 245–247.
- Henderson, L.E. 1968. First record of the emperor penguin in New Zealand. *Notornis* 15: 34–35.
- Henderson, N. & Gill, B.J. 2010. A mid-Pliocene shearwater skull (Aves: Procellariidae: *Puffinus*) from the Taihape Mudstone, central North Island, New Zealand. *New Zealand Journal of Geology and Geophysics* 53: 327–332.
- Hensley, V.H. 1982. A white-necked heron in the far north. *Notornis* 29: 207–208.
- Hermes, N. 1985. *Birds of Norfolk Island*. Norfolk Island: Wonderland Publications. 65 pp.
- Hermes, N.; Evans, O. & Evans, B. 1986. Norfolk Island birds: a review 1985. *Notornis* 33: 141–149.
- Higgins, P.J. (Ed.). 1999. *Handbook of Australian, New Zealand & Antarctic birds. Parrots to dollarbird*. Volume 4. Melbourne: Oxford University Press. 1248 pp.
- Higgins, P.J. & Davies, S.J.J.F. (Eds). 1996. *Handbook of Australian, New Zealand & Antarctic birds. Snipe to pigeons*. Volume 3. Melbourne: Oxford University Press. 1028 pp.
- Higgins, P.J. & Peter, J.M. (Eds). 2002. *Handbook of Australian, New Zealand & Antarctic birds. Pardalotes to shrike-thrushes*. Volume 6. Melbourne: Oxford University Press. 1226 pp.
- Higgins, P.J.; Peter, J.M. & Cowling, S.J. (Eds). 2006. *Handbook of Australian, New Zealand & Antarctic birds. Boatbill to starlings*. Volume 7 (A and B). Melbourne: Oxford University Press. viii + 1984 pp.
- Higgins, P.J.; Peter, J.M. & Steele, W.K. (Eds). 2001. *Handbook of Australian, New Zealand & Antarctic birds. Tyrant-flycatchers to chats*. Volume 5. Melbourne: Oxford University Press. 1269 pp.
- Hill, C. 2006. First record of a stilt sandpiper (*Micropalama himantopus*) in New Zealand. *Notornis* 53: 320–321.
- Hindwood, K.A. 1940. The birds of Lord Howe Island. *Emu* 40: 1–86.
- Hindwood, K.A. 1945. The fleshy-footed shearwater (*Puffinus carneipes*). *Emu* 44: 241–248.
- Hindwood, K.A. 1946. The white-fronted tern (*Sterna striata*) in Australia. *Emu* 45: 179–200.
- Hindwood, K.A. & Cunningham, J.M. 1950. Notes on the birds of Lord Howe Island. *Emu* 50: 23–35.
- Hitchcock, W.B. 1959. A review of “least” terns in Australian waters. *The South Australian Ornithologist* 22: 87–106.
- Hobcroft, D. 2000. Ashmore Reef pelagic trip, October to November 1999. *Australasian Seabird Bulletin* 36: 17–19.
- Hocken, A.G. 1996. In: O’Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island and the Chatham Islands, 1 July 1994 to 30 June 1995. *Notornis* 43: 165–186.
- Hocken, A.G. 2001. In: O’Donnell, C.F.J. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 1997 to 30 June 1998. *Notornis* 48: 90–99.
- Hogg, M.J. & Brown, B. 1966. American whimbrel (Hudsonian curlew) in Firth of Thames. *Notornis* 13: 67–68.
- Holdaway, R.N. 1980. Royal spoonbills nesting near Blenheim. *Notornis* 27: 169.
- Holdaway, R. 1989. Terror of the forests. *New Zealand Geographic* 4: 56–64.
- Holdaway, R.N. 1990. *Harpagornis assimilis* Haast, 1874, a synonym of *Harpagornis moorei* Haast, 1872 (Aves: Accipitridae). *New Zealand Natural Sciences* 17: 39–47.
- Holdaway, R.N. 1991. Systematics and palaeobiology of Haast’s eagle (*Harpagornis moorei* Haast, 1872) (Aves: Accipitridae). Unpublished PhD thesis. Christchurch, New Zealand: University of Canterbury. xiv + 472 pp.
- Holdaway, R.N. 1994a. An exploratory phylogenetic analysis of the genera of the Accipitridae, with notes on the biogeography of the family. Pp. 601–649. In: Meyburg, B.-U. & Chancellor, R.D. (Eds). *Raptor conservation today*. London: World Working Group on Birds of Prey and Owls, and Pica Press. xiv + 799 pp.
- Holdaway, R.N. (Ed.). 1994b. *Chatham Islands ornithology*. Wellington: Ornithological Society of New Zealand. iii + 214 pp.
- Holdaway, R.N. 1995. A fossil record of the black stilt *Himantopus novaeseelandiae* Gould, 1841. *New Zealand Natural Sciences* 22: 69–74.
- Holdaway, R.N. & Anderson, A.J. 2001. Avifauna from the Emily Bay settlement site, Norfolk Island: a preliminary account. *Records of the Australian Museum* 27 (Supplement): 85–100.
- Holdaway, R.N. & Worthy, T.H. 1993. First North Island fossil record of kea, and morphological and morphometric comparison of kea and kaka. *Notornis* 40: 95–108.
- Holdaway, R.N. & Worthy, T.H. 1994. A new fossil species of shearwater *Puffinus* from the late Quaternary of the South Island, New Zealand, and notes on the biogeography and evolution of the *Puffinus gavia* superspecies. *Emu* 94: 201–215.
- Holdaway, R.N. & Worthy, T.H. 1997. A reappraisal of the late Quaternary fossil vertebrates of Pyramid Valley Swamp, North Canterbury, New Zealand. *New Zealand Journal of Zoology* 24: 69–121.
- Holdaway, R.N.; Worthy, T.H. & Tennyson, A.J.D. 2001. A working list of breeding bird species of the New Zealand region at first human contact. *New Zealand Journal of Zoology* 28: 119–187.
- Holdgate, M.W. 1965. The biological report of the Royal Society Expedition to Tristan da Cunha Island. Part III. The fauna of the Tristan da Cunha Islands. *Philosophical Transactions of the Royal Society of London (series B) Biological Sciences* 249: 361–402.
- Holyoak, D.T. & Thibault, J.-C. 1976. La variation géographique de *Gygis alba*. *Alauda* 44: 457–473.
- Horn, P.L. 1980. Probable occurrence of the black bittern *Dupetor flavicollis* (Linnaeus) [sic] in New Zealand. *Notornis* 27: 401–403.
- Horn, P.L. 1983. Subfossil avian deposits from Poukawa, Hawkes Bay, and the first record of *Oxyura australis* (blue-billed duck) from New Zealand. *Journal of the Royal Society of New Zealand* 13: 67–78.
- Horning, D.S. 1976. *The 1974–75 Snares Islands expedition*. University of Canterbury. Unpublished report. Wellington: Department of Lands & Survey. 65 pp.
- Horning, D.S. & Horning, C.J. 1974. Bird records of the 1971–1973 Snares Islands, New Zealand, expedition. *Notornis* 21: 13–24.
- Houde, P.W. 1986. Ostrich ancestors found in the Northern Hemisphere suggest new hypothesis of ratite origins. *Nature* 324: 563–565.

- Houde, P.W. 1988. Paleognathous birds from the early Tertiary of the Northern Hemisphere. *Publications of the Nuttall Ornithological Club* 22: viii + 148 pp.
- Houde, P.W.; Cooper, A.; Leslie, E.; Shand, A.E. & Montano, G.A. 1997. Phylogeny and evolution of 12S rDNA in Gruiformes (Aves). Pp. 117–154. In: Mindell, D.P. (Ed.). *Avian molecular evolution and systematics*. San Diego: Academic Press. 382 pp.
- Houde, P.W. & Olson, S.L. 1981. Paleognathous carinate birds from the early Tertiary of North America. *Science* 214: 1236–1237.
- Houston, D. & Hiscock, J. 2013. Snares penguin: population stable? [Abstract] *New Zealand Journal of Zoology* 40: 236–237.
- Houston, J.E. 1998. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1996 to 30 June 1997. *Notornis* 45: 279–309.
- Houston, J.E. 2000. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 1998 to 30 June 1999. *Notornis* 47: 215–234.
- Houston, J.E. 2001. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 1999 to 30 June 2000. *Notornis* 48: 165–174.
- Howard, H. & Warter, S.L. 1969. A new species of bony-toothed bird (family *Pseudodontornithidae* [sic]) from the Tertiary of New Zealand. *Records of the Canterbury Museum* 8(4): 345–357.
- Howard, P.F. 1954. Banding of the black-browed albatross at Heard Island and Macquarie Island. *Emu* 54: 256.
- Howard, P.J. 1963. Little bittern at Meremere. *Notornis* 10: 317–319.
- Howard, P.J. 1968. A New Zealand record of the northern shoveller. *Notornis* 15: 253.
- Howard, P.J. & McKenzie, H.R. 1965. The small bittern at Meremere. *Notornis* 12: 47–50.
- Howard, R. & Moore, A. 1991. *A complete checklist of the birds of the world*. Second edition. London: Academic Press. xxxiv + 622 pp.
- Howell, A.V. 1974. French-banded lesser broad-billed prion ashore. *Notornis* 21: 391.
- Howell, L. (Comp.). 1985. Classified summarised notes, North Island, 1 July 1983 to 30 June 1984. *Notornis* 32: 118–139.
- Howell, L. (Comp.). 1986. Classified summarised notes, North Island, 1 July 1984 to 30 June 1985. *Notornis* 33: 95–119.
- Howell, L. (Comp.). 1987. Classified summarised notes, North Island, 1 July 1985 to 30 June 1986. *Notornis* 34: 117–147.
- Howell, L. & Esler, L. 2007. Beach patrol scheme – preliminary reports for the years 2002 to 2006. *Southern Bird* 32: 12–14.
- Howell, S.N.G. 2012. *Petrels, albatrosses & storm-petrels of North America; a photographic guide*. Princeton and Oxford: Princeton University Press. 483 pp.
- Howell, S.N.G.; Ainley, D.G.; Webb, S.; Hardesty, B.D. & Spear, L.B. 1996. New information on the distribution of three species of Southern Ocean gadfly petrels (*Pterodroma* spp.). *Notornis* 43: 71–78.
- Howell, S.N.G.; Webb, S. & Spear, L.B. 1996. Identification at sea of Cook's, De Filippi's, and Pycroft's petrels. *Western Birds* 27: 57–64.
- Howell, S.N.G. & Zufelt, K. 2019. *Oceanic birds of the world; a photo guide*. Princeton and Oxford: Princeton University Press. 361 pp.
- Huber, L.N. 1971. Notes on the migration of the Wilson's storm petrel *Oceanites oceanicus* near Eniwetok Atoll Western Pacific Ocean. *Notornis* 18: 38–42.
- Hudson, F.P. 1963. Another Kaipara record of the lesser frigate-bird. *Notornis* 10: 238.
- Hughey, K.F.D. 1989. The status of the red-capped dotterel in New Zealand. *Notornis* 36: 24–26.
- Hull, D.L. 1997. The ideal species concept – and why we can't get it. Pp. 357–380. In: Claridge, M.F.; Dawah, H.A. & Wilson, M.R. (Eds). *Species: the units of biodiversity*. London: Chapman & Hall. 461 pp.
- Hunter, S. 1984. Movements of giant petrels *Macronectes* spp. ringed at South Georgia. *Ringing and Migration* 5: 105–112.
- Hutton, F.W. 1869. Notes on the birds of the Great Barrier Island. *Transactions and Proceedings of the New Zealand Institute* 1: 160–161.
- Hutton, F.W. 1870. Description of two birds new to the fauna of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 2: 78–80.
- Hutton, F.W. 1871. *Catalogue of the birds of New Zealand with diagnoses of species*. Wellington: Geological Survey of New Zealand, James Hughes Printer. ix + 85 pp.
- Hutton, F.W. 1874. Notes on the New Zealand wood-hens (*Ocydromus*). *Transactions and Proceedings of the New Zealand Institute* 6: 110–112.
- Hutton, F.W. 1905. On the occurrence of *Graucalus melanops*, Latham, in New Zealand. *Transactions and Proceedings of the New Zealand Institute* 37: 350–351.
- Hutton, F.W. (undated). Manuscript in the collection of Canterbury Museum. 1 p. [Written on flyleaf of Hutton 1871, as an addendum].
- Hutton, F.W. & Drummond, J. 1904. *The animals of New Zealand; an account of the colony's air-breathing vertebrates*. Christchurch: Whitcombe and Tombs. 381 pp.
- Hutton, F.W. & Drummond, J. 1909. *The animals of New Zealand; an account of the dominion's air-breathing vertebrates*. Third edition. Christchurch: Whitcombe and Tombs. 407 pp.
- Hutton, I. & Priddel, D. 2002. Breeding biology of the black-winged petrel, *Pterodroma nigripennis*, on Lord Howe Island. *Emu* 102: 361–365.
- Huxley, T.H. 1859. On a fossil bird and a fossil cetacean from New Zealand. *Quarterly Journal of the Geological Society of London* 15: 670–677.
- Huynen, L.; Millar, C.D.; Scofield, R.P. & Lambert, D.M. 2003. Nuclear DNA sequences detect species limits in ancient moa. *Nature* 425: 175–178.
- Hyde, N.H.S.; Bell, M. & Seaton, R. 2017. Black kite. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed Feb. 2022].
- Hyde, N. & Matthews, K. 2017. Winter mortality of barn owl (*Tyto alba*) in Northland, New Zealand. *Notornis* 64: 27–30.
- Hyde, N.H.S.; Matthews, K.; Thompson, M. & Gale, R. 2009. First record of barn owls (*Tyto alba*) breeding in the wild in New Zealand. *Notornis* 56: 169–175.

- ICZN [International Commission on Zoological Nomenclature]. 1916. Opinions rendered by the International Commission on Zoological Nomenclature: Opinion 67. One hundred and two bird names placed in the official list of generic names. *Smithsonian Institution Publication, Washington 2409*: 177–182.
- ICZN [International Commission on Zoological Nomenclature]. 1955. Direction 26. Determination of the gender to be attributed to the names of ninety-eight genera of birds placed on the *Official List of Generic Names in Zoology* in the period up to the end of 1936. *Opinions and Declarations Rendered by the International Commission of Zoological Nomenclature 1(C.17)*: 259–272.
- ICZN [International Commission on Zoological Nomenclature]. 1957. Opinion 497. Suppression under the plenary powers of the specific name *munda* Kuhl, 1820, as published in the combination *Proc.[ellaria] munda* and on the same occasion in the combination *Nectris munda* (Class Aves). *Opinions and Declarations Rendered by the International Commission of Zoological Nomenclature 17(19)*: 349–360.
- ICZN [International Commission on Zoological Nomenclature]. 1963. Direction 105. Brisson, 1760, *Ornithologie*: restriction to certain portions of that work of the validation granted under the plenary powers. *Bulletin of Zoological Nomenclature 20*: 343–344.
- ICZN [International Commission on Zoological Nomenclature]. 1997. Opinion 1874. *Aptornis* Owen, 1848 (Aves): conserved as the original spelling. *Bulletin of Zoological Nomenclature 54*: 142–143.
- ICZN [International Commission on Zoological Nomenclature]. 1999. *International code of zoological nomenclature*. Fourth edition. London: The International Trust for Zoological Nomenclature. xxx + 306 pp.
- ICZN [International Commission on Zoological Nomenclature]. 2008. Opinion 2215 (Case 3380). *Streptopelia risoria* (Linnaeus, 1758) (Aves, Columbidae): priority maintained. *Bulletin of Zoological Nomenclature 65(4)*: 234–235.
- ICZN [International Commission on Zoological Nomenclature]. 2011. Opinion 2284. *Anthochaera* Vigors & Horsfield, 1827 and *Philesturnus* Geoffroy Saint-Hilaire, 1832 (Aves): usage conserved by suppression of the generic name *Creadion* Vieillot, 1816. *Bulletin of Zoological Nomenclature 68(3)*: 234–235.
- Illiger, J.K.W. 1811. *Prodromus systematis mammalium et avium: additis terminis zoographicis utriusque classis, eorumque versione Germanica*. Berolino (Berlin): Sumptibus C. Salfeld. Xvii + 301 pp.
- Imber, M.J. 1971. The identity of New Zealand's Canada geese. *Notornis 18*: 253–261.
- Imber, M.J. 1981. Diets of storm petrels *Pelagodroma* and *Garrodia* and of prions *Pachyptila* (Procellariiformes). Pp. 63–88. In: Cooper, J. (Ed.). *Proceedings of the Symposium on Birds of the Sea and Shore*. Cape Town: African Seabird Group. vi + 474 pp.
- Imber, M.J. 1983. The lesser petrels of Antipodes Islands, with notes from Prince Edward and Gough Islands. *Notornis 30*: 283–298.
- Imber, M.J. 1984a. The age of Kerguelen petrels found in New Zealand. *Notornis 31*: 89–91.
- Imber, M.J. 1984b. Migration of white-faced storm-petrels *Pelagodroma marina* in the South Pacific and the status of the Kermadec subspecies. *Emu 84*: 32–35.
- Imber, M.J. 1985a. Flesh-footed shearwater. P. 95. In: Robertson, C.J.R. (Ed.). *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 320 pp.
- Imber, M.J. 1985b. Fluttering shearwater. P. 100. In: Robertson, C.J.R. (Ed.). *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 320 pp.
- Imber, M.J. 1985c. Little shearwater. P. 101. In: Robertson, C.J.R. (Ed.). *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 320 pp.
- Imber, M.J. 1985d. Origins, phylogeny and taxonomy of the gadfly petrels *Pterodroma* spp. *Ibis 127*: 197–229.
- Imber, M.J. 1987. Breeding ecology and conservation of the black petrel (*Procellaria parkinsoni*). *Notornis 34*: 19–39.
- Imber, M.J. 1988. Annual report of the Rare Birds Committee 1987/88. *OSNZ News 47*: 5.
- Imber, M.J. 1994. Seabirds recorded at the Chatham Islands, 1960 to May 1993. *Notornis 41 (Supplement)*: 97–108.
- Imber, M.J. 1999. Diet and feeding ecology of the royal albatross *Diomedea epomophora* – king of the shelf break and inner slope. *Emu 99*: 200–211.
- Imber, M.J. 2003. Recovery of Kerguelen-banded thin-billed prion (*Pachyptila belcheri*) in New Zealand. *Notornis 50*: 238.
- Imber, M.J. 2004. Kermadec petrels (*Pterodroma neglecta*) at Ilha da Trindade, South Atlantic Ocean and in the North Atlantic. *Notornis 51*: 33–40.
- Imber, M.J. 2005. A response to M. Tove's rebuttal of Imber (2004). *Notornis 52*: 58–59.
- Imber, M.J.; Bell, B.D. & Bell, E.A. 2005. Antipodes Islands birds in autumn 2001. *Notornis 52*: 125–132.
- Imber, M.J. & Crockett, D.E. 1970. Sea birds found dead in New Zealand in 1968. *Notornis 17*: 223–230.
- Imber, M.J.; Crockett, D.E.; Gordon, A.H.; Best, H.A.; Douglas, M.E. & Cotter, R.N. 1994. Finding the burrows of Chatham Island taiko *Pterodroma magentae* by radio telemetry. *Notornis (Supplement) 41*: 69–96.
- Imber, M.J. & Jenkins, J.A.F. 1981. The New Caledonian petrel. *Notornis 28*: 149–160.
- Imber, M.J. & Lovegrove, T.G. 1982. Leach's storm petrels (*Oceanodroma l. leucorhoa*) prospecting for nest sites on the Chatham Islands. *Notornis 29*: 101–108.
- Imber, M.J.; McFadden, I.; Bell, E.A. & Scofield, R.P. 2003. Post-fledging migration, age of first return and recruitment, and results of inter-colony translocation of black petrels (*Procellaria parkinsoni*). *Notornis 50*: 183–190.
- Imber, M.J.; Merton, D.V.; West, J.A. & Tennyson, A.J.D. 1991. Juan Fernandez petrels prospecting at the Chatham Islands. *Notornis 38*: 60–62.
- Imber, M.J. & Nilsson, R.J. 1980. South Georgian diving petrels (*Pelecanoides georgicus*) breeding on Codfish Island. *Notornis 27*: 325–330.
- Imber, M.J. & Tennyson, A.J.D. 2001. A new petrel species (Procellariidae) from the south-west Pacific. *Emu 101*: 123–127.
- Imber, M.J.; Tennyson, A.J.D.; Taylor, G.A. & Johnston, P. 1998. A second intact specimen of the Chatham Island taiko (*Pterodroma magentae*). *Notornis 45*: 247–254.
- Imber, M.J.; West, J.A. & Cooper, W.J. 2003. Cook's petrel (*Pterodroma cookii*): historic distribution, breeding biology and effects of predators. *Notornis 50*: 221–230.
- Ingham, S.E. 1959. Banding of giant petrels by the Australian National Antarctic Research Expeditions, 1955–1958. *Emu 59*: 189–200.

- Innes, J.; Hay, R.; Flux, I.; Bradfield, P.; Speed, H. & Jansen, P. 1999. Successful recovery of North Island kokako *Callaeas cinerea wilsoni* populations, by adaptive management. *Biological Conservation* 87: 201–221.
- Innes, J.; Molles, L.E. & Speed, H. 2013. Translocations of North Island kokako, 1981–2011. *Notornis* 60: 107–114.
- Iredale, T. 1913. On some interesting birds in the Vienna Museum. *The Austral Avian Record* 2: 14–32.
- Irestedt, M. & Ohlson, J.I. 2008. The division of the major songbird radiation into Passerida and “core Corvoidea” (Aves: Passeriformes) – the species tree vs. gene trees. *Zoologica Scripta* 37(3): 305–313.
- Issac, N.J.B.; Mallet, J. & Mace, G.M. 2004. Taxonomic inflation: its influence on macroecology and conservation. *Trends in Ecology & Evolution* 19: 464–469.
- Jackson, D.G.; Emslie, S.D. & van Tuinen, M. 2012. Genome skimming identifies polymorphism in tern populations and species. *BMC Research Notes* 5: 94 (11 pp.).
- Jackson, R. & Lyall, H. 1964. An account of the establishment of the Australian coot in the Rotorua district with some notes on its nesting habits. *Notornis* 11: 82–86.
- Jackson, T. 1975. Another gentoo penguin. *Notornis* 22: 82.
- Jackson, W.R. & Olsen, M. 1988. A study of cattle egret numbers in the Horowhenua. *Notornis* 35: 83–85.
- Jacques, S. 2021. First confirmed successful breeding by gull-billed tern in New Zealand. *Birds New Zealand* 30: 18.
- Jadwiszczak, P. 2006a. Eocene penguins of Seymour Island, Antarctica: taxonomy. *Polish Polar Research* 27: 3–62.
- Jadwiszczak, P. 2006b. Eocene penguins of Seymour Island, Antarctica: the earliest record, taxonomic problems and some evolutionary considerations. *Polish Polar Research* 27: 287–302.
- James, D.J. 2000. Comments on albatross taxonomy and species concepts. *Australasian Seabird Bulletin* 36: 13–16.
- Jamieson, S.E.; Tennyson, A.J.D.; Wilson, K.-J.; Crotty, E.; Miskelly, C.M.; Taylor, G.A. & Waugh, S.M. 2016. A review of the distribution and size of prion (*Pachyptila* spp.) colonies throughout New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 27: 56–80.
- Jarvis, E.D.; Mirarab, S.; Aberer, A.J.; Li, B.; Houde, P.; Li, C. Ho, S.Y.W.; Faircloth, B.C.; Nabholz, B.; Howard, J.T.; Suh, A.; Weber, C.C.; da Fonseca, R.R.; Li, J.; Zhang, F.; Li, H.; Zhou, L.; Narula, N.; Liu, L.; Ganapathy, G.; Boussau, B.; Bayzid, M.S.; Zavidovych, V.; Subramanian, S.; Gabaldón, T.; Capella-Gutiérrez, S.; Huerta-Cepas, J.; Rekepalli, B.; Munch, K.; Schierup, M.; Lindow, B.; Warren, W.C.; Ray, D.; Green, R.E.; Bruford, M.W.; Zhan, X.; Dixon, A.; Li, S.; Li, N.; Huang, Y.; Derryberry, E.P.; Bertelsen, M.F.; Sheldon, F.H.; Brumfield, R.T.; Mello, C.V.; Lovell, P.V.; Wirthlin, M.; Cruz Schneider, M.P.; Prosdocimi, F.; Samaniego, J.A.; Velazquez, A.M.V.; Alfaro-Núñez, A.; Campos, P.F.; Petersen, B.; Sichteritz-Ponten, T.; Pas, A.; Bailey, T.; Scofield, P.; Bunce, M.; Lambert, D.M.; Zhou, Q.; Perelman, P.; Driskell, A.; Shapiro, B.; Xiong, Z.; Zeng, Y.; Liu, S.; Li, Z.; Liu, B.; Wu, K.; Xiao, J.; Yinqi, X.; Zheng, Q.; Zhang, Y.; Yang, H.; Wang, J.; Smeds, L.; Rheindt, F.E.; Braun, M.; Fjeldsa, J.; Orlando, L.; Berker, F.K.; Jönsson, K.A.; Johnson, W.; Koepfli, K.-P.; O’Brien, S.; Haussler, D.; Ryder, O.A.; Rahbek, C.; Willerslev, E.; Graves, G.R.; Glenn, T.C.; McCormack, J.; Burt, D.; Ellegren, H.; Alström, P.; Edwards, S.V.; Stamatakis, A.; Mindell, D.P.; Cracraft, J.; Braun, E.L.; Warnow, T.; Jun, W.; Gilbert, M.T.P. & Zhang, G. 2014. Whole-genome analyses resolve early branches in the tree of life of modern birds. *Science* 346: 1320–1331. doi: 10.1126/science.1253451
- Jehl, J.R. 1973. The distribution of marine birds in Chilean waters in winter. *Auk* 90: 114–135.
- Jehl, J.R. 1974. The near-shore avifauna of the middle American west coast. *Auk* 91: 681–699.
- Jenkins, J. 1968. Does the greater shearwater reach the southwest Pacific? *Notornis* 15: 214–215.
- Jenkins, J. 1981. Birds seen at sea around New Zealand during the 1978 BAAS expedition. *Australasian Seabird Group Newsletter* 16: 3–16.
- Jenkins, J. & Croxall, J.P. 1970. Sightings of white-bellied storm-petrels in coastal waters. *Notornis* 17: 75–76.
- Jenkins, J.A.F. 1962. Sooty tern off Cape Reinga. *Notornis* 9: 295.
- Jenkins, J.A.F. 1979. Observations on the wedge-tailed shearwater (*Puffinus pacificus*) in the southwest Pacific. *Notornis* 26: 331–348.
- Jenkins, J.A.F. 1982a. Kermadec storm petrel. *Notornis* 29: 112.
- Jenkins, J.A.F. 1982b. A note on the winter distribution of the white-headed petrel. *Sea Swallow* 31: 37–38.
- Jenkins, J.A.F. 1986. The seabirds of Fiji. An account based on the literature and recent observations. *Australasian Seabird Group Newsletter* 25: iii + 1–70.
- Jenkins, J.A.F. 1988. The distribution of Buller’s shearwater (*Puffinus bulleri*) in New Zealand coastal waters and in the Tasman Sea. *Notornis* 35: 203–215.
- Jenkins, J.A.F. & Cheshire, N.G. 1982. The black-winged petrel (*Pterodroma nigripennis*) in the south-west Pacific and the Tasman Sea. *Notornis* 29: 293–310.
- Jenkins, J.A.F.; Lovegrove, T.G. & Sibson, R.B. 1986. Red-necked phalarope at Mangere, Manukau Harbour. *Notornis* 33: 191–192.
- Jenkins, P. 1982. Wood duck in Marlborough. *Notornis* 29: 22.
- Jenkins, R. 1974. A new giant penguin from the Eocene of Australia. *Palaeontology* 17: 291–310.
- Jiguet, F. 2002. Taxonomy of the kelp gull *Larus dominicanus* Lichtenstein inferred from biometrics and wing plumage pattern, including two previously undescribed subspecies. *Bulletin of the British Ornithologists’ Club* 122: 50–71.
- Jiguet, F.; Capainolo, P. & Tennyson, A. 2012. Taxonomy of the kelp gull *Larus dominicanus* Lichtenstein revisited with sex-separated analyses of biometrics and wing tip patterns. *Zoological Studies* 51: 881–892.
- Johansson, U.S.; Pasquet, E. & Irestedt, M. 2011. The New Zealand thrush: an extinct oriole. *PLOS One* 6: e24317. 6 pp.
- Johnsgard, P.A. 1968. *Waterfowl: their biology and natural history*. Lincoln (Nebraska): University of Nebraska Press. xx + 218 pp.
- Johnsgard, P.A. 1993. *Cormorants, darters, and pelicans of the world*. Washington & London: Smithsonian Institution Press. xvi + 445 pp.
- Johnson, K.M. 1997. In: Parrish, G.R. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1995 to 30 June 1996. *Notornis* 44: 79–109.
- Johnson, K.P. & Clayton, D.H. 2003. The biology, ecology, and evolution of chewing lice. Pp. 449–476. In: Price, R.D.; Hellenthal, R.A.; Palma, R.L.; Johnson, K.P. & Clayton, D.H. *The chewing lice: world checklist and biological overview*. Illinois Natural History Survey Special Publication 24: x + 501 pp.

- Johnson, K.P. & Sorenson, M.D. 1998. Comparing molecular evolution in two mitochondrial protein coding genes (cytochrome *b* and ND2) in the dabbling ducks (tribe: Anatini). *Molecular Phylogenetics and Evolution* 10: 82–94.
- Johnson, K.P. & Sorenson, M.D. 1999. Phylogeny and biogeography of dabbling ducks (genus: *Anas*): a comparison of molecular and morphological evidence. *Auk* 116: 792–805.
- Johnstone, G.W. 1978. Letter. *Notornis* 25: 356.
- Johnstone, R.E. 1982. Distribution, status and variation of the silver gull *Larus novaehollandiae* Stephens, with notes on the *Larus cirrocephalus* species-group. *Records of the Western Australian Museum* 10: 133–165.
- Johnstone, R.E. & Darnell, J.C. 1997. Description of a new subspecies of boobook owl *Ninox novaeseelandiae* (Gmelin) from Roti Island, Indonesia. *Western Australian Naturalist* 21: 161–173.
- Jones, C.W.; Risi, M.M.; Osborne, A.M.; Ryan, P.G. & Oppel, S. 2021. Mouse eradication is required to prevent local extinction of an endangered seabird on an oceanic island. *Animal Conservation* 24: 637–645.
- Jones, E.B. 1964. Cattle egrets near Levin. *Notornis* 11: 194–195.
- Joseph, L.; Toon, A.; Schirtzinger, E.E.; Wright, T.F. & Schodde, R. 2012. A revised nomenclature and classification for family-group taxa of parrots (Psittaciformes). *Zootaxa* 3205: 26–40.
- Jouanin, C. & Mougou, J.-L. 1979. Order Procellariiformes. Pp. 48–121. In: Mayr, E. & Cottrell, G.W. (Eds). *Check-list of birds of the world*. Volume 1. Second edition. Cambridge, Massachusetts: Museum of Comparative Zoology. xviii + 547 pp.
- Jouanin, C.; Roux, F. & Zino, A. 1977. Sur les premiers résultats du baguage des puffins cendres aux îles Selvagens. *L'Oiseau et la Revue Française d'Ornithologie* 47: 351–358.
- Jouventin, P. 1982. Visual and vocal signals in penguins, their evolution and adaptive characters. *Journal of Comparative Ethology (Supplement)* 24: 1–149. [Also as *Advances in Ethology* 24: 1–149.]
- Jouventin, P. 1990. Shy albatrosses *Diomedea cauta salvini* breeding on Penguin Island, Crozet Archipelago, Indian Ocean. *Ibis* 132: 126–127.
- Jouventin, P.; Cuthbert, R.J. & Ottvall, R. 2006. Genetic isolation and divergence in sexual traits: evidence for the northern rockhopper penguin *Eudyptes moseleyi* being a sibling species. *Molecular Ecology* 15: 3413–3423.
- Jouventin, P.; Mougou, J.-L.; Stahl, J.-C. & Weimerskirch, H. 1985. Comparative biology of the burrowing petrels of the Crozet Islands. *Notornis* 32: 157–220.
- Jouventin, P.; Stahl, J.-C.; Weimerskirch, H. & Mougou, J.L. 1984. The seabirds of the French Subantarctic Islands & Adelie Land, their status and conservation. Pp. 609–625. In: Croxall, J.P.; Evans, P.G.H. & Schreiber, R.W. (Eds). Status and conservation of the world's seabirds. *International Council for Bird Protection Technical Publication* 2: i–x + 1–779.
- Jowett, C.R. 1980. White-eyed duck at Western Springs. *Notornis* 27: 392.
- Jowett, C.R. 1995. In: Parrish, G.R. & Lock, W.J. (Comps). Classified summarised notes, North Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 145–173.
- Jowett, C. 1997. Seabird observations around New Zealand: May 1995–April 1996. *Sea Swallow* 46: 57–63.
- Kaigler, C.G. 1968. Red-necked avocet in Westland. *Notornis* 15: 123.
- Kakishima, S. & Morimoto, T. 2015. First record of dusky woodswallow (*Artamus cyanopterus*) in New Zealand. *Notornis* 62: 231–232.
- Kear, J. (Ed.). 2005. *Ducks, geese and swans*. Oxford: Oxford University Press. 908 pp.
- Kear, J. & Scarlett, R.J. 1970. The Auckland Islands merganser. *Wildfowl* 21: 78–86.
- Kearns, A.M.; Joseph, L. & Cook, L.G. 2013. A multilocus coalescent analysis of the speciation history of the Australo-Papuan butcherbirds and their allies. *Molecular Phylogenetics and Evolution* 66: 941–952.
- Kearns, A.M.; Joseph, L.; Thierry, A.; Malloy, J.F.; Cortes-Rodriguez, M.N. & Omland, K.E. 2019. Diversification of *Petroica* robins across the Australo-Pacific region: first insights into the phylogenetic affinities of New Guinea's highland robin species. *Emu – Austral Ornithology* 119: 205–217.
- Kearns, A.M.; Malloy, J.F.; Gobbett, M.; Thierry, A.; Joseph, L.; Driskell, A. & Omland, K.E. 2019. Nuclear introns help unravel the diversification history of the Australo-Pacific *Petroica* robins. *Molecular Phylogenetics and Evolution* 131: 48–54.
- Kearvell, J.C.; Grant, A.D. & Boon, W.M. 2003. The orange-fronted parakeet (*Cyanoramphus malherbi*) is a distinct species: a review into its taxonomy and systematic relationships within the genus *Cyanoramphus*. *Notornis* 50: 27–35.
- Keeley, B.R. 1988. Classified summarised notes, North Island, 1 July 1986 to 30 June 1987. *Notornis* 35: 285–310.
- Keeley, B.R. 1989. Classified summarised notes, North Island, 1 July 1987 to 30 June 1988. *Notornis* 36: 197–222
- Keith, K. & Hines, M.P. 1958. New and rare species of birds at Macquarie Island during 1951 and 1957. *CSIRO Wildlife Research* 3: 50–53.
- Kennedy, M. & Page, R.D.M. 2002. Seabird supertrees: combining partial estimates of procellariiform phylogeny. *Auk* 119: 88–108.
- Kennedy, M. & Spencer, H.G. 2000. Phylogeny, biogeography and taxonomy of Australasian teals. *Auk* 117: 154–163.
- Kennedy, M. & Spencer, H.G. 2014. Classification of the cormorants of the world. *Molecular Phylogenetics and Evolution* 79: 249–257.
- Kennington, S.R. 1963. Adelie penguin from Marlborough coast. *Notornis* 10: 234.
- Kerr, I.S. 1976. *Campbell Island – a history*. Wellington: A.H. & A.W. Reed. xii + 182 pp.
- Kerry, K.R.; Horne, R.S.C. & Dorward, D.F. 1983. Records of the short-tailed shearwater *Puffinus tenuirostris* in Antarctic waters. *Emu* 83: 35–37.
- Kimball, R.T.; St. Mary, C.M. & Braun, E.L. 2011. A macroevolutionary perspective on multiple sexual traits in the Phasianidae (Galliformes). *International Journal of Evolutionary Biology* 2011, Article ID 423938, 16 pp. doi: 10.4061/2011/423938.
- King, S. & Robertson, C.J.R. 1999. Rare penguin at Pitt Island. *OSNZ News* 90: 10.
- King, W.B. 1967. *Preliminary Smithsonian identification manual – seabirds of the tropical Pacific Ocean*. Washington, D.C.: Smithsonian Institution. xxxii + 126 pp.
- King, W.B. 1974. Wedge-tailed shearwater (*Puffinus pacificus*). Pp. 53–95. In: King, W.B. (Ed.). Pelagic studies of seabirds in the central and eastern Pacific Ocean. *Smithsonian Contributions to Zoology* 158: i–iv + 1–277.
- Kinsky, F.C. 1963. The southern black-backed gull (*Larus dominicanus*) Lichtenstein. *Records of the Dominion Museum* 4: 149–219.

- Kinsky, F.C. 1969. New and rare birds on Campbell Island. *Notornis* 16: 225–236.
- Kinsky, F.C. 1970a. The “Porirua yellowlegs” again. *Notornis* 17: 74.
- Kinsky, F.C. 1970b. “Spotted shags” in Westland. *Notornis* 17: 102–104.
- Kinsky, F.C. 1971. Recent occurrences of rare petrels in New Zealand. *Notornis* 18: 215–216.
- Kinsky, F.C. 1977a. Rare Birds Committee annual report for the period June 1976–May 1977. *Notornis* 24: 191–192.
- Kinsky, F.C. 1977b. Annual General Meeting 1977: a later report, Rare Birds Committee. *Notornis* 24: 294.
- Kinsky, F.C. & Falla, R.A. 1976. A subspecific revision of the Australasian blue penguin (*Eudyptula minor*) in the New Zealand area. *National Museum of New Zealand Records* 1: 105–126.
- Kinsky, F.C. & Fowler, J.A. 1973. A Manx shearwater (*Puffinus p. puffinus*) in New Zealand. *Notornis* 20: 14–20.
- Kinsky, F.C. & Jones, E.B. 1972. Northern shovelers (*Anas clypeata*) in New Zealand. *Notornis* 19: 105–110.
- Kinsky, F.C. & Yaldwyn, J.C. 1981. The bird fauna of Niue Island, south-west Pacific, with special notes on the white-tailed tropic bird and golden plover. *National Museum of New Zealand Miscellaneous Series* 2: 1–49.
- Kirk, T. 1896. The displacement of species in New Zealand. *Transactions and Proceedings of the New Zealand Institute* 28: 1–27.
- Kirwan, G.M. & Collar, N.J. 2020. Reflections on *Thinornis rossii*. *Notornis* 67: 773–781.
- Knapp, M.; Thomas, J.E.; Haile, J.; Prost, S.; Ho, S.Y.W.; Dussex, N.; Cameron-Christie, S.; Kardailsky, O.; Barnett, R.; Bunce, M.; Thomas, M.; Gilbert, P. & Scofield, R.P. 2019. Mitogenomic evidence of close relationships between New Zealand’s extinct giant raptors and small-sized Australian sister-taxa. *Molecular Phylogenetics and Evolution* 134: 122–128.
- Knox, A.G.; Collinson, M.; Helbig, A.J.; Parkin, D.T. & Sangster, G. 2002. Taxonomic recommendations for British birds. *Ibis* 144: 707–710.
- Knox, A.G.; Helbig, A.J.; Parkin, D.T. & Sangster, G. 2001. The taxonomic status of lesser redpoll. *British Birds* 94: 260–267.
- König, C. & Weick, W. 2008. *Owls. A guide to the owls of the world*. Second edition. London: Christopher Helm. 528 pp.
- Ksepka, D.T. 2009. Broken gears in the avian molecular clock: new phylogenetic analyses support stem galliform status for *Gallinuloides wyomingensis* and rallid affinities for *Amitabha urbsinterdictensis*. *Cladistics* 25: 173–197.
- Ksepka, D.T.; Bertelli, S. & Giannini, N.P. 2006. The phylogeny of the living and fossil Sphenisciformes (penguins). *Cladistics* 22: 412–441.
- Ksepka, D.T. & Clarke, J.A. 2010. The basal penguin (Aves: Sphenisciformes) *Perudyptes devriesi* and a phylogenetic evaluation of the penguin fossil record. *Bulletin of the American Museum of Natural History* 337: 1–77.
- Ksepka, D.T.; Fordyce, R.E.; Ando, T. & Jones, C.M. 2012. New fossil penguins (Aves: Sphenisciformes) from the Oligocene of New Zealand reveal the skeletal plan of stem penguins. *Journal of Vertebrate Paleontology* 32: 235–254.
- Kuhl, H. 1820. Beiträge zur Kenntnifs der Procellarien. Pp. 135–149. In: Kuhl, H. (Ed.). *Beiträge zur Zoologie und vergleichenden Anatomie*. Part 1. Frankfurt am Main: Hermannsche Buchhandlung. 152 pp.
- Kuhl, H.; Frankl-Vilches, C.; Bakker, A.; Mayr, G.; Nikolaus, G.; Boerno, S.T.; Klages, S.; Timmermann, B. & Gahr, M. 2021. An unbiased molecular approach using 3’UTRs resolves the avian family-level tree of life. *Molecular Biology and Evolution* 38: 108–127. doi: 10.1093/molbev/msaa191
- Kuroda, N. 1991. Distributional patterns and seasonal movements of Procellariiformes in the North Pacific. *Journal of the Yamashima Institute for Ornithology* 23: 23–84.
- Kushlan, J.A. & Hancock, J.A. 2005. *Bird families of the world – herons*. Oxford: Oxford University Press. xviii + 433 pp.
- La Cépède, B.G.E. 1799. *Discours de l’ouverture et de clôture du cours d’histoire naturelle donné dans le Muséum National d’Histoire Naturelle, l’an VII de la République, et tableaux méthodiques des mammifères et des oiseaux*. Paris: Plassan. 94 pp.
- Lacey, A.R. 1979. A white-necked heron near Matamata. *Notornis* 26: 97.
- Lalas, C. 1979. Seasonal movements of black-fronted terns. *Notornis* 26: 69–72.
- Lalas, C.; Hamel, J.; Tennyson, A.J.D. & Worthy, T.H. 2014. Southern extensions for Holocene records of Australian pelican (*Pelecanus conspicillatus*) and New Zealand musk duck (*Biziura delautouri*) in New Zealand. *Notornis* 61: 106–108.
- Lalas, C. & Heather, B.D. 1980. The morphology, moult and taxonomic status of the black-fronted tern. *Notornis* 27: 45–67.
- Lamb, R.C. 1964. *Birds, beasts and fishes: the first hundred years of the North Canterbury Acclimatisation Society*. Christchurch: North Canterbury Acclimatisation Society. 184 pp.
- Lambert, D.M. 1999. *Genetic variation in weka*. Unpublished report 2154. Ecology Institute of Natural Resources, Massey University. Palmerston North: New Zealand Department of Conservation, 32pp.
- Lambert, D.M.; Ritchie, P.A.; Millar, C.D.; Holland, B.; Drummond, A.J. & Baroni, C. 2002. Rates of evolution in ancient DNA from Adelie penguins. *Science* 295: 2270–2273.
- Lambrecht, K. 1933. *Handbuch der Palaeornithologie*. Berlin: Verlag von Gebruder Borntraeger. xix + 1024 pp, 4 pls.
- Lamey, T.C. 1990. Snares crested penguin in the Falkland Islands. *Notornis* 37: 78.
- Lane, B.A. & Rogers, D.I. 2000. The Australian painted snipe, *Rostratula (benghalensis) australis*: an endangered species? *Stilt* 36: 26–34.
- Lane, S.G. 1983. Short-tailed shearwater on Figure of Eight Island, Archipelago of the Recherche, Western Australia. *Emu* 83: 37–38.
- Lanfear, R. & Bromham, L. 2011. Estimating phylogenies for species assemblages: a complete phylogeny for the past and present native birds of New Zealand. *Molecular Phylogenetics & Evolution* 61: 958–963. doi:10.1016/j.ympev.2011.07.018.
- Langlands, P.A. 1989. Petrels at sea off south Westland in June–July. *Notornis* 36: 266.
- Langlands, P.A. 1994. In: O’Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 167–188.
- Langlands, P.A. 1995. In: O’Donnell, C.F.J. (Comp.). Classified summarised notes, South Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 263–279.
- Latham, J. 1782. *A general synopsis of birds*. Volume 1. London: B. White. vi + 788 pp., 35 pls.
- Latham, J. 1783. *A general synopsis of birds*. Volume 2. London: B. White. ii + 810 pp., 34 pls.
- Latham, J. 1785. *A general synopsis of birds*. Volume 3. London: B. White. iii + 624 pp., 37 pls.

- Latham, P.C.M. 1979. An Arctic tern at the Tarawera River mouth. *Notornis* 26: 63–67.
- Latham, P.C.M. 1980. Yellow-nosed mollymawks in the Bay of Plenty. *Notornis* 27: 393–394.
- Latham, P.C.M. 1981. Black-fronted terns wintering in the Bay of Plenty. *Notornis* 28: 221–239.
- Latham, P.C.M. 1986. A common tern in the Bay of Plenty. *Notornis* 33: 69–76.
- Latham, P.C.M. 2003. An update on the grey ternlet (*Procelsterna cerulea albivitta*) in the Bay of Plenty. *Notornis* 50: 118–121.
- Latham, P.C.M.; Marin, M. & Powlesland, R.G. 2004. Chatham albatross (*Thalassarche eremita*) off the Chilean coast. *Notornis* 51: 47–49.
- Lauder, C.S. 1978. Breeding of Australian little grebe. *Notornis* 25: 251–252.
- Lawrie, D.A. & Habraken, A.M. 2001. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 1999 to 30 June 2000. *Notornis* 48: 165–174.
- Lawton, K.; Robertson, G.; Valencia, J.; Wienecke, B. & Kirkwood, R. 2003. The status of black-browed albatrosses *Thalassarche melanophrys* at Diego de Almagro Island, Chile. *Ibis* 145: 502–505.
- Le Corre, M. & Jouventin, P. 1999. Geographical variation in the white-tailed tropicbird *Phaethon lepturus*, with the description of a new subspecies endemic to Europa Island, southern Mozambique Channel. *Ibis* 141: 233–239.
- Leach, W.E. 1819. Eleventh room, upper floor. Pp. 63–67. In: Anon. (Ed.). *Synopsis of the contents of the British Museum*. [With an introductory statement of the rise and progress of the museum, and of its existing constitution, and an analytical syllabus of the library, etc.] Fifteenth edition. London: British Museum. 162 pp.
- Leach, W.E. 1820. Eleventh room, upper floor. Pp. 65–70. In: Anon. (Ed.). *Synopsis of the contents of the British Museum*. [With an introductory statement of the rise and progress of the museum, and of its existing constitution, and an analytical syllabus of the library, etc.] Seventeenth edition. London: British Museum. 166 pp.
- Lee, M. 2005. Failed attempts to reintroduce bellbirds (*Anthornis melanura*) to Waiheke Island, Hauraki Gulf, 1988–91. *Notornis* 52: 150–157.
- Lee, M. & Bruce, M.D. 2019. The ‘French kiwi’ *Dromiceius novaezelandiae* first recorded and named by R.P. Lesson in the Bay of Islands, April 1824. *Notornis* 66: 168–173.
- Leech, T.J.; Craig, E.; Beaven, B.; Mitchell, D.K. & Seddon, P.J. 2007. Reintroduction of rifleman *Acanthisitta chloris* to Ulva Island, New Zealand: evaluation of techniques and population persistence. *Oryx* 41: 369–375.
- Lerner, H.L. & Mindell, D.P. 2005. Phylogeny for eagles, Old World vultures and other Accipitridae taxa based on nuclear and mitochondrial DNA. *Molecular Phylogenetics and Evolution* 37: 327–346.
- Lifjeld, J.T. & Bjerke, B.-A. 1996. Evidence for assortative pairing by the *cabaret* and *flammea* subspecies of the common redpoll *Carduelis flammea* in SE Norway. *Fauna Norvegica series C, Cinclus* 19: 1–8.
- Lindsay, C.J. 1963. Some notes on the birds of Norfolk Island. *Notornis* 10: 303–305.
- Linnaeus, C. 1766. *Systema naturae sive regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis*. Volume 1, part 1. Twelfth edition. Holmiae (Stockholm): Laurentii Salvii. 532 pp.
- Liu, G.; Zhou, L. & Zhao, G. 2019. Complete mitochondrial genomes of five raptors and implications for the phylogenetic relationships between owls and nightjars. *PeerJ Preprints* 7:e27478v1. doi: 10.7287/peerj.preprints.27478v1
- Livezey, B.C. 1989. Phylogenetic relationships of several subfossil Anseriformes of New Zealand. *Occasional Papers of the Museum of Natural History of the University of Kansas* 128: 1–25.
- Livezey, B.C. 1990. Evolutionary morphology of flightlessness in the Auckland Islands teal. *Condor* 92: 639–673.
- Livezey, B.C. 1991. A phylogenetic analysis and classification of Recent dabbling ducks (tribe Anatini) based on comparative morphology. *Auk* 108: 471–507.
- Livezey, B.C. 1996a. A phylogenetic analysis of geese and swans (Anseriformes: Anserinae), including selected fossil species. *Systematic Biology* 45: 415–450.
- Livezey, B.C. 1996b. A phylogenetic analysis of modern pochards (Anatidae: Aythyini). *Auk* 113: 74–93.
- Livezey, B.C. 1996c. A phylogenetic reassessment of the tadornine–anatine divergence (Aves: Anseriformes: Anatidae). *Annals of the Carnegie Museum* 65: 27–88.
- Livezey, B.C. 1997a. A phylogenetic analysis of modern sheldgeese and shelducks (Anatidae: Tadornini). *Ibis* 139: 51–66.
- Livezey, B.C. 1997b. A phylogenetic classification of waterfowl (Aves: Anseriformes), including selected fossil species. *Annals of the Carnegie Museum* 67: 457–496.
- Livezey, B.C. 1998. A phylogenetic analysis of the Gruiformes (Aves) based on morphological characters, with an emphasis on the rails (Rallidae). *Philosophical Transactions: Biological Sciences (B)* 353: 2077–2151.
- Livezey, B.C. & Martin, L.D. 1988. The systematic position of the Miocene anatid *Anas*[?] *blanchardi* Milne-Edwards. *Journal of Vertebrate Paleontology* 8: 196–211.
- Livezey, B.C. & Zusi, R.L. 2007. Higher-order phylogeny of modern birds (Theropoda, Aves: Neornithes) based on comparative anatomy. II. Analysis and discussion. *Zoological Journal of the Linnean Society* 149: 1–95.
- Lockstone, R.H. 1967. Lesser frigate bird over Waiheke. *Notornis* 14: 224.
- Loh, G. 1990. In: Taylor, G.A. (Comp.). Classified summarised notes, North Island, 1 July 1988 to 30 June 1989. *Notornis* 37: 183–235.
- Loh, G. 2000. A mainland breeding population of fairy prions (*Pachyptila turtur*), South Island, New Zealand. *Notornis* 47: 119–122.
- Lombal, A.J.M.; Salis, A.T.; Mitchell, K.J.; Tennyson, A.J.D.; Shepherd, L.D.; Worthy, T.H.; Woehler, E.J.; Austin, J.J. & Burridge, C.P. 2020. Using ancient DNA to quantify losses of genetic and species diversity in seabirds: a case study of *Pterodroma* petrels from a Pacific island. *Biodiversity and Conservation* 29: 2361–2375.
- Long, J.L. 1981. *Introduced birds of the world*. London: David & Charles. 528 pp.
- Long, R. 2017. A survey of Fiordland crested penguins / tawaki (*Eudyptes pachyrhynchus*) from Cascade River to Martins Bay, South Westland, New Zealand, 2014. *Notornis* 64: 206–210.
- Long, R. & Litchwark, S. 2021. A survey of Fiordland crested penguins (*Eudyptes pachyrhynchus*): northeast Stewart Island/Rakiura, New Zealand, September 2019. *Notornis* 68: 183–187.
- Lovegrove, T.G. 1978. Seabird observations between New Zealand and Fiji. *Notornis* 25: 291–298.

- Lowe, K.W. & Richards, G.C. 1991. Morphological variation in the sacred ibis *Threskiornis aethiopicus* superspecies complex. *Emu* 91: 41–45.
- Lusk, C.H. & Lusk, J.R. 1981. The New Zealand dabchick on Lake Rotoiti. *Notornis* 28: 203–208.
- Lyle, G.W. 1973. Australian little grebe on Lake Okareka. *Notornis* 20: 279–280.
- Macdonald, J.D. & Lawford, P.A. 1954. Sight record of birds in the Pacific: compiled from the bird log kept during recent cruises of H.M.S. *Challenger*. *Emu* 54: 7–28.
- Macdonald, N. 1953. Inquiry into the status of fairy tern in N.Z. – interim report. *Notornis* 5: 84.
- Macdonald, N. 1954. Linnet in South Canterbury. *Notornis* 5: 252.
- Macdonald, R. 1968. The Australian coot established on Virginia Lake, Wanganui. *Notornis* 15: 234–237.
- Madsen, C.S.; McHugh, K.P. & de Kloet, S.W.R. 1988. A partial classification of the waterfowl (Anatidae) based on single-copy DNA. *Auk* 105: 452–459.
- Maloney, R. 1988. A ruff at Lake Wainono. *Notornis* 35: 328.
- Maloney, R. & Watola, G. 1989. A second grey phalarope at Lake Wainono. *Notornis* 36: 88.
- Mantell, G.A. 1848. On the fossil remains of birds collected in various parts of New Zealand by Mr Walter Mantell, of Wellington. *The Quarterly Journal of the Geological Society of London* 4: 225–238.
- Māori Dictionary. 2003–2021. <https://maoridictionary.co.nz> [viewed Aug. 2021].
- Marchant, S. & Higgins, P.J. (Eds). 1990. *Handbook of Australian, New Zealand & Antarctic birds. Ratites to ducks*. Volume 1 (A and B). Melbourne: Oxford University Press. 1400 pp.
- Marchant, S. & Higgins, P.J. (Eds) 1993. *Handbook of Australian, New Zealand & Antarctic birds. Raptors to lapwings*. Volume 2. Melbourne: Oxford University Press. 984 pp.
- Marples, B.J. 1942a. Notes on cuckoos. *Bulletin of the Ornithological Society of New Zealand* 2: 10–11.
- Marples, B.J. 1942b. A study of the little owl, *Athene noctua*, in New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 72: 237–252.
- Marples, B.J. 1946a. List of the birds of New Zealand. *New Zealand Bird Notes 1 (Supplement)*: 1–7.
- Marples, B.J. 1946b. Notes on some neognathous bird bones from the early Tertiary of New Zealand. *Transactions of the Royal Society of New Zealand* 76: 132–134.
- Marples, B.J. 1952. Early Tertiary penguins of New Zealand. *New Zealand Geological Survey – Palaeontological Bulletin* 20: 66.
- Marples, B.J. 1962. Observations on the history of penguins. Pp. 408–416. In: Leeper, G.W. (Ed.) *The evolution of living organisms: a symposium to mark the centenary of Darwin's "Origin of species" and of the Royal Society of Victoria, held in Melbourne, December, 1959*. Parkville, Victoria: Melbourne University Press. 459 pp.
- Marsh, N. & Lovei, G.L. 1997. The first confirmed breeding by the nankeen night heron (*Nycticorax caledonicus*) in New Zealand. *Notornis* 44: 152–155.
- Marshall, Y.M.; Scarlett, R.J. & Sutton, D.G. 1987. Bird species present on the southwest coast of Chatham Island in the 16th Century AD. *Working Papers in Anthropology, Archaeology Linguistics & Maori Studies*. Auckland: Department of Anthropology, University of Auckland. 23 pp.
- Marthinsen, G.; Wennerberg, L. & Lifjeld, J.T. 2007. Phylogeography and subspecies taxonomy of dunlins (*Calidris alpina*) in western Palearctic analysed by DNA microsatellites and amplified fragment length polymorphism markers. *Biological Journal of the Linnean Society* 92: 713–726.
- Martin, J.S. & Bartlett, J. 1963. Sulphur-crested cockatoos near Hunterville. *Notornis* 10: 241.
- Martínez-Gómez, J.E.; Noemí, M.-F.; Sehgal, R.N.M. & Escalante, P. 2015. Phylogenetic placement of the critically endangered Townsend's shearwater (*Puffinus auricularis auricularis*): evidence for its conspecific status with Newell's shearwater (*Puffinus a. newelli*) and a mismatch between genetic and phenotypic differentiation. *Journal of Ornithology* 156: 1025–1034.
- Martínez-Vilalta, A. & Motis, A. 1992. Family Ardeidae (herons). Pp. 375–429. In: del Hoyo, J.; Elliott, A. & Sargatal, J. (Eds). *Handbook of the birds of the world. Ostrich to ducks*. Volume 1. Barcelona: Lynx Edicions. 696 pp.
- Mason, I.J. 1997. Cuculidae. Pp. 219–254. In: Schodde, R.; Mason, I.J. Aves (Columbidae to Coraciidae). In: Houston, W.K. & Wells, A. (Eds). *Zoological catalogue of Australia*. Volume 37.2. Melbourne: CSIRO Publishing. xiii + 440 pp.
- Massaro, M. & Blair, D. 2003. Comparison of population numbers of yellow-eyed penguins, *Megadyptes antipodes*, on Stewart Island and on adjacent cat-free islands. *New Zealand Journal of Ecology* 27: 107–113.
- Mather, E.K.; Tennyson, A.J.D.; Scofield, R.P.; De Pietri, V.L.; Hand, S.J.; Archer, M.; Handley, W.D. & Worthy, T.H. 2019. Flightless rails (Aves: Rallidae) from the early Miocene St Bathans Fauna, Otago, New Zealand. *Journal of Systematic Palaeontology* 17: 423–449.
- Mathews, G.M. 1912–13. *The birds of Australia*. Volume 2. London: Witherby & Co. xiv + 527 pp.
- Mathews, G.M. 1922. Additions and corrections to my check list, 1920. *The Austral Avian Record* 4: 165–171.
- Mathews, G.M. 1927. *Systema avium Australasianarum – a systematic list of the birds of the Australasian Region*. Part 1. London: British Ornithologists' Union. xvii + 426 pp.
- Mathews, G.M. 1930a. *Systema avium Australasianarum – a systematic list of the birds of the Australasian Region*. Part 2. London: British Ornithologists' Union. iv + 427–1047 pp.
- Mathews, G.M. 1930b. Nests and eggs of New Zealand birds. *Emu* 29: 278–287.
- Mathews, G.M. 1931. *A list of the birds of Australasia (including New Zealand, Lord Howe and Norfolk Islands, and the Australasian Antarctic quadrant)*. London: Taylor Francis. 562 pp.
- Mathews, G.M. 1933. On *Fregatta* Bonaparte and allied genera. *Novitates Zoologicae* 39: 34–54.
- Mathews, G.M. 1934a. Petrel notes. *Ibis* 4 (13th series): 174–176.
- Mathews, G.M. 1934b. A check-list of the order Procellariiformes. *Novitates Zoologicae* 39: 151–206.
- Mathews, G.M. 1935. Remarks on *Apteryx australis* and *Stictapteryx owenii*, with the necessary changes of nomenclature. *Bulletin of the British Ornithologists' Club* 55: 179–180.
- Mathews, G.M. 1936a. Remarks on procellarian and puffinine petrels. *Emu* 36: 91–98.

- Mathews, G.M. 1936b. *A supplement to the birds of Norfolk and Lord Howe Islands to which is added those birds of New Zealand not figured by Buller*. London: Witherby. xiv + 177 pp.
- Mathews, G.M. 1937a. Some changes in the names of New Zealand birds. *Emu* 36: 221–223.
- Mathews, G.M. 1937b. Notes on New Zealand ducks. *Emu* 37: 31–2.
- Mathews, G.M. 1948. Systematic notes on petrels. *Bulletin of the British Ornithologists' Club* 68: 155–170.
- Mathews, G.M. & Hallstrom, E.J.L. 1943. *Notes on the order Procellariiformes*. Canberra: Verity Hewitt Bookshop. 62 pp.
- Mathews, G.M. & Iredale, T. 1913. A reference list of the birds of New Zealand. Part 1. *Ibis* 2 (10th series): 201–263.
- Mayden, R.L. 1997. A hierarchy of species concepts: the denouement in the saga of the species problem. Pp. 381–424. In: Claridge, M.F.; Dawah, H.A. & Wilson, M.R. (Eds). *Species: the units of biodiversity*. London: Chapman & Hall. 461 pp.
- Mayr, E. 1934. Zur Nomenklatur einiger *Aplonis*-Arten. *Mitteilungen aus dem Zoologischen Museum Berlin* 20: 334–336.
- Mayr, E. 1940. Speciation phenomena in birds. *The American Naturalist* 74: 249–278.
- Mayr, E. 1996. What is species and what is not? *Philosophy of Science* 63: 261–276.
- Mayr, E. & Amadon, D. 1941. Birds collected during the Whitney South Sea Expedition. XLVI. Geographical variation in *Demigretta sacra* (Gmelin). *American Museum Novitates* 1144: 1–11.
- Mayr, G. 2002. Osteological evidence for paraphyly of the avian order Caprimulgiformes (nightjars and allies). *Journal für Ornithologie* 143: 82–97.
- Mayr, G. 2003. The phylogenetic affinities of the shoebill (*Balaeniceps rex*). *Journal für Ornithologie* 144: 157–175.
- Mayr, G. 2005. A new cypselomorph bird from the middle Eocene of Germany and early diversification of avian aerial insectivores. *Condor* 107: 342–352.
- Mayr, G. 2009. *Paleogene fossil birds*. Berlin: Springer. xiii + 262 pp.
- Mayr, G.; De Pietri, V.L.; Love, L.; Mannering, A.A. & Scofield, R.P. 2018. A well-preserved new mid-Paleocene penguin (Aves, Sphenisciformes) from the Waipara Greensand in New Zealand. *Journal of Vertebrate Paleontology* 37: 6, e1398169. doi: 10.1080/02724634.2017.1398169
- Mayr, G.; De Pietri, V.L.; Love, L.; Mannering, A. & Scofield, R.P. 2019. Leg bones of a new penguin species from the Waipara Greensand add to the diversity of very large Sphenisciformes in the Paleocene of New Zealand. *Alcheringa* 44: 194–201.
- Mayr, G.; De Pietri, V.L.; Love, L.; Mannering, A. & Scofield, R.P. 2021. Oldest, smallest and phylogenetically most basal pelagornithid, from the early Paleocene of New Zealand, sheds light on the evolutionary history of the largest flying birds. *Papers in Palaeontology* 7: 217–233.
- Mayr, G.; Manegold, A. & Johansson, U.S. 2003. Monophyletic groups within “higher land birds” – comparison of morphological and molecular data. *Journal of Zoological Systematics and Evolutionary Research* 41: 233–248.
- Mayr, G. & Rubilar-Rogers, D. 2010. Osteology of a new giant bony-toothed bird from the Miocene of Chile, with a revision of the taxonomy of Neogene Pelagornithidae. *Journal of Vertebrate Paleontology* 30: 1313–1330.
- Mayr, G. & Scofield, R.P. 2014. First diagnosable non-sphenisciform bird from the early Paleocene of New Zealand. *Journal of the Royal Society of New Zealand* 44: 48–56.
- Mayr, G. & Scofield, R.P. 2015. New avian remains from the early Paleocene of New Zealand: the first early Cenozoic Phaethontiformes (tropicbirds) from the Southern Hemisphere. *Journal of Vertebrate Paleontology* e1031343 (5 p.).
- Mayr, G.; Scofield, R.P.; De Pietri, V.L. & Tennyson, A.J.D. 2017. A Paleocene penguin from New Zealand substantiates multiple origins of gigantism in fossil Sphenisciformes. *Nature Communications* 8: 1927. doi: 10.1038/s41467-017-01959-6. 5. pp.
- Mayr, G. & Smith, T. 2012. Phylogenetic affinities and taxonomy of the Oligocene Diomedeoidea, and the basal divergences amongst extant procellariiform birds. *Zoological Journal of the Linnean Society* 166: 854–875.
- Mayr, G. & Tennyson, A.J.D. 2019. A small, narrow-beaked albatross from the Pliocene of New Zealand demonstrates a higher past diversity in the feeding ecology of the Diomedeoidea. *Ibis* 162: 723–734.
- Mays, H.L. Jr; Oehler, D.A.; Morrison, K.W.; Morales, A.E.; Lycans, A.; Perdue, J.; Battley, P.F.; Cherel, Y.; Chilver, B.L.; Cofts, S.; Demongin, L.; Fry, W.R.; Hiscock, J.; Kusch, A.; Marin, M.; Poisbleau, M.; Quillfeldt, P.; Raya Rey, A.; Steinfurth, A.; Thompson, D.R. & Weakley, L.A. 2019. Phylogeography, population structure, and species delimitation in rockhopper penguins (*Eudyptes chrysocome* and *Eudyptes moseleyi*). *Journal of Heredity* 110: 801–817.
- McAllan, I.A.W. 2000. A possible record of black-fronted tern *Sterna albobristata* from Norfolk Island. *Notornis* 47: 63–64.
- McAllan, I.A.W. 2004. Corrections to the original citations and type localities of some birds described by John Gould and recorded from New Zealand. *Notornis* 51: 125–130.
- McAllan, I.A.W.; Curtis, B.R.; Hutton, I. & Cooper, R.M. 2004. The birds of the Lord Howe Island Group: a review of the records. *Australian Field Ornithology* 21 (Supplement): 1–82.
- McBride, K. 1981. Sighting of South Island kokako (*Callaeas cinerea cinerea*) in Mount Aspiring National Park. *Notornis* 28: 255–256.
- McCallum, J.; Brook, F. & Francis, M. 1985. Buller's mollymawks on Rosemary Rock, Three Kings Islands, in 1985. *Notornis* 32: 257–259.
- McCaskill, L.W. 1943. The invasion of New Zealand by spine-tailed swifts in the summer of 1942–43. *New Zealand Bird Notes* 1: 38–40.
- McClelland, P.J. 2002a. An assessment of the success of a recently introduced population of Campbell Island teal (*Anas nesiotis*) on Codfish Island (Whenua Hou Nature Reserve) and implications for returning teal to Campbell Island. Unpublished M.App.Sci. thesis. Lincoln, New Zealand: Lincoln University. 97 pp.
- McClelland, P.J. 2002b. Eradication of Pacific rats (*Rattus exulans*) from Whenua Hou Nature Reserve (Codfish Island), Putauhinu and Rarotoka Islands, New Zealand. Pp 173–181 in Veitch, C.R. & Clout, M.N. (Eds), *Turning the tide: the eradication of invasive species*. Gland, Switzerland and Cambridge, UK: IUCN SSC Invasive Specialist Group.
- McClelland, P.J. & Moore, P.J. 1991. New species for the Auckland Islands. *Notornis* 38: 80.
- McCormick, R. 1842. A sketch of the Antarctic regions, embracing a few passing remarks, geological and ornithological. *Tasmanian Journal of Natural Sciences* 1: 241–246.

- McCracken, K.G.; Harshman, J.; McClellan, D.A. & Afton, A.D. 1999. Data set incongruence and correlated character evolution: an example of functional convergence in the hind-limbs of stiff-tail ducks. *Systematic Biology* 48: 683–714.
- McCracken, K.G. & Sheldon, F.H. 1997. Avian vocalizations and phylogenetic signal. *Proceedings of the National Academy of Sciences of the United States of America* 94: 3833–3836.
- McCracken, K.G. & Sheldon, F.H. 1998. Molecular and osteological heron phylogenies: sources of incongruence. *Auk* 115: 127–141.
- McCracken, K.G. & Sorenson, M.D. 2005. Is homoplasy or lineage sorting the source of incongruent mtDNA and nuclear gene trees in the stiff-tailed ducks (*Nomonyx-Oxyura*). *Systematic Biology* 54: 35–55.
- McDowall, R.M. 1994. *Gamekeepers for the nation – the story of New Zealand's acclimatisation societies 1861–1990*. Christchurch: Canterbury University. ix + 508 pp.
- McFadgen, B. 2003. *Archaeology of the Wellington Conservancy: Wairarapa. A study in tectonic archaeology*. Wellington: New Zealand Department of Conservation. 94 pp.
- McKean, J.L.; Evans, O. & Lewis, J.H. 1976. Notes on the birds of Norfolk Island. *Notornis* 23: 299–301.
- McKee, J.W.A. 1985. A pseudodontorn (Pelecaniformes: Pelagornithidae) from the middle Pliocene of Hawera, Taranaki, New Zealand. *New Zealand Journal of Zoology* 12: 181–184.
- McKee, J.W.A. 1988. The occurrence of the Pliocene penguin *Tereingaornis moisleyi* (Sphenisciformes: Spheniscidae) at Hawera, Taranaki, New Zealand. *New Zealand Journal of Zoology* 14: 557–561.
- McKenzie, H.R. 1955. A new bird for New Zealand – gull-billed terns (*Gelochelidon nilotica*) near Invercargill. *Notornis* 6: 163–164.
- McKenzie, H.R. 1956. Probable recent occurrences of oriental dotterel in New Zealand. *Notornis* 7: 25–26.
- McKenzie, H.R. 1968. Suspected upland plover (*Bartramia longicauda*) in Manukau Harbour. *Notornis* 15: 216–218.
- McKenzie, H.R. 1970. A new arctic wader for New Zealand: two white-rumped (Bonaparte's) sandpipers at Karaka. *Notornis* 17: 236–237.
- McKenzie, H.R. & Cunningham, J.M. 1952. Occurrence of the broilga (*Megalornis rubicundus*) in New Zealand. *Notornis* 4: 198.
- McKenzie, H.R.; McKenzie, M.E.; Burch, B.J. & Fogarty, S.M. 1971. A sighting of Baird's sandpiper in New Zealand. *Notornis* 18: 58–60.
- McKenzie, H.R. & Sibson, R.B. 1957. Does the little tern (*Sterna albifrons*) reach New Zealand? *Notornis* 7: 174–182.
- McLean, I.G.; Abel, M.; Challies, C.N.; Heppelthwaite, S.; Lyall, J. & Russ, R.B. 1997. The Fiordland crested penguin (*Eudyptes pachyrhynchus*) survey, stage V: mainland coastline, Bruce Bay to Yates Point. *Notornis* 44: 37–47.
- McLean, J.C. 1907. Field-notes on some of the bush-birds of New Zealand. *Ibis* 1 (9th series): 519–542.
- McPherson, B. 1973. The first record of a white-winged triller in New Zealand. *Notornis* 20: 46–48.
- Mebs, T. & Schmidt, D. 2006. *Die Greifvögel Europas, Nordafrikas und Vorderasiens*. Stuttgart: Franckh-Kosmos. 495 pp.
- Medway, D.G. 1976. Extant types of New Zealand birds from Cook's voyages. Part 2: type specimens. *Notornis* 23: 120–137.
- Medway, D.G. 1987. King shags – a correction. *Notornis* 34: 80.
- Medway, D.G. 1992. An early record of probable Snares Cape pigeon off southwestern Australia. *Notornis* 39: 129–131.
- Medway, D.G. 1993. The identity of the chocolate albatross *Diomedea spadicea* of Gmelin, 1789 and of the wandering albatross *Diomedea exulans* of Linnaeus, 1758. *Notornis* 40: 145–162.
- Medway, D.G. 1994. In: Taylor, G.A. & Parrish, G.R. (*Comps*). Classified summarised notes, North Island, 1 July 1992 to 30 June 1993. *Notornis* 41: 235–274.
- Medway, D.G. 1997. In: Parrish, G.R. & Lock, J.W. (*Comps*). Classified summarised notes, North Island, 1 July 1995 to 30 June 1996. *Notornis* 44: 79–109.
- Medway, D.G. 2000a. Rare Birds Committee – combined report for 1992–1999. *Notornis* 47: 64–70.
- Medway, D.G. 2000b. Rare Birds Committee – 6 monthly report. *Southern Bird* 2: 8.
- Medway, D.G. 2000c. *The Reed field guide to common New Zealand shorebirds*. Auckland: Reed Books. 155 pp.
- Medway, D.G. 2001a. Rare Birds Committee – report for 2000. *Notornis* 48: 61–62.
- Medway, D.G. 2001b. Causes of the demise of a breeding population of *titi* on Mangaia, Cook Islands. *Notornis* 48: 137–144.
- Medway, D.G. 2001c. Rare Birds Committee – 6 monthly report. *Southern Bird* 6: 8–10.
- Medway, D.G. 2001d. Rare Birds Committee – 6 monthly report. *Southern Bird* 8: 4–5.
- Medway, D.G. 2002a. An historic record of black petrels (*Procellaria parkinsoni*) nesting in south Westland. *Notornis* 49: 51–52.
- Medway, D.G. 2002b. A critical review of the prions (genus *Pachyptila*) collected and observed on Cook's voyages. *Notornis* 49: 59–75.
- Medway, D.G. 2002c. History and causes of the extirpation of the providence petrel (*Pterodroma solandri*) on Norfolk Island. *Notornis* 49: 246–258.
- Medway, D.G. 2002d. Rare Birds Committee – 6 monthly report. *Southern Bird* 10: 5–6.
- Medway, D. 2002e. Egmont black petrels. *Southern Bird* 10: 9.
- Medway, D.G. 2002f. Rare Birds Committee – 6 monthly report. *Southern Bird* 12: 6–7.
- Medway, D.G. 2003a. Rare Birds Committee – 6 monthly report. *Southern Bird* 14: 14–15.
- Medway, D.G. 2003b. Rare Birds Committee – 6 monthly report. *Southern Bird* 16: 4–5.
- Medway, D.G. 2004a. Letter – the place of collection of the original specimens of *Pealeornis maoriana* Mathews, 1932. *Notornis* 51: 58–59.
- Medway, D.G. 2004b. Rare Birds Committee – six monthly report. *Southern Bird* 18: 12.
- Medway, D.G. 2004c. Taxonomic status of the Stephens Island piopio (*Turnagra capensis*). *Notornis* 51: 231–232.
- Medway, D.G. 2004d. The land bird fauna of Stephens Island, New Zealand in the early 1890s, and the cause of its demise. *Notornis* 51: 201–211.
- Medway, D.G. 2007. A possible live South Island snipe (*Coenocorypha iredalei*) at Dusky Sound in 1773. *Notornis* 54: 237–238.
- Medway, D.G. & Hartley, B.A. 1998. In: Tennyson, A.J.D. & Lock, J.W. (*Comps*). Classified summarised notes, North Island, 1 July 1996 to 30 June 1997. *Notornis* 45: 279–308.

- Mees, G.F. 1964. A revision of the Australian owls (Strigidae and Tytonidae). *Zoologische Verhandelingen* 65: 1–62.
- Mees, G.F. 1977. The subspecies of *Chlidonias hybridus* (Pallas), their breeding distribution and migrations (Aves, Laridae, Sterninae). *Zoologische Verhandelingen, Leiden* 157: 1–64.
- Mees, G.F. 1982. Nocturnal birds of Australia by R. Schodde & I.J. Mason. Pp. 182–184. In: Penhallurick, J.M. (Ed.) Reviews. *Emu* 82: 182–186.
- Meise, W. 1931. Zur systematik der gattung *Gerygone*. *Novitates Zoologicae* 36: 317–379.
- Melville, D.S. 1984. A “yellow-crowned” parakeet on Chatham Island. *Notornis* 31: 91.
- Melville, D.S. 1985. Long-tailed skuas *Stercorarius longicaudus* in New Zealand. *Notornis* 32: 51–73.
- Melville, D.S.; Riegen, A.C.; Schuckard, R. & Habraken, A.M. 2020. Movements of New Zealand ruddy turnstones (*Arenaria interpres*). *Notornis* 67: 659–672.
- Meredith, C.W. 1985. The vertebrate fossil fauna of Norfolk Island, and the phylogeny of the genus *Pterodroma*. Unpublished PhD thesis. Melbourne, Australia: Monash University. 255 pp.
- Meredith, C.W. 1991. Vertebrate fossil faunas from islands in Australasia and the southwest Pacific. Pp. 1345–1381. In: Rich, P.V.; Monaghan, J.M.; Baird, R.F. & Rich, T.H. (Eds). *Vertebrate palaeontology of Australasia*. Melbourne: Pioneer Design Studio and Monash University Publications Committee. 1437 pp.
- Merton, D.V. 1970. Kermadec Islands expedition reports: a general account of birdlife. *Notornis* 17: 147–199.
- Merton, D.V. 2004. The legacy of Big South Cape Island. *Forest & Bird* 313: 32–35.
- Messenger, R. 2000. Taranaki. *Southern Bird* 4: 13.
- Meyer, A.B. 1879–97. *Abbildungen von Vogel-Skeletten. Herausgegeben mit Unterstützung der Generaldirection der Königl. Sammlungen für Kunst und Wissenschaft in Dresden*. Berlin and Dresden: R. Friedlander & Sohn. Volume 1: xiv + 71 pp., 120 pls; Volume 2: xxi + 120 pp., 122 pls.
- Meyer de Schauensee, R. 1970. *A guide to the birds of South America*. Wynnewood, Pennsylvania: Livingston Publishing Co. xiv + 470 pp.
- Michie, R.H. 1959. Welcome swallows nesting in Northland – a new breeding bird for New Zealand. *Notornis* 8: 61–62.
- Milius, N. 2003. Cover photo. *Miranda Naturalists' Trust News* 49: 3.
- Millener, P.R. 1980. The taxonomic status of extinct New Zealand coots, *Fulica chathamensis* subsp. (Aves: Rallidae). *Notornis* 27: 363–367.
- Millener, P.R. 1981a. The Quaternary avifauna of the North Island, New Zealand. Unpublished PhD thesis. Auckland, New Zealand: University of Auckland. xxviii + 897 pp.
- Millener, P.R. 1981b. The subfossil distribution of extinct New Zealand coots *Fulica chathamensis* subsp. (Aves: Rallidae). *Notornis* 28: 1–9.
- Millener, P.R. 1982. And then there were twelve: the taxonomic status of *Anomalopteryx oweni* (Aves: Dinornithidae). *Notornis* 29: 165–170.
- Millener, P.R. 1983. *Tyto alba* (Aves: Strigidae): a deletion from the New Zealand subfossil record. *Notornis* 30: 15–21.
- Millener, P.R. 1988. Contributions to New Zealand's late Quaternary avifauna. 1: *Pachyplichas*, a new genus of wren (Aves: Acanthisittidae), with two new species. *Journal of the Royal Society of New Zealand* 18: 383–406.
- Millener, P.R. 1990. Evolution, extinction and the subfossil record of New Zealand's avifauna. Pp. 93–100. In: Gill, B.J. & Heather, B.D. (Eds). *A flying start. Commemorating fifty years of the Ornithological Society of New Zealand. 1940–1990*. Auckland: Random Century. x + 217 pp.
- Millener, P.R. 1991. The Quaternary avifauna of New Zealand. Pp. 1317–1344. In: Vickers-Rich, P.; Monaghan, J.M.; Baird, R.F. & Rich, T.H. (Eds). *Vertebrate palaeontology of Australasia*. Melbourne: Pioneer Design Studio in co-operation with the Monash University Publications Committee. 1437 pp.
- Millener, P.R. 1999. The history of the Chatham Islands' bird fauna of the last 7000 years – a chronicle of change and extinction. Pp. 85–109. In: Olson, S.L. (Ed.). *Avian paleontology at the close of the 20th Century*. Proceedings of the 4th International meeting of the Society of Avian Paleontology and Evolution, Washington, D.C., 4–7 June 1996. *Smithsonian Contributions to Paleobiology* 89: i–viii + 1–344.
- Millener, P.R. & Powlesland, R.G. 2001. The Chatham Islands pigeon (parea) deserves full species status; *Hemiphaga chathamensis* (Rothschild 1891); Aves: Columbidae. *Journal of the Royal Society of New Zealand* 31: 365–383.
- Miller, C. 2001. Long-term monitoring of a breeding colony of white herons (*Egretta alba*) on the Waitangiroti River, South Westland, New Zealand. *Notornis* 48: 157–163.
- Miller, H.C. & Lambert, D.M. 2006. A molecular phylogeny of New Zealand's *Petroica* (Aves: Petroicidae) species based on mitochondrial DNA sequences. *Molecular Phylogenetics and Evolution* 40: 844–855.
- Miller, P. 1973. Second record of the Australian little grebe in New Zealand. *Notornis* 20: 272–275.
- Miller, P. 1986. Second New Zealand record of the bird of providence. *Notornis* 33: 76.
- Mills, J.A.; Yarrall, J.W. & Mills, D.A. 2020. First record of a New Zealand banded red-billed gull (*Larus novaehollandiae scopulinus*) recovered from mainland Australia. *Notornis* 67: 479–490.
- Milne-Edwards, A. 1880. Recherches sur la faune des régions australes. *Annales des Sciences Naturelles (Zoologie et Paléontologie)*, 6th series, 9: 1–82, pls 17–20.
- Milot, E.; Weimerskirch, H.; Duchesne, P. & Bernatchez, L. 2007. Surviving with low genetic diversity: the case of albatrosses. *Proceedings of the Royal Society B* 274: 779–787.
- Miskelly, C.M. 1987. The identity of the hakawai. *Notornis* 34: 95–116.
- Miskelly, C.M. 1988. The Little Barrier snipe. *Notornis* 35: 273–281.
- Miskelly, C.M. 1990. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1988 to 30 June 1989. *Notornis* 37: 236–266.
- Miskelly, C.M. 2000. Spotted shags breeding on Kapiti Island. *Notornis* 47: 169.

- Miskelly, C.M. 2003a. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2001 to 30 June 2002. *Notornis* 50: 103–112.
- Miskelly, C.M. 2003b. An historical record of bush wren (*Xenicus longipes*) on Kapiti Island. *Notornis* 50: 113–114.
- Miskelly, C.M. 2006. An unprecedented influx of grey-backed storm petrels (*Garrodia nereis*) in the Hauraki Gulf, northern New Zealand. *Notornis* 53: 317–318.
- Miskelly, C.M. 2012a. Bird names commemorating Edgar Stead. *Notornis* 59: 7–14.
- Miskelly, C.M. 2012b. Discovery and extinction of the South Island snipe (*Coenocorypha iredalei*) on islands around Stewart Island. *Notornis* 59: 15–31.
- Miskelly, C.M. 2013. Fernbird. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed Dec. 2021].
- Miskelly, C.M. (Ed.). 2013–2021. *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed Aug. 2021].
- Miskelly, C.M. 2018a. Changes in the forest bird community of an urban sanctuary in response to pest mammal eradications and endemic bird reintroductions. *Notornis* 65: 132–151.
- Miskelly, C.M. 2018b. Rose-ringed parakeet. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed 3 Mar. 2022].
- Miskelly, C.M. 2020a. First record of South Polar skua (*Catharacta maccormicki*) from New Zealand – Auckland Islands, March 1904. *Notornis* 67: 427–429.
- Miskelly, C.M. 2020b. First record of rose-crowned fruit-dove (*Ptilinopus regina*) from New Zealand. *Notornis* 67: 564–567.
- Miskelly, C.M. & Baker, A.J. 2010a. Description of a new subspecies of *Coenocorypha* snipe from subantarctic Campbell Island, New Zealand. *Notornis* 56: 113–123.
- Miskelly, C.M. & Baker, A.J. 2010b. Corrected publication date for *Coenocorypha aucklandica perseverance*. *Notornis* 57: 56.
- Miskelly, C.M. & Bell, M. 2004. An unusual influx of Snares crested penguins (*Eudyptes robustus*) on the Chatham Islands, with a review of other crested penguin records from the islands. *Notornis* 51: 235–237.
- Miskelly, C.M.; Bester, A.J. & Bell, M. 2006. Additions to the Chatham Islands' bird list, with further records of vagrant and colonising bird species. *Notornis* 53: 215–230.
- Miskelly, C.M.; Bishop, C.R.; Greene, T.C.; Rickett, J.; Taylor, G.A. & Tennyson, A.J.D. 2020. Breeding petrels of Breaksea and Dusky Sounds, Fiordland; responses to three decades of predator control. *Notornis* 67: 543–557.
- Miskelly, C.M.; Bishop, C.R.; Greene, T.C. & Tennyson, A.J.D. 2018. Dispersal of translocated endemic passerines to nearby islands in Chalky and Preservation Inlets, southern Fiordland. *Notornis* 65: 239–241.
- Miskelly, C.M.; Bishop, C.R.; Taylor, G.A. & Tennyson, A.J.D. 2019. Breeding petrels of Chalky and Preservation Inlets, southern Fiordland – a test of the 'refugia from resident stoats' hypothesis. *Notornis* 66: 74–90.
- Miskelly, C.M.; Bishop, C.R. & Tennyson, A.J.D. 2021. Breeding petrels of northern and central Fiordland, with a summary of petrel populations for the Fiordland region. *Notornis* 68: 194–207.
- Miskelly, C.M.; Charteris, M.R. & Fraser, J.R. 2012. Successful translocation of Snares Island snipe (*Coenocorypha huegeli*) to replace the extinct South Island snipe (*C. iredalei*). *Notornis* 59: 32–38.
- Miskelly, C.M. & Cooper, J.H. 2020. Macquarie Island shags (*Leucocarbo purpurascens*) at the Auckland Islands – an addition to the New Zealand list. *Notornis* 67: 419–425.
- Miskelly, C.M. & Cooper, W.J. 1985. A ruff in Southland. *Notornis* 32: 329–330.
- Miskelly, C.M.; Cooper, W.J.; Morrison, K. & Morrison, J.V. 1985. Snipe in Southland. *Notornis* 32: 327–328.
- Miskelly, C.M.; Crossland, A.C.; Sagar, P.M.; Saville, I.; Tennyson, A.J.D. & Bell, E.A. 2013. Vagrant and extra-limital bird records accepted by the OSNZ Records Appraisal Committee 2011–2012. *Notornis* 60: 296–306.
- Miskelly, C.M.; Crossland, A.C.; Sagar, P.M.; Saville, I.; Tennyson, A.J.D. & Bell, E.A. 2015. Vagrant and extra-limital bird records accepted by the Birds New Zealand Records Appraisal Committee 2013–2014. *Notornis* 62: 85–95.
- Miskelly, C.M.; Crossland, A.C.; Sagar, P.M.; Saville, I.; Tennyson, A.J.D. & Bell, E.A. 2017. Vagrant and extra-limital bird records accepted by the Birds New Zealand Records Appraisal Committee 2015–2016. *Notornis* 64: 57–67.
- Miskelly, C.M.; Crossland, A.C.; Saville, I.; Southey, I.; Tennyson, A.J.D. & Bell, E.A. 2019. Vagrant and extra-limital bird records accepted by the Birds New Zealand Records Appraisal Committee 2017–2018. *Notornis* 66: 150–163.
- Miskelly, C.M.; Crossland, A.C.; Saville, I.; Southey, I.; Tennyson, A.J.D. & Bell, E.A. 2021. Vagrant and extra-limital bird records accepted by the Birds New Zealand Records Appraisal Committee 2019–2020. *Notornis* 68: 253–265.
- Miskelly, C.M.; Elliott, G.P.; Parker, G.C.; Rexer-Huber, K.; Russ, R.B.; Taylor, R.H.; Tennyson, A.J.D. & Walker, K.J. 2020. Birds of the Auckland Islands, New Zealand subantarctic. *Notornis* 67: 59–151.
- Miskelly, C.M.; Forsdick, N.J.; Gill, B.J.; Palma, R.L.; Rawlence, N.J. & Tennyson, A.J.D. 2022. Amendments to the 2010 *Checklist of the birds of New Zealand*. Ornithological Society of New Zealand Occasional Publication No. 2. Wellington: Ornithological Society of New Zealand. 69 pp.
- Miskelly, C.M.; Gilad, D.; Taylor, G.A.; Tennyson, A.J.D. & Waugh, S.M. 2019. A review of the distribution and size of gadfly petrel (*Pterodroma* spp.) colonies throughout New Zealand. *Tuhinga* 30: 99–177.
- Miskelly, C.M.; Greene, T.C.; McMurtrie, P.G.; Morrison, K.; Taylor, G.A.; Tennyson, A.J.D. & Thomas, B.W. 2021. Species turnover in forest bird communities on Fiordland islands following predator eradications. *New Zealand Journal of Ecology* 45(2): 3449 (15 pp.).
- Miskelly, C.M. & Gummer, H. 2013. Attempts to anchor pelagic fairy prions (*Pachyptila turtur*) to their release site on Mana Island. *Notornis* 60: 29–40.
- Miskelly, C.M.; McNally, N.; Seymour, R.; Gregory-Hunt, D. & Lanauze, J. 2008. Antipodean wandering albatrosses (*Diomedea antipodensis*) colonising the Chatham Islands. *Notornis* 55: 89–95.
- Miskelly, C.M. & Powlesland, R.G. 2013. Conservation translocations of New Zealand birds, 1863–2012. *Notornis* 60: 3–28.
- Miskelly, C.M. & Sagar, P.M. 2008. Establishment and local extinction of fantails (*Rhipidura fuliginosa*) on the Snares Islands, New Zealand. *Notornis* 55: 170–171.
- Miskelly, C.M.; Sagar, P.M.; Tennyson, A.J.D. & Scofield, R.P. 2001a. Birds of the Snares Islands, New Zealand. *Notornis* 48: 1–40.

- Miskelly, C.M.; Sagar, P.M.; Tennyson, A.J.D. & Scofield, R.P. 2001b. Letter – correction: *Leucocarbo* shag at the Snares Islands. *Notornis* 48: 185.
- Miskelly, C.M.; Scofield, R.P.; Sagar, P.M.; Tennyson, A.J.D.; Bell, B.D. & Bell, E.A. 2011. Vagrant and extra-limital bird records accepted by the OSNZ Records Appraisal Committee 2008–2010. *Notornis* 58: 64–70.
- Miskelly, C.M.; Simpson, P.M.; Argilla, L.S. & Cockrem, J.F. 2012. Discovery, care, and post-release monitoring of a vagrant emperor penguin (*Aptenodytes forsteri*). *Notornis* 59: 116–122.
- Miskelly, C.M.; Stahl, J.-C. & Tennyson, A.J.D. 2017. Do grey-backed storm petrels (*Garrodia nereis*) breed in Fiordland, New Zealand? *Notornis* 64: 109–114.
- Miskelly, C.M.; Stahl, J.-C.; Tennyson, A.J.D. & Bishop, C.R. 2021. Further evidence in support of grey-backed storm petrels (*Garrodia nereis*) breeding in Fiordland. *Notornis* 68: 177–181.
- Miskelly, C.M.; Taylor, G.A.; Gummer, H. & Williams, R. 2009. Translocations of eight species of burrow-nesting seabirds (genera *Pterodroma*, *Pelecanoides*, *Pachyptila* and *Puffinus*: family Procellariidae). *Biological Conservation* 142: 1965–1980.
- Miskelly, C.M. & Taylor, R.H. 2020. Ornithological discovery, exploration, and research on the Auckland Islands, New Zealand subantarctic. *Notornis* 67: 11–58.
- Miskelly, C.M.; Tennyson, A.J.D.; Edmonds, H.K. & McMurtrie, P.G. 2017. Dispersal of endemic passerines to islands in Dusky Sound, Fiordland, following translocations and predator control. *Notornis* 64: 192–205.
- Miskelly, C.M.; Tennyson, A.J.D.; Stahl, J.-C.; Smart, A.F.; Edmonds, H.K. & McMurtrie, P.G. 2017. Breeding petrels of Dusky Sound, Fiordland – survivors from a century of stoat invasions. *Notornis* 64: 136–153.
- Mitchell, K.J.; Llamas, B.; Soubrier, J.; Rawlence, N.J.; Worthy, T.H.; Wood, J.; Lee, M.S.Y. & Cooper, A. 2014. Ancient DNA reveals elephant birds and kiwi are sister taxa and clarifies ratite bird evolution. *Science* 344: 898–900.
- Mitchell, K.J.; Wood, J.R.; Llamas, B.; McLenachan, P.A.; Kardailsky, O.; Scofield, R.P.; Worthy, T.H. & Cooper, A. 2016. Ancient mitochondrial genomes clarify the evolutionary history of New Zealand’s enigmatic acanthisittid wrens. *Molecular Phylogenetics and Evolution* 102: 295–304.
- Mitchell, K.J.; Wood, J.R.; Scofield, R.P.; Llamas, B. & Cooper, A. 2014. Ancient mitochondrial genome reveals unsuspected taxonomic affinity of the extinct Chatham duck (*Pachyanas chathamica*) and resolves divergence times for New Zealand and sub-Antarctic brown teals. *Molecular Phylogenetics and Evolution* 70: 420–428.
- Mlodinow, S.G. 1999. Southern Hemisphere albatrosses in North American waters. *Birders Journal* 8: 131–141.
- Mlodinow, S.G. 2004. Manx shearwaters in the North Pacific Ocean. *Birding* 36: 608–615.
- Moncrieff, P. 1925. Occurrence of the Australian white ibis in New Zealand. *New Zealand Journal of Science and Technology* 7: 371–372.
- Moncrieff, P. 1936. *New Zealand birds and how to identify them*. Second edition. Auckland: Whitcombe & Tombs Ltd. 142 pp.
- Monroe, B.L. Jr. 1989. The correct name of the Terek sandpiper. *Bulletin of the British Ornithologists’ Club* 109: 106–107.
- Moore, J.L. 1981. Norfolk Island notes 1971 to 1980. *Notornis* 28: 50–56.
- Moore, J.L. 1985a. Norfolk Island notes 1968 to 1984. *Notornis* 32: 311–318.
- Moore, J.L. 1985b. Ensign Best’s bird observations on Norfolk Island. *Notornis* 32: 319–322.
- Moore, J.L. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Moore, J.L. 1999. Norfolk Island bird notes, 1977 to 1997. *Notornis* 46: 354–364.
- Moore, J.L. & Moore, M. 1984. Wilson’s phalarope at Manawatu River estuary – a new bird for New Zealand. *Notornis* 31: 330–333.
- Moore, J.L. & Moore, M. 1992. A chestnut teal at the Manawatu River estuary – a new bird for New Zealand. *Notornis* 39: 289–292.
- Moore, P.J. 2002. Counting mollymawks on Campbell Island – data supplements. *Science & Research Internal Report* 192: 1–168. Wellington: New Zealand Department of Conservation.
- Moore, P.J. 2004. Abundance and population trends of mollymawks on Campbell Island. *Science for Conservation* 242: 1–62. Wellington: New Zealand Department of Conservation.
- Moore, P.J. & Battam, H. 2000. Procellariiforms killed by fishers in Chile to obtain bands. *Notornis* 47: 168–169.
- Moore, P.J. & Bettany, S.M. 2005. Band recoveries of southern royal albatrosses (*Diomedea epomophora*) from Campbell Island, 1943–2003. *Notornis* 52: 195–205.
- Moore, P.J.; Burg, T.M.; Taylor, G.A. & Millar, C.D. 2001. Provenance and sex ratio of black-browed albatross, *Thalassarche melanophrys*, breeding on Campbell Island, New Zealand. *Emu* 101: 329–334.
- Moore, P.J. & Moffat, R.D. 1990. Mollymawks on Campbell Island. *Science & Research Internal Report* 59: 1–43. Wellington: New Zealand Department of Conservation.
- Moore, P.J.; Scott, J.J.; Joyce, L.J. & Peart, M. 1997. Southern royal albatross *Diomedea epomophora epomophora* census on Campbell Island, 4 January to 6 February 1996, and a review of population figures. *Science & Research Series* 101: 1–27. Wellington: New Zealand Department of Conservation.
- Moors, P.J. 1980. East Island. *Wildlife – a Review* 11: 48–52.
- Moors, P.J. & Merton, D.V. 1984. First records for New Zealand of Moseley’s rockhopper penguin (*Eudyptes chrysocome moseleyi*). *Notornis* 31: 262–265.
- Morgan, G. 2004. A record tern up. *Southern Bird* 18: 9.
- Morlan, J. 1994. Light-mantled sooty albatross (*Phoebastria palpebrata*) over Cordell Banks, Marin County, California. *Australasian Seabird Group Newsletter* 27: 5–8.
- Morrison, K. 1979. In: Sibson, R.B. (Comp.). Classified summarised notes 30 June 1978 to 30 June 1979. *Notornis* 26: 396–422.
- Mougin, J.-L. 1970. Le petrel à menton blanc *Procellaria aequinoctialis* de l’île de la Possession (Archipel Crozet). *L’Oiseau et la Revue Française d’Ornithologie* 40 (Numéro spécial): 62–96.
- Moyle, R.G. 2006. A molecular phylogeny of kingfishers (Alcedinidae) with insights into early biogeographic history. *Auk* 123: 487–499.
- Murphy, R.C. 1928. Birds collected during the Whitney South Sea Expedition. IV. *American Museum Novitates* 322: 1–5.

- Murphy, R.C. 1930. Birds collected during the Whitney South Sea Expedition. XI. *American Museum Novitates* 419: 1–15.
- Murphy, R.C. 1936. *Oceanic birds of South America*. New York: American Museum of Natural History. xxii + 1245 pp.
- Murphy, R.C. 1938. Birds collected during the Whitney South Sea Expedition. XXXVII, On pan-Antarctic terns. *American Museum Novitates* 977: 1–17.
- Murphy, R.C. & Harper, F. 1921. A review of the diving petrels. *Bulletin American Museum of Natural History* 44: 495–554.
- Murphy, R.C. & Irving, S. 1951. A review of the frigate-petrels (*Pelagodroma*). *American Museum Novitates* 1506: 1–17.
- Murphy, R.C. & Pennoyer, J.M. 1952. Larger petrels of the genus *Pterodroma*. *American Museum Novitates* 1580: 1–43.
- Murphy, S.A.; Flux, I.A. & Double, M.C. 2006. Recent evolutionary history of New Zealand's North and South Island kokako (*Callaeas cinerea*) inferred from mitochondrial DNA sequences. *Emu* 106: 41–48.
- Myrcha, A.; Jadwiszczak, P.; Tambussi, C.P.; Noriega, J.I.; Gaździcki, A.; Tatur, A. & del Valle, R.A. 2002. Taxonomic revision of Eocene Antarctic penguins based on tarsometatarsal morphology. *Polish Polar Research* 23: 5–46.
- Naarding, J.A. 1980. *Study of the short-tailed shearwater Puffinus tenuirostris in Tasmania*. Tasmania: National Parks and Wildlife Service. 78 pp.
- Nakamura, K. 1982. Distribution of gadfly petrels of the genus *Pterodroma* in the Antarctic and subantarctic regions of the Australian sector, austral summer 1981. *Transactions of the Tokyo University of Fisheries* 5: 203–211.
- Nakamura, K. & Hasegawa, M. 1979. A brief note on distribution of Buller's shearwater, *Puffinus bulleri*, in Japan and the adjacent seas. *Journal of the Yamashina Institute for Ornithology* 2: 123–127.
- Nakamura, K. & Tanaka, Y. 1977. Distribution and migration of two species of the genus *Pterodroma* in the North Pacific. *Miscellaneous Reports of the Yamashina Institute for Ornithology* 9: 112–120.
- Nakamura, K.; Tanaka, Y. & Hasegawa, M. 1983. Distribution status of the Wilson's storm-petrel *Oceanites oceanicus* in Japanese waters. *Bulletin of the Biogeographical Society of Japan* 38: 125–127.
- Napier, R.B. 1968. Erect-crested and rockhopper penguins interbreeding in the Falkland Islands. *British Antarctic Survey Bulletin* 16: 71–72.
- Nelson, A. 1971. King shags in the Marlborough Sounds. *Notornis* 18: 30–37.
- Nelson, J.B. 2005. Pelicans, cormorants and their relatives *Pelecanidae, Sulidae, Phalacrocoracidae, Anhingidae, Fregatidae, Phaethontidae*. Oxford: Oxford University Press. 661 pp.
- Nettleship, D.N. 2000. Ruddy turnstone *Arenaria interpres*. In: Poole, A.; Gill, F. (Eds). *The birds of North America*, No. 537. Philadelphia, PA: The Birds of North America, Inc.
- Nevill, A. 1984. Fairy and tree martins in Otago. *Notornis* 31: 173–175.
- Ngāi Tahu Claims Settlement Act 1998. Schedule 97 Taonga species. Public Act 1998 No. 97.
- Nicholls, D.G.; Murray, M.D.; Butcher, E.C. & Moors, P.J. 2000. Time spent in exclusive economic zones of southern oceans by non-breeding wandering albatrosses (*Diomedea* spp.): implications for national responsibilities for conservation. *Emu* 100: 318–323.
- Nicholls, D.G.; Murray, M.D.; Elliott, G.P. & Walker, K.J. 1996. Satellite tracking of a wandering albatross from the Antipodes Islands, New Zealand, to South America. *Corella* 20: 28.
- Nicholls, D.G.; Murray, M.D. & Robertson, C.J.R. 1994. Oceanic flights of the northern royal albatross *Diomedea epomophora sanfordi* using satellite telemetry. *Corella* 18: 50–52.
- Nicholls, D.G.; Robertson, C.J.R.; Prince, P.A.; Murray, M.D.; Walker, K.J. & Elliott, G.P. 2002. Foraging niches of three *Diomedea* albatrosses. *Marine Ecology Progress Series* 231: 269–277.
- Nicholls, D.G.; Stampton, P.; Klomp, N.I. & Schultz, M. 1998. Post-breeding flight to Antarctic waters by a short-tailed shearwater *Puffinus tenuirostris*. *Emu* 98: 79–82.
- Niethammer, G. 1971. Zur Taxonomie europäischer, in Neuseeland eingeburgerter Vogel. *Journal für Ornithologie* 112: 202–226.
- Nilsson, R.J.; Kennedy, E.S. & West, J.A. 1994. The birdlife of South East Island (Rangatira), Chatham Islands, New Zealand. *Notornis* 41 (Supplement): 109–125.
- Noriega, J. & Tambussi, C. 1989. Un Spheniscidae (Aves: Sphenisciformes) del Mioceno Tardío de la costa del Perú. *Ameghiniana* 26: 247.
- Norman, J.A.; Christidis, L.; Westerman, M. & Hill, A.R. 1998. Molecular analysis confirms the species status of the Christmas Island hawk-owl (*Ninox natalis*). *Emu* 98: 197–208.
- Norman, J.A.; Olsen, P. & Christidis, L. 1998. Molecular genetics confirms taxonomic affinities of the endangered Norfolk Island boobook *Ninox novaeseelandiae undulata*. *Biological Conservation* 86: 33–36.
- Noske, R. 2019. New Zealand shining bronze-cuckoos *Chalcites lucidus lucidus* are regular visitors to southeast Queensland. *The Sunbird* 48: 149–158.
- Nowak, J.E.; Sweet, A.D.; Weckstein, J.D. & Johnson, K.P. 2019. A molecular phylogenetic analysis of the genera of fruit doves and their allies using dense taxonomic sampling. *Illinois Natural History Survey Bulletin* 42: 2019001.
- Nunn, G.B.; Cooper, J.; Jouventin, P.; Robertson, C.J.R. & Robertson, G.G. 1996. Evolutionary relationships among extant albatrosses (Procellariiformes: Diomedidae) established from complete cytochrome-*b* gene sequences. *Auk* 113: 784–801.
- Nunn, G.B. & Stanley, S.E. 1998. Body size effects and rates of cytochrome *b* gene evolution in tube-nosed seabirds. *Molecular Biology and Evolution* 15: 1360–1371.
- O'Brien, M.; Bird, J.P.; O'Connor, E.; Qalo, P.; Fraser, M. & Watling, D. 2016. New distribution records of collared petrel (*Pterodroma brevipes*) in Fiji and development of a rapid assessment monitoring method. *Notornis* 63: 18–25.
- O'Brien, R.M. & Davies, J. 1990. A new subspecies of masked booby *Sula dactylatra* from Lord Howe, Norfolk and Kermadec Islands. *Marine Ornithology* 18: 1–7.
- O'Connor, F. 1999. Port: Perth, WA. P. 28. In: James, D. (Ed.). *The ship's log: shipboard observations, February to November 1998. Australasian Seabird Group Newsletter* 33: 18–29.
- Ödeen, A.; Håstad, O. & Alström, P. 2010. Evolution of ultraviolet vision in shorebirds (Charadriiformes). *Biology Letters* 6: 370–374.
- O'Donnell, C.F.J. (Comp.). 2001. Classified summarised notes, South Island and outlying islands, 1 July 1998 to 30 June 1999. *Notornis* 48: 100–107.

- O'Donnell, C.F.J. & Dilks, P. 1988. First record of the Australian little bittern (*Ixobrychus minutus*) in New Zealand. *Notornis* 35: 153–157.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1989. Classified summarised notes, South Island, 1 July 1987 to 30 June 1988. *Notornis* 36: 223–247.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1990. Classified summarised notes, South and Chatham Islands, 1 July 1988 to 30 June 1989. *Notornis* 37: 236–266.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1991. Classified summarised notes, South and Chatham Islands 1 July 1989 to 30 June 1990. *Notornis* 38: 315–341.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1992. Classified summarised notes, South and Chatham Islands, 1 July 1990 to 30 June 1991. *Notornis* 39: 211–232.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1994. Classified summarised notes, South Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 167–188.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1995. Classified summarised notes: South Island, 1 July 1992 to 30 June 1993. *Notornis* 42: 53–77.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1996. Classified summarised notes: South Island and the Chatham Islands, 1 July 1994–30 June 1995. *Notornis* 43: 165–186.
- O'Donnell, C.F.J. & West, J.A. (Comps). 1998. Classified summarised notes, South Island and outlying islands, 1 July 1995 to 30 June 1996. *Notornis* 45: 1–30.
- O'Donnell, C.F.J. & West, J.A. (Comps). 2001. Classified summarised notes, South Island and outlying islands, 1 July 1996 to 30 June 1997. *Notornis* 48: 81–89.
- Ogilvie-Grant, W.R. 1898. Steganopodes (cormorants, gannets, frigate-birds, tropic-birds, and pelicans), Pygopodes (divers and grebes), Alcae (auks), and Impennes (penguins). Pp. 329–657. In Bowdler Sharpe, R. & Ogilvie-Grant, W.R. Catalogue of the Plataleae, Herodiones, Steganopodes, Pygopodes, Alcae, and Impennes in the Collection of the British Museum. *Catalogue of the birds in the British Museum*, Vol. 26. London: Trustees of the British Museum.
- Ogilvie-Grant, W.R. 1905. On the birds procured by the Earl of Ranfurly in New Zealand and the adjacent islands. *Ibis* 5 (8th series): 543–602.
- O'Hara, R.J. 1989. An estimate of the phylogeny of the living penguins (Aves: Spheniscidae). *American Zoologist* 29: 11A.
- Oliver, W.R.B. 1923. Name-list of New Zealand birds. Pp. 425–433. In: Hutton, F.W. & Drummond, J. *The animals of New Zealand: an account of the dominion's air-breathing vertebrates*. Fourth edition. Christchurch: Whitcombe and Tombs Ltd.
- Oliver, W.R.B. 1930. *New Zealand birds*. Wellington: Fine Arts (New Zealand) Ltd. viii + 541 pp.
- Oliver, W.R.B. 1934. Occurrence of the Mediterranean shearwater in New Zealand. *Emu* 34: 23–24.
- Oliver, W.R.B. 1949. The moas of New Zealand and Australia. *Dominion Museum Bulletin* 15: 1–206.
- Oliver, W.R.B. 1955. *New Zealand birds*. Second edition. Wellington: A.H. & A.W. Reed. 661 pp.
- Olsen, K.M. & Larsson, H. 1997. *Skuas and jaegers – a guide to the skuas and jaegers of the world*. Robertsbridge, East Sussex: Pica Press. 190 pp.
- Olsen, P.D. 1996. Re-establishment of an endangered subspecies: the Norfolk Island boobook owl. *Bird Conservation International* 6: 63–80.
- Olsen, P.D. 1999. Laughing owl (*Sceloglaux albifacies*). In: del Hoyo, J.; Elliott, A.; Sargatal, J.; Christie, D.A. & de Juana, E. (Eds) *Handbook of the birds of the world alive*. Barcelona: Lynx Edicions. <http://www.hbw.com/node/200871>
- Olson, S.L. 1973. A classification of the Rallidae. *Wilson Bulletin* 85: 381–416.
- Olson, S.L. 1975. A review of the extinct rails of the New Zealand region (Aves: Rallidae). *Records of the National Museum of New Zealand* 1: 63–79.
- Olson, S.L. 1977. Notes on subfossil Anatidae from New Zealand, including a new species of pink-eared duck *Malacorhynchus*. *Emu* 77: 132–135.
- Olson, S.L. 1985a. Early Pliocene Procellariiformes (Aves) from Langebaanweg, South-Western Cape Province, South Africa. *Annals of the South African Museum* 95(3): 123–145.
- Olson, S.L. 1985b. The fossil record of birds. Pp. 79–252. In: Farner, D.S.; King, J.R. & Parkes, K.C. (Eds). *Avian biology*. Volume 8. New York: Academic Press. xxiv + 256 pp.
- Olson, S.L. 1988. Letter – Classical origin of the name *Daption* Stephens. *Notornis* 35: 87–88.
- Olson, S.L. 1990. Osteology and systematics of the fernbirds (*Bowdleria*: Sylviidae). *Notornis* 37: 161–171.
- Olson, S.L. 1995. Review: history and nomenclature of avian family-group names. *Auk* 112: 539–546.
- Olson, S.L. 2004. Taxonomic review of the fossil Procellariidae (Aves: Procellariiformes) described from Bermuda by R.W. Shufeldt. *Proceedings of the Biological Society of Washington* 117(4): 575–581.
- Olson, S.L. 2005. First occurrence of *Gygis microrhyncha* in the Hawai'ian Islands. *Bulletin of the British Ornithologists' Club* 125: 155–157.
- Olson, S.L.; Balouet, J.-C. & Fisher, C.T. 1987. The owlet-nightjar of New Caledonia, *Aegotheles savesi*, with comments on the systematics of the Aegothelidae. *Le Gerfaut* 77: 341–352.
- Olson, S.L. & Feduccia, A. 1980. *Presbyornis* and the origin of the Anseriformes (Aves: Charadriomorphae). *Smithsonian Contributions to Zoology* 323: 1–24.
- Onley, D.J. 1982a. The spotless crake (*Porzana tabuensis*) on Aorangi, Poor Knights Islands. *Notornis* 29: 9–21.
- Onley, D.J. 1982b. The nomenclature of the spotless crake (*Porzana tabuensis*). *Notornis* 29: 75–79.
- Onley, D.J. 1992. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1990 to 30 June 1991. *Notornis* 39: 211–232.
- Onley, D.J. 1995a. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes: South Island 1 July 1992 to 30 June 1993. *Notornis* 42: 53–77.

- Onley, D.J. 1995b. In: O'Donnell, C.F.J. (*Comp.*). Classified summarised notes, South Island, 1 July 1993–30 June 1994. *Notornis* 42: 263–279.
- Onley, D.J. & Bartle, S. 1999. *Identification of seabirds of the Southern Ocean – a guide for scientific observers aboard fishing vessels*. Wellington: Te Papa Press. 81 pp.
- Onley, D.J. & Schweigman, P. 2004. First record of Franklin's gull (*Larus pipixcan*) in New Zealand. *Notornis* 51: 49–50.
- Onley, D.J. & Scofield, P. 2007. *Albatrosses, petrels & shearwaters of the world*. Princeton: Princeton University Press. 240 pp.
- Ottvall, R.; Bensch, S.; Walinder, G. & Lifjeld, J.T. 2002. No evidence of genetic differentiation between lesser redpolls *Carduelis flammea cabaret* and common redpolls *Carduelis f. flammea*. *Avian Science* 2: 237–244.
- Overbeek, A.; Galla, S.; Brown, L.; Cleland, S.; Thyne, C.; Maloney, R. & Steeves, T. 2020. Pedigree validation using genetic markers in an intensively-managed taonga species, the critically endangered kakī (*Himantopus novaezelandiae*). *Notornis* 67: 709–716.
- Owen, K.L. 1994. In: Taylor, G.A. Parrish, G.R. (*Comps*). Classified summarised notes, North Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 1–49.
- Owen, R. 1848. On *Dinornis* (Part III): containing a description of the skull and beak of that genus, and of the same characteristic parts of *Palapteryx*, and of two other genera of birds, *Notornis* and *Nestor*; forming part of an extensive collection of ornithic remains discovered by Mr Walter Mantell at Waingongoro, North Island of New Zealand. *Transactions of the Zoological Society of London* 3: 345–378, pls 52–56.
- Pacheco, J.F.; Silveira, L.F.; Aleixo, A.; Agne, C.E.; Bencke, G.A.; Bravo, G.A.; Brito, G.R.R.; Cohn-Haft, M.; Nachtigall Mauricio, G.; Naka, L.N.; Olmos, F.; Posso, S.; Lees, A.C.; Fernando, L.; Figueiredo, A.; Carrano, E.; Guedes, R.C.; Cesari, E.; Franz, I.; Schunck, F. & de Q. Piacentini. V. 2021. Annotated checklist of the birds of Brazil by the Brazilian Ornithological Records Committee. Second edition. *Ornithology Research* 29: 94–105.
- Pallas, P.S. 1769. *Spicilegia zoologica quibus novae imprimis et obscurae animalium species iconibus, descriptionibus atque commentariis illustrantur*. Fasciculus 5. Berolino (Berlin): G.A. Lange. 34 pp., 5 pls.
- Palliser, A. 1976. Crested grebe in the North Island. *Notornis* 23: 262.
- Palliser, A. 1977. In: Edgar, A.T. (*Comp.*). Classified summarised notes. *Notornis* 24: 246–279.
- Palliser, A. 1997. Seabird observations around Australia, September 1996–April 1997. Ashmore Reef, WA, October 1996. *Australasian Seabird Group Newsletter* 32: 2–4.
- Palliser, A. 1999. Wollongong, NSW, ship's log. *Australasian Seabird Group Newsletter* 35: 17.
- Palliser, A. 2004. Birds Australia Rarities Committee – rare birds in 2003. *Wingspan* 14: 38.
- Palliser, A. 2005. Birds Australia Rarities Committee – rare birds in 2004. *Wingspan* 15: 38–39.
- Palliser, A. 2006. Birds Australia Rarities Committee – rare birds in 2005. *Wingspan* 16: 36–37.
- Palma, R.L. 1991. A new species of *Rallicola* (Insecta: Phthiraptera: Philopteridae) from the North Island brown kiwi. *Journal of the Royal Society of New Zealand* 21: 313–322.
- Palma, R.L. 1999. Amendments and additions to the 1982 list of chewing lice (Insecta: Phthiraptera) from birds in New Zealand. *Notornis* 46: 373–387.
- Palma, R.L. 2017. Phthiraptera (Insecta). A catalogue of parasitic lice from New Zealand. *Fauna of New Zealand* 76: 1–400.
- Palma, R.L. & Pilgrim, R.L.C. 2002. A revision of the genus *Naubates* (Insecta: Phthiraptera: Philopteridae). *Journal of the Royal Society of New Zealand* 32: 7–60.
- Palma, R.L. & Price, R.D. 2004. *Apterygon okarito*, a new species of chewing louse (Insecta: Phthiraptera: Menoponidae) from the Okarito brown kiwi (Aves: Apterygiformes: Apterygidae). *New Zealand Journal of Zoology* 31: 67–73.
- Palma, R.L.; Worthy, T.H. & Tennyson, A.J.D. 2003. Resolution of the status of the taxon *Apteryx maxima*. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 14: 1–9.
- Pandolfi Benoit, M. & Bretagnolle, V. 2002. Seabirds of the Southern Lagoon of New Caledonia; distribution, abundance and threats. *Waterbirds* 25: 202–213.
- Park, J. 1887. On the geology of the western part of Wellington Provincial District and part of Taranaki. *New Zealand Geological Survey Reports. Geological Exploration 1886–7*. 18: 24–73.
- Park, T. & Fitzgerald, E.M.G. 2012. A review of Australian fossil penguins (Aves: Sphenisciformes). *Memoirs of Museum Victoria* 69: 309–325.
- Parker, S.A. 1982. A new sandpiper of the genus *Calidris*. *South Australian Naturalist* 56: 63.
- Parker, W.K. 1866. On the structure and development of the skull in the ostrich tribe. *Philosophical Transactions of the Royal Society, London* 156: 113–183.
- Parkes, K.C. 1974. Buller's New Zealand specimen of grey heron. *Notornis* 21: 121–123.
- Parkes, K.C. 1982. Nomenclatural notes on the phalaropes. *Bulletin of the British Ornithologists' Club* 102: 84–85.
- Parlato, E.H. & Armstrong, D.P. 2012. An integrated approach for predicting fates of reintroductions with demographic data from multiple populations. *Conservation Biology* 26: 97–106.
- Parrish, G.R. 1997. In: Parrish, G.R. & Lock, J.W. (*Comps*). Classified summarised notes, North Island, 1 July 1995 to 30 June 1996. *Notornis* 44: 79–109.
- Parrish, G.R. 2000a. Which subspecies of Mongolian dotterel visit New Zealand? *Notornis* 47: 125–126.
- Parrish, G.R. (*Comp.*). 2000b. Classified summarised notes, North Island, 1 July 1998 to 30 June 1999. *Notornis* 47: 215–234.
- Parrish, G.R. (*Comp.*). 2001. Classified summarised notes, North Island, 1 July 1999 to 30 June 2000. *Notornis* 48: 165–174.
- Parrish, G.R. (*Comp.*). 2002. Classified summarised notes: North Island, 1 July 2000 to 30 June 2001. *Notornis* 49: 100–110.
- Parrish, G.R. (*Comp.*). 2006. Classified summarised notes, North Island, 1 July 2002 to 30 June 2003. *Notornis* 53: 240–247.
- Parrish, G.R. & Anderson, P. 1998. In: Tennyson, A.J.D. & Lock, J.W. (*Comps*). Classified summarised notes, North Island, 1 July 1996 to 30 June 1997. *Notornis* 45: 279–309.
- Parrish, G.R. & Lock, W.J. (*Comps*). 1995. Classified summarised notes, North Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 145–173.

- Parrish, G.R. & Lock, J.W. (Comps). 1996. Classified summarised notes. North Island, 1 July 1994 to 30 June 1995. *Notornis* 43: 117–145.
- Parrish, G.R. & Lock, J.W. (Comps). 1997. Classified summarised notes, North Island, 1 July 1995 to 30 June 1996. *Notornis* 44: 79–109.
- Parrish, G.R.; Pierce, R.J. & Anderson, P. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Parrish, G.R. & Pulham, G.A. 1995. Population size, productivity and post breeding movements of the New Zealand fairy tern. *Tane* 35: 175–181.
- Parrish, G.R. & Waddell, B. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Patterson, D.L. & Hunter, S. 2000. Giant petrel *Macronectes* spp. band recovery analysis from the international giant petrel banding project, 1988/89. *Marine Ornithology* 28: 69–74.
- Payne, M.R. & Prince, P.A. 1979. Identification and breeding biology of the diving petrels *Pelecanoides georgicus* and *P. urinatrix exsul* at South Georgia. *New Zealand Journal of Zoology* 6: 299–318.
- Payne, R.B. 1979. Family Ardeidae. Pp. 193–244. In: Mayr, E. & Cottrell, G.W. (Eds). *Checklist of birds of the world*. Volume 1. Second edition. Cambridge, Massachusetts: Museum of Comparative Zoology. xviii + 547 pp.
- Payne, R.B. 2005. *The cuckoos*. Oxford, UK: Oxford University Press. 618 pp + 20 plates.
- Payne, R.B. & Risley, C.J. 1976. Systematics and evolutionary relationships among the herons (Ardeidae). *University of Michigan Museum of Zoology, Miscellaneous Publications* 150: 1–115.
- Pendlebury, C. 2007. Yellow-nosed albatross. *The Seabird Group* 106: 13.
- Penhallurick, J. & Wink, M. 2004. Analysis of the taxonomy and nomenclature of the Procellariiformes based on complete nucleotide sequences of the mitochondrial cytochrome *b* gene. *Emu* 104: 125–147.
- Pereira, S.L. & Baker, A.J. 2005. Multiple gene evidence for parallel evolution and retention of ancestral morphological states in the shanks (Charadriiformes: Scolopacidae). *Condor* 107: 514–526.
- Pereira, A.; Daut, N. W.; Nuss, A.; Tavares, M. & Carlos, C. J. 2016. The first confirmed record of the white-capped albatross *Thalassarche steadi* in Brazil. *Revista Brasileira de Ornithologia*, 24: 286289.
- Pereira, S.L.; Johnson, K.P.; Clayton, D.H. & Baker, A.J. 2007. Mitochondrial and nuclear DNA sequences support a Cretaceous origin of Columbiformes and a dispersal-driven radiation in the Paleogene. *Systematic Biology* 56: 656–672.
- Pertierra, L.R.; Segovia, N.I.; Noll, D.; Martinez, P.A.; Pliscoff, P.; Barbosa, A.; Aragón, P.; Rey, A.R.; Pistorius, P.; Trathan, P.; Polanowski, A.; Bonadonna, F.; Le Bohec, C.; Bi, K.; Wang-Claypool, C.Y.; González-Acuña, D.; Dantas, G.P.M.; Bowie, R.C.K.; Poulain, E. & Vianna, J.A. 2020. Cryptic speciation in gentoo penguins is driven by geographic isolation and regional marine conditions: unforeseen vulnerabilities to global change. *Diversity and Distributions* 26: 958–975.
- Petch, S.; Hill, C. & Allen, N. 2002. First record of a long-toed stint (*Calidris subminuta*) in New Zealand. *Notornis* 49: 185–186.
- Peters, J.L. (Ed.) 1931–87. *Check-list of birds of the world*. Volumes 1–16. Cambridge, Massachusetts: Harvard University Press.
- Peters, J.L. 1931. *Check-list of birds of the world*. Volume 1. Cambridge, Massachusetts: Harvard University Press. xviii + 345 pp.
- Peters, J.L. 1934. *Checklist of the birds of the world*. Volume 2. Cambridge, Massachusetts: Harvard University Press. xvii + 401 pp.
- Petyt, C. 1995. Behaviour of seabirds around fishing trawlers in New Zealand subantarctic waters. *Notornis* 42: 99–115.
- Petyt, C. 1999. First record of northern pintail (*Anas acuta*) in New Zealand. *Notornis* 46: 298–299.
- Petyt, C. 2001a. South Polar skua (*Catharacta maccormicki*) and Cook's petrel (*Pterodroma cookii*) on the Chatham Rise. *Notornis* 48: 41–42.
- Petyt, C. 2001b. The occurrence of Wilson's storm petrel (*Oceanites oceanicus*) in New Zealand waters. *Notornis* 48: 54–55.
- Petyt, C. 2013. First recent recorded breeding of the New Zealand dabchick (*Poliiocephalus rufopectus*) in the South Island. *Notornis* 60: 322–323.
- Peucker, A.J.; Dann, P. & Burrige, C.P. 2009. Range-wide phylogeography of the little penguin (*Eudyptula minor*): evidence of long-distance dispersal. *Auk* 126: 397–408.
- Phalan, B.; Phillips, R.A. & Double, M.C. 2004. A white-capped albatross, *Thalassarche [cauta] steadi*, at South Georgia: first confirmed record in the south-west Atlantic. *Emu* 104: 359–361.
- Phelps, W.H. & Phelps, W.H. Jr. 1958. Lista de las aves de Venezuela con su distribución. Tomo 2, Parte 1. No Passeriformes. *Boletín de la Sociedad Venezolana de Ciencias Naturales* 19: 1–317.
- Phillips, W.J. 1958. Some notes on muttonbirding in the North Island. *Notornis* 7: 189–191.
- Phillips, W.J. 1959. The last (?) occurrence of *Notornis* in the North Island. *Notornis* 8: 93–94.
- Phillips, J.H. 1963. The pelagic distribution of the sooty shearwater *Procellaria grisea*. *Ibis* 105: 340–353.
- Phillips, M.J.; Gibb, G.C.; Crimp, E.A. & Penny, D. 2010. Tinamous and moa flock together: mitochondrial genome sequence analysis reveals independent loss of flight among ratites. *Systematic Biology* 59: 90–107.
- Phillips, R.E. 1980. Behaviour and systematics of New Zealand plovers. *Emu* 80: 177–197.
- Phillips, S. 2006. Regional roundup – Auckland. *Southern Bird* 28: 12.
- Pierce, R.J. 1969. Brown booby on South Canterbury coast. *Notornis* 16: 125.
- Pierce, R.J. 1974. Presumed attempted breeding of the white-winged black tern in New Zealand. *Notornis* 21: 129–134.
- Pierce, R.J. 1978. Feeding methods of an oriental pratincole. *Notornis* 25: 290.
- Pierce, R.J. 1979. Foods and feeding of the wrybill (*Anarhynchus frontalis*) on its riverbed breeding grounds. *Notornis* 26: 1–21.
- Pierce, R.J. 1980. Habitats and feeding of the Auckland Island banded dotterel (*Charadrius bicinctus exilis* Falla 1978) in autumn. *Notornis* 27: 309–324.
- Pierce, R.J. 1984a. Plumage, morphology and hybridisation of New Zealand stilts *Himantopus* spp. *Notornis* 31: 106–130.
- Pierce, R.J. 1984b. Breeding success of isolated pairs of Caspian terns in Canterbury. *Notornis* 31: 185–190.

- Pierce, R.J. 1992. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1990 to 30 June 1991. *Notornis* 39: 161–210.
- Pierce, R.J. 1994. A relic population of rifleman in Northland. *Notornis* 41: 234.
- Pilgrim, R.L.C. & Palma, R.L. 1982. A list of the chewing lice (Insecta: Mallophaga) from birds in New Zealand. *National Museum of New Zealand Miscellaneous Series* 6: 1–32. [Also as *Notornis* 29 (Supplement): 1–32.]
- Pinder, R. 1966. The Cape pigeon, *Daption capensis* Linnaeus, at Signy Island, South Orkney Islands. *British Antarctic Survey Bulletin* 8: 19–47.
- Pinto, O.M. de O. 1938. Catalogo das aves do Brasil e lista dos exemplares que as representam no Museu Paulista. *Revista do Museu Paulista* 22: 1–566.
- Pitman, R.L. 1986. *Atlas of seabird distribution and relative abundance in the eastern tropical Pacific*. La Jolla, California: U.S. National Marine Fisheries Service, Southwest Fisheries Science Center. v + 107 pp.
- Pitman, R.L. & Ballance, L.T. 1992. Parkinson's petrel distribution and foraging ecology in the eastern Pacific: aspects of an exclusive feeding relationship with dolphins. *Condor* 94: 825–835.
- Pitman, R.L. & Jehl, J.R. 1998. Geographic variation and reassessment of species limits in the “masked” boobies of the eastern Pacific Ocean. *The Wilson Bulletin* 110: 155–170.
- Plant, A.R.; Qalo, K.M.; Vererusa, K. & Watling, D. 1989. A Tahiti petrel (*Pseudobulweria rostrata*) from Gau Island, Fiji. *Notornis* 36: 149–150.
- Polkanov, A. & Keeling, P. 2002. *Review of the Auckland Conservancy rainbow lorikeet operation*. Unpublished report. Auckland: New Zealand Department of Conservation. 26 pp.
- Pollock, G. (Comp.). 2003. Classified summarised notes, South Island and outlying islands, 1 July 2000 to 30 June 2001. *Notornis* 50: 161–166.
- Pollock, G. 2005. Nelson. *Southern Bird* 21: 14.
- Pons, J.-M.; Hassanin, A. & Crochet, P.-A. 2005. Phylogenetic relationships within the Laridae (Charadriiformes: Aves) inferred from mitochondrial markers. *Molecular Phylogenetics and Evolution* 37: 686–699.
- Portelli, D.J. 2016. Plumage variation in Gould's petrel (*Pterodroma leucoptera*): an evaluation of the taxonomic validity of *P. l. caledonica* (Imber & Jenkins 1981) [sic]. *Notornis* 63: 130–141.
- Portflitt-Toro, M.; Miranda-Urbina, D. & Luna-Jorquera, G. 2018. Specimen record confirms broad-billed prion *Pachyptila vittata* presence in Chilean waters. *Marine Ornithology* 46: 69–70.
- Potts, T.H. 1871. On the birds of New Zealand (Part II). *Transactions and Proceedings of the New Zealand Institute* 3: 59–109.
- Potts, T.H. 1872a. Notes and descriptions of some birds lately added to the museum, Canterbury, New Zealand. *Ibis* 2 (3rd series): 35–39.
- Potts, T.H. 1872b. Notes on the birds of New Zealand. *The Zoologist*, May 1872: 3052–3056.
- Potts, T.H. 1872c. Notes on the birds of New Zealand. *The Zoologist*, June 1872: 3089–3095.
- Potts, T.H. 1873. On the birds of New Zealand (Part III). *Transactions and Proceedings of the New Zealand Institute* 5: 171–205.
- Potts, T.H. 1882. *Out in the open: a budget of scraps of natural history gathered in New Zealand*. Christchurch: Lyttelton Times Co. Ltd. 301 pp.
- Power, D.M. & Ainley, D.G. 1986. Seabird geographic variation: similarity among populations of Leach's storm-petrel. *Auk* 103: 575–585.
- Powers, K.D. 1983. *Pelagic distributions of marine birds off the northeastern United States*. NOAA Technical Memorandum NMFS-F/NEC-27. Woods Hole: US Department of Commerce. xvi + 201 pp.
- Powlesland, R.G. 1983. Seabirds found dead on New Zealand beaches in 1981. *Notornis* 30: 125–135.
- Powlesland, R.G. 1985. Seabirds found dead on New Zealand beaches in 1983 and a review of albatross recoveries since 1960. *Notornis* 32: 23–41.
- Powlesland, R.G. 1986. Seabirds found dead on New Zealand beaches in 1984 and a review of fulmar recoveries since 1960. *Notornis* 33: 171–184.
- Powlesland, R.G. 1987. Seabirds found dead on New Zealand beaches in 1985 and a review of *Pterodroma* species recoveries since 1960. *Notornis* 34: 237–252.
- Powlesland, R.G. 1989a. Seabirds found dead on New Zealand beaches in 1986 and a review of *Pachyptila* species since 1960. *Notornis* 36: 125–140.
- Powlesland, R.G. 1989b. Seabirds found dead on New Zealand beaches in 1987, and a review of *Procellaria* species since 1960. *Notornis* 36: 299–310.
- Powlesland, R.G. 1996. Red-tailed tropicbird *Phaethon rubricauda* found near Pureora. *Notornis* 43: 158–159.
- Powlesland, R.G. & Crockett, D. 1986. A glossy ibis in the Chatham Islands. *Notornis* 33: 232.
- Powlesland, R.G.; Hay, J.R. & Powlesland, M.H. 2000. Bird fauna of Niue Island in 1994–1995. *Notornis* 47: 39–53.
- Powlesland, R.G. & Pickard, C.R. 1992. Seabirds found dead on New Zealand beaches in 1988, and a review of *Puffinus* species recoveries, 1943 to 1988. *Notornis* 39: 27–46.
- Powlesland, R.G.; Pickard, C.R. & Powlesland, M.H. 1992. Seabirds found dead on New Zealand beaches in 1989, and a review of *Pelecanoides urinatrix*, *Phaethon rubricauda*, *P. lepturus* and *Fregata ariel* recoveries, 1943 to 1988. *Notornis* 39: 101–111.
- Powlesland, R.G. & Powlesland, M.H. 1993. Seabirds found dead on New Zealand beaches in 1991, and a review of *Morus* and *Sula* species recoveries, 1943 to 1991. *Notornis* 40: 233–245.
- Powlesland, R.G. & Powlesland, M.H. 1994a. Seabirds found dead on New Zealand beaches in 1992, and a review of *Larus* species recoveries, 1943 to 1992. *Notornis* 41: 117–132.
- Powlesland, R.G. & Powlesland, M.H. 1994b. Seabirds found dead on New Zealand beaches in 1993, with a review of *Sterna albobristata*, *S. caspia* and *S. striata* recoveries, 1943 to 1992. *Notornis* 41: 275–286.
- Powlesland, R.G.; Powlesland, M.H. & Pickard, C.R. 1993. Seabirds found dead on New Zealand beaches in 1990, and a review of *Phalacrocorax*, *Leucocarbo*, and *Stictocarbo* species recoveries, 1943 to 1990. *Notornis* 40: 27–43.

- Pratt, E. 1979. The growth of a cattle egret colony. *Notornis* 26: 353–356.
- Pratt, H.D. 2011. Observations on species limits in the great egret (*Ardea alba*) complex. *Journal of Heron Biology and Conservation* 1: 5 (5 pp).
- Pratt, H.D.; Bruner, P.L. & Berrett, D.G. 1987. *A field guide to the birds of Hawaii and the tropical Pacific*. Princeton: Princeton University Press. xx + 409 pp, 45 pls.
- Pratt, H.D.; Masibalavu, V. & Abbott, M. 2008. Grey heron (*Ardea cinerea*) sightings in Fiji. *Notornis* 55: 42–43.
- Predator Free NZ website (<https://predatorfreenz.org/research/the-challenges-of-counting-kakariki/>), viewed Feb. 2022.
- Price, R.D.; Hellenthal, R.A. & Palma, R.L. 2003. *World checklist of chewing lice with host associations and keys to families and genera*. Pp. 1–448. In: Price, R.D.; Hellenthal, R.A.; Palma, R.L.; Johnson, K.P. & Clayton, D.H. *The chewing lice: world checklist and biological overview*. Illinois Natural History Survey Special Publication 24: x + 501 pp.
- Priddel, D. & Carlile, N. 2004a. Seabird islands No. 22/1 – Boondelbah Island, New South Wales. *Corella* 28(4): 104–106.
- Priddel, D. & Carlile, N. 2004b. Seabird islands No. 35/1 – Cabbage Tree Island, New South Wales. *Corella* 28(4): 107–109.
- Priddel, D.; Carlile, N.; Portelli, D.; Kim, Y.; O’Neill, L.; Bretagnolle, V.; Ballance, L.T.; Phillips, R.A.; Pitman, R.L.; Rayner, M.J. 2014. Pelagic distribution of Gould’s petrel (*Pterodroma leucoptera*): linking shipboard and onshore observations with remote-tracking data. *Emu* 114: 360–370.
- Priddel, D.; Hutton, I.; Olson, S.L. & Wheeler, R. 2005. Breeding biology of masked boobies (*Sula dactylatra tasmani*) on Lord Howe Island, Australia. *Emu* 105: 105–113.
- Prince, P.A.; Croxall, J.P.; Trathan, P.N. & Wood, A.G. 1998. The pelagic distribution of South Georgia albatrosses and their relationships with fisheries. Pp. 137–167. In: Robertson, G. & Gales, R.P. (Eds). *Albatross biology and conservation*. Chipping Norton, New South Wales: Surrey Beatty & Sons. xii + 300 pp.
- Prum, R.O.; Berv, J.S.; Dornburg, A.; Field, D.J.; Townsend, J.P.; Lemmon, E.M. & Lemmon, A.R. 2015. A comprehensive phylogeny of birds (*Aves*) using targeted next-generation DNA sequencing. *Nature* 526: 569–573. doi: 10.1038/nature15697
- Pulham, G.A. 2000. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 1998 to 30 June 1999. *Notornis* 47: 215–234.
- Pulham, G.A. 2003. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2001 to 30 June 2002. *Notornis* 50: 103–112.
- Pulham, G.A. 2004. Fairy tern update. *Southern Bird* 19: 9.
- Purdie, A.C. 1871. On a (supposed) new species of bittern, from the Lake District. *Proceedings of the New Zealand Institute (Otago Institute)* 3(2): 99–100.
- Pycroft, A.T. 1899. Birds of the Bay of Islands. *Transactions and Proceedings of the New Zealand Institute* 31: 141–146.
- Pyle, P.; Welch, A.J. & Fleischer, R.C. 2011. A new species of shearwater (*Puffinus*) recorded from Midway Atoll, northwestern Hawaiian Islands. *Condor* 113: 518–527.
- Rafinesque, C.S. 1815. *Analyse de la nature, ou tableau de l’univers et des corps organisés*. Palermo, Italy: published by the author. 224 pp. [Reprinted in Richmond, C.W. 1909].
- Ramstad, K.M.; Gibb, G.C.; Robertson, H.A.; Colbourne, R.M.; Doran, E.E. & Shepherd, L.D. 2021. Recent extinctions among little spotted kiwi (*Apteryx owenii*) and the origin of extant populations. *Emu* 121: 23–32.
- Rare Birds Committee. 2005. Report of Rare Birds Committee. *Southern Bird* 21: 5.
- Rawlence, N. 2006. *Evolutionary genetics of the New Zealand parakeets*. Unpublished M.Sc (Hons) thesis. Wellington, New Zealand: Victoria University of Wellington. 242 pp.
- Rawlence, N.J. & Cooper, A. 2013. Youngest reported radiocarbon age of a moa (*Aves*: Dinornithiformes) dated from a natural site in New Zealand. *Journal of the Royal Society of New Zealand* 43: 100–107.
- Rawlence, N.J.; Kardamaki, A.; Easton, L.J.; Tennyson, A.J.D.; Scofield, R.P. & Waters J.M. 2017. Ancient DNA and morphometric analysis reveal extinction and replacement of New Zealand’s unique black swans. *Proceedings of the Royal Society B: Biological Sciences* 284(1859): 20170876. 7 pp.
- Rawlence, N.J.; Rayner, M.J.; Lovegrove, T.G.; Stoddart, D.; Vermeulen, M.; Easton, L.J.; Tennyson, A.J.D.; Scofield, R.P.; Kennedy, M.; Spencer, H. & Waters, J.M. 2019. Archival DNA reveals cryptic biodiversity within the spotted shag (*Phalacrocorax punctatus*) from New Zealand. *The Condor Ornithological Applications* 121(3): 1–16. doi: 10.1093/condor/duz029
- Rawlence, N.J.; Salis, A.T.; Spencer, H.G.; Waters, J.M.; Scarsbrook, L.; Mitchell, K.J.; Phillips, R.A.; Calderón, L.; Cook, T.R.; Bost, C.-A.; Dutoit, L.; King, T.M.; Masello, J.F.; Nupen, L.J.; Quillfeldt, P.; Ratcliffe, N.; Ryan, P.G.; Till, C.E. & Kennedy, M. 2022. Rapid radiation of Southern Ocean shags in response to receding sea ice. *Journal of Biogeography* 00: 1–12. <https://doi.org/10.1111/jbi.14360> 12 pp.
- Rawlence, N.J.; Scofield, R.P.; Spencer, H.G.; Lallas, C.; Easton, L.J.; Tennyson, A.J.D.; Adams, M.; Pasquet, E.; Fraser, C.; Waters, J.M. & Kennedy, M. 2016. Genetic and morphological evidence for two species of *Leucocarbo* shag (*Aves*, Pelecaniformes, Phalacrocoracidae) from southern South Island of New Zealand. *Zoological Journal of the Linnean Society* 177: 676–694.
- Rawlence, N.J.; Tennyson, A.J.D.; Cole, T.L.; Verry, A.J.F. & Scofield, R.P. 2019. Evidence for breeding of *Megadyptes* penguins in the North Island at the time of human arrival. *New Zealand Journal of Zoology* 46: 165–173.
- Rawlence, N.J.; Till, C.E.; Easton, L.G.; Spencer, H.G.; Schuckard, R.; Melville, D.S.; Scofield, R.P.; Tennyson, A.J.D.; Rayner, M.J.; Waters, J.M. & Kennedy, M. 2017. Speciation, range contraction and extinction in the endemic New Zealand king shag complex. *Molecular Phylogenetics and Evolution* 115: 197–209.
- Rayner, M.J.; Gaskin, C.P.; Fitzgerald, N.B.; Baird, K.A.; Berg, M.M.; Boyle, D.; Joyce, L.; Landers, T.J.; Loh, G.G.; Maturin, S.; Perriman, L.; Scofield, R.P.; Simm, J.; Southey, I.; Taylor, G.; Tennyson, A.J.D.; Robertson, B.C.; Young, M.; Walle, R. & Ismar, S. 2015. Using miniaturized radiotelemetry to discover the breeding grounds of the endangered New Zealand storm petrel *Fregatta maoriana*. *Ibis* 157: 754–766.
- Rayner, M.J.; Hauber, M.E. & Clout, M.N. 2007. Breeding habitat of the Cook’s petrel (*Pterodroma cookii*) on Little Barrier Island (Hauturu): implications for the conservation of a New Zealand endemic. *Emu* 107: 59–68.

- Rayner, M.J.; Hauber, M.E.; Clout, M.N.; Seldon, D.S.; van Dijken, S.; Bury, S. & Phillips, R.A. 2008. Foraging ecology of the Cook's petrel *Pterodroma cookii* during the austral breeding season: a comparison of its two populations. *Marine Ecology Progress Series* 370: 271–284.
- Rayner, M.J.; Hauber, M.E.; Steeves, T.E.; Lawrence, H.A.; Thompson, D.R.; Sagar, P.M.; Bury, S.J.; Landers, T.J.; Phillips, R.A.; Ranjard, L. & Shaffer, S.A. 2011. Contemporary and historic separation of transequatorial migration between genetically distinct seabird populations. *Nature Communications* 2(332): 1–7.
- Rayner, M.J.; Parker, K.A. & Imber, M.J. 2008. Population census of Cook's petrel *Pterodroma cookii* breeding on Codfish Island (New Zealand) and the global conservation status of the species. *Bird Conservation International*. 18: 211–218.
- Rayner, M.J.; Parker, K.A.; Neho, T. & Hvid, T. 2020. Buller's mollymawk (*Thalassarche bulleri platei*) count at Rosemary Rock, Manawatāwhi (Three Kings Islands). *Notornis* 67: 580–582.
- Rayner, M.J.; Taylor, G.A.; Gaskin, C.P.; Dunphy, B.J. 2017. Seasonal activity and unpredicted polar front migration of northern New Zealand common diving petrels (*Pelecanoides urinatrix*). *Emu* 117: 290–298.
- Rayner, M.J.; Taylor, G.A.; Gummer, H.D.; Phillips, R.A.; Sagar, P.M.; Shaffer, S.A. & Thompson, D.R. 2012. The breeding cycle, year-round distribution and activity patterns of the endangered Chatham petrel (*Pterodroma axillaris*). *Emu* 112: 107–116.
- Rayner, M.J.; van Loenen, A.L.; Shepherd, L.D.; Cubrinovska, I.; Scofield, R.P.; Tennyson, A.J.D.; Bunce, M. & Steeves, T.E. 2021. Comprehensive evidence for subspecies designations in Cook's petrel *Pterodroma cookii* with implications for conservation management. *Bird Conservation International* 13: 1–13.
- Reddy, S.; Kimball, R.T.; Pandey, A.; Hosner, P.A.; Braun, M.J.; Hackett, S.J.; Han, K.; Harshman, J.; Huddleston, C.J.; Kingston, S.; Marks, B.D.; Miglia, K.J.; Moore, W.S.; Sheldon, F.H.; Steadman, D.W.; Witt, C.C.; Yuri, T. & Braun, E.J. 2017. Why do phylogenomic data sets yield conflicting trees? Data type influences the avian tree of life more than taxon sampling. *Systematic Biology* 66: 857–879.
- Reed, S. 1972. Black-capped petrel in the Waikato. *Notornis* 19: 91.
- Reed, S.M. 1976a. Report on Cuvier Island, January 1976. *Notornis* 23: 259–262.
- Reed, S.M. 1976b. Correction to short note on black-capped petrel in the Waikato. *Notornis* 23: 355.
- Reichenbach, H.G.L. 1849–53. *Avium systema naturale: das natürliche System der Vögel mit hundert Tafeln grosstentheils Original-Abbildungen der bis jetzt entdeckten fast zwölfhundert typischen Formen. Vorläufer einer Iconographie der Arten der Vögel aller Welttheile, welche, nachdem bereits fast dreitausend Abbildungen erscheinen sind, ununterbrochen fortgesetzt wird*. Dresden & Leipzig: Expedition der vollständigsten Naturgeschichte. 100 pp., 100 pls.
- Reid, D. & Reid, B. 1965. The Sulphur Point (Lake Rotorua) gull colony. *Notornis* 12: 138–157.
- Reid, T. & James, D. 1997. The Chatham Island mollymawk (*Diomedea eremita*) in Australia. *Notornis* 44: 125–128.
- Reid, T.A.; Hindell, M.A.; Eades, D.W. & Newman, M. 2002. Seabird atlas of south-eastern Australian waters. *Birds Australia Monograph Series* 4: vii + 146.
- Reinke, K.; Butcher, E.C.; Russell, C.J.; Nicholls, D.G. & Murray, M.D. 1998. Understanding the flight movements of a non-breeding wandering albatross, *Diomedea exulans gibsoni*, using a geographic information system. *Australian Journal of Zoology* 46: 171–181.
- Reischek, A. 1885. Notes on New Zealand ornithology. *Transactions and Proceedings of the New Zealand Institute* 17: 187–198.
- Reischek, A. 1887. Description of the Little Barrier or Hauturu Island, the birds which inhabit it, and the locality as a protection to them. *Transactions and Proceedings of the New Zealand Institute* 19: 181–184.
- Reischek, A. 1889. Notes on the islands to the south of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 21: 384–385.
- Reischek, A. 1924. *Sterbende Welt – Zwölf Jahre Forscherleben aus Neuseeland*. Leipzig: F.A. Brockhaus. 334 pp.
- Reischek, A. 1930. *Yesterdays in Maoriland. New Zealand in the 'eighties*. Translated and edited by H.E.L. Priday. London: Jonathan Cape. 311 pp.
- Renner, M. 1995. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 263–279.
- Renner, M. 2001. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 1998 to 30 June 1999. *Notornis* 48: 100–107.
- Rexer-Huber, K.; Thompson, D.R. & Parker, G.C. 2020. White-chinned petrel (*Procellaria aequinoctialis*) burrow density, occupancy, and population size at the Auckland Islands. *Notornis* 67: 387–401.
- Reyes-Arriagada, R.; Campos-Ellwanger, P.; Schlatter, R.P. & Baduini, C. 2007. Sooty shearwater (*Puffinus griseus*) on Guafo Island: the largest seabird colony in the world? *Biodiversity and Conservation* 16: 913–930.
- Rhymer, J.M.; Williams, M.J. & Kingsford, R.T. 2004. Implications of phylogeography and population genetics for subspecies taxonomy of grey (Pacific black) duck *Anas superciliosa* and its conservation in New Zealand. *Pacific Conservation Biology* 10: 57–66.
- Rich, P.V. & Scarlett, R.J. 1977. Another look at *Megaegothales*, a large owlet-nightjar from New Zealand. *Emu* 77: 1–8.
- Richards, E.C. (Ed.). 1950. *Diary of E.R. Chudleigh 1862–1921 Chatham Islands*. Christchurch: Simpson and Williams Ltd. 474 pp.
- Richardson, M.E. 1984. Aspects of the ornithology of the Tristan da Cunha Group and Gough Island, 1972–1974. *Cormorant* 12: 123–201.
- Richdale, L.E. 1940. Random notes on the genus *Eudyptula* on the Otago Peninsula, New Zealand. *Emu* 40: 180–217.
- Richdale, L.E. 1941. The erect-crested penguin (*Eudyptes sclateri*) Buller. *Emu* 41: 25–53.
- Richdale, L.E. [1942]. Notes on the southern robin. *Wild Life Series (Volume 1)*: 1). Dunedin: Otago Daily Times and Witness Newspapers Co. 8 pp.
- Richdale, L.E. 1943. The white-faced storm petrel or takahi-kare-moana (*Pelagodroma marina maoriana*, Mathews). *Transactions and Proceedings of the Royal Society of New Zealand* 73: 97–115, 217–232, 335–350.
- Richdale, L.E. 1944. Camera studies of New Zealand birds. *Wild Life Series (Volume 1)*: 4). Dunedin: Otago Daily Times and Witness Newspapers Co. 16 pp.

- Richdale, L.E. [1945]. Vanishing New Zealand birds. *Wild Life Series (Volume 1: 5)*. Dunedin: Otago Daily Times and Witness Newspapers Co. 16 pp.
- Richdale, L.E. [1948]. Wild life on an island outpost. *Wild Life Series (Volume 1: 8)*. Dunedin: Otago Daily Times and Witness Newspapers Co. 16 pp.
- Richdale, L.E. [1949]. Native perching birds of New Zealand. *Wild Life Series (Volume 2: 10)*. Dunedin: Otago Daily Times and Witness Newspapers Co. 16 pp.
- Richdale, L.E. 1950. Further notes on the erect-crested penguin. *Emu* 49: 153–166.
- Richdale, L.E. [1950]. New Zealand waders, terns, and gulls. *Wild Life Series (Volume 2: 12)*. Dunedin: Otago Daily Times and Witness Newspapers Co. 16 pp.
- Richdale, L.E. 1953. p.5 in Summarised reports. *Reports & Bulletins (1939–1942) of Ornithological Society of New Zealand: 5–22*.
- Richdale, L.E. 1957. *A population study of penguins*. Oxford: Clarendon Press. 195 pp.
- Richdale, L.E. 1965. Biology of the birds of Whero Island, New Zealand, with special reference to the diving petrel and the white-faced storm petrel. *Transactions of the Zoological Society of London* 31: 1–86.
- Richmond, C.W. 1909. A reprint of the ornithological writings of C.S. Rafinesque. Part I. *Auk* 26: 37–55.
- Riddell, D. & Taylor, A. 1984. Fairy martin at Cape Reinga. *Notornis* 31: 224.
- Ridgway, R. 1901. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part I. Family Fringillidae – the finches. *Bulletin of the United States National Museum* 50: xxx + 715 pp., 19 pls.
- Ridgway, R. 1902. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part II. Family Tanagridae – the tanagers, family Icteridae – the troupials, family Coerebidae – the honey creepers, family Mniotiltidae – the wood warblers. *Bulletin of the United States National Museum* 50: xx + 834 pp., 22 pls.
- Ridgway, R. 1904. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part III. Family Motacillidae – the wagtails and pipits, family Hirundinidae – the swallows, family Ampelidae – the waxwings, family Ptilonotidae – the silky flycatchers, family Dulidae – the palm chats, family Vireonidae – the vireos, family Laniidae – the shrikes, family Corvidae – the crows and jays, family Paridae – the titmice, family Sittidae – the nuthatches, family Certhidae – the creepers, family Troglodytidae – the wrens, family Cinclidae – the dippers, family Chamaeidae – the wren-tits, family Sylviidae – the warblers. *Bulletin of the United States National Museum* 50: xx + 801 pp., 19 pls.
- Ridgway, R. 1907. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part IV. Family Turdidae – thrushes, family Zeledoniidae – wren-thrushes, family Mimidae – mockingbirds, family Sturnidae – starlings, family Ploceidae – weaver birds, family Alaudidae – larks, family Oxyruncidae – sharp-bills, family Tyrannidae – tyrant flycatchers, family Pipridae – manakins, family Cotingidae – cotingas. *Bulletin of the United States National Museum* 50: xxii + 973 pp., 34 pls.
- Ridgway, R. 1911. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part V. Family Pterotochidae – the tapaculos, family Dendrocolaptidae – the woodhewers, family Formicariidae – the antbirds, family Trochilidae – the humming birds, family Furnariidae – the ovenbirds, family Micropodidae – the swifts, family Trogonidae – the trogons. *Bulletin of the United States National Museum* 50: xxiii + 859 pp., 33 pls.
- Ridgway, R. 1914. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part VI. Family Picidae – the woodpeckers, family Capitonidae – the barbers, family Ramphastidae – the toucans, family Bucconidae – the puff birds, family Galbulidae – the jacamars, family Alcedinidae – the kingfishers, family Todidae – the todies, family Momotidae – the motmots, family Caprimulgidae – the goat-suckers, family Nyctibiidae – the potoos, family Tytonidae – the barn owls, family Bubonidae – the eared owls. *Bulletin of the United States National Museum* 50: xx + 882 pp., 36 pls.
- Ridgway, R. 1916. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part VII. Family Cuculidae – the cuckoos, family Psittacidae – the parrots, family Columbidae – the pigeons. *Bulletin of the United States National Museum* 50: xiii + 543 pp., 24 pls.
- Ridgway, R. 1919. Birds of North and Middle America, a descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the isthmus of Panama, the West Indies and other islands of the Caribbean sea, and the Galapagos archipelago. Part VIII. Family Jacanidae – the jacanas, family Oedicnemidae – the thick-knees, family Haematopodidae – the oystercatchers, family Arenariidae – the turnstones, family Aphrizzidae – the surf birds, family Charadriidae – the plovers, family Scolopacidae – the snipes, family Phalaropodidae – the phalaropes, family Recurvirostridae – the avocets and stilts, family Rynchopidae – the skimmers, family Sternidae – the terns, family Laridae – the gulls, family Stercorariidae – the skuas, family Alcidae – the auks. *Bulletin of the United States National Museum* 50: xvi + 852 pp., 34 pls.
- Riegen, A.C. 2003. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2001 to 30 June 2002. *Notornis* 50: 103–112.
- Riegen, A.C. & Sagar, P.M. 2020. Distribution and numbers of waders in New Zealand, 2005–2019. *Notornis* 67: 591–634.
- Rinke, D.R.; Onnebrink, H. & Curio, E. 1992. Miscellaneous bird notes from the Kingdom of Tonga. *Notornis* 39: 301–315.
- Roberson, D. & Bailey, S.F. 1991. *Cookilaria* petrels in the eastern Pacific Ocean – Part II. *American Birds* 45: 1067–1081.

- Roberts, B. 1940. The life cycle of Wilson's petrel *Oceanites oceanicus* (Kuhl). *British Graham Land Expedition 1934–37 Scientific Reports 1*(2): 141–194.
- Roberts, P.E. 1977. An unusual petrel near the Chatham Islands, New Zealand. *Notornis 24*: 280–283.
- Robertson, B.C. & Gemmill, N.J. 2002. Geographic differentiation in the Australasian great crested grebe (*Podiceps cristatus australis*). *DOC Science Internal Series 34*: 1–11. Wellington: New Zealand Department of Conservation.
- Robertson, B.C.; Paley, R. & Gemmill, N.J. 2003. Broad scale genetic population structure of the blue duck *Hymenolaimus malacorhynchos*. Pilot study of mitochondrial variation. *DOC Science Internal Series 115*: 1–12. Wellington: New Zealand Department of Conservation.
- Robertson, B.C.; Stephenson, B.M. & Goldstein, S.J. 2011. When discovery is not enough: taxonomic uncertainty hinders conservation of a critically endangered bird. *Molecular Phylogenetics and Evolution 63*: 949–952.
- Robertson, B.C.; Stephenson, B.M.; Ronconi, R.A.; Goldstein, S.J.; Shepherd, L.; Tennyson, A.; Carlile, N. & Ryan, P.G. 2016. Phylogenetic affinities of the *Fregatta* storm-petrels are not black and white. *Molecular Phylogenetics and Evolution 97*: 170–176.
- Robertson, C.J.R. 1972a. Preliminary report on bird banding in New Zealand 1964–1971. *Notornis 19*: 61–73.
- Robertson, C.J.R. 1972b. Two unusual albatross recoveries. *Notornis 19*: 91.
- Robertson, C.J.R. 1975. Yellow-nosed mollymawk (*Diomedea chlororhynchus*) [sic] recorded in the Chatham Islands. *Notornis 22*: 342–344.
- Robertson, C.J.R. (Ed.) 1985. *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 319 pp.
- Robertson, C.J.R. 1991. Questions on the harvesting of toroa in the Chatham Islands. *Science & Research Series 35*: 1–105. Wellington: New Zealand Department of Conservation.
- Robertson, C.J.R. 1993. Survival and longevity of the northern royal albatross *Diomedea epomophora sanfordi* at Taiaroa Head 1937–93. *Emu 93*: 269–276.
- Robertson, C.J.R. 2001. Effects of intervention on the royal albatross population at Taiaroa Head, Otago, 1937–2001. *DOC Science Internal Series 23*: 1–13. Wellington: New Zealand Department of Conservation.
- Robertson, C.J.R. 2002. The scientific name of the Indian yellow-nosed albatross *Thalassarche carteri*. *Marine Ornithology 30*: 48–49.
- Robertson, C.J.R.; Abel, R.S. & Kinsky, F.C. 1972. First New Zealand record of Magellanic penguin (*Spheniscus magellanicus*). *Notornis 19*: 111–113.
- Robertson, C.J.R.; Bell, D. & Nicholls, D.G. 2000. The Chatham albatross (*Thalassarche eremita*): at home and abroad. *Notornis 47*: 174.
- Robertson, C.J.R.; Gilbert, J.R. & Erickson, A.W. 1980. Birds and seals of the Balleny Islands, Antarctica. *National Museum of New Zealand Records 1*: 271–279.
- Robertson, C.J.R.; Hyvonen, P.; Fraser, M.J. & Pickard, C.R. 2007. *Atlas of bird distribution in New Zealand 1999–2004*. Wellington: Ornithological Society of New Zealand. x + 533 pp.
- Robertson, C.J.R. & Jenkins, J. 1981. Birds seen at sea in southern New Zealand waters, February–June 1981. *Australasian Seabird Group Newsletter 16*: 17–27.
- Robertson, C.J.R. & Kinsky, F.C. 1972. The dispersal movements of the royal albatross (*Diomedea epomophora*). *Notornis 19*: 289–301.
- Robertson, C.J.R.; Klavitter, J. & McCarthy, R. 2005. Salvin's albatross (*Thalassarche salvini*) on Midway Atoll. *Notornis 52*: 236–237.
- Robertson, C.J.R. & Nicholls, D.G. 2000. Round the world with the northern royal albatross (*Diomedea sanfordi*). *Notornis 47*: 176.
- Robertson, C.J.R. & Nunn, G.B. 1998. Towards a new taxonomy for albatrosses. Pp. 13–19. In: Robertson, G. & Gales, R.P. (Eds). *Albatross biology and conservation*. Chipping Norton, New South Wales: Surrey Beatty & Sons. xii + 300 pp.
- Robertson, C.J.R.; Robertson, G.G. & Bell, D. 1997. White-capped albatross (*Thalassarche steadi*) breeding at Chatham Islands. *Notornis 44*: 156–158.
- Robertson, C.J.R. & Stephenson, B.M. 2005. Cape gannet (*Sula capensis*) breeding at Cape Kidnappers, New Zealand. *Notornis 52*: 238–242.
- Robertson, C.J.R. & van Tets, G.F. 1982. The status of birds at the Bounty Islands. *Notornis 29*: 311–336.
- Robertson, C.J.R. & Warham, J. 1992. Nomenclature of the New Zealand wandering albatrosses *Diomedea exulans*. *Bulletin of the British Ornithologists' Club 112*: 74–81.
- Robertson, G.; Moreno, C.A.; Lawton, K.; Arata, J.; Valencia, J. & Kirkwood, R. 2007. An estimate of the population sizes of black-browed (*Thalassarche melanophrys*) and grey-headed (*T. chrysostoma*) albatrosses breeding in the Diego Ramirez Archipelago, Chile. *Emu 107*: 239–244.
- Robertson, G. & Weimerskirch, H. 1993. Tracking albatrosses across southern seas. *Antarctic 13*: 171–173.
- Robertson, H.A. 1992. Trends in the numbers and distribution of coastal birds in Wellington Harbour. *Notornis 39*: 263–289.
- Robertson, H.A. 1995. In: Parrish, G.R. & Lock, W.J. (Comps). Classified summarised notes, North Island, 1 July 1993 to 30 June 1994. *Notornis 42*: 145–173.
- Robertson, H.A. 2015. Little spotted kiwi. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed 23 Jun. 2021].
- Robertson, H.A.; Baird, K.; Dowding, J.E.; Elliott, G.P.; Hitchmough, R.A.; Miskelly, C.M.; McArthur, N.; O'Donnell, C.F.J.; Sagar, P.M.; Scofield, R.P. & Taylor, G.A. 2017. *Conservation status of New Zealand birds, 2016*. New Zealand Threat Classification Series 19. Wellington: Department of Conservation. 23 pp.
- Robertson, H.A. & Dennison, M.D. 1977. Red-kneed dotterel (*Charadrius cinctus*) – first record for New Zealand. *Notornis 24*: 193–194.
- Robson, C. 2008. *Field guide to the birds of Thailand and Southeast Asia*. London: New Holland. 544 pp.
- Rogers, A.E.F. 1980. Seabirds observed between Sydney and Buenos Aires. *Notornis 27*: 69–78.
- Rogers, D.I.; Collins, P.; Jessop, R.E.; Minton, C.D.T. & Hassell, C.J. 2005. Gull-billed terns in north-west Australia: subspecies identification, moults and behavioural notes. *Emu 105*: 145–158.
- Rogers, D.I. & van de Kam, J. 2004. Sorting migrant gull-billed terns from residents. *Wingspan 14*: 22–25.

- Rogers, D.I.; Yang, H.-Y.; Hassell, C.J.; Boyle, A.N.; Rogers, K.G.; Chen, B.; Zhang, Z.-W. & Piersma, T. 2010. Red knots (*Calidris canutus piersmae* and *C. c. rogersi*) depend on a small threatened staging area in Bohai Bay, China. *Emu* 110: 307–315.
- Roulin, A. & Wink, M. 2004. Predator-prey relationships and the evolution of colour polymorphism: a comparative analysis in diurnal raptors. *Biological Journal of the Linnean Society* 81: 565–578.
- Rounsevell, D.E. & Brothers, N.P. 1984. The status and conservation of seabirds at Macquarie Island. Pp. 587–592. In: Croxall, J.P.; Evans, P.G.H. & Schreiber, R.W. (Eds). Status and conservation of the world's seabirds. *International Council for Bird Protection Technical Publication 2*: i–x + 1–779.
- Roux, J.-P.; Jouventin, P.; Mougou, J.-L.; Stahl, J.-C. & Weimerskirch, H. 1983. Un nouvel albatros *Diomedea amsterdamensis* n.sp. découvert sur l'île Amsterdam (37°50'S, 77°35'E). *L'Oiseau et la Revue Française d'Ornithologie* 53: 1–11, 1 pl.
- Roux, J.-P. & Martinez, J. 1987. Rare, vagrant and introduced birds at Amsterdam and Saint Paul Islands, Southern Indian Ocean. *Cormorant* 14: 3–19.
- Rowan, M.K. 1952. The greater shearwater *Puffinus gravis* at its breeding grounds. *Ibis* 94: 97–121.
- Rowe, A.S. et al. 2000. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Rowe, A.S. & Rowe, J. 2001. In: O'Donnell, C.F.J. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 1997 to 30 June 1998. *Notornis* 48: 90–99.
- Rowe, L.K. 2018. Observations of Hutton's shearwater (*Puffinus huttoni*) at a natural colony in the Kōwhai River and a newly established by translocation colony at Te Rae o Atiu, Kaikōura Peninsula. *Notornis* 65: 42–50.
- Ryan, P. 1998. The taxonomic and conservation status of the spectacled petrel *Procellaria conspicillata*. *Bird Conservation International* 8: 223–235.
- Ryan, P. 2000. Separating albatrosses – Tristan or wandering? *Africa Birds & Birding* 5: 35–39.
- Ryan, P. 2001. All at sea. *Africa Birds & Birding* 6: 13.
- Ryan, P. 2002. Chatham albatross *Thalassarche eremita*: new to Africa. *Bulletin of the African Bird Club* 9: 44.
- Ryan, P. (Ed.). 2007. *Field guide to the animals and plants of Tristan da Cunha and Gough Island*. Newbury, U.K.: Pisces Publications. vi + 162 pp.
- Ryan, P.M. 1995. *The Reed dictionary of modern Māori*. Auckland: Reed. 648 pp.
- Sagar, P.M. 1977. Birds of the 1976–77 Snares Island expedition. *Notornis* 24: 205–210.
- Sagar, P.M. 1978. Australian pelicans in Canterbury. *Notornis* 25: 353–354.
- Sagar, P.M. 1981. The distribution and numbers of crested grebe in New Zealand 1980. *Notornis* 28: 301–310.
- Sagar, P.M. & Harrison, K.C. 1984. Wilson's phalaropes at Lake Ellesmere. *Notornis* 31: 333–334.
- Sagar, P.M.; Miskelly, C.M.; Sagar, J.L. & Tennyson, A.J.D. 2003. Population size, breeding, and annual cycle of the New Zealand Antarctic tern (*Sterna vittata bethunei*) at the Snares Islands. *Notornis* 50: 36–42.
- Sagar, P.M. & O'Donnell, C.F.J. 1982. Seasonal movements and population of the southern crested grebe in Canterbury. *Notornis* 29: 113–149.
- Sagar, P.M.; Shankar, U. & Brown, S. 1999. Distribution and numbers of waders in New Zealand, 1983–1994. *Notornis* 46: 1–43.
- Sagar, P.M. & Stahl, J.-C. 2005. Increases in the numbers of breeding pairs in two populations of Buller's albatross (*Thalassarche bulleri bulleri*). *Emu* 105: 49–55.
- Sagar, P.M.; Tennyson, A.J.D. & Miskelly, C.M. 1996. Breeding and survival of Snares Cape pigeons *Daption capense australe* at The Snares, New Zealand. *Notornis* 43: 197–207.
- Sagar, P.M. & Weimerskirch, H. 1996. Satellite tracking of southern Buller's albatrosses from The Snares, New Zealand. *Condor* 98: 649–652.
- Sainsbury, J.P.; Greene, T.C.; Moorhouse, R.J.; Daugherty, C.H. & Chambers, C.K. 2006. Microsatellite analysis reveals substantial levels of genetic variation but low levels of genetic divergence among isolated populations of kaka (*Nestor meridionalis*). *Emu* 106: 329–338.
- Sallaberry, M.A.; Yuri-Yañez, R.E.; Otero, R.A.; Soto-Acuña, S. & Torres G, T. 2010. Eocene birds from the western margin of southernmost South America. *Journal of Paleontology* 84: 1061–1070.
- Salomon, M. & Voisin, J.-F. 2010. Ecogeographical variation in the southern giant petrel (*Macronectes giganteus*). *Canadian Journal of Zoology* 88: 195–203.
- Salvadori, T. 1891. Catalogue of the Psittaci, or parrots, in the collection of the British Museum. *Catalogue of the birds in the British Museum*. Volume 20. London: The Trustees, British Museum (Natural History). xvii + 658 pp., 18 pls.
- Salvin, O. 1876. Critical notes on Procellariidae. Pp. 223–238. In: Rowley, G.D. (Ed.). *Ornithological Miscellany 1*. London: Trubner & Co. vi + 321 pp.
- Sangster, G. 1998. Purple swamphen is a complex of species. *Dutch Birding* 20: 13–22.
- Sangster, G. 2005. A name for the clade formed by owllet-nightjars, swifts and hummingbirds (Aves). *Zootaxa* 799: 1–6.
- Sangster, G.; Collinson, J.M.; Crochet, P.-A.; Knox, A.G.; Parkin, D.T.; Svensson, L. & Votier, S.C. 2011. Taxonomic recommendations for British birds: seventh report. *Ibis* 153: 883–892.
- Sangster, G.; Collinson, J.M.; Helbig, A.J.; Knox, A.G. & Parkin, D.T. 2002. The specific status of Balearic and Yelkouan shearwaters. *British Birds* 95: 636–639.
- Sangster, G.; Collinson, J.M.; Helbig, A.J.; Knox, A.G. & Parkin, D.T. 2004. Taxonomic recommendations for British birds: second report. *Ibis* 146: 153–157.
- Sangster, G.; Collinson, J.M.; Helbig, A.J.; Knox, A.G. & Parkin, D.T. 2005. Taxonomic recommendations for British birds: third report. *Ibis* 147: 821–826.
- Sangster, G.; García-R, J.C. & Trewick, S.A. 2015. A new genus for the lesser moorhen *Gallinula angulata* Sundevall, 1850 (Aves, Rallidae). *European Journal of Taxonomy* 153: 1–8.
- Sangster, G.; Hazevoet, C.J.; van den Berg, A.B.; Roselaar, C.S. & Sluys, R. 1999. Dutch avifaunal list: species concepts, taxonomic instability, and taxonomic changes in 1977–1998. *Ardea* 87: 139–166.

- Sangster, G.; Knox, A.G.; Helbig, A.J. & Parkin, D.T. 2002. Taxonomic recommendations for European birds. *Ibis* 144: 153–159.
- Sansom, O.; Bell, B.D.; Andrews, T. & Wilson, R.A. 1954. Visitation of glossy ibis. *Notornis* 6: 18–19.
- Saunders, H. 1896. *Catalogue of the birds in the British Museum. Gaviae (terns, gulls, and skuas)*. Volume 25. London: The Trustees, British Museum (Natural History). xvi + 339 pp., 1 pl.
- Saville, I. 1999. Identification of common tern. *OSNZ News* 90: 10–11.
- Saville, S. 2002. Manawatu Estuary trust. *Miranda Naturalists' Trust News* 47: 11.
- Saville, S. 2003. Chinstrap penguin at Kaikoura. *Southern Bird* 13: 4.
- Scarlett, R.J. 1968. A second North Island locality for *Pachyornis elephantopus* (Owen). *Notornis* 15: 36.
- Scarlett, R.J. 1969. The occurrence of the musk duck *Biziura lobata* (Shaw) in New Zealand. *Notornis* 16: 57–59.
- Scarlett, R.J. 1972. Bone of a presumed odontopterygian bird from the Miocene of New Zealand. *New Zealand Journal of Geology and Geophysics* 15: 269–274.
- Scarlett, R.J. 1976a. Further records of the grey petrel on Chatham Island. *Notornis* 23: 178.
- Scarlett, R.J. 1976b. Short-tailed shearwater: a new subfossil record from the Chatham Islands. *Notornis* 23: 266.
- Scarlett, R.J. 1976c. King penguins at Chatham Islands. *Notornis* 23: 355.
- Scarlett, R.J. 1979. Avifauna and man. Pp. 75–90. In: Anderson, A. (Ed.). Birds of a feather. *New Zealand Archaeological Association Monograph 2. British Archaeological Reports, International Series* 62: i–vi + 1–295.
- Scarlett, R.J. 1984. *Tereingaornis moisleyi* – a new Pliocene penguin. *New Zealand Journal of Geology and Geophysics*. 26: 419–428.
- Schiavini, A. 2000. The unrevealed southern rockhopper penguins at Staten Island, Tierra del Fuego: their largest breeding ground? *Australasian Seabird Bulletin* 36: 7.
- Schmechel, F.A. & O'Connor, S. 1999. Distribution and abundance of the Chatham Island oystercatcher (*Haematopus chathamensis*). *Notornis* 46: 155–165.
- Schodde, R. 1997a. Strigidae. Pp. 264–283. In: Schodde, R. & Mason, I.J. Aves (Columbidae to Coraciidae). Houston, W.K. & Wells, A. (Eds). *Zoological catalogue of Australia*. Volume 37.2. Melbourne: CSIRO Publishing. xiii + 440 pp.
- Schodde, R. 1997b. Apodidae. Pp. 330–345. In: Schodde, R. & Mason, I.J. Aves (Columbidae to Coraciidae). Houston, W.K. & Wells, A. (Eds). *Zoological catalogue of Australia*. Volume 37.2. Melbourne: CSIRO Publishing. xiii + 440 pp.
- Schodde, R. 1997c. Alcedinidae. Pp. 346–376. In: Schodde, R. & Mason, I.J. Aves (Columbidae to Coraciidae). Houston, W.K. & Wells, A. (Eds). *Zoological catalogue of Australia*. Volume 37.2. Melbourne: CSIRO Publishing. xiii + 440 pp.
- Schodde, R. (Ed.). 2006. Proceedings of the 23rd International Ornithological Congress, Beijing, China, 11–17 August 2002. *Acta Zoologica Sinica* 52 (Supplement): i–xvi + 1–706.
- Schodde, R.; Black, A.B. & Fornasiero, F.J. 2016. East or west: to which subspecies does the type specimen of the galah, *Eolophus roseicapilla* (Vieillot, 1817) (Aves: Cacatuidae), belong? *Zootaxa* 4067: 489–493.
- Schodde, R. & de Naurois, R. 1982. Patterns of variation and dispersal in the buff-banded rail (*Gallirallus philippensis*) in the South-west Pacific, with description of a new subspecies. *Notornis* 29: 131–142.
- Schodde, R.; Dickinson, E.C.; Steinheimer, F.D. & Bock, W.J. 2010. The date of Latham's *Supplementum Indicis Ornithologici*: 1801 or 1802? *South Australian Ornithologist* 35: 231–235.
- Schodde, R.; Fullagar, P. & Hermes, N. (Eds). 1983. A review of Norfolk Island birds: past and present. *Australian National Parks and Wildlife Service. Special Publication* 8: viii + 1–119.
- Schodde, R. & Mason, I.J. 1980. *Nocturnal birds of Australia*. Melbourne: Lansdowne Editions. 136 pp.
- Schodde, R. & Mason, I.J. 1999. *The directory of Australian birds. A taxonomic and zoogeographic atlas of the biodiversity of birds in Australia and its territories. Passerines*. Collingwood, Victoria: CSIRO Publishing. x + 851 pp.
- Schodde, R.; Tennyson, A.J.D.; Groth, J.G.; Lai, J.; Scofield, P. & Steinheimer, F.D. 2017. Settling the name *Diomedea exulans* Linnaeus, 1758 for the wandering albatross by neotypification. *Zootaxa* 4236: 135–148.
- Schofield, R. & Schofield, S. 2006. In: Pollock, G. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 2002 to 30 June 2003. *Notornis* 53: 248–251.
- Schuckard, R. 1994. New Zealand shag (*Leucocarbo carunculatus*) on Duffers Reef, Marlborough Sounds. *Notornis* 41: 93–108.
- Schuckard, R. 2006. Population status of the New Zealand king shag (*Leucocarbo carunculatus*). *Notornis* 53: 297–307.
- Schweigman, P. 2000. Royal spoonbill census. *Southern Bird* 3: 2.
- Schweigman, P. 2006. The royal spoonbill in New Zealand. *Southern Bird* 27: 10–11.
- Scofield, P. 1994a. Taxonomy of the blue grey noddy group. *Australasian Seabird Group Newsletter* 27: 3–5.
- Scofield, P. 1994b. Report on ornithological observations made from G.R.V. *Tangaroa* during leg one of TAN93/10 on southern plateau. *Australasian Seabird Group Newsletter* 27: 9–10.
- Scofield, P. & Stephenson, B. 2013. *Birds of New Zealand; a photographic guide*. First edition. Auckland: Auckland University Press. 544 pp.
- Scofield, R.P. 2005a. Rare Birds Committee report for the six months to 31 July 2005. *Southern Bird* 23: 7–9.
- Scofield, R.P. 2005b. The supposed Macquarie Island parakeet in the collection of the Canterbury Museum. *Notornis* 52: 117–120.
- Scofield, R.P. 2006. Rare Birds Committee report for the year to 31st July 2006. *Southern Bird* 27: 8–9.
- Scofield, R.P. 2007. Ruling on four records of *Pealeornis maoriana*. *Southern Bird* 30: 14.
- Scofield, R.P. 2008. Rare Birds Committee report for the two years to 31st July 2008. *Southern Bird* 36: 5.
- Scofield, R.P.; Christie, D.; Palma, R.L. & Tennyson, A.J.D. 2010. First record of streaked shearwater (*Calonectris leucomelas*) in New Zealand. *Notornis* 57: 212–215.
- Scofield, R.P.; Hiller, N. & Mannering, A.A. 2006. A fossil diving petrel (Aves: Pelecanoididae) from the mid-Miocene of North Canterbury, New Zealand. *Records of the Canterbury Museum* 20: 65–71.
- Scofield, R.P.; Mitchell, K.J.; Wood, J.R.; De Pietri, V.L.; Jarvie, S.; Llamas, B. & Cooper, A. 2017. The origin and phylogenetic relationships of the New Zealand ravens. *Molecular Phylogenetics and Evolution* 106: 136–143.

- Scofield, R.P.; Wood, J.R.; de Nascimento, L.; Robertson, H.A.; Colbourne, R.M.; De Pietri, V.L.; Innes, J. & Weir, J.T. 2021. Identification of the type locality of the South Island brown kiwi *Apteryx australis*. *Conservation Genetics* 22: 645–542.
- Scofield, R.P.; Worthy, T. & Schlumpf, H. 2003. What birds were New Zealand's first people eating? – Wairau Bar's avian remains re-examined. *Records of the Canterbury Museum* 17: 17–35.
- Scofield, R.P.; Worthy, T.H. & Tennyson, A.J.D. 2010. A heron (Aves: Ardeidae) from the early Miocene St Bathans fauna of southern New Zealand. *Records of the Australian Museum* 62: 89–104.
- Seabrook-Davison, M.; Huynen, L.; Lambert, D.M. & Brunton, D.H. 2009. Ancient DNA resolves identity and phylogeny of New Zealand's extinct and living quail (*Coturnix* sp.). *PLOS One* 4(7): e6400. doi: 10.1371/journal.pone.0006400
- Secker, H. 1994. Spread of Australian little pied cormorants to central New Zealand. *Australasian Seabird Group Newsletter* 27: 10.
- Seco Pon, J.P.; Weinecke, B. & Robertson, G. 2007. First record of Salvin's albatross (*Thalassarche salvini*) on the Patagonian Shelf. *Notornis* 54: 49–51.
- Seddon, J.H. & Seddon, B.H. 1979. Sight record of *Egretta intermedia* in New Zealand. *Notornis* 26: 330.
- Serventy, D.L.; Serventy, V. & Warham, J. 1971. *The handbook of Australian sea-birds*. Sydney: A.H. & A.W. Reed. 254 pp.
- Shaffer, S.; Weimerskirch, H.; Scott, D. & Moller, H. 2007. Globe-trotting tītī. *Tītī Times* 19: 1–3.
- Shand, A. 1895. The Moriori people of the Chatham Islands: their traditions and history. *Journal of the Polynesian Society* 4: 89–98.
- Shand, L. 1992. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1990 to 30 June 1991. *Notornis* 39: 211–232.
- Sharpe, R.B. 1893. [On the classification of the Rallidae]. *Bulletin of the British Ornithologists' Club* 1: 26–30.
- Sharpe, R.B.; Seebohm, H.; Gadow, H.; Sclater, P.L.; Salvin, O.; Hartert, E.; Ogilvie-Grant, W.R.; Hargitt, E.; Shelley, G.E.; Salvadori, T. & Saunders, H. 1874–98. *Catalogue of the birds in the British Museum*. Volumes 1–27. London: The Trustees, British Museum (Natural History).
- Shaw, T. 1994. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1992 to 30 June 1993. *Notornis* 41: 235–274.
- Sheldon, F.H. 1987. Phylogeny of herons estimated from DNA-DNA hybridization data. *Auk* 104: 97–108.
- Sheldon, F.H.; Jones, C.E. & McCracken, K.G. 2000. Relative patterns and rates of evolution in heron nuclear and mitochondrial DNA. *Molecular Biology and Evolution* 17: 437–450.
- Sheldon, F.H.; McCracken, K.G. & Stuebing, K.D. 1995. Phylogenetic relationships of the zigzag heron (*Zebrilus undulatus*) and white-crested bittern (*Tigriornis leucolophus*) estimated by DNA-DNA hybridization. *Auk* 112: 672–679.
- Shepherd, L.D.; Bulgarella, M.; Haddrath, O. & Miskelly, C.M. 2020. Genetic analyses reveal an unexpected refugial population of subantarctic snipe (*Coenocorypha aucklandica*). *Notornis* 67: 403–418.
- Shepherd, L.D. & Lambert, D.M. 2007. The relationships and origins of the New Zealand wattlebirds (Passeriformes, Callaeatidae) from DNA sequence analysis. *Molecular Phylogenetics and Evolution* 43: 480–492.
- Shepherd, L.D. & Lambert, D.M. 2008. Ancient DNA and conservation: lessons from the endangered kiwi of New Zealand. *Molecular Ecology* 17: 2174–2184.
- Shepherd, L.D.; Miskelly, C.M.; Cherel, Y. & Tennyson, A.J.D. 2021. Genetic identification informs on the distributions of vagrant royal (*Eudyptes schlegeli*) and macaroni (*Eudyptes chrysolophus*) penguins. *Polar Biology* 44: 2299–2306.
- Shepherd, L.D.; Tennyson, A.J.D.; Robertson, H.A.; Colbourne, R.M. & Ramstad, K.R. 2021. Hybridisation in kiwi (*Apteryx*; Apterygidae) requires taxonomic revision for the great spotted kiwi. *Avian Research* 12: 24. doi: 10.1186/s40657-021-00257-6. 13 pp.
- Shepherd, L.D.; Worthy, T.H.; Tennyson, A.J.D.; Scofield, R.P.; Ramstad, K.M. & Lambert, D.M. 2012. Ancient DNA analyses reveal contrasting phylogeographic patterns amongst kiwi (*Apteryx* spp.) and a recently extinct lineage of spotted kiwi. *PLOS One* 7(8): e42384. doi: 10.1371/journal.pone.0042384. 9 pp.
- Sherley, G. 1992. Monitoring Hutton's shearwater 1986–1989. *Notornis* 39: 249–261.
- Shirihai, H. 2002. *The complete guide to Antarctic wildlife – birds and marine mammals of the Antarctic continent and the Southern Ocean*. Princeton: Princeton University Press. 510 pp.
- Shirihai, H. 2008. Rediscovery of Beck's petrel *Pseudobulweria becki*, and other observations of tubenoses from the Bismarck Archipelago, Papua New Guinea. *Bulletin of the British Ornithologists' Club* 128: 3–16.
- Shirihai, H. & Bretagnolle, V. 2010. First observations at sea of Vanuatu petrel *Pterodroma (cervicalis) occulta*. *Bulletin of the British Ornithologists' Club* 130: 132–140.
- Sibley, C.G. & Ahlquist, J.E. 1985. The phylogeny and classification of the Australo-Papuan passerine birds. *Emu* 85: 1–14.
- Sibley, C.G. & Ahlquist, J.E. 1987. The relationships of four species of New Zealand passerine birds. *Emu* 87: 63–66.
- Sibley, C.G. & Ahlquist, J.E. 1990. *Phylogeny and classification of birds. A study in molecular evolution*. New Haven, Connecticut: Yale University Press. 976 pp.
- Sibley, C.G.; Ahlquist, J.E. & Monroe, B.L. 1988. A classification of the living birds of the world based on DNA-DNA hybridization studies. *Auk* 105: 409–423.
- Sibley, C.G. & Monroe, B.L. Jr. 1990. *Distribution and taxonomy of birds of the world*. New Haven, Connecticut: Yale University Press. xxiv + 1111 pp.
- Sibley, C.G.; Williams, G.R. & Ahlquist, J.E. 1982. The relationships of the New Zealand wrens (Acanthisittidae) as indicated by DNA-DNA hybridization. *Notornis* 29: 113–130.
- Sibson, R.B. 1948. Black-fronted tern in the north. *New Zealand Bird Notes* 3: 10–12.
- Sibson, R.B. 1963. [Editor's footnote]. *Notornis* 10: 316.
- Sibson, R.B. 1967. Long-tailed skua ashore at Muriwai. *Notornis* 14: 79–81.
- Sibson, R.B. 1969. Giant petrels as migrants to northern New Zealand. *Notornis* 16: 45–50.
- Sibson, R.B. (Comp.). 1978. Classified summarised notes. *Notornis* 25: 332–349.
- Sibson, R.B. (Comp.). 1979. Classified summarised notes 30 June 1978 to 30 June 1979. *Notornis* 26: 396–422.
- Sibson, R.B. (Comp.). 1981. Classified summarised notes 1 June 1979 to 30 June 1980. *Notornis* 28: 57–85.

- Sibson, R.B. 1982. Arctic tern in Manukau Harbour. *Notornis* 29: 47–48.
- Sibson, R.B. 1987. More Laishleyana: red wattlebird and white-faced heron. *Notornis* 34: 81–83.
- Sibson, R.B. 1992. Some thoughts on Caspian terns in New Zealand. *Notornis* 39: 87–93.
- Sibson, R.B. & Edgar, A.T. 1962. Little terns in the Firth of Thames. *Notornis* 10: 91–92.
- Sibson, R.B. & MacKenzie, N.B. 1967. A “difficult” stint near Napier. *Notornis* 14: 84.
- Sibson, R.B. & Rutherford, V.M. 1956. Probable recent occurrences of oriental dotterel in New Zealand. 2. *Notornis* 7: 26–27.
- Siegel-Causey, D. 1988. Phylogeny of the Phalacrocoracidae. *Condor* 90: 885–905.
- Sigurdsson, S. 2013. The systematics and evolution of the nightjars and their allies (Aves: Caprimulgiformes) (Order No. 3549075). PhD thesis. Available from Natural Science Collection; ProQuest One Academic. (1283150423). Retrieved from <https://www.proquest.com/dissertations-theses/systematics-evolution-nightjars-their-allies-aves/docview/1283150423/se-2?accountid=14700>
- Simonetta, A.M. 1967. Cinesi e morfologia del cranio negli uccelli non passeriformi. Studio su varie tendenze evolutive. Part II – Striges, Caprimulgiformes ed Apodiformes. *Archivio Zoologico Italiano* 52: 1–35.
- Simpson, G.G. 1957. Australian fossil penguins, with remarks on penguin evolution and distribution. *Records of the South Australian Museum* 13: 51–70.
- Simpson, G.G. 1971. A review of the pre-Pliocene penguins of New Zealand. *Bulletin of the American Museum of Natural History* 144: 321–378.
- Simpson, G.G. 1972a. Conspectus of Patagonian fossil penguins. *American Museum Novitates* 2488: 1–37.
- Simpson, G.G. 1972b. Pliocene penguins from North Canterbury, New Zealand. *Records of the Canterbury Museum* 9(2): 159–182.
- Simpson, G.G. 1975. Fossil penguins. Pp. 19–41. In: Stonehouse, B. (Ed.). *The biology of penguins*. London & Basingstoke: The MacMillan Press Ltd. ix + 555 pp.
- Simpson, G.G. 1981. Notes on some fossil penguins, including a new genus from Patagonia. *Ameghiniana* 18: 266–272.
- Sinclair, J.C. & Rose, B. 1982. Southern African records of the Manx shearwater *Puffinus puffinus*. *Cormorant* 10(2): 81–86.
- Sitters, H.; Minton, C.; Collins, P.; Etheridge, B.; Hassell, C. & O'Connor, F. 2004. Extraordinary numbers of oriental pratincoles in NW Australia. *Stilt* 45: 43–49.
- Skira, I.J. 1986. Food of the short-tailed shearwater, *Puffinus tenuirostris*, in Tasmania. *Australian Wildlife Research* 13: 481–488.
- Skira, I.J. 1991. The short-tailed shearwater: a review of its biology. *Corella* 15: 45–52.
- Slack, K.E.; Jones, C.M.; Ando, T.; Harrison, G.L.; Fordyce, R.E.; Arnason, U. & Penny, D. 2006. Early penguin fossils, plus mitochondrial genomes, calibrate avian evolution. *Molecular Biology and Evolution* 23: 1144–1155.
- Slikas, B.; Olson, S.L. & Fleischer, R.C. 2002. Rapid, independent evolution of flightlessness in four species of Pacific island rails (Rallidae): an analysis based on mitochondrial sequence data. *Journal of Avian Biology* 33: 5–14.
- Small, M.M. & Soper, M.F. 1959. Australian coots nesting in Otago. *Notornis* 8: 93.
- Smith, L.E. 1997. An unusual wandering albatross on Macquarie Island. *Southern Oceans Seabird Study Association Newsletter* 13: 7.
- Smith, L.E.; Hansbro, P.M.; Hodgkin, M.; Jenkin, J.G.; Loves, C. & Milburn, P.J. 2000. The relationship between age and primary moult of Indian Ocean yellow-nosed albatross *Thalassarche carteri* captured in the South-west Tasman Sea. *Marine Ornithology* 28: 147.
- Smith, W.W. 1889. On the birds of Lake Brunner district. *Transactions and Proceedings of the New Zealand Institute* 21: 205–224.
- Smithers, C.N. 1977. A note on welcome swallows and a Canada goose on Lord Howe Island. *Australian Birds* 12(2): 36.
- Smuts-Kennedy, C. & Lovegrove, T. 1996. A barn owl (*Tyto alba*) on Little Barrier Island. *Notornis* 43: 49–50.
- Soldaat, E.; Leopold, M.F.; Meesters, E.H. & Robertson, C.J.R. 2009. Albatross mandible at archaeological site in Amsterdam, the Netherlands, and WP records of *Diomedea* albatrosses. *Dutch Birding* 31: 1–16.
- Soper, M.F. 1976. *New Zealand birds*. Second edition. Christchurch: Whitcoulls. 251 pp.
- Sorensen, J.H. 1951. *Wild life in the subantarctic*. Christchurch: Whitcombe & Tombs Ltd. xvii + 85 pp.
- Sorensen, J.H. 1964. Birds of the Kermadec Islands. *Notornis* 11: 69–81.
- Sorenson, M.D.; Cooper, A.; Paxinos, E.E.; Quinn, T.W.; James, H.F.; Olson, S.L. & Fleischer, R.C. 1999. Relationships of the extinct moa-nalos, flightless Hawai’ian waterfowl, based on ancient DNA. *Proceedings of the Royal Society of London series B* 266: 2187–2193.
- Sorenson, M.D. & Fleischer, R.C. 1996. Multiple independent transpositions of mitochondrial DNA control region sequences to the nucleus. *Proceedings of the National Academy of Sciences of the United States of America* 93: 15239–15243.
- Sorenson, M.D. & Payne, R.B. 2005. A molecular genetic analysis of cuckoo phylogeny. Pp. 68–94. In: Payne, R.B. *The cuckoos*. Oxford, UK: Oxford University Press.
- Southey, I. 2018. Leach’s storm petrel. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed 25 Jun. 2021].
- Spear, L.B. & Ainley, D.G. 2007. Storm-petrels of the eastern Pacific Ocean: species assembly and diversity along marine habitat gradients. *American Ornithologists’ Union Ornithological Monographs* 62: i–xii + 1–77.
- Spear, L.B.; Ainley, D.G. & Webb, S.W. 2003. Distribution, abundance and behaviour of Buller’s, Chatham Island and Salvin’s albatrosses off Chile and Peru. *Ibis* 145: 253–269.
- Spear, L.B.; Ainley, D.G. & Webb, S.W. 2005. Distribution, abundance, habitat use and behaviour of three *Procellaria* petrels off South America. *Notornis* 52: 88–105.
- Spear, L.B.; Howell, S.N.G. & Ainley, D.G. 1992. Notes on the at-sea identification of some Pacific gadfly petrels (genus: *Pterodroma*). *Colonial Waterbirds* 15: 202–218.
- Speedie, C. 1992. An erect-crested penguin in the southern Indian Ocean. *Notornis* 39: 58–60.
- Springer, K. 2016. Methodology and challenges of a complex multi-species eradication in the sub-Antarctic and immediate effects of invasive species removal. *New Zealand Journal of Ecology* 40: 273–278.
- Spurr, E.B. 1985. Records of chinstrap penguins in the Ross Sea region, Antarctica. *Notornis* 32: 1–4.
- Spurr, E.B.; Wilson, K.-J. & Sagar, P.M. 1990. Bird species recorded at Cape Bird, Ross Island, Antarctica. *Notornis* 37: 37–44.

- Sraml, M.; Christidis, L.; Easteal, S.; Horn, P. & Collet, C. 1996. Molecular relationships within Australasian waterfowl (Anseriformes). *Australian Journal of Zoology* 44: 47–58.
- St Paul, R. 1977. A bushman's seventeen years of noting birds. Part F [conclusion of series] – notes on other native birds. McKenzie, H.R. (Ed.). *Notornis* 24: 65–74.
- Stafford, A. 2002. Twitchers' corner. *Wingspan* 12: 23.
- Stahl, J.-C.; Bartle, J.A.; Cheshire, N.G.; Petyt, C. & Sagar, P.M. 1998. Distribution and movements of Buller's albatross (*Diomedea bulleri*) in Australasian seas. *New Zealand Journal of Zoology* 24: 109–137.
- Stahl, J.-C. & Sagar, P.M. 2000a. Foraging strategies of southern Buller's albatrosses *Diomedea b. bulleri* breeding on the Snares, New Zealand. *Journal of the Royal Society of New Zealand* 30: 299–318.
- Stahl, J.-C. & Sagar, P.M. 2000b. Foraging strategies and migration of southern Buller's albatrosses *Diomedea b. bulleri* breeding on the Solander Is, New Zealand. *Journal of the Royal Society of New Zealand* 30: 319–334.
- Stahl, J.-C. & Sagar, P.M. 2006. Long and short trips in nonbreeding Buller's albatrosses: relationships with colony attendance and body mass. *Condor* 108: 348–365.
- Stahl, J.-C.; Weimerskirch, H. & Ridoux, V. 1984. Observations recentes d'oiseaux marins et terrestres visiteurs dans les Iles Crozet, sud-ouest de l'Océan Indien. *Le Gerfaut* 74: 39–46.
- Stead, E.F. 1932. *The life histories of New Zealand birds*. London: Search Publishing. xvi + 162 pp.
- Stead, E.F. 1948. Blue shag of Stewart Island. *New Zealand Bird Notes* 3: 79–80.
- Steadman, D.W. 2002. A new species of gull (Laridae: *Larus*) from an archaeological site on Huahine, Society Islands. *Proceedings of the Biological Society of Washington* 115: 1–17.
- Steadman, D.W. 2006. *Extinction & biogeography of tropical Pacific birds*. Chicago: University of Chicago Press. xiv + 594 pp.
- Stein, P.A.S. 1952. Brown booby in the Hauraki Gulf. *Notornis* 4: 213.
- Stenhouse, D. 1960. The redpoll in New Zealand: interbreeding sub-species. *Nature* 186: 488–490.
- Stenhouse, D. 1962. Taxonomic status of the New Zealand redpoll, *Carduelis flammea*: a reassessment. *Notornis* 10: 61–67.
- Stephenson, B.M. 2002. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2000 to 30 June 2001. *Notornis* 49: 100–110.
- Stephenson, B.M. 2003. In: Parrish, G.R. (Comp.). Classified summarised notes, North Island, 1 July 2001 to 30 June 2002. *Notornis* 50: 103–112.
- Stephenson, B.M. 2004. Return of the New Zealand storm-petrel. *Wingspan* 14(2): 20–23.
- Stephenson, B.M. 2006. First transmitters fitted to NZSPs. *Tara*: 5.
- Stephenson, B.M. & Saville, S. 2003. Pelagic birding around New Zealand: how much do we know? *Notornis* 50: 181.
- Sternkopf, V. 2011. Molekulargenetische Untersuchung in der Gruppe der Möwen (Laridae) zur Erforschung der Verwandtschaftsbeziehungen und phylogeographischer Differenzierung. Inauguraldissertation zur Erlangung des akademischen Grades Doctor rerum naturalium (Dr. rer. nat.) an der Mathematisch-Naturwissenschaftlichen Fakultät der Ernst-Moritz-Arndt-Universität: Greifswald, Germany.
- Stidolph, R.H.D. 1926. Bird-life around Wellington, N.Z. *Emu* 25: 204–207.
- Stidolph, R.H.D. 1927. Stragglers and migratory birds of New Zealand. *Emu* 26: 212–219.
- Stidolph, R.H.D. 1948. Royal spoonbill in New Zealand. *New Zealand Bird Notes* 2: 195–196.
- Stidolph, R.H.D. 1952. Occurrence of white-necked heron in N.Z.. *Notornis* 5: 38.
- Stidolph, R.H.D. 1953. A new wader for New Zealand – least sandpiper. *Notornis* 5: 115.
- Stidolph, R.H.D. 1974a. Northern shoveler in New Zealand. *Notornis* 21: 270.
- Stidolph, R.H.D. 1974b. Feral Barbary doves in Masterton. *Notornis* 21: 383–384.
- Stidolph, R.H.D. & Heather, B.D. 1978. Notes on post-breeding movements of the New Zealand dabchick in the southern North Island. *Notornis* 25: 84–88.
- Storer, R.W. 1963. Courtship and mating behavior and the phylogeny of the grebes. Pp. 562–569. In: Sibley, C.G. (Ed.). *Proceedings of the 13th International Ornithological Congress*. Baton Rouge, Louisiana: American Ornithologists' Union. 1246 pp.
- Storer, R.W. 1971. The behaviour of the New Zealand dabchick. *Notornis* 18: 175–186.
- Storer, R.W. 1987. Morphology and relationships of the hoary-headed grebe and the New Zealand dabchick. *Emu* 87: 150–157.
- Storr, G.M. 1958. Migration routes of the Arctic tern. *Emu* 58: 59–62.
- Stracy, D. & Stracy, M. 1995. In: Parrish, G.R. & Lock, W.J. (Comps). Classified summarised notes, North Island, 1 July 1993 to 30 June 1994. *Notornis* 42: 145–173.
- Strange, I.J. 1980. The thin-billed prion, *Pachyptila belcheri*, at New Island, Falkland Islands. *Le Gerfaut* 70: 411–445.
- Stresemann, E. & Amadon, D. 1979. Falconiformes. Pp. 271–425. In: Mayr, E. & Cottrell, G.W. (Eds). *Check-list of birds of the world*. Volume 1. Second edition. Cambridge, Massachusetts: Museum of Comparative Zoology. xviii + 547 pp.
- Stuart-Menteath, B.J. 1996. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island and the Chatham Islands, 1 July 1994 to 30 June 1995. *Notornis* 43: 165–186.
- Stucchi, M. 2002. Una nueva especie de *Spheniscus* (Aves: Spheniscidae) de la Formación Pisco, Perú. *Boletín de la Sociedad Geológica del Perú* 94: 19–26.
- Stucchi, M.; Urbina, M. & Giraldo, A. 2003. Una nueva especie de Spheniscidae del Mioceno tardío de la Formación Pisco, Perú. *Boletín del Instituto Francés de Estudios Andinos* 32: 361–375.
- Studholme, B.J.S.; Russ, R.B. & McLean, I.G. 1994. The Fiordland crested penguin survey: stage IV, Stewart and offshore islands and Solander Island. *Notornis* 41: 133–143.
- Sutton, D.G. & Marshall, Y.M. 1977. Archaeological bird bone assemblages from Chatham Island: an interpretation. *Working papers in Chatham Island archaeology*. Volume 12. Dunedin: Anthropology Department, University of Otago. iii + 15 pp., 7 pls.
- Swainson, W. 1821. *Zoological illustrations or original figures and descriptions of new, rare, or interesting animals, selected chiefly from the classes of ornithology, entomology, and conchology, and arranged on the principles of Cuvier and other modern zoologists*. Volume 1. London: Baldwin, Cradock & Joy. x + 75 pp., pls 1–66.

- Tambussi, C.P.; Acosta Hospitaleche, C.I.; Reguero, M.A. & Marensi, S.A. 2006. Late Eocene penguins from west Antarctica: systematics and biostratigraphy. In: Francis, J.E.; Pirrie, D. & Crame, J.A. (Eds). Cretaceous–Tertiary high-latitude palaeoenvironments, James Ross Basin, Antarctica. *Geological Society, London. Special Publications* 258: 145–161.
- Tambussi, C.P.; Reguero, M.A.; Marensi, S.A. & Santillana, S.N. 2005. *Crossvallia unienwillia*, a new Spheniscidae (Sphenisciformes, Aves) from the late Paleocene of Antarctica. *Geobios* 38: 667–675.
- Tan, H.Z.; Ng, E.Y.X.; Tang, Q.; Allport, G.A.; Jansen, J.J.F.J.; Tomkovich, P.S. & Rheindt, F.E. 2019. Population genomics of two congeneric Palaearctic shorebirds reveals differential impacts of Quaternary climate oscillations across habitats types. *Scientific Reports. Nature* 9: 18172.
- Tanaka, Y. 1986. Distribution and migration of the Solander's petrel *Pterodroma solandri* in the North Pacific in relation to sea surface water temperatures. *Journal of the Yamashina Institute for Ornithology* 18: 55–62.
- Tanaka, Y. & Inaba, F. 1981. The distribution and migration of white-necked petrel, *Pterodroma externa cervicalis*, in the west area of north Pacific Ocean and the Japanese waters. *Journal of the Yamashina Institute for Ornithology* 13: 207–214.
- Tanaka, Y.; Kaneko, Y. & Sato, S. 1985. Distribution and migration of smaller petrels of the genus *Pterodroma* in the northwest Pacific. *Journal of the Yamashina Institute for Ornithology* 17: 23–31.
- Tarburton, M.K. 1989. Subspeciation in the red-tailed tropicbird. *Notornis* 36: 39–49.
- Tarburton, M.K. 1993. The most southern record of a red-tailed tropicbird. *Notornis* 40: 64.
- Taylor, B. & van Perlo, B. 1998. *Rails – a guide to the rails, crakes, gallinules and coots of the world*. Robertsbridge, East Sussex: Pica Press. 600 pp.
- Taylor, G.A. (Comp.). 1990. Classified summarised notes, North Island, 1 July 1988 to 30 June 1989. *Notornis* 37: 183–235.
- Taylor, G.A. 1992. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1990 to 30 June 1991. *Notornis* 39: 161–210.
- Taylor, G.A. 1996. Seabirds found dead on New Zealand beaches in 1994. *Notornis* 43: 187–196.
- Taylor, G.A. 1997. Seabirds found dead on New Zealand beaches in 1995. *Notornis* 44: 201–212.
- Taylor, G.A. 1999. Seabirds found dead on New Zealand beaches in 1996. *Notornis* 46: 434–445.
- Taylor, G.A. 2000a. Action plan for seabird conservation in New Zealand – part A: threatened seabirds. *Threatened Species Occasional Publication* 16: 1–234. Wellington: New Zealand Department of Conservation.
- Taylor, G.A. 2000b. Action plan for seabird conservation in New Zealand – part B: non-threatened seabirds. *Threatened Species Occasional Publication* 17: 235–435. Wellington: New Zealand Department of Conservation.
- Taylor, G.A. 2004. Beach patrol scheme: seabirds found dead on New Zealand beaches, 1997–1999. *Notornis* 51: 176–191.
- Taylor, G.A. 2008. Maximum dive depths of eight New Zealand Procellariiformes, including *Pterodroma* species. *Papers and Proceedings of the Royal Society of Tasmania* 142: 89–97.
- Taylor, G.A. & Parrish, G.R. (Comps). 1991. Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Taylor, G.A. & Parrish, G.R. (Comps). 1992. Classified summarised notes, North Island, 1 July 1990 to 30 June 1991. *Notornis* 39: 161–210.
- Taylor, G.A. & Parrish, G.R. (Comps). 1994a. Classified summarised notes, North Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 1–49.
- Taylor, G.A. & Parrish, G.R. (Comps). 1994b. Classified summarised notes, North Island, 1 July 1992 to 30 June 1993. *Notornis* 41: 235–247.
- Taylor, G.A. & Tennyson, A.J.D. 1990. In: Taylor, G.A. (Comp.). Classified summarised notes, North Island, 1 July 1988 to 30 June 1989. *Notornis* 37: 183–235.
- Taylor, G.A. & Tennyson, A.J.D. 1994. Christmas Island shearwater *Puffinus nativitatis* on Curtis Island. *Notornis* 41: 287–291.
- Taylor, G.A.; Tennyson, A.J.D. & Eller, G.J. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Taylor, G.A. & White, C. 1990. In: Taylor, G.A. (Comp.). Classified summarised notes, North Island, 1 July 1988 to 30 June 1989. *Notornis* 37: 183–235.
- Taylor, M.J. 1987. A colony of the little shag and the pied shag in which the plumage forms of the little shag freely interbreed. *Notornis* 34: 41–50.
- Taylor, N.M. (Ed.). 1966. *The journal of Ensign Best 1837–1843*. Wellington: Government Printer. 465 pp.
- Taylor, R. 1848. *A leaf from the natural history of New Zealand*. Wellington: Robert Stokes. 128 pp.
- Taylor, R. 1855. *Te Ika a Maui; or, New Zealand and its inhabitants. Illustrating the origin, manners, customs, mythology, religion, rites, songs, proverbs, fables and language of the Maori and Polynesian races in general; together with the geology, natural history, productions, and climate of the country*. London: Wertheim and Macintosh. xiv + 476 pp.
- Taylor, R. 1868. *The past and present of New Zealand*. London: William Macintosh. 331 pp.
- Taylor, R. 1870. *Te Ika a Maui; or, New Zealand and its inhabitants. Illustrating the origin, manners, customs, mythology, religion, rites, songs, proverbs, fables and language of the Maori and Polynesian races in general; together with the geology, natural history*. Second edition. London: William Macintosh. xvi + 713 pp., 8 pls, 1 map.
- Taylor, R. [1870]. *Maori and English dictionary*. Auckland: George T. Chapman. 120 pp.
- Taylor, R.H. 1966. Seasonal and altitudinal distribution of kingfishers in the Nelson district. *Notornis* 13: 200–203.
- Taylor, R.H. 1971. Influence of man on vegetation and wildlife of Enderby and Rose Islands, Auckland Islands. *New Zealand Journal of Botany* 9: 225–268.
- Taylor, R.H. 1985. Status, habits and conservation of *Cyanoramphus* parakeets in the New Zealand region. *International Council for Bird Preservation Technical Publication* 3: 195–211.
- Taylor, R.H.; Bell, B.D. & Wilson, P.R. 1970. Royal albatrosses, feral sheep and cattle on Campbell Island. *New Zealand Journal of Science* 13: 78–88.

- Taylor, R.H.; Heatherbell, E.G. & Heatherbell, E.M. 1986. The orange-fronted parakeet (*Cyanoramphus malherbi*) is a colour morph of the yellow-crowned parakeet (*C. auriceps*). *Notornis* 33: 17–22.
- Taylor, T.J. 1978. The girl bunting in Marlborough. *Notornis* 25: 249–251.
- Te Papa 2019. Te Taio exhibition labels. Museum of New Zealand Te Papa Tongarewa.
- Temminck, C.J. 1839. Tableau methodique. Livraison 102. In: Temminck, C.J. & Laugier de Chartrouse, M. 1820–39. *Nouveau recueil des planches coloriées d'oiseaux, pour servir de suite et de complément aux planches enluminées de Buffon*. Paris: Levrault. 102 livr., 600 pls.
- Tennyson, A.J.D. 1986. Second record of a Manx shearwater in New Zealand. *Notornis* 33: 59–61.
- Tennyson, A.J.D. 1990a. In: Taylor, G.A. (Comp.). Classified summarised notes, North Island, 1 July 1988 to 30 June 1989. *Notornis* 37: 183–235.
- Tennyson, A.J.D. 1990b. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South and Chatham Islands 1 July 1988 to 30 June 1989. *Notornis* 37: 236–266.
- Tennyson, A.J.D. 1991a. The black-winged petrel on Mangere Island, Chatham Islands. *Notornis* 38: 111–116.
- Tennyson, A.J.D. 1991b. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Tennyson, A.J.D. 1994. An eastern rockhopper penguin (*Eudyptes chrysocome filholi*) at the Chatham Islands. *Notornis (Supplement)* 41: 38.
- Tennyson, A.J.D. 1996a. In: Parrish, G.R. & Lock, J.W. (Comps). Classified summarised notes. North Island, 1 July 1994 to 30 June 1995. *Notornis* 43: 117–145.
- Tennyson, A.J.D. 1996b. Penguin numbers tumbling. *Forest & Bird* 280: 4–5.
- Tennyson, A.J.D. 1997. First record of a black-faced monarch (*Monarcha melanopsis*) in New Zealand. *Notornis* 44: 267–269.
- Tennyson, A.J.D. 1998a. In: O'Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island and outlying islands, 1 July 1995 to 30 June 1996. *Notornis* 45: 1–30.
- Tennyson, A.J.D. 1998b. Chestnut-breasted shelducks and other wetland birds at Tupuangi, Chatham Islands. *Notornis* 45: 226–228.
- Tennyson, A.J.D. 2000. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Tennyson, A.J.D. 2004. Records of the extinct Hawkins' rail (*Diaphorapteryx hawkinsi*) from Pitt Island, Chatham Islands. *Notornis* 51: 159–161.
- Tennyson, A.J.D. 2010. The origin and history of New Zealand's terrestrial vertebrates. *New Zealand Journal of Ecology* 34: 6–27.
- Tennyson, A.J.D. 2020a. Holocene bird bones found at the subantarctic Auckland Islands. *Notornis* 67: 269–294.
- Tennyson, A.J.D. 2020b. Variation in the bill colour of the white-capped mollymawk (*Thalassarche cauta steadi*). *Notornis* 67: 333–340.
- Tennyson, A.J.D. & Bartle, J.A. 2005. A scientific name for fulmar prions nesting at Auckland and Heard Islands. *Notornis* 52: 47–55.
- Tennyson, A.J.D. & Brackenbury, G. 1998. Channel-billed cuckoos in New Zealand in spring 1996. *Notornis* 45: 223–226.
- Tennyson, A.J.D.; Cooper, J.H. & Shepherd, L.D. 2015. A new species of extinct *Pterodroma* petrel (Procellariiformes: Procellariidae) from the Chatham Islands, New Zealand. *Bulletin of the British Ornithologists' Club* 135: 267–277.
- Tennyson, A.J.D.; Easton, L.J. & Wood, J.R. 2014. Kea (*Nestor notabilis*) – another North Island human-caused extinction. *Notornis* 61: 174–176.
- Tennyson, A.J.D. & Eller, G.J. 1991. In: Taylor, G.A. & Parrish, G.R. (Comps). Classified summarised notes, North Island, 1 July 1989 to 30 June 1990. *Notornis* 38: 267–314.
- Tennyson, A.J.D.; Imber, M. & Taylor, R. 1998. Numbers of black-browed mollymawks (*Diomedea m. melanophrys*) and white-capped mollymawks (*D. cauta steadi*) at the Antipodes Islands in 1994–95 and their population trends in the New Zealand region. *Notornis* 45: 157–166.
- Tennyson, A.J.D.; Lawrence, H.A.; Taylor, G.A. & Imber, M.J. 2013. A hybrid gadfly petrel suggests that soft-plumaged petrels (*Pterodroma mollis*) had colonised the Antipodes Islands by the 1920s. *Notornis* 60: 290–295.
- Tennyson, A.J.D. & Lock, J.W. (Comps). 1998. Classified summarised notes, North Island, 1 July 1996 to 30 June 1997. *Notornis* 45: 279–309.
- Tennyson, A.J.D. & Mannering, A.A. 2018. A new species of Pliocene shearwater (Aves: Procellariidae) from New Zealand. *Tuhinga* 29: 1–19.
- Tennyson, A.J.D. & Martinson, P. 2006. *Extinct birds of New Zealand*. Wellington: Te Papa Press. vi + 180 pp.
- Tennyson, A.J.D. & Martinson, P. 2007. *Extinct birds of New Zealand*. Revised edition. Wellington: Te Papa Press. vi + 180 pp.
- Tennyson, A.J.D. & Millener, P.R. 1994. Bird extinctions and fossil bones from Mangere Island, Chatham Islands. *Notornis* 41 (Supplement): 165–178.
- Tennyson, A.J.D. & Miskelly, C.M. 1989. “Dark-faced” rockhopper penguins at the Snares Islands. *Notornis* 36: 183–189.
- Tennyson, A.J.D.; Miskelly, C.M. & LeCroy, M. 2014. Clarification of collection data for the type specimens of Hutton's Shearwater *Puffinus huttoni* Mathews, 1912, and implications for the accuracy of historic subantarctic specimen data. *Bulletin of the British Ornithologists' Club* 134: 242–246.
- Tennyson, A.J.D.; Miskelly, C.M. & Totterman, S.L. 2012. Observations of collared petrels (*Pterodroma brevipes*) on Vanua Lava, Vanuatu, and a review of the species' breeding distribution. *Notornis* 59: 39–48.
- Tennyson, A.J.D.; Palma, R.L.; Robertson, H.; Worthy, T.H. & Gill, B.J. 2003. A new species of kiwi (Aves, Apterygiformes) from Okarito, New Zealand. *Records of the Auckland Museum* 40: 55–64.
- Tennyson, A.J.D.; Palma, R.L.; Scofield, R.P. & Worthy, T.H. 2010. Emending the species name for Lopdells' penguin. *Notornis* 57: 54–55.
- Tennyson, A.J.D. & Pierce, R. 1995. The presence of Pycroft's petrel (*Pterodroma pycrofti*) and other petrels on Mauitaha Island, New Zealand. *Notornis* 42: 212–214.

- Tennyson, A.J.D.; Scofield, R.P. & Bell, B.D. 2003. Confirmation of Kermadec petrels breeding on the southern Kermadec Islands. *Notornis* 50: 236–237.
- Tennyson, A.J.D. & Taylor, G.A. 1989. More distribution records of Buller's shearwater in New Zealand waters. *Notornis* 36: 323–324.
- Tennyson, A.J.D. & Taylor, G.A. 1999. History, fauna and flora of Te Haupa (Saddle) Island, Hauraki Gulf. *Tane* 37: 69–89.
- Tennyson, A.J.D. & Taylor, G.A. 2000. In: Tennyson, A.J.D. & Lock, J.W. (Comps). Classified summarised notes, North Island, 1 July 1997 to 30 June 1998. *Notornis* 47: 192–214.
- Tennyson, A.J.D.; Taylor, R.H.; Taylor, G.A.; Imber, M.J. & Greene, T. 2002. Unusual bird records from the Antipodes Islands in 1978–1995, with a summary of other species recorded at the island group. *Notornis* 49: 241–245.
- Tennyson, A.J.D. & Tomotani, B.M. 2021a. A new fossil species of kiwi (Aves: Apterygidae) from the mid-Pleistocene of New Zealand. *Historical Biology* 34: 352–360.
- Tennyson, A.J.D. & Tomotani, B.M. 2021b. A new fossil species of *Procellaria* (Aves: Procellariiformes) from the Pliocene of New Zealand. *Papéis Avulsos de Zoologia* 61: e20216116.
- Tennyson, A.J.D.; Worthy, T.H.; Scofield, R.P.; Hand, S.J. & Salisbury, S.W. 2013. An update on the early Miocene avifauna from St Bathans, Otago: helping understand the origins of New Zealand birds. P. 65 In: Australasian Ornithological Congress Programme and Abstracts, Auckland.
- Terauds, A.; Gales, R. & Alderman, R. 2005. Trends in numbers and survival of black-browed (*Thalassarche melanophrys*) and grey-headed (*T. chrysostoma*) albatrosses breeding on Macquarie Island. *Emu* 105: 159–167.
- Terauds, A.; Gales, R.; Baker, G.B. & Alderman, R. 2006. Foraging areas of black-browed and grey-headed albatrosses breeding on Macquarie Island in relation to marine protected areas. *Aquatic Conservation: Marine and Freshwater Ecosystems* 16: 133–146.
- Thibault, J.-C. & Rives, C. 1988. *Birds of Tahiti*. Second edition. Singapore: Les Editions du Pacifique. 111 pp.
- Thibault, J.-C. & Varney, A. 1991. Breeding seabirds of Rapa (Polynesia): numbers and changes during the 20th Century. *Bulletin of the British Ornithologists' Club* 111: 70–77.
- Thomas, D.B.; Ksepka, D.T.; Holvast, E.J.; Tennyson, A.J.D. & Scofield, P.R. 2020. Re-evaluating New Zealand's endemic Pliocene penguin genus. *New Zealand Journal of Geology and Geophysics* 63: 324–330.
- Thomas, D.B.; Tennyson, A.J.D.; Scofield, P.R.; Heath, T.A.; Pett, W. & Ksepka, D.T. 2020. Ancient crested penguin constrains timing of recruitment into seabird hotspot. *Proceedings of the Royal Society B* 287(1932) doi: 10.1098/rspb.2020.1497
- Thompson, D. 2006 In: Pollock, G. (Comp.). Classified summarised notes, South Island and outlying islands, 1 July 2002 to 30 June 2003. *Notornis* 53: 248–251.
- Thompson, D.; Murdoch, R. & Page, M. 2000. A near albino Cape pigeon (*Daption capense*). *Notornis* 47: 235–236.
- Thompson, D.R.; Bearhop, S. & Ross, B. 2005. Spread of Australasian pipit (*Anthus novaeseelandiae*) onto Campbell Island following eradication of Norway rats (*Rattus norvegicus*). *Notornis* 52: 43–46.
- Thompson, M. 2015. Discovery of first breeding attempt of glossy ibis in New Zealand. *Birds New Zealand* 5: 10–11.
- Thomson, G.M. 1922. *The naturalisation of animals & plants in New Zealand*. Cambridge: Cambridge University Press. x + 607 pp.
- Thomson, G.M. 1926. *Wild life in New Zealand. Part II. Introduced birds and fishes*. Wellington: Government Printer. 110 pp.
- Tickell, W.L.N. 1962. The dove prion, *Pachyptila desolata* (Gmelin). *Falkland Islands Dependencies Survey Scientific Reports* 33: 1–55.
- Tickell, W.L.N. 2000. *Albatrosses*. New Haven: Yale University Press. 448 pp.
- Tily, I. 1951. Dunedin Naturalists' Field Club notes. *Notornis* 4: 149–150.
- Todd, K. & Lloyd, J. 1980. White-winged black terns, Napier 1972. *Notornis* 27: 91–92.
- Tomkovich, P.S. 2001. A new subspecies of red knot *Calidris canutus* from the New Siberian Islands. *Bulletin of the British Ornithologists' Club* 121: 257–263.
- Tomkovich, P.S. 2008. A new subspecies of the whimbrel (*Numenius phaeopus*) from Central Siberia. *Zoologicheskii Zhurnal* 87: 1092–1099.
- Totterman, B.; Clancey, G. & Moffatt, R. 1999. First record of a South Island pied oystercatcher in Australia. *Australian Bird Watcher* 18(4): 153–159.
- Tove, M.H. 2005. Kermadec petrels (*Pterodroma neglecta*) in the Atlantic Ocean – a rebuttal. *Notornis* 52: 56–58.
- Toy, R. & Toy, S. 2020. Post-translocation dispersal and home range establishment of rooroa (great spotted kiwi, *Apteryx haastii*): need for long term monitoring and a flexible management strategy. *Notornis* 67: 511–525.
- Travers, H.H. & Travers, W.T.L. 1873. On the birds of the Chatham Islands, with introductory remarks on the avi-fauna and flora of the islands in their relation to those of New Zealand. *Transactions and Proceedings of the New Zealand Institute* 5: 212–222.
- Trewick, S.A. 1996. Morphology and evolution of two takahe: flightless rails of New Zealand. *Journal of Zoology, London* 238: 221–237.
- Trewick, S.A. 1997a. Flightlessness and phylogeny amongst endemic rails (Aves: Rallidae) of the New Zealand region. *Philosophical Transactions of the Royal Society, London*, 352: 429–446.
- Trewick, S.A. 1997b. Sympatric flightless rails *Gallirallus dieffenbachii* and *G. modestus* on the Chatham Islands, New Zealand; morphometrics and alternative evolutionary scenarios. *Journal of the Royal Society of New Zealand* 27: 451–464.
- Trewick, S.A. & Olley, L. 2016. Spatial size dimorphism in New Zealand's last endemic raptor, the kārearea *Falco novaeseelandiae*, coincides with a narrow sea strait. *Ibis* 158: 747–761.
- Trewick, S.A. & Worthy, T.H. 2001. Origins and prehistoric ecology of takahe based on morphometric, molecular, and fossil data. Pp. 31–48. Chapter 4. In: Lee, W.G. & Jamieson, I.G. (Eds). *The takahe: fifty years of conservation and research*. 132 pp.
- Triggs, S.J. & Daugherty, C.H. 1996. Conservation and genetics of New Zealand parakeets. *Bird Conservation International* 6: 89–101.
- Triggs, S.J.; Williams, M.J.; Marshall, S.J. & Chambers, G.K. 1992. Genetic structure of blue duck *Hymenolaimus malacorhynchos* populations revealed by DNA fingerprinting. *Auk* 109: 80–89.
- Tunnicliffe, G.A. 1982. First sightings of the North Atlantic (Cory's) shearwater *Calonectris diomedea* (Scopoli, 1769) in Australasian seas. *Notornis* 29: 85–91.
- Tunnicliffe, G.A. 1984. Correction: North Atlantic shearwater to pink-footed shearwater. *Notornis* 31: 130.

- Tunnickliffe, G.A. & Langlands, P.A. 1990. First record of the bridled (brown-winged) tern (*Sterna anaethetus*) in New Zealand. *Notornis* 37: 131–139.
- Turbott, E.G. 1952. Some stray tropical and sub-tropical sea birds in New Zealand. *Records of the Auckland Institute and Museum* 4: 187–192.
- Turbott, E.G. 1954. Record of black-faced cuckoo-shrike. *Notornis* 5: 253.
- Turbott, E.G. 1956a. Bulbuls in Auckland. *Notornis* 6: 185–192.
- Turbott, E.G. 1956b. Notes on the plumages and breeding cycle of the spotted shag, *Phalacrocorax (Stictocarbo) punctatus punctatus* (Sparman, 1786). *Records of the Auckland Institute and Museum* 4: 343–363.
- Turbott, E.G. 1964. Cattle egret: a second Canterbury record. *Notornis* 10: 383–385.
- Turbott, E.G. 1965. Welcome swallow: first breeding records for South Island. *Notornis* 12: 241–244.
- Turbott, E.G.; Brathwaite, D.H. & Wilkin, F.W. 1963. Cattle egret: a new bird for New Zealand. *Notornis* 10: 316.
- Turbott, E.G. & Buddle, G.A. 1948. Birds of the Three Kings Islands. *Records of the Auckland Institute and Museum* 3: 319–336.
- Turbott, E.G. & Scarlett, R.J. 1964. Australian stragglers in New Zealand, with first record of the fan-tailed cuckoo. *Notornis* 11: 107–109.
- Tyler, J.; Bonfitto, M.T.; Clucas, G.V.; Reddy, S. & Younger, J.L. 2020. Morphometric and genetic evidence for four species of gentoo penguin. *Ecology and Evolution* 10: 13836–13846.
- Undin, M.; Hills, S.F.K.; Lockhart, P.J. & Castro, I. 2021. Gaps in genetic knowledge affect conservation management of kiwi (*Apteryx*) species. *Ibis* 163: 1155–1174.
- Urantówka, A.D.; Krocak, A. & Mackiewicz, P. 2020. New view on the organization and evolution of Palaeognathae mitogenomes poses the question on the ancestral gene rearrangement in Aves. *BMC Genomics* 21: 874. doi: 10.1186/s12864-020-07284-5
- van Beneden, M.P.-J. 1875. Un oiseau fossile nouveau des caverns de la Nouvelle-Zelande. *Journal de Zoologie, Paris* 4: 267–272.
- van Beneden, M.P.-J. 1877. A new fossil bird, *Anas finschi*, from the Earnsclough Caves, Otago, New Zealand. *Transactions and Proceedings of the New Zealand Institute* 9: 599–602, pl. 28.
- van den Berg, A.B. & Haas, M. 2007. WP reports. *Dutch Birding* 29: 315–330.
- van Duivendijk, N. 2011. *Advanced bird ID handbook: the Western Palearctic*. Bloomsbury. 416 pp.
- van Franeker, J.A.; Gavriilo, M.; Mehlum, F.; Veit, R. & Woehler, E.J. 1999. Distribution and abundance of the Antarctic petrel. *Waterbirds* 22(1): 14–28.
- van Tets, G.F. 1978. Second amendments to the 1975 RAOU Checklist. *Emu* 78: 80–88.
- van Tets, G.F.; Meredith, C.W.; Fullagar, P.J. & Davidson, P.M. 1988. Osteological differences between *Sula* and *Morus*, and a description of an extinct new species of *Sula* from Lord Howe and Norfolk Islands, Tasman Sea. *Notornis* 35: 35–57.
- van Tets, G.F. & Scarlett, R.J. 1972. Sex and age of the only specimen of the darter *Anhinga rufa* (Daudin) recorded from New Zealand. *Notornis* 19: 85–86.
- Veit, R.R.; Hyrenbach, K.D. & Martin, M.-C. 2007. Records of rare birds in the Indian Ocean during the austral summers of 2003–05. *Bulletin of the British Ornithologists' Club* 127: 27–34.
- Veitch, C.R. 1980. Seabirds found dead in New Zealand in 1978. *Notornis* 27: 115–124.
- Veitch, C.R. 1981. Seabirds found dead in New Zealand in 1979. *Notornis* 28: 41–47.
- Veitch, C.R.; Miskelly, C.M.; Harper, G.A.; Taylor, G.A. & Tennyson, A.J.D. 2004. Birds of the Kermadec Islands, south-west Pacific. *Notornis* 51: 61–90.
- Verry, A.J.F.; Scarsbrook, L.; Scofield, R.P.; Tennyson, A.J.D.; Weston, K.A.; Robertson, B.C. & Rawlence, N.J. 2019. Who, where, what, wren? Using ancient DNA to examine the veracity of museum specimen data: a case study of the New Zealand rock wren (*Xenicus gilviventris*). *Frontiers in Ecology and Evolution* (Paleoecology). doi.org/10.3389/fevo.2019.00496
- Vickers-Rich, P. 1991. The mesozoic and Tertiary history of birds on the Australian plate. Pp. 721–808. In: Vickers-Rich, P.; Monaghan, J.M.; Baird, R.F. & Rich, T.H. (Eds). *Vertebrate palaeontology of Australasia*. Melbourne: Pioneer Design Studio in cooperation with the Monash University Publications Committee. 1437 pp.
- Vigors, N.A. 1825. Observations on the natural affinities that connect the orders and families of birds. *Transactions of the Linnean Society of London* 14: 395–517.
- Villard, P.; Dano, S. & Bretagnolle, V. 2006. Morphometrics and the breeding biology of the Tahiti petrel *Pseudobulweria rostrata*. *Ibis* 148: 285–291.
- Voisin, C. & Voisin, J.-F. 2011. List of type specimens of birds in the collections of the Muséum National d'Histoire Naturelle (Paris, France). 22. Charadriiformes (Part 1: Stercorariidae, Laridae, Sternidae, Alcidae). *Journal of the National Museum* (Prague), *Natural History Series* 180: 39–56.
- Von Pelzeln, A. 1873. On the birds in the Imperial Collection at Vienna obtained from the Leverian Museum. *Ibis* 9 (3rd series): 14–54.
- Von Tschudi, J.J. 1856. Beitrage zur geographischen Verbreitung der Meeresvogel. *Journal für Ornithologie* 4: 134–162.
- Voous, K.H. & Wattel, J. 1963. Distribution and migration of the greater shearwater. *Ardea* 51: 143–157.
- Vuilleumier, F.; LeCroy, M. & Mayr, E. 1992. New species of birds described from 1981 to 1990. *Bulletin of the British Ornithologists' Club* 112A: 267–309.
- Wahl, T.R. 1985. The distribution of Buller's shearwater (*Puffinus bulleri*) in the North Pacific Ocean. *Notornis* 32: 109–117.
- Waite, E.R. 1909. Vertebrata of the subantarctic islands of New Zealand. Pp. 542–600 In: Chilton, C. (Ed.) *The subantarctic islands of New Zealand*, Vol. 2. Wellington, Philosophical Institute of Canterbury and New Zealand Government Printer.
- Wakelin, H. 1968. Some notes on the birds of Norfolk Island. *Notornis* 15: 156–176.
- Walker, C.A.; Wragg, G.M. & Harrison, C.J.O. 1990. A new shearwater from the Pleistocene of the Canary Islands and its bearing on the evolution of certain *Puffinus* shearwaters. *Historical Biology* 3: 203–224.
- Walker, J.M. [1931]. Our native birds; birds of New Zealand in the vernacular. Auckland: self-published. 47 pp. [Copy held at Alexander Turnbull Library, Wellington.]
- Walker, K. & Elliott, G. 1999. Population changes and biology of the wandering albatross *Diomedea exulans gibsoni* at the Auckland Islands. *Emu* 99: 239–247.

- Walker, K.J.; Elliott, G.P.; Rexer-Huber, K.; Parker, G.C.; Sagar, P.M. & McClelland, P.J. 2020. Shipwrecks and mollymawks: an account of Disappointment Island birds. *Notornis* 67: 213–245.
- Walker, K. & Elliott, G. 2005. Population changes and biology of the antipodean wandering albatross (*Diomedea antipodensis*). *Notornis* 52: 206–214.
- Walker, K. & Elliott, G. 2006. At-sea distribution of Gibson's and Antipodean wandering albatrosses, and relationships with longline fisheries. *Notornis* 53: 265–290. [See also *Corrigenda* in *Notornis* 54: 60].
- Walker, K.; Elliott, G.; Nicholls, D.; Murray, D. & Dilks, P. 1995. Satellite tracking of wandering albatross (*Diomedea exulans*) from the Auckland Islands: preliminary results. *Notornis* 42: 127–137.
- Walker, K.; Moore, P. & Elliott, G. 1991. The Auckland Island banded dotterel has apparently increased. *Notornis* 38: 257–265.
- Wallace, W.J.; Morris-Pocock, J.A.; González-Solis, J.; Quillfeldt, P. & Friesen, V.L. 2017. A phylogenetic test of sympatric speciation in the Hydrobatinae (Aves: Procellariiformes). *Molecular Phylogenetics and Evolution* 107: 39–47.
- Waller, M.A. 1959. Sulphur-crested cockatoo at Kaipara Heads. *Notornis* 8: 165.
- Walsh, S.A. & Hume, J.P. 2001. A new Neogene marine avian assemblage from north-central Chile. *Journal of Vertebrate Paleontology* 21: 484–491.
- Walsh, S.A. & Suárez, M.E. 2006. New penguin remains from the Pliocene of northern Chile. *Historical Biology* 18: 115–126.
- Warham, J. 1961. A spine-tailed swift at Macquarie Island. *Emu* 61: 189–190.
- Warham, J. 1967. Snares Island birds. *Notornis* 14: 122–139.
- Warham, J. 1971. Aspects of breeding behaviour in the royal penguin *Eudyptes chrysolophus schlegeli*. *Notornis* 18: 91–115.
- Warham, J. 1978. Letter – the unsexing of the Cape pigeon. *Notornis* 25: 355–356.
- Warham, J. 1981. Does Hutton's shearwater circumnavigate Australia? *Emu* 81: 44.
- Warham, J. 1985. Rockhopper penguin. P. 49. In: Robertson, C.J.R. (Ed.). *Reader's Digest complete book of New Zealand birds*. Sydney: Reader's Digest. 320 pp.
- Warham, J. 1990. *The petrels – their ecology and breeding systems*. London: Academic Press. viii + 440 pp.
- Warham, J. 2000. A further comment of albatross taxonomy. *Australasian Seabird Bulletin* 37: 13–14.
- Warham, J. & Bell, B.D. 1979. The birds of Antipodes Island, New Zealand. *Notornis* 26: 121–169.
- Warham, J. & Keeley, B.R. 1969. New and rare birds at Snares Island during 1968–69. *Notornis* 16: 221–224.
- Warham, J.; Keeley, B.R. & Wilson, G.J. 1977. Breeding of the mottled petrel. *Auk* 94: 1–17.
- Warham, J.; Wilson, G.J. & Keeley, B.R. 1982. The annual cycle of the sooty shearwater *Puffinus griseus* at the Snares Islands, New Zealand. *Notornis* 29: 269–292.
- Watkins, D. 1993. A national plan for shorebird conservation in Australia. Australasian Wader Studies Group, *RAOU Report* No. 90.
- Watling, D. 2001. *A guide to the birds of Fiji and Western Polynesia*. Suva: Environmental Consultants. 272 pp.
- Watson, G.E. 1974. The correct gender of *Daption* Stephens 1826. *Auk* 91: 419–421.
- Watson, G.E. 1975. *Birds of the Antarctic and Sub-Antarctic*. American Geophysical Union: Washington, D.C. xvii + 350 pp.
- Watson, G.E.; Angle, J.P.; Harper, P.C.; Bridge, M.A.; Schlatter, R.P.; Tickell, W.L.N.; Boyd, J.C. & Boyd, M.M. 1971. Birds of the Antarctic and Subantarctic. *American Geographical Society. Antarctic Map Folio Series* 14: 1–18, 15 pls.
- Waugh, S.M. 1998. Dye-marking of New Zealand black-browed and grey-headed albatrosses from Campbell Island. *New Zealand Journal of Marine and Freshwater Research* 32: 545–549.
- Waugh, S.M.; Filippi, D.; Fukuda, A.; Suzuki, M.; Higuchi, H.; Setiawan, A. & Davis, L. 2005. Foraging of royal albatrosses, *Diomedea epomophora*, from the Otago Peninsula and its relationships to fisheries. *Canadian Journal of Fisheries and Aquatic Sciences* 62: 1410–1421.
- Waugh, S.M.; Prince, P.A. & Weimerskirch, H. 1999. Geographical variation in morphometry of black-browed and grey-headed albatrosses from four sites. *Polar Biology* 22: 189–194.
- Waugh, S.M.; Sagar, P.M. & Cossee, R.O. 1999. New Zealand black-browed albatross *Diomedea melanophrys impavida* and grey-headed albatross *D. chrysostoma* banded at Campbell Island: recoveries from the South Pacific region. *Emu* 99: 29–35.
- Waugh, S.M.; Tennyson, A.J.D.; Taylor, G.A.; Wilson, K.-J. 2013. Population sizes of shearwaters (*Puffinus* spp.) breeding in New Zealand, with recommendations for monitoring. *Tuhinga* 24: 159–204.
- Waugh, S.M.; Troup, C.; Filippi, D. & Weimerskirch, H. 2002. Foraging zones of southern royal albatrosses. *Condor* 104: 662–667.
- Waugh, S.M. & Weimerskirch, H. 2003. Environmental heterogeneity and the evolution of foraging behaviour in long ranging greater albatrosses. *Oikos* 103: 374–384.
- Waugh, S.M.; Weimerskirch, H.; Cherel, Y.; Shankar, U.; Prince, P.A. & Sagar, P.M. 1999. Exploitation of the marine environment by two sympatric albatrosses in the Pacific Southern Ocean. *Marine Ecology Progress Series* 177: 243–254.
- Waugh, S.M.; Weimerskirch, H.; Moore, P.J. & Sagar, P.M. 1999. Population dynamics of blackbrowed and grey-headed albatrosses *Diomedea melanophrys* and *D. chrysostoma* at Campbell Island, New Zealand, 1942–96. *Ibis* 141: 216–225.
- Wehi, P.M.; Carter, L.; Harawira, T.W.; Fitzgerald, G.; Lloyd, K.; Whaanga, H. & MacLeod, C.J. 2019. Enhancing awareness and adoption of cultural values through use of Māori bird names in science communication and environmental reporting. *New Zealand Journal of Ecology* 43: 1–9.
- Weick, F. 2006. *Owls (Strigiformes): annotated and illustrated checklist*. Berlin: Springer. 388 pp.
- Weimerskirch, H.; Akesson, S. & Pinaud, D. 2006. Postnatal dispersal of wandering albatrosses *Diomedea exulans*: implications for the conservation of the species. *Journal of Avian Biology* 37: 23–28.
- Weimerskirch, H.; Jouventin, P.; Mougín, J.L.; Stahl, J.-C. & van Beveren, M. 1985. Banding recoveries and the dispersal of seabirds breeding in French Austral and Antarctic territories. *Emu* 85: 22–33.
- Weimerskirch, H. & Robertson, G. 1994. Satellite tracking of light-mantled sooty albatrosses. *Polar Biology* 14: 123–126.
- Weir, J.T.; Haddrath, O.; Robertson, H.A.; Colbourne, R.M. & Baker, A.J. 2016. Explosive ice age diversification of kiwi. *PNAS* 113(38) E5580–E5587. doi: 10.1073/pnas.1603795113. 8 pp.
- West, J.A. 1994. Chatham petrel (*Pterodroma axillaris*) – an overview. *Notornis* 41 (Supplement): 19–26.

- West, J.A. & Imber, M.J. 1989. Surveys of South Georgian diving petrels (*Pelecanoides georgicus*) on Codfish Island. *Notornis* 36: 157–158.
- Westerskov, K.E. 1953a. Introduction into New Zealand of the Australian blue wren in 1923. *Notornis* 5: 106–107.
- Westerskov, K.E. 1953b. Taxonomic status of the redpoll in N.Z. *Notornis* 5: 189–191.
- Westerskov, K.E. 1956. History and distribution of the bobwhite quail in New Zealand. *New Zealand Outdoor* 21(10): 12–14, 35–36.
- Westerskov, K.E. 1960. Birds of Campbell Island. *New Zealand Department of Internal Affairs Wildlife Publication* 61: 1–83.
- Westerskov, K.E. 1963. Superior survival of black-necked over ring-necked pheasants in New Zealand. *Journal of Wildlife Management* 27: 239–245.
- Westerskov, K.E. 1968. Australian brolga (*Grus rubicunda*) recorded in New Zealand. *Notornis* 15: 248–253.
- Westerskov, K.E. 1972. History of distribution of the crested grebe (*Podiceps cristatus*) in the North Island and Nelson–Marlborough. *Notornis* 19: 74–82.
- Westerskov, K.E. 1974. Probable first breeding of the cattle egret (*Bubulcus ibis*) in New Zealand. *Notornis* 21: 239–246.
- Wetmore, A. 1960. A classification for the birds of the world. *Smithsonian Miscellaneous Collection* 139: 1–37.
- Wetmore, A. 1965. The birds of the Republic of Panama. Part 1. *Smithsonian Miscellaneous Collection* 150: iv + 1–483.
- White, C.M.N. 1937. [Notes on small terns]. *Bulletin of the British Ornithologists' Club* 57: 110–111.
- Williams, G.R. 1950. Chukar in New Zealand. *New Zealand Science Review* 8: 2–6.
- Williams, G.R. 1951. Further notes on the chukar. *Notornis* 4: 151–157.
- Williams, G.R. 1963. A four-year population cycle in California quail in New Zealand. *Journal of Animal Ecology* 32: 441–459.
- Williams, G.R. 1967. The breeding biology of California quail in New Zealand. *Proceedings of the New Zealand Ecological Society* 14: 88–99.
- Williams, G.R. 1968. The Cape Barren goose (*Cereopsis novaehollandiae* Latham) in New Zealand. *Notornis* 15: 66–69.
- Williams, G.R. 1969. Introduced birds. Pp. 435–451. In: Knox, G.A. (Ed.). *The natural history of Canterbury*. Wellington: Reed. 620 pp.
- Williams, G.R. & Harrison, M. 1972. The laughing owl *Sceloglaux albifacies* (Gray, 1844). A general survey of a near-extinct species. *Notornis* 19: 4–19.
- Williams, H.W. 1906. Maori bird names. *Journal of the Polynesian Society* 15: 193–208.
- Williams, H.W. 1917. *A dictionary of the Maori language*. Fifth edition. Wellington: Government Printer. xxiv + 590 pp.
- Williams, H.W. 1957. *A dictionary of the Maori language*. Sixth edition. Wellington: R.E. Owen, Government Printer. xxvi + 504 pp.
- Williams, H.W. 1971. *Dictionary of the Maori language*. Seventh edition. Wellington: GP Publications Ltd. xl + 507 pp.
- Williams, M.J. 1971. The distribution and abundance of the paradise shelduck (*Tadorna variegata*, Gmelin) in New Zealand from pre-European times to the present day. *Notornis* 18: 71–86.
- Williams, M.J. 1981. The demography of New Zealand's *Cygnus atratus* population. Pp. 147–161. In: Matthews, G.V.T. & Smart, M. (Eds). *Proceedings of the Second International Swan Symposium, Sapporo, Japan*. Slimbridge, U.K.: International Waterfowl Research Bureau. 396 pp.
- Williams, M. 2012. A merganser at Auckland Islands, New Zealand. *Wildfowl* 62: 3–36.
- Williams, M.J. 2020. Brown teal. In Miskelly, C.M. (Ed.) *New Zealand birds online*. www.nzbirdsonline.org.nz [viewed 23 Jun. 2021].
- Williams, M.J. & Robertson, C.J.R. 1996. The Campbell Island teal *Anas aucklandica nesiotis*: history and review. *Wildfowl* 47: 134–165.
- Williams, M.; Tennyson, A.J.D. & Sim, D. 2014. Island differentiation of New Zealand's extinct mergansers (Anatidae: Mergini), with description of a new species from Chatham Island. *Wildfowl* 64: 3–34.
- Williams, M.; Tennyson, A.J.D. & Sim, D. 2015. Island differentiation of New Zealand's extinct mergansers (Anatidae: Mergini), with description of a new species from Chatham Island: correction and addition. *Wildfowl* 65: 166–168.
- Williams W. 1844. *A dictionary of the New Zealand language, and a concise grammar; to which are added a selection of colloquial sentences*. Paihia: C.M. Society. xli + 195 pp.
- Williams W. 1852. *A dictionary of the New Zealand language, and a concise grammar*. Second edition. London: Williams and Norgate. xxxix + 323 pp.
- Wills, D.E.; Murray, M.J. & Powlesland, R.G. 2003. Impact of management on the breeding success of the northern New Zealand dotterel (*Charadrius obscurus aquilonius*) on Matakana Island, Bay of Plenty. *Notornis* 50: 1–10.
- Wilson, G.J. 1976. Sighting of a yellow-nosed mollymawk off Stewart Island. *Notornis* 23: 252.
- Wilson, G.J. & Taylor, R.H. 1984. Distribution and abundance of penguins in the Ross Sea sector of Antarctica. *New Zealand Antarctic Record* 6(1): 1–7.
- Wilson, J.R.; Nebel, S. & Minton, C.D.T. 2007. Migration ecology and morphometrics of two bar-tailed godwit populations in Australia. *Emu* 107: 262–274.
- Wilson, K.-J. 2005. The state of New Zealand's birds. *Wingspan* 15: 12–21.
- Wilson, N.C. 1980. *Memories of Mansion House, Kawau Island, New Zealand*. Auckland: Richards Publishing. 124 pp.
- Wilson, R.A. 1955. Occurrence of black-faced cuckoo-shrike. *Notornis* 6: 119.
- Wiltshire, A.; Hamilton, S. & Brothers, N. 2004. First record of soft-plumaged petrels, *Pterodroma mollis*, breeding in Australia. *Emu* 104: 363–368.
- Wink, M. 2000. Advances in DNA studies of diurnal and nocturnal raptors. Pp. 831–844. In: Chancellor, R.D. & Meyburg, B.-U. (Eds). *Raptors at risk*. Berlin: The World Working Group on Birds of Prey, and Canada: Hancock House Publishers. 895 pp.
- Wink, M.; Heidrich, P. & Fentzloff, C. 1996. A mtDNA phylogeny of sea eagles (genus *Haliaeetus*) based on nucleotide sequences of the cytochrome b-gene. *Biochemical Systematics and Ecology* 24: 783–791.
- Wink, M. & Sauer-Gurth, H. 2000. Advances in the molecular systematics of African raptors. Pp. 135–147. In: Chancellor, R.D. & Meyburg, B.-U. (Eds). *Raptors at risk*. Berlin: The World Working Group on Birds of Prey, and Canada: Hancock House Publishers. 895 pp.

- Wink, M. & Sauer-Gurth, H. 2004. Phylogenetic relationships in diurnal raptors based on nucleotide sequences of mitochondrial and nuclear marker genes. Pp. 483–498. *In*: Chancellor, R.D. & Meyburg, B.-U. (Eds). *Raptors worldwide*. Berlin: The World Working Group on Birds of Prey. 890 pp.
- Wink, M.; El-Sayed A.-A.; Sauer-Gürth H. & Gonzalez J. 2009. Molecular phylogeny of owls (Strigiformes) inferred from DNA sequences of the mitochondrial cytochrome b and the nuclear RAG-1 gene. *In*: Johnson, D.H.; Van Nieuwenhuysse, D. & Duncan J.R. (Eds). Proc. Fourth World Owl Conf. Oct–Nov 2007, Groningen, The Netherlands. *Ardea* 97: 581–591.
- Wink, M. & Seibold, I. 1996. Molecular phylogeny of Mediterranean raptors (families Accipitridae and Falconidae). Pp. 335–344. *In*: Muntaner, J. & Mayol, J. (Eds). *Biología y conservación de las rapaces mediterráneas. BirdLife Monografía* 4: 1–486. Madrid: Sociedad Española de Ornitología.
- Wodzicki, K.A. 1967. The gannets at Cape Kidnappers. 2. Dispersal and movements. *Transactions of the Royal Society of New Zealand* 9: 17–31.
- Wodzicki, K.A. & Eyles, J.R. 1946. White phase of the reef heron or Matuku-moana *Demigretta sacra* (Gmelin) at Wairau Bar. *New Zealand Bird Notes* 1: 115–117.
- Wodzicki, K.A.; Robertson, C.J.R.; Thompson, H.R. & Alderton, C.J.T. 1984. The distribution and numbers of gannets (*Sula serrator*) in New Zealand. *Notornis* 31: 232–261.
- Wodzicki, K.A. & Stein, P. 1958. Migration and dispersal of New Zealand gannets. *Emu* 58: 289–312.
- Woehler, E.J. 1995. Bill morphology of royal and macaroni penguins, and geographic variation within eudyptid penguins. Pp. 319–330. *In*: Dann, P.; Norman, I. & Reilly, P. (Eds). *The penguins: ecology and management*. Chipping Norton, New South Wales: Surrey Beatty & Sons. 475 pp.
- Wood, J. 2004. Annual and monthly patterns in recoveries of beach-wrecked Procellariiformes from Southland, New Zealand 1990–2000. *Notornis* 51: 103–112.
- Wood, J.R. & Briden, S. 2008. South Georgian diving petrel (*Pelecanoides georgicus*) bones from a Maori midden on Otago Peninsula, New Zealand. *Notornis* 55: 46–47.
- Wood, J.R.; Lawrence, H.A.; Scofield, R.P.; Taylor, G.A.; Lyver, P.O'B. & Gleeson, D.M. 2017. Morphological, behavioural, and genetic evidence supports reinstatement of full species status for grey-faced petrel, *Pterodroma macroptera gouldi* (Procellariiformes: Procellariidae). *Zoological Journal of the Linnean Society* 179: 201–216.
- Wood, J.R.; Mitchell, K.J.; Scofield, R.P.; De Pietri, V.L.; Rawlence, N.J. & Cooper, A. 2017. Phylogenetic relationships and terrestrial adaptations of the extinct laughing owl, *Sceloglaux albifacies* (Aves: Strigidae). *Zoological Journal of the Linnean Society* 179: 907–918.
- Wood, J.R.; Mitchell, K.J.; Scofield, R.P.; Tennyson, A.J.D.; Fidler, A.E.; Wilmschurst, J.M.; Llamas, B. & Cooper, A. 2014. An extinct nestorid parrot (Aves, Psittaciformes, Nestoridae) from the Chatham Islands, New Zealand. *Zoological Journal of the Linnean Society* 172: 185–199.
- Wood, K.A. 1992. Seasonal abundance and spatial distribution of albatrosses off central New South Wales. *Australian Bird Watcher* 14: 207–225.
- Worthy, T.H. 1987. Sexual dimorphism and temporal variation in the North Island moa species *Euryapteryx curtus* (Owen) and *Pachyornis mappini* Archey. *National Museum of New Zealand Records* 3: 59–70.
- Worthy, T.H. 1988a. Loss of flight ability in the extinct New Zealand duck *Euryanas finschi*. *Journal of Zoology, London* 215: 619–628.
- Worthy, T.H. 1988b. A re-examination of the moa genus *Megalapteryx*. *Notornis* 35: 99–108.
- Worthy, T.H. 1989a. Moas of the subalpine zone. *Notornis* 36: 191–196.
- Worthy, T.H. 1989b. Validation of *Pachyornis australis* Oliver (Aves: Dinornithiformes), a medium-sized moa from the South Island, New Zealand. *New Zealand Journal of Geology and Geophysics* 32: 255–266.
- Worthy, T.H. 1992. A re-examination of the species *Euryapteryx geranoides* (Owen) including comparisons with other emeiin moas (Aves: Dinornithiformes). *Journal of the Royal Society of New Zealand* 22: 19–40.
- Worthy, T.H. 1993a. *Fossils of Honeycomb Hill*. Wellington: Museum of New Zealand Te Papa Tongarewa. 56 pp.
- Worthy, T.H. 1993b. A review of fossil bird bones from loess deposits in eastern South Island, New Zealand. *Records of the Canterbury Museum* 10(8): 95–106.
- Worthy, T.H. 1995. Description of some post-cranial bones of *Malacorhynchus scarletti*, a large extinct pink-eared duck from New Zealand. *Emu* 95: 13–22.
- Worthy, T.H. 1997a. A mid-Pleistocene rail from New Zealand. *Alcheringa* 21: 71–78.
- Worthy, T.H. 1997b. Fossil deposits in the Hodges Creek cave system, on the northern foothills of Mt Arthur, Nelson, South Island, New Zealand. *Notornis* 44: 111–124.
- Worthy, T.H. 1997c. A survey of historical laughing owl (*Sceloglaux albifacies*) specimens in museum collections. *Notornis* 44: 241–252.
- Worthy, T.H. 1997d. Quaternary fossil fauna of South Canterbury, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 27: 67–162.
- Worthy, T.H. 1997e. The identification of fossil *Eudyptes* and *Megadyptes* bones at Marfells Beach, Marlborough, South Island. *New Zealand Natural Sciences* 23: 71–85.
- Worthy, T.H. 1998a. Quaternary fossil faunas of Otago, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 28: 421–521.
- Worthy, T.H. 1998b. The Quaternary fossil avifauna of Southland, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 28: 537–589.
- Worthy, T.H. 1998c. Fossil avifaunas from Old Neck and Native Island, Stewart Island – Polynesian middens or natural sites? *Records of the Canterbury Museum* 12(2): 49–82.
- Worthy, T.H. 1998d. A remarkable fossil and archaeological avifauna from Marfells Beach, Lake Grassmere, South Island, New Zealand. *Records of the Canterbury Museum* 12(1): 79–176.
- Worthy, T.H. 1998e. Fossils indicate *Pelecanoides georgicus* had large colonies at Mason Bay, Stewart Island, New Zealand. *Notornis* 45: 229–246.

- Worthy, T.H. 1999a. The role of climate change versus human impacts – avian extinction on South Island, New Zealand. Proceedings of the 4th International meeting of the Society of Avian Paleontology and Evolution. Washington, U.S.A., June 1996. *Smithsonian Contributions to Paleobiology* 89: 111–123.
- Worthy, T.H. 1999b. What was on the menu? Avian extinction in New Zealand. *New Zealand Journal of Archaeology* 19: 125–160.
- Worthy, T.H. 2000. Two late-Glacial avifaunas from eastern North Island, New Zealand – Te Aute Swamp and Wheturau Quarry. *Journal of the Royal Society of New Zealand* 30: 1–25.
- Worthy, T.H. 2001. A fossil vertebrate fauna accumulated by laughing owls (*Sceloglaux albifacies*) on the Goulard Downs, northwest Nelson, South Island. *Notornis* 48: 225–233.
- Worthy, T.H. 2002a. The fossil distribution of brown teal (*Anas chlorotis*) in New Zealand. *DOC Science Internal Series* 81: 1–29. Wellington: New Zealand Department of Conservation.
- Worthy, T.H. 2002b. The New Zealand musk duck (*Biziura delautouri* Forbes 1892). *Notornis* 49: 19–28.
- Worthy, T.H. 2004. The Holocene fossil waterfowl fauna of Lake Poukawa, North Island, New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 15: 77–120.
- Worthy, T.H. 2005a. A new species of *Oxyura* (Aves: Anatidae) from the New Zealand Holocene. *Memoirs of the Queensland Museum* 51: 259–275.
- Worthy, T.H. 2005b. Rediscovery of the types of *Dinornis curtus* Owen and *Palapteryx geranoides* Owen, with a new synonymy (Aves: Dinornithiformes). *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 16: 33–43.
- Worthy, T.H. 2007. Book review: *Extinction and biogeography of tropical Pacific birds* by D.W. Steadman. *Emu* 107: 248–251.
- Worthy, T.H. 2009. Descriptions and phylogenetic relationships of two new genera and four new species of Oligo–Miocene waterfowl (Aves: Anatidae) from Australia. *Zoological Journal of the Linnean Society* 156: 411–454.
- Worthy, T.H. & Brassey, R. 2000. New Zealand pigeon (*Hemiphaga novaeseelandiae*) on Raoul Island, Kermadec Group. *Notornis* 47: 36–38.
- Worthy, T.H.; Bunce, M.; Cooper, A. & Scofield, P. 2005. *Dinornis* – an insular oddity, a taxonomic conundrum reviewed. In: Alcover, J.A. & Bover, P. (Eds). Proceedings of the International Symposium “Insular vertebrate evolution: the palaeontological approach”. *Monographies de la Societat d’Història Natural de les Balears* 12: 337–390.
- Worthy, T.H.; Edwards, A.R. & Millener, P.R. 1991. The fossil record of moas (Aves: Dinornithiformes) older than the Otira (last) glaciation. *Journal of the Royal Society of New Zealand* 21: 101–118.
- Worthy, T.H. & Gill, B.J. 2002. New distributional records of the extinct New Zealand duck *Malacorhynchus scarletti* (Anatidae). *Records of the Auckland Museum* 39: 49–52.
- Worthy, T.H. & Grant-Mackie, J.A. 2003. Late-Pleistocene avifaunas from Cape Wanbrow, Otago, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 33: 427–485.
- Worthy, T.H.; Hand, S.J.; Archer, M.; Scofield, R.P. & De Pietri, V.L. 2019. Evidence for a giant parrot from the early Miocene of New Zealand. *Biology Letters* 15: 20190467. doi: 10.1098/rsbl.2019.0467
- Worthy, T.H.; Hand, S.J.; Archer, M.; Scofield, R.P. & De Pietri V.L. 2021. Correction to ‘Evidence for a giant parrot from the early Miocene of New Zealand’. *Biology Letters* 17: 20210608. <https://doi.org/10.1098/rsbl.2021.0608>
- Worthy, T.H.; Hand, S.J.; Nguyen, J.M.T.; Tennyson, A.J.D.; Worthy, J.P.; Scofield, R.P.; Boles, W.E. & Archer, M. 2010. Biogeographical and phylogenetic implications of an early Miocene wren (Aves: Passeriformes: Acanthisittidae) from New Zealand. *Journal of Vertebrate Paleontology* 30: 479–498.
- Worthy, T.H.; Hand, S.J.; Worthy, J.P.; Tennyson, A.J.D. & Scofield, R.P. 2009. A large fruit pigeon (Columbidae) from the early Miocene of New Zealand. *Auk* 126(3): 649–656.
- Worthy, T.H. & Holdaway, R.N. 1993. Quaternary fossil faunas from caves in the Punakaiki area, West Coast, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 23: 147–254.
- Worthy, T.H. & Holdaway, R.N. 1994. Quaternary fossil faunas from caves in Takaka Valley and on Takaka Hill, northwest Nelson, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 24: 297–391.
- Worthy, T.H. & Holdaway, R.N. 1995. Quaternary fossil faunas from caves on Mt Cookson, North Canterbury, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 25: 333–370.
- Worthy, T.H. & Holdaway, R.N. 1996. Quaternary fossil faunas, overlapping taphonomies, and palaeofaunal reconstruction in North Canterbury, South Island, New Zealand. *Journal of the Royal Society of New Zealand* 26: 275–361.
- Worthy, T.H. & Holdaway, R.N. 2000. Terrestrial fossil vertebrate faunas from inland Hawke’s Bay, North Island, New Zealand. Part 1. *Records of the Canterbury Museum* 14: 89–154.
- Worthy, T.H. & Holdaway, R.N. 2002. *The lost world of the moa: prehistoric life of New Zealand*. Christchurch: Canterbury University Press. xxxiii + 719 pp.
- Worthy, T.H.; Holdaway, R.N.; Alloway, B.V.; Jones, J.; Winn, J. & Turner, D. 2002. A rich Pleistocene–Holocene avifaunal sequence from Te Waka #1: terrestrial fossil vertebrate faunas from inland Hawke’s Bay, North Island, New Zealand. Part 2. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 13: 1–38.
- Worthy, T.H.; Holdaway, R.N.; Sorenson, M.D. & Cooper, A.C. 1997. Description of the first complete skeleton of the extinct New Zealand goose *Cnemiornis calcitrans* Owen (Aves: Anatidae), and a reassessment of the relationships of *Cnemiornis*. *Journal of Zoology, London* 243: 695–723.
- Worthy, T.H. & Jouventin, P. 1999. The fossil avifauna of Amsterdam Island, Indian Ocean. Pp. 39–65. In: Olson, S.L. (Ed.). Avian paleontology at the close of the 20th Century. Proceedings of the 4th International meeting of the Society of Avian Paleontology and Evolution, Washington, D.C., 4–7 June 1996. *Smithsonian Contributions to Paleobiology* 89: i–viii + 1–344.
- Worthy, T.H. & Lee, M.S.Y. 2008. Affinities of Miocene waterfowl (Anatidae: *Manuherikia*, *Dunstanetta* and *Miotadorna*) from the St Bathans Fauna, New Zealand. *Palaeontology* 51(3): 677–708.
- Worthy, T.H. & Mildenhall, D.C. 1989. A late Otiran–Holocene paleoenvironmental reconstruction based on cave excavations in northwest Nelson. *New Zealand Journal of Geology and Geophysics* 32: 243–253.

- Worthy, T.H.; Miskelly, C.M. & Ching, R.A. 2002. Taxonomy of North and South Island snipe (Aves: Scolopacidae: *Coenocorypha*), with analysis of a remarkable collection of snipe bones from Greymouth, New Zealand. *New Zealand Journal of Zoology* 29: 231–244, 345.
- Worthy, T.H. & Olson, S.L. 2002. Relationships, adaptations, and habits of the extinct duck ‘*Euryanas*’ *finschi*. *Notornis* 49: 1–17.
- Worthy, T.H. & Roscoe, D. 2003. Takaka Fossil Cave – a stratified late Glacial to late Holocene deposit from Takaka Hill, New Zealand. *Tuhinga: Records of the Museum of New Zealand Te Papa Tongarewa* 14: 41–60.
- Worthy, T.H. & Scofield, R.P. 2012. Twenty-first century advances in knowledge of the biology of moa (Aves: Dinornithiformes): a morphological analysis and diagnoses revised. *New Zealand Journal of Zoology* 39: 87–153.
- Worthy, T.H. & Swabey, S.E.J. 2002. Avifaunal changes revealed in Quaternary deposits near Waitomo Caves, North Island, New Zealand. *Journal of the Royal Society of New Zealand* 32: 293–325.
- Worthy, T.H.; Tennyson, A.J.D.; Archer, M. & Scofield, R.P. 2010. First record of *Palaelodus* (Aves: Phoenicopteriformes) from New Zealand. *Records of the Australian Museum* 62: 77–88.
- Worthy, T.H.; Tennyson, A.J.D.; Hand, S.J. & Scofield, R.P. 2008. A new species of the diving duck *Manuherikia* and evidence for geese (Aves: Anatidae: Anserinae) in the St Bathans Fauna (early Miocene), New Zealand. *Journal of the Royal Society of New Zealand* 38: 97–114.
- Worthy, T.H.; Tennyson, A.J.D.; Jones, C.; McNamara, J.A. & Douglas, B.J. 2007. Miocene waterfowl and other birds from Central Otago, New Zealand. *Journal of Systematic Palaeontology* 5: 1–39.
- Worthy, T.H.; Tennyson, A.J.D. & Scofield, R.P. 2011a. Fossils reveal an early Miocene presence of the aberrant gruiform Aves: Aptornithidae in New Zealand. *Journal of Ornithology* 152: 669–680.
- Worthy, T.H.; Tennyson, A.J.D. & Scofield, R.P. 2011b. An early Miocene diversity of parrots (Aves, Strigopidae, Nestorinae) from New Zealand. *Journal of Vertebrate Paleontology* 31: 1102–1116.
- Worthy, T.H.; Walter, R. & Anderson, A.J. 1998. Fossil and archaeological avifauna of Niue Island, Pacific Ocean. *Notornis* 45: 177–190.
- Worthy, T.H.; Worthy, J.P.; Tennyson, A.J.D.; Salisbury, S.W.; Hand, S.J. & Scofield, R.P. 2013. Miocene fossils show that kiwi (*Apteryx*, Apterygidae) are probably not phyletic dwarves. Pp. 63–80. In: Göhlich, U.B. & Kroh, A. (Eds) *Paleornithological Research 2013 (Proceedings of the 8th International Meeting of the Society of Avian Palaeontology and Evolution)*. Vienna: Verlag Naturhistorisches Museum.
- Worthy, T.H.; Worthy, J.P.; Tennyson, A.J.D. & Scofield, R.P. 2013. A bittern (Aves: Ardeidae) from the early Miocene of New Zealand. *Paleontological Journal* 47: 1331–1343.
- Worthy, T.H. & Zhao, J.X. 2006. A late Pleistocene predator-accumulated avifauna from Kids Cave, West Coast, South Island, New Zealand. *Alcheringa* 30 (suppl.): 389–408.
- Wright, A. 1960. Rare birds at Farewell Spit: tree martins. *Notornis* 8: 260–261.
- Wright, A.E. 1984. Buller’s mollymawks breeding at the Three Kings Islands. *Notornis* 31: 203–207.
- Wright, A.E. 1994. In: O’Donnell, C.F.J. & West, J.A. (Comps). Classified summarised notes, South Island, 1 July 1991 to 30 June 1992. *Notornis* 41: 167–188.
- Wright, D.A. & Clout, M. 2001. The eastern rosella (*Platycercus eximius*) in New Zealand. *DOC Science Internal Series* 18: 1–27. Wellington: New Zealand Department of Conservation.
- Wright, T.F.; Schirtzinger, E.E.; Matsumoto, T.; Eberhard, J.R.; Graves, G.R.; Sanchez, J.J.; Capelli, S.; Muller, H.; Scharpegge, J.; Chambers, G.K. & Fleischer, R.C. 2008. A multilocus molecular phylogeny of the parrots (Psittaciformes): support for a Gondwanan origin during the Cretaceous. *Molecular Biology and Evolution* 25: 2141–2156.
- Yaldwyn, J.C. 1956. A preliminary account of the sub-fossil avifauna of the Martinborough caves. *Records of the Dominion Museum* 3: 1–7.
- Yaldwyn, J.C. 1986. Sandhills of Sandy Bay, Auckland Islands, January 1975. Pp. 148–153. In: Penniket, A.; Garrick, A. & Breese, E. (Comps). *Preliminary reports of expeditions to the Auckland Islands Nature Reserve 1973–1984*. Wellington: Department of Lands & Survey. viii + 231 pp.
- Yeung, N.W.; Carlson, D.B. & Conant, S. 2009. Testing subspecies hypothesis with molecular markers and morphometrics in the Pacific white tern complex. *Biological Journal of the Linnean Society* 98: 586–595.
- Yonezawa, T.; Segawa, T.; Mori, H.; Campos, P.F.; Hongoh, Y.; Endo, H.; Akiyoshi, A.; Kohno, N.; Nishida, S.; Wu, J.; Jin, H.; Adachi, J.; Kishino, H.; Kurokawa, K.; Nogi, Y.; Tanabe, H.; Mukoyama, H.; Yoshida, K.; Rasoamiaramanana, A.; Yamagishi, S.; Hayashi, Y.; Yoshida, A.; Koike, H.; Akishinomiya, F.; Willerslev, E. & Hasegawa, M. 2017. Phylogenomics and morphology of extinct Paleognaths reveal the origin and evolution of the ratites. *Current Biology* 27: 68–77.
- Young, H.G.; Tonge, S.J. & Hume, J.P. 1997. Review of Holocene wildfowl extinctions. *Wildfowl* 47: 166–180.
- Yuri, T.; Kimball, R.; Harshman, J.; Bowie, R.; Braun, M.; Chojnowski, J.; Han, K.-L.; Hackett, S.; Huddleston, C.; Moore, W.; Reddy, S.; Sheldon, F.; Steadman, D.; Witt, C. & Braun, E. 2013. Parsimony and model-based analyses of indels in avian nuclear genes reveal congruent and incongruent phylogenetic signals. *Biology* 2: 419–444.
- Zino, F.; Brown, R. & Biscoito, M. 2008. The separation of *Pterodroma madeira* (Zino’s petrel) from *Pterodroma feae* (Fea’s petrel) (Aves: Procellariidae). *Ibis* 150: 326–334.
- Zuccon, D. & Ericson, P.G.P. 2012. Molecular and morphological evidences place the extinct New Zealand endemic *Turnagra capensis* in the Oriolidae. *Molecular Phylogenetics & Evolution* 62: 414–426.
- Zuccon, D.; Prÿs-Jones, R.; Rasmussen, P.C. & Ericson, P.G.P. 2012. The phylogenetic relationships and generic limits of finches (Fringillidae). *Molecular Phylogenetics and Evolution* 62: 581–596.

