



# Breeding Bird Atlas of Mecklenburg County, NC

Written by Donald W. Seriff





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Written by Donald W. Seriff

Illustrations and Layout Design by Leigh Anne Carter

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The Mecklenburg Audubon Society was founded in 1940. The Society has been a leader in education and conservation in the Charlotte region for over 75 years.



## Mecklenburg County Park and Recreation Department

The Mecklenburg County Park and Recreation Department was established in 1974. The Department manages over 22,000 acres of parks, greenways, and nature preserves in the county.



## United States Geological Survey

Learn about Breeding Bird Atlas Explorer at:  
<http://www.pwrc.usgs.gov/bba/>



# Table of Contents

Breeding Bird Atlas 1	Red-headed Woodpecker 55	European Starling 96
Results 10	Red-bellied Woodpecker 56	Cedar Waxwing 97
Species Accounts 15	Downy Woodpecker 57	Ovenbird 98
Canada Goose 18	Hairy Woodpecker 58	Worm-eating Warbler 99
Wood Duck 19	Northern Flicker 59	Louisiana Waterthrush 100
Mallard 20	Pileated Woodpecker 60	Black-and-white Warbler 101
Hooded Merganser 21	American Kestrel 61	Prothonotary Warbler 102
Northern Bobwhite 22	Peregrine Falcon 62	Swainson's Warbler 103
Wild Turkey 23	Eastern Wood-Pewee 63	Kentucky Warbler 104
Pied-billed Grebe 24	Acadian Flycatcher 64	Common Yellowthroat 105
Great Blue Heron 25	Willow Flycatcher 65	Hooded Warbler 106
Green Heron 26	Eastern Phoebe 66	American Redstart 107
Yellow-crowned Night-Heron 27	Great Crested Flycatcher 67	Northern Parula 108
Black Vulture 28	Eastern Kingbird 68	Yellow Warbler 109
Turkey Vulture 29	Loggerhead Shrike 69	Pine Warbler 110
Osprey 30	White-eyed Vireo 70	Yellow-throated Warbler 111
Mississippi Kite 31	Yellow-throated Vireo 71	Prairie Warbler 112
Bald Eagle 32	Red-eyed Vireo 72	Yellow-breasted Chat 113
Sharp-shinned Hawk 33	Blue Jay 73	Eastern Towhee 114
Cooper's Hawk 34	American Crow 74	Chipping Sparrow 115
Red-shouldered Hawk 35	Fish Crow 75	Field Sparrow 116
Broad-winged Hawk 36	Common Raven 76	Grasshopper Sparrow 117
Red-tailed Hawk 37	Horned Lark 77	Song Sparrow 118
Killdeer 38	Purple Martin 78	Summer Tanager 119
Spotted Sandpiper 39	Tree Swallow 79	Scarlet Tanager 120
American Woodcock 40	Northern Rough-winged Swallow 80	Northern Cardinal 121
Rock Pigeon 41	Cliff Swallow 81	Blue Grosbeak 122
Eurasian Collared-Dove 42	Barn Swallow 82	Indigo Bunting 123
Mourning Dove 43	Carolina Chickadee 83	Dickcissel 124
Yellow-billed Cuckoo 44	Tufted Titmouse 84	Red-winged Blackbird 125
Barn Owl 45	White-breasted Nuthatch 85	Eastern Meadowlark 126
Eastern Screech-Owl 46	Brown-headed Nuthatch 86	Common Grackle 127
Great Horned Owl 47	House Wren 87	Brown-headed Cowbird 128
Barred Owl 48	Carolina Wren 88	Orchard Oriole 129
Common Nighthawk 49	Blue-gray Gnatcatcher 89	Baltimore Oriole 130
Chuck-will's-widow 50	Eastern Bluebird 90	House Finch 131
Eastern Whip-poor-will 51	Wood Thrush 91	American Goldfinch 132
Chimney Swift 52	American Robin 92	House Sparrow 133
Ruby-throated Hummingbird 53	Gray Catbird 93	
Belted Kingfisher 54	Brown Thrasher 94	Appendices 134
	Northern Mockingbird 95	Credits 163

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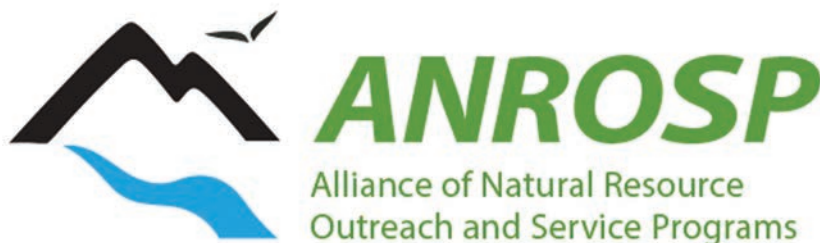
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# **BREEDING BIRD ATLAS**

In Charlotte, in the spring of 1928, William McIlwaine wrote:

“Nesting is the order with the birds to-day. Now the art of nest-finding is vastly more than standing still with eyes squinted and mouth open and your head about to topple off its pedestal. Such is bird identification. To find the nests means that, at times, yes, but also to roam the fields and court the brambles and get over on your head to see up under. And it takes a lot of time. My small boy, aged four, said to me, ‘Daddy, I tell you what I don’t think is right. A person ought not to be a preacher and a bird man at the same time.’ And he was surely right. You cannot do much of both. And I have seen very little of nesting this year.”

Despite his lamentation, in just a few short years, McIlwaine had located and recorded detailed information on the nests of more than 50 species of birds in the city of Charlotte.

## Mecklenburg County Breeding Bird Atlas (BBA)

A “Breeding Bird Atlas” (BBA) is a study designed to map and monitor the breeding status of birds in a specific geographic region. Atlas projects are implemented by trained biologists with the assistance of “citizen scientist” birders as volunteers. The final product of a BBA is a comprehensive data set and a series of maps illustrating the geographic distribution of each species of breeding bird.

The Mecklenburg County BBA study is a collaboration between the Mecklenburg Audubon Society and the Mecklenburg County Conservation Science Office with vital assistance provided by staff hosting the USGS North American BBA Explorer website. The study is the first county-level BBA ever conducted in the Carolinas. It followed a standardized protocol recommended by the North American Ornithological Atlas Committee (NORAC). The project was officially initiated in 2011 and ended in 2015. The results of the Mecklenburg County Breeding Bird Atlas provide an essential scientific baseline of the status and distribution of the breeding birds of Mecklenburg County—so that future comparisons can be made.

Mecklenburg County is situated at the core of the Carolina Piedmont and lies at the heart of the most rapidly developing urban area in both states. Changes in the breeding status and distribution of birds similar to those documented during this Mecklenburg County study, may be expected to impact adjacent counties or emanate outward from other rapidly developing urban areas in both North and South Carolina.

Some of the results of the Atlas study have been summarized and are presented in table format for easy reference. Individual Atlas maps and species specific findings for each bird species recorded breeding in Mecklenburg County are provided in the Species Accounts section. These Atlas maps graphically illustrate the distribution of each species in the county. Educational handouts summarizing BBA results about “Lost Birds,” “Imperiled Breeding Birds,” “Vulnerable Breeding Birds,” and “New Breeding Birds” in Mecklenburg County are provided in the Appendix.

**1. Atlas Methods:** Methods for conducting breeding bird atlas surveys have been standardized and refined by the

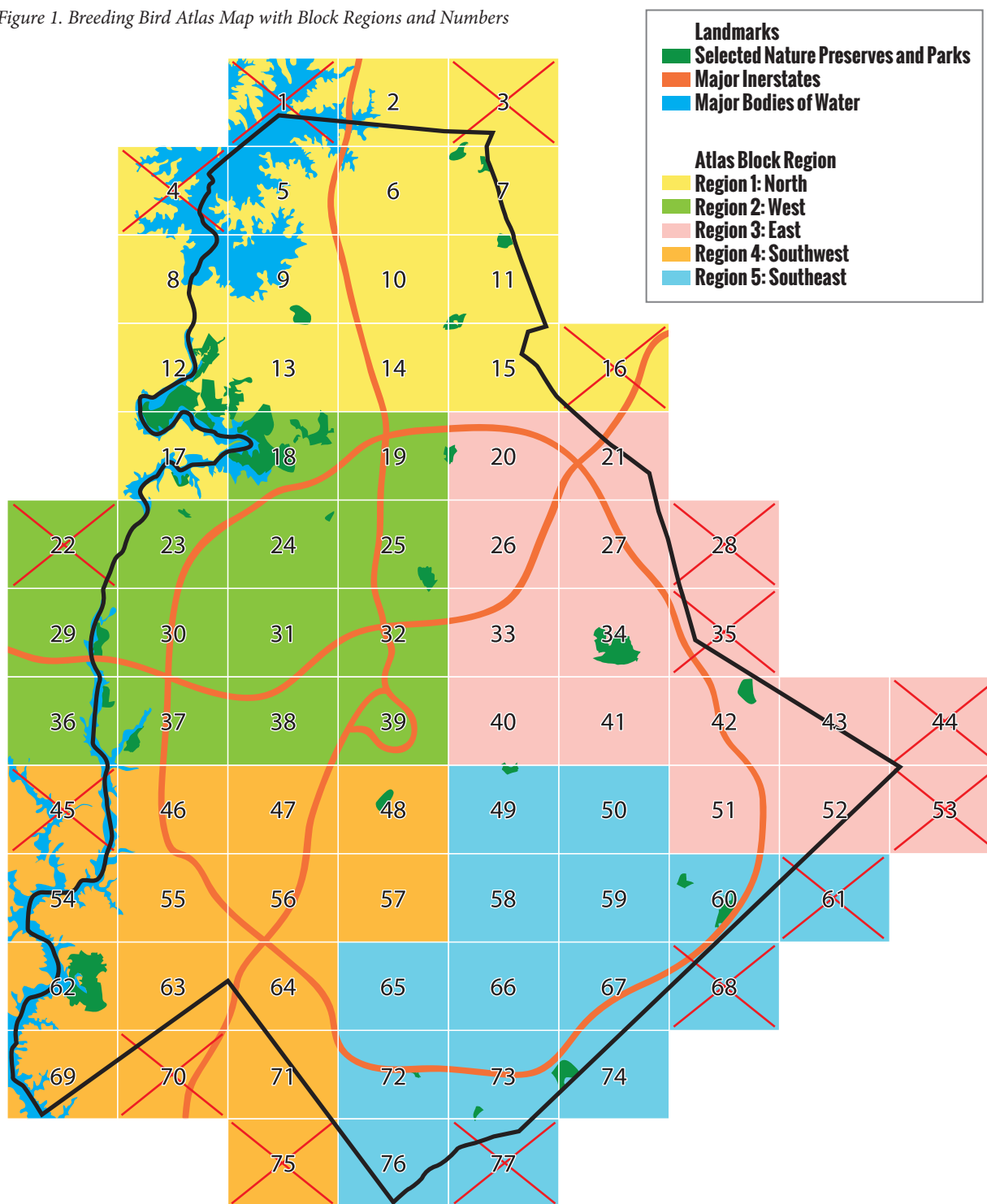


North American Ornithological Atlas Committee. The Mecklenburg County BBA methods largely conformed to established NORAC committee protocols and to protocols recommended and established by the USGS North American BBA Explorer program.

The grid base selected for the survey was the 1:24,000, 7.5 minute, U.S. Geological Survey topographic quadrangle map. It is commonly used as the base map in BBA surveys. Eighteen topographic quadrangles cover portions of Mecklenburg County. A standard mapping grid of one-sixth of a USGS 7.5 minute topographic quadrangle was overlain on a map of Mecklenburg County dividing the county into 77 survey blocks. Each survey block was approximately 10 square miles in extent and each was assigned an individual block number. A total of 62 of the blocks were selected to be surveyed (*Figure 1*). The remaining 15 blocks contained fractions of the county too small to be surveyed.

**2. Block Coverage:** A “Regional Coordinator” was assigned to each of five survey regions: North, West, East, Southwest, and Southeast. Each Regional Coordinator assigned volunteer observers to manage one or more atlas blocks within their region. These “Blockheads,” as they were affectionately called, were responsible for coordinating other volunteers in their block and for fully surveying each block to determine the presence of breeding birds. They reviewed street maps and satellite maps to familiarize themselves with their block in advance of conducting their field work. Blockheads were asked to make a special effort to identify and visit all

Figure 1. Breeding Bird Atlas Map with Block Regions and Numbers



undeveloped natural areas within each of their assigned blocks. Volunteers were instructed to never enter private property without prior permission.

The primary goal of each Blockhead was to find as many species of birds breeding within the block as possible. Their secondary goal was to collect the highest level of breeding evidence for each bird species. A grand total of 20 hours of field effort per block was the goal over the entire study period. Evidence of breeding only needed to

be confirmed once for each species, in each survey block, during the study. A range of “Safe Dates” was provided for counting each species in an attempt to insure that lingering migrants were not counted.

A series of training workshops was developed by a Training Coordinator and was offered to interested Atlas volunteers. Each workshop covered the basics of birding ethics, requesting access, safety, pre-planning, and specifics on how to properly collect data and conduct

the survey. Each volunteer received a detailed 30-page observer handbook.

Volunteers entered data on field checklist cards and the information was later entered into the Mecklenburg County BBA database on the national “BBA Explorer” web site, hosted by the United States Geological Survey. Breeding data from casual observations and incidental sightings were collected, filed, and later entered online as well. All data were reviewed and verified by both the Regional Coordinators and the Project Coordinator before final acceptance. A significant amount of time was spent on both data verification and on following up on reports of locally rare species to insure that accurate information was properly entered. The data set is available for reference at: <http://www.pwrc.usgs.gov/bba/>

**3. Breeding Data:** Volunteers used the following codes to record the various breeding behaviors they detected.

a) OBSERVED – not breeding evidence (used within Safe Dates): Species (male or female) was observed in a block during its breeding season, but no evidence of breeding was seen. Also used for a bird that is not in suitable nesting habitat. This code could be used for a wide range of species “passing through” the block such as vultures or raptors, or a colonial nesting species not at the nesting colony.

b) POSSIBLE – possible breeding evidence (used within Safe Dates): Species (male or female) was seen or heard in suitable nesting habitat during its breeding season.

c) PROBABLE – probable breeding evidence (used within Safe Dates except for “C” which could be used anytime.)

P – Pair observed in suitable habitat during its breeding season.

S – Permanent territory presumed through song at same location on at least two occasions seven days or more apart.

T – Permanent territory presumed through defense of territory (chasing individuals of the same species).

C – Courtship behavior or copulation. Can use outside Safe Dates (except for ducks). Especially for raptors, woodcock, and hummingbird courtship rituals.

N – Visiting probable nest-site.

A – Agitated behavior or anxiety calls from adult.

B – Nest building by wrens or excavation of holes by woodpeckers.

d) CONFIRMED – confirmed evidence of breeding (could be used outside of Safe Dates).

CN – Carrying nesting material, such as sticks or other material. Don’t use for wrens, crows, or colonial nesting species.

NB – Nest building at the actual nest-site.

PE – Physiological evidence of breeding (e.g. [brood] patch or egg in oviduct based on bird in hand. Only to be used by experienced bird banders on local birds during the nesting season).

DD – Distraction display or injury feigning.

UN – Used nests or eggshells found.

PY – Precocial young. Flightless young of precocial species restricted to the natal area by dependence on adults or limited ability.

FL – Recently fledged young (either precocial or altricial) incapable of sustained flight, restricted to natal area by dependence on adults or limited mobility.

ON – Occupied nest: adults entering or leaving a nest site in circumstances indicating occupied nest. To be used for nests which are too high (e.g. the tops of trees) or enclosed (e.g. chimneys) for the contents to be seen.

CF – Carrying food: adult carrying food for the young.

FY – Adult feeding recently fledged young.

FS – Adult carrying fecal sac.

NE – Nest with egg(s).

NY – Nest with young seen or heard.

**4. Species Maps:** Data for each Atlas map were exported from USGS BBA Explorer and reviewed and accessioned using MS Access, MS Excel, and ArcMap (ESRI ArcGIS) software. Each map generated was later enhanced in Adobe Illustrator for easier viewing. Each map uses color to illustrate the highest level of breeding evidence obtained for that species in each of the 62 survey blocks. An Atlas map is included in the species account of each breeding bird.

#### **5. Atlas Results**

a) Effort: Surveys were conducted in all 62 target blocks resulting in attainment of 100% coverage. Overall, survey effort (time in the field) dramatically exceeded the established goal of 20 hours per block (1,240 total hours) by a stunning 112.25% (2,631 total hours). Effort was well dispersed in blocks throughout the county and each region exceeded its target effort: North (180%), West (156%), East (228%), Southwest (195%), Southeast (309%). A total of 56 blocks received at least the minimum of 20 hours of effort (*Figure 2*). Seven blocks received less than 20 hours of effort. One volunteer spent over 300 hours surveying a single block and three others spent more than 100 hours each surveying individual blocks.

Nearly 7,000 breeding records were collected and submitted for review. Over 1,500 local breeding records recorded prior to the survey were also collected and compiled. Many of these are shared in the species accounts to help provide historical context.

Over 250 people volunteered their time or provided information for the Atlas project. In addition to field effort, volunteers contributed at least 500 hours of time involved with training, steering committee meetings, data

entry, and other project administration.

b) Breeding Birds Documented: Breeding evidence was obtained for a total of 115 species of birds. There were 105 species with Confirmed breeding as the highest level of evidence and five species had Probable as their highest level of evidence. Five other species had Possible or Observed codes entered as the highest level of breeding evidence. No evidence of breeding was obtained for another four “historic” species that were documented as breeding birds in Mecklenburg County prior to 1990. Species from these last two groups have been included on the “Lost” bird list found in the Appendix. Most blocks surveyed had between 50 and 60 breeding birds documented (Figure 3).

Sixty-seven of the 110 breeding species documented with Confirmed or Probable as the highest level of evidence were found in each of the five survey regions, however, this does not necessarily mean that the species is a widespread breeding bird within the county. Evidence of breeding for 43 of the 110 breeding species was documented in four or fewer survey regions. Thirty-nine of these 43 species were thinly distributed across the

county, being found in eight or fewer survey blocks. Atlas maps for each of the 110 breeding birds are provided in the individual species accounts.

c) Breeding Bird Atlas Findings: Each species of breeding bird recorded in Mecklenburg County was characterized using one of the following metrics and is presented in one of the three charts below (Figures 4, 5, and 6). Note: Possible codes recorded were not included in these findings.

- Nearly Ubiquitous – Probable or Confirmed code recorded in 41–62 survey blocks
- Widespread: Probable or Confirmed code recorded in 31–40 survey blocks
- Fairly Widespread: Probable or Confirmed code recorded in 21–30 survey blocks
- Somewhat Local: Probable or Confirmed code recorded in 10–20 survey blocks
- Local: Probable or Confirmed code recorded in 4–9 survey blocks
- Very Local: Probable or Confirmed code recorded in 1–3 survey blocks

Figure 2. Hours of Effort per Block

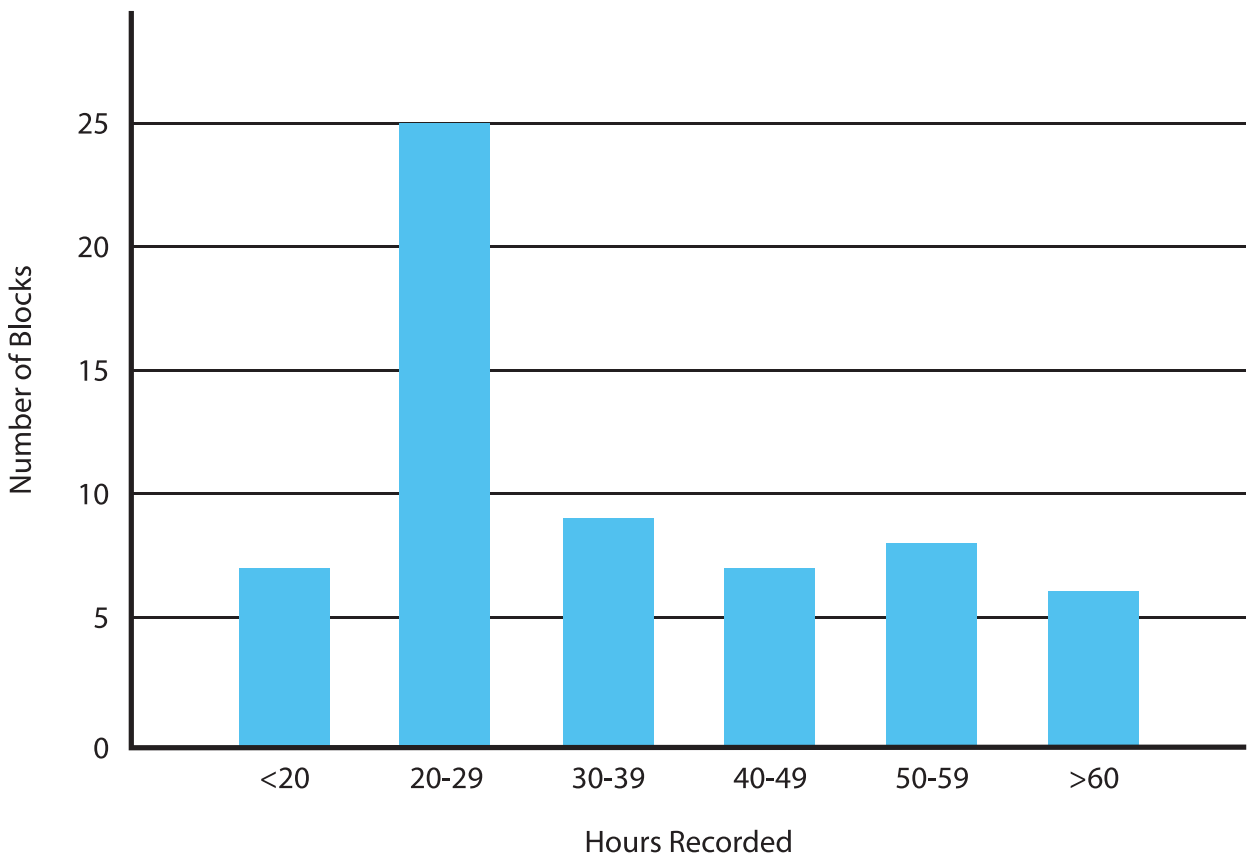


Figure 3. Species per Block

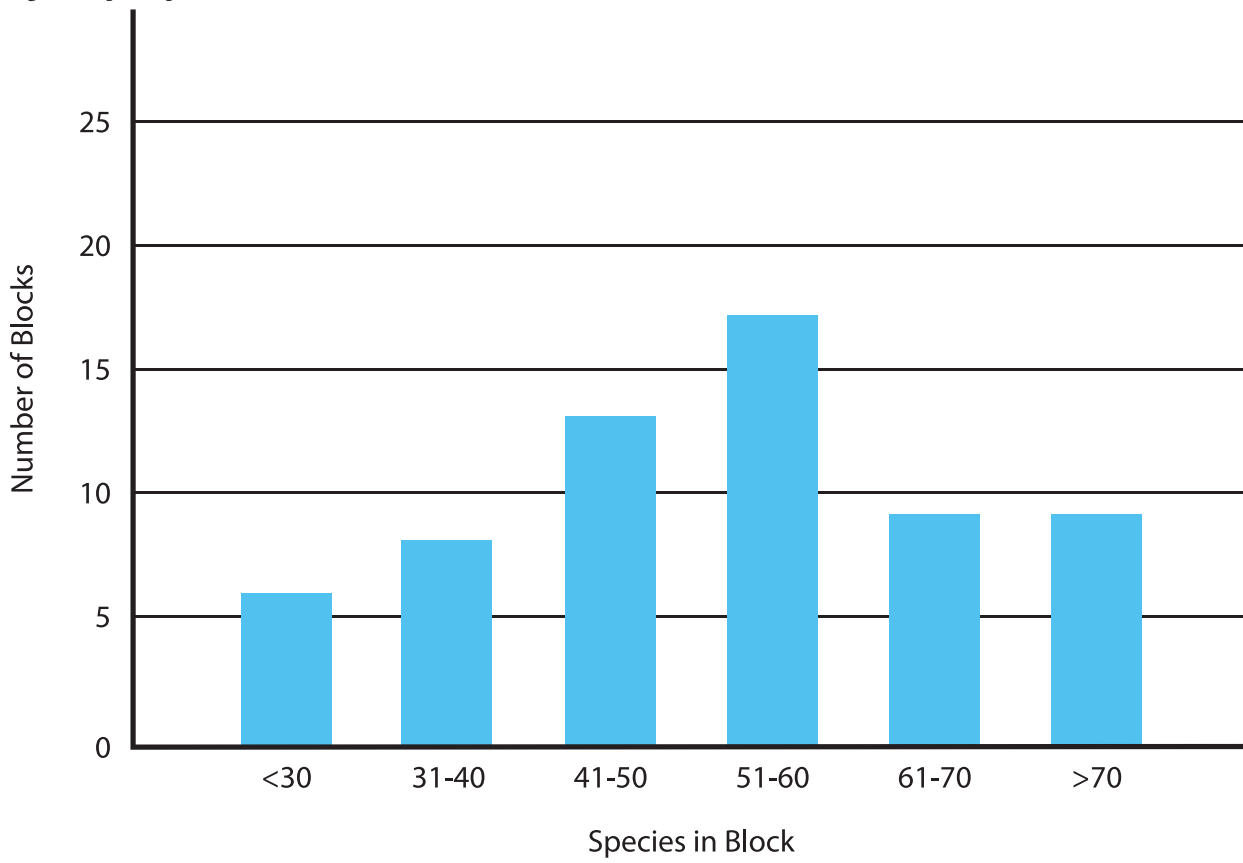


Figure 4. Nearly Ubiquitous and Widespread Breeding Birds

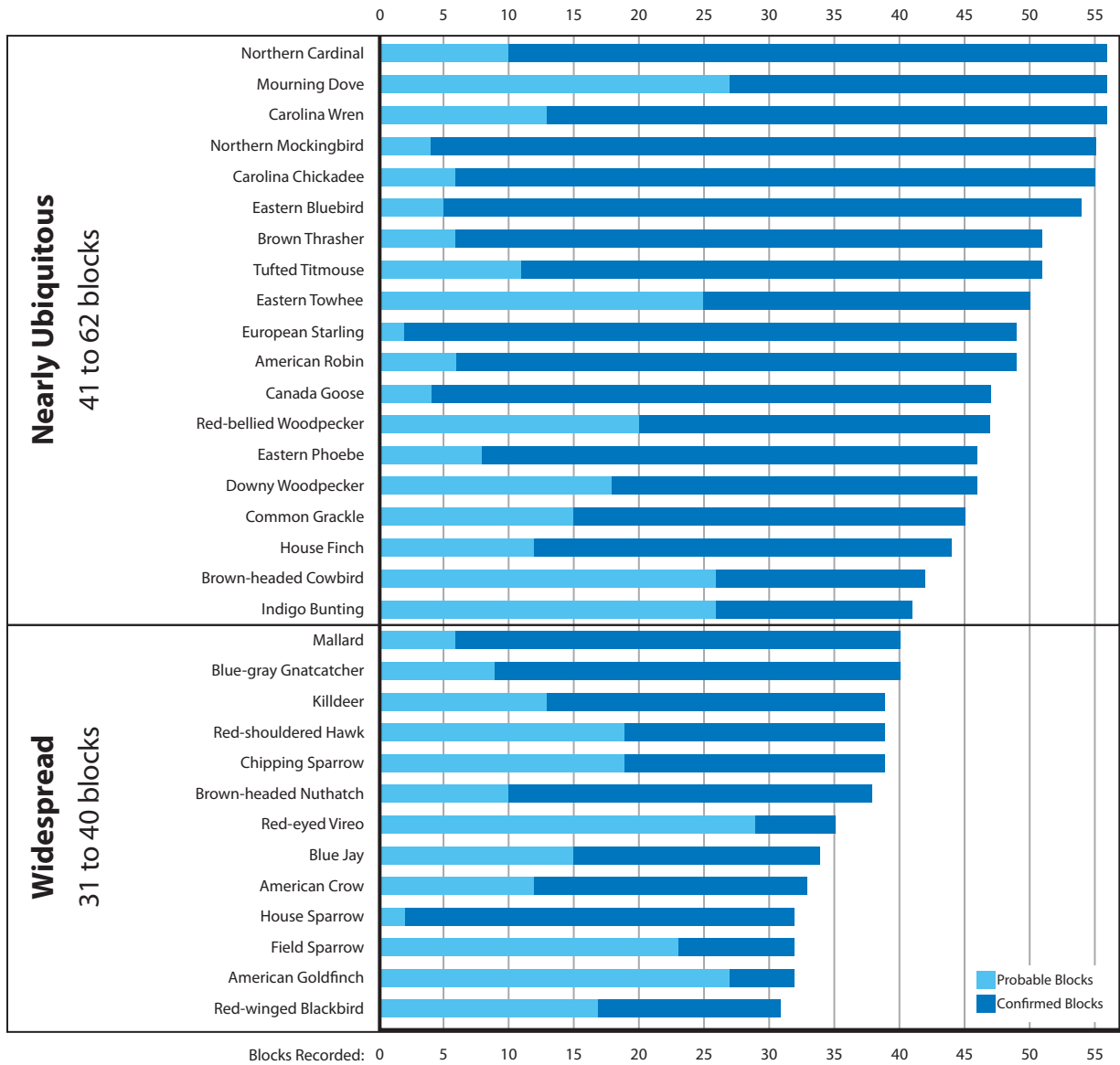
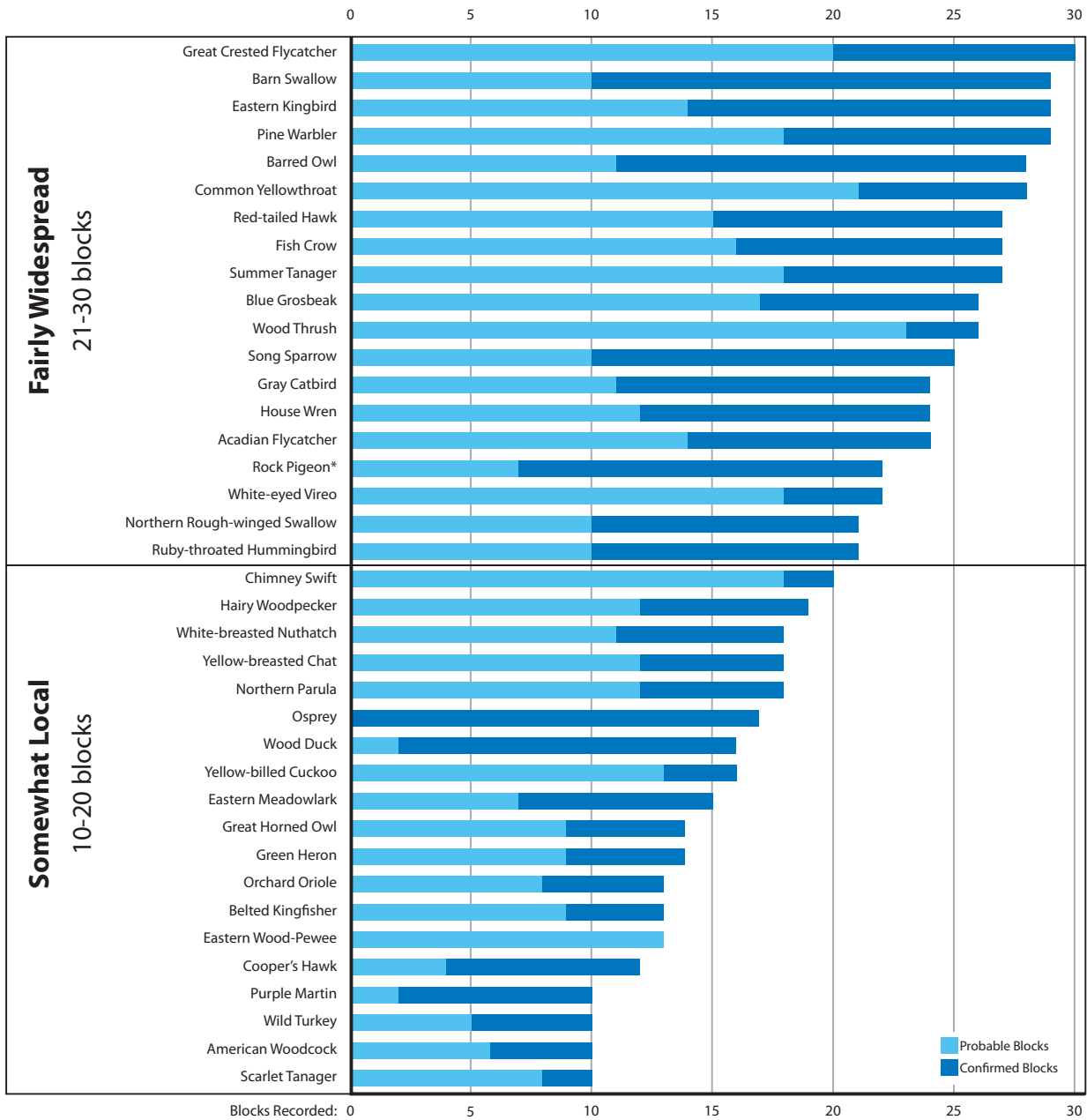


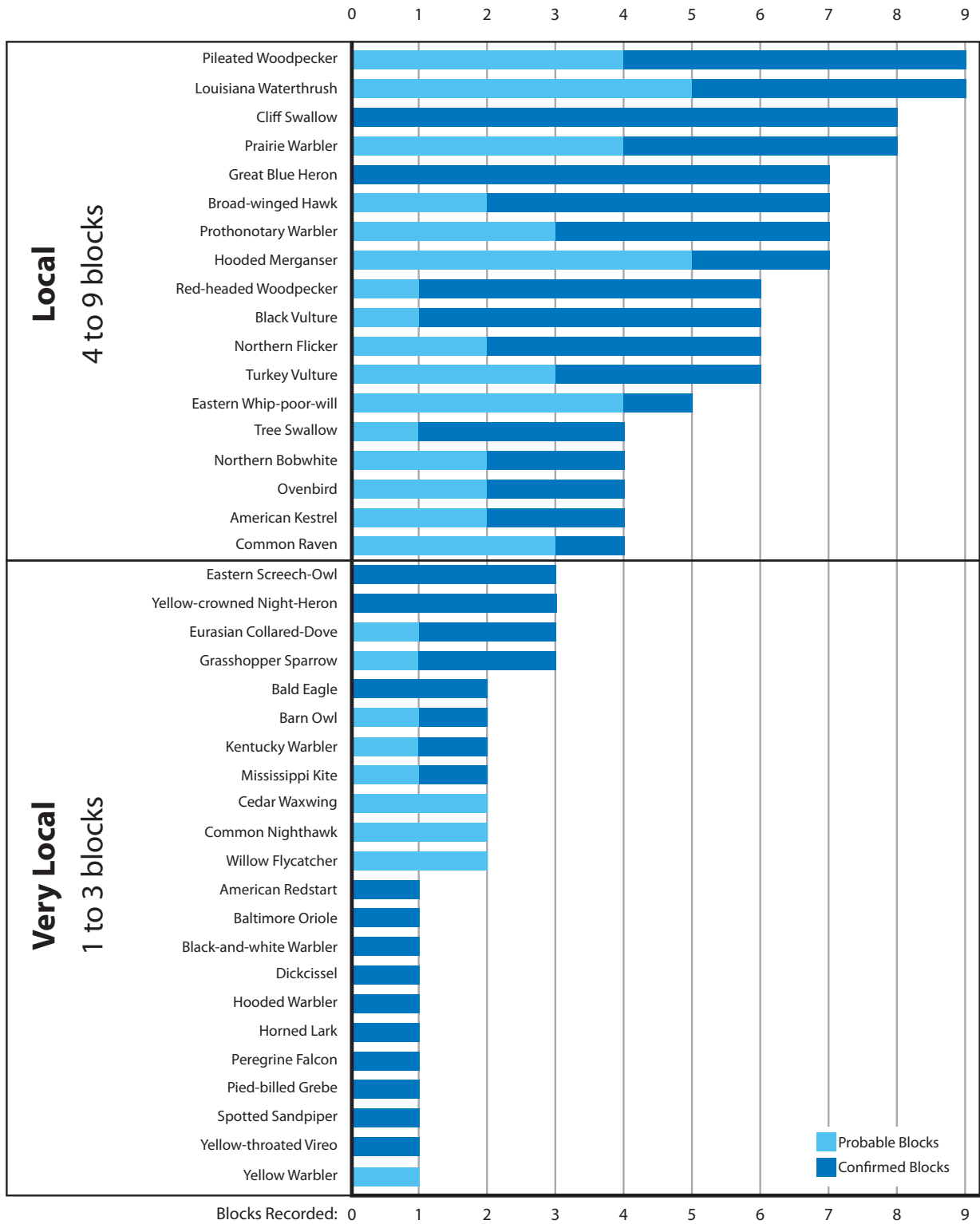
Figure 5. Fairly Widespread and Somewhat Local Breeding Birds



\*The presence of Rock Pigeon is believed to be underrepresented by this Atlas survey.



Figure 6. Local and Very Local Breeding Birds





# RESULTS

## BBA Survey Results

A total of 312 species of birds have been formally documented occurring in Mecklenburg County, NC. A full list with scientific names is included in the Appendix. The large majority (63%) of these birds do not breed in the county. These birds use a variety of habitat patches scattered throughout the county as vital stopover sites during spring and fall migration, or they spend the winter here.

Breeding evidence was collected for 116 different species of birds (37% of the total county list) during this Breeding Bird Atlas study. Details and atlas maps are provided for each of these species in the species account section.

Many of these breeding birds were once common breeding birds in the county. However, now, almost one-third (30%) of these species have been listed as Lost, Imperiled, or Vulnerable as breeding birds in Mecklenburg County. This is primarily due to habitat loss, habitat fragmentation, habitat degradation, and a variety of other contributing factors. An additional nine species (8%) are listed in North Carolina as being of conservation concern in the state. Lists and pertinent details are provided below.

### I. Listed Species

Some birds that were documented breeding in Mecklenburg County have been identified as species of serious conservation concern in the state of North Carolina. Rankings of these birds in three different categories of conservation concern at the state level are presented below.

**North Carolina Listed Species\***: State listed as Significantly Rare, Special Concern, Threatened, or Endangered. (6 species) (5%)

Yellow-crowned Night-Heron: Significantly Rare  
Bald Eagle: Threatened  
Sharp-shinned Hawk: Significantly Rare  
Barn Owl: Significantly Rare  
American Kestrel: Significantly Rare  
Peregrine Falcon: Endangered

**North Carolina Watch List\***: Species that are rare or uncommon, are not well studied, or are otherwise threatened with serious decline. (10 species) (9%)

(W1: population decline in NC. W2: rare but relatively secure. W3: poorly known in NC. W5: threat to habitat)

Hooded Merganser: W3  
Pied-billed Grebe: W2  
Common Nighthawk: W1  
Chuck-will's-widow: W1  
Eastern Whip-poor-will: W1  
Chimney Swift: W1

Willow Flycatcher: W2  
Loggerhead Shrike: SC, W2  
Common Raven: W2  
Grasshopper Sparrow: W1, W5

**SWAP Listed Species<sup>^</sup>**: State Wildlife Action Plan listed (17 species) (15%)

(SGCN = Species of Greatest Conservation Need)

Northern Bobwhite: SGCN  
Yellow-crowned Night-Heron: SGCN  
Bald Eagle: SGCN  
Barn Owl: SGCN  
Red-headed Woodpecker: SGCN  
American Kestrel: SGCN  
Peregrine Falcon: SGCN  
Loggerhead Shrike: SGCN  
Common Raven: SGCN  
Brown-headed Nuthatch: SGCN  
Worm-eating Warbler: SGCN  
Louisiana Waterthrush: SGCN  
Prothonotary Warbler: SGCN  
Swainson's Warbler: SGCN  
Kentucky Warbler: SGCN  
Yellow-throated Warbler: SGCN  
Prairie Warbler: SGCN

*\*Natural Heritage Program List of Rare Animal Species of North Carolina 2016, www.ncnhp.org*

*<sup>^</sup>2015 North Carolina Wildlife Action Plan, <http://ncwildlife.org/plan>*

### II. Lost Breeding Birds in Mecklenburg County, NC

(See Posters in Appendix) Two species of birds that once roamed the skies around this part of North Carolina and may possibly have once bred in the county are now extinct: the Carolina Parakeet and the Passenger Pigeon. The Carolina Parakeet was lost during the eighteenth century and the Passenger Pigeon was lost during the nineteenth century.

Six species of birds that were confirmed nesting in Mecklenburg County during the twentieth century are no longer breeding here:

- The Blue-headed Vireo was last confirmed breeding in the county in June 1939.
- The Black-billed Cuckoo was last confirmed breeding in the county in June 1943.
- The Henslow's Sparrow was last confirmed breeding in the county in June 1943.
- The King Rail was last confirmed breeding in the county in June 1945.
- The Bachman's Sparrow was last confirmed breeding in the county in May 1947.
- The Least Bittern is believed to have occasionally

bred in the county possibly as late as May 1990.

- The Bewick's Wren was once documented nesting as close as Chester County, SC, and was a migrant or winter visitor in Mecklenburg County. It has now been extirpated from both North and South Carolina. The last report of this wren from Mecklenburg County was a bird observed on June 6, 1990.

#### **Recently Lost:**

Three species regularly nested in Mecklenburg County throughout the twentieth century, but they now appear to be lost as breeding birds here. No evidence at the level of probable or confirmed breeding was documented during the five-year Atlas survey. (Maps for these three species are provided in the species accounts.) (3%)

Chuck-will's-widow  
Loggerhead Shrike  
Yellow-throated Warbler

#### **Uncertain:**

The status of the Sharp-shinned Hawk as a breeding bird in the county is unclear. Intake records from the Carolina Raptor Center confirm breeding has occurred in the county and the surrounding region. A designation of possible breeding was determined in two blocks during this survey. This species is known to be a secretive nesting bird.

The status of the Worm-eating Warbler needs further study as well. A designation of possible breeding was determined in one block during this survey. A female with a fully developed brood patch was captured at the banding station at Cowan's Ford Wildlife Refuge in recent years. It may be a sporadic breeder here.

### **III. Imperiled Breeding Birds in Mecklenburg County, NC**

(See Posters in Appendix) Breeding Bird Atlas survey results indicate a breeding code of either confirmed or probable in **five or fewer** survey blocks in the county, and the local breeding population is not known to be increasing. Only species with established populations are included in this list. These birds are *especially* vulnerable to extirpation. (16 species) (14%)

Northern Bobwhite  
Yellow-crowned Night-Heron  
Barn Owl  
Eastern Screech-Owl  
Common Nighthawk  
Eastern Whip-poor-will  
American Kestrel  
Yellow-throated Vireo  
Horned Lark  
Ovenbird  
Black-and-white Warbler  
Kentucky Warbler

Hooded Warbler  
American Redstart  
Yellow Warbler  
Grasshopper Sparrow

### **IV. Vulnerable Breeding Birds in Mecklenburg County, NC**

(See Posters in Appendix) Breeding Bird Atlas survey results indicate a breeding code of either confirmed or probable in **six to ten** survey blocks in the county, and the local breeding population is not known to be increasing. These birds are rare or uncommon breeders, restricted to a few locations, or because of some other factor, are vulnerable to extirpation. (15 species) (13%)

Hooded Merganser  
Wild Turkey  
Black Vulture  
Turkey Vulture  
Broad-winged Hawk  
American Woodcock  
Red-headed Woodpecker  
Northern Flicker  
Pileated Woodpecker  
Purple Martin  
Cliff Swallow  
Louisiana Waterthrush  
Prothonotary Warbler  
Prairie Warbler  
Scarlet Tanager

### **V. New Breeding Birds in Mecklenburg County, NC**

(See Posters in Appendix) Eleven of the twelve species listed below had not been confirmed breeding in Mecklenburg County prior to the turn of the twenty-first century. As indicated, several of these species have become established, or may possibly establish, regular breeding populations in the county.

- Pied-billed Grebe: first confirmed nesting April 2015, sporadic breeder, not expected to establish a long-term breeding population here.
- Mississippi Kite: first confirmed nesting June 2014. Now believed to nest annually.
- Bald Eagle: first fully confirmed nesting in the county in February 2009. Now nests annually.
- Spotted Sandpiper: first confirmed nesting July 2010, sporadic breeder, not expected to establish a long-term breeding population here.
- Eurasian Collared-Dove: first confirmed nesting April 2011. Now nests annually.
- Peregrine Falcon: first-time breeder the Piedmont of the Carolinas, first confirmed nesting in March 2013, not expected to establish a long-term breeding population here.

- Willow Flycatcher: first confirmed nesting in June 2004, sporadic breeder, not expected to establish a long-term breeding population here.
- Common Raven: first confirmed nesting March 2010. Now nests annually.
- Tree Swallow: first confirmed nesting June 2003. Now nests annually.
- Swainson's Warbler: first suspected nesting May 2006. Not currently believed to be nesting.
- Dickcissel: first confirmed nesting May 2011, sporadic breeder, not expected to establish a long-term breeding population here.
- Baltimore Oriole: there are two confirmed nest attempts of the Baltimore Oriole in Mecklenburg County. The first was documented in the Dilworth area in May 1926. The second was documented in the Highland Creek area, 87 years later, in May 2013.

## VI. Avian Guilds

An avian guild is a grouping of bird species that share a common life-history trait. A guild may be comprised of a variety of unrelated species that are linked together by a reliance on one or more habitat needs; such as the need for natural nest cavities for reproduction, or a diet specializing in feeding on aerial "plankton" (insects), or species that nest on or near the ground, among others. ([www.bsc-eoc.org/download/BWCwi08.pdf](http://www.bsc-eoc.org/download/BWCwi08.pdf))

An analysis of breeding information prior to the Atlas survey, together with the results of the Atlas survey indicate that the majority of the birds in the following five avian guilds are in decline as breeders in Mecklenburg County. Both the breeding population and breeding footprint of many of these species in these guilds are believed to have been reduced over the past two decades or more.

\*Survey results for this species in the guild indicates a designation of fairly widespread or better, or the species is a sporadic breeder. Species marked with an asterisk are not considered to be of conservation concern in Mecklenburg County at this time.

### **Ground and Near-Ground Breeders**

As a group, ground-nesting songbirds have declined worldwide. (Biological Conservation 136 (2007) p. 136) Habitat loss and nest predation are the primary contributors to this decline. In Mecklenburg County, predation by mesopredators (raccoons, skunks, coyotes, foxes, mink, opossums, etc.), black rat snakes, blue jays, and fire ants have been documented to be serious problems for ground-nesting and near ground-nesting birds. Nest parasitism by Brown-headed Cowbirds has also played a significant role in many of these birds' decline.

Pied-billed Grebe\*  
 Black Vulture  
 Turkey Vulture  
 Wild Turkey\*  
 Northern Bobwhite  
 Killdeer\*  
 American Woodcock  
 Common Nighthawk  
 Chuck-will's-widow  
 Whip-poor-will  
 Horned Lark  
 Prairie Warbler  
 Black-and-white Warbler  
 Worm-eating Warbler  
 Swainson's Warbler  
 Ovenbird  
 Louisiana Waterthrush  
 Kentucky Warbler  
 Common Yellowthroat\*  
 Hooded Warbler  
 Eastern Towhee  
 Field Sparrow\*  
 Grasshopper Sparrow  
 Song Sparrow\*  
 Red-winged Blackbird\*  
 Eastern Meadowlark

### **Cavity Nesting Birds**

Populations of many cavity-nesting bird species are in decline. As a guild, they are one of the most threatened groups of birds in the North America. A lack of nest cavities (habitat loss) is the primary reason for the decline of birds in this guild.

Wood Duck\*  
 Hooded Merganser  
 Black Vulture (occasionally nests in cavities)  
 Turkey Vulture (occasionally nests in cavities)  
 American Kestrel  
 Barn Owl  
 Eastern Screech-Owl  
 Barred Owl\*  
 Chimney Swift  
 Red-headed Woodpecker  
 Red-bellied Woodpecker\*  
 Downy Woodpecker\*  
 Hairy Woodpecker  
 Northern Flicker  
 Pileated Woodpecker  
 Great Crested Flycatcher\*  
 Purple Martin  
 Tree Swallow\*  
 Carolina Chickadee\*  
 Tufted Titmouse\*  
 White-breasted Nuthatch  
 Brown-headed Nuthatch\*  
 Carolina Wren\* (occasionally nests in cavities)

House Wren\*  
Eastern Bluebird\*  
European Starling\*  
Prothonotary Warbler  
House Sparrow\*

#### ***Aerial Insectivores***

Breeding populations of many species of aerial insectivores are in “startling decline” across much of North America. The magnitude of these declines are especially alarming. The continental population of many of these birds has declined 50–70% over the past two decades alone. (www.bsc-eoc.org/download/BWCwi08.pdf)

Common Nighthawk  
Chuck-will’s-widow  
Whip-poor-will  
Chimney Swift  
Eastern Wood-Pewee  
Acadian Flycatcher\*  
Willow Flycatcher  
Great Crested Flycatcher\*  
Eastern Kingbird\*  
Purple Martin  
Tree Swallow\*  
Northern Rough-winged Swallow\*  
Cliff Swallow\*  
Barn Swallow\*

#### ***Grassland/Agricultural Land Breeders***

Birds that rely on grasslands or agricultural lands have shown some of the steepest declines in breeding populations in both North and South Carolina. (NC SWAP www.ncwildlife.org and SC DNR John E. Cely and Laurel Moore Barnhill)

Northern Bobwhite  
Barn Owl  
Loggerhead Shrike

Prairie Warbler (early successional)  
Yellow-breasted Chat (early successional)  
Grasshopper Sparrow  
Field Sparrow\*  
Eastern Meadowlark

#### ***Long-distance Migrants that Breed in Mecklenburg County***

Many of our breeding birds are known as “neotropical migrants”, long-distance migrants that overwinter in mature tropical forests, but breed in the United States and Canada. The breeding populations of most of these birds are in decline across North America. (www.rainforesttrust.org / John Terborgh and David Wilcove)

Mississippi Kite\*  
Broad-winged Hawk  
Chuck-will’s-widow  
Whip-poor-will  
Yellow-billed Cuckoo  
Great Crested Flycatcher\*  
Acadian Flycatcher\*  
Eastern Wood-Pewee  
Wood Thrush  
Blue-gray Gnatcatcher\*  
Yellow-throated Vireo  
Black-and-white Warbler  
Prothonotary Warbler  
Swainson’s Warbler  
Worm-eating Warbler  
Northern Parula  
Yellow-throated Warbler  
Ovenbird  
Louisiana Waterthrush  
Kentucky Warbler  
Hooded Warbler  
American Redstart  
Scarlet Tanager



# **SPECIES ACCOUNTS**

## Explanatory Matter

A total of 346 species of birds have been found in the Central Carolinas. A total of 312 have been documented in Mecklenburg County. Breeding evidence is provided for 116 species.

## Arrangement

The taxonomic sequence of avian orders, families, and species, and all common and scientific names, conform to the *56th Supplement to the American Ornithologist's Union Check-list of North American Birds*, published in 2015.

## Components

1) Common name

2) Scientific name

3) Seasonality: Adapted from Post and Gauthreaux (1989)

Resident: found in all or part of the region year round

Breeder: breeding confirmed in all or part of the region, but species is not found here all year

Migrant: periodically moves in and out of the region, is not known to breed here

Winter Resident/Visitor: spends all or part of the winter in the region

4) Occurrence and Abundance Categories: Adapted from Post and Gauthreaux (1989) and LeGrand and Howard (2017)

For species of irregular occurrence that are not recorded annually:

- Accidental: 1–2 records for the region
- Casual: 2–5 records for the region
- Very Rare: 6–9 records for the region

For regularly occurring species that are recorded annually:

- Rare: often missed by a person in a given season, but 10 or more records from the region
- Uncommon: can be missed in a given day, but can usually be found if searching for several days
- Fairly Common: usually seen in a given day, but mostly under 5 individuals
- Common: usually seen in moderate numbers, often 5–20, in a given day
- Very Common: usually seen in large numbers, often 20–100, in a given day
- Abundant: usually seen in very large numbers, often over 100 in a given day, at the appropriate time of year and in the appropriate habitat.

5) Seasonal Abundance Graph: A graph is provided for

each species to help the reader quickly determine the typical level of abundance and relative occurrence of each bird throughout the year. Although these graphs are derived from actual records of each species reported from within the region, each graph should be considered only as a general approximation of the actual occurrence and abundance of each bird. (*Figure 1a and 1b*)

6) Habitat (very general): derived from a variety of

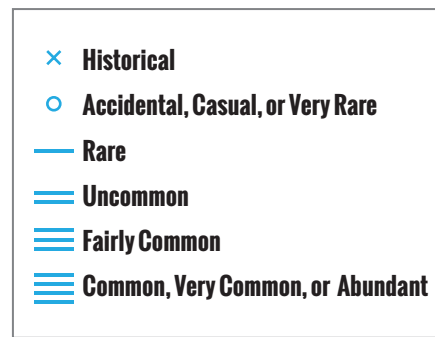


Figure 1a. (above) Abundance levels

Figure 1b. (below) Seasonal abundance graph example



sources including *The Land Manager's Guide to the Birds of the South* by Paul B. Hamel.

7) Original scientific illustration or photograph of the bird taken within the region.

8) Mecklenburg County Breeding Bird Atlas Maps (*Figure 2*)



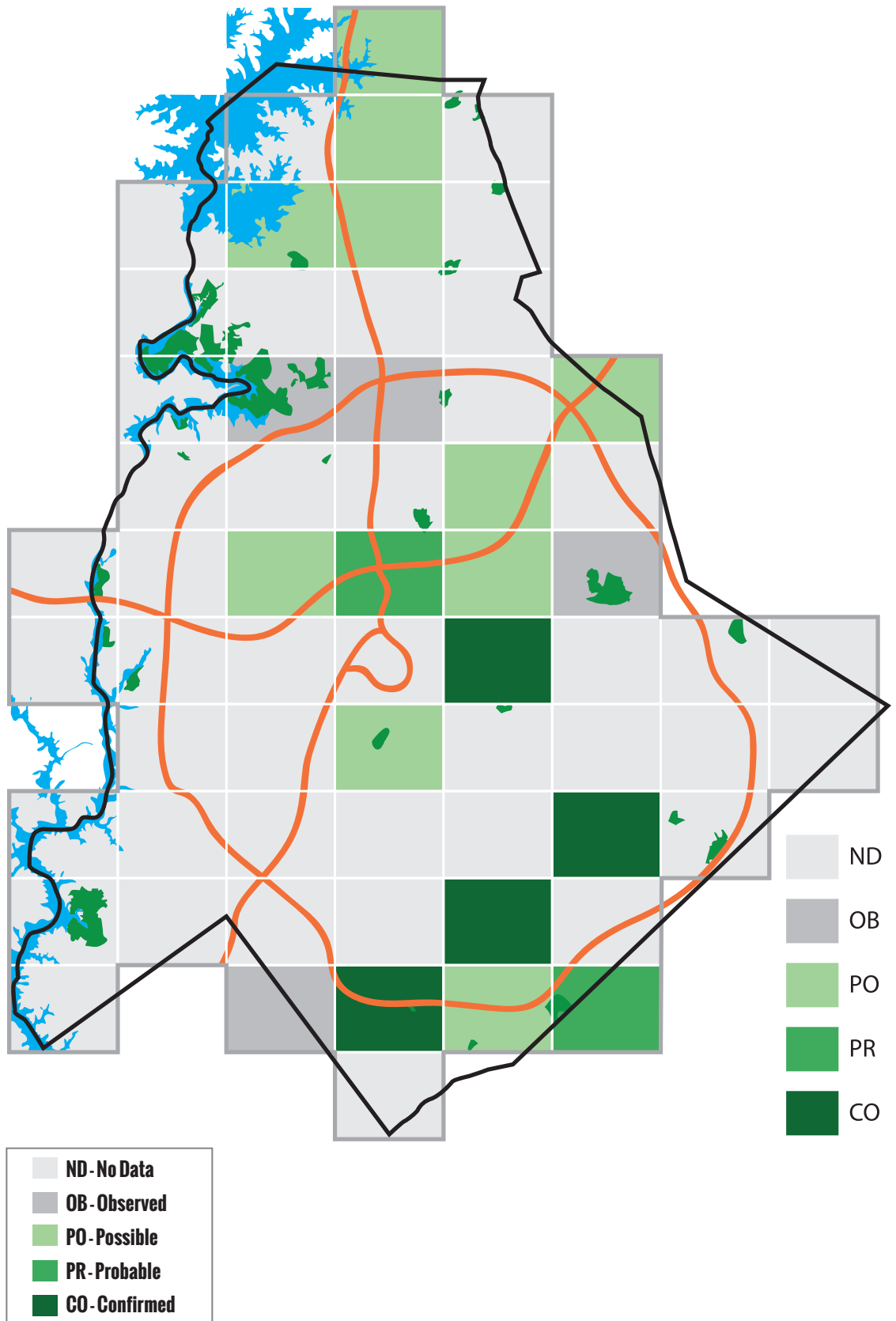


Figure 2. Breeding Bird Atlas Key and a BBA Map example

# Canada Goose *Branta canadensis*

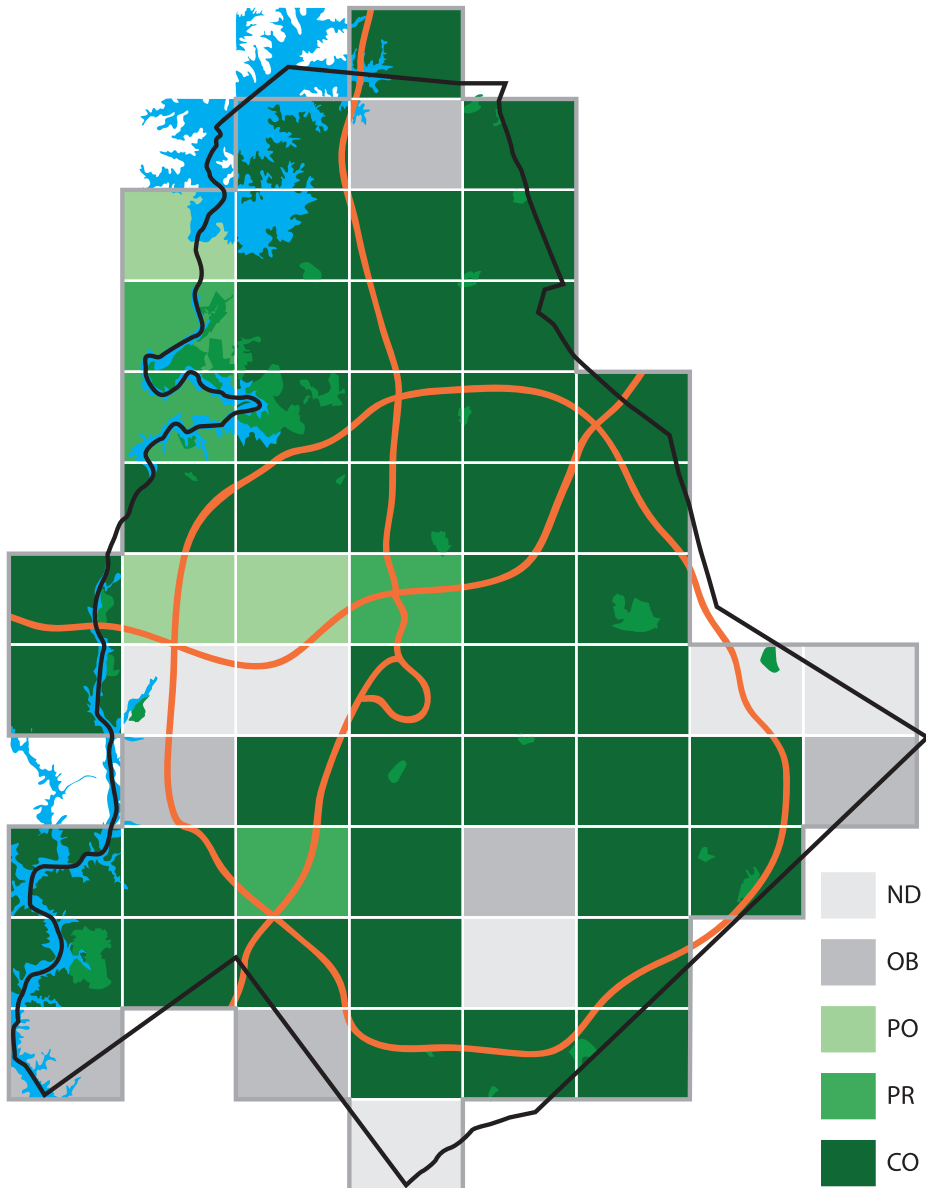


**Status:** Resident

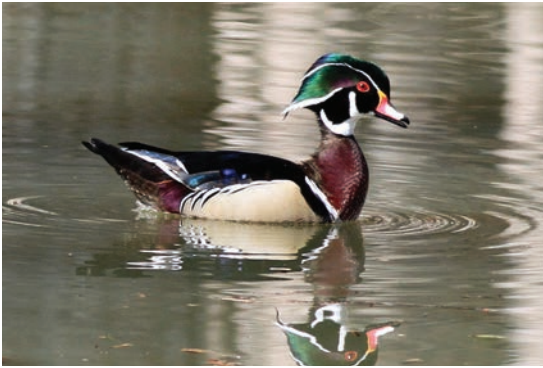
**Abundance:** Common

**Habitat:** Lakes, ponds, turf grass

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/4, CO/43)



# Wood Duck *Aix sponsa*



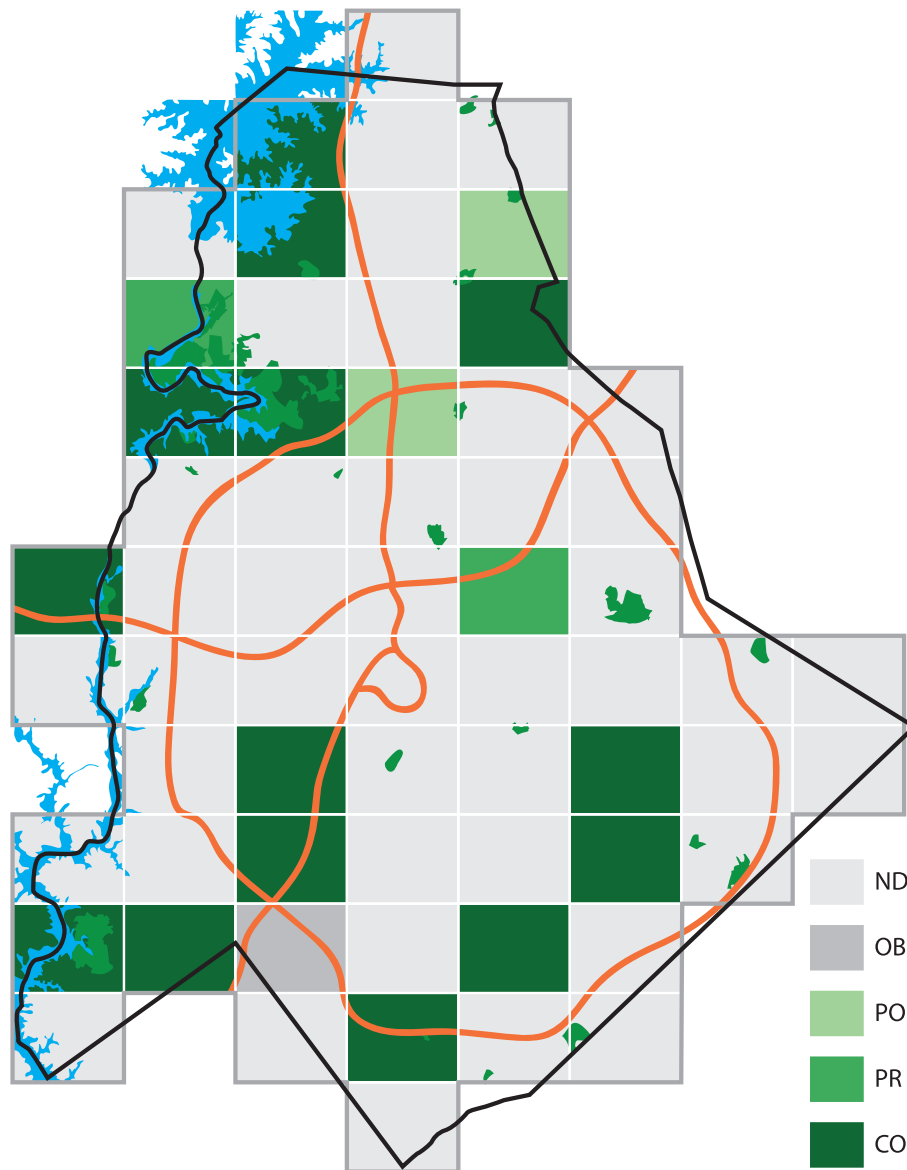
**Status:** Resident

**Abundance:** Uncommon

**Habitat:** Lakes, ponds, creeks, river bottoms, forested wetlands

**Breeding Bird Atlas:** *Somewhat Local* (PR/2, CO/14)

J F M A M J J A S O N D



# Mallard *Anas platyrhynchos*

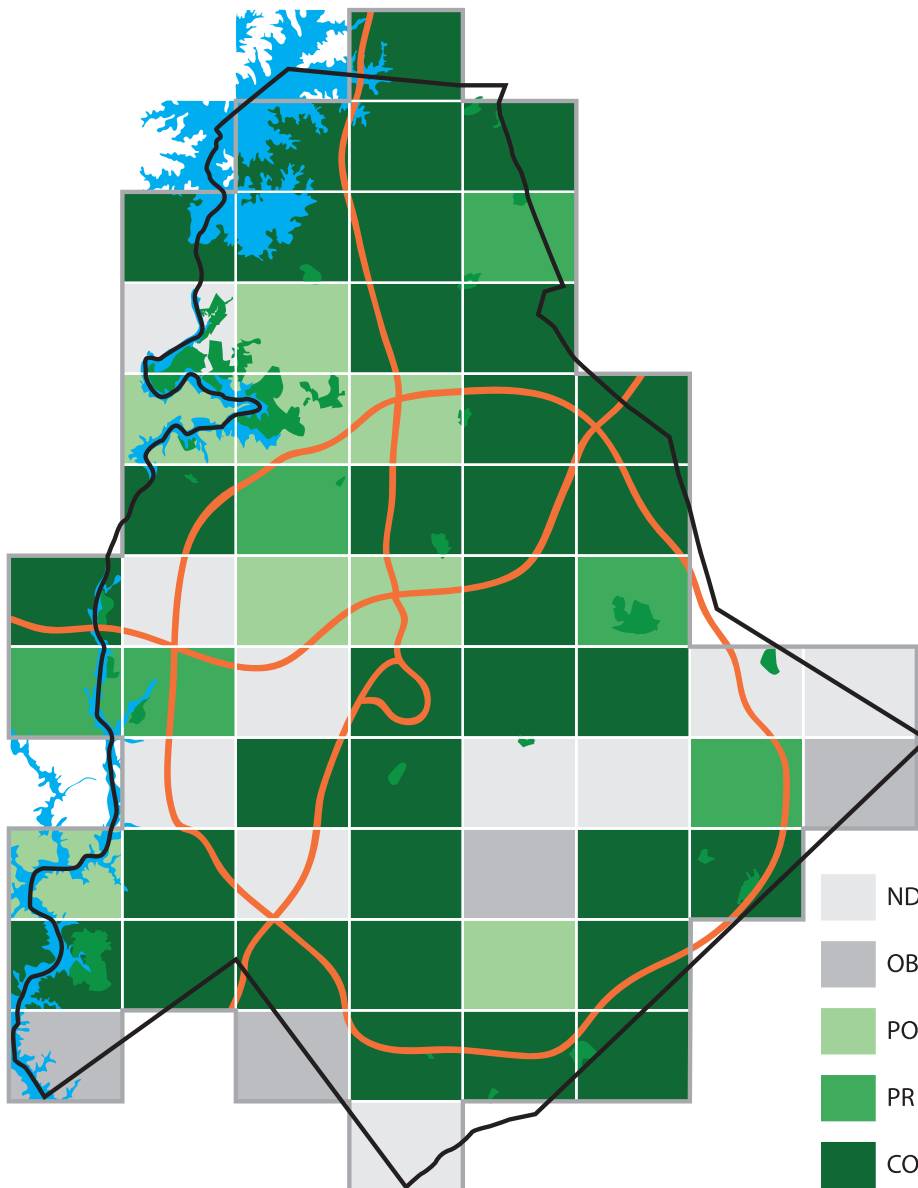


**Status:** Resident

**Abundance:** Common

**Habitat:** Lakes, ponds, creeks, turf grass

**Breeding Bird Atlas:** *Widespread* (PR/6, CO/34)



# Hooded Merganser *Lophodytes cucullatus*



**Status:** Winter Resident, local Breeder

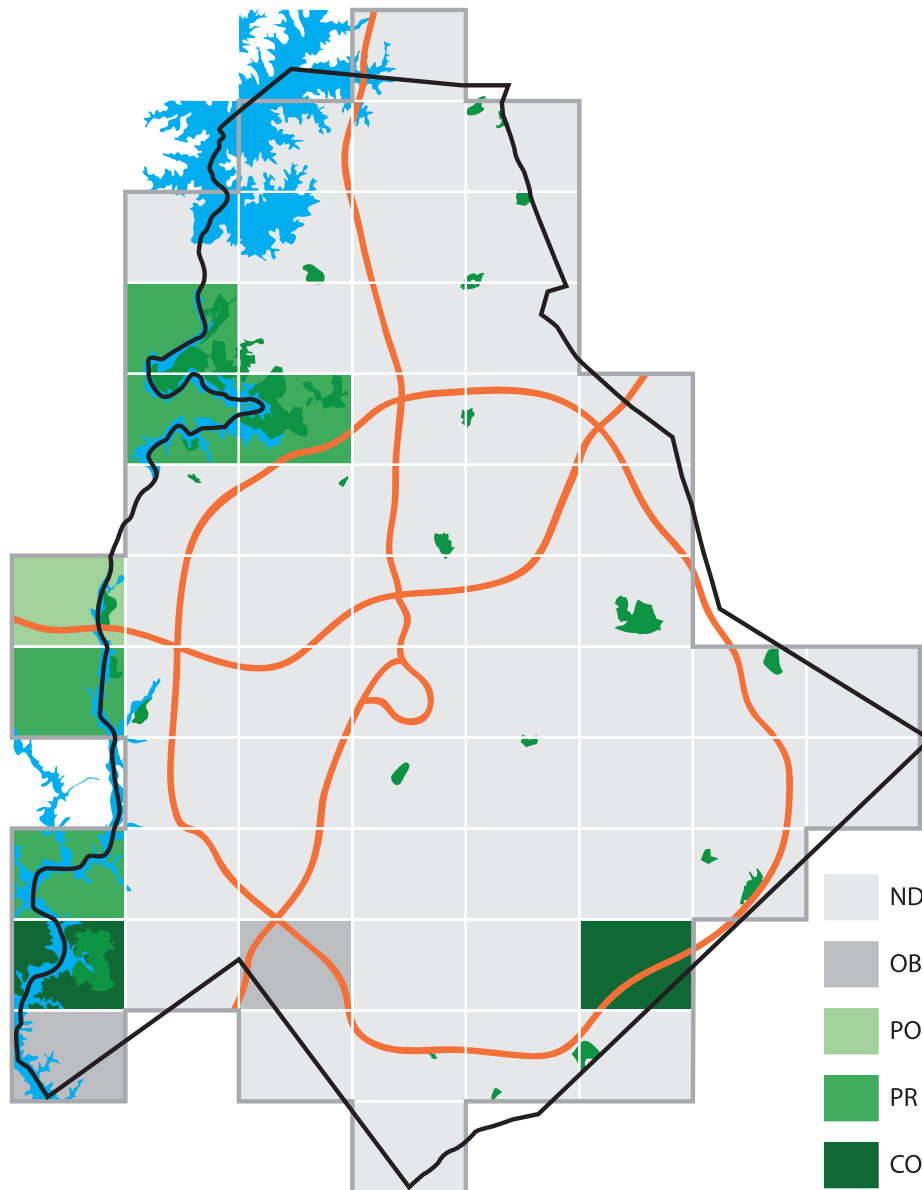
**Abundance:** Uncommon to Common

**Habitat:** Lakes, ponds, slow-moving creeks

**Breeding Bird Atlas:** *Local* (PR/5, CO/2)



**Vulnerable** 



# Northern Bobwhite *Colinus virginianus*



**Status:** Resident

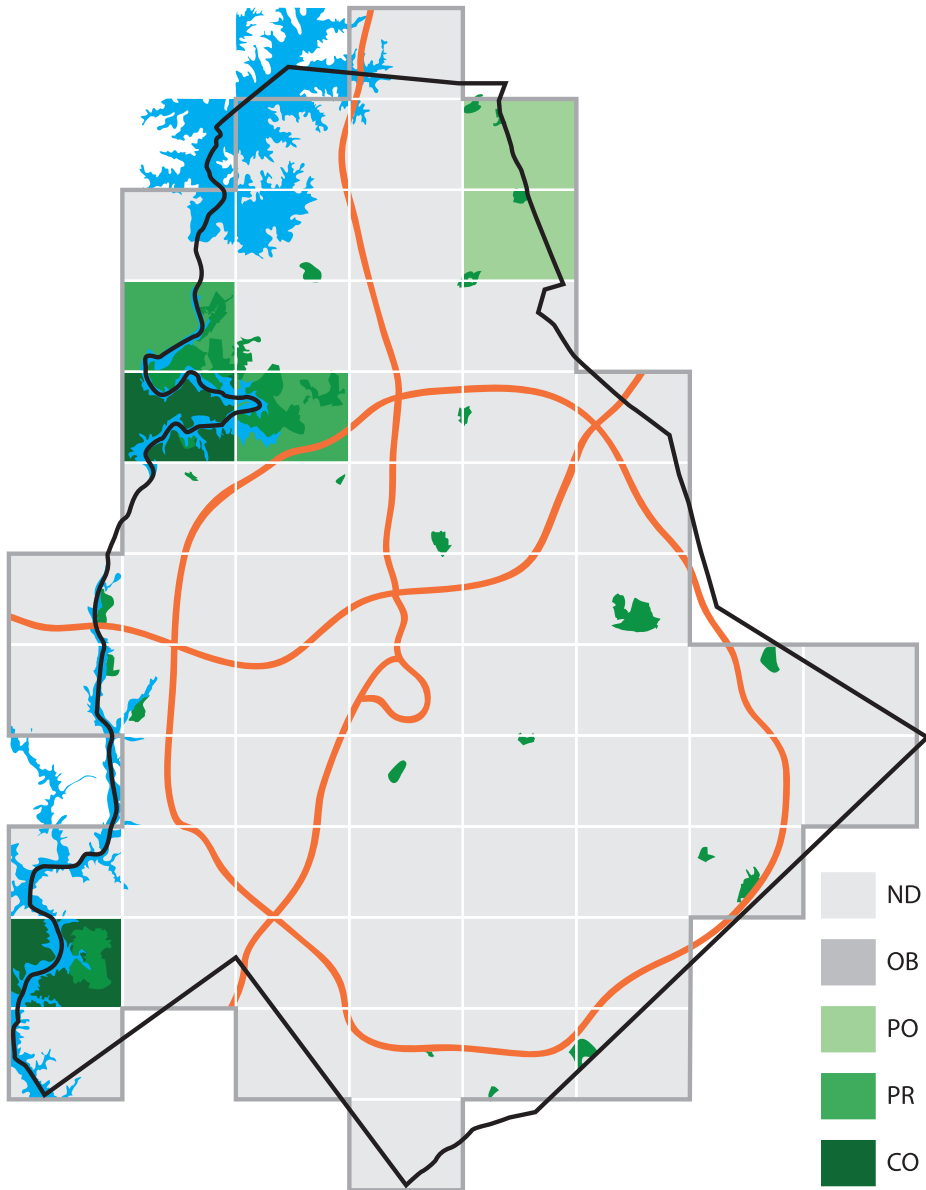
**Abundance:** Uncommon to Fairly Common—but declining

**Habitat:** Brushy fields, hedgerows, thickets, forest edges, open woods

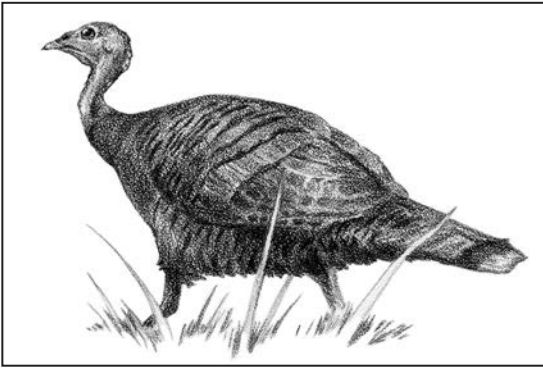
**Breeding Bird Atlas:** Local (PR/2, CO/2)

J F M A M J J A S O N D

**Imperiled**



# Wild Turkey *Meleagris gallopavo*



**Status:** Resident

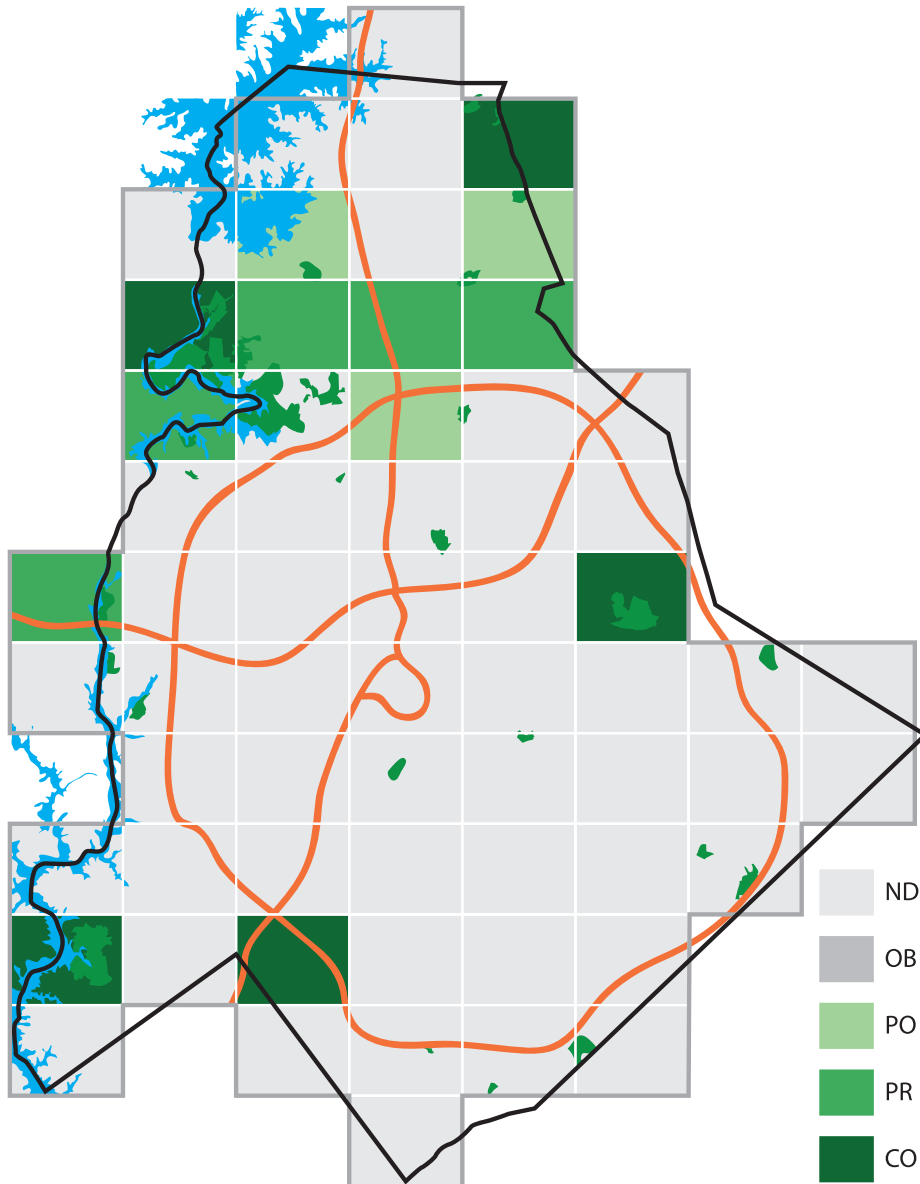
**Abundance:** Uncommon

**Habitat:** Large hardwood and mixed hardwood forest patches; also forages in fields along forest edges

**Breeding Bird Atlas:** *Somewhat Local* (PR/5, CO/5)

J F M A M J J A S O N D

**Vulnerable** 



# Pied-billed Grebe *Podilymbus podiceps*



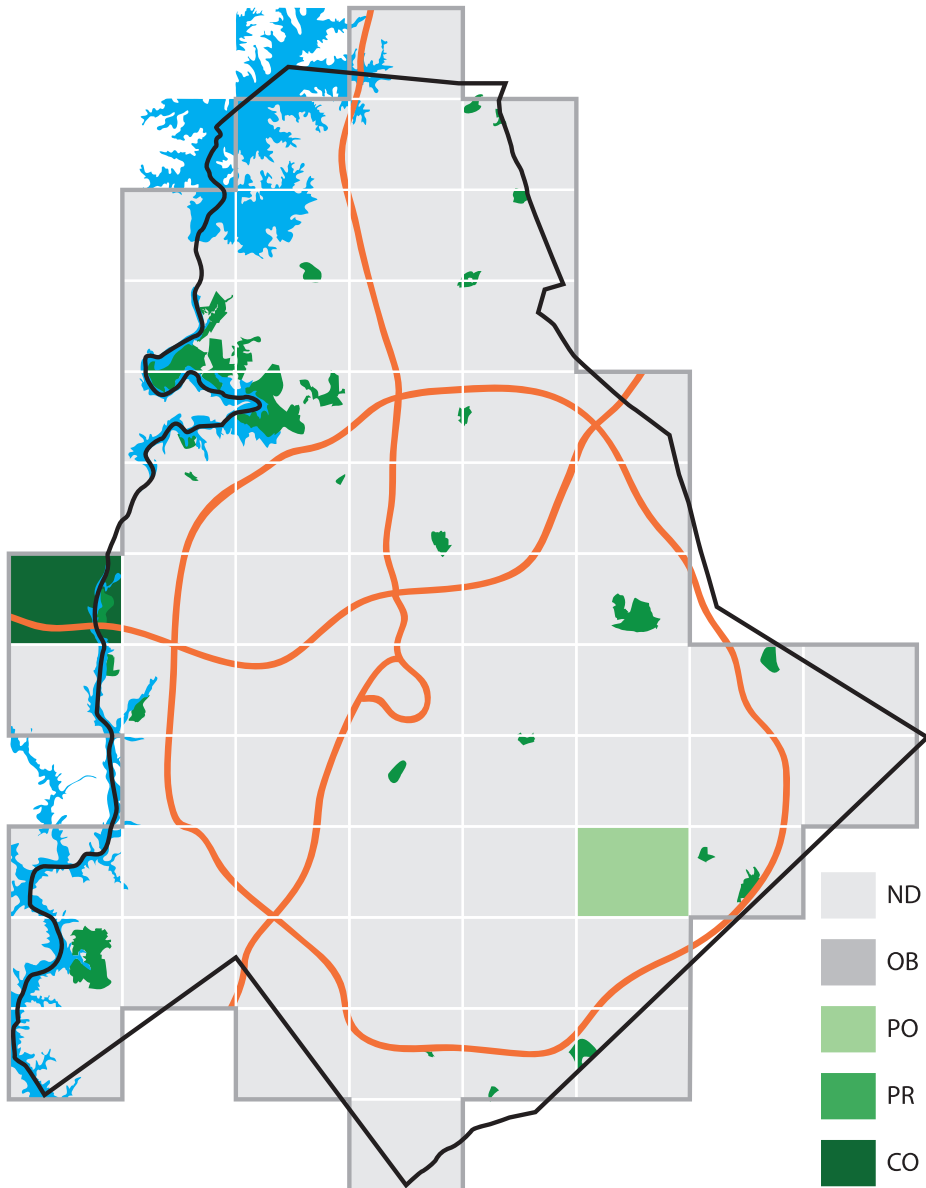
**Status:** Winter Resident, sporadic Breeder

**Abundance:** Fairly Common

**Habitat:** Lakes, ponds

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)

**New Breeding Bird:** First confirmed nesting April 2015, sporadic breeder, not expected to establish a long-term breeding population here.





# Great Blue Heron *Ardea herodias*

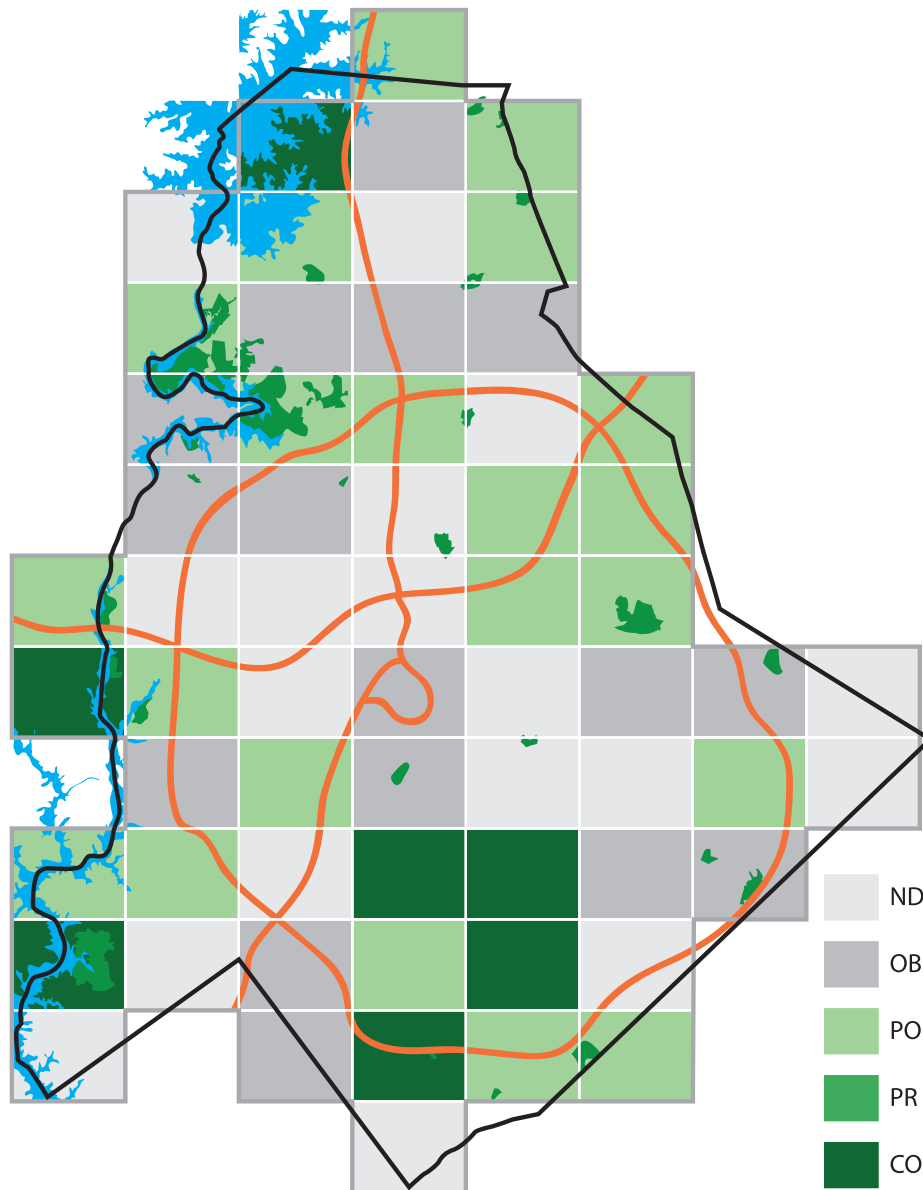


**Status:** Resident

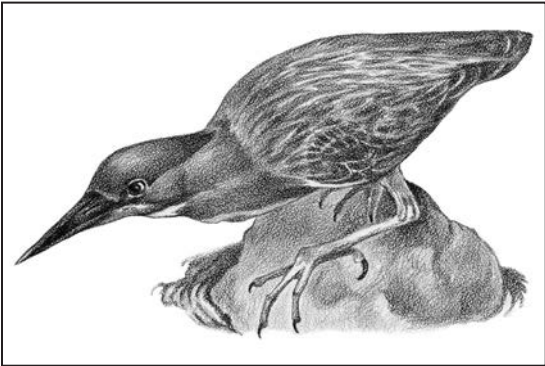
**Abundance:** Fairly Common to Common

**Habitat:** Lakes, rivers, ponds, wetlands, marshes

**Breeding Bird Atlas:** *Local* (PR/0, CO/7)



# Green Heron *Butorides virescens*

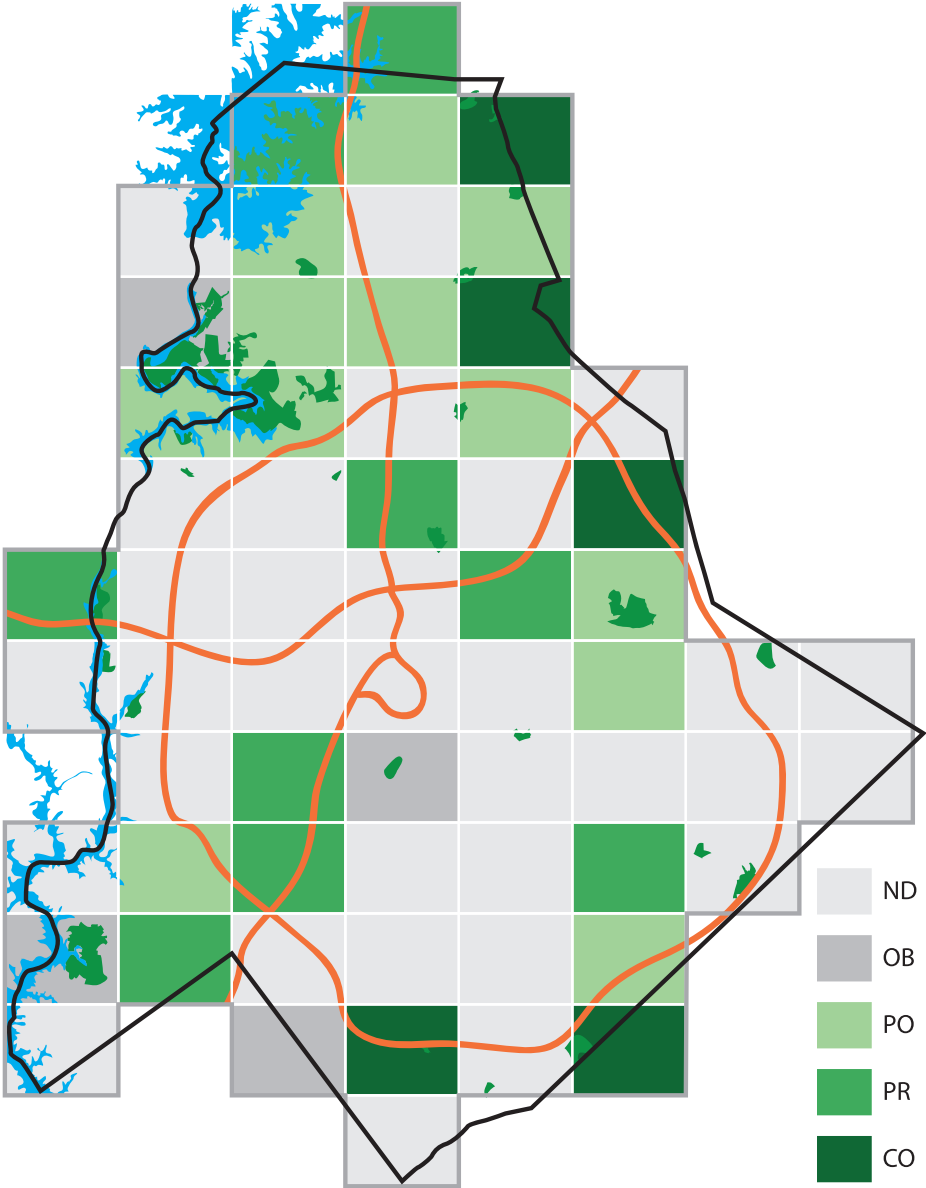


**Status:** Breeder, Migrant, Winter Visitor

**Abundance:** Fairly Common

**Habitat:** Lakes, rivers, ponds, wetlands, marshes

**Breeding Bird Atlas:** *Somewhat Local (PR/9, CO/5)*



# Yellow-crowned Night-Heron *Nyctanassa violacea*



**Status:** Migrant, local Breeder

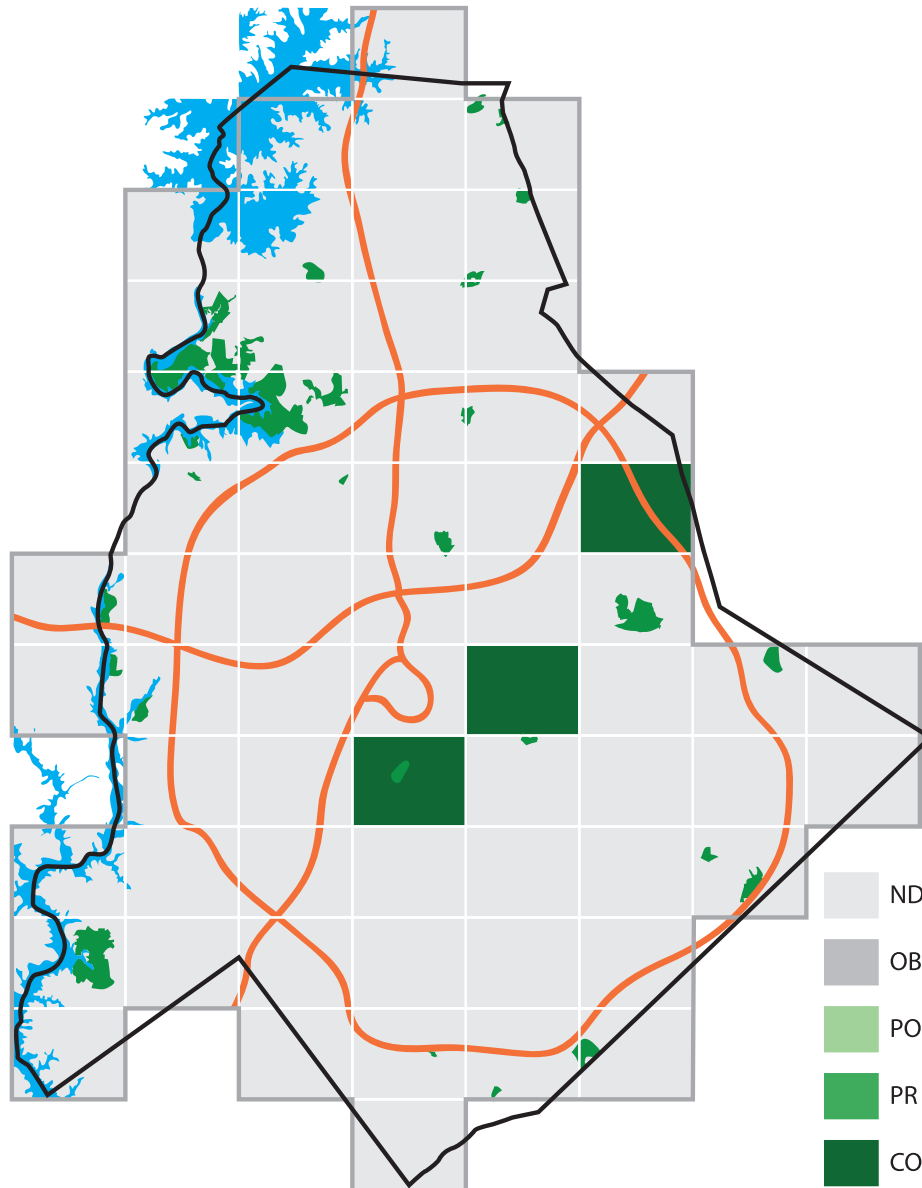
**Abundance:** Rare

**Habitat:** Creeks, ponds, wetlands, marshes, and mudflats

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/3)



**Imperiled**



# Black Vulture *Coragyps atratus*



**Status:** Resident

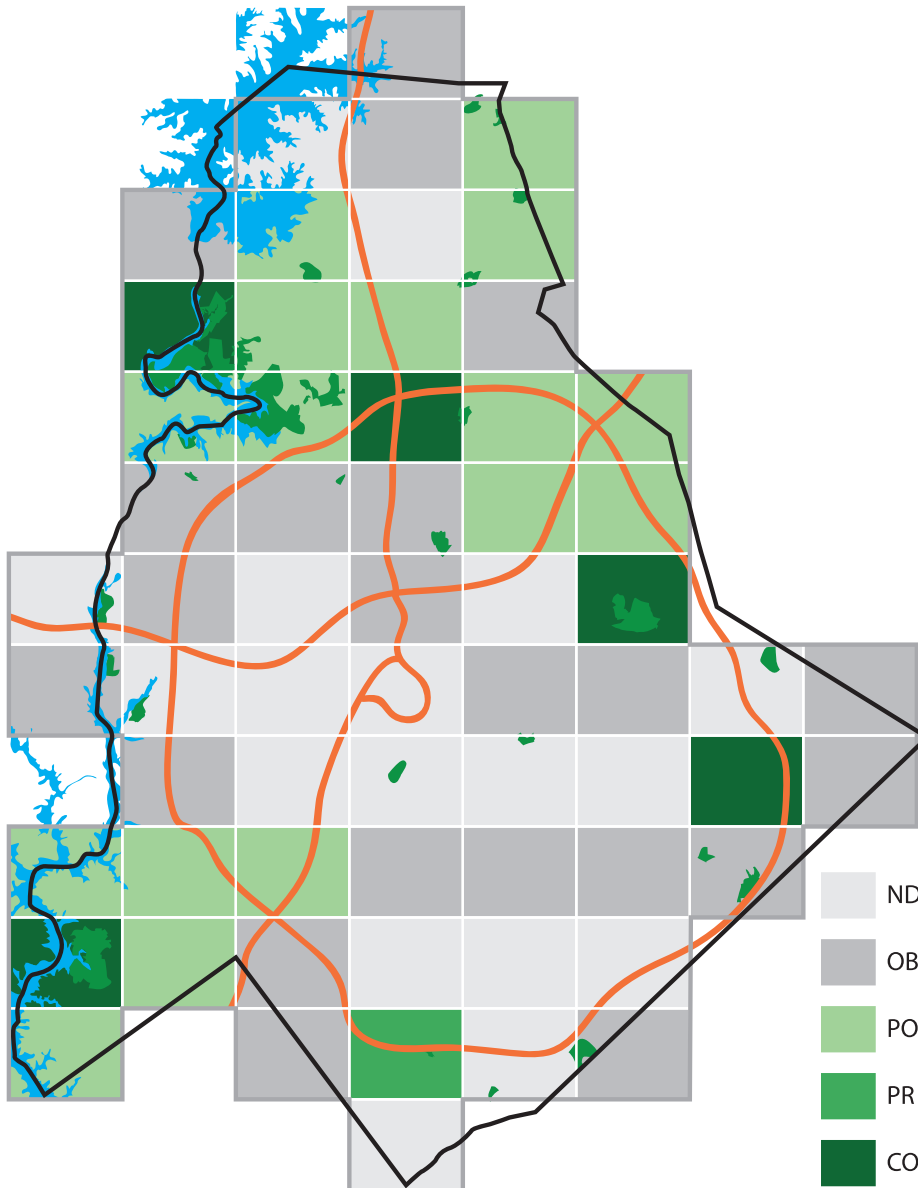
**Abundance:** Uncommon to Fairly Common

**Habitat:** Forage almost anywhere including narrow roadsides, especially in open country with abundant livestock or deer. Nest in sheltered cavities in old out-buildings, forests, ledges.

**Breeding Bird Atlas:** Local (PR/1, CO/5)



**Vulnerable**



# Turkey Vulture *Cathartes aura*



**Status:** Resident

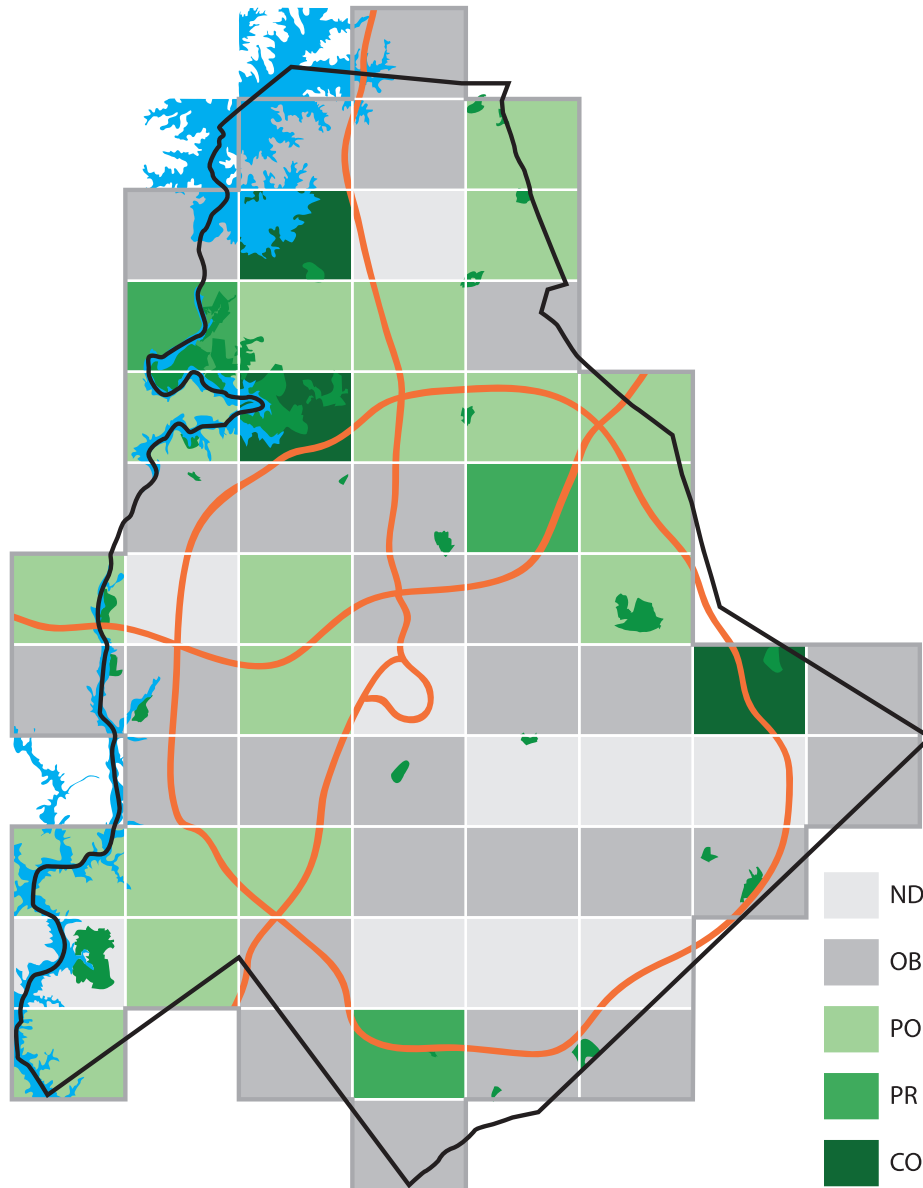
**Abundance:** Fairly Common to Common

**Habitat:** Forage almost anywhere. Nest in sheltered cavities in old out-buildings, forests, ledges.

**Breeding Bird Atlas:** *Local (PR/3, CO/3)*



**Vulnerable** 



# Osprey *Pandion haliaetus*

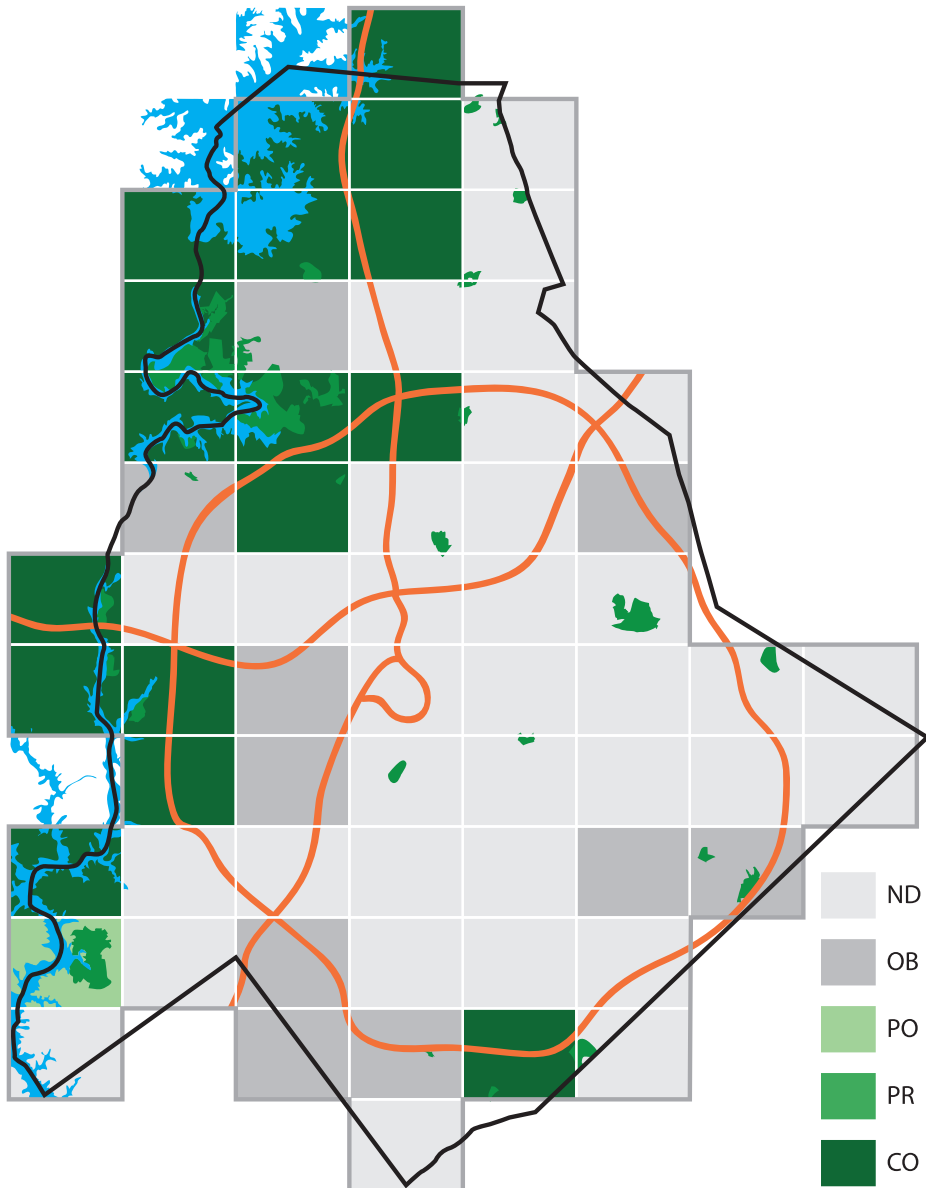


**Status:** Breeder, Migrant, Winter Visitor

**Abundance:** Uncommon to Fairly Common

**Habitat:** Open water habitats

**Breeding Bird Atlas:** *Somewhat Local* (PR/0, CO/17)



# Mississippi Kite *Ictinia mississippiensis*



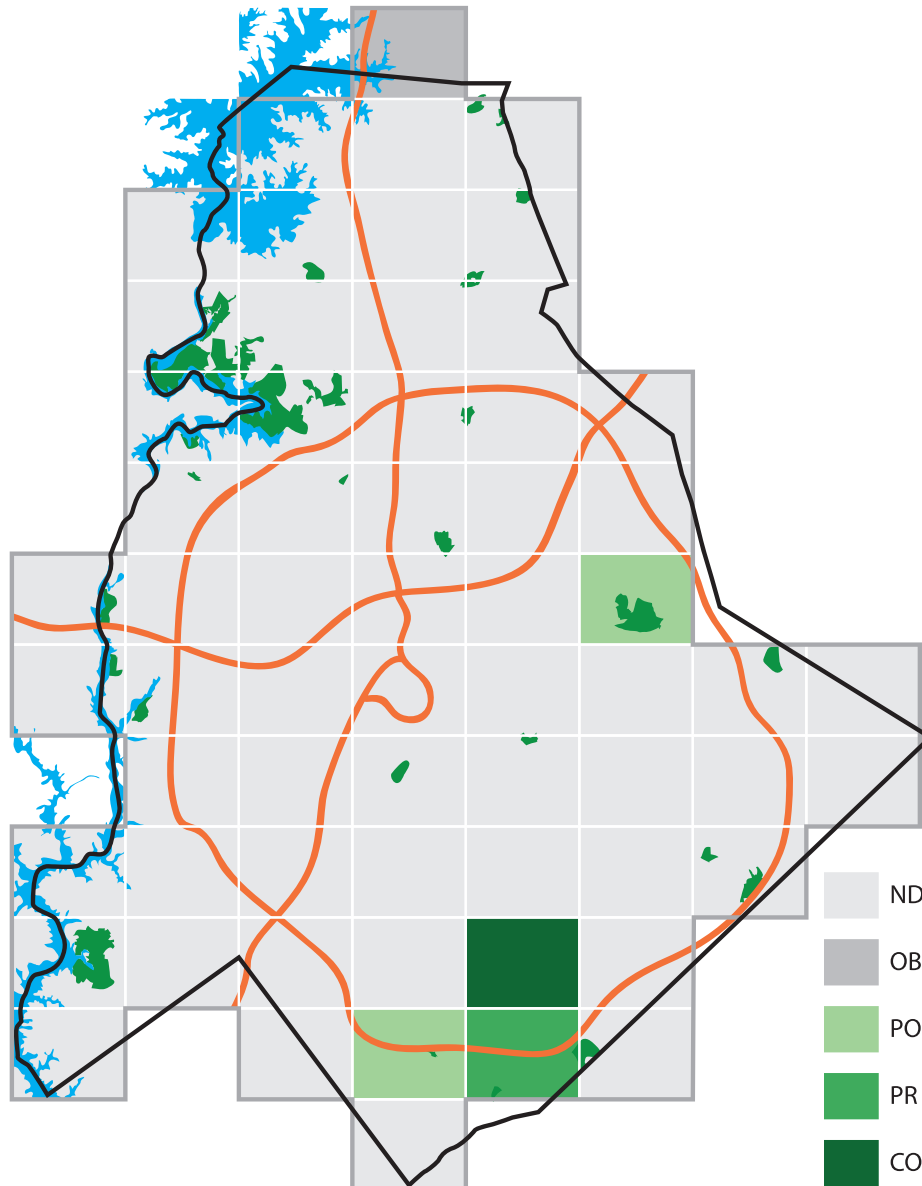
**Status:** Migrant, Breeder

**Abundance:** Rare

**Habitat:** Hardwoods near creeks, or rivers, forages in open fields

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/1)

**New Breeding Bird:** First confirmed nesting June 2014. Now believed to nest annually.



# Bald Eagle *Haliaeetus leucocephalus*



**Status:** Resident

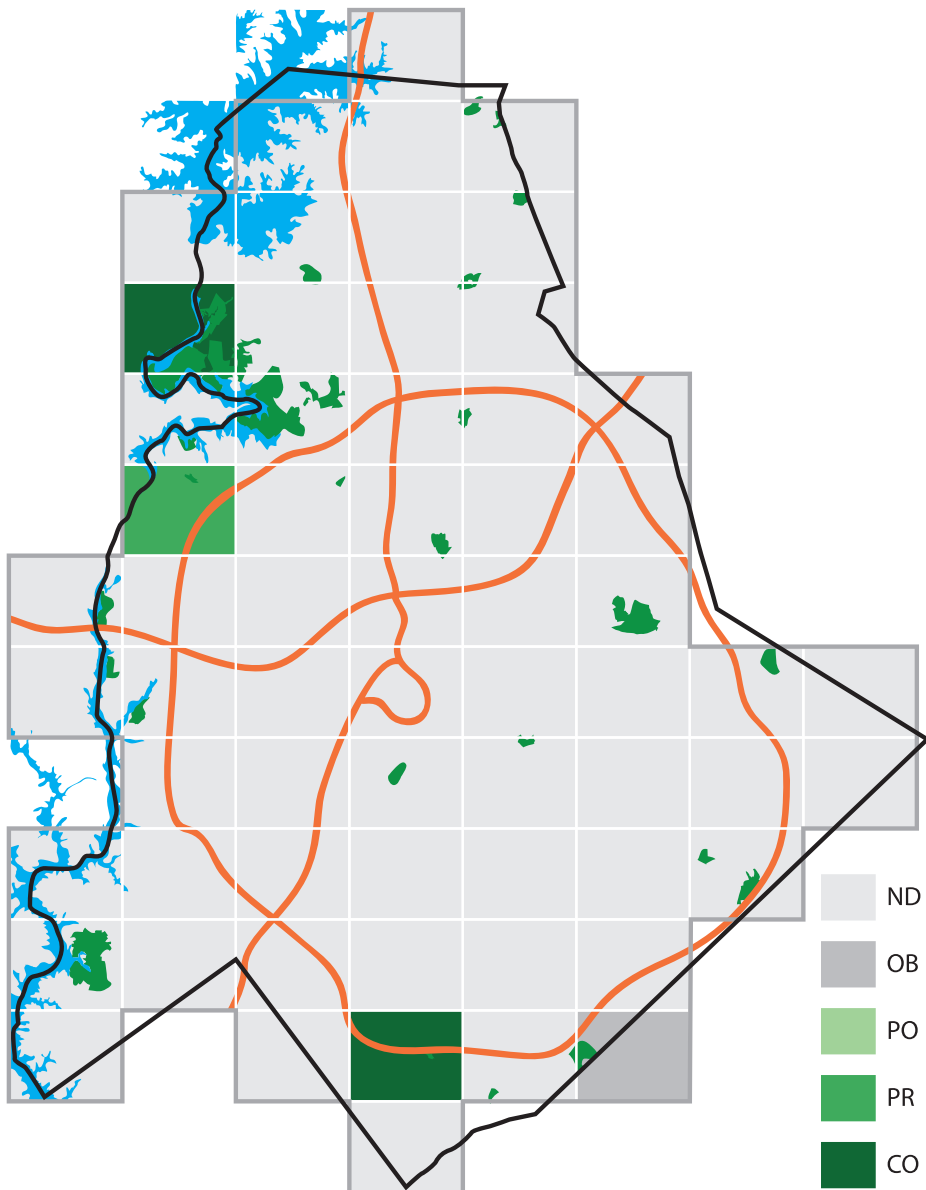
**Abundance:** Rare to Uncommon

**Habitat:** River corridors, lakes, large ponds, open marsh habitats

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/2)

**New Breeding Bird:** First fully confirmed nesting in the county in February 2009. Now nests annually.

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# Sharp-shinned Hawk *Accipiter striatus*



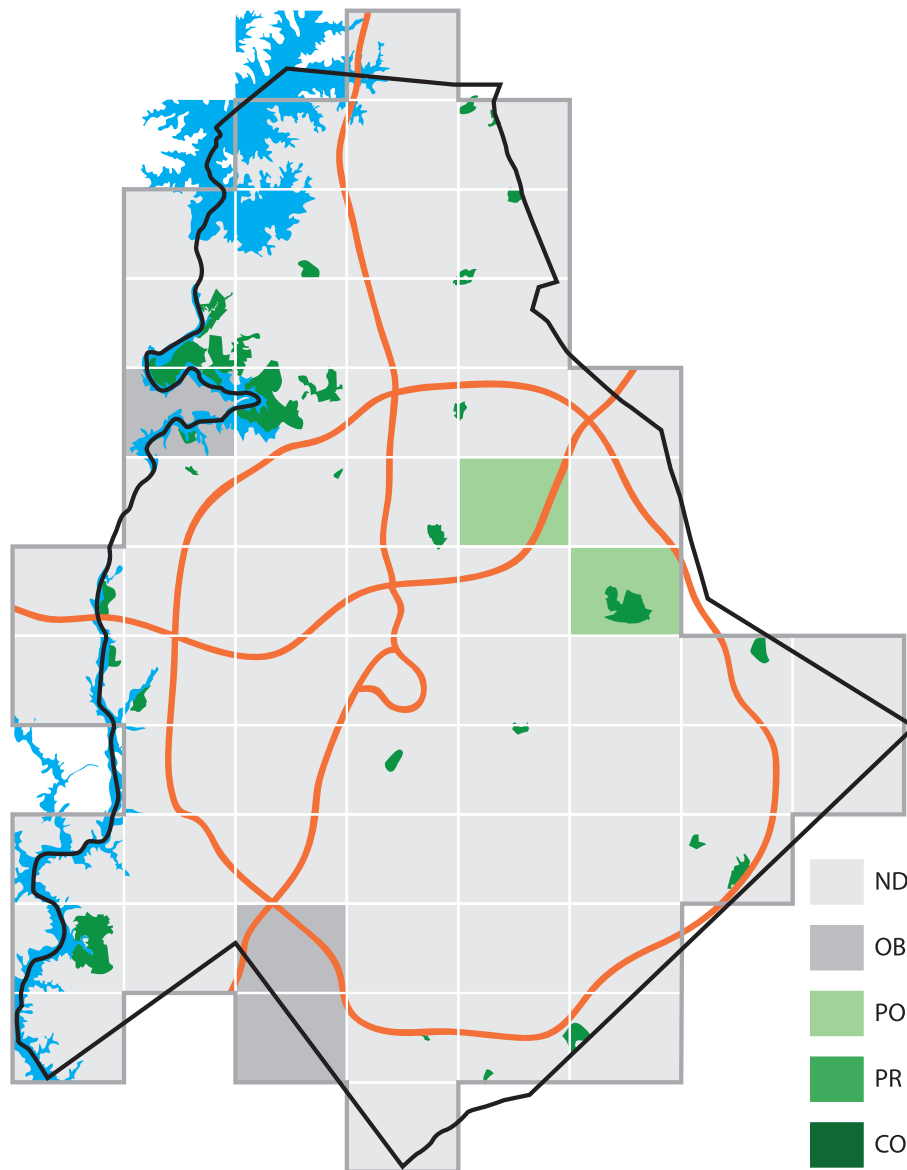
**Status:** Migrant, Winter Resident, sporadic Breeder

**Abundance:** Uncommon

**Habitat:** Woodlands and urban and suburban woodlots

**Breeding Bird Atlas:** *UNCERTAIN—Possible (PR/0, CO/0)*

J F M A M J J A S O N D



# Cooper's Hawk *Accipiter cooperii*



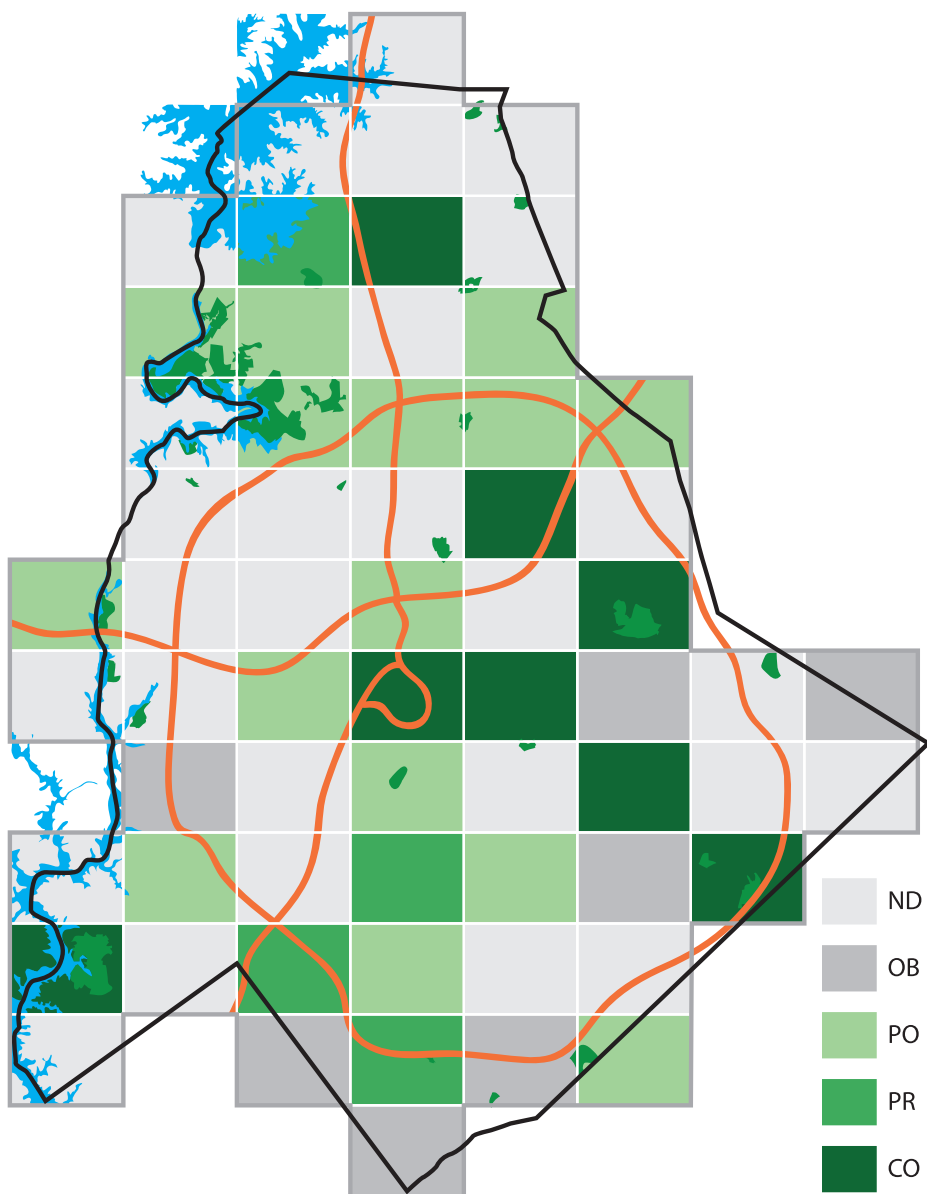
**Status:** Resident

**Abundance:** Uncommon

**Habitat:** Woodlands, urban and suburban woodlots

**Breeding Bird Atlas:** *Somewhat Local* (PR/4, CO/8)

J F M A M J J A S O N D



# Red-shouldered Hawk *Buteo lineatus*



**Status:** Resident

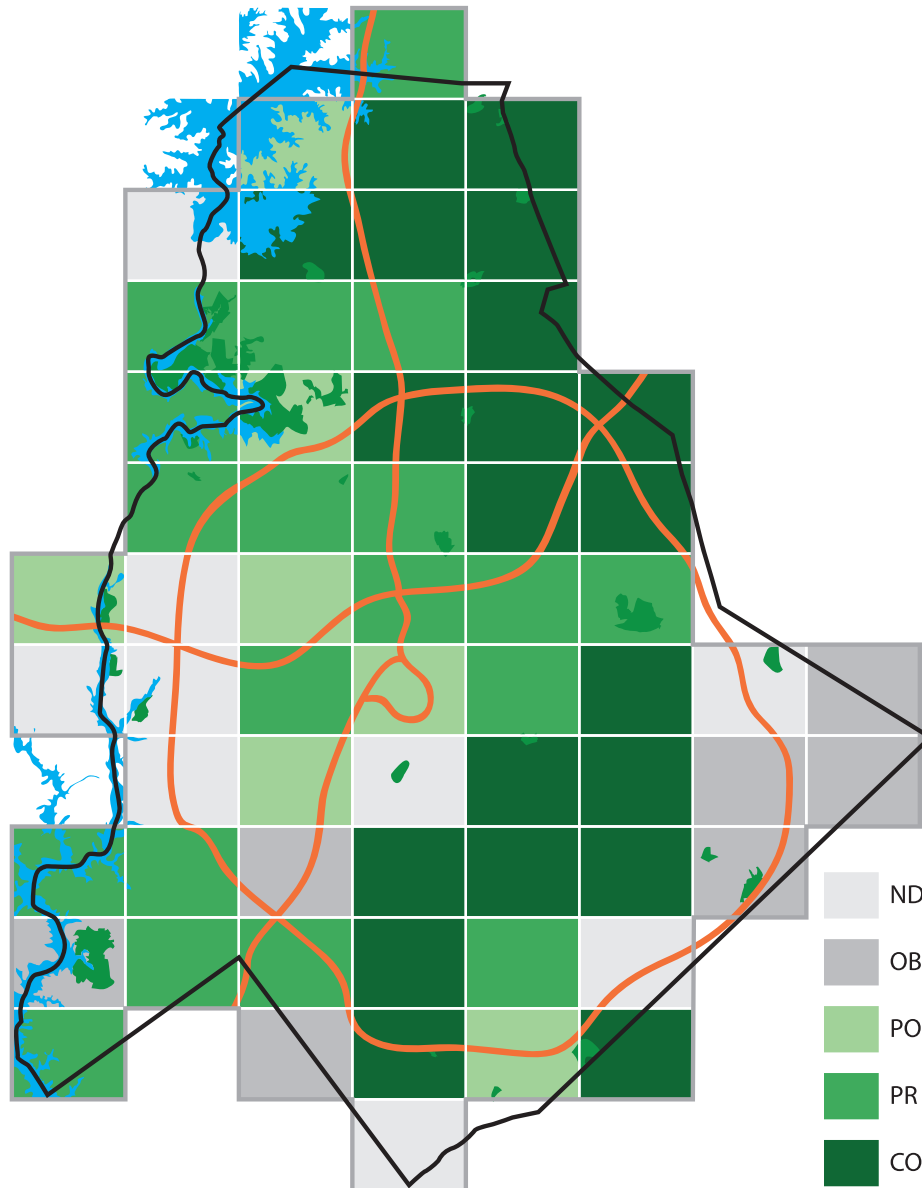
**Abundance:** Fairly Common

**Habitat:** Forests and open fields

**Breeding Bird Atlas:** *Widespread* (PR/19, CO/20)



J F M A M J J A S O N D



# Broad-winged Hawk *Buteo platypterus*



**Status:** Breeder

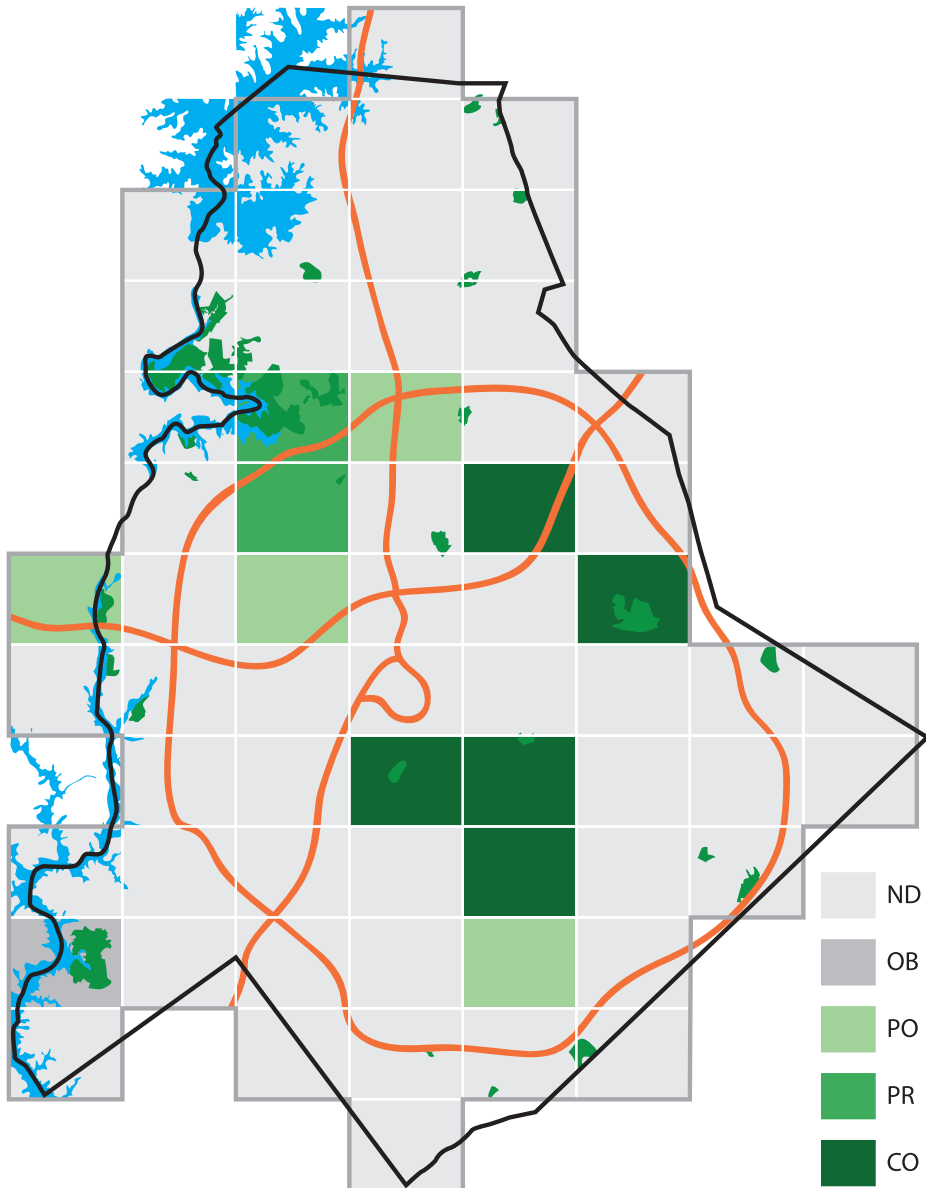
**Abundance:** Uncommon

**Habitat:** Deciduous forests

**Breeding Bird Atlas:** *Local (PR/2, CO/5)*



**Vulnerable**



# Red-tailed Hawk *Buteo jamaicensis*

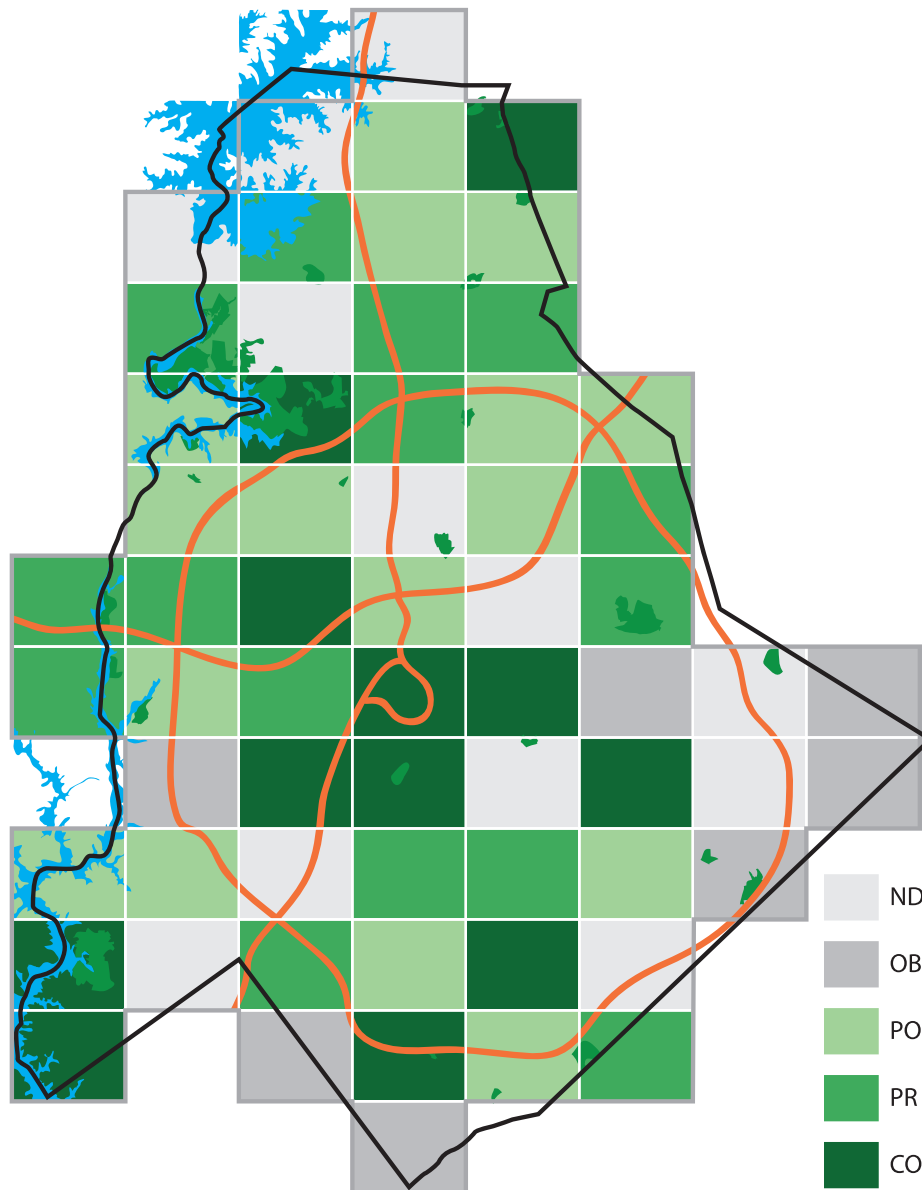


**Status:** Resident

**Abundance:** Fairly Common to Common

**Habitat:** Forest edges and extensive open fields

**Breeding Bird Atlas:** *Fairly Widespread (PR/15, CO/12)*



# Killdeer *Charadrius vociferus*

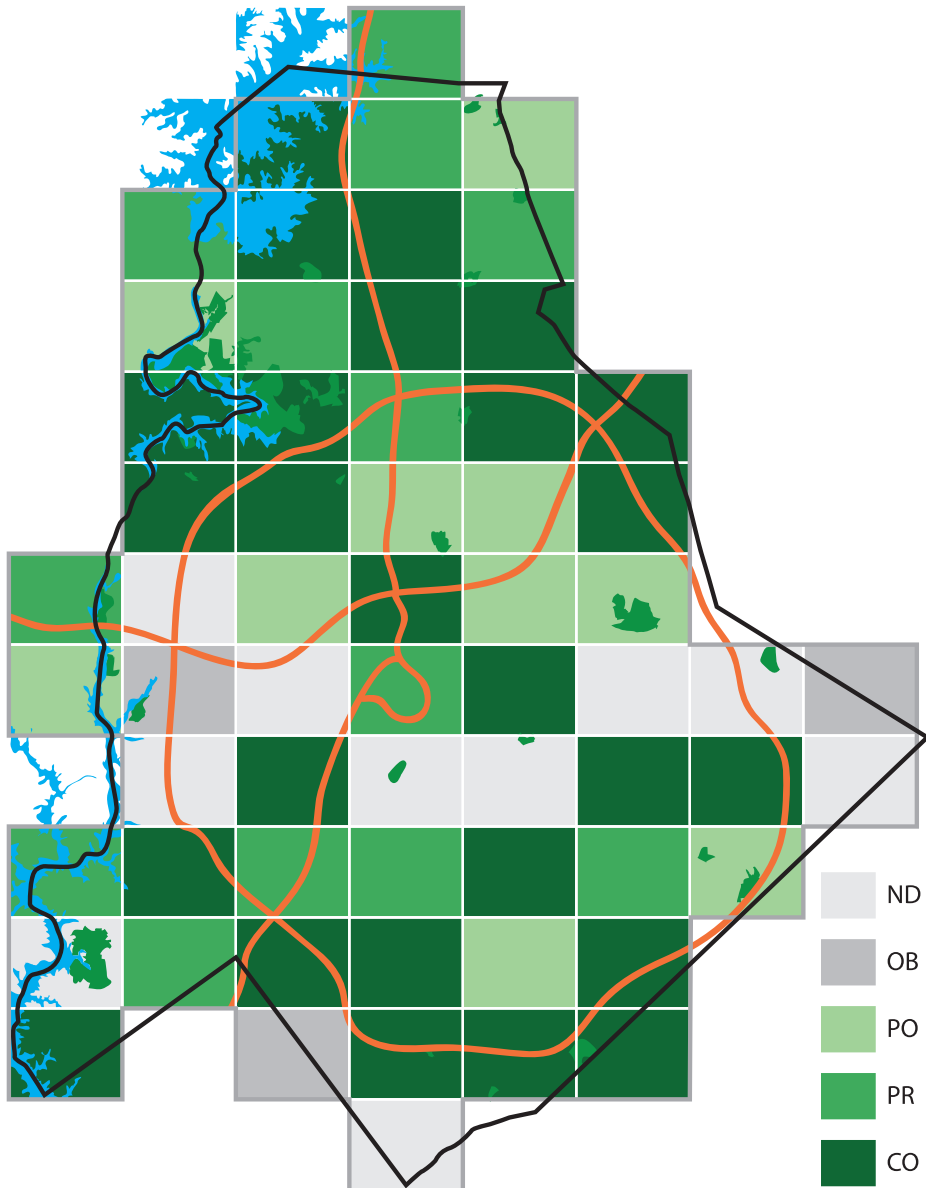


**Status:** Resident

**Abundance:** Fairly Common to Common

**Habitat:** Open, flat land with bare ground, sparse grass, or short grass

**Breeding Bird Atlas:** *Widespread* (PR/13, CO/26)



# Spotted Sandpiper *Actitis macularius*



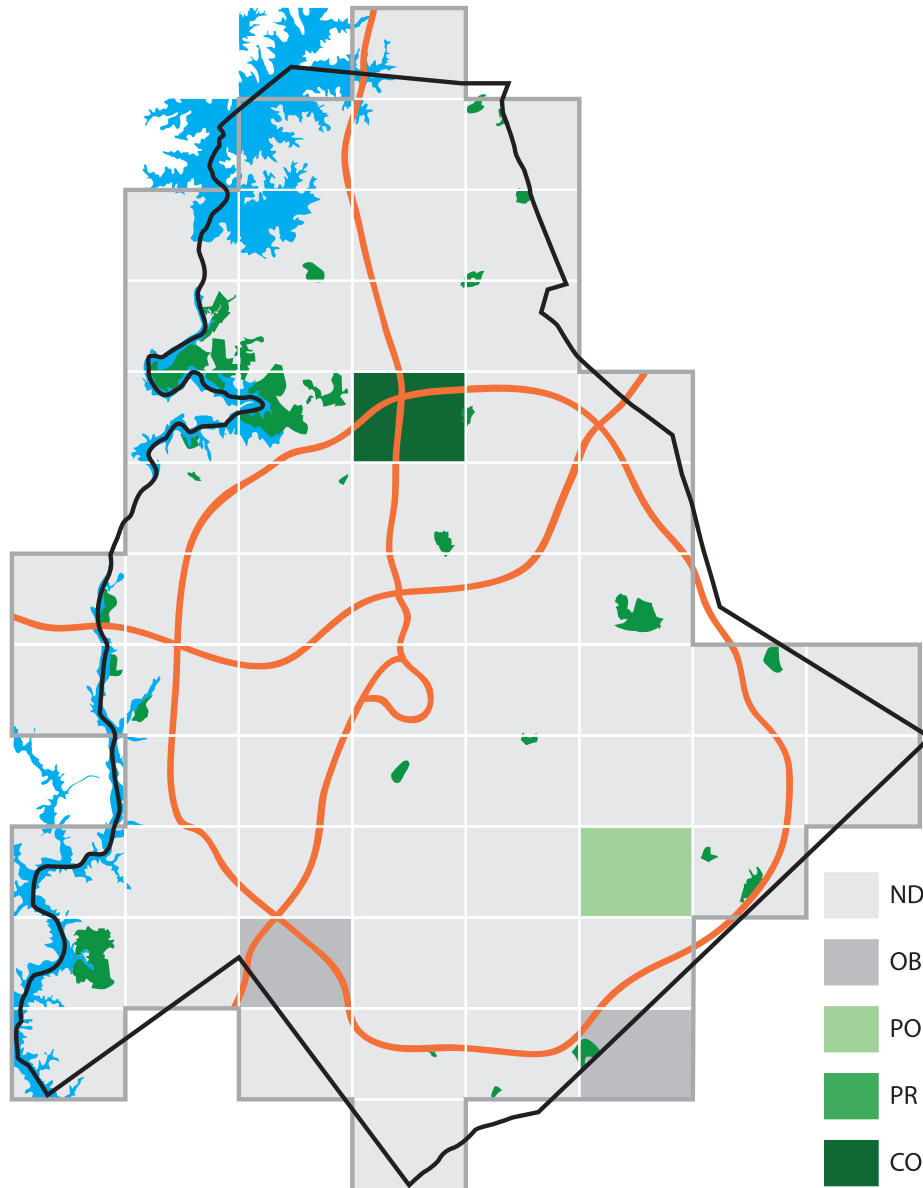
**Status:** Migrant, Winter Visitor, sporadic Breeder

**Abundance:** Fairly Common

**Habitat:** Mud flats, lakes, ponds, creeks

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)

**New Breeding Bird:** First confirmed nesting July 2010, sporadic breeder, not expected to establish a long-term breeding population here.



# American Woodcock *Scolopax minor*



**Status:** Resident

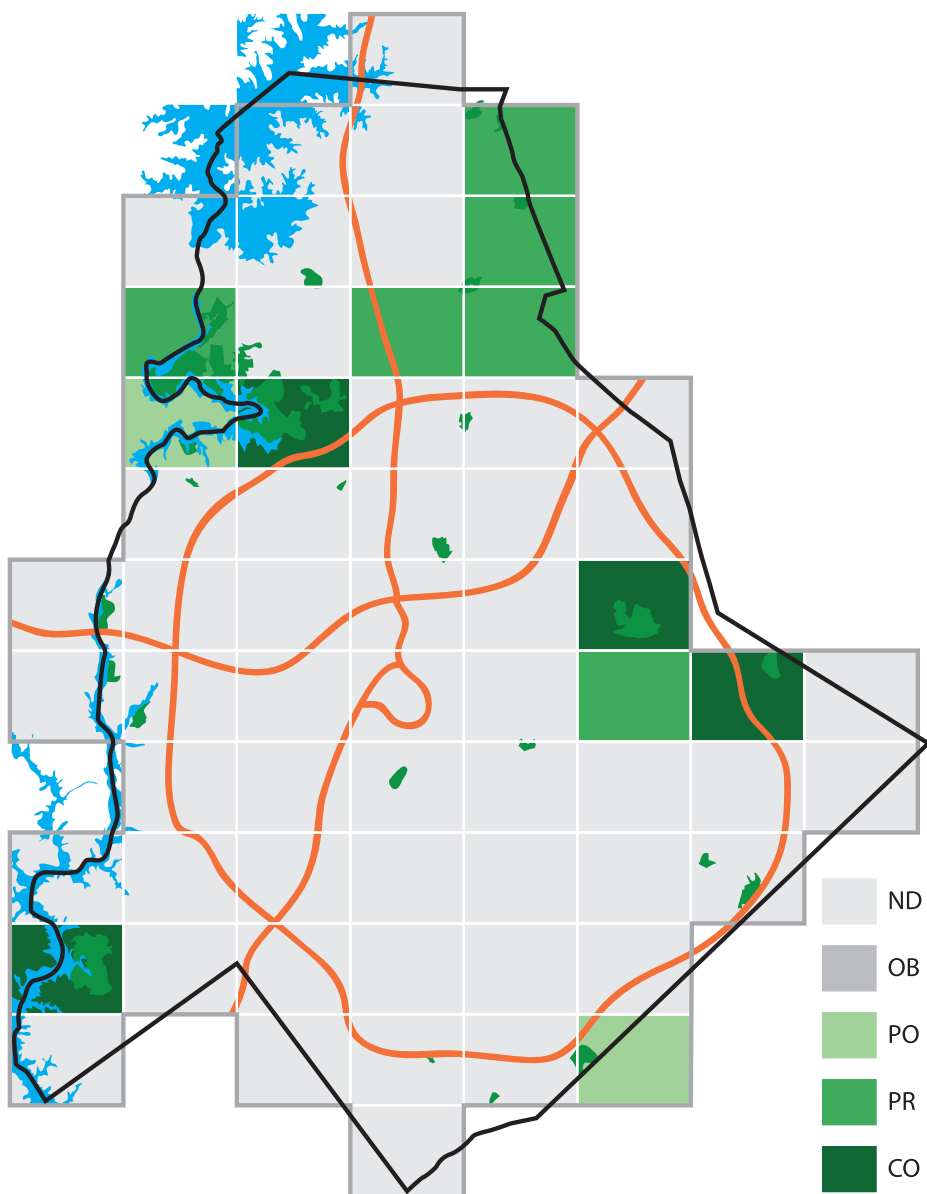
**Abundance:** Rare to Uncommon

**Habitat:** Wet fields, moist woods, edges of marshes, muddy pastures

**Breeding Bird Atlas:** *Somewhat local* (PR/6, CO/4)



**Vulnerable**





# Rock Pigeon *Columba livia*



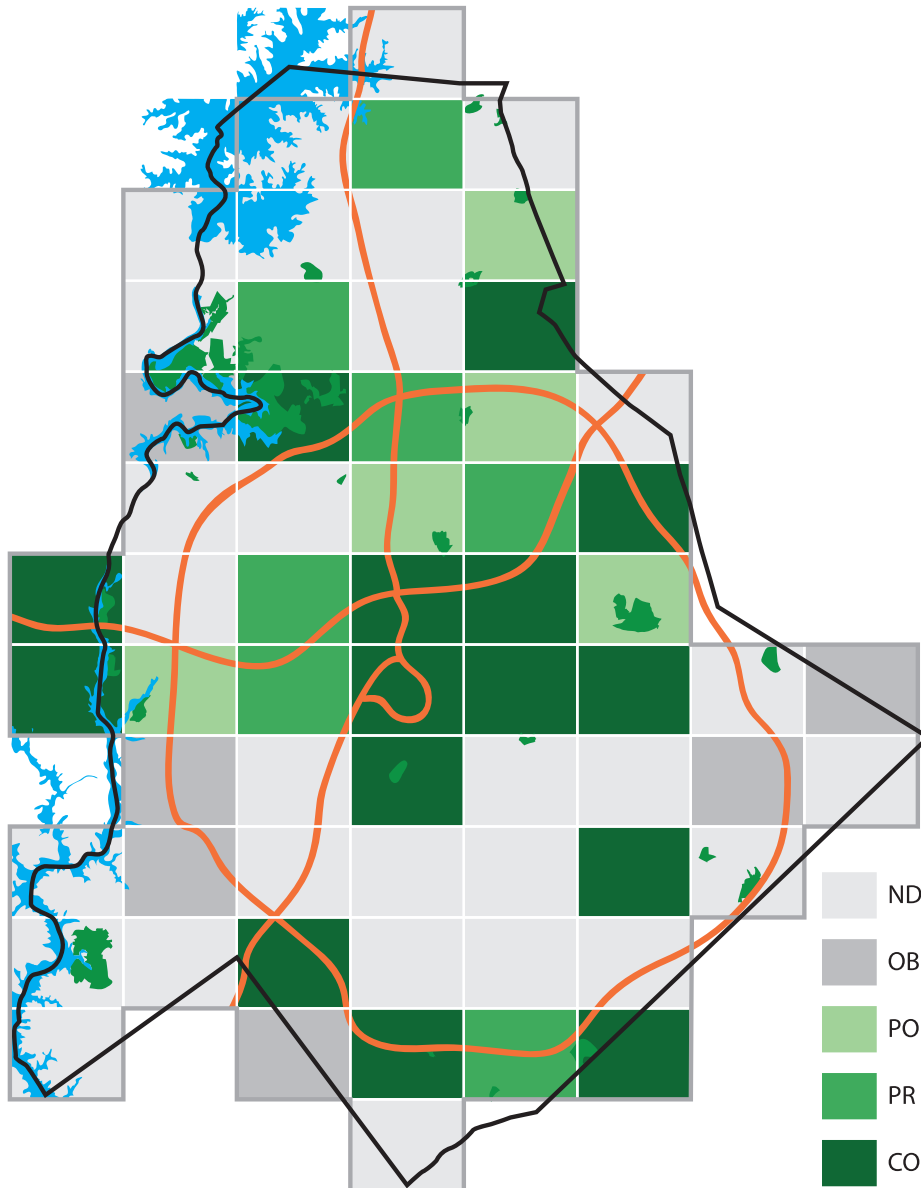
**Status:** Resident

**Abundance:** Common to Abundant

**Habitat:** Urban areas, underpasses and ledges, farms, industrial sites—bare ground and short grass

**Breeding Bird Atlas:** *Fairly Widespread (PR/7, CO/15)*

*Note: The presence of Rock Pigeon is believed to be underrepresented by this Mecklenburg County Breeding Bird Atlas Map. Birders sometimes fail to pay attention to these feral birds.*



# Eurasian Collared-Dove *Streptopelia decaocto*



**Status:** Resident

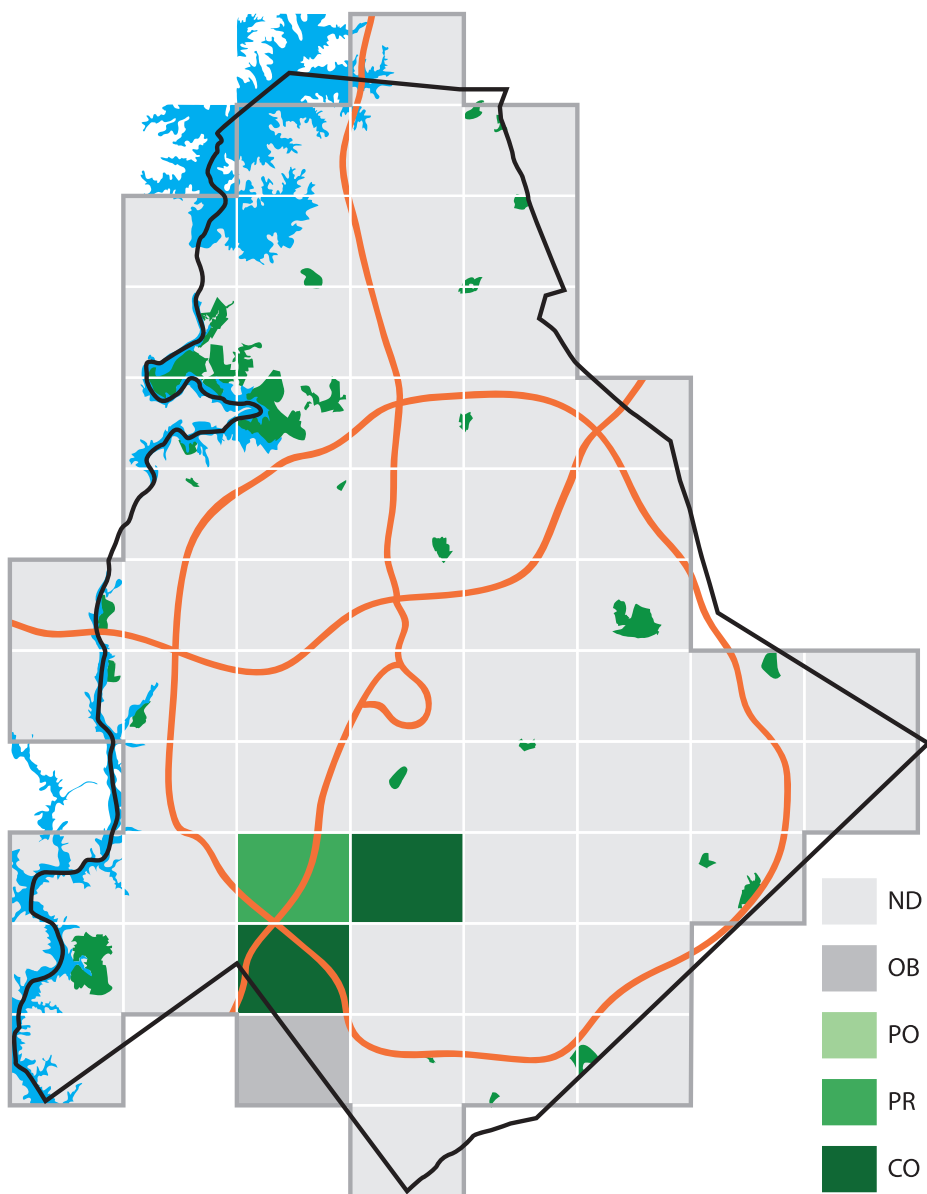
**Abundance:** Rare to Uncommon

**Habitat:** Urban areas and agricultural sites

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/2)

**New Breeding Bird:** First confirmed nesting April 2011. Now nests annually.

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# Mourning Dove *Zenaida macroura*



**Status:** Resident

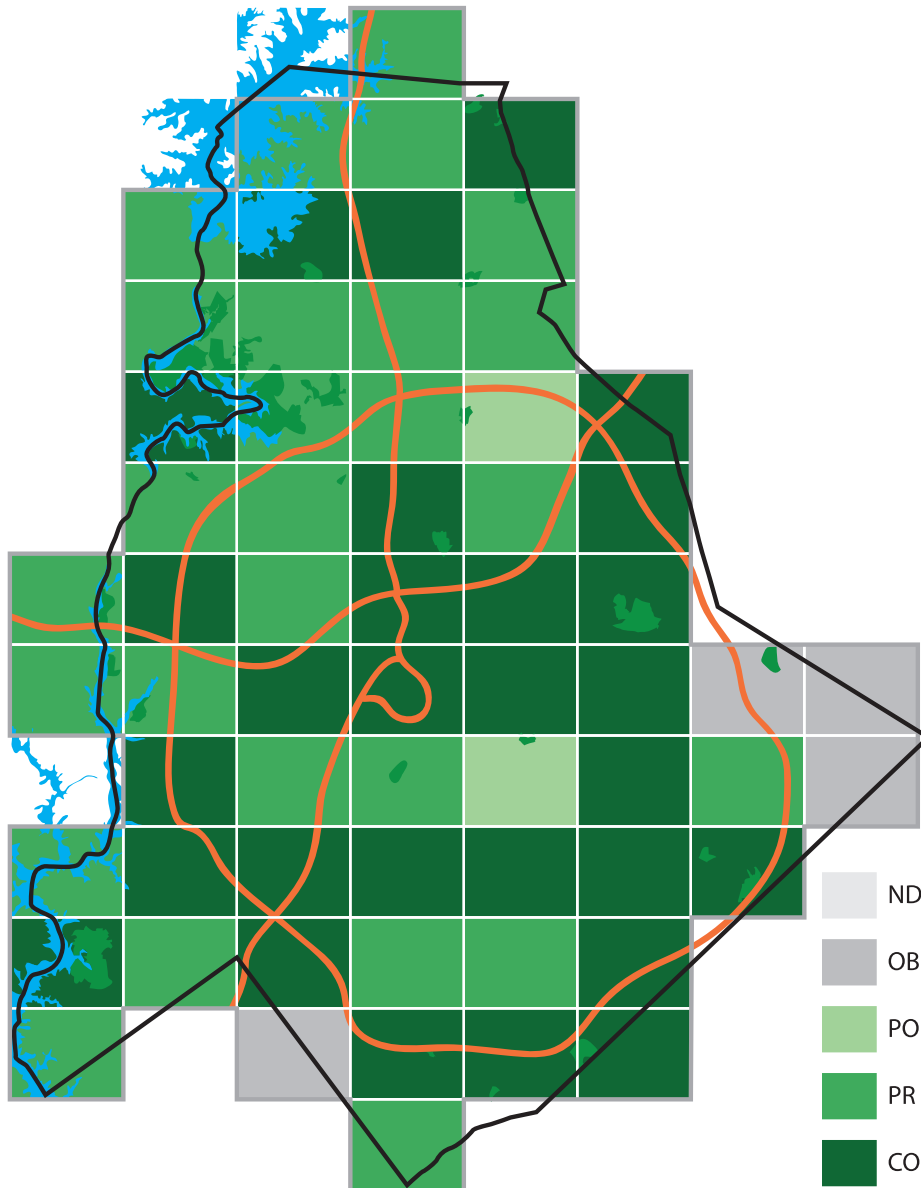
**Abundance:** Abundant

**Habitat:** Nest in small trees near open fields and open ground in both urban and rural areas

**Breeding Bird Atlas:** *Nearly Ubiquitous (PR/27, CO/29)*



J F M A M J J A S O N D



# Yellow-billed Cuckoo *Coccyzus americanus*

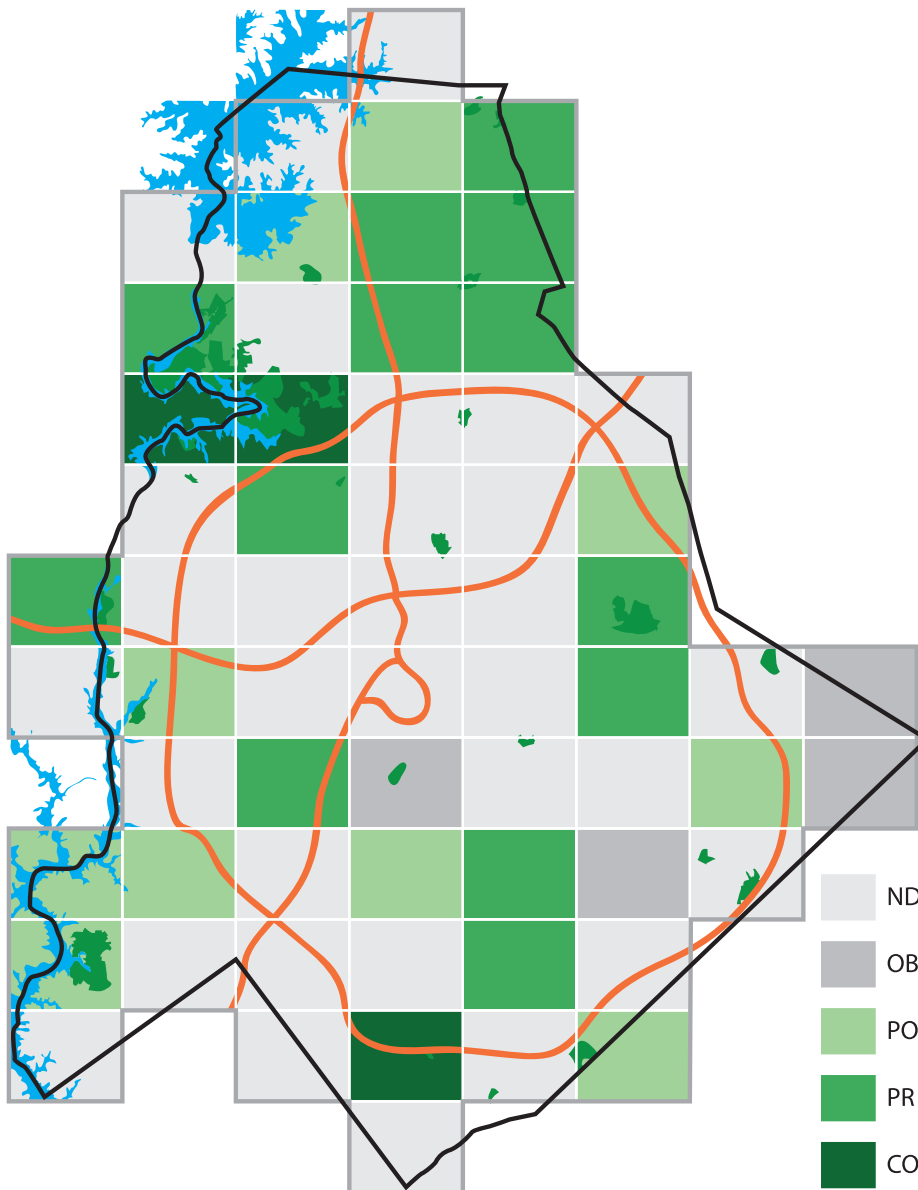


**Status:** Breeder

**Abundance:** Uncommon to Fairly Common

**Habitat:** Deciduous forests

**Breeding Bird Atlas:** *Somewhat Local* (PR/13, CO/3)



# Barn Owl *Tyto alba*



**Status:** Resident

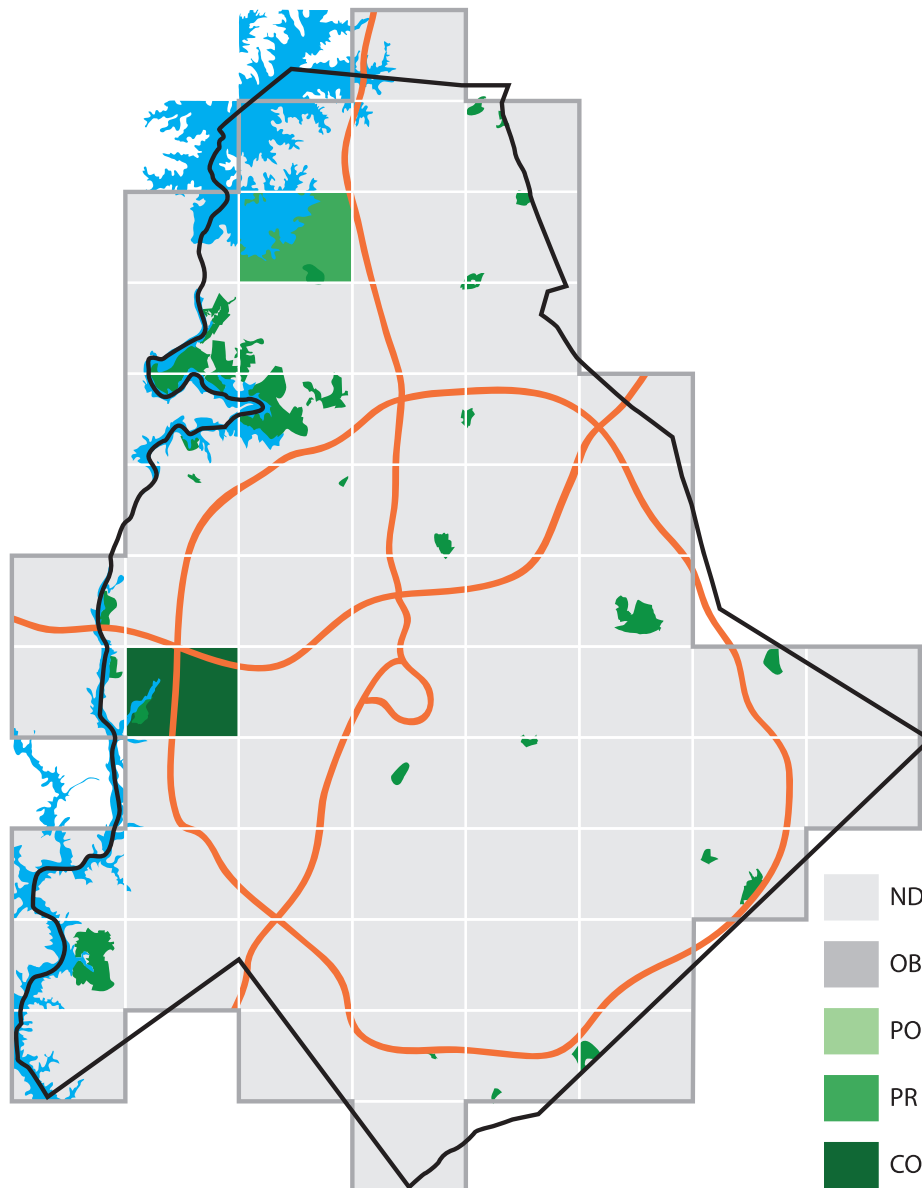
**Abundance:** Rare

**Habitat:** Open country, extensive fields, farmland, marshes, short grasslands

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/1)

J F M A M J J A S O N D

**Imperiled** 



# Eastern Screech-Owl *Megascops asio*



**Status:** Resident

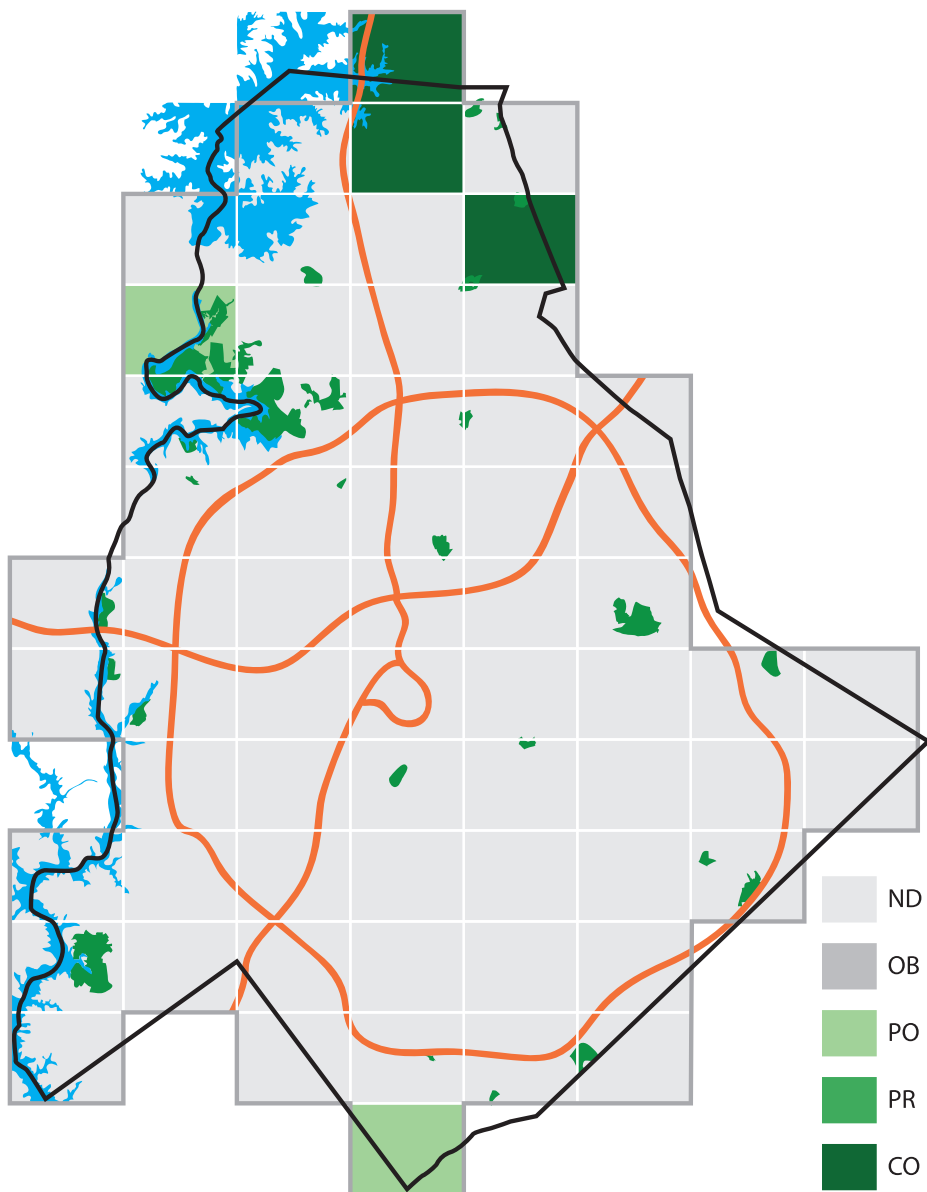
**Abundance:** Uncommon

**Habitat:** Woodlands

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/3)



**Imperiled**



# Great Horned Owl *Bubo virginianus*



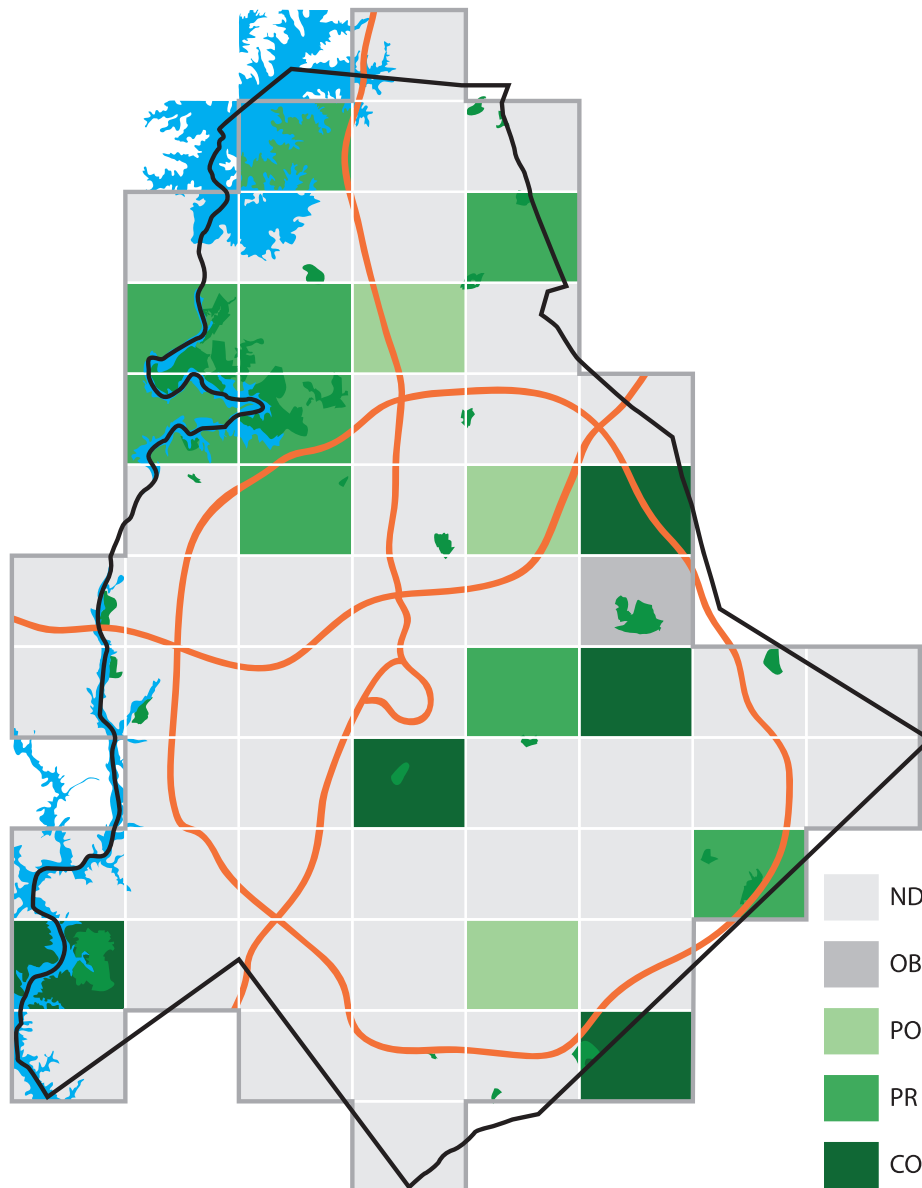
**Status:** Resident

**Abundance:** Uncommon

**Habitat:** Upland forests with adjacent fields, often nests in pines

**Breeding Bird Atlas:** *Somewhat Local (PR/9, CO/5)*

J F M A M J J A S O N D



# Barred Owl *Strix varia*

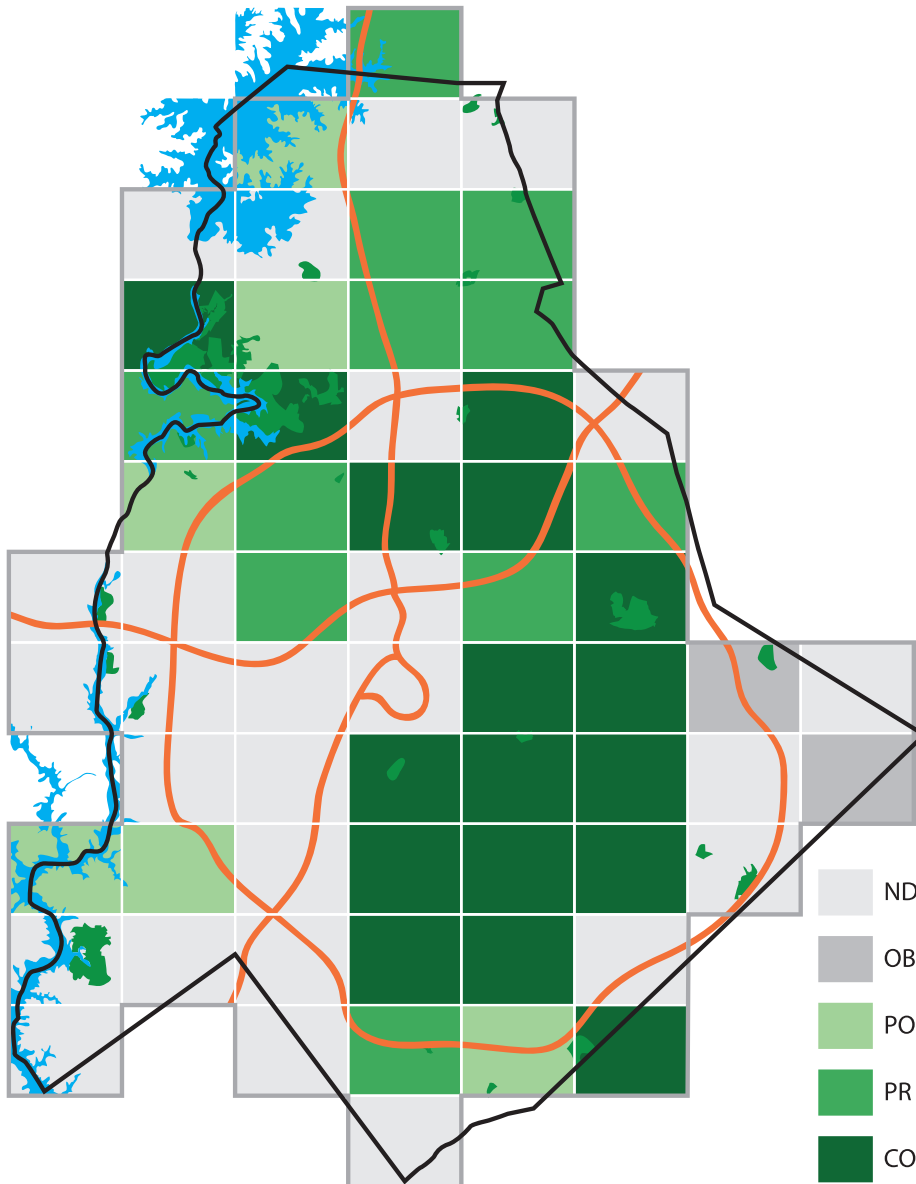


**Status:** Resident

**Abundance:** Fairly Common

**Habitat:** Moist riparian forests and urban and suburban bottomland forests

**Breeding Bird Atlas:** *Fairly Widespread* (PR/11, CO/17)





# Common Nighthawk *Chordeiles minor*



**Status:** Migrant, local Breeder

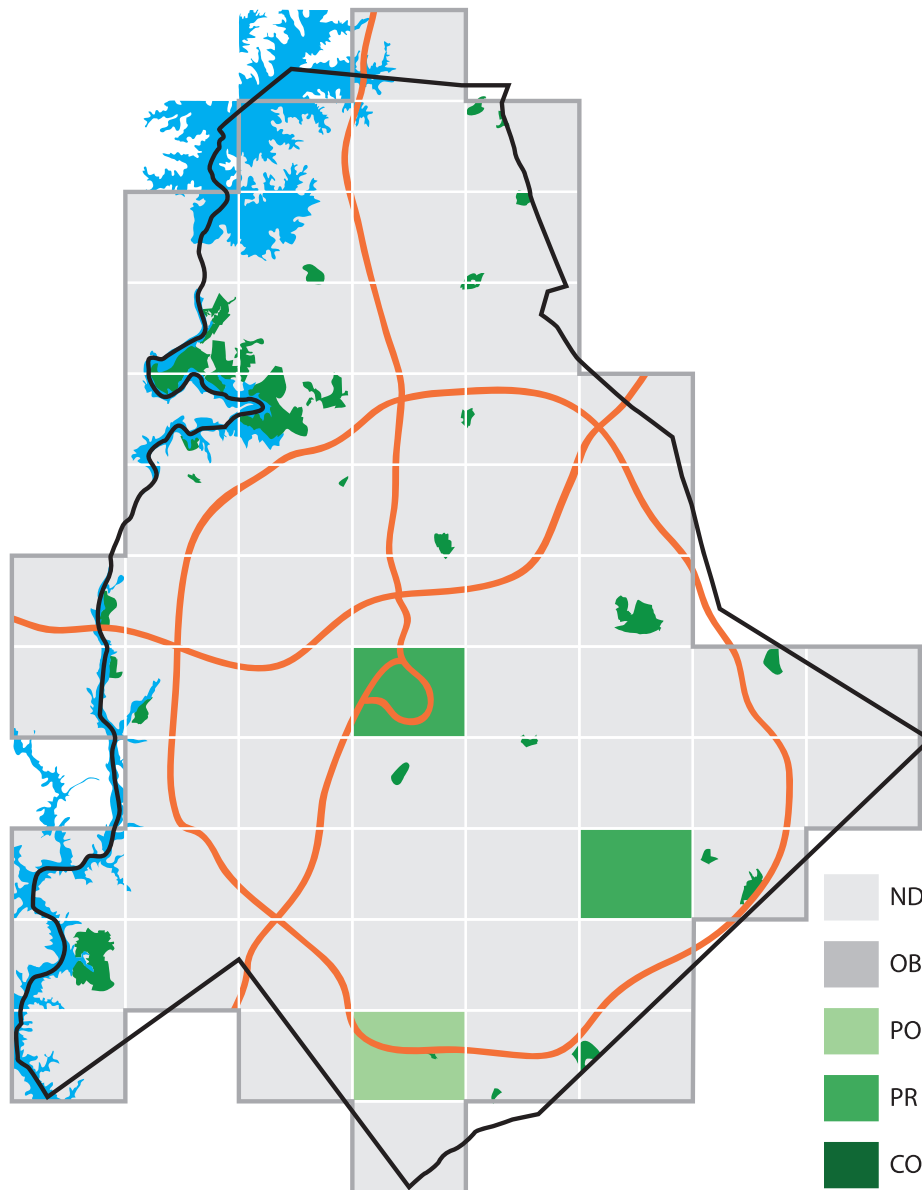
**Abundance:** Rare to Uncommon

**Habitat:** Nests on gravel roofs of flat-topped buildings—  
aerial insectivore

**Breeding Bird Atlas:** *Very Local* (PR/2, CO/0)



**Imperiled** 



# Chuck-will's-widow *Antrostomus carolinensis*

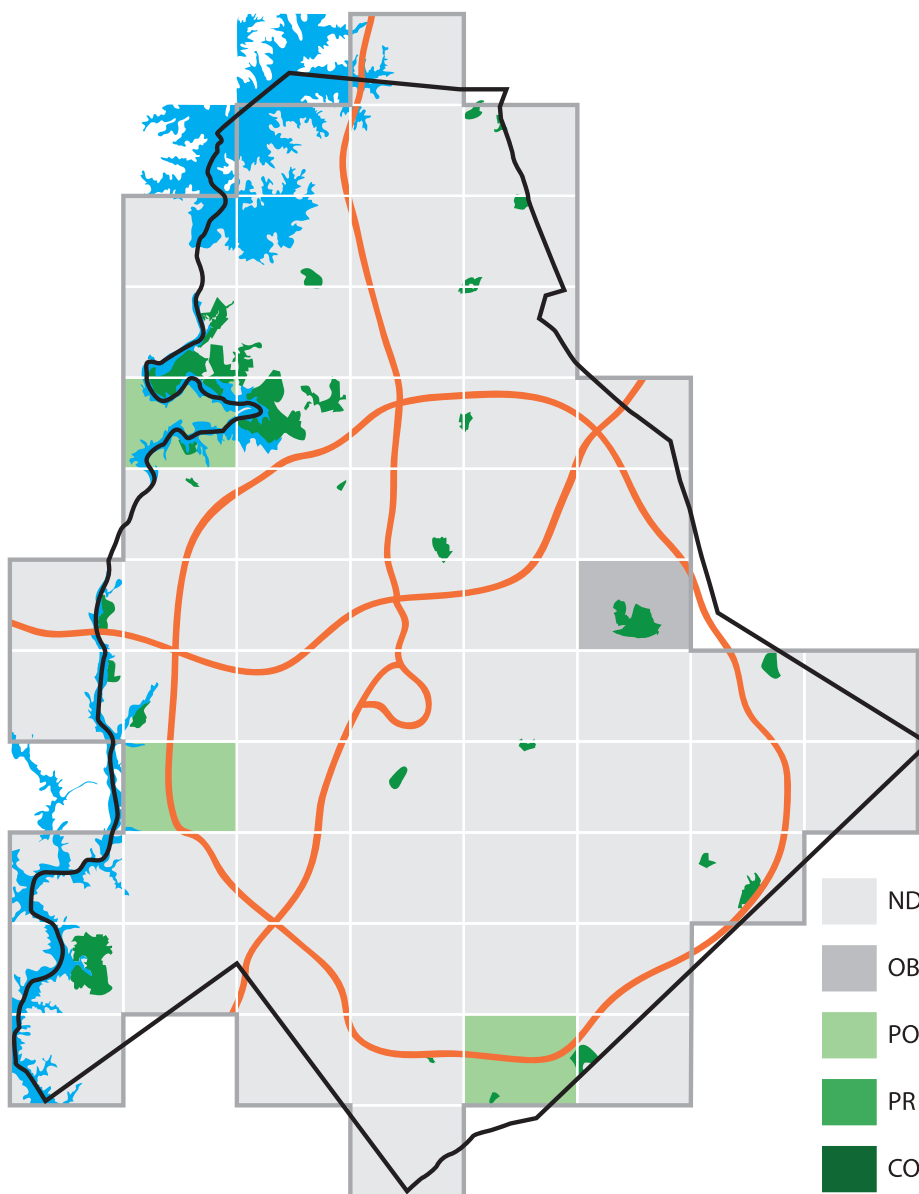


**Status:** Breeder

**Abundance:** Rare to Uncommon

**Habitat:** Open woodlands near open fields

**Breeding Bird Atlas:** *Possible* (PR/0, CO/0)



# Eastern Whip-poor-will *Antrostomus vociferous*



**Status:** Breeder

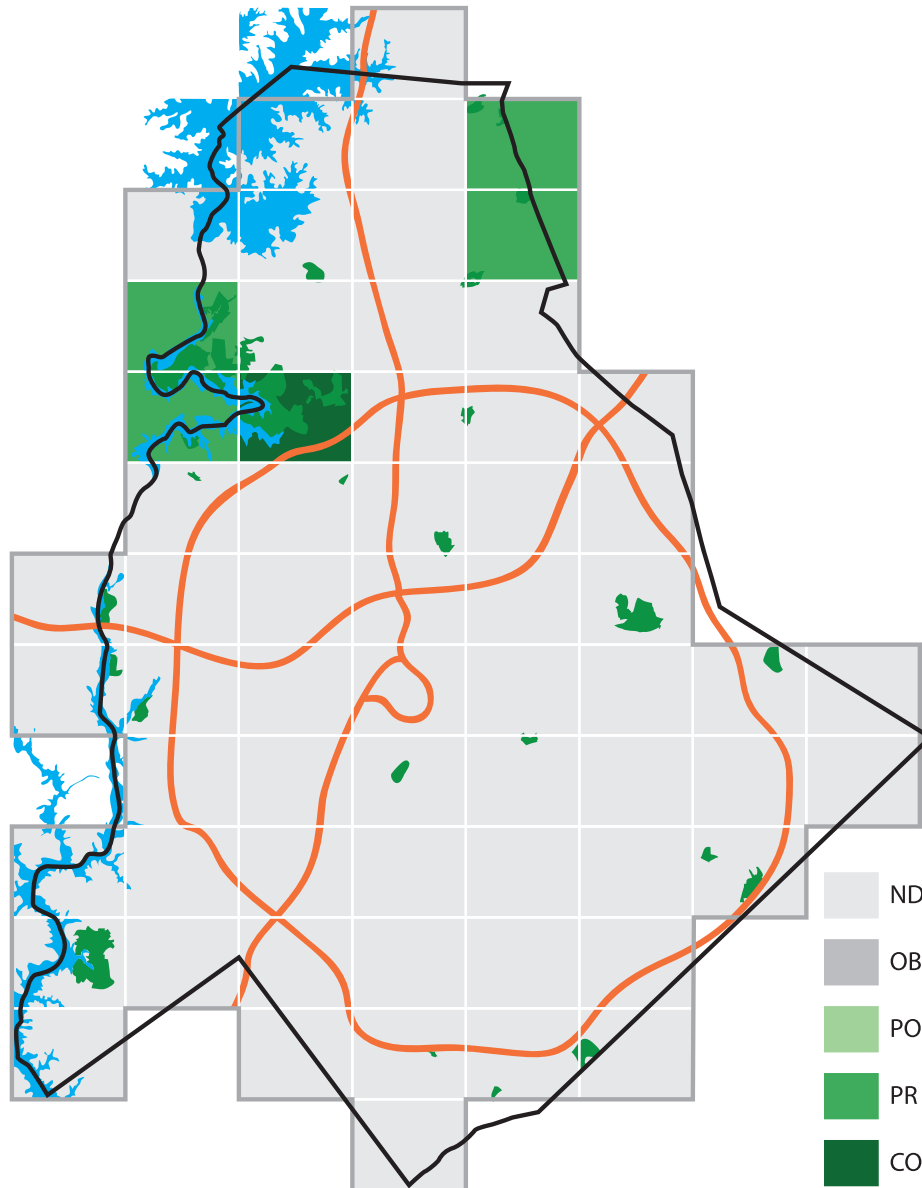
**Abundance:** Rare to Uncommon

**Habitat:** Woodlands often near open fields

**Breeding Bird Atlas:** *Local* (PR/4, CO/1)



**Imperiled**



# Chimney Swift *Chaetura pelagica*



**Status:** Breeder

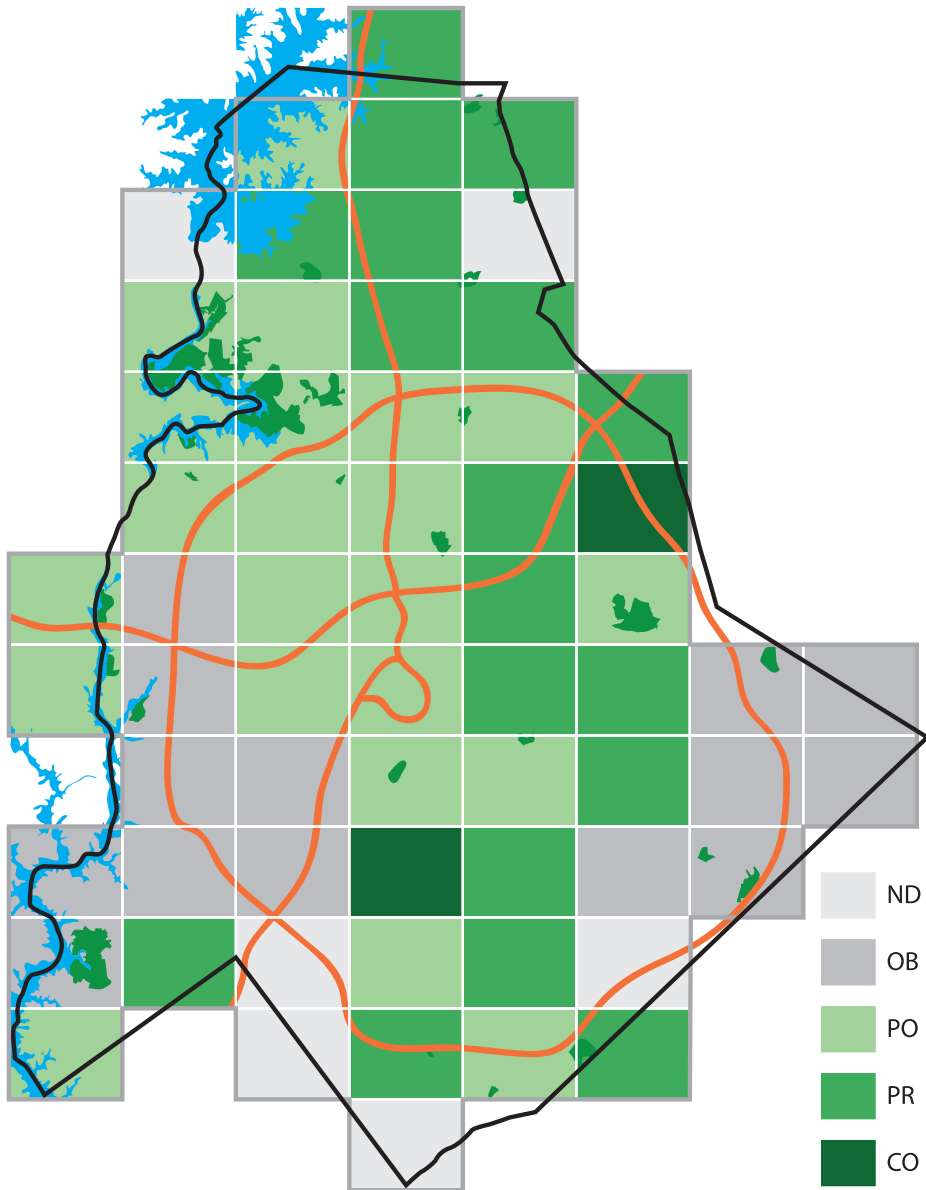
**Abundance:** Common

**Habitat:** Aerial insectivore—observed in flight—perches in chimneys

**Breeding Bird Atlas:** *Somewhat Local—likely declining*  
(PR/18 , CO/2)



J F M A M J J A S O N D



# Ruby-throated Hummingbird *Archilochus colubris*

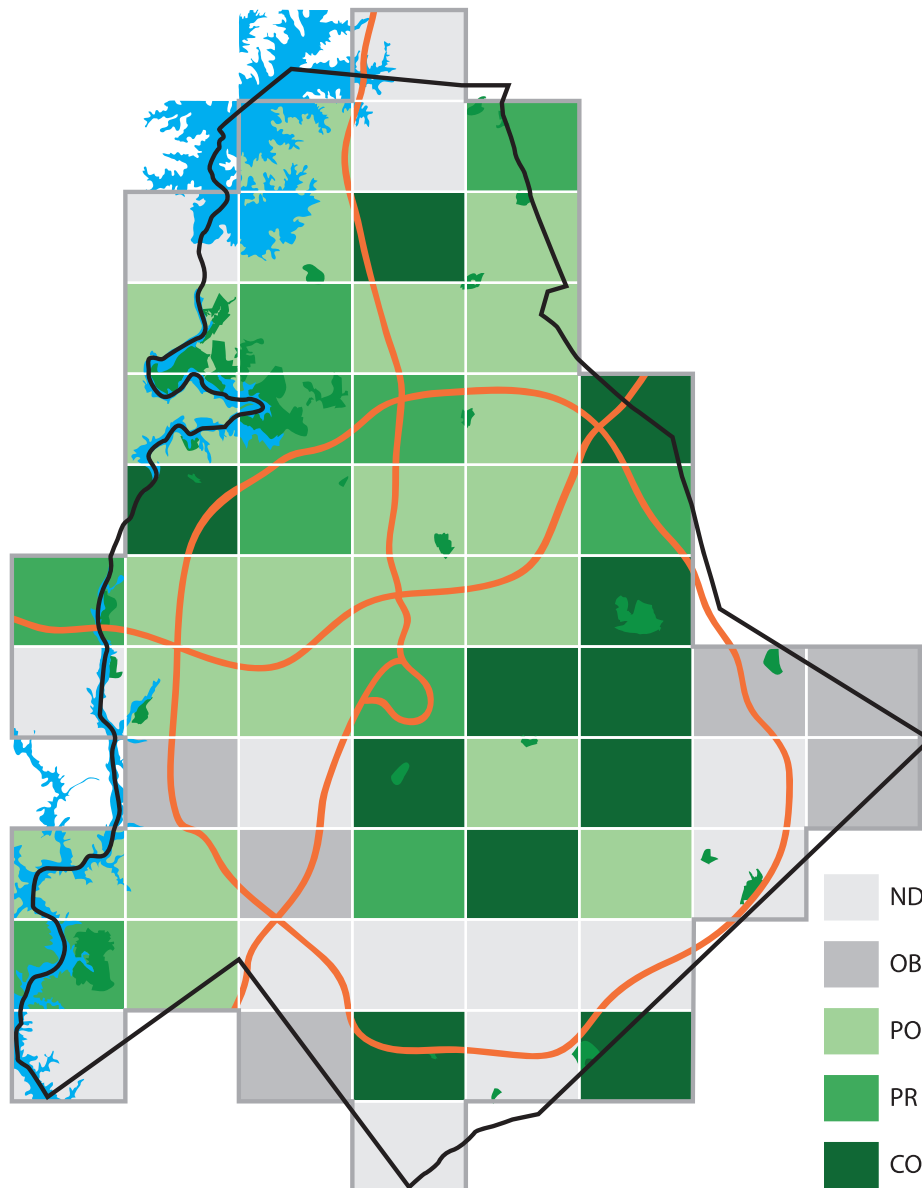


**Status:** Breeder

**Abundance:** Fairly Common

**Habitat:** Woodlands and residential areas with tubular flowers, hummingbird feeder stations

**Breeding Bird Atlas:** *Fairly Widespread* (PR/10, CO/11)



# Belted Kingfisher *Megaceryle alcyon*

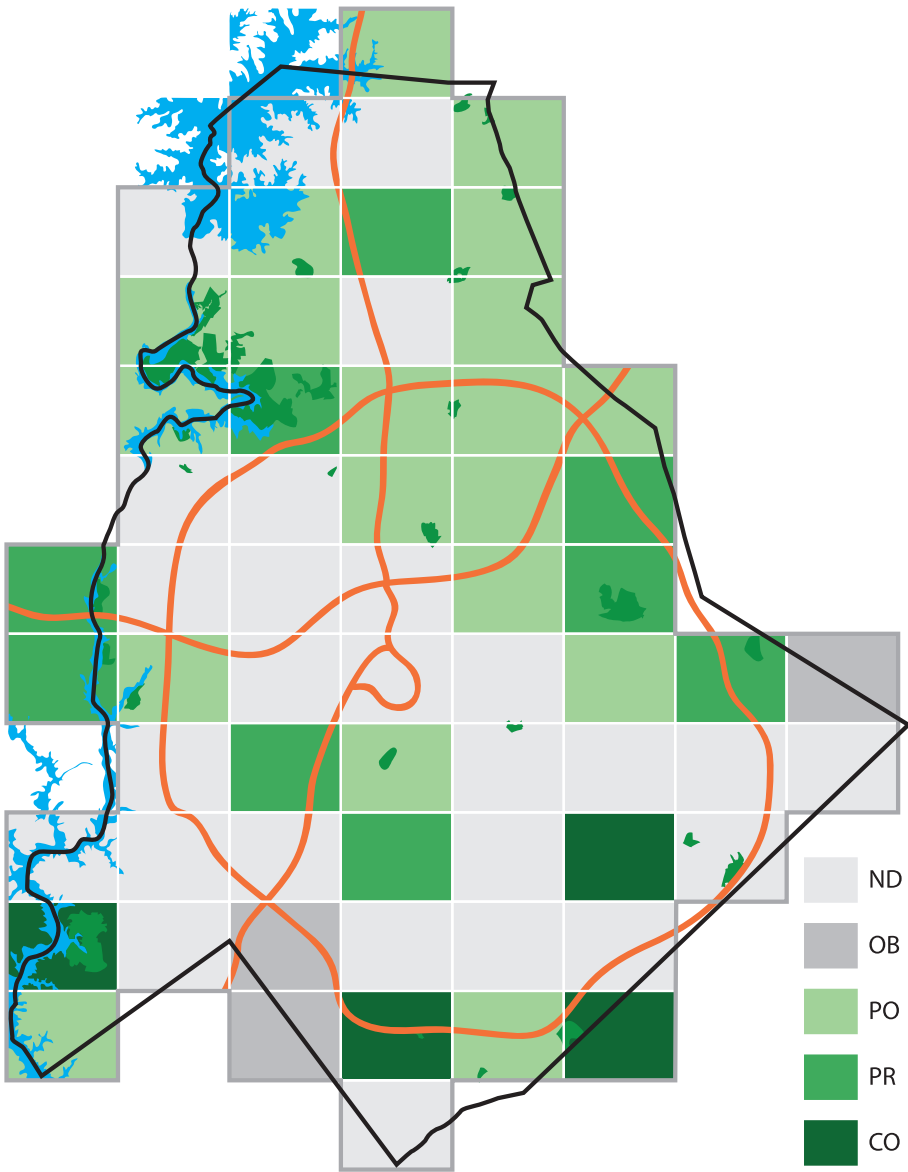


**Status:** Resident

**Abundance:** Fairly Common

**Habitat:** Lakes, ponds, streams, wires along roads with wet ditches

**Breeding Bird Atlas:** *Somewhat Local* (PR/9, CO/4)



# Red-headed Woodpecker *Melanerpes erythrocephalus*



**Status:** Resident

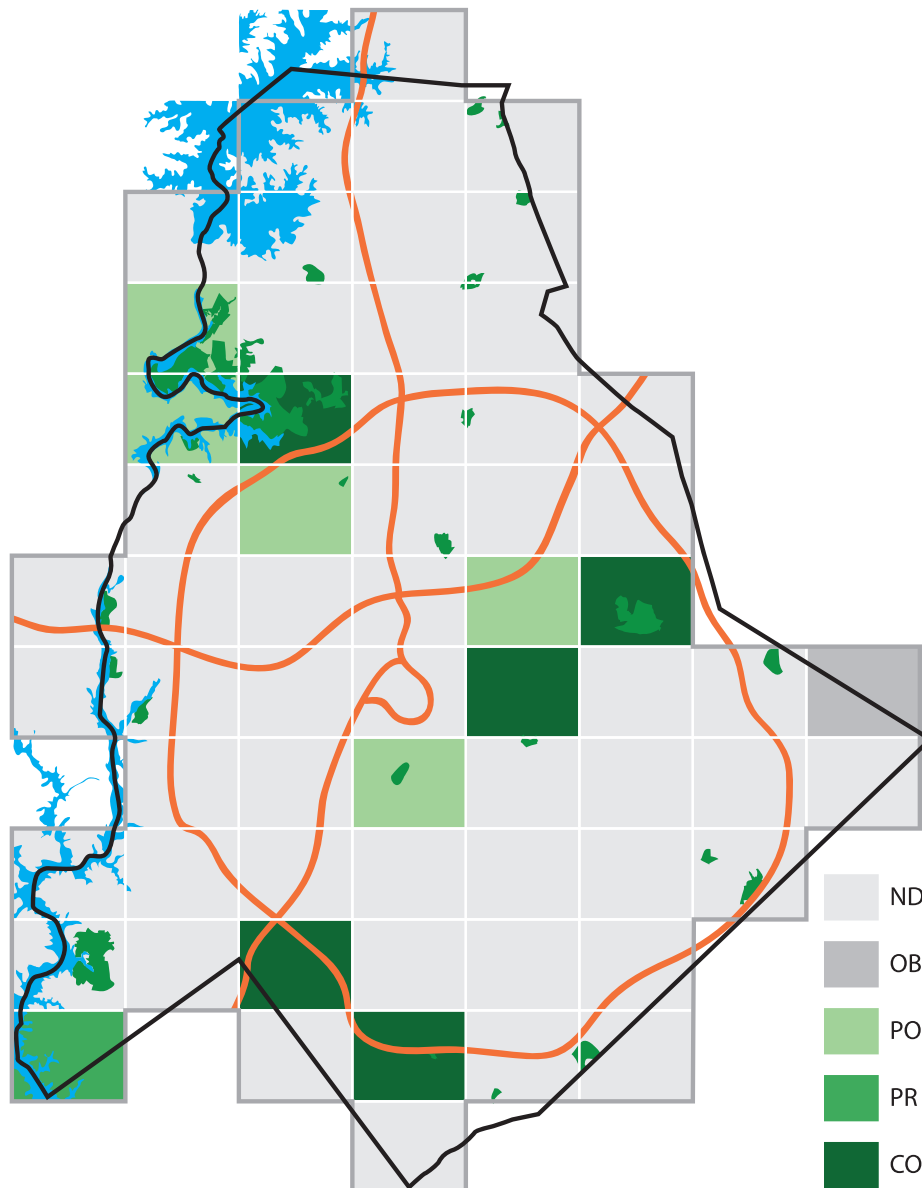
**Abundance:** Uncommon

**Habitat:** Open forest, parks, planted groves, bottomland forest (winter)

**Breeding Bird Atlas:** *Local (PR/1, CO/5)*

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**Vulnerable** 



# Red-bellied Woodpecker *Melanerpes carolinus*

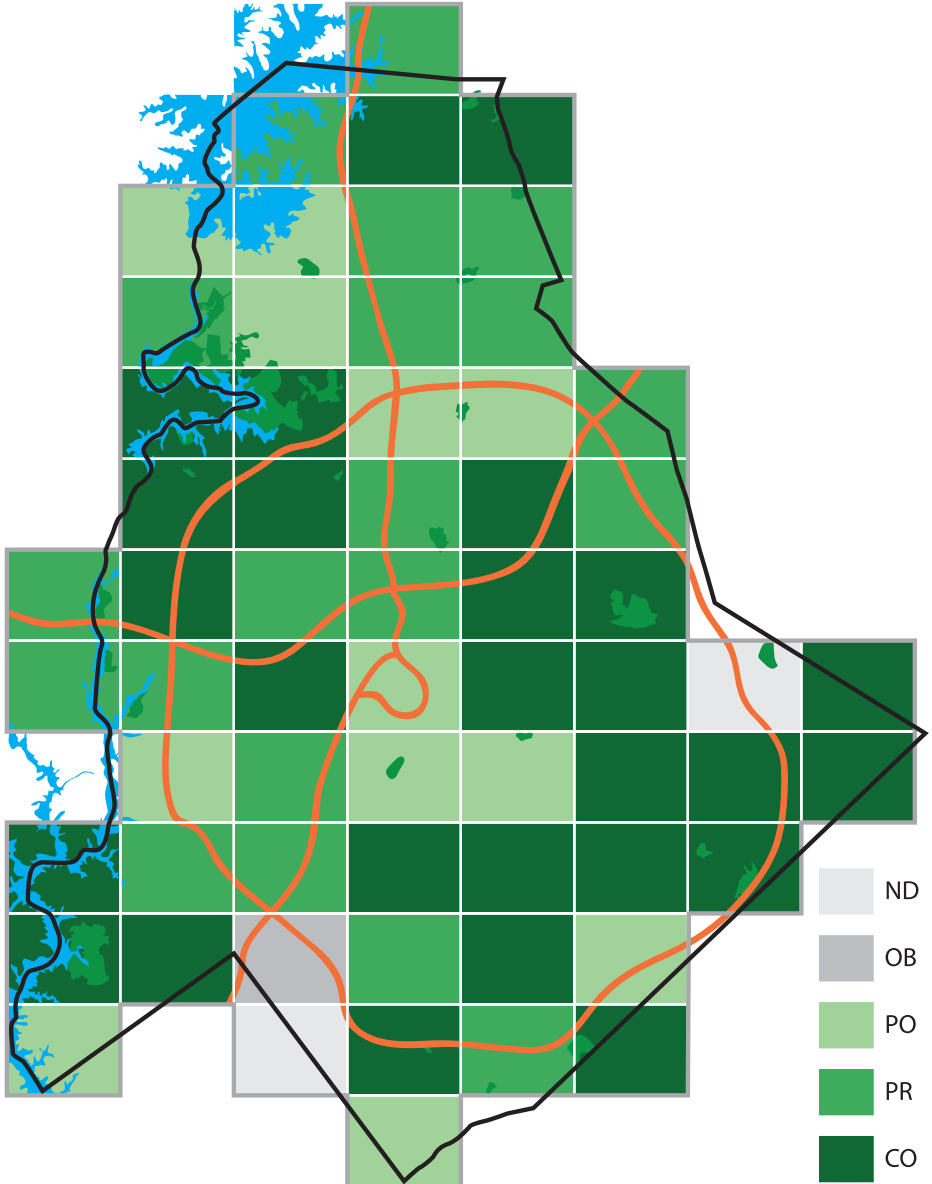


**Status:** Resident

**Abundance:** Common

**Habitat:** Mature forest

**Breeding Bird Atlas:** Ubiquitous (PR/20, CO/27)





# Downy Woodpecker *Picoides pubescens*

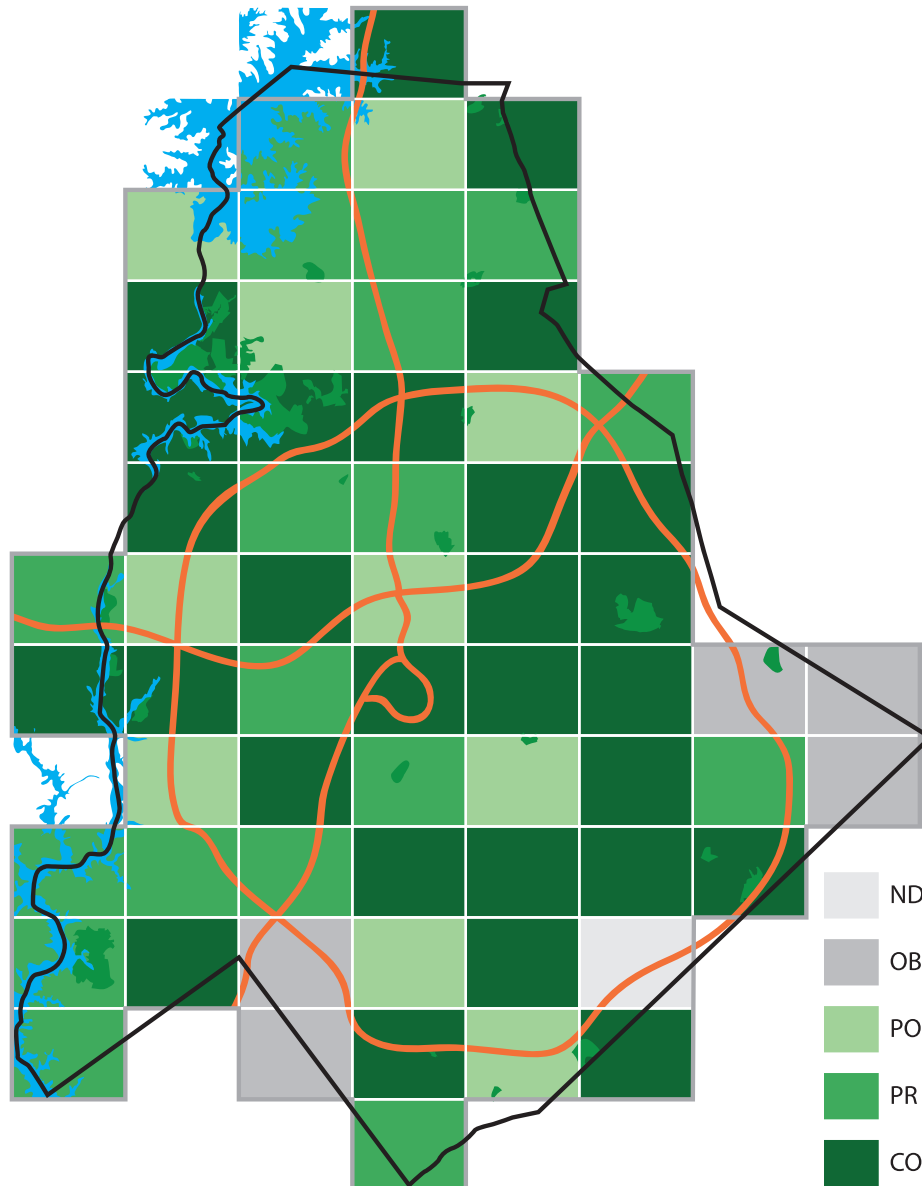


**Status:** Resident

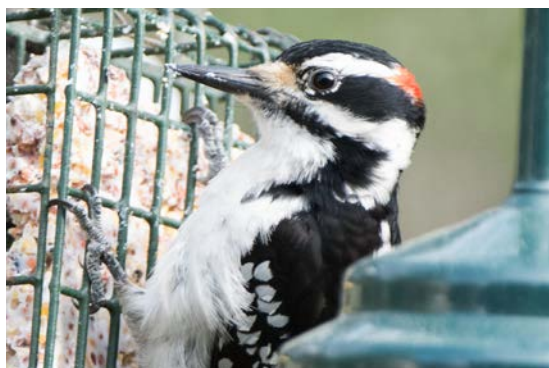
**Abundance:** Common

**Habitat:** Woodlands, forested neighborhoods and parks

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/18, CO/28)



# Hairy Woodpecker *Picoides villosus*



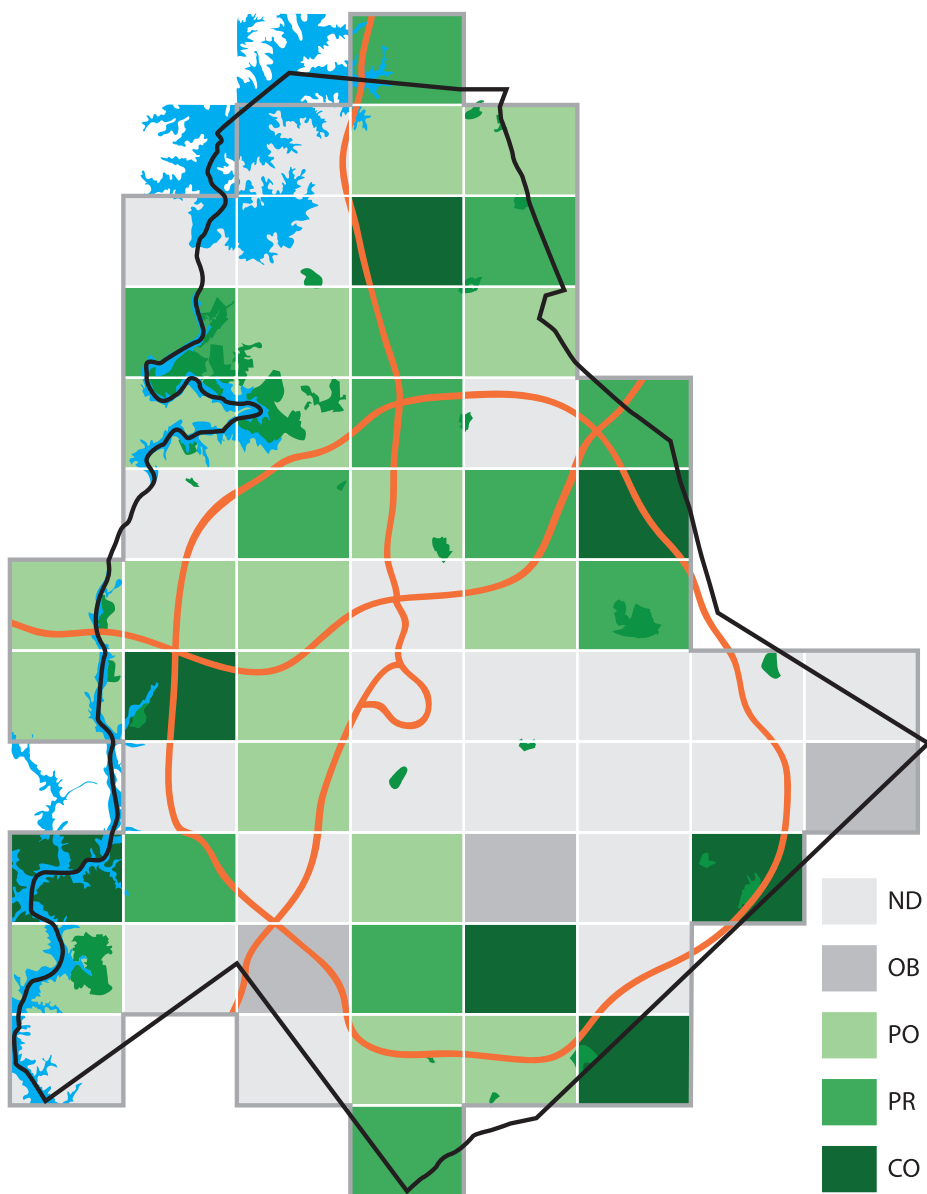
**Status:** Resident

**Abundance:** Uncommon to Fairly Common

**Habitat:** Forests and heavily forested neighborhoods

**Breeding Bird Atlas:** *Somewhat Local* (PR/12, CO/7)

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# Northern Flicker *Colaptes auratus*



**Status:** Resident

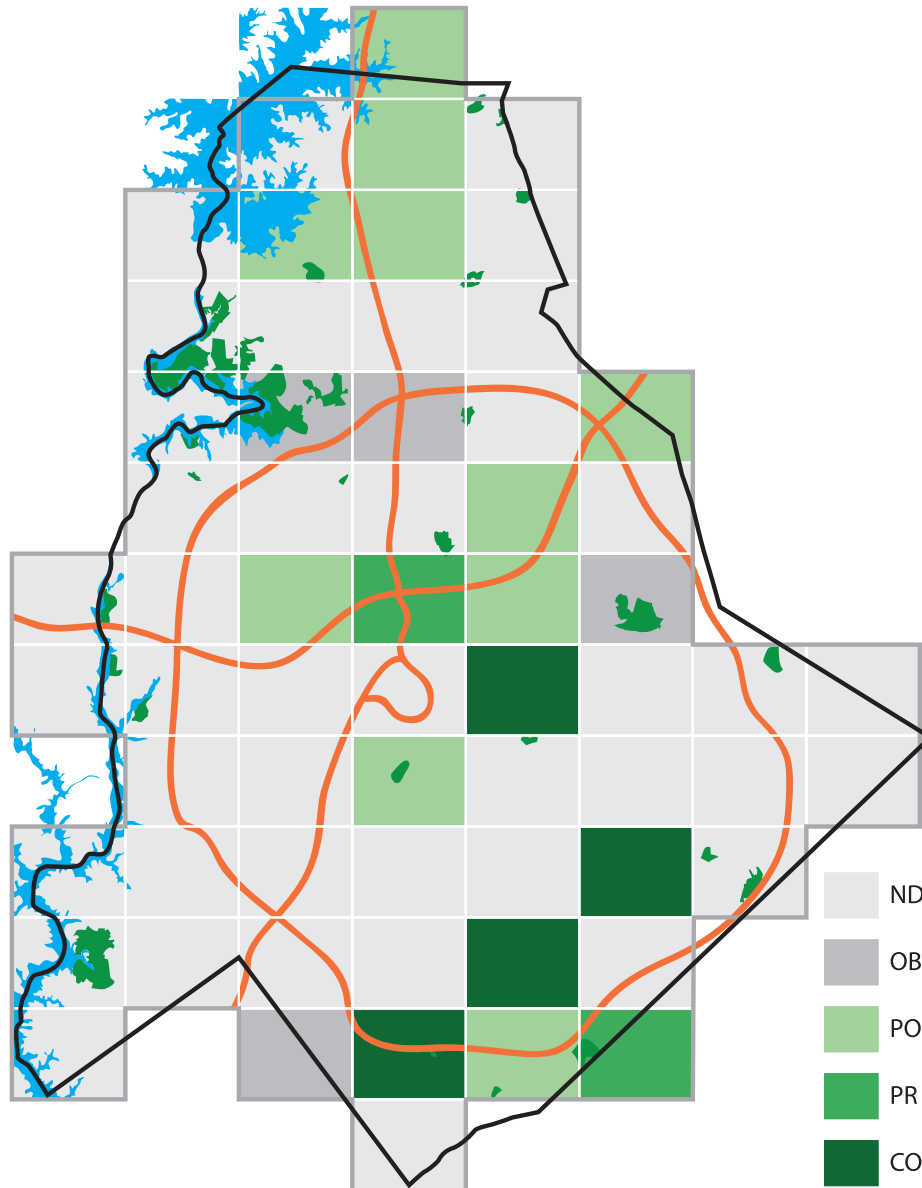
**Abundance:** Fairly Common

**Habitat:** Open woodlands, parks, neighborhoods

**Breeding Bird Atlas:** *Local* (PR/2, CO/4)



**Vulnerable**



# Pileated Woodpecker *Dryocopus pileatus*



**Status:** Resident

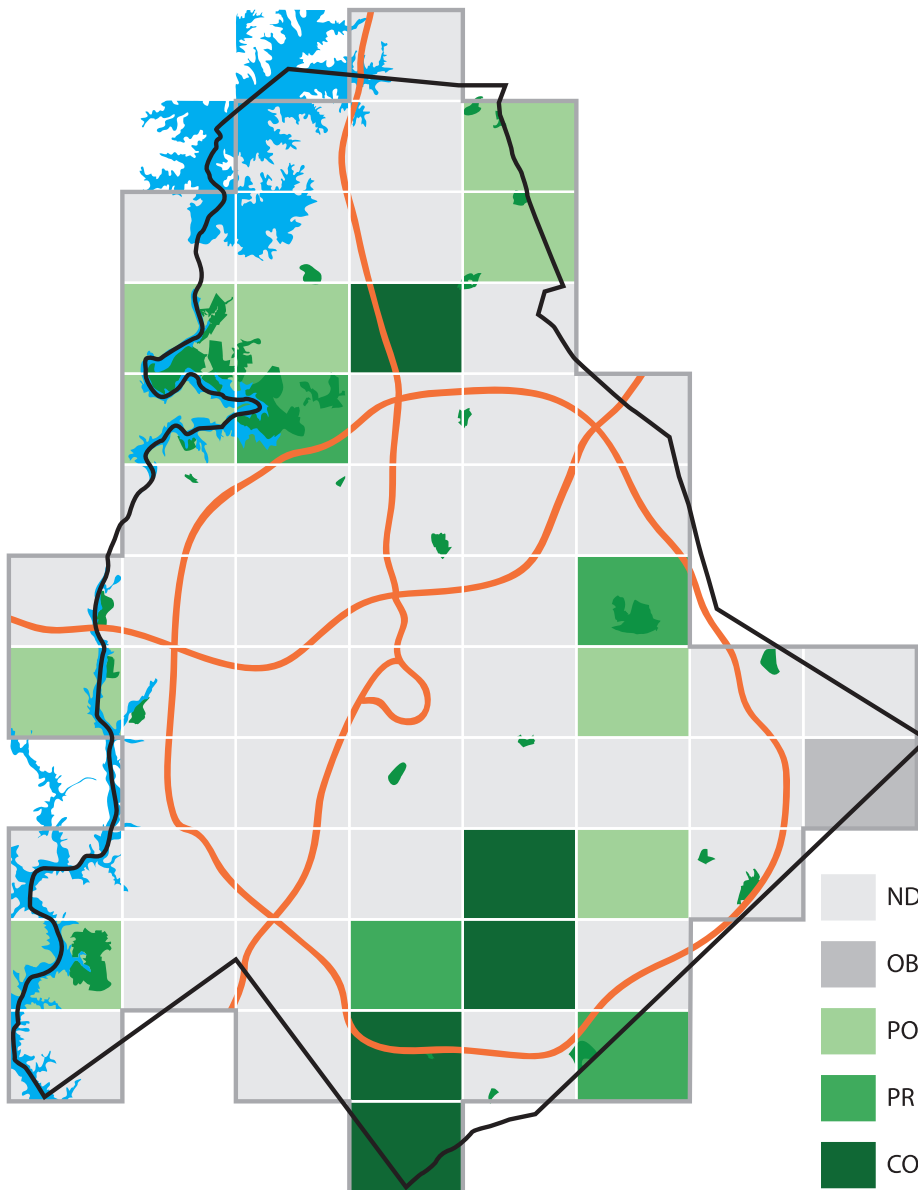
**Abundance:** Rare to Uncommon

**Habitat:** Mature forests

**Breeding Bird Atlas:** *Local (PR/4, CO/5)*



**Vulnerable**



# American Kestrel *Falco sparverius*



**Status:** Resident

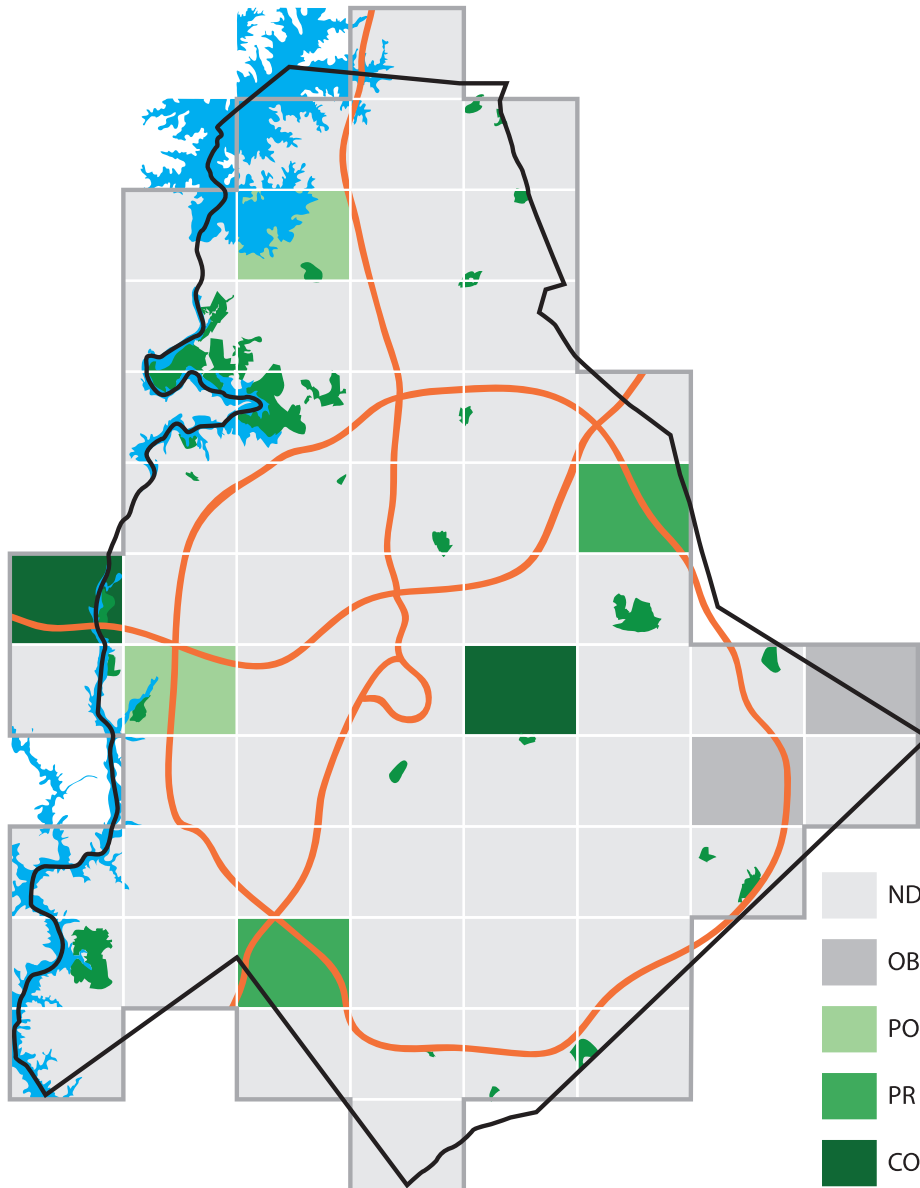
**Abundance:** Rare to Uncommon

**Habitat:** Open country, fields, pastures, also found occasionally in urban areas

**Breeding Bird Atlas:** *Local (PR/2, CO/2)*

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**Imperiled**



# Peregrine Falcon *Falco peregrinus*



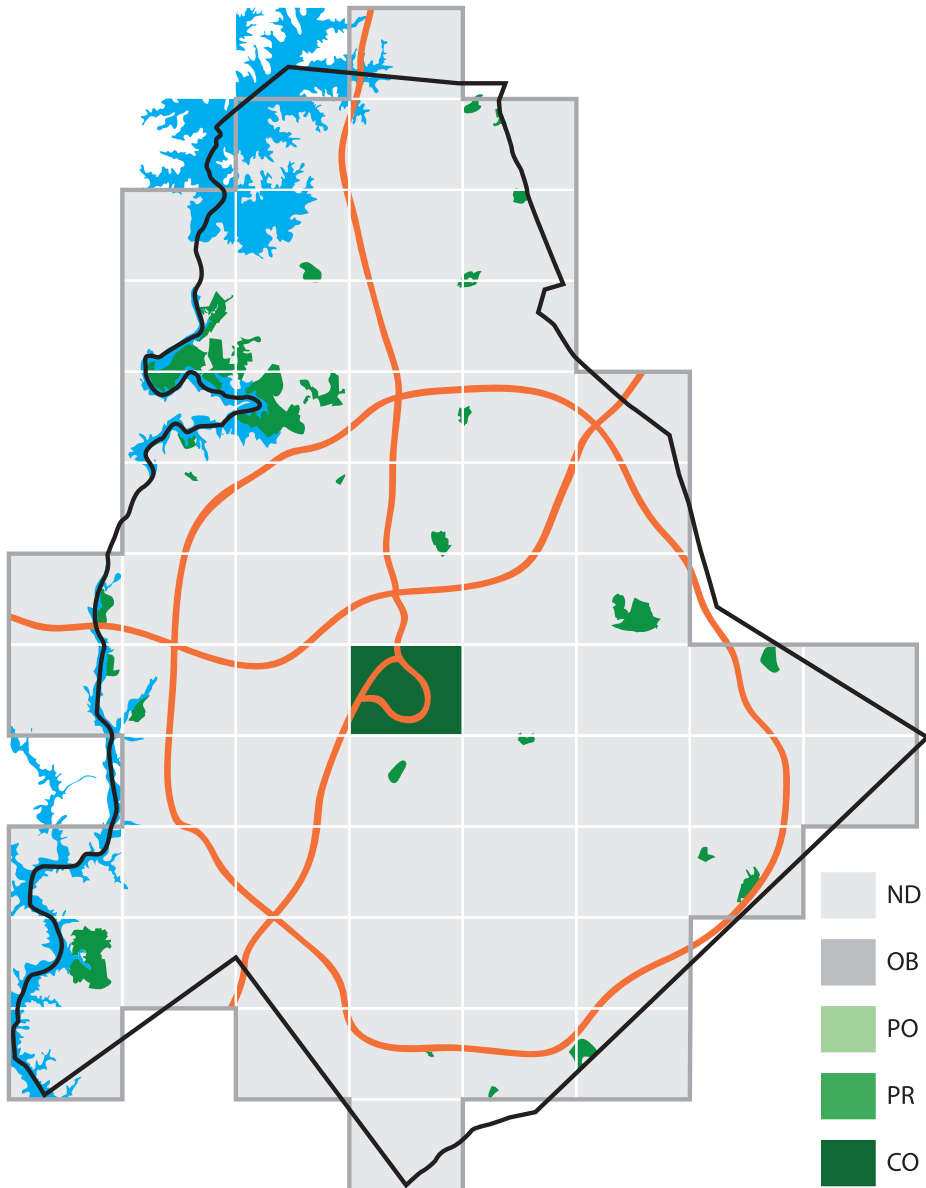
**Status:** Migrant, Winter Visitor, casual Breeder

**Abundance:** Rare

**Habitat:** Open country, fields, pastures, open water; also urban buildings and ledges for roosting and nesting

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)

**New Breeding Bird:** First-time breeder the Piedmont of the Carolinas, first confirmed nesting in March 2013, not expected to establish a long-term breeding population here.



# Eastern Wood-Pewee *Contopus virens*



**Status:** Breeder

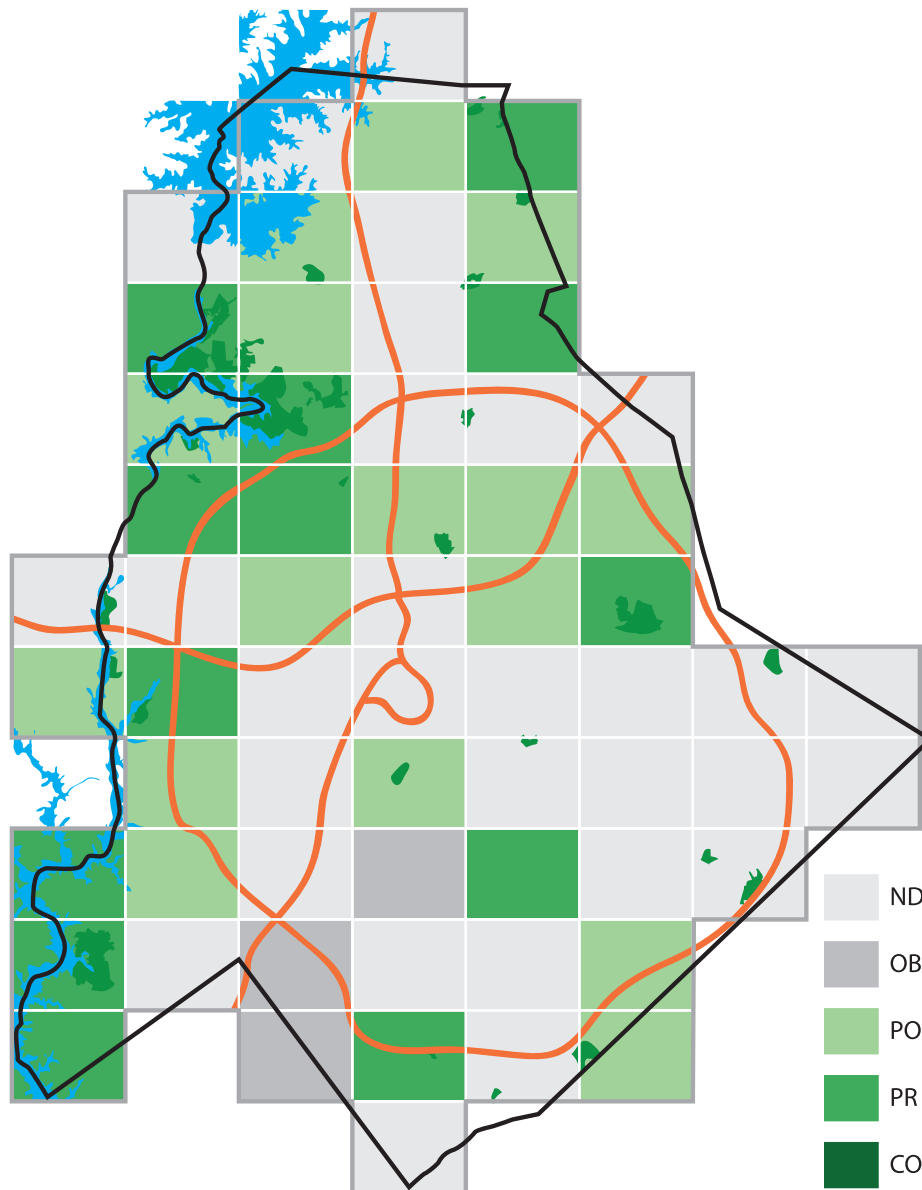
**Abundance:** Fairly Common to Common

**Habitat:** Exposed limb, often on a snag tree in an upland, usually open, woodland or woodlot of pines or hardwoods

**Breeding Bird Atlas:** *Somewhat Local (PR/13, CO/0)*



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# Acadian Flycatcher *Empidonax virescens*



**Status:** Breeder

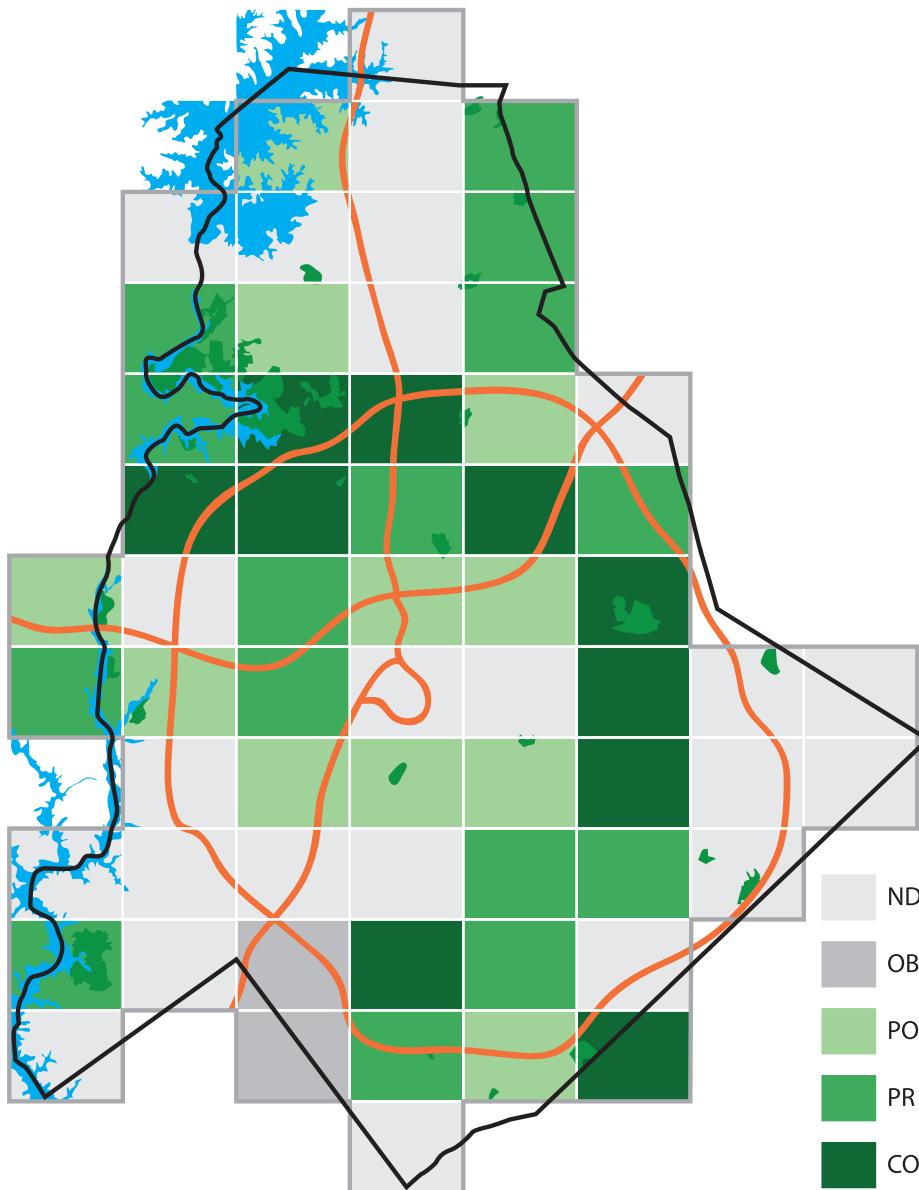
**Abundance:** Fairly Common

**Habitat:** Streamside deciduous forest, floodplain forest, and bottomland hardwoods

**Breeding Bird Atlas:** *Fairly Widespread* (PR/15, CO/10)



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# Willow Flycatcher *Empidonax traillii*



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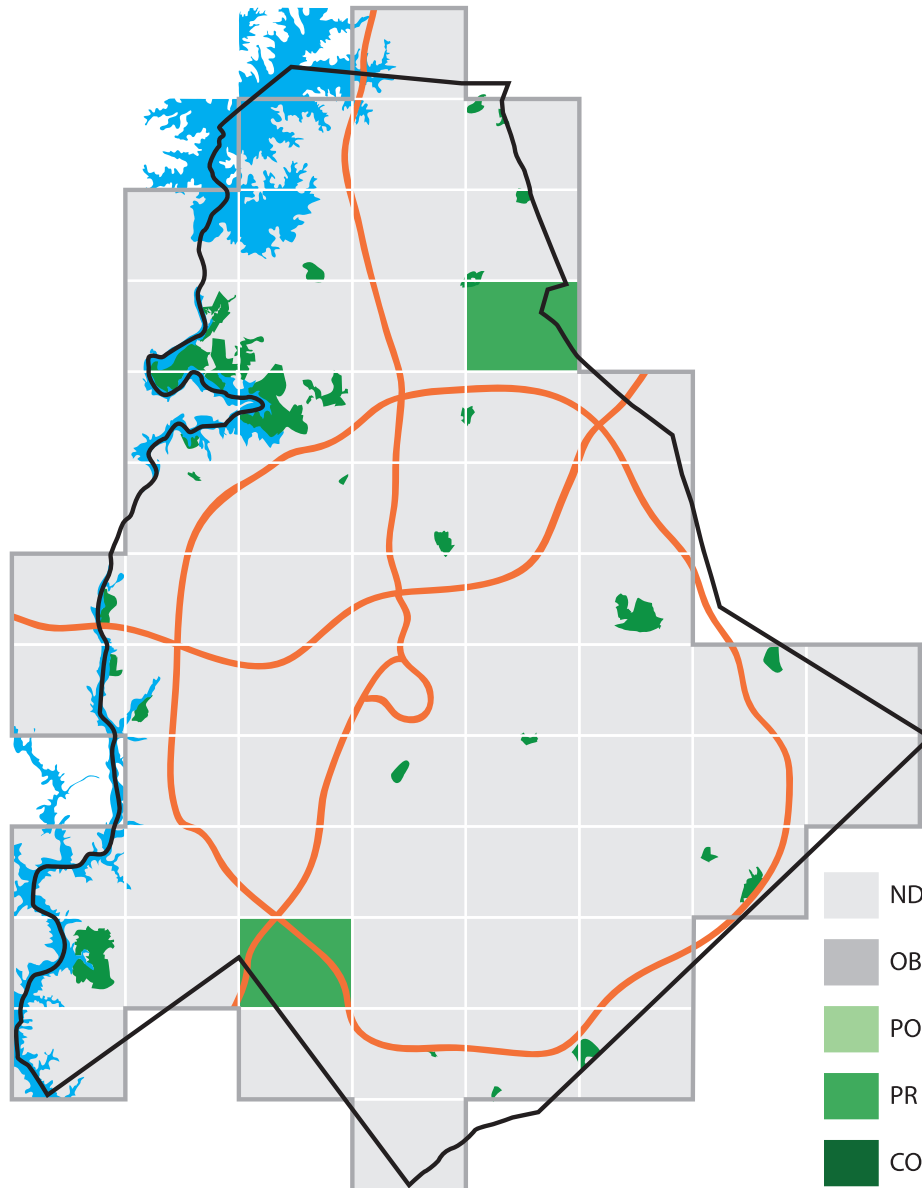
**Status:** Migrant, sporadic local Breeder

**Abundance:** Very Rare to Uncommon

**Habitat:** Shrubby thickets near ponds or along stream corridors

**Breeding Bird Atlas:** *Very Local* (PR/2, CO/0)

**New Breeding Bird:** First confirmed nesting in June 2004, sporadic breeder, not expected to establish a long-term breeding population here.



# Eastern Phoebe *Sayornis phoebe*

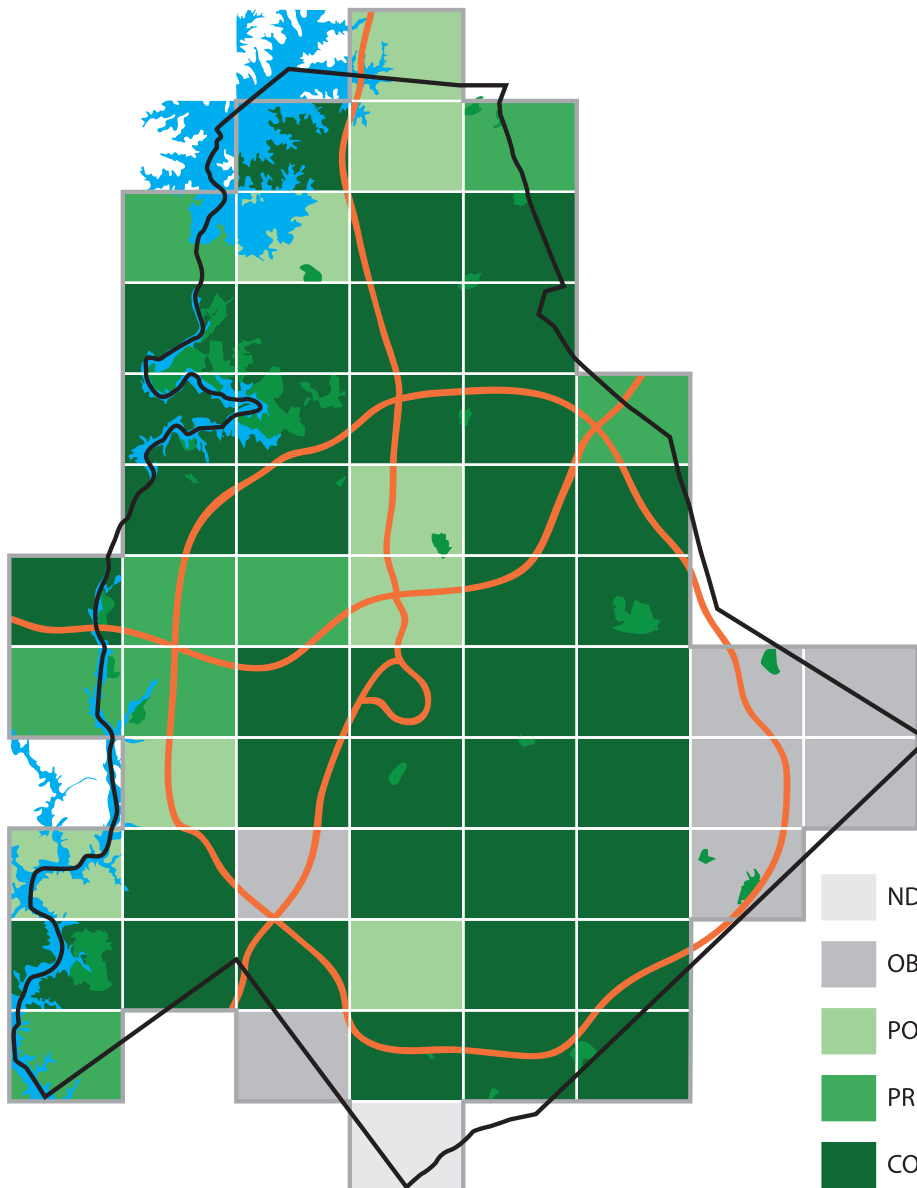


**Status:** Resident

**Abundance:** Fairly Common

**Habitat:** Open habitats nesting under bridges, building eaves, horizontal ledges

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/8, CO/38)



# Great Crested Flycatcher *Myiarchus crinitus*

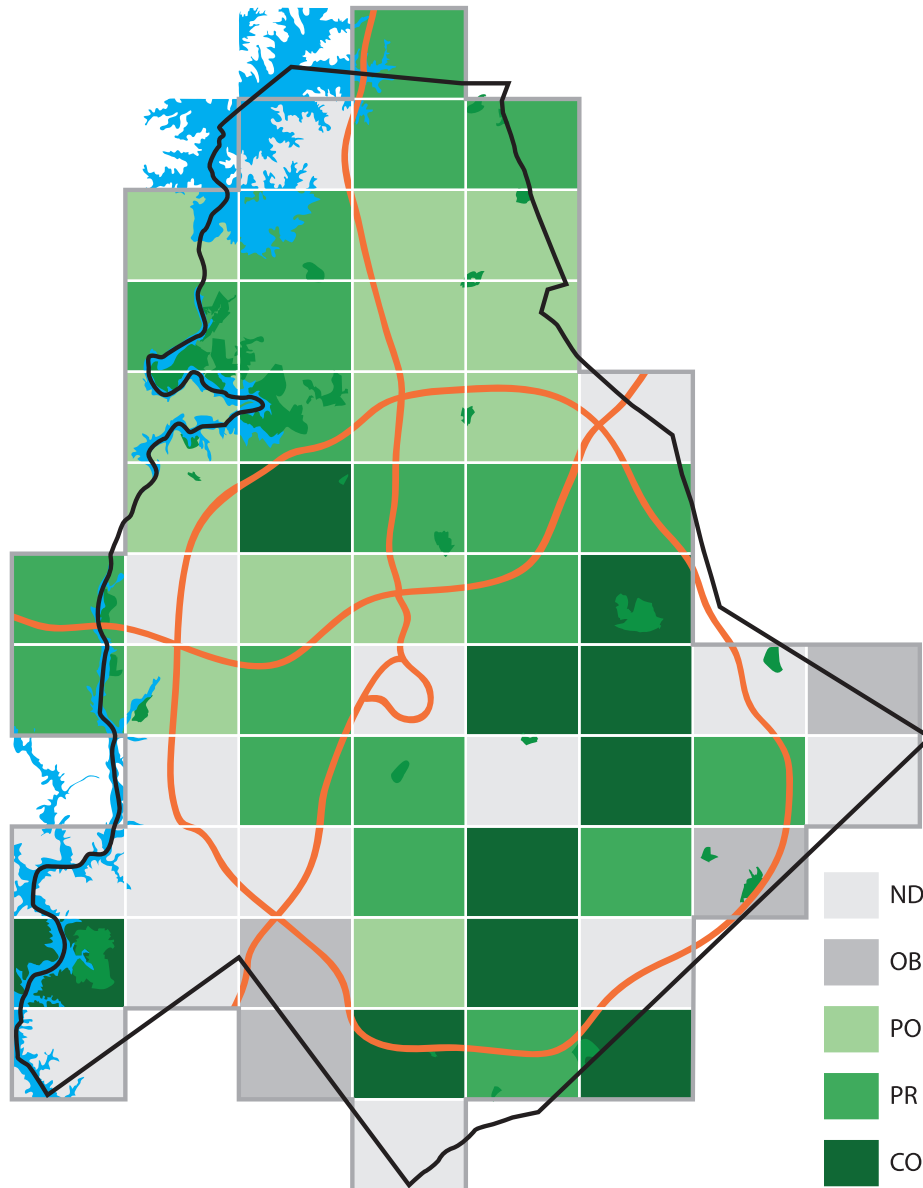


**Status:** Breeder

**Abundance:** Fairly Common

**Habitat:** Open woodlands and wooded groves, trees in residential areas with nest cavities

**Breeding Bird Atlas:** *Fairly Widespread (PR/20, CO/10)*



# Eastern Kingbird *Tyrannus tyrannus*



**Status:** Breeder

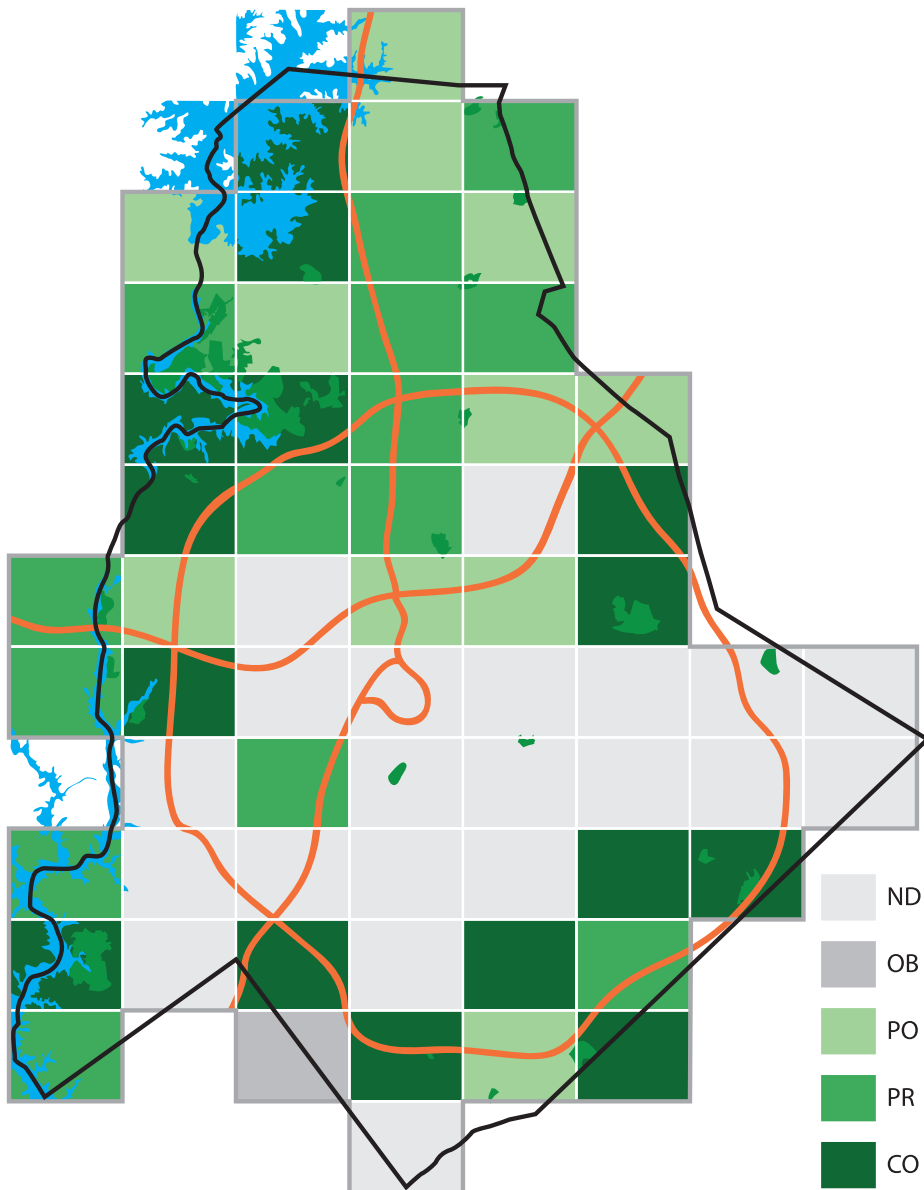
**Abundance:** Uncommon to Fairly Common

**Habitat:** Open areas, fences, wires, snags

**Breeding Bird Atlas:** *Fairly Widespread (PR/14, CO/15)*



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# Loggerhead Shrike *Lanius ludovicianus*



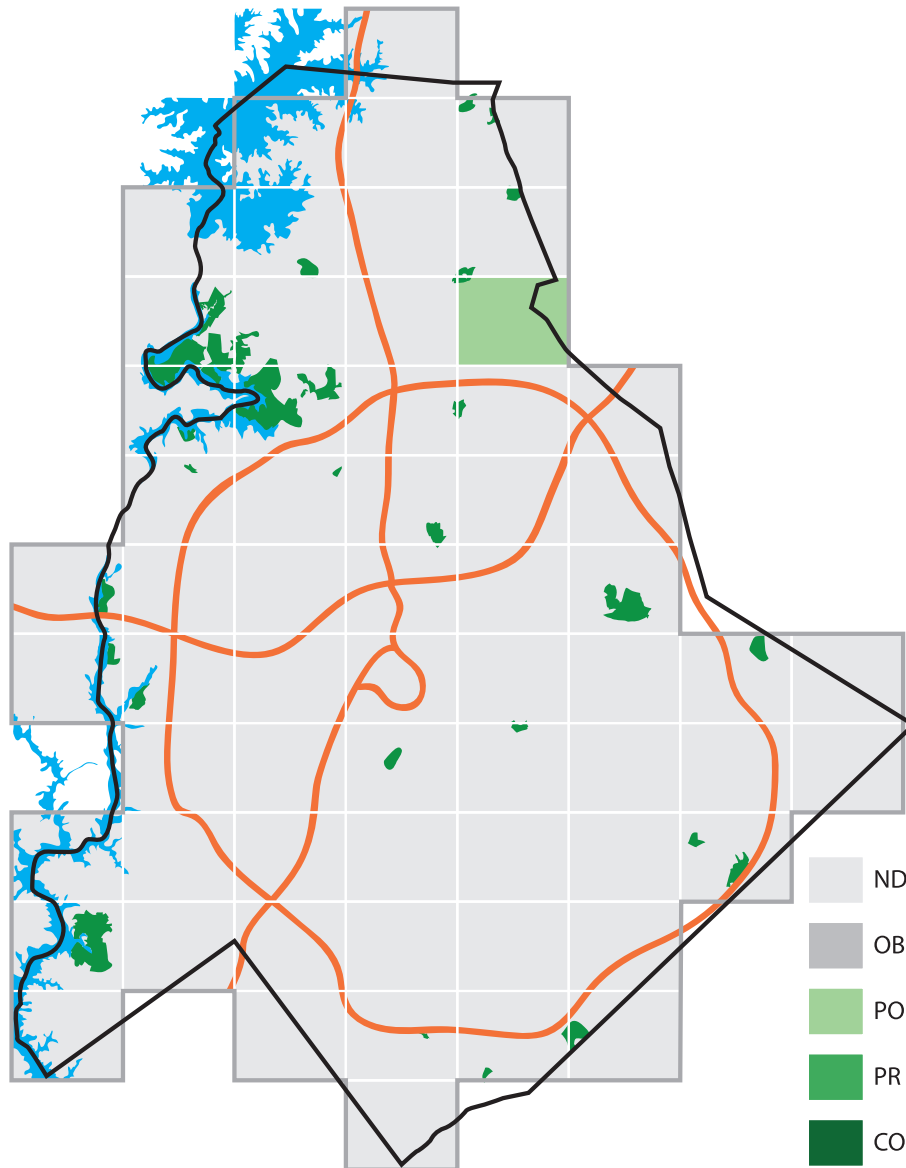
**Status:** Resident

**Abundance:** Uncommon/Rare in urban areas

**Habitat:** Open country, weedy fields, pastures

**Breeding Bird Atlas:** *Possible* (PR/0, CO/0)

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# White-eyed Vireo *Vireo griseus*

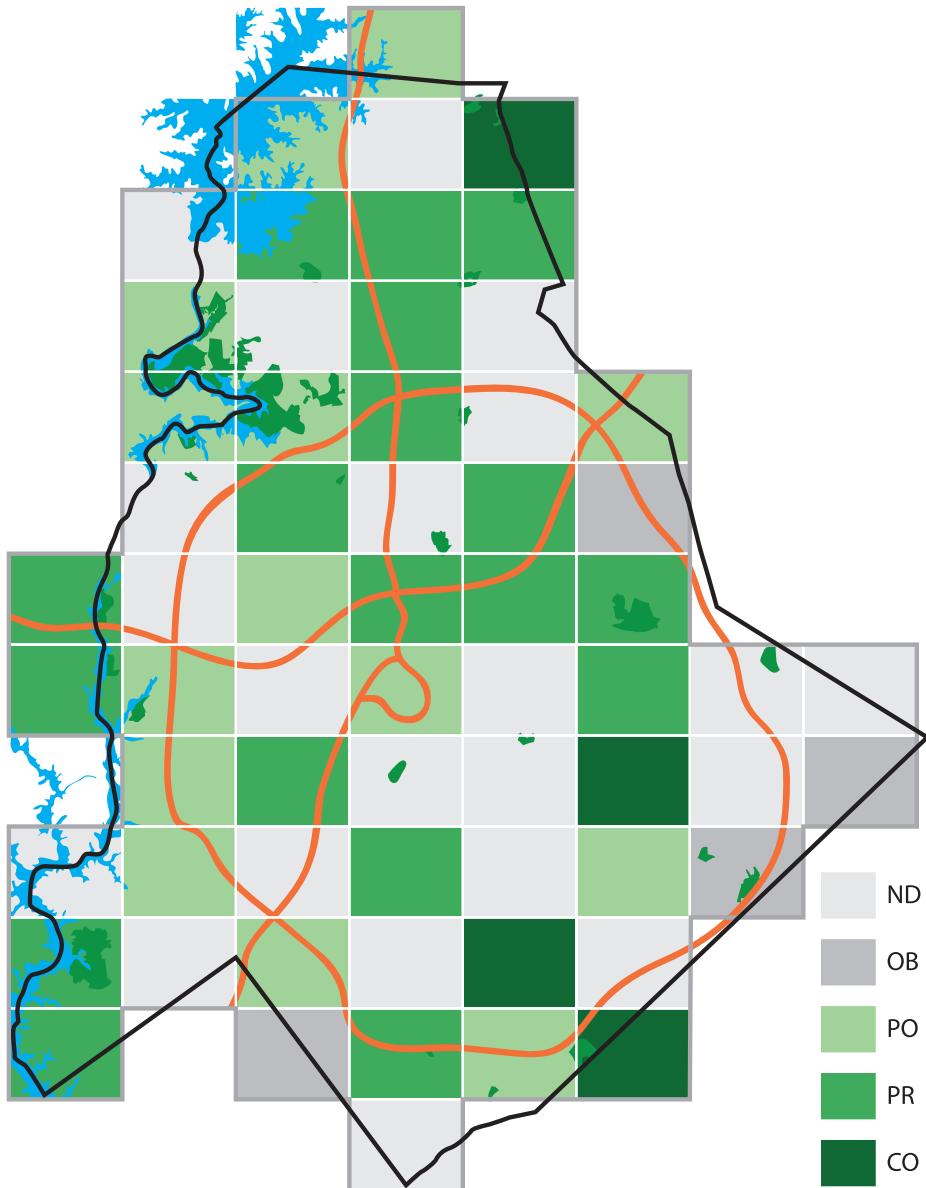


**Status:** Breeder, Winter Visitor

**Abundance:** Fairly Common to Common

**Habitat:** Dense thickets, and moist, shrubby, vine-covered tangles

**Breeding Bird Atlas:** *Fairly Widespread (PR/18, CO/4)*



# Yellow-throated Vireo *Vireo flavifrons*



**Status:** Breeder

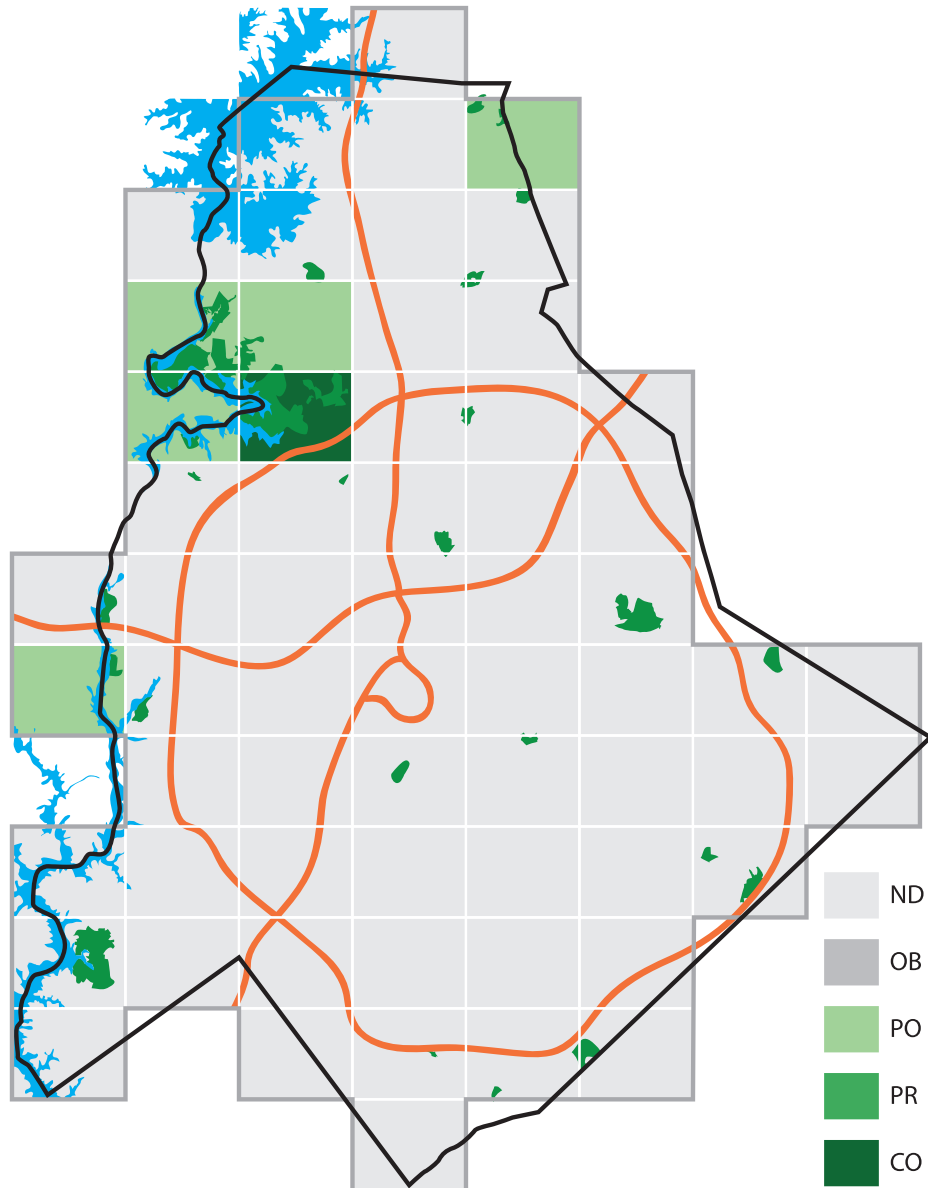
**Abundance:** Uncommon to Fairly Common

**Habitat:** Mature, open deciduous woodlands

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)



**Imperiled**



# Red-eyed Vireo *Vireo olivaceus*



**Status:** Breeder

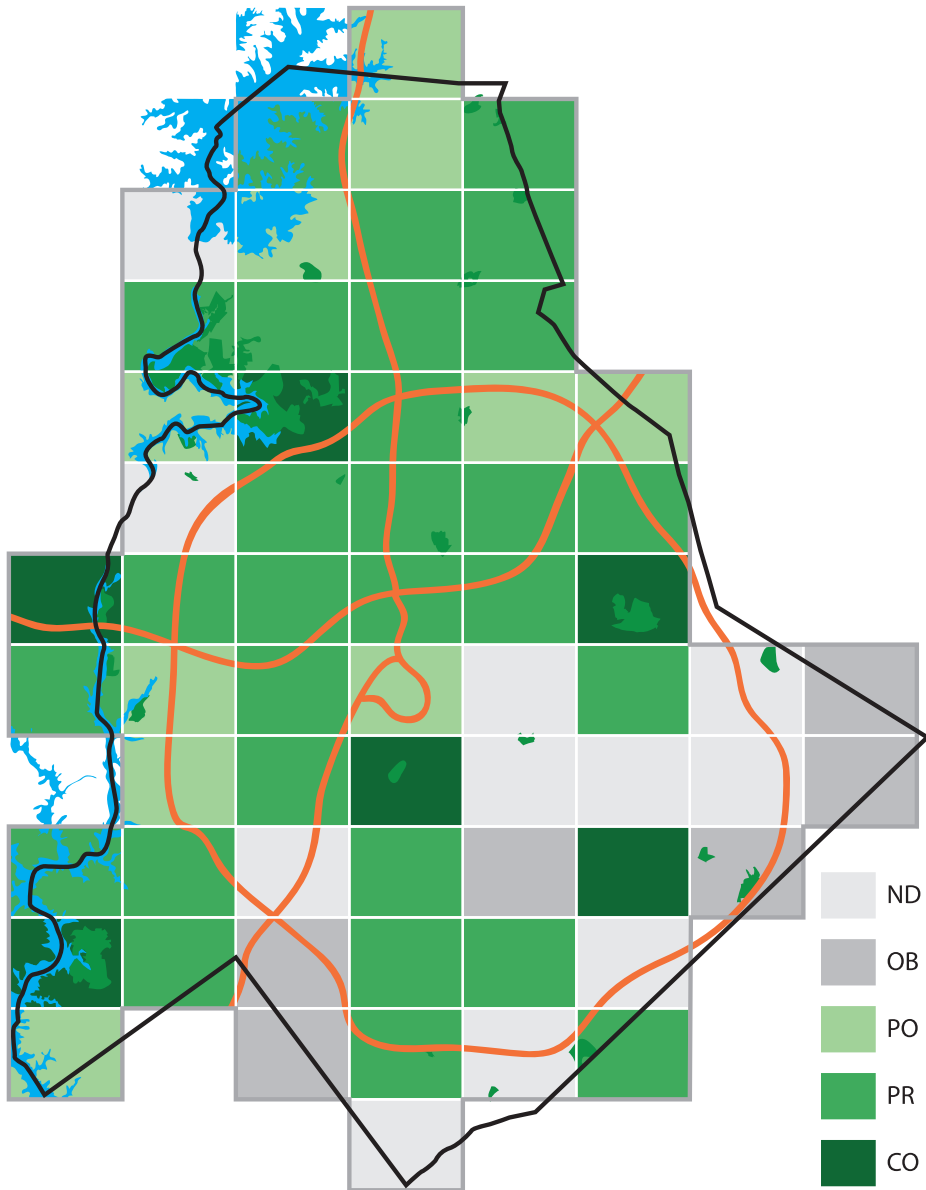
**Abundance:** Common to Very Common

**Habitat:** Hardwood forests and mixed pine hardwood forests

**Breeding Bird Atlas:** *Widespread* (PR/29, CO/6)



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# Blue Jay *Cyanocitta cristata*

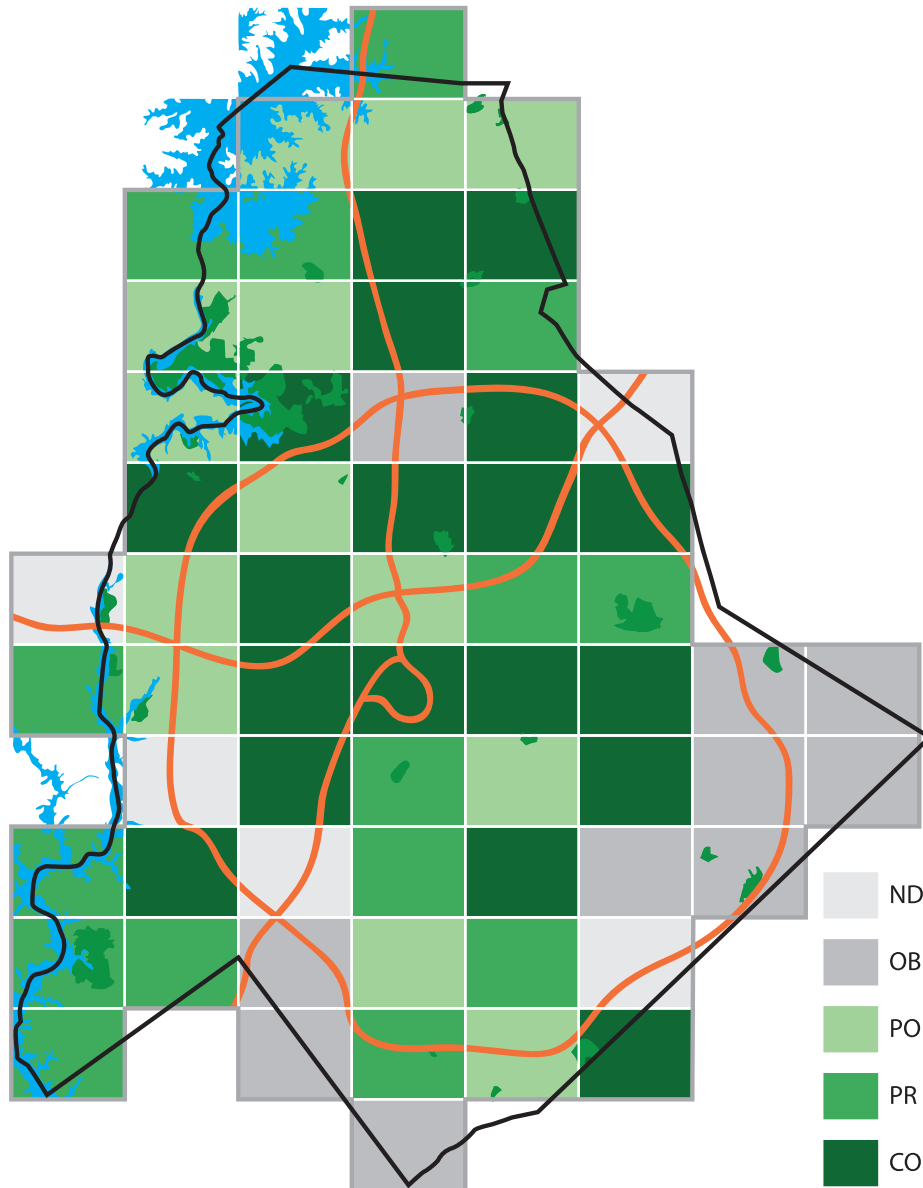


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Woodlands, parks, residential areas

**Breeding Bird Atlas:** *Widespread* (PR/15, CO/19)



# American Crow *Corvus brachyrhynchos*



**Status:** Resident

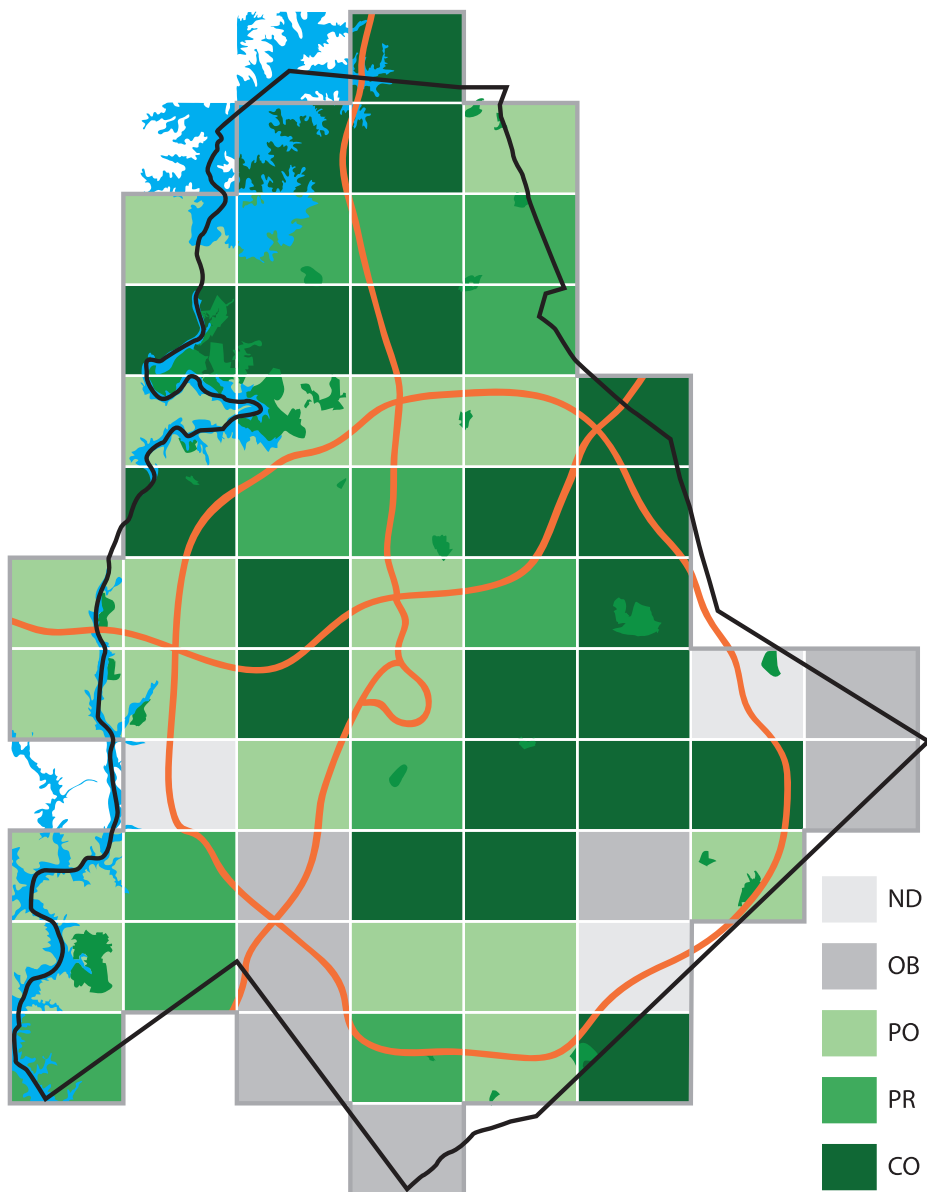
**Abundance:** Very Common to Abundant

**Habitat:** Pines and mixed forest when breeding/  
roosting—open habitat when foraging

**Breeding Bird Atlas:** *Widespread* (PR/12, CO/21)



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# Fish Crow *Corvus ossifragus*

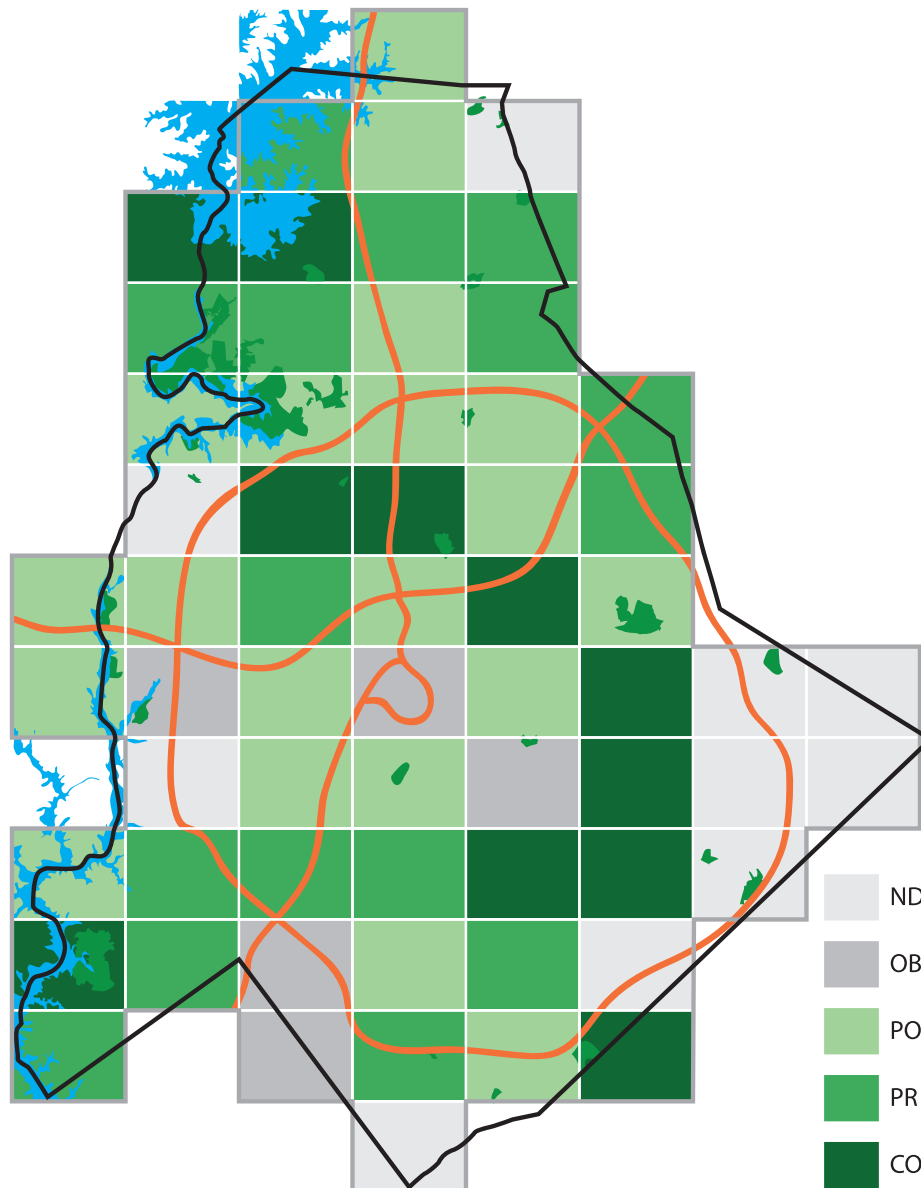


**Status:** Breeder, Migrant, increasing Winter Resident

**Abundance:** Common

**Habitat:** Lakes, ponds, landfills, shopping centers, residential neighborhoods

**Breeding Bird Atlas:** *Fairly Widespread* (PR/16, CO/11)



# Common Raven *Corvus corax*



**Status:** Resident

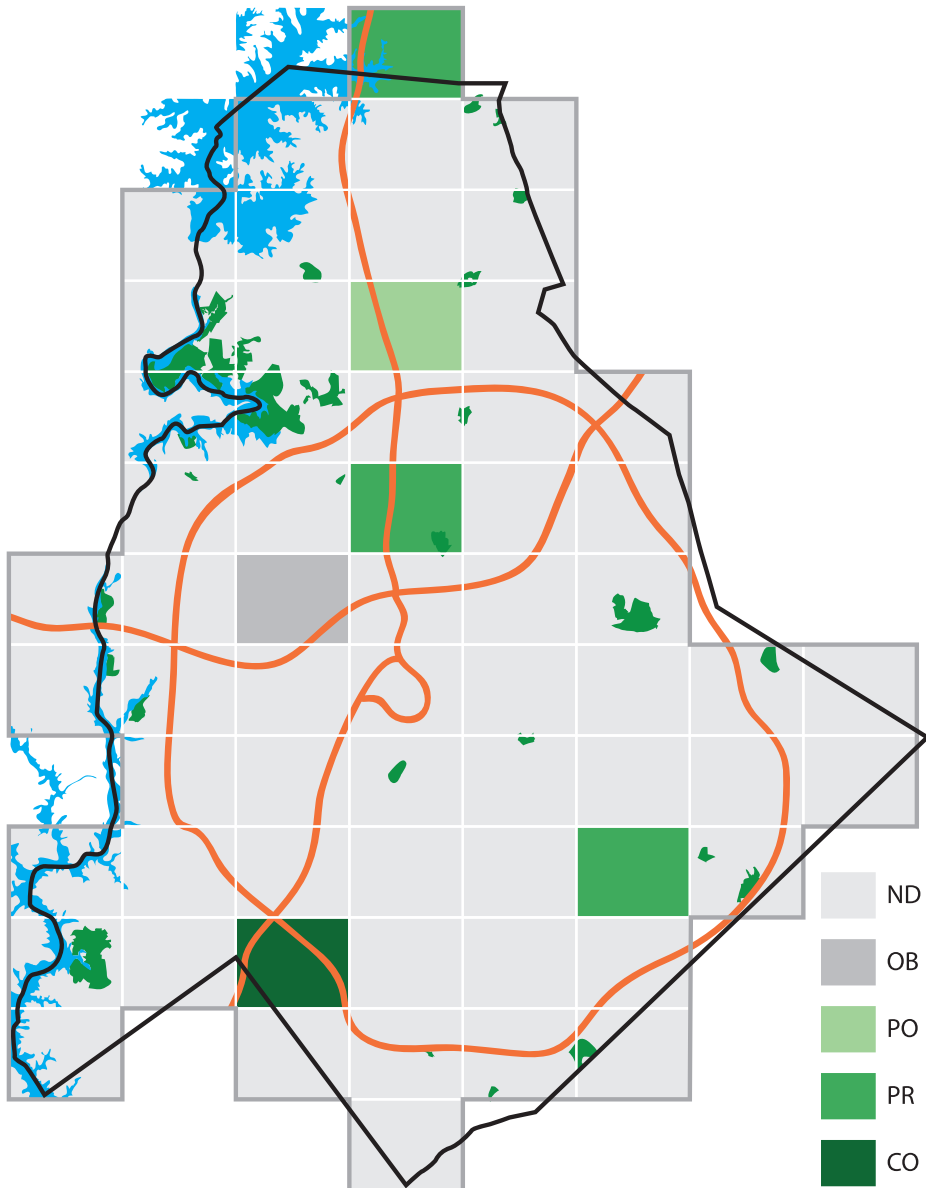
**Abundance:** Rare to Uncommon

**Habitat:** Breeds on ledges in local rock quarries—forages in open areas

**Breeding Bird Atlas:** *Local (PR/3, CO/1)*

**New Breeding Bird:** First confirmed nesting March 2010. Now nests annually.

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# Horned Lark *Eremophila alpestris*



**Status:** Resident

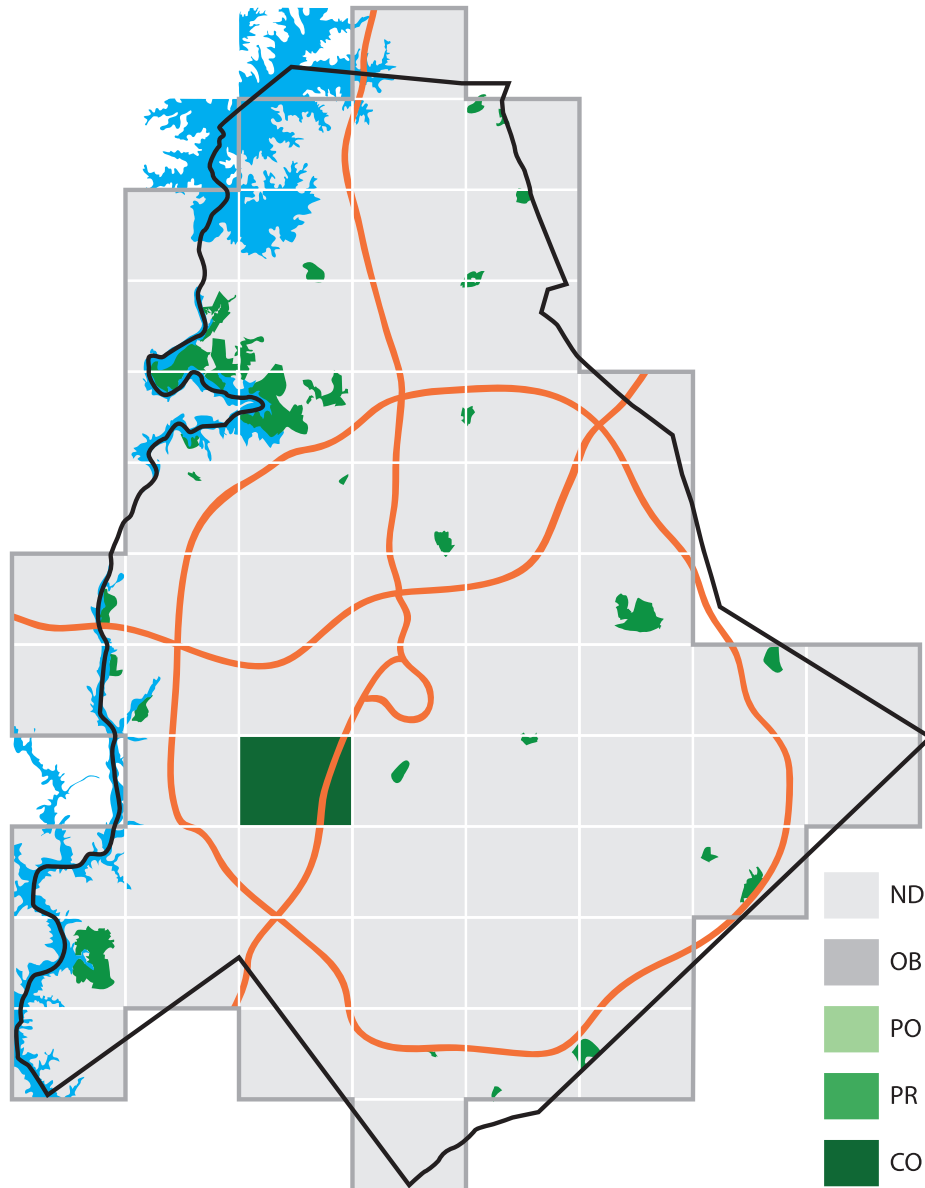
**Abundance:** Rare to Uncommon

**Habitat:** Barren stubble fields, closely cropped pasture, patches of dirt and fine gravel, airports, poorly maintained athletic fields

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)

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**Imperiled** 



# Purple Martin *Progne subis*



**Status:** Breeder

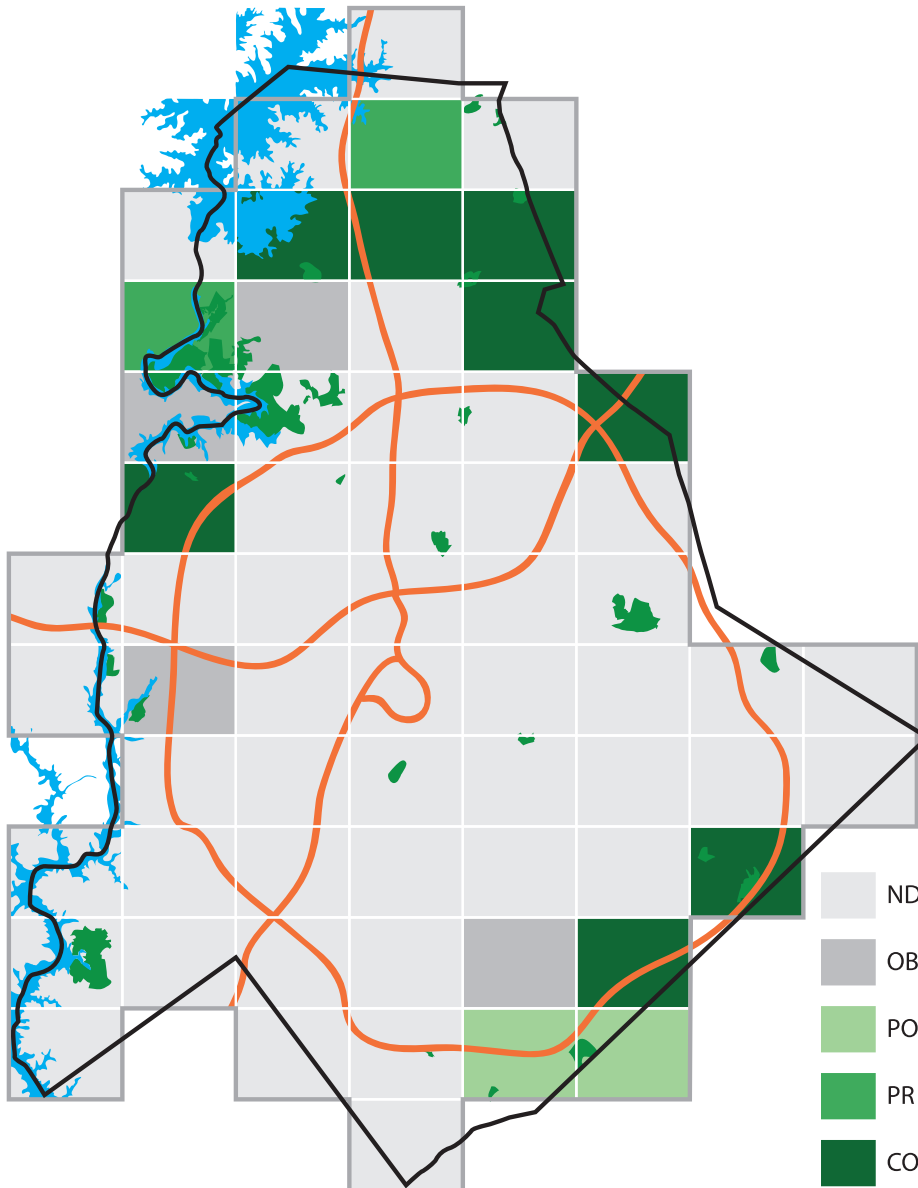
**Abundance:** Uncommon to Fairly Common

**Habitat:** Open country with man-made gourds or nest boxes

**Breeding Bird Atlas:** *Somewhat Local* (PR/2, CO/8)



**Vulnerable**



# Tree Swallow *Tachycineta bicolor*



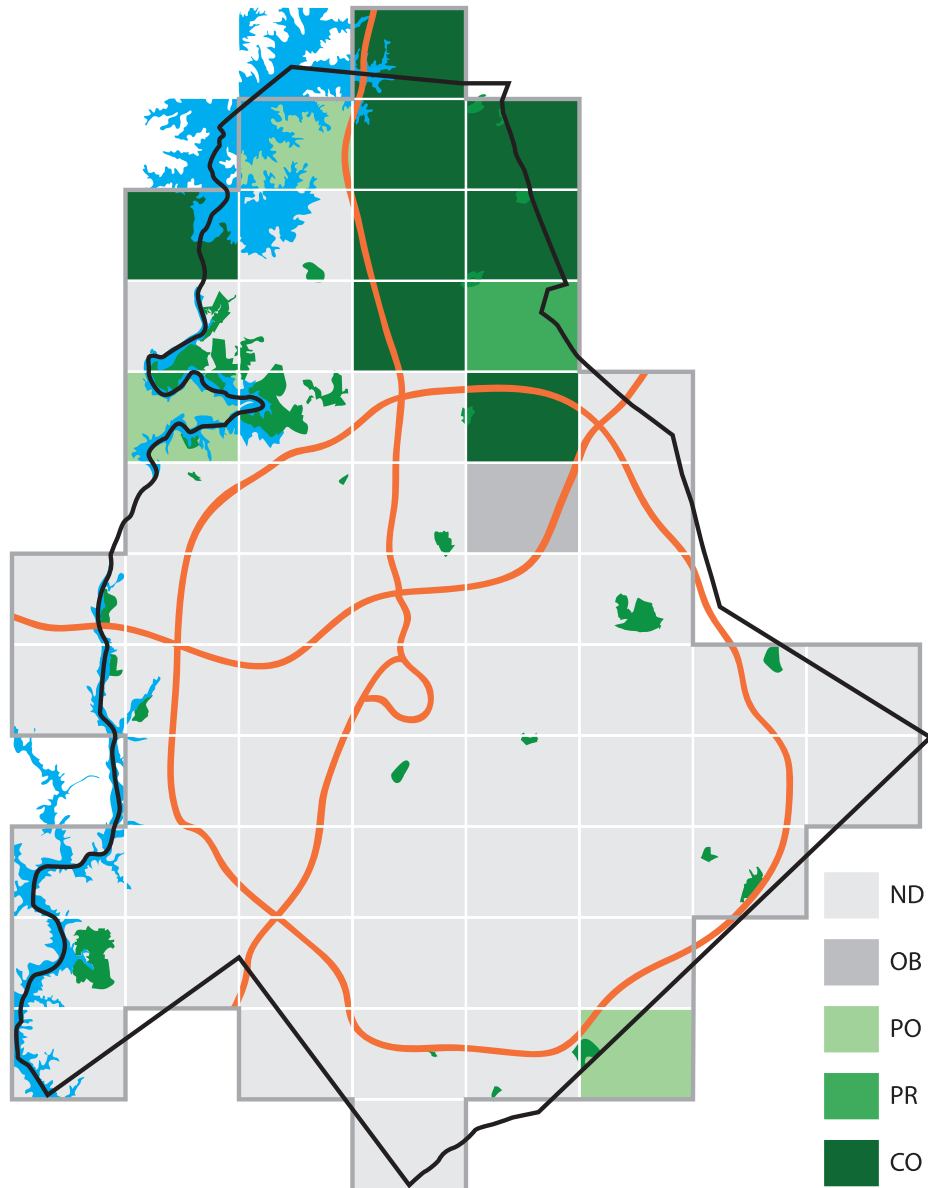
**Status:** Migrant, local Breeder, Winter Visitor

**Abundance:** Uncommon to Fairly Common

**Habitat:** Open water, fields

**Breeding Bird Atlas:** Local (PR/1, CO/8)

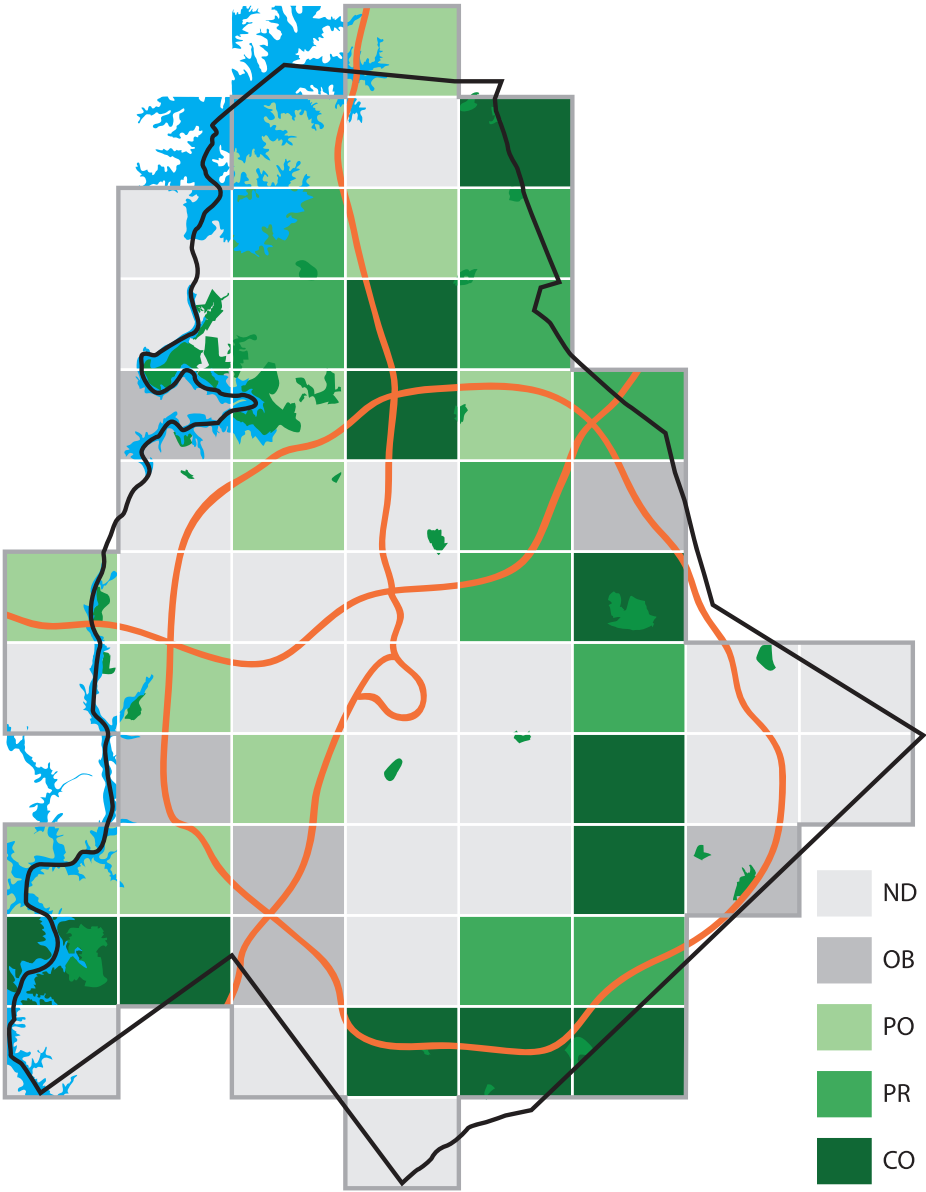
**New Breeding Bird:** First confirmed nesting June 2003. Now nests annually.



# Northern Rough-winged Swallow *Stelgidopteryx serripennis*



**Status:** Breeder  
**Abundance:** Fairly Common  
**Habitat:** Open water, fields  
**Breeding Bird Atlas:** *Fairly Widespread (PR/10, CO/11)*





# Cliff Swallow *Petrochelidon pyrrhonota*



**Status:** Breeder

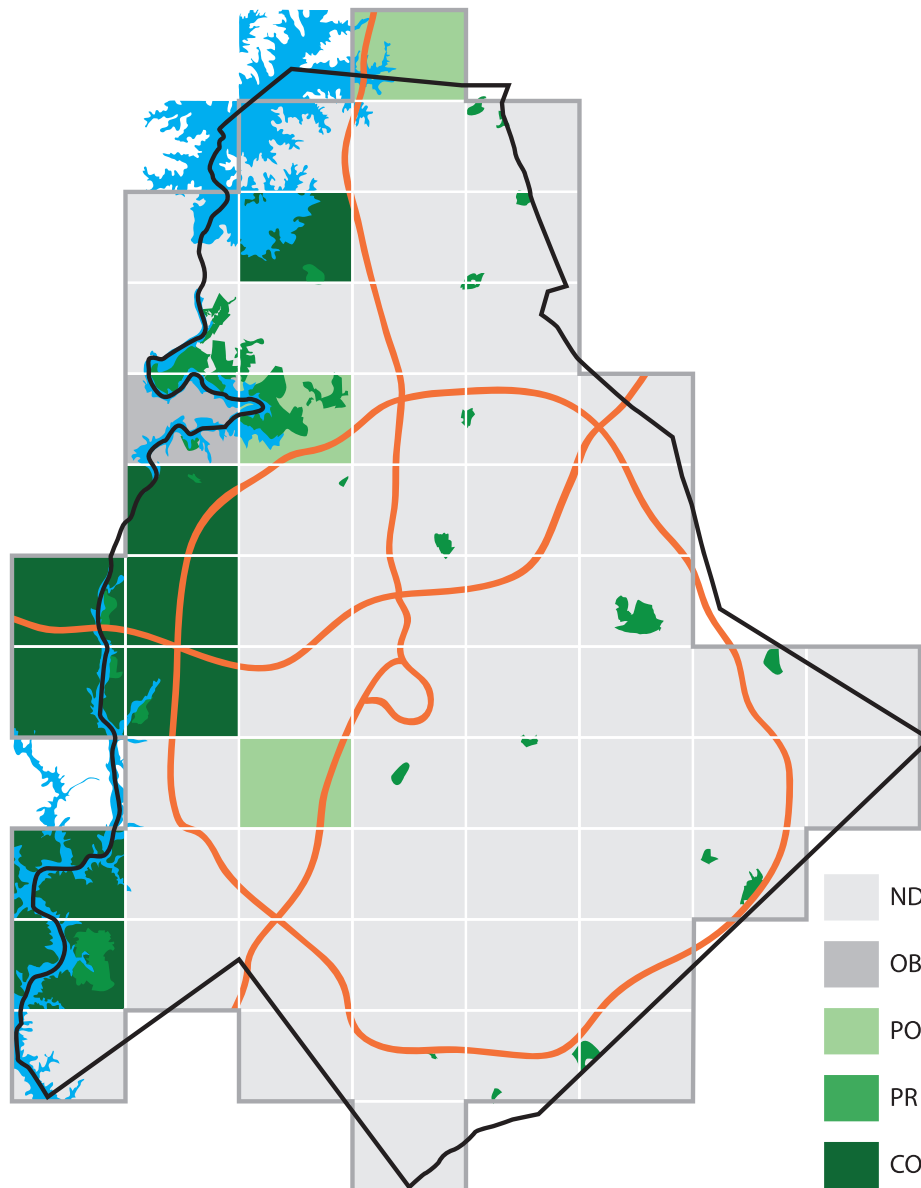
**Abundance:** Uncommon to Fairly Common

**Habitat:** Open water, fields

**Breeding Bird Atlas:** Local (PR/0, CO/8)



**Vulnerable** 



# Barn Swallow *Hirundo rustica*



**Status:** Breeder

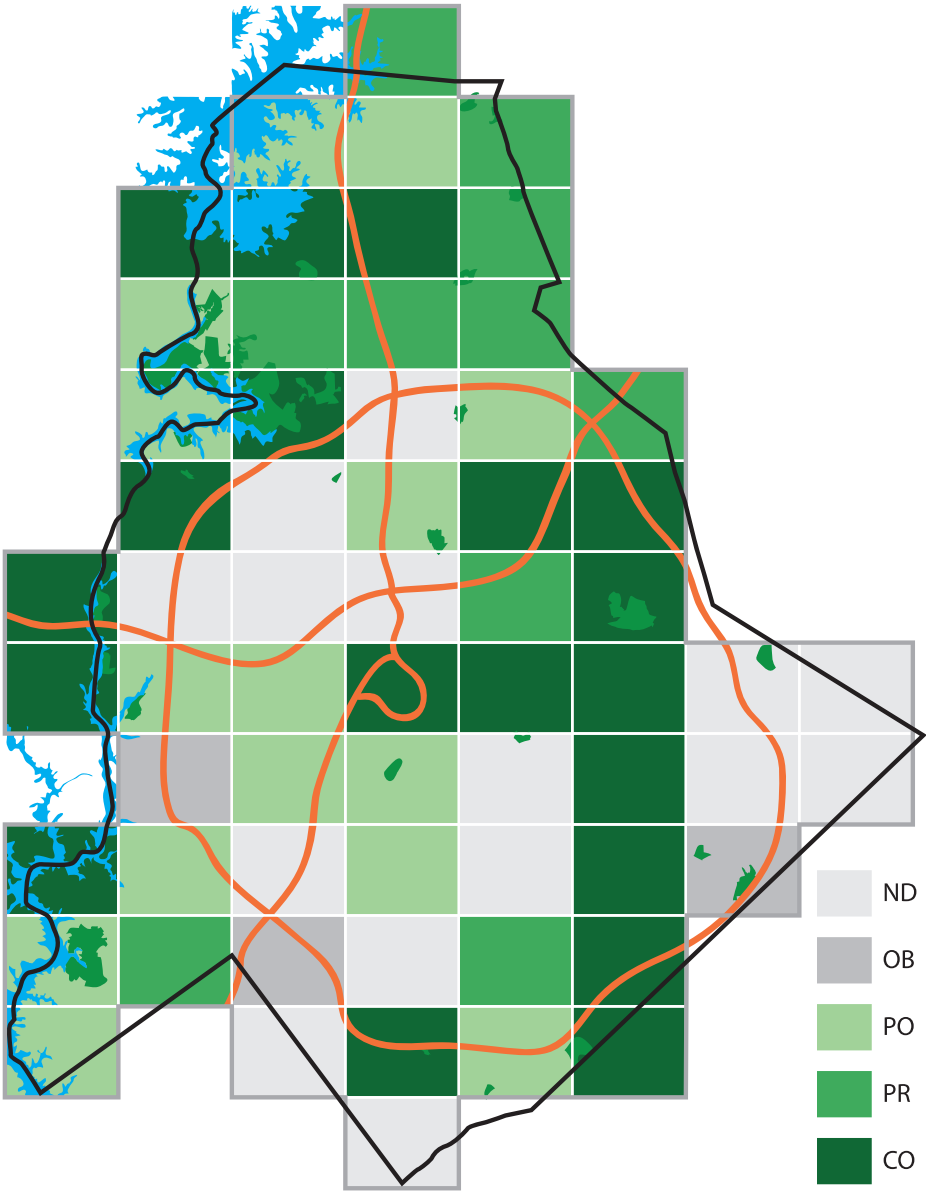
**Abundance:** Common

**Habitat:** Open water, fields

**Breeding Bird Atlas:** *Fairly Widespread (PR/10, CO/19)*



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# Carolina Chickadee *Poecile carolinensis*

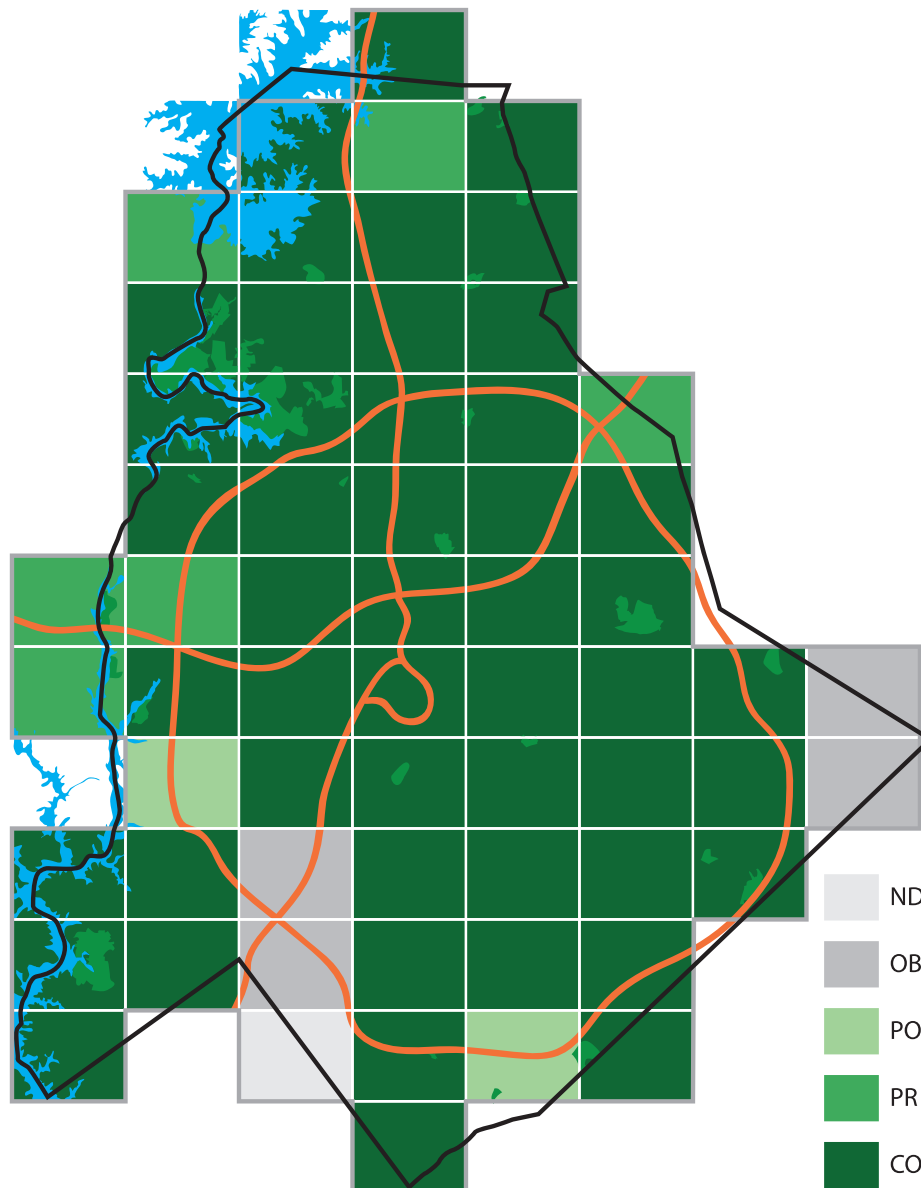


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Forest, parks, wooded neighborhoods

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/6, CO/49)



# Tufted Titmouse *Baeolophus bicolor*

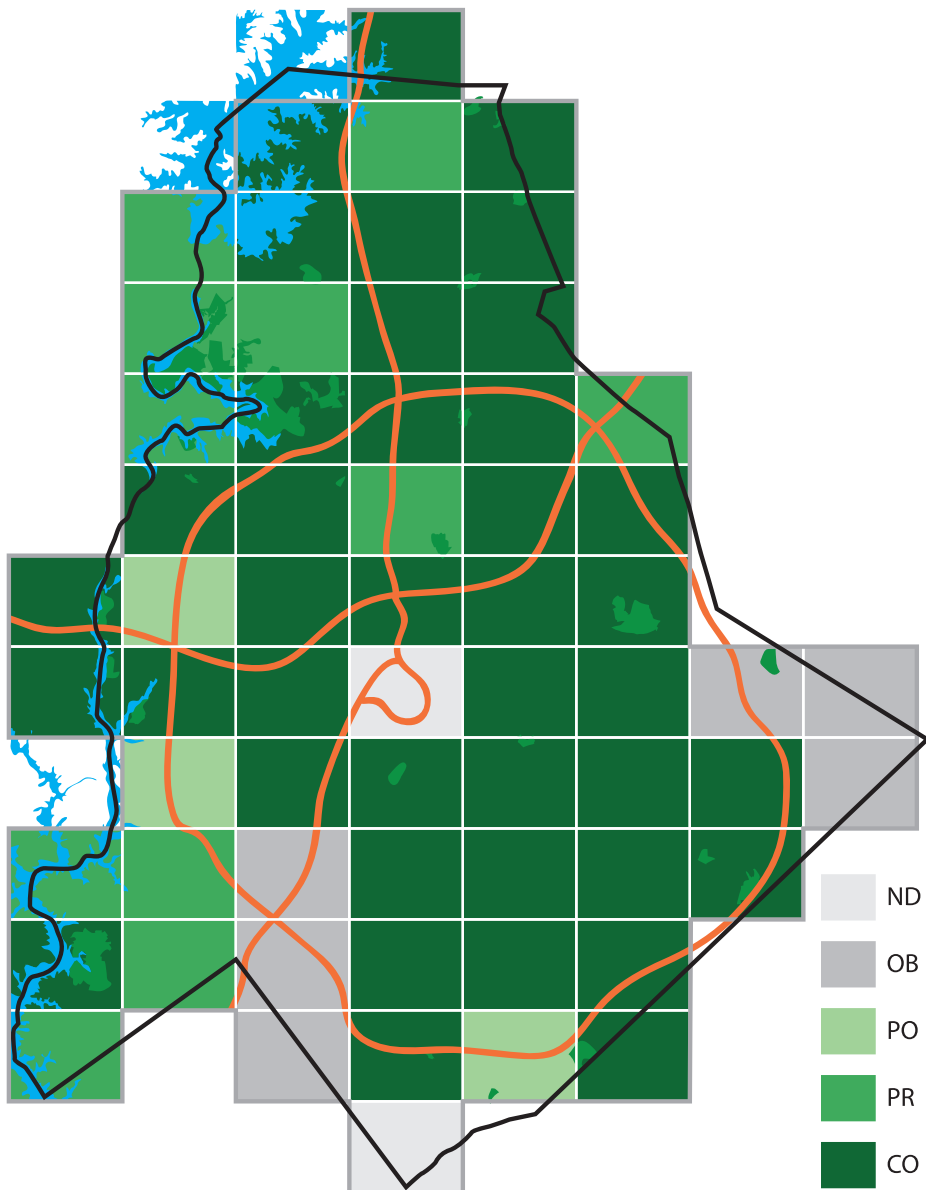


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Forest, parks, wooded neighborhoods

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/11, CO/40)



# White-breasted Nuthatch *Sitta carolinensis*

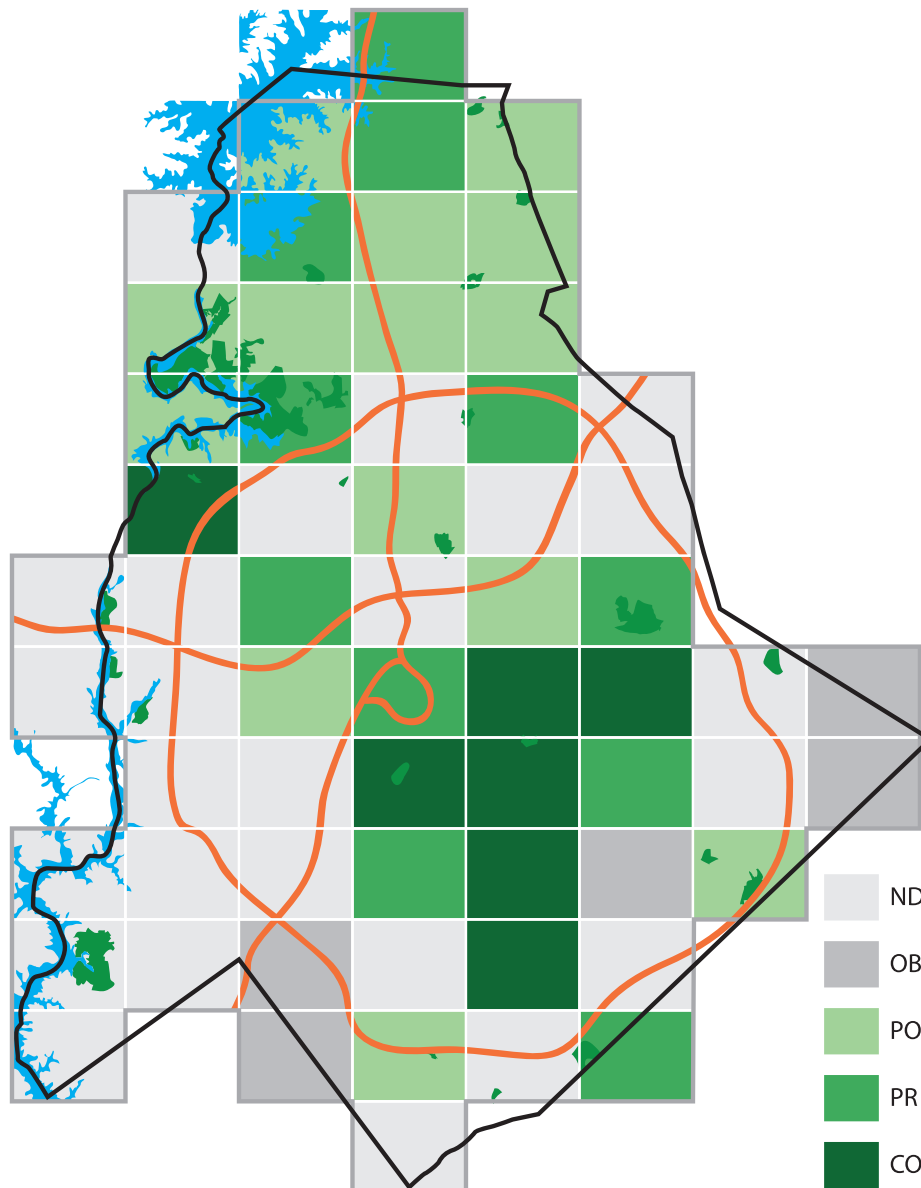


**Status:** Resident

**Abundance:** Fairly Common

**Habitat:** Mature forests

**Breeding Bird Atlas:** *Somewhat Local* (PR/11, CO/7)



# Brown-headed Nuthatch *Sitta pusilla*

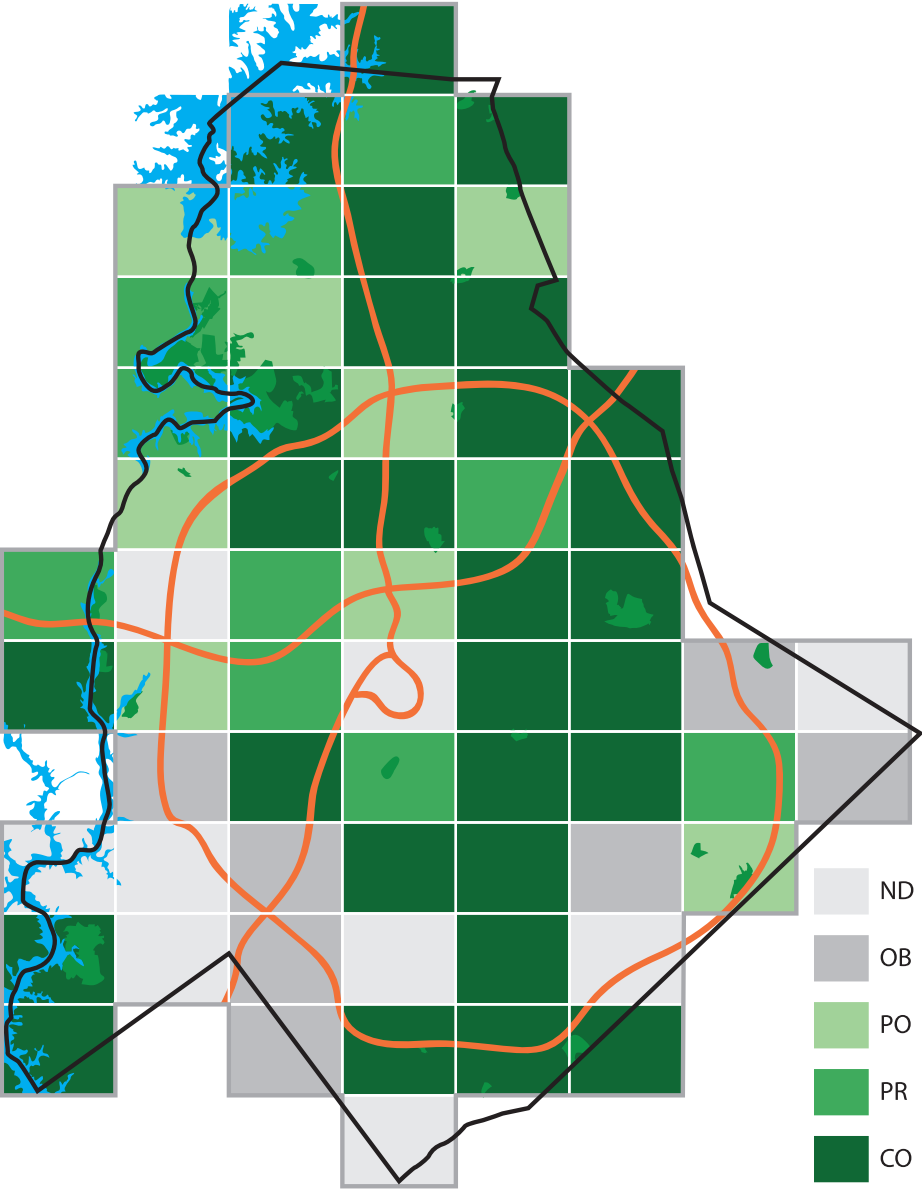


**Status:** Resident

**Abundance:** Uncommon to Fairly Common

**Habitat:** Coniferous or mixed woods

**Breeding Bird Atlas:** *Widespread* (PR/10, CO/28)



# House Wren *Columba livia*

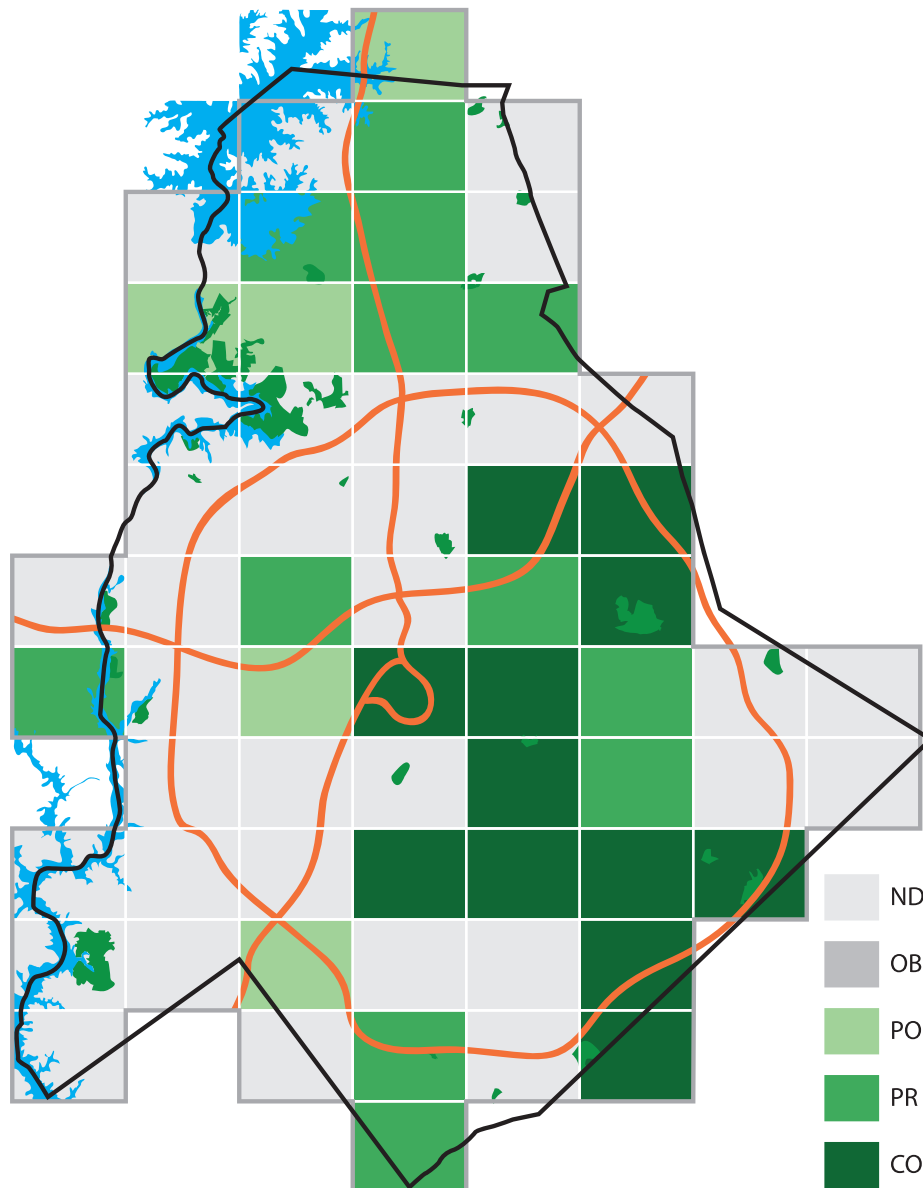


**Status:** Breeder, Winter Visitor

**Abundance:** Fairly Common

**Habitat:** Brushy areas in cities, towns, farmland

**Breeding Bird Atlas:** *Fairly Widespread* (PR/12, CO/12)



# Carolina Wren *Thryothorus ludovicianus*

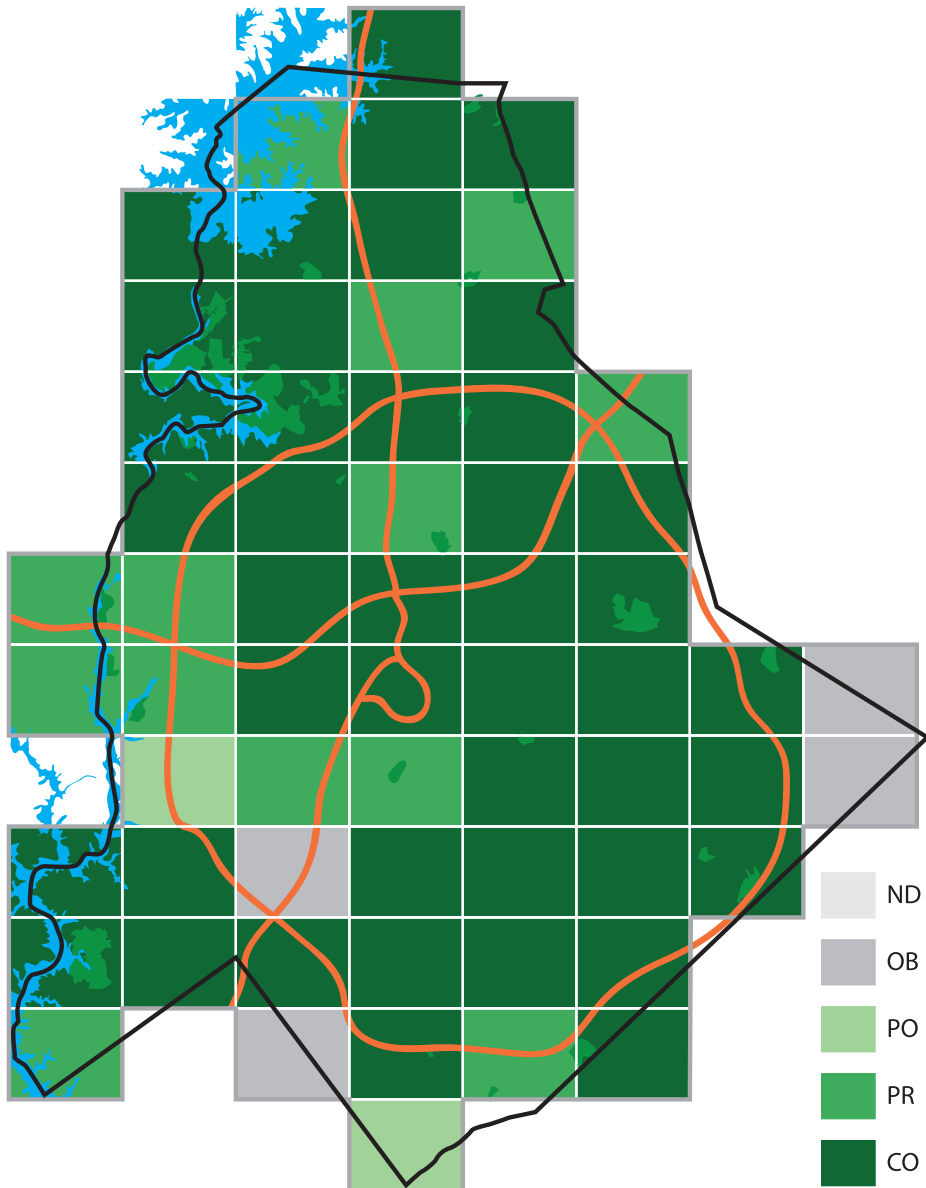


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Woodlands, overgrown fields, field edges, residential areas

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/13, CO/43)





# Blue-gray Gnatcatcher *Polioptila caerulea*

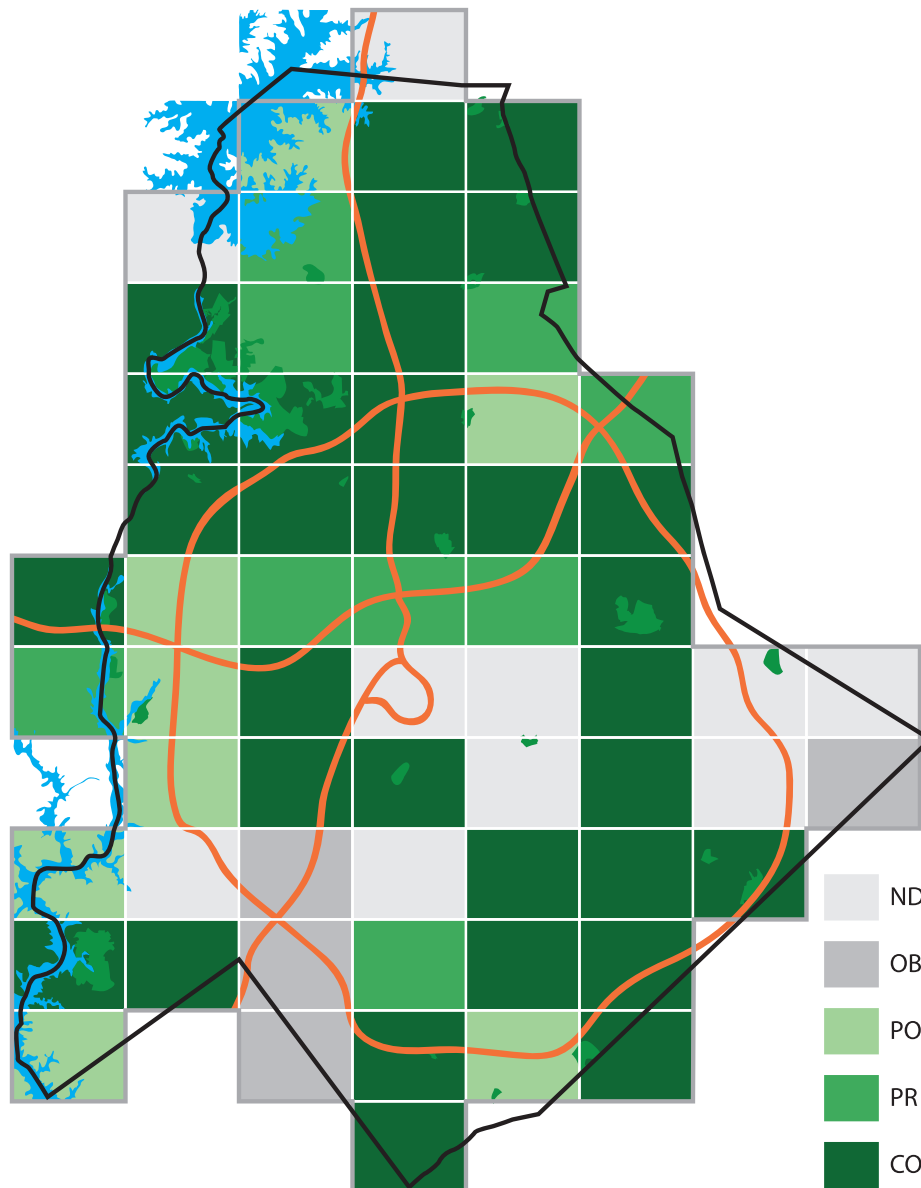


**Status:** Breeder

**Abundance:** Common

**Habitat:** Deciduous forests and woodlands, often near water

**Breeding Bird Atlas:** *Widespread* (PR/9, CO/31)



# Eastern Bluebird *Sialia sialis*



**Status:** Resident

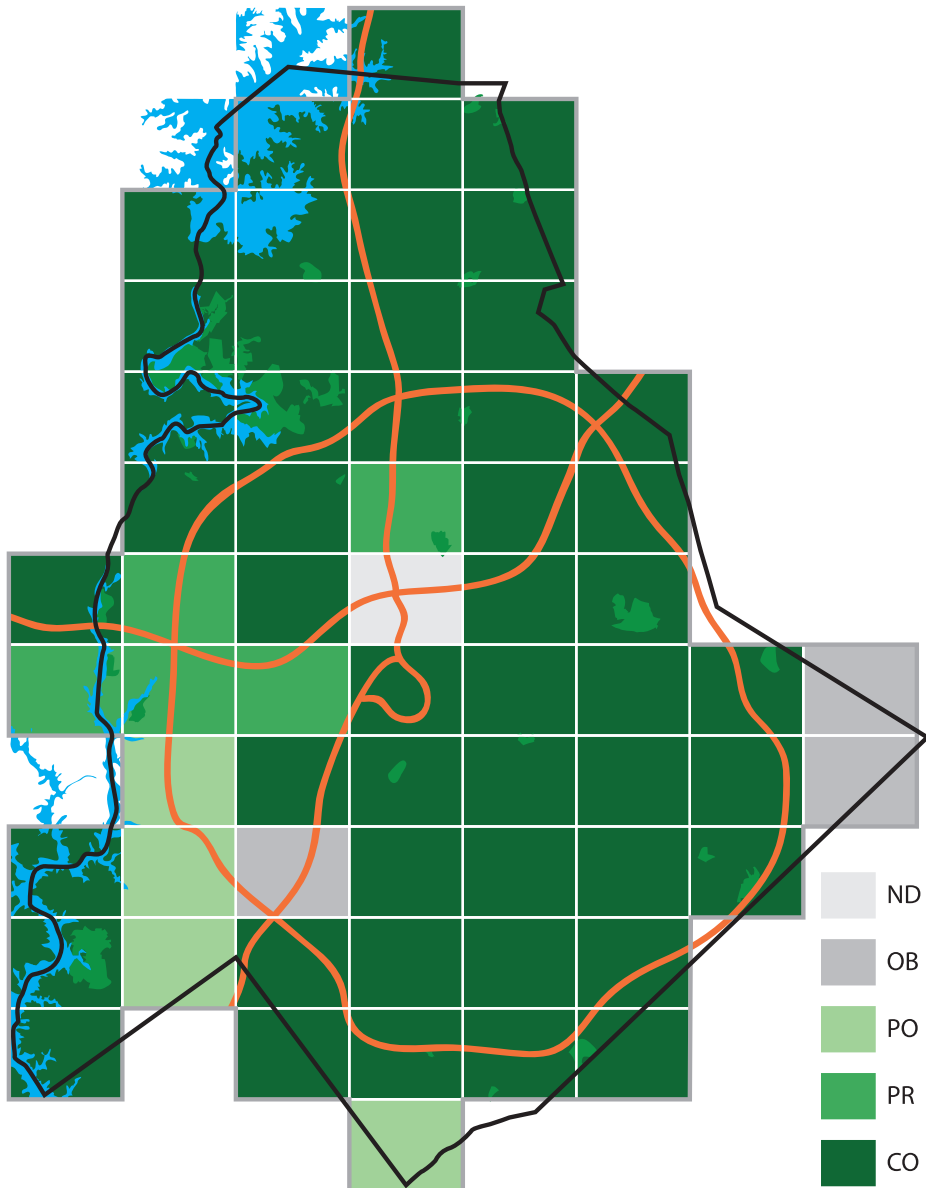
**Abundance:** Common to Very Common

**Habitat:** Open habitat; including fields, farmland, residential areas, golf courses, parks, forest edge

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/5, CO/49)



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# Wood Thrush *Hylocichla mustelina*

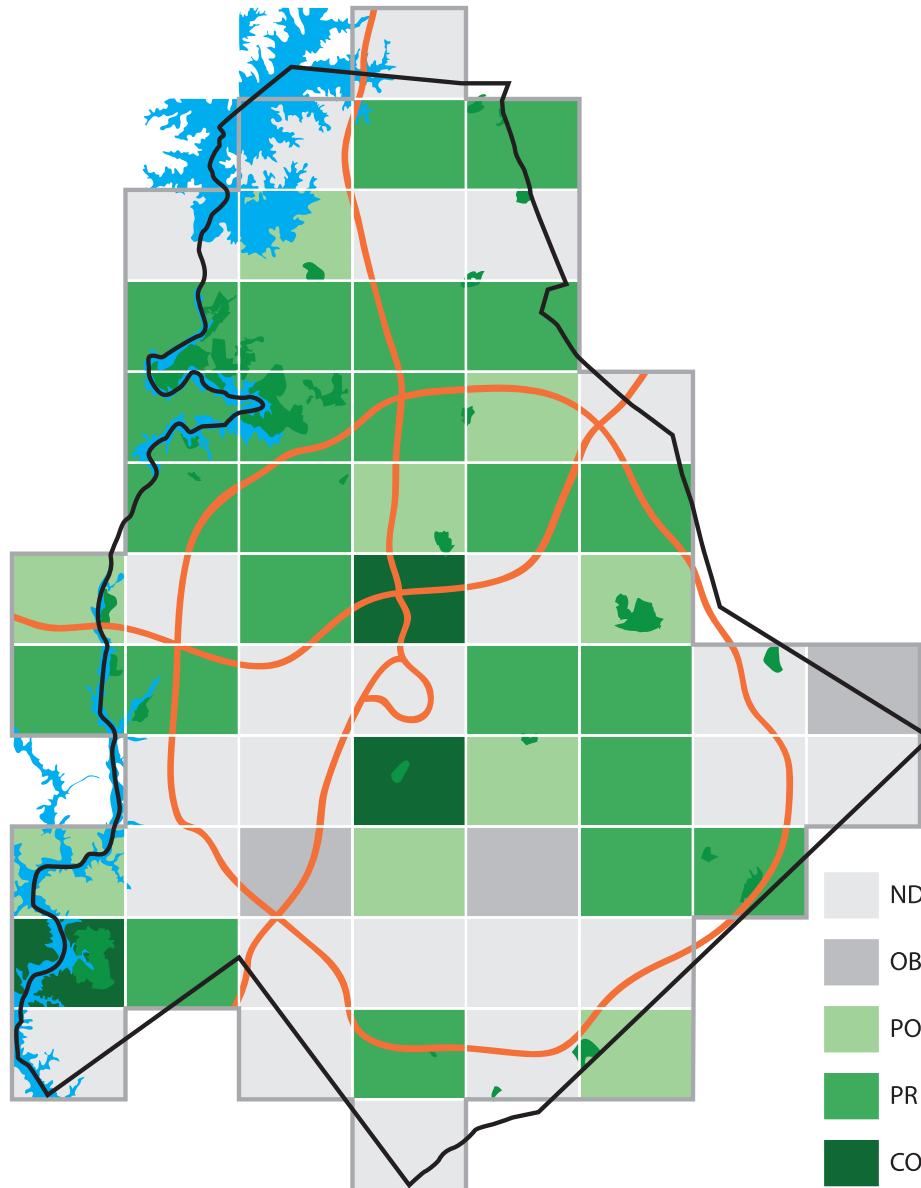


**Status:** Breeder

**Abundance:** Uncommon to Fairly Common

**Habitat:** Deciduous forests with developed understory and forested neighborhoods

**Breeding Bird Atlas:** *Fairly Widespread (PR/23, CO/3)*



# American Robin *Turdus migratorius*

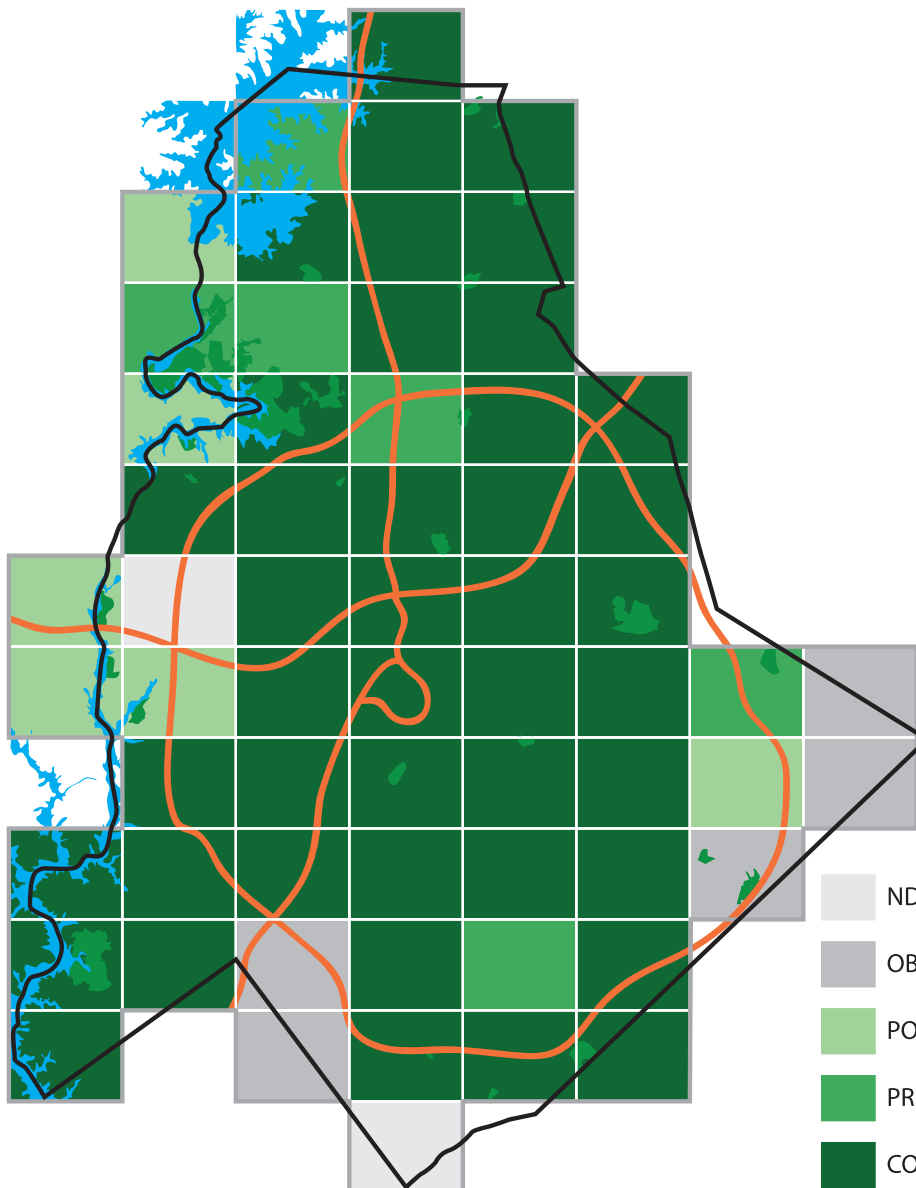


**Status:** Resident

**Abundance:** Very Common to Abundant

**Habitat:** Trees and shrubs, open lawns, farmland, residential areas, parks, and more

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/6, CO/43)



# Gray Catbird *Dumetella carolinensis*

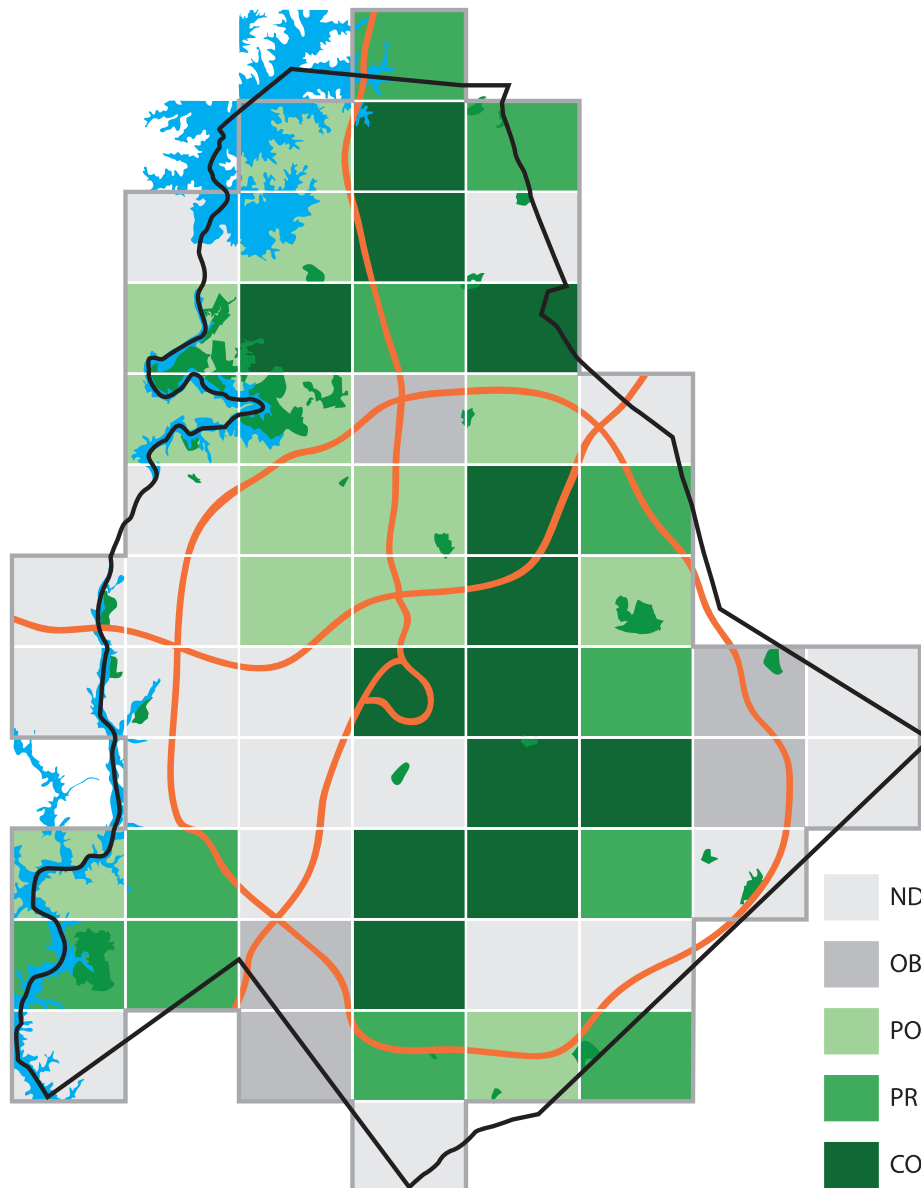


**Status:** Breeder, Winter Visitor

**Abundance:** Fairly Common

**Habitat:** Thickets (often moist), shrubs, residential areas

**Breeding Bird Atlas:** *Fairly Widespread (PR/11, CO/13)*



# Brown Thrasher *Toxostoma rufum*

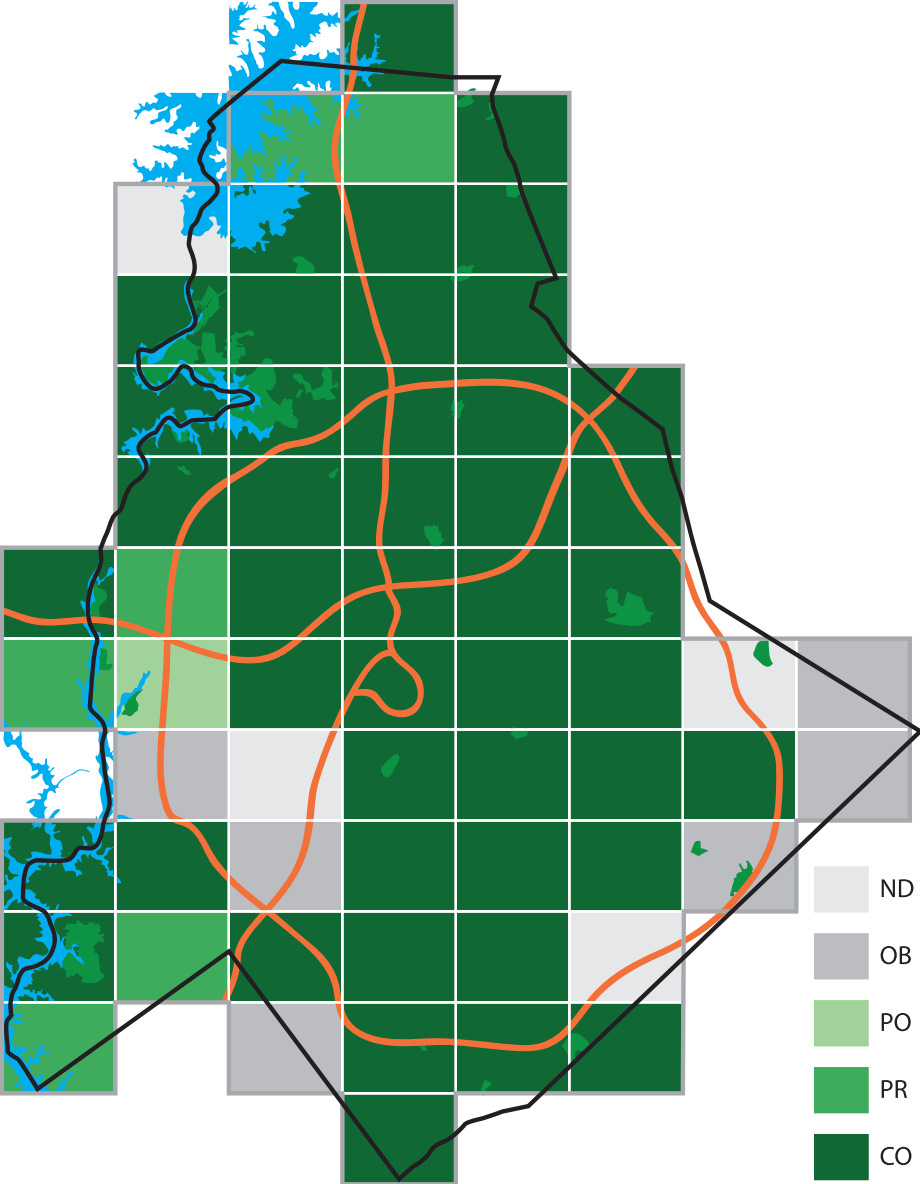


**Status:** Resident

**Abundance:** Common

**Habitat:** Brushy habitat, field edges, thickets (often dry), residential areas

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/6, CO/45)



# Northern Mockingbird *Mimus polyglottos*

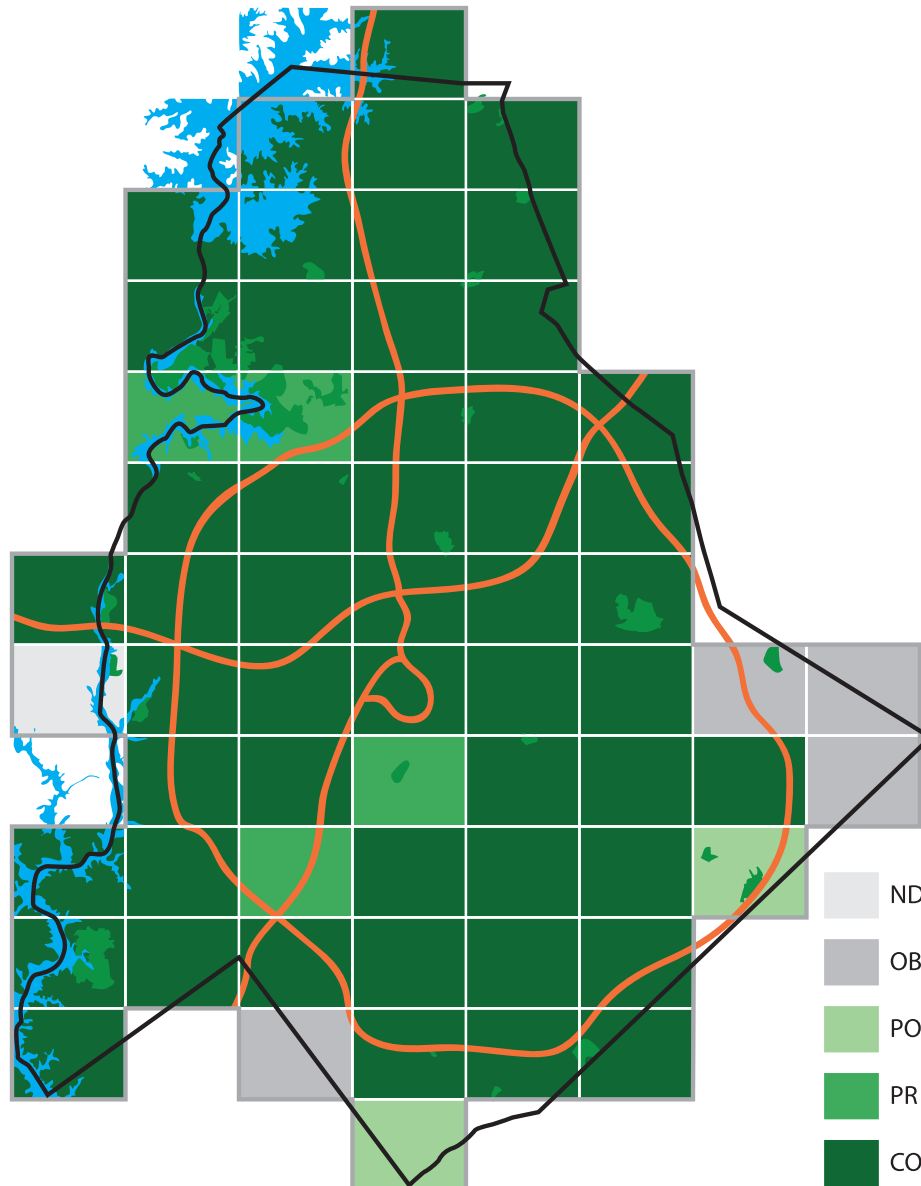


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Urban areas, open residential areas, open farm land

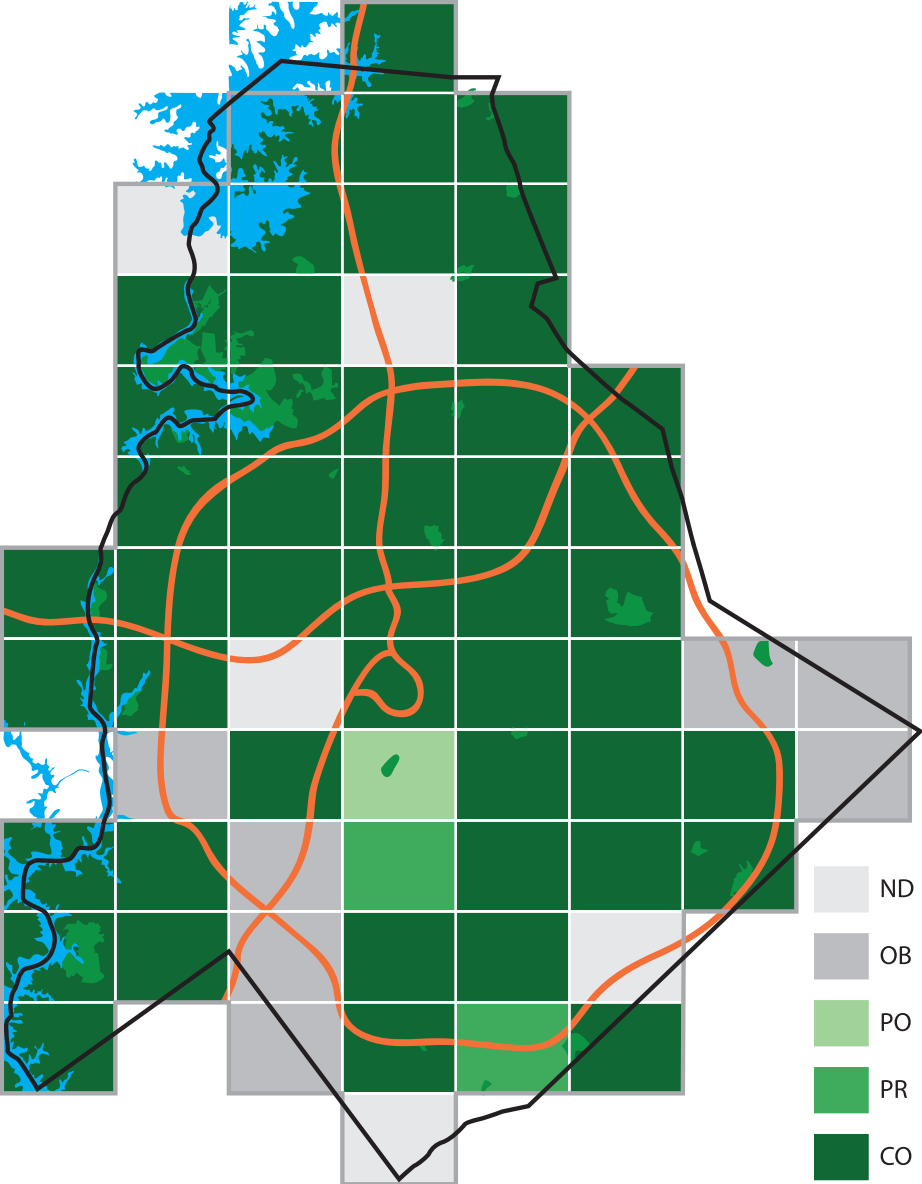
**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/4, CO/51)



# European Starling *Columba livia*



**Status:** Resident  
**Abundance:** Abundant  
**Habitat:** Urban areas, farmland  
**Breeding Bird Atlas:** *Nearly Ubiquitous (PR/2, CO/47)*





# Cedar Waxwing *Bombycilla cedrorum*

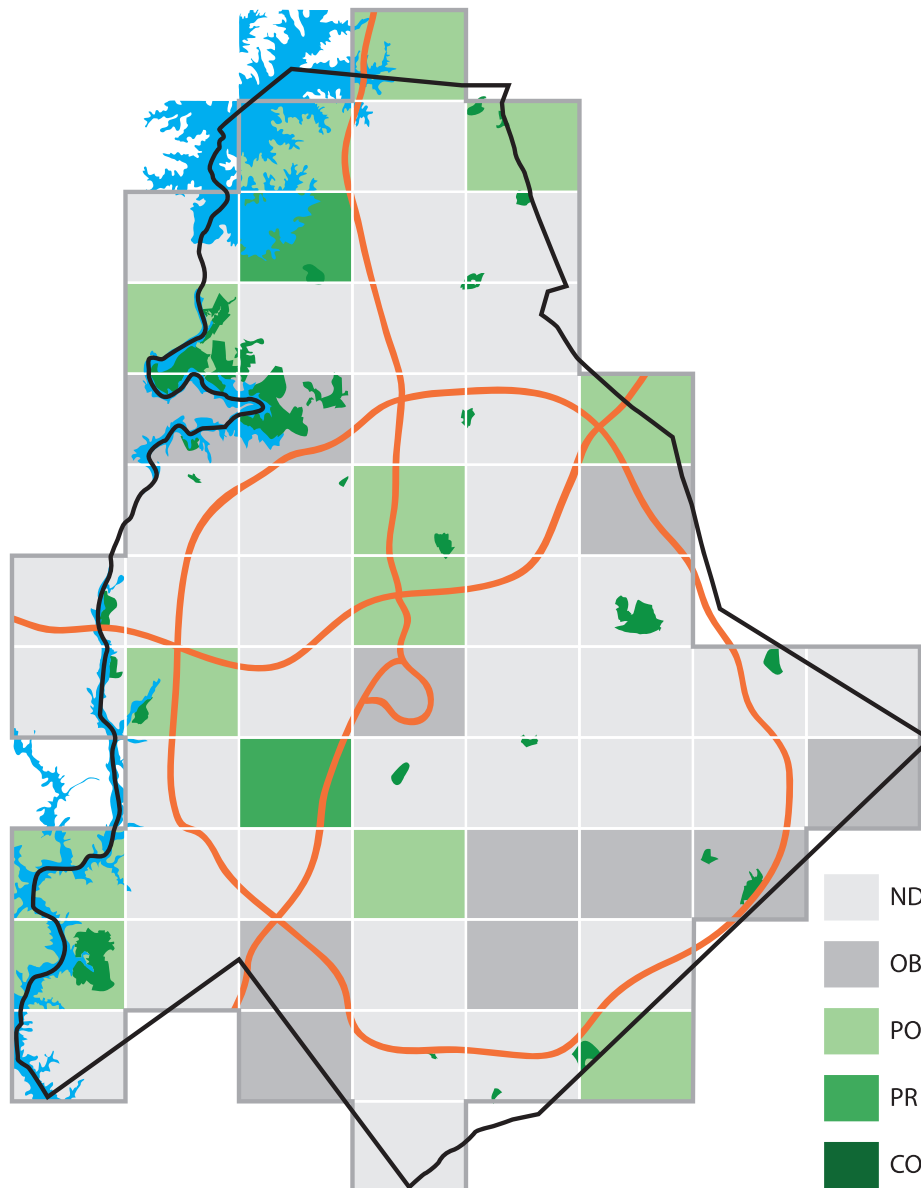


**Status:** Winter Resident, sporadic Breeder

**Abundance:** Common

**Habitat:** Scattered trees in open woods with fruit bearing trees, urban areas with ornamental berry crops

**Breeding Bird Atlas:** *Very Local* (PR/2, CO/0)



# Ovenbird *Seiurus aurocapilla*



**Status:** Migrant, Breeder, Winter Visitor

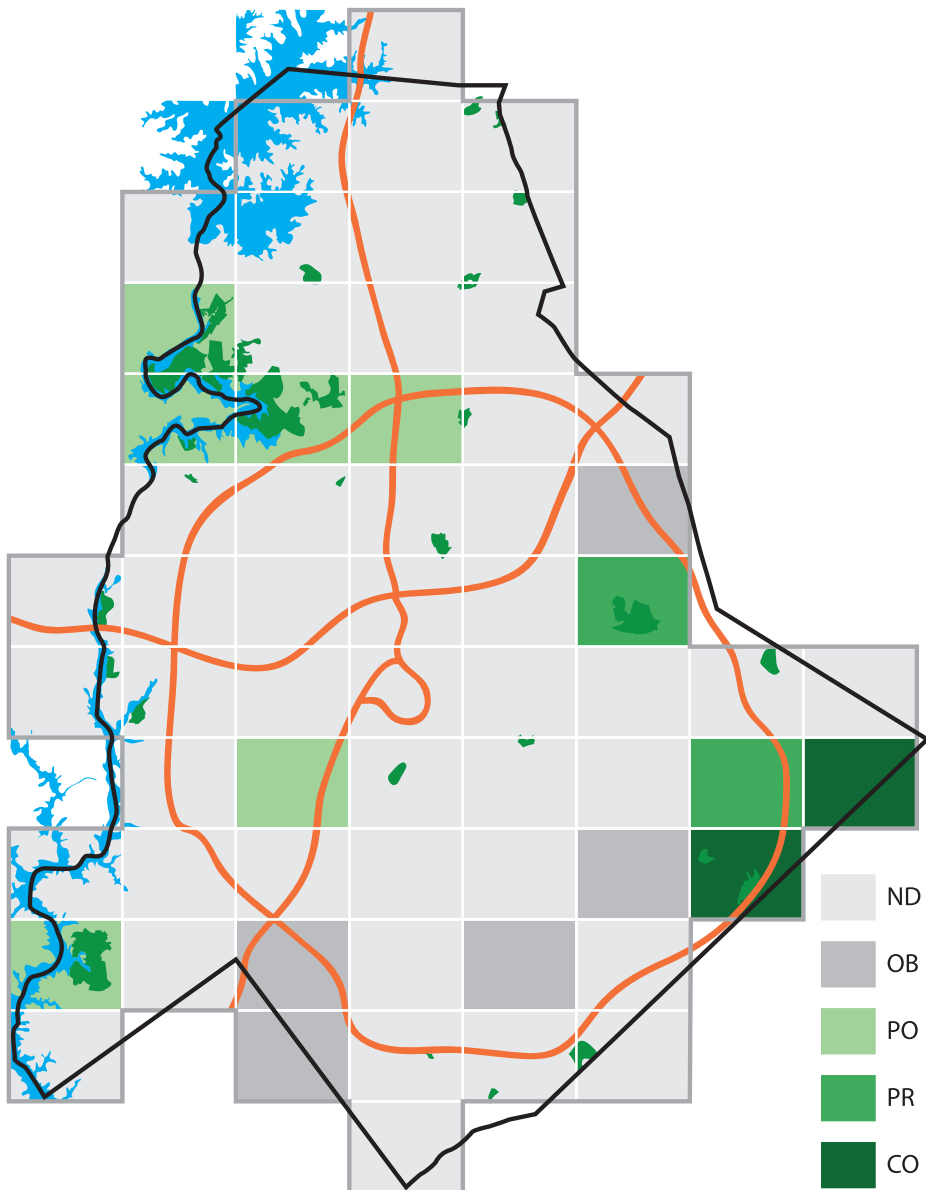
**Abundance:** Fairly Common to Common

**Habitat:** Upland forests

**Breeding Bird Atlas:** *Local (PR/2, CO/2)*



**Imperiled** 



# Worm-eating Warbler *Helmitheros vermivorum*

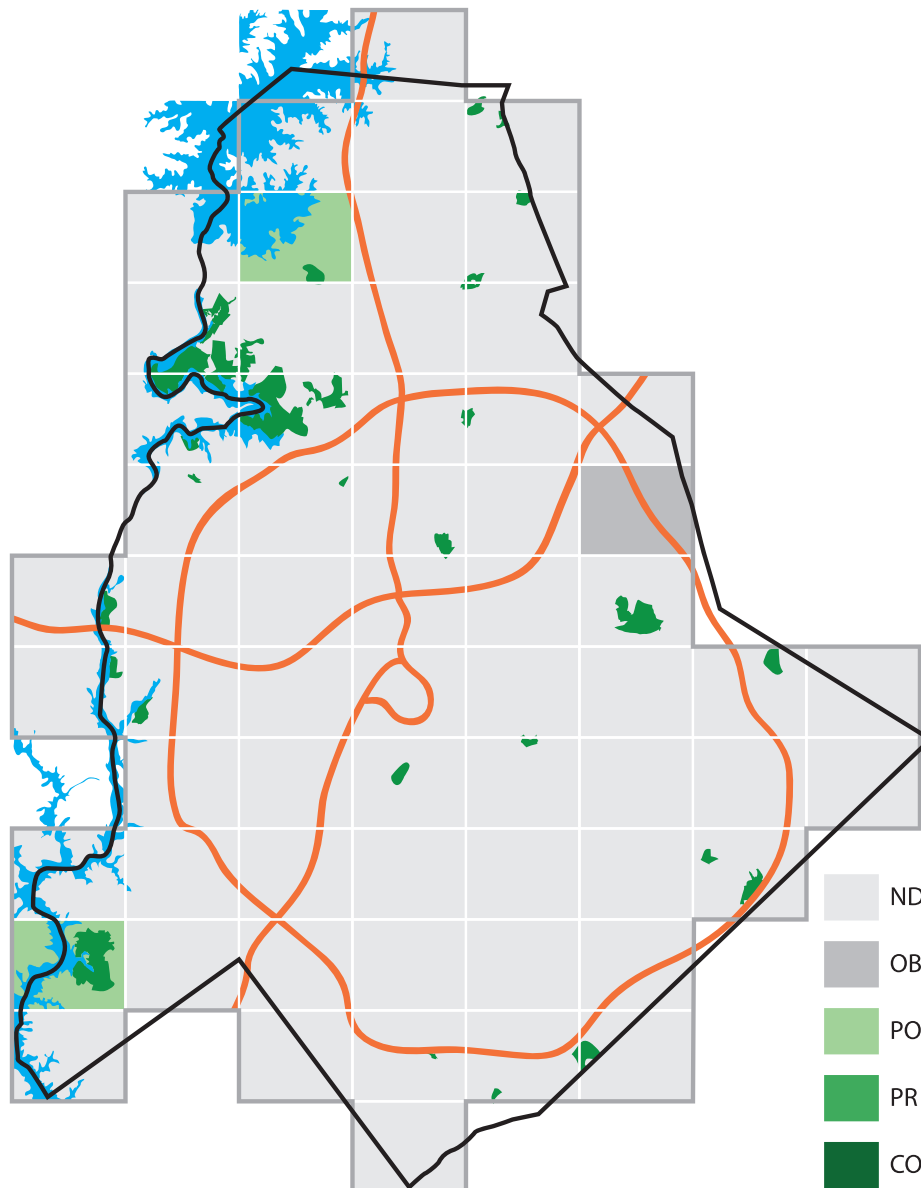


**Status:** Migrant and local Breeder

**Abundance:** Uncommon

**Habitat:** Hillsides and ravines in mature deciduous or mixed forest (often dry) with evergreen shrubs

**Breeding Bird Atlas:** *UNCERTAIN—Possible (PR/0, CO/0)*



# Louisiana Waterthrush *Parkesia motacilla*



**Status:** Migrant, Breeder

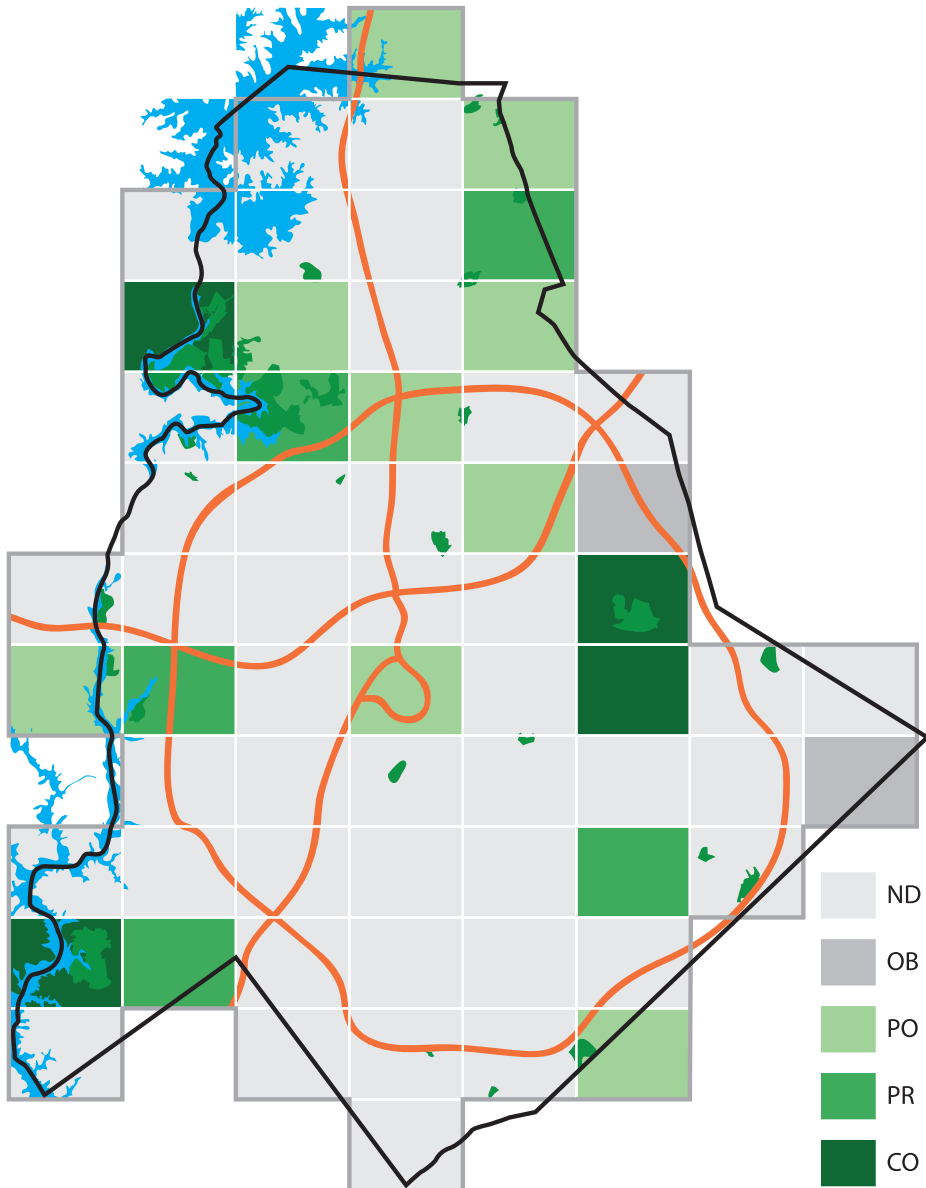
**Abundance:** Uncommon to Fairly Common

**Habitat:** Forests with rocky streams, riparian zones

**Breeding Bird Atlas:** Local (PR/5, CO/4)



**Vulnerable**



# Black-and-white Warbler *Mniotilta varia*



**Status:** Migrant, Breeder, Winter Visitor

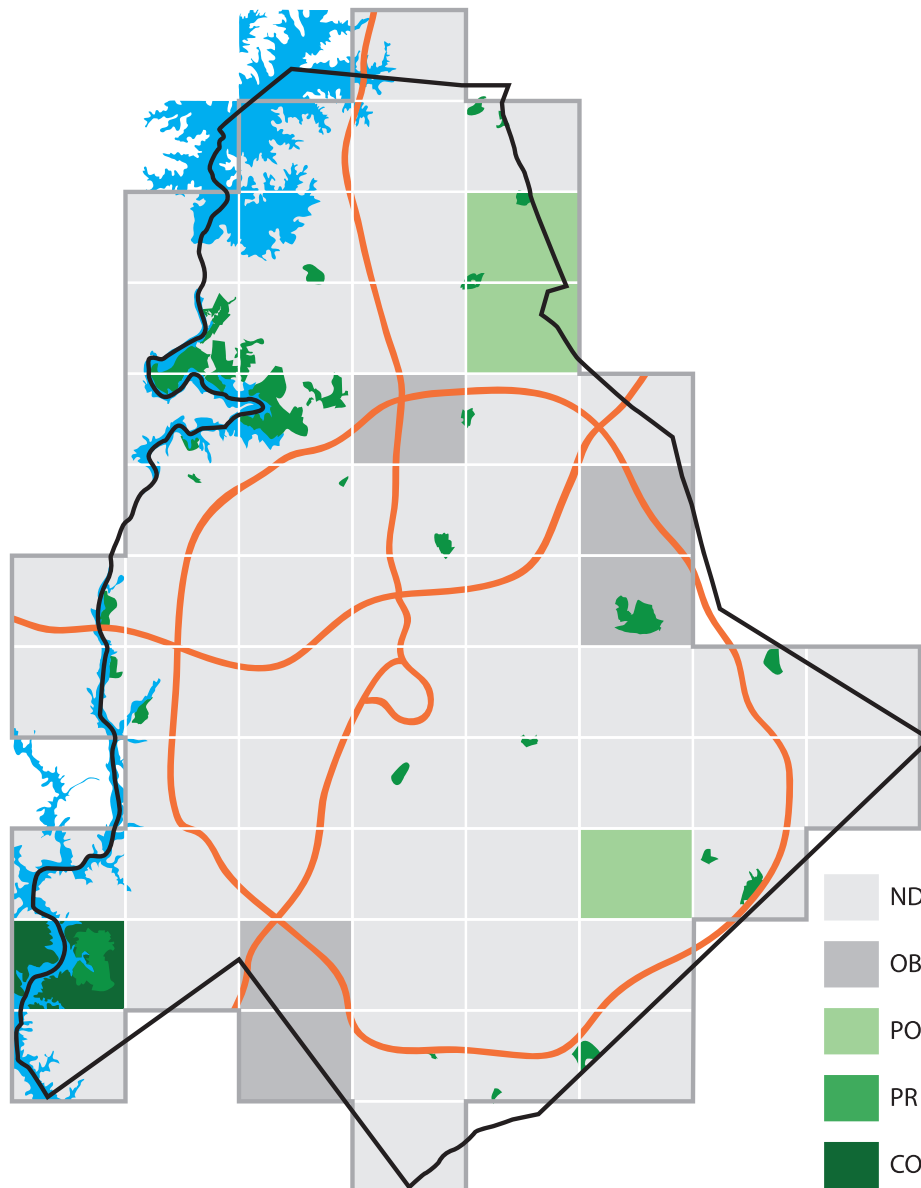
**Abundance:** Uncommon to Fairly Common

**Habitat:** Mature deciduous forests, mixed pine-hardwood forest, stream bottoms in the Piedmont

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)



**Imperiled**



# Prothonotary Warbler *Protonotaria citrea*



**Status:** Breeder

**Abundance:** Uncommon to Fairly Common

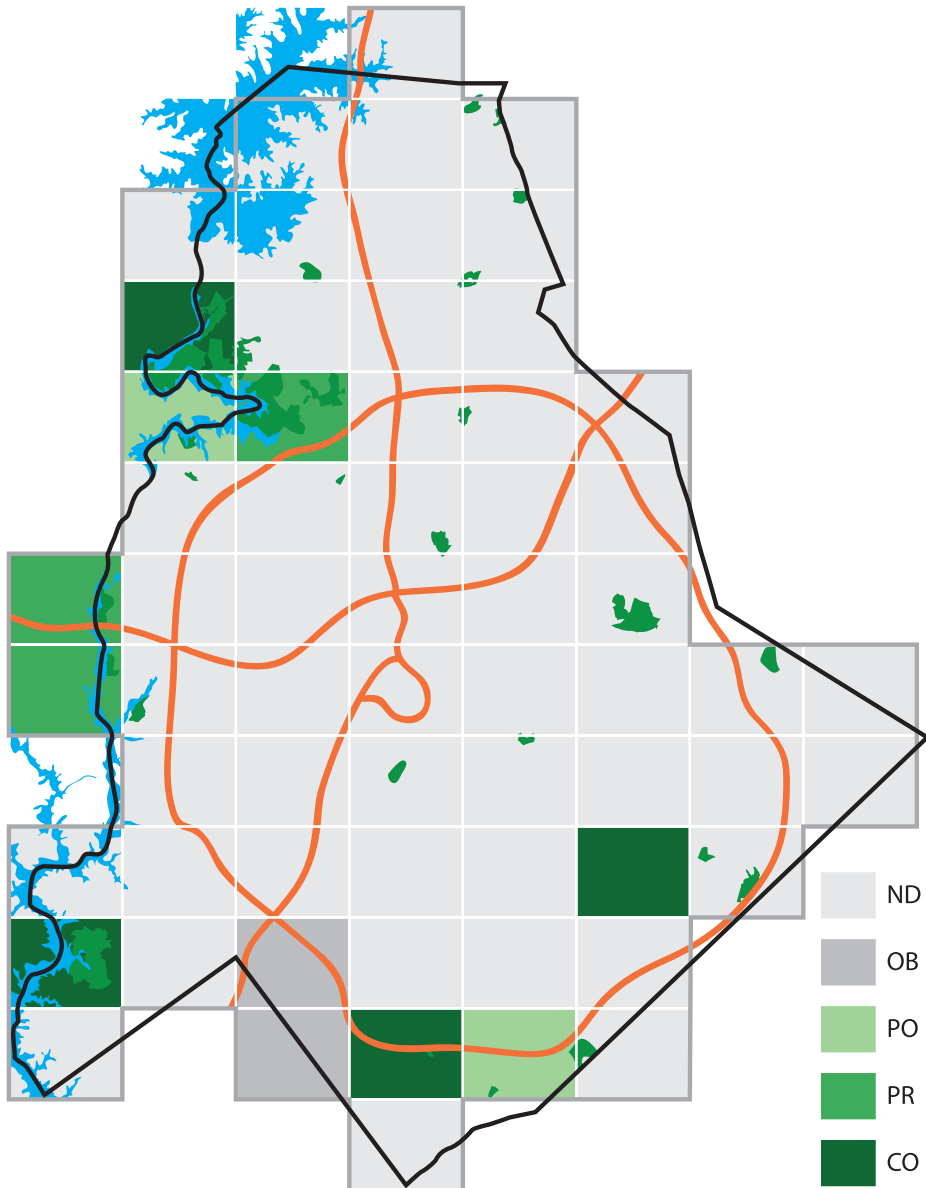
**Habitat:** River and lake edges, bottomland floodplain forests, especially with standing water and stumps

**Breeding Bird Atlas:** *Local* (PR/3, CO/4)

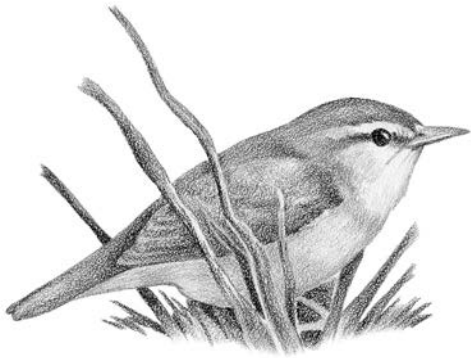


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**Vulnerable** 



# Swainson's Warbler *Limnothlypis swainsonii*



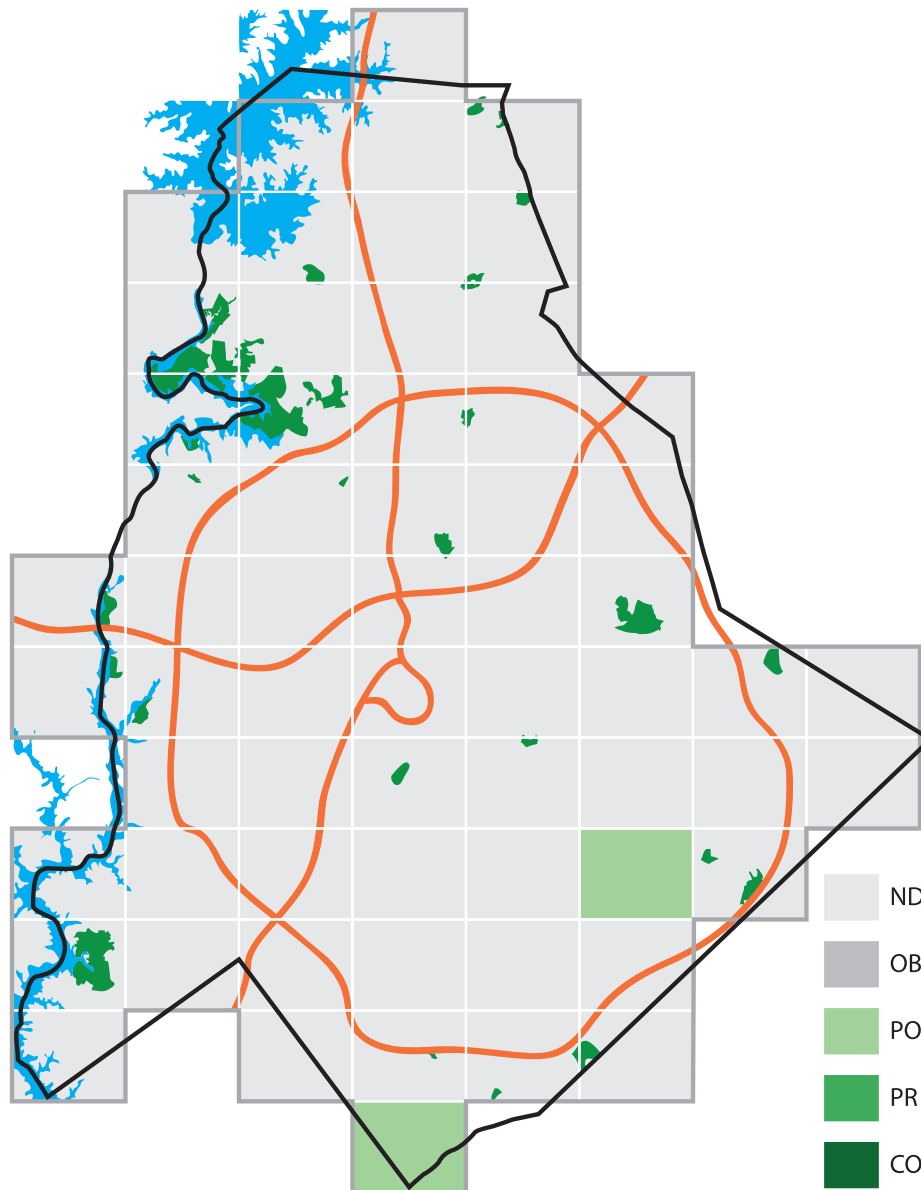
**Status:** Migrant, Breeder

**Abundance:** Rare to Uncommon

**Habitat:** Bottomland, floodplain forests with river cane

**Breeding Bird Atlas:** Possible (PR/0, CO/0)

**New Breeding Bird:** First suspected nesting May 2006. Not currently believed to be nesting.



# Kentucky Warbler *Columba livia*



**Status:** Breeder

**Abundance:** Uncommon

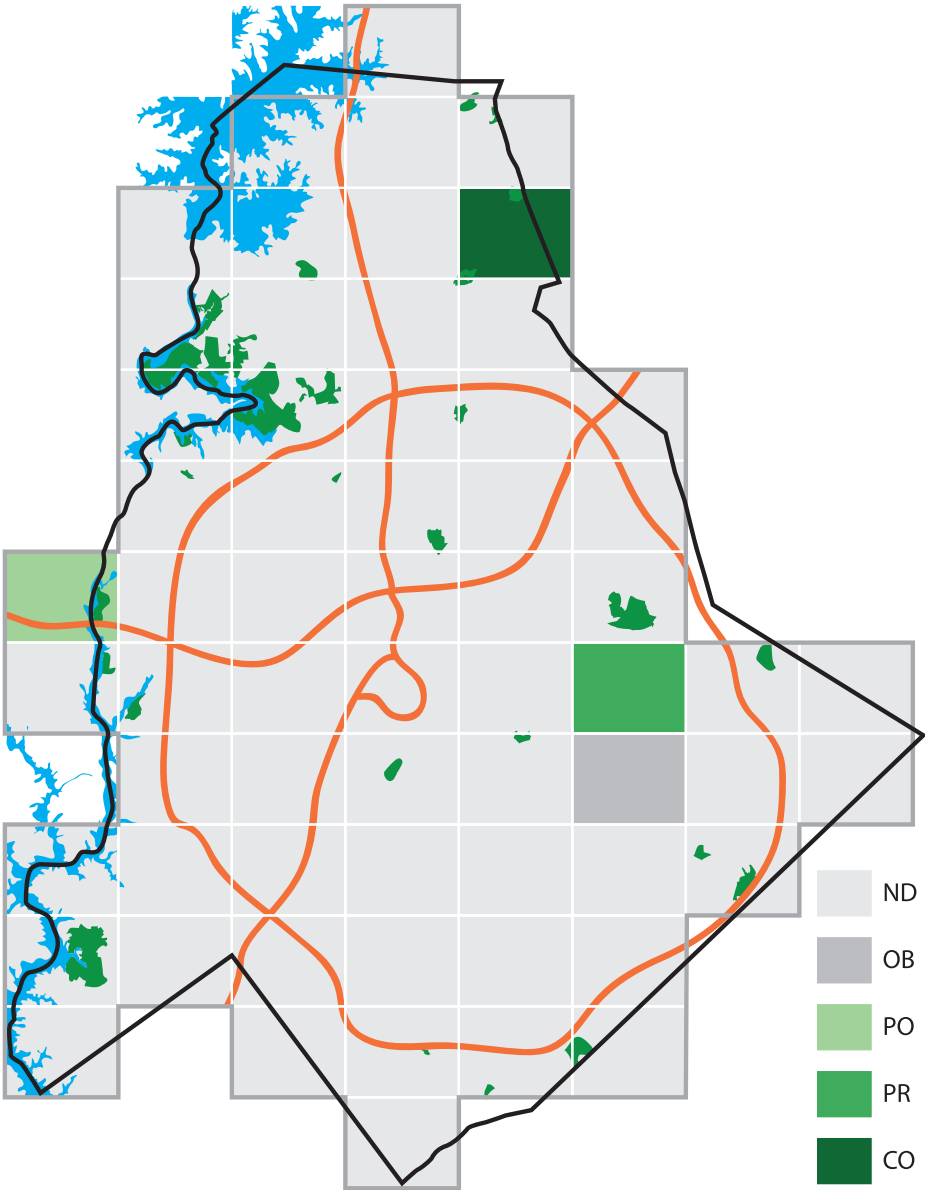
**Habitat:** Deciduous forests (moist)

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/1)



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**Imperiled** 





# Common Yellowthroat *Geothlypis trichas*

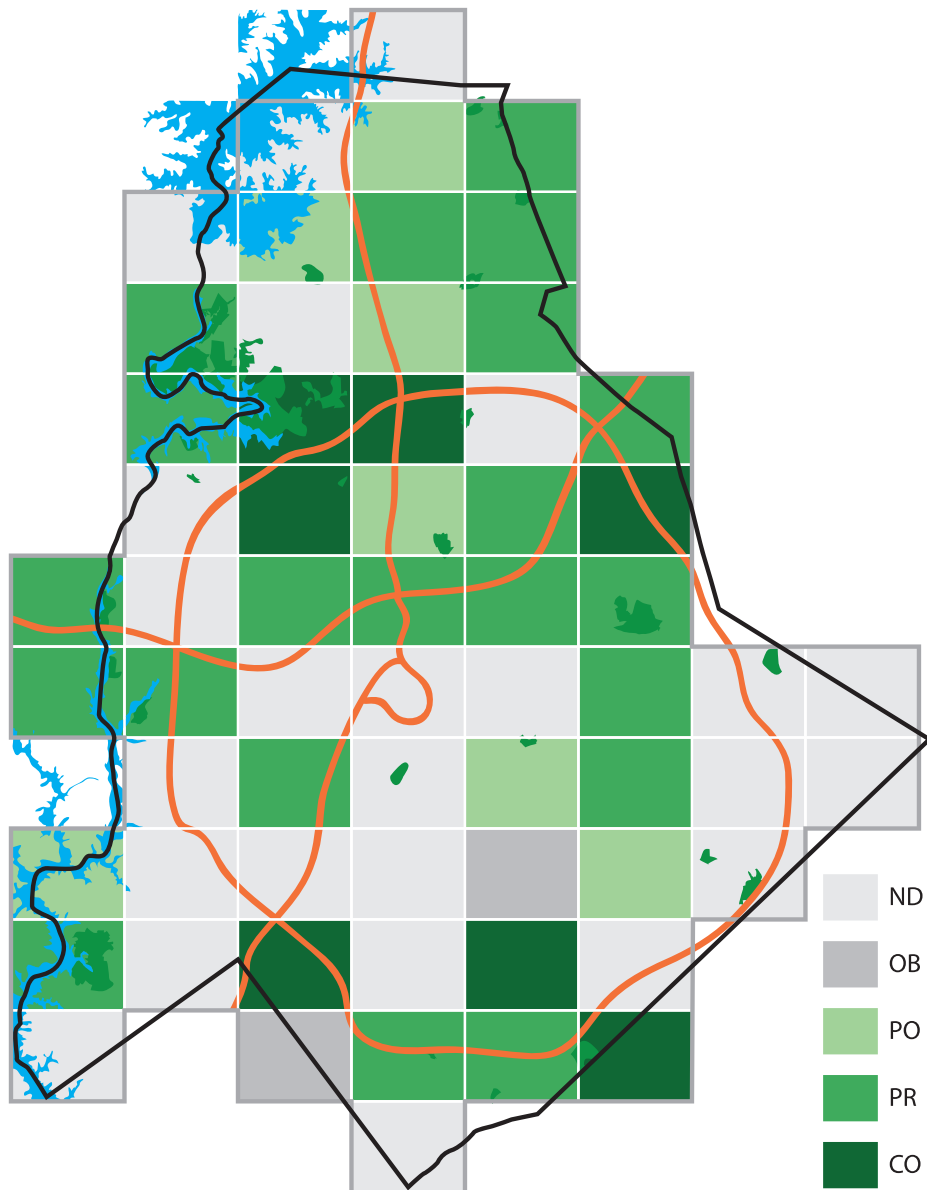


**Status:** Breeder, Winter Visitor

**Abundance:** Common

**Habitat:** Brushy thickets, abandoned fields, woodland edges (usually moist), wetland edges

**Breeding Bird Atlas:** *Fairly Widespread (PR/21, CO/7)*



# Hooded Warbler *Setophaga citrine*



**Status:** Breeder

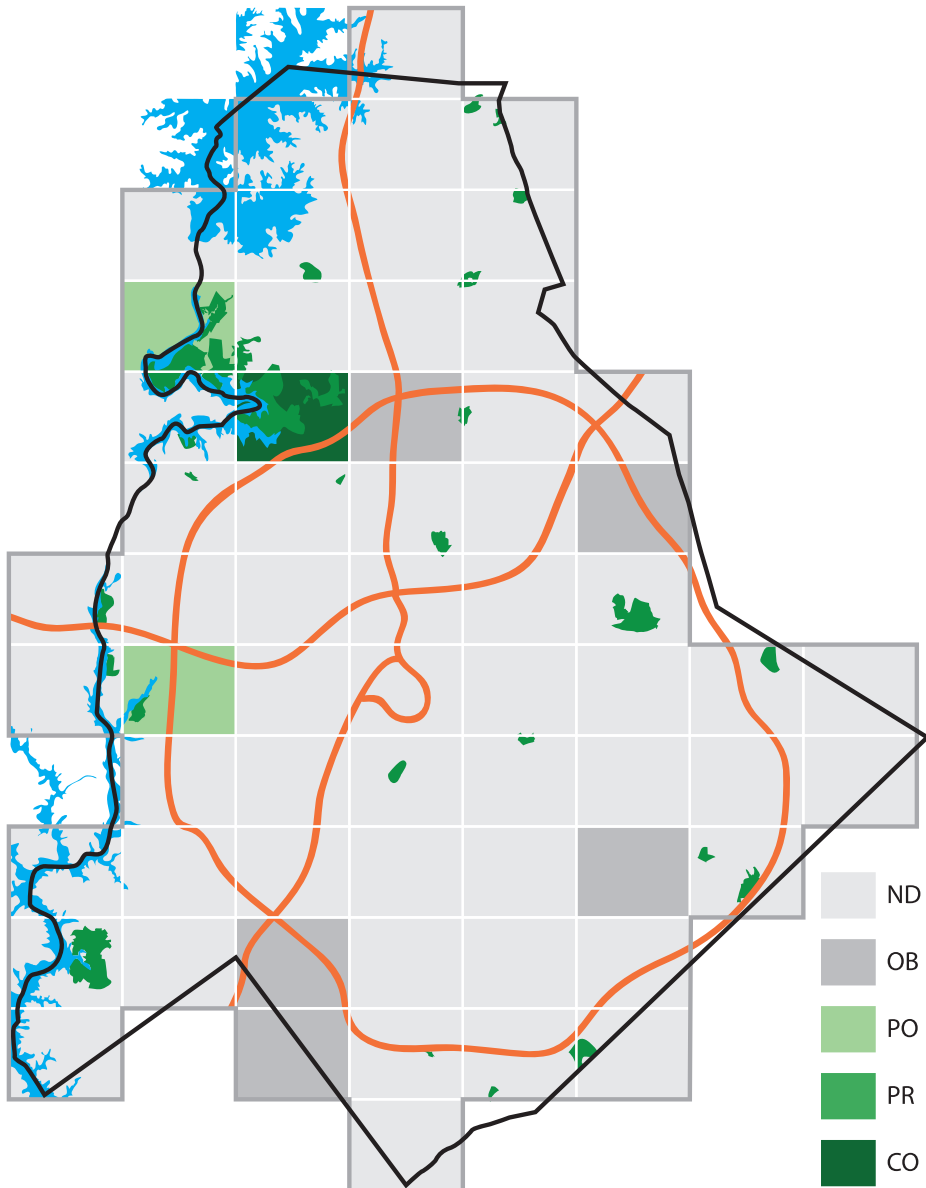
**Abundance:** Fairly Common to Common

**Habitat:** Rich, deciduous or mixed forests (moist) or occasionally mature pine forests

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)



**Imperiled**



# American Redstart *Setophaga ruticilla*



**Status:** Migrant, local Breeder

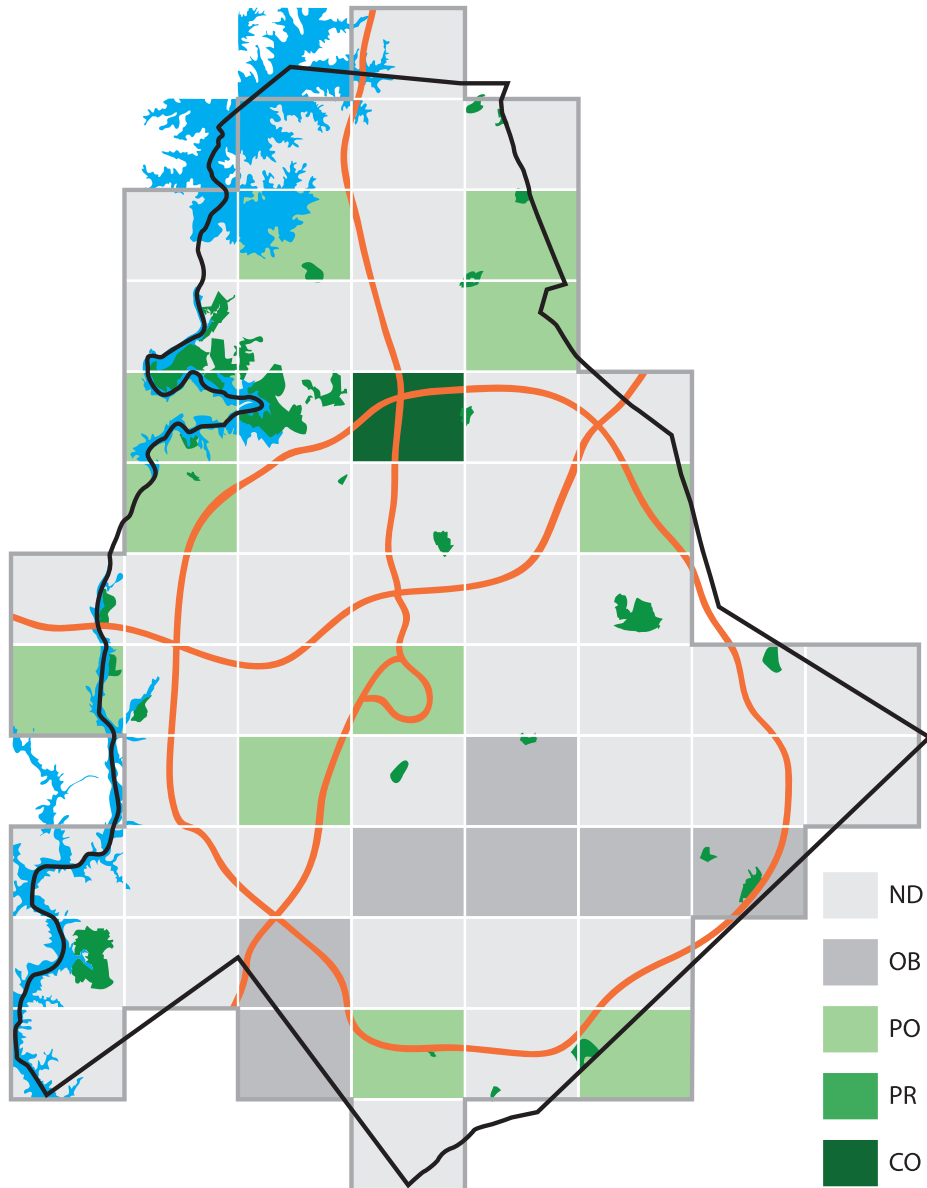
**Abundance:** Common in migration

**Habitat:** Bottomland hardwoods, wide creek floodplains, moist deciduous forest slopes

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)



**Imperiled**



# Northern Parula *Setophaga americana*

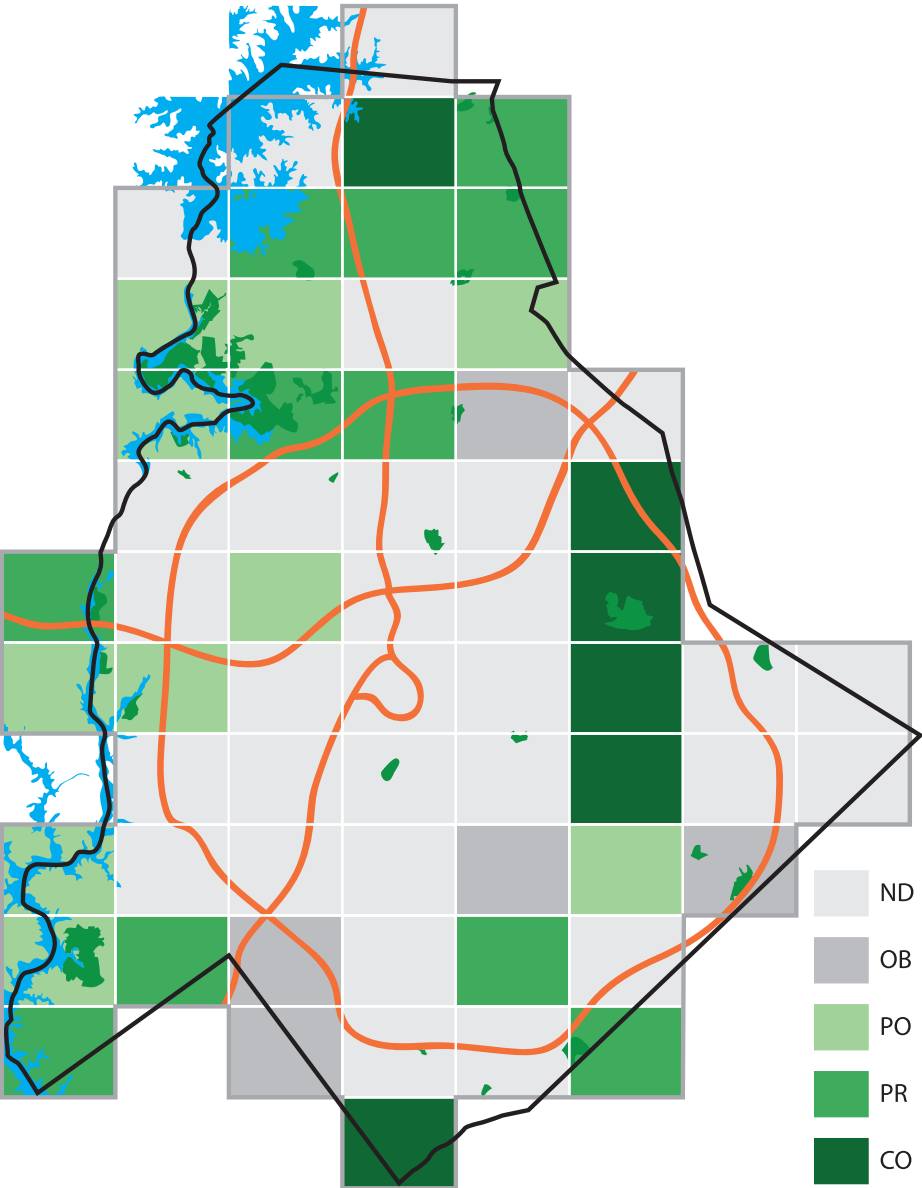


**Status:** Breeder

**Abundance:** Uncommon to Fairly Common

**Habitat:** Bottomland forests—damp, low woods

**Breeding Bird Atlas:** *Somewhat Local* (PR/11, CO/6)



# Yellow Warbler *Setophaga petechial*



**Status:** Migrant, local Breeder

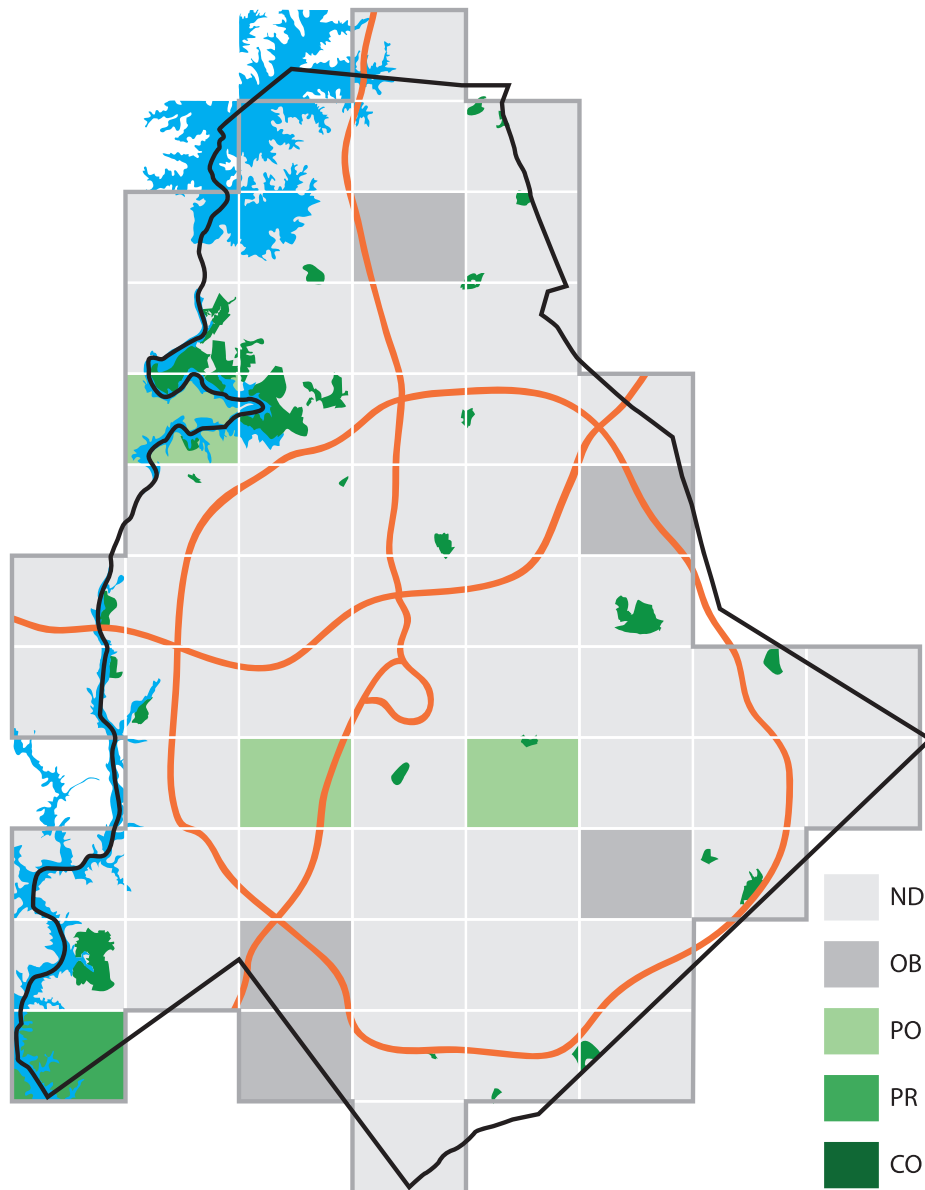
**Abundance:** Rare to Uncommon

**Habitat:** Shrubby thickets, willows, groves, open areas

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/0)



**Imperiled**



# Pine Warbler *Setophaga pinus*

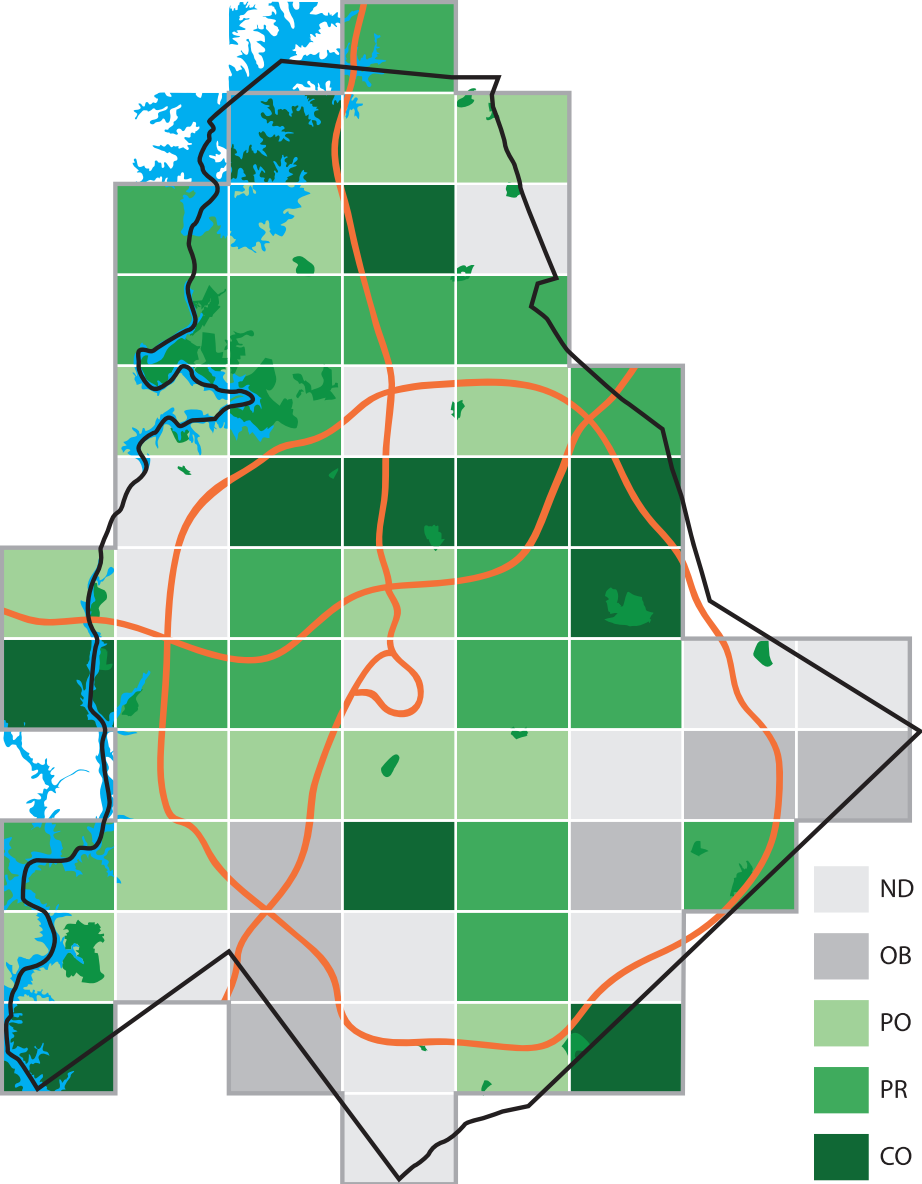


**Status:** Resident

**Abundance:** Common

**Habitat:** Pine forests

**Breeding Bird Atlas:** Fairly Widespread (PR/18, CO/11)



# Yellow-throated Warbler *Setophaga dominica*

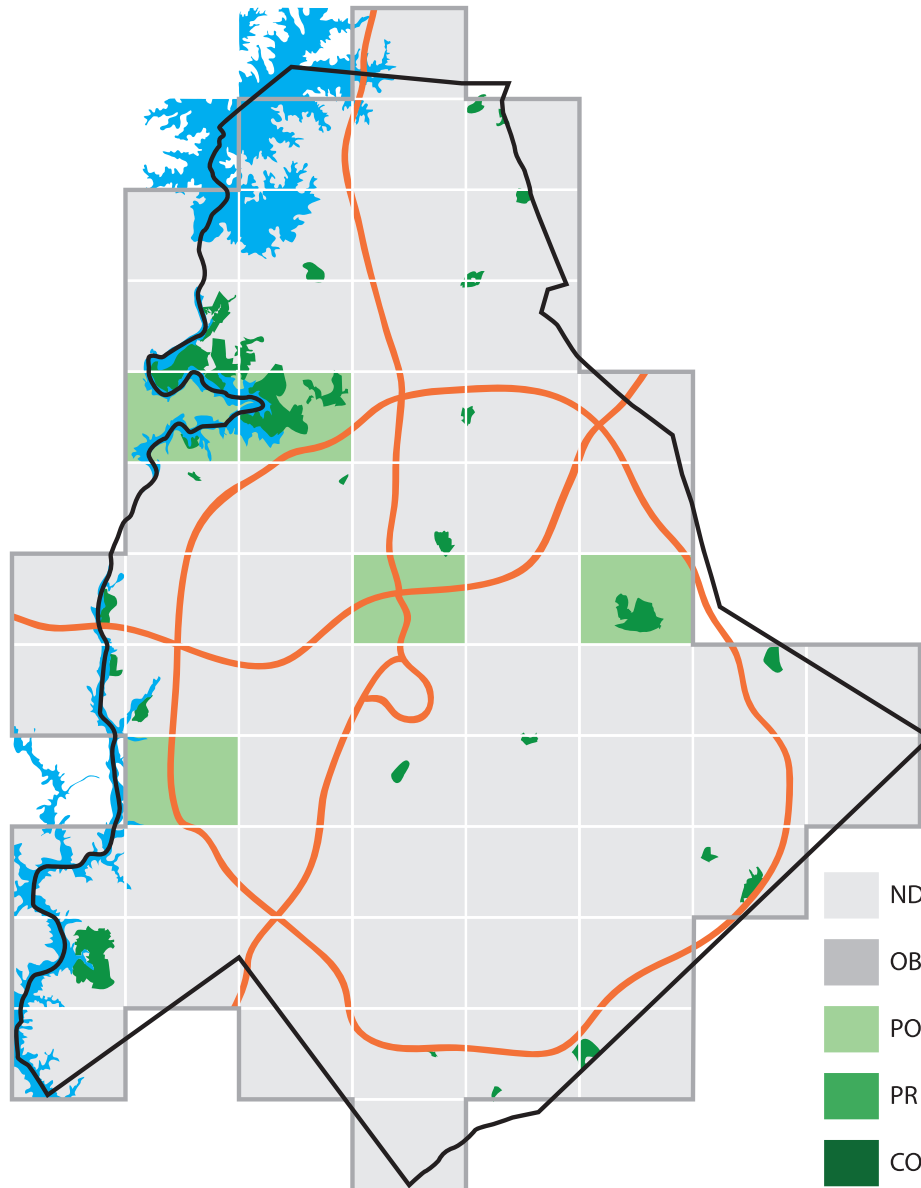


**Status:** Breeder

**Abundance:** Uncommon to Fairly Common

**Habitat:** Mature open forest, bottomland forest or pinewoods and mixed hardwoods, all below 2,000 feet

**Breeding Bird Atlas:** Possible (PR/0, CO/0)



# Prairie Warbler *Setophaga discolor*



**Status:** Breeder

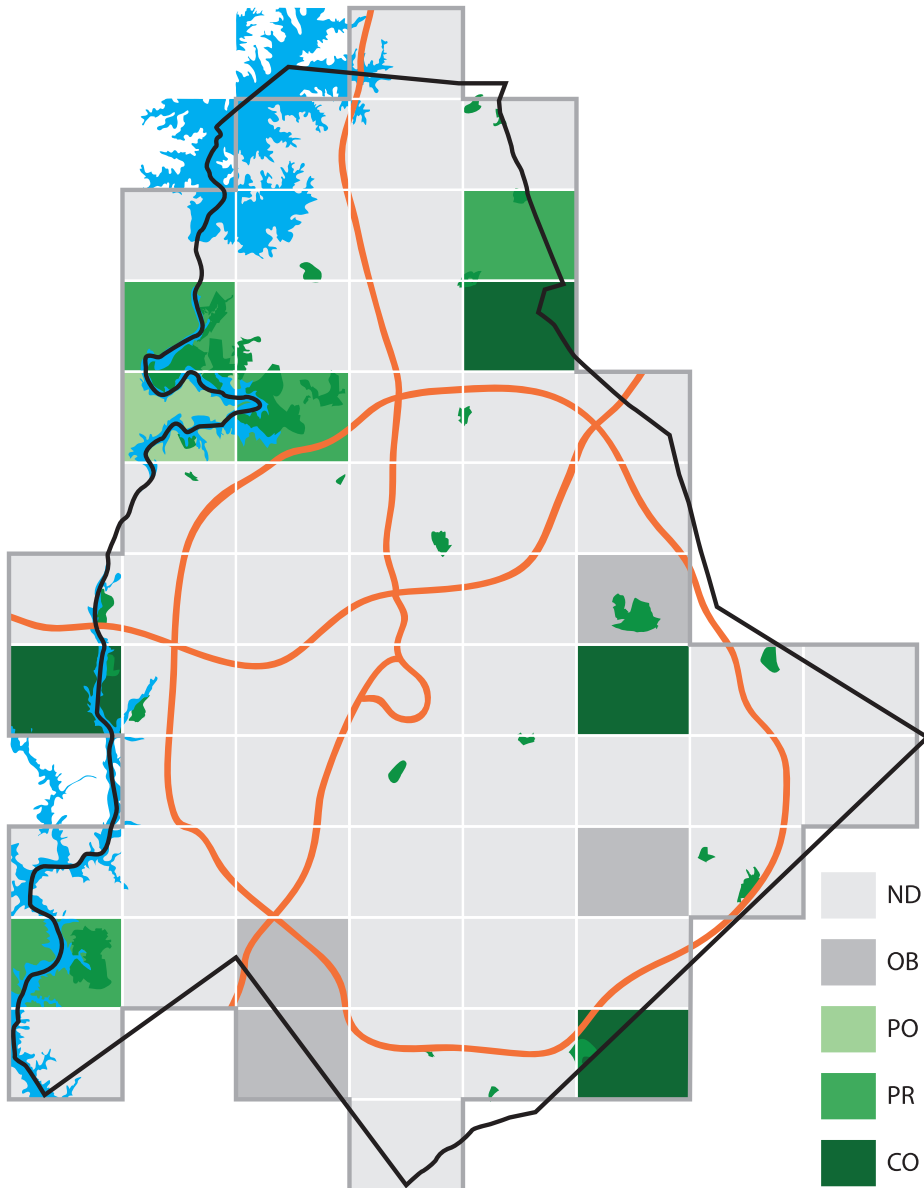
**Abundance:** Uncommon to Fairly Common

**Habitat:** Open fields, right-of-ways

**Breeding Bird Atlas:** *Local (PR/4, CO/4)*



**Vulnerable**





# Yellow-breasted Chat *Icteria virens*

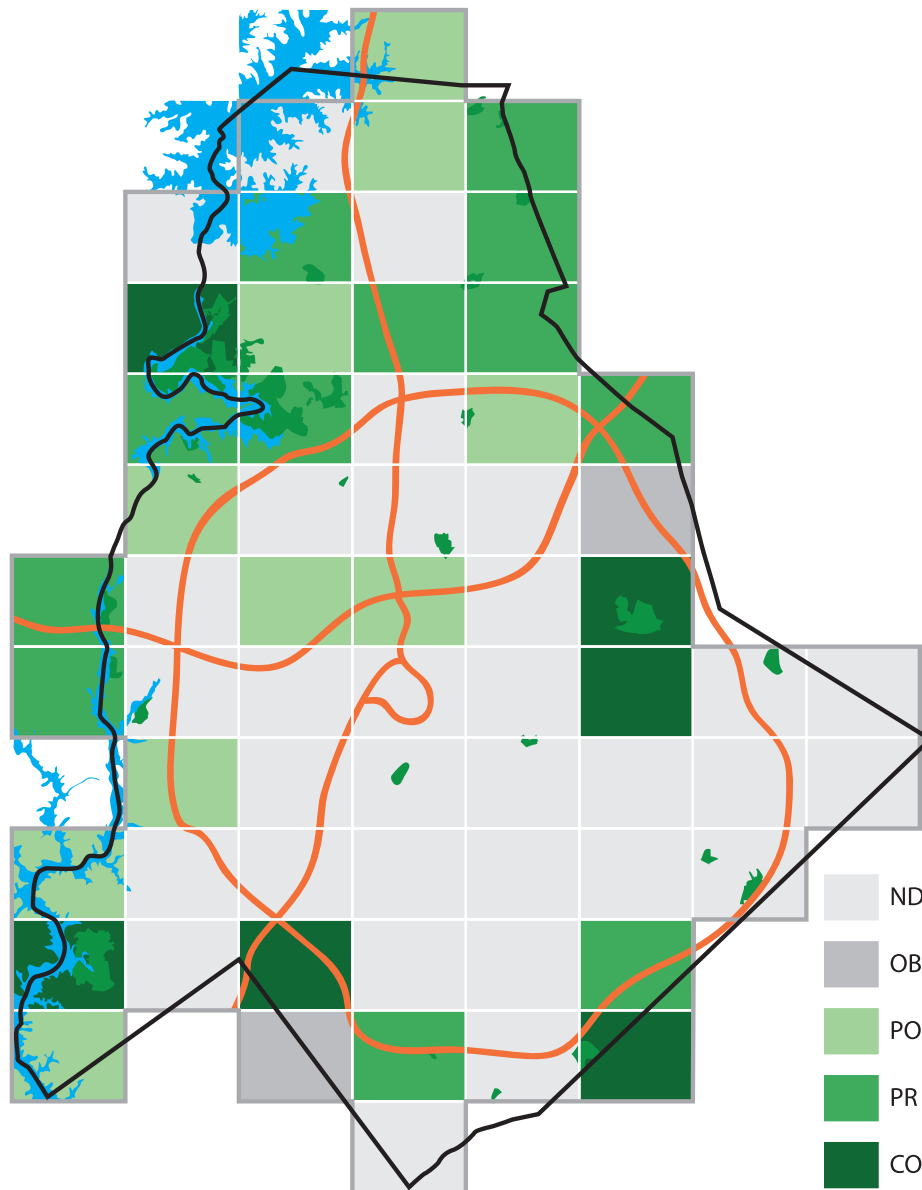


**Status:** Breeder

**Abundance:** Fairly Common to Common

**Habitat:** Early successional fields, briar thickets along woodland edges

**Breeding Bird Atlas:** *Somewhat Local* (PR/12, CO/6)



# Eastern Towhee *Pipilo erythrophthalmus*

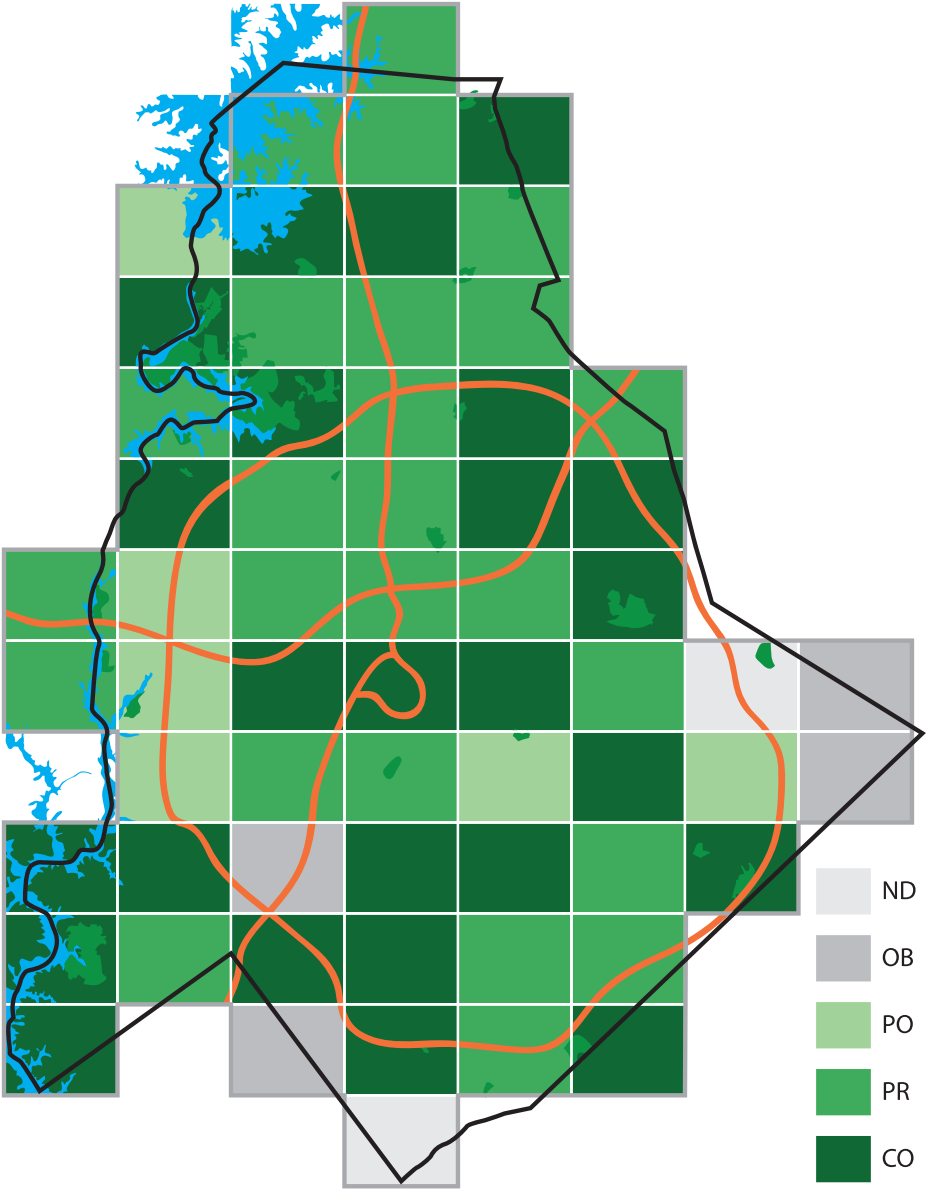


**Status:** Resident

**Abundance:** Common

**Habitat:** Thickets, shrubs, saplings, woodland understory and edge, shrubs in neighborhoods

**Breeding Bird Atlas:** *Nearly Ubiquitous (PR/25, CO/25)*



# Chipping Sparrow *Spizella passerine*

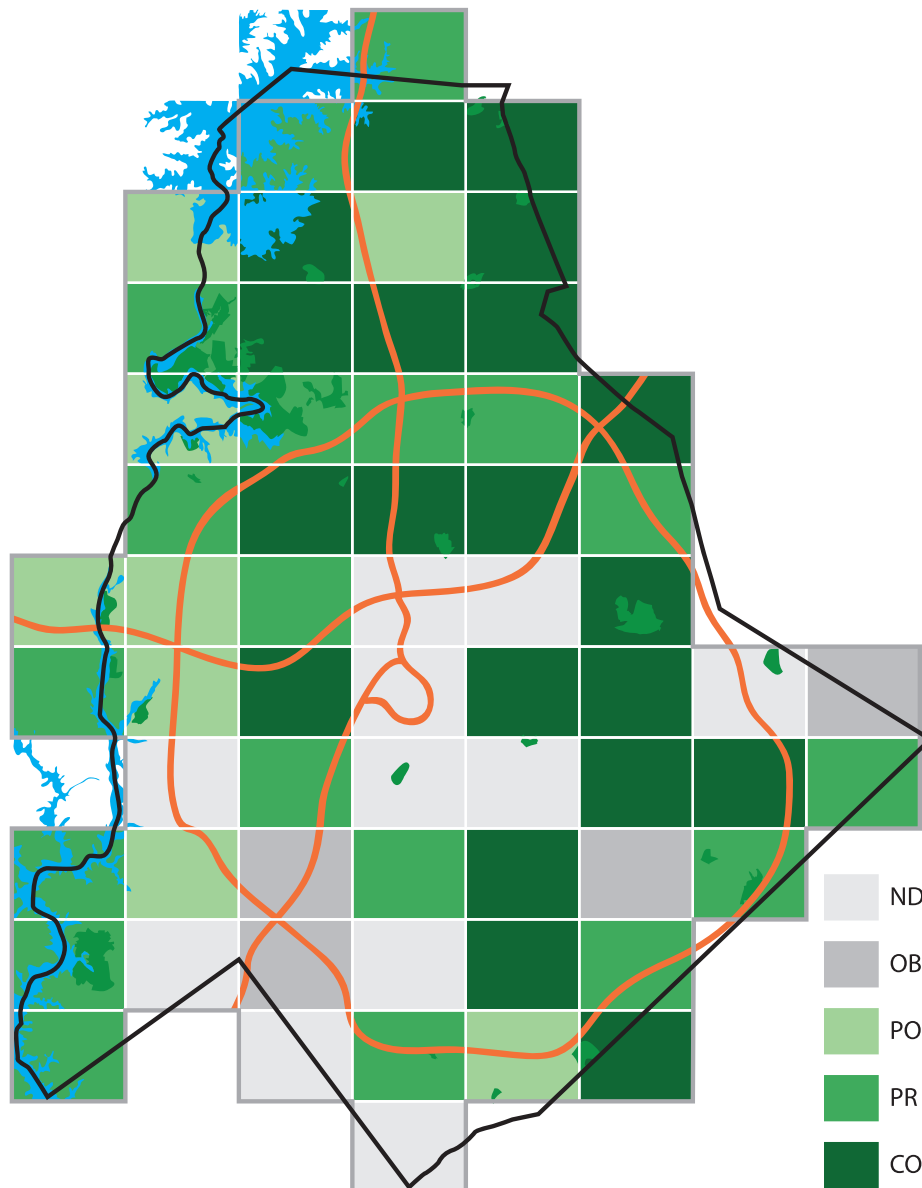


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Wooded residential areas, scattered trees with short grass, parks, golf courses

**Breeding Bird Atlas:** *Widespread* (PR/19, CO/20)



# Field Sparrow *Spizella pusilla*

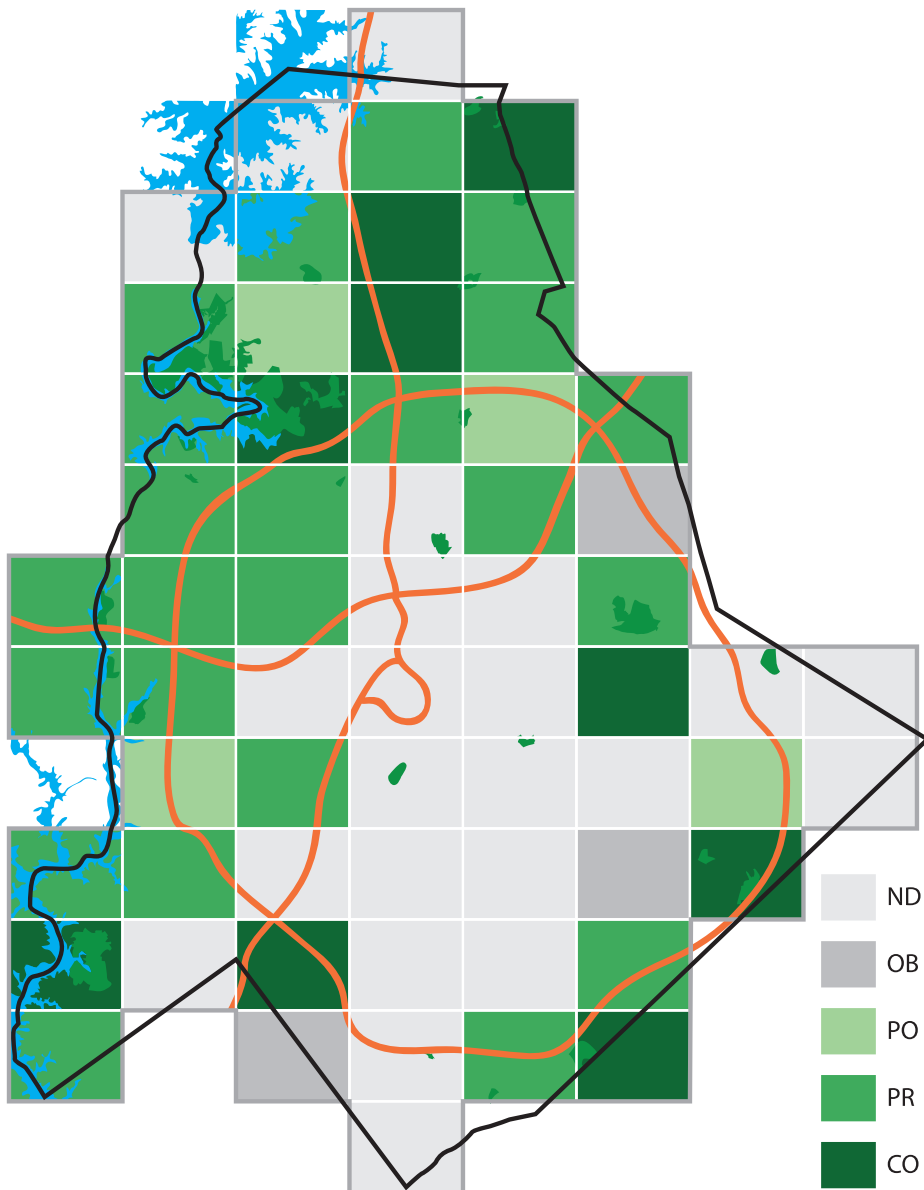


**Status:** Resident

**Abundance:** Fairly Common to Common

**Habitat:** Old fields, wood margins, hedgerows, thickets

**Breeding Bird Atlas:** *Widespread* (PR/23, CO/9)



# Grasshopper Sparrow *Ammodramus savannarum*



**Status:** Breeder, Winter Visitor

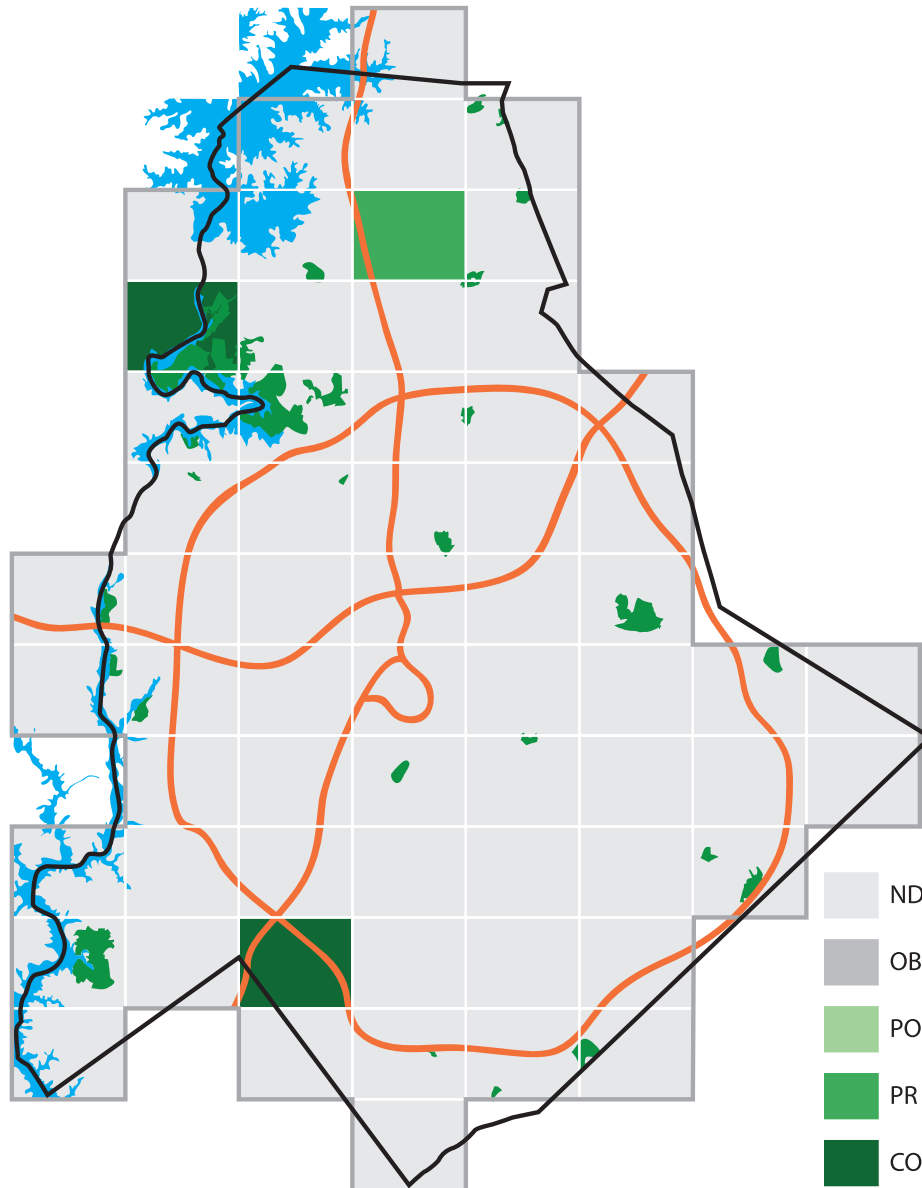
**Abundance:** Uncommon

**Habitat:** Open grassy fields during breeding

**Breeding Bird Atlas:** *Very Local* (PR/1, CO/2)



**Imperiled**



# Song Sparrow *Melospiza melodia*



**Status:** Resident

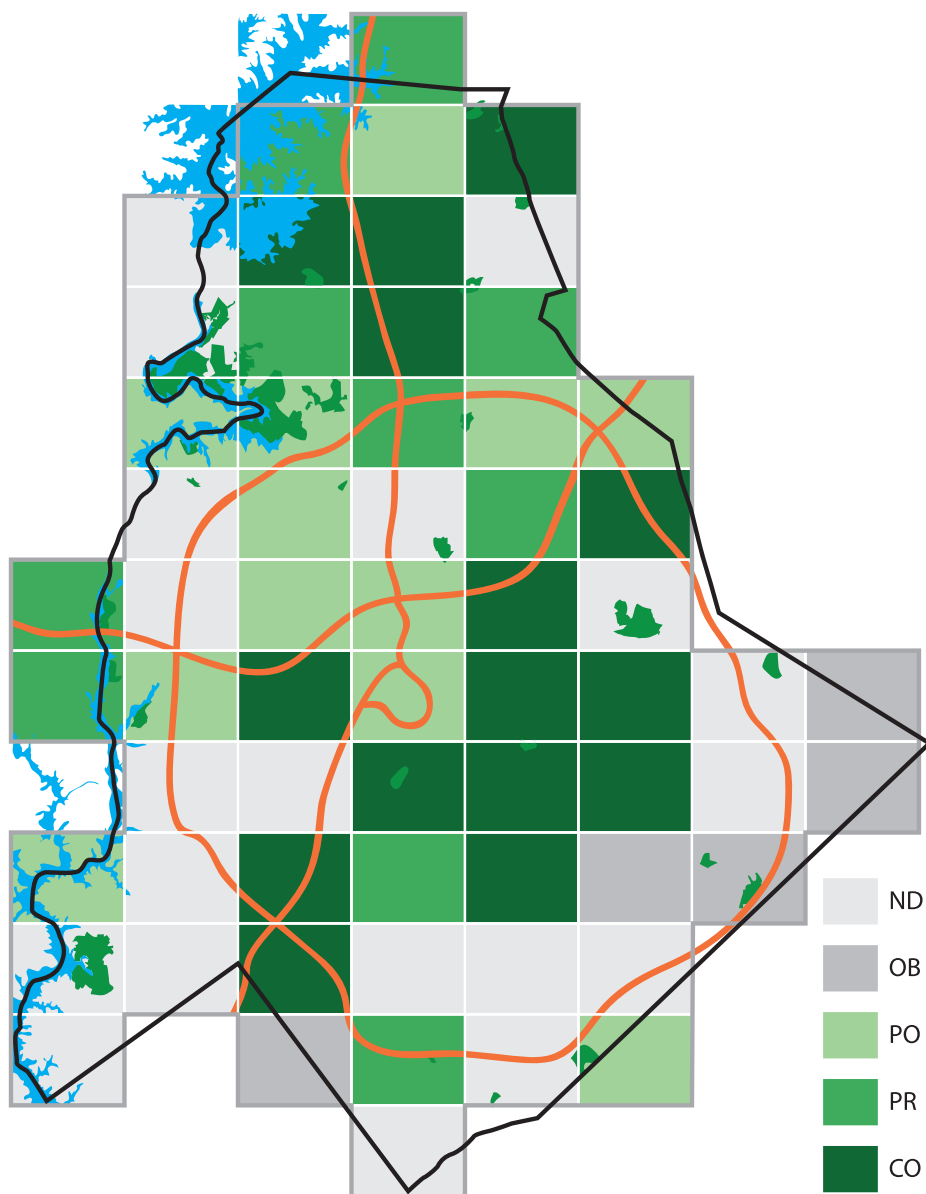
**Abundance:** Common to Very Common

**Habitat:** Brushy thickets, shrubby areas, residential areas, parks, farms

**Breeding Bird Atlas:** *Fairly Widespread* (PR/10, CO/15)



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# Summer Tanager *Piranga rubra*

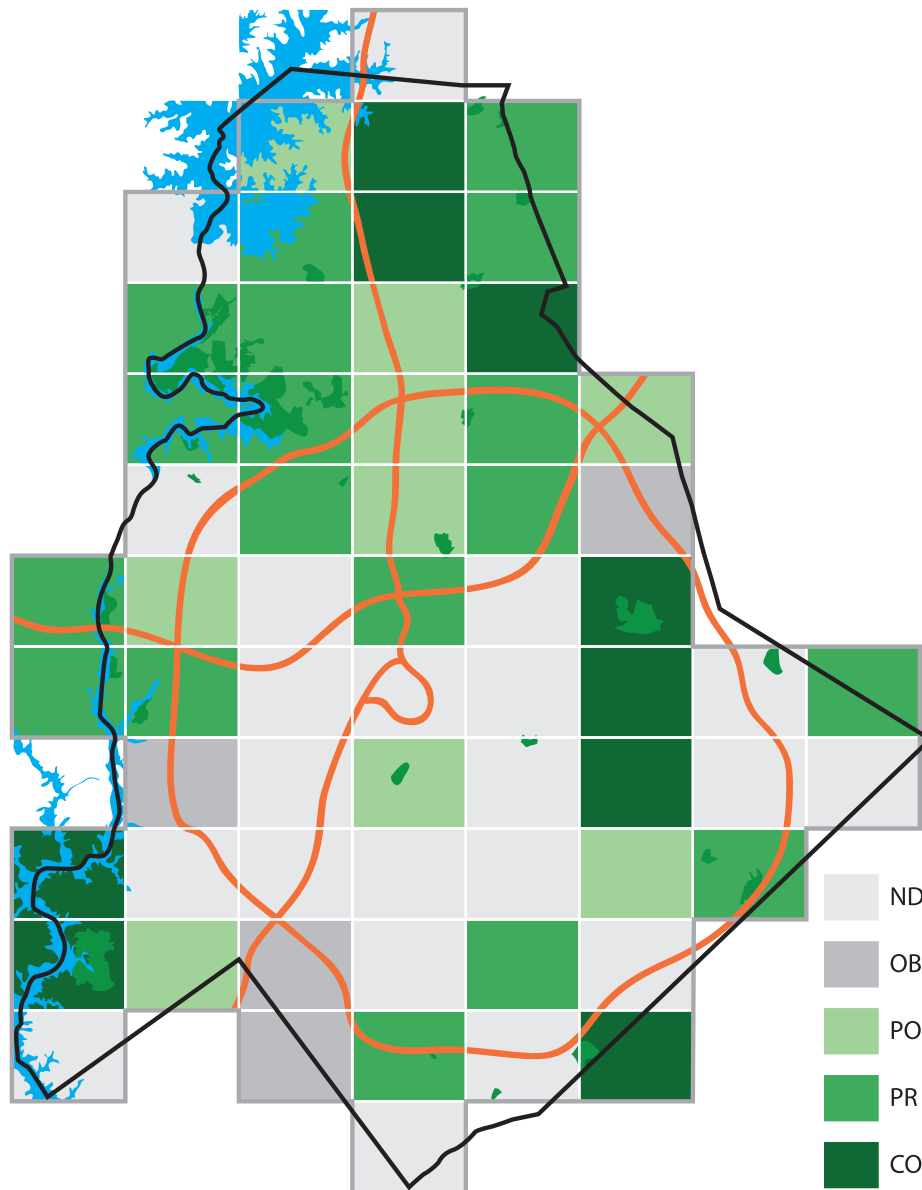


**Status:** Breeder

**Abundance:** Fairly Common to Common

**Habitat:** Open dry pine or mixed hardwood forests, wooded residential areas

**Breeding Bird Atlas:** *Fairly Widespread (PR/18, CO/9)*



# Scarlet Tanager *Piranga olivacea*



**Status:** Breeder

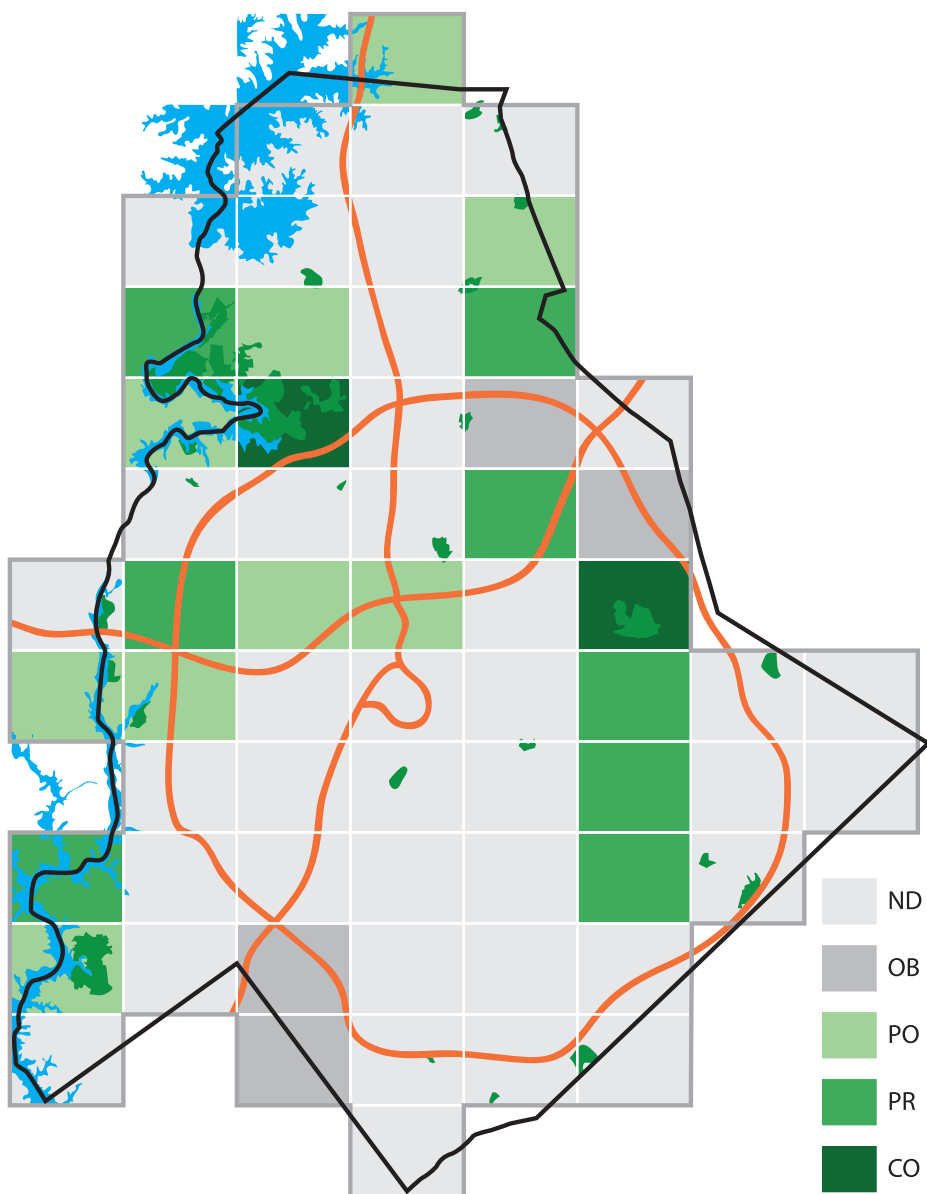
**Abundance:** Uncommon to Fairly Common

**Habitat:** Mature, deciduous forests often in uplands

**Breeding Bird Atlas:** *Somewhat Local* (PR/8, CO/2)



**Vulnerable**





# Northern Cardinal *Cardinalis cardinalis*



**Status:** Resident

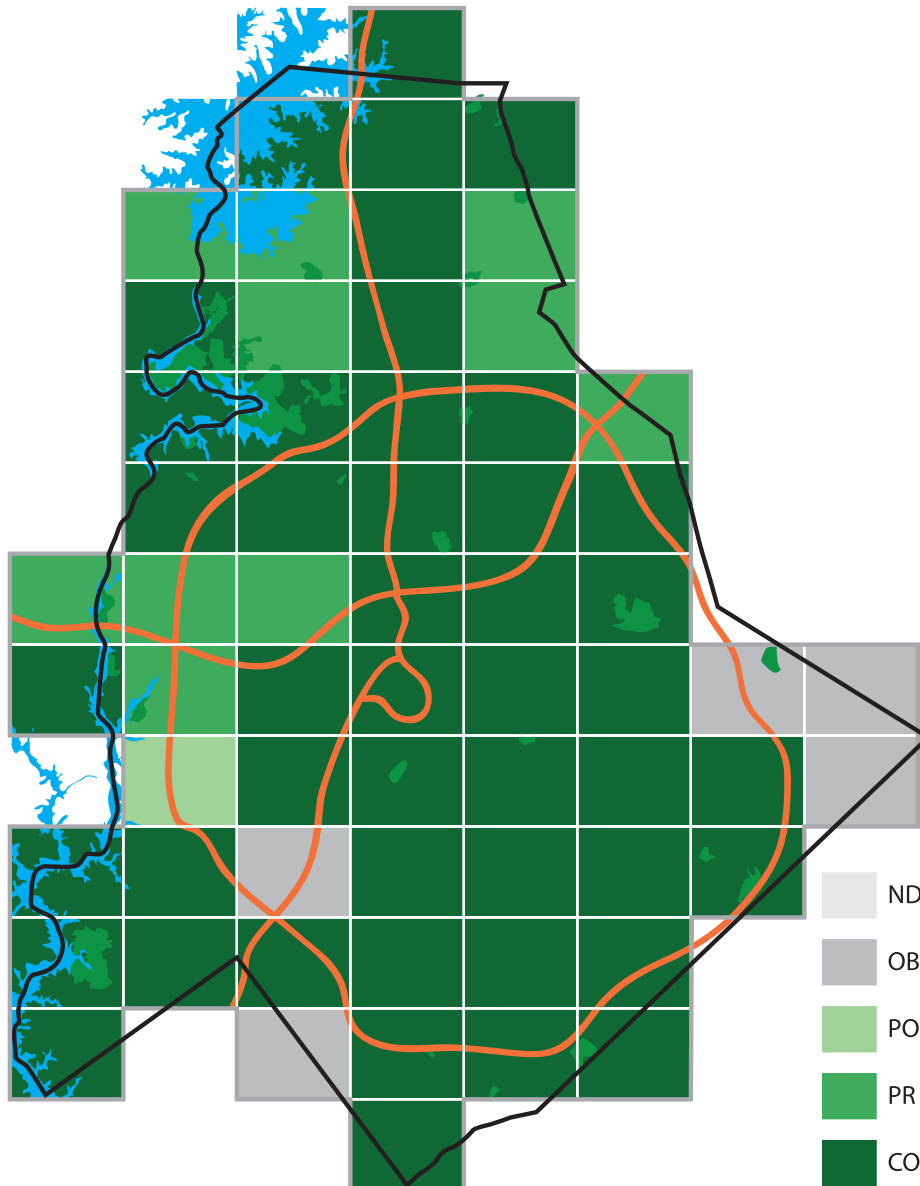
**Abundance:** Very Common

**Habitat:** Open woods, forest edge, thickets, residential neighborhoods

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/10, CO/46)



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# Blue Grosbeak *Passerina caerulea*



**Status:** Breeder

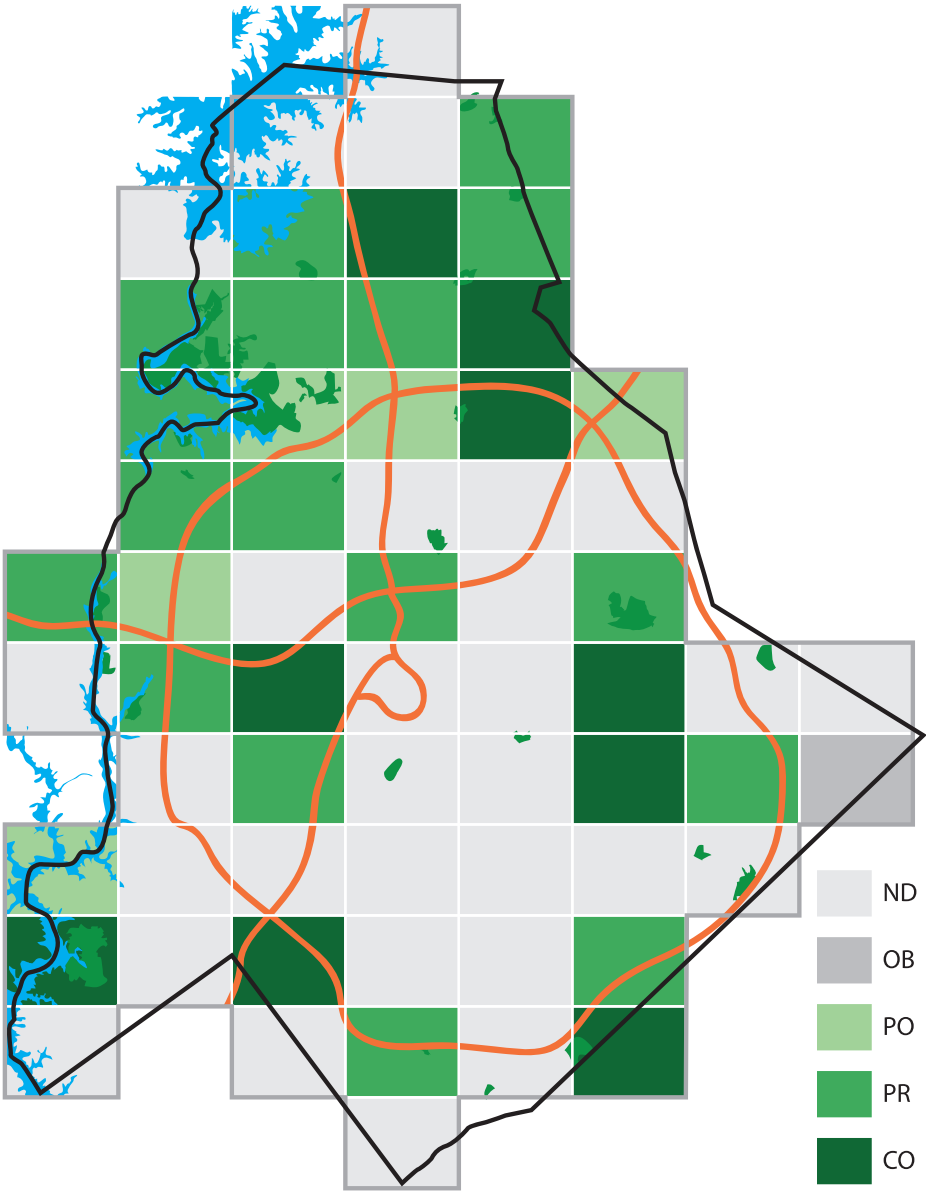
**Abundance:** Fairly Common to Common

**Habitat:** Old fields full of saplings, brushy thickets, forest edge

**Breeding Bird Atlas:** *Fairly Widespread (PR/7, CO/9)*



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# Indigo Bunting *Passerina cyanea*

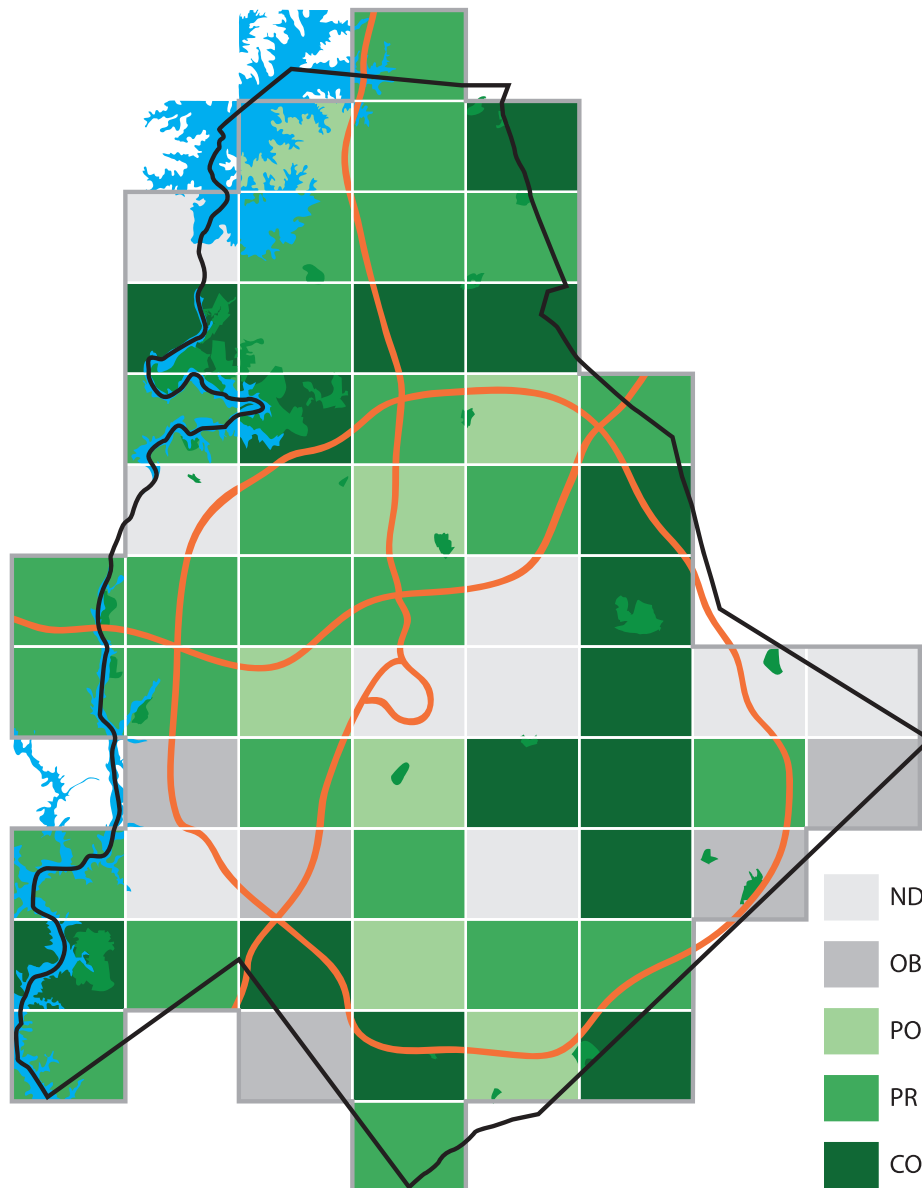


**Status:** Breeder

**Abundance:** Very Common

**Habitat:** Overgrown fields with scattered trees, forest edge, and clearings

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/26, CO/15)



# Dickcissel *Spiza americana*



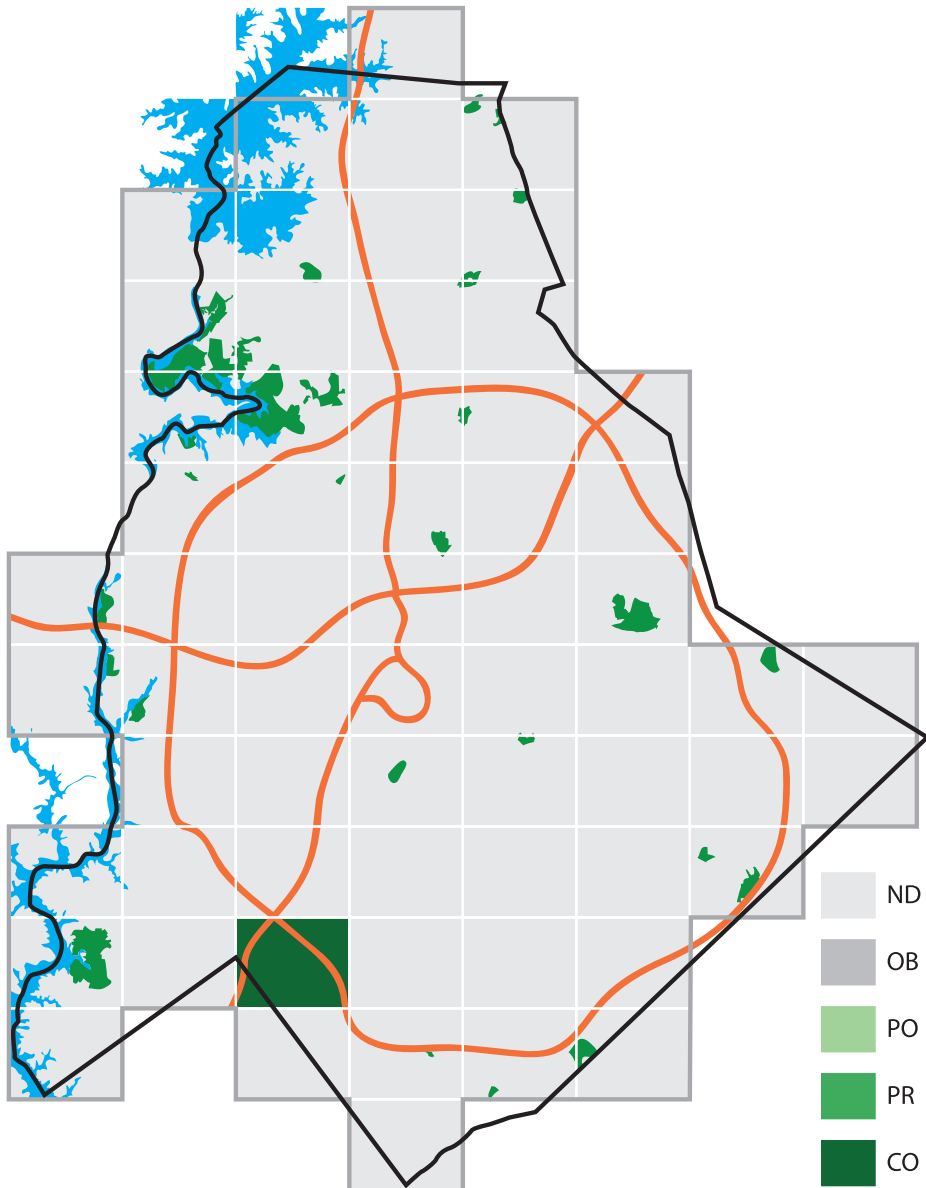
**Status:** Sporadic Breeder, Winter Visitor

**Abundance:** Rare

**Habitat:** Open grassy fields for breeding and hedgerows and thickets in winter

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)

**New Breeding Bird:** First confirmed nesting May 2011, sporadic breeder, not expected to establish a long-term breeding population here.



# Red-winged Blackbird *Agelaius phoeniceus*

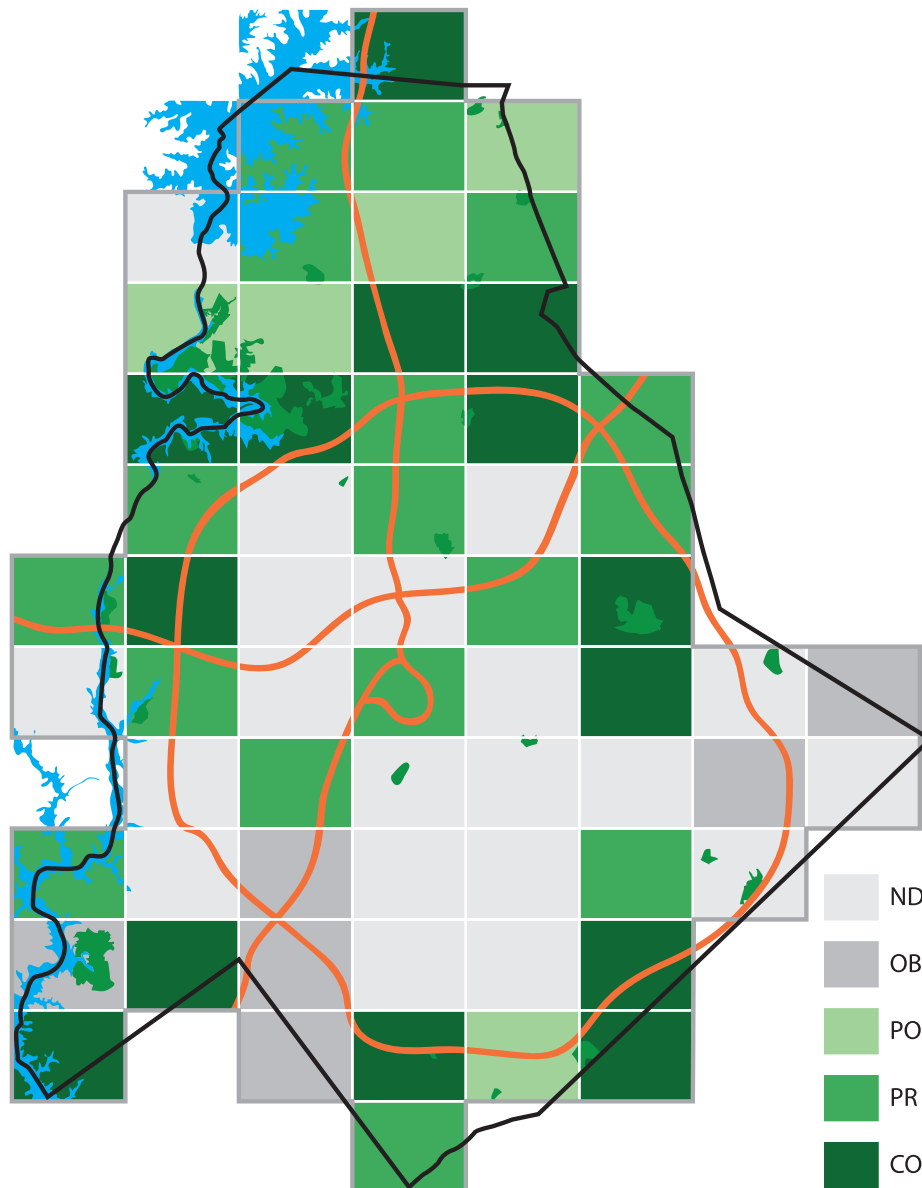


**Status:** Resident

**Abundance:** Common to locally Abundant in winter

**Habitat:** Edges of marshes, lakes, and ponds; forages in open grassy fields; roosts in thick woodlands

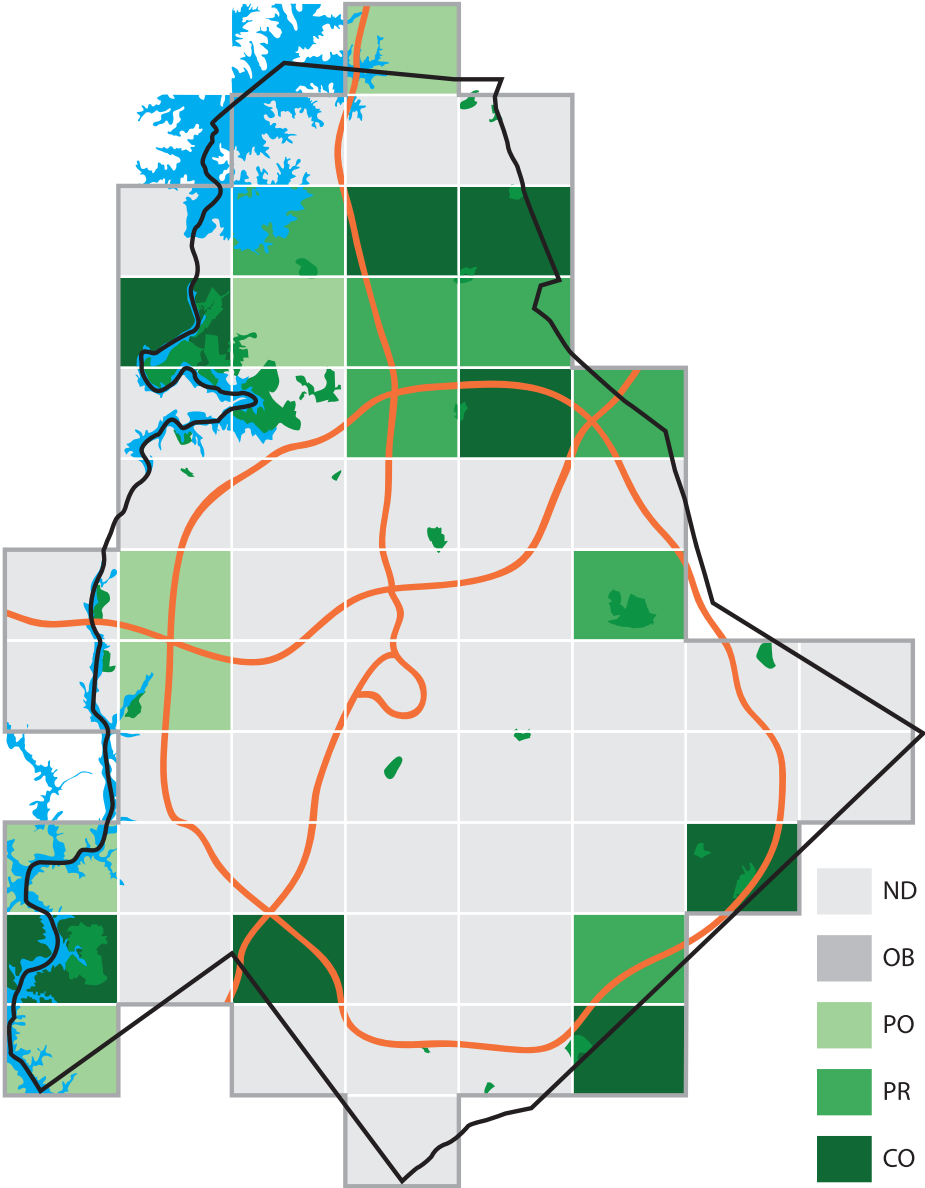
**Breeding Bird Atlas:** *Widespread* (PR/17, CO/14)



# Eastern Meadowlark *Placeholder*



**Status:** Resident  
**Abundance:** Fairly Common to Common  
**Habitat:** Fields, pastures, all grassland areas  
**Breeding Bird Atlas:** *Somewhat Local (PR/7, CO/8)*



# Common Grackle *Quiscalus quiscula*



**Status:** Resident

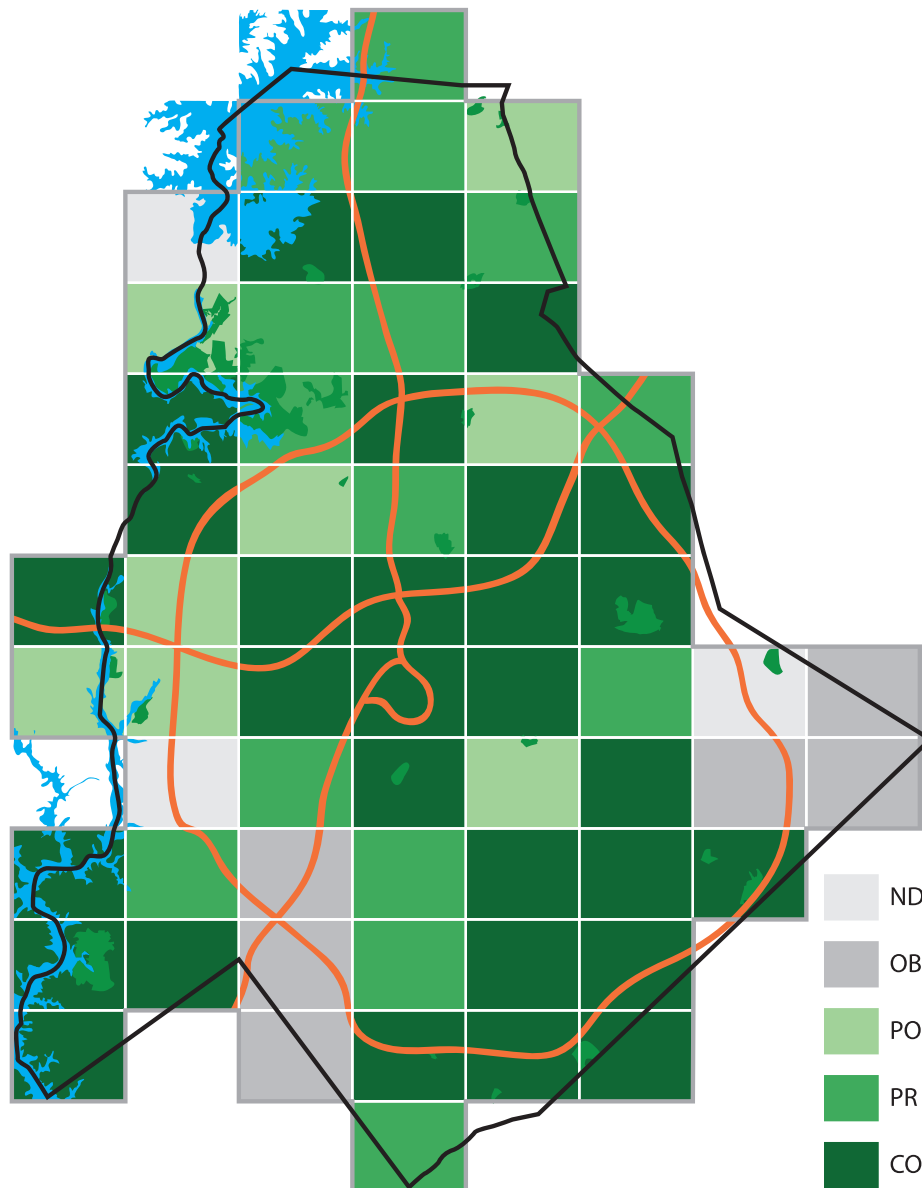
**Abundance:** Common to Abundant

**Habitat:** Pine woods and dense woods for nesting or roosting; forages in croplands, fields

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/15, CO/30)



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# Brown-headed Cowbird *Molothrus ater*

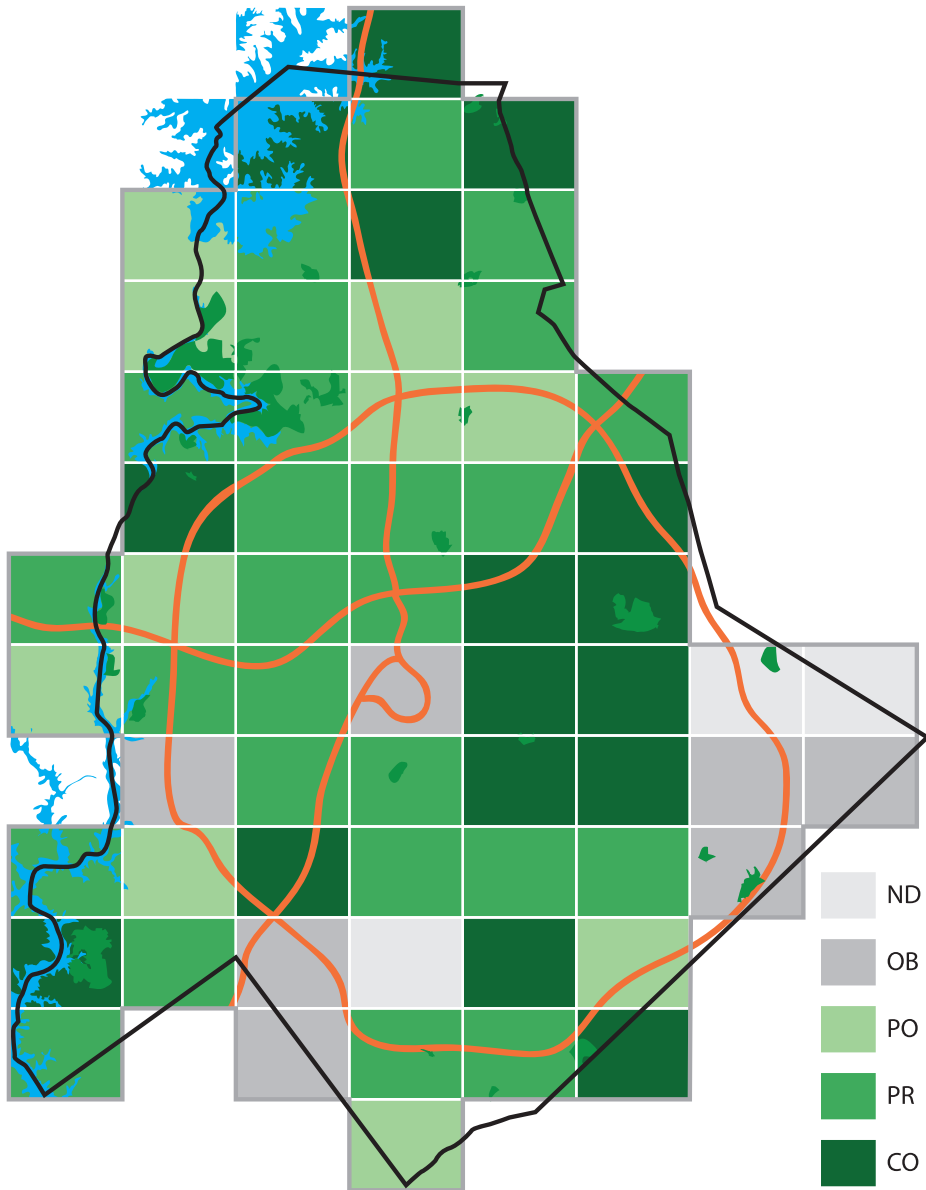


**Status:** Resident

**Abundance:** Fairly Common to Common

**Habitat:** Open woods, residential areas, farms, pastures, plowed fields

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/26, CO/16)





# Orchard Oriole *Icterus spurius*



**Status:** Breeder

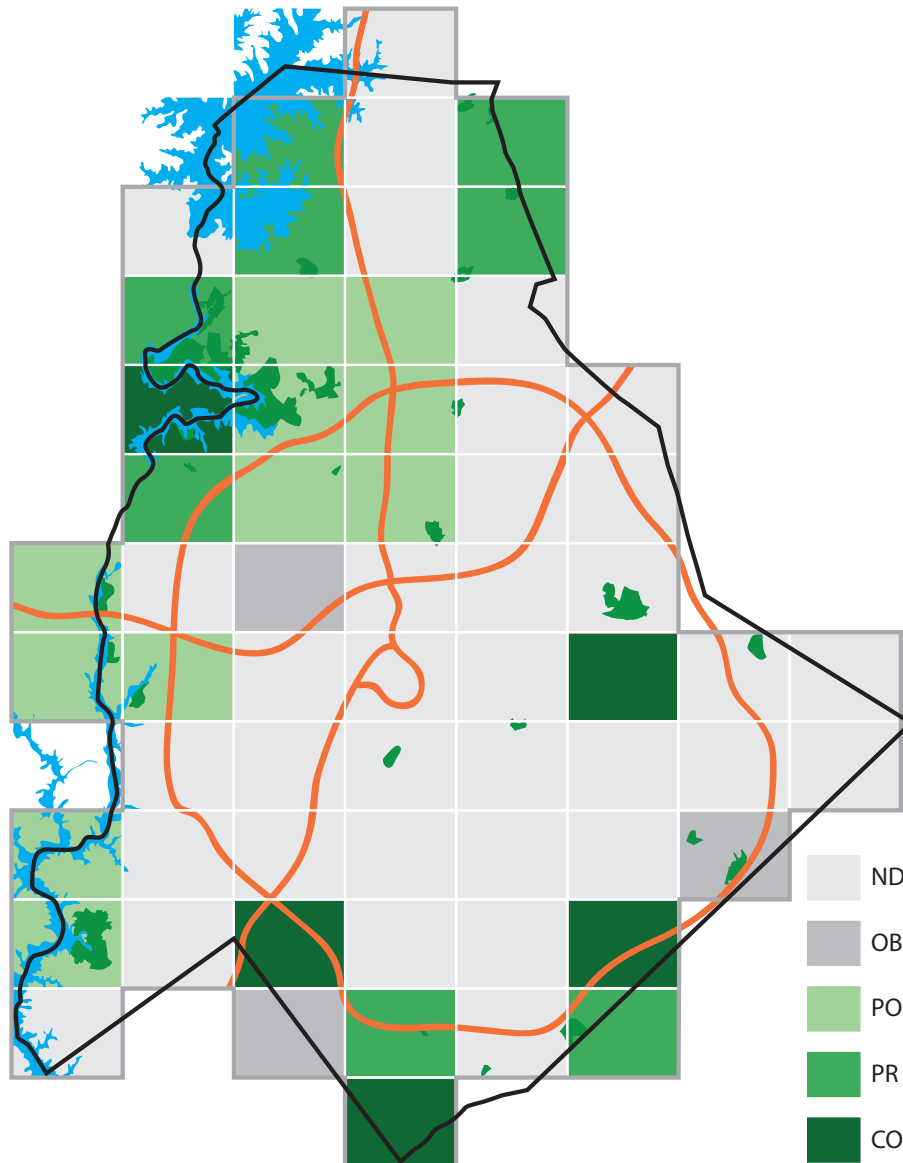
**Abundance:** Uncommon to Fairly Common

**Habitat:** Scattered hardwoods in open country, farmyards, woodland edge

**Breeding Bird Atlas:** *Somewhat Local* (PR/8, CO/5)



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# Baltimore Oriole *Icterus galbula*



**Status:** Migrant, Winter Resident, sporadic Breeder

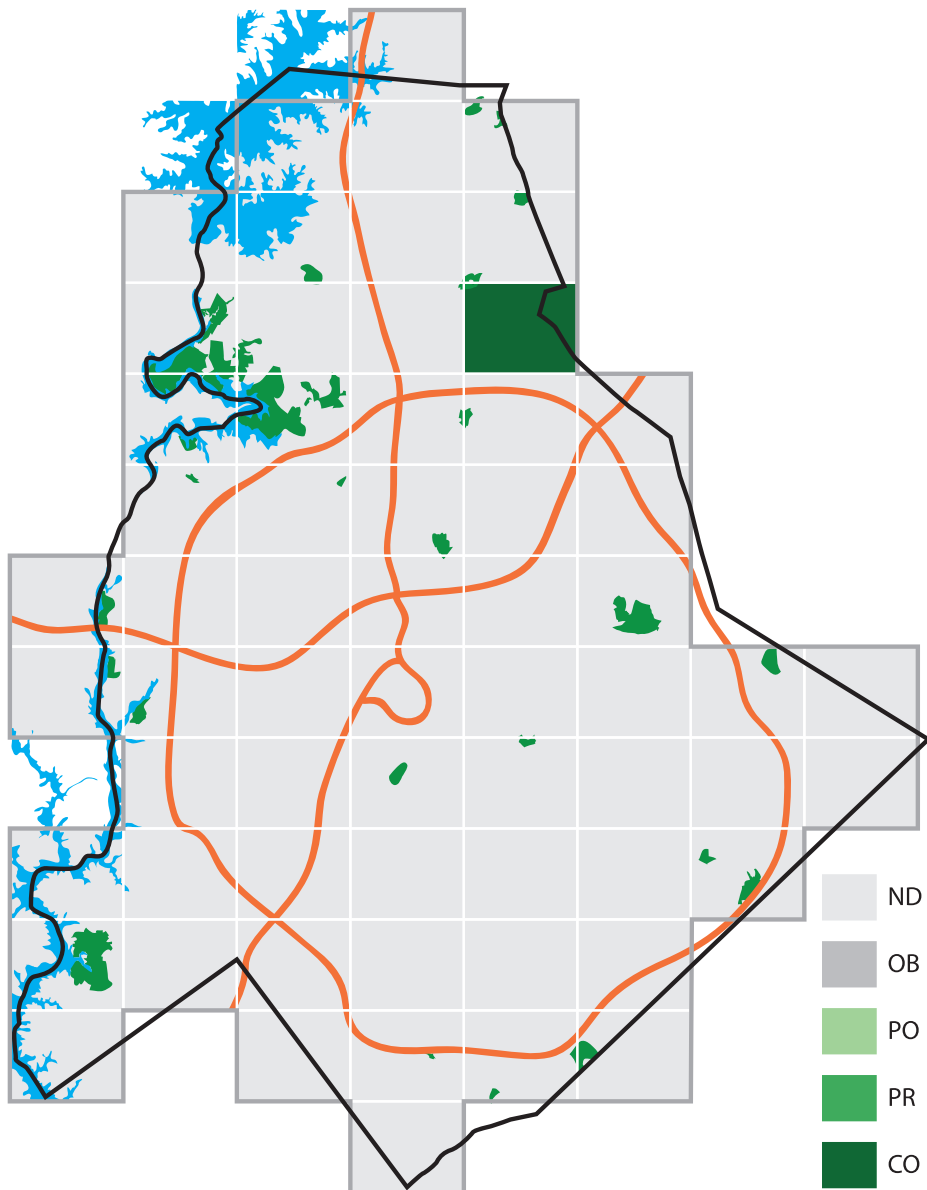
**Abundance:** Uncommon in migration and winter, Very Rare during breeding season

**Habitat:** Scattered hardwoods or open country during migration and riparian borders for breeding; bird feeders in winter

**Breeding Bird Atlas:** *Very Local* (PR/0, CO/1)



**New Breeding Bird:** Two confirmed nest attempts: 1) The Dilworth area in May 1926 and 2) The Highland Creek area, 87 years later, in May 2013.



# House Finch *Haemorrhous mexicanus*

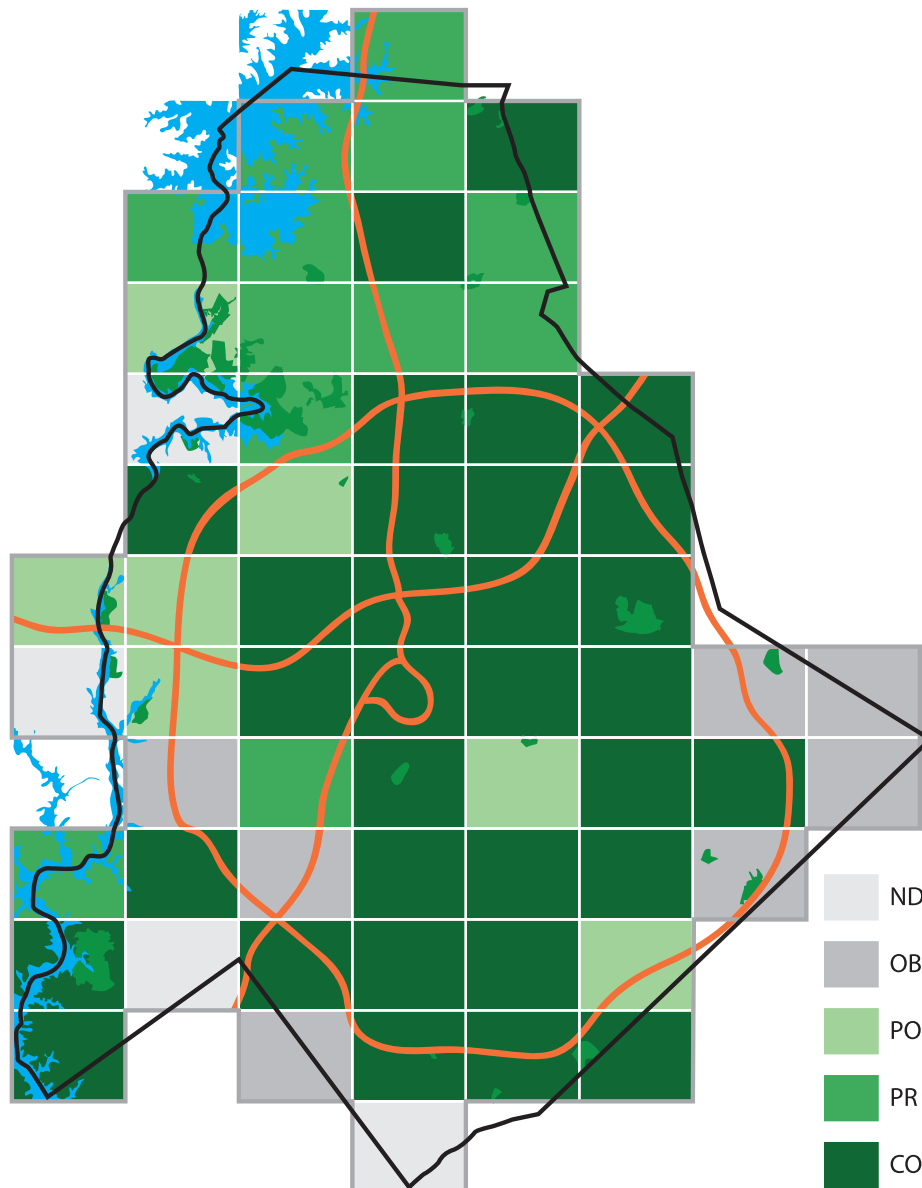


**Status:** Resident

**Abundance:** Very Common

**Habitat:** Urban and suburban areas, farms and brushy thickets in more rural areas

**Breeding Bird Atlas:** *Nearly Ubiquitous* (PR/12, CO/32)



# American Goldfinch *Spinus tristis*



**Status:** Resident

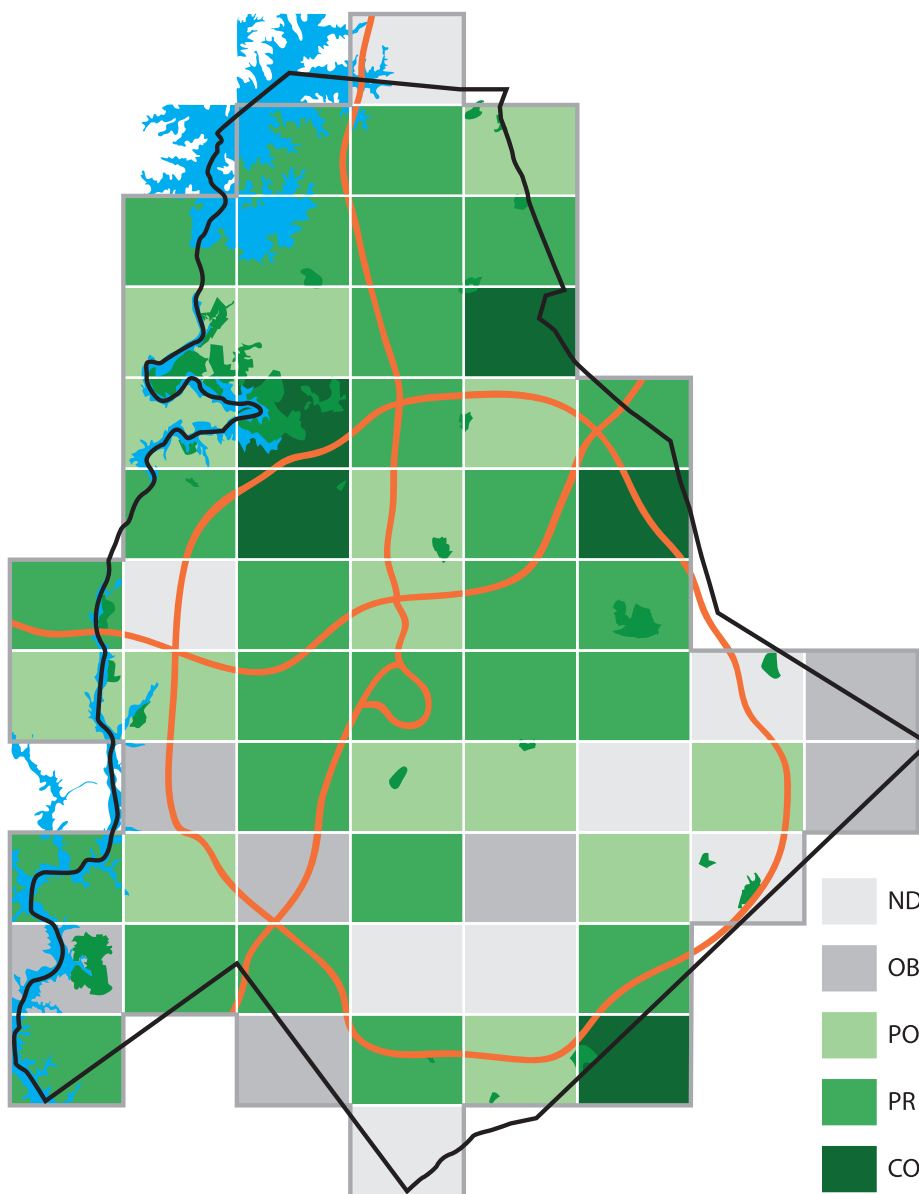
**Abundance:** Common during breeding and Very Common to Abundant in winter

**Habitat:** Overgrown fields, shrubs bordering ponds, widespread in various habitats in winter

**Breeding Bird Atlas:** *Widespread* (PR/27, CO/5)



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# House Sparrow *Passer domesticus*

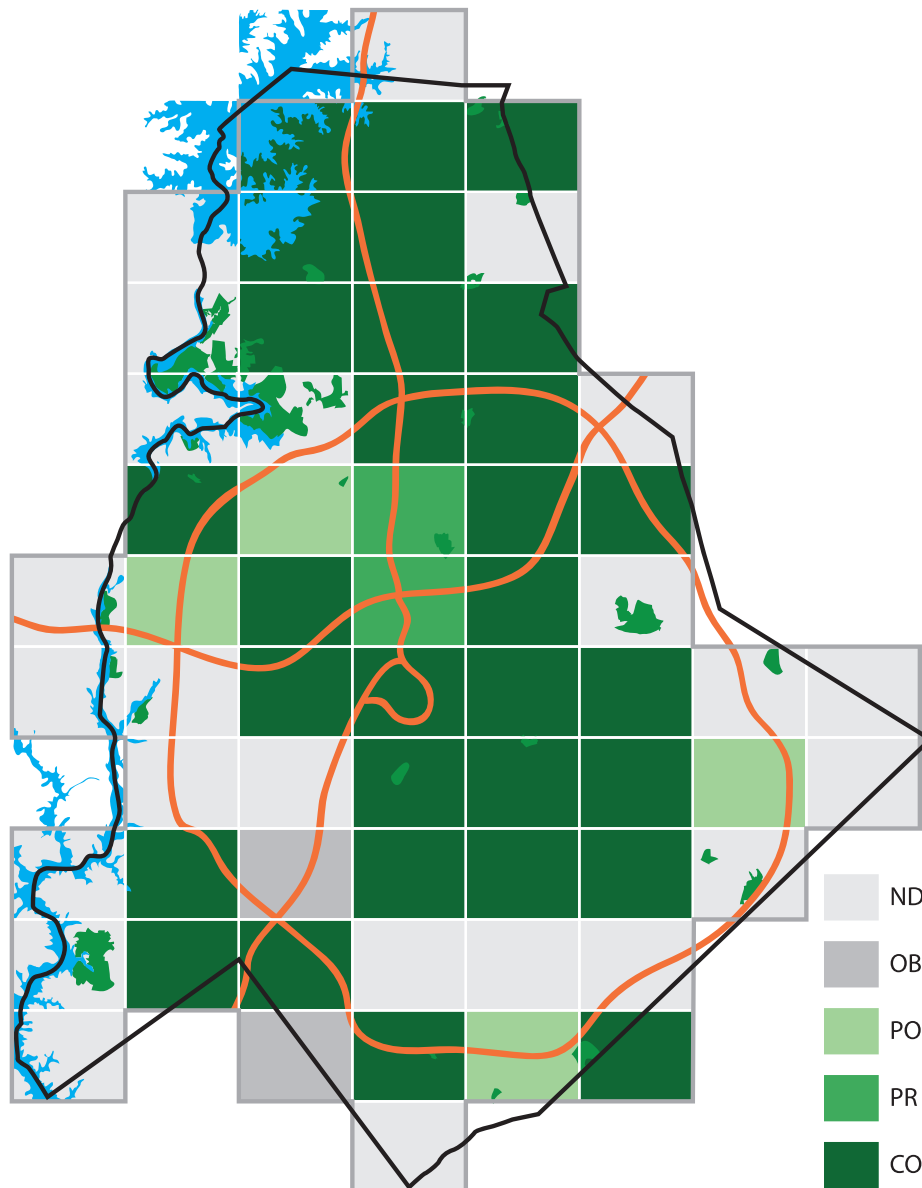


**Status:** Resident

**Abundance:** Very Common to Abundant

**Habitat:** Human settlements: cities, towns, farms, open neighborhoods

**Breeding Bird Atlas:** *Widespread* (PR/2, CO/30)





# APPENDICES

## Checklist of the Birds of Mecklenburg County, North Carolina

October 2017<sup>1</sup>

Atlas maps were prepared for each species highlighted in bold print.

Birds with an asterisk (\*) are former breeding birds with no Atlas map.

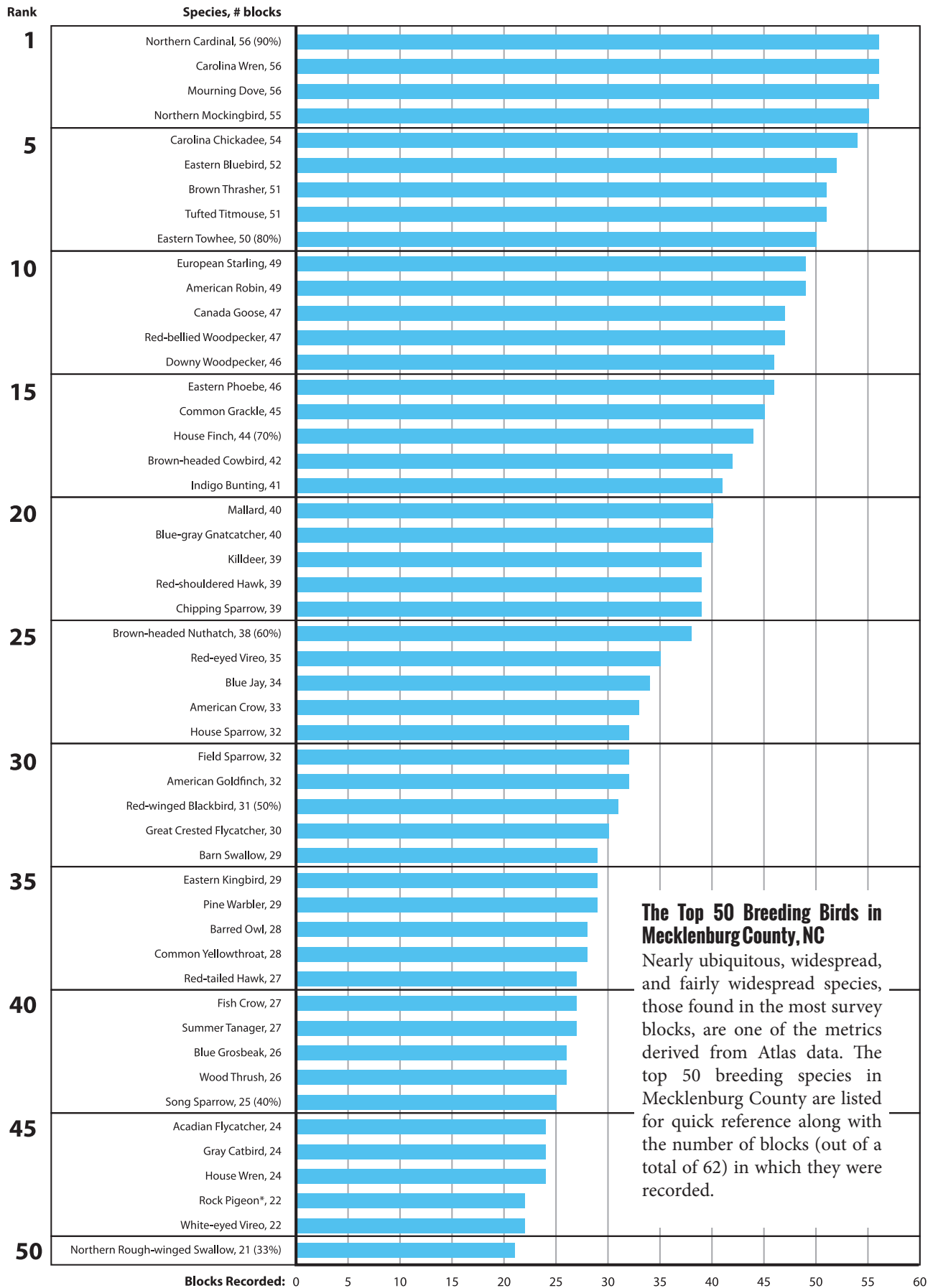
- \_\_\_ **Snow Goose** *Chen caerulescens*
- \_\_\_ Ross's Goose *Chen rossii*
- \_\_\_ Canada Goose *Branta canadensis*
- \_\_\_ Tundra Swan *Cygnus columbianus*
- \_\_\_ **Wood Duck** *Aix sponsa*
- \_\_\_ Gadwall *Anas strepera*
- \_\_\_ American Wigeon *Anas americana*
- \_\_\_ American Black Duck *Anas rubripes*
- \_\_\_ **Mallard** *Anas platyrhynchos*
- \_\_\_ Blue-winged Teal *Anas discors*
- \_\_\_ Northern Shoveler *Anas clypeata*
- \_\_\_ Northern Pintail *Anas acuta*
- \_\_\_ Green-winged Teal *Anas crecca*
- \_\_\_ Canvasback *Aythya valisineria*
- \_\_\_ Redhead *Aythya americana*
- \_\_\_ Ring-necked Duck *Aythya collaris*
- \_\_\_ Greater Scaup *Aythya marila*
- \_\_\_ Lesser Scaup *Aythya affinis*
- \_\_\_ Surf Scoter *Melanitta perspicillata*
- \_\_\_ White-winged Scoter *Melanitta fusca*
- \_\_\_ Black Scoter *Melanitta nigra*
- \_\_\_ Long-tailed Duck *Clangula hyemalis*
- \_\_\_ Bufflehead *Bucephala albeola*
- \_\_\_ Common Goldeneye *Bucephala clangula*
- \_\_\_ **Hooded Merganser** *Lophodytes cucullatus*
- \_\_\_ Common Merganser *Mergus merganser*
- \_\_\_ Red-breasted Merganser *Mergus serrator*
- \_\_\_ Ruddy Duck *Oxyura jamaicensis*
- \_\_\_ **Northern Bobwhite** *Colinus virginianus*
- \_\_\_ **Wild Turkey** *Meleagris gallopavo*
- \_\_\_ Red-throated Loon *Gavia stellata*
- \_\_\_ Common Loon *Gavia immer*
- \_\_\_ **Pied-billed Grebe** *Podilymbus podiceps*
- \_\_\_ Horned Grebe *Podiceps auritus*
- \_\_\_ Red-necked Grebe *Podiceps grisegena*
- \_\_\_ Eared Grebe *Podiceps nigricollis*
- \_\_\_ Western Grebe *Aechmophorus occidentalis*
- \_\_\_ Wood Stork *Mycteria americana*
- \_\_\_ Double-crested Cormorant *Phalacrocorax auritus*
- \_\_\_ Anhinga *Anhinga anhinga*
- \_\_\_ American White Pelican *Pelecanus erythrorhynchos*
- \_\_\_ Brown Pelican *Pelecanus occidentalis*
- \_\_\_ American Bittern *Botaurus lentiginosus*
- \_\_\_ Least Bittern\* *Ixobrychus exilis*
- \_\_\_ **Great Blue Heron** *Ardea herodias*
- \_\_\_ Great Egret *Ardea alba*
- \_\_\_ Snowy Egret *Egretta thula*
- \_\_\_ Little Blue Heron *Egretta caerulea*
- \_\_\_ Tricolored Heron *Egretta tricolor*
- \_\_\_ Cattle Egret *Bubulcus ibis*
- \_\_\_ **Green Heron** *Butorides virescens*
- \_\_\_ Black-crowned Night-Heron *Nycticorax nycticorax*
- \_\_\_ **Yellow-crowned Night-Heron** *Nyctanassa violacea*
- \_\_\_ White Ibis *Eudocimus albus*
- \_\_\_ Glossy Ibis *Plegadis falcinellus*
- \_\_\_ **Black Vulture** *Coragyps atratus*
- \_\_\_ **Turkey Vulture** *Cathartes aura*
- \_\_\_ **Osprey** *Pandion haliaetus*
- \_\_\_ Swallow-tailed Kite *Elanoides forficatus*
- \_\_\_ **Mississippi Kite** *Ictinia mississippiensis*
- \_\_\_ **Bald Eagle** *Haliaeetus leucocephalus*
- \_\_\_ Northern Harrier *Circus cyaneus*
- \_\_\_ **Sharp-shinned Hawk** *Accipiter striatus*
- \_\_\_ **Cooper's Hawk** *Accipiter cooperii*
- \_\_\_ **Red-shouldered Hawk** *Buteo lineatus*
- \_\_\_ **Broad-winged Hawk** *Buteo platypterus*
- \_\_\_ **Red-tailed Hawk** *Buteo jamaicensis*
- \_\_\_ Rough-legged Hawk *Buteo lagopus*
- \_\_\_ Yellow Rail *Coturnicops noveboracensis*
- \_\_\_ Black Rail *Laterallus jamaicensis*
- \_\_\_ Clapper Rail *Rallus crepitans*
- \_\_\_ King Rail\* *Rallus elegans*
- \_\_\_ Virginia Rail *Rallus limicola*
- \_\_\_ Sora *Porzana carolina*
- \_\_\_ Purple Gallinule *Porphyrio martinicus*
- \_\_\_ Common Gallinule *Gallinula chloropus*
- \_\_\_ American Coot *Fulica americana*
- \_\_\_ Sandhill Crane *Grus canadensis*
- \_\_\_ American Avocet *Recurvirostra americana*
- \_\_\_ Black-bellied Plover *Pluvialis squatarola*
- \_\_\_ American Golden-Plover *Pluvialis dominica*
- \_\_\_ Semipalmated Plover *Charadrius semipalmatus*
- \_\_\_ Piping Plover *Charadrius melodus*
- \_\_\_ **Killdeer** *Charadrius vociferus*
- \_\_\_ **Spotted Sandpiper** *Actitis macularius*
- \_\_\_ Solitary Sandpiper *Tringa solitaria*
- \_\_\_ Greater Yellowlegs *Tringa melanoleuca*
- \_\_\_ Willet *Tringa semipalmata*
- \_\_\_ Lesser Yellowlegs *Tringa flavipes*
- \_\_\_ Upland Sandpiper *Bartramia longicauda*
- \_\_\_ Whimbrel *Numenius phaeopus*
- \_\_\_ Marbled Godwit *Limosa fedoa*
- \_\_\_ Ruddy Turnstone *Arenaria interpres*
- \_\_\_ Red Knot *Calidris canutus*

<sup>1</sup>Taxonomy conforms to the 56th Supplement to the American Ornithologist's Union Check-list of North American Birds, published in 2015.

- \_\_\_ Stilt Sandpiper *Calidris himantopus*  
 \_\_\_ Sanderling *Calidris alba*  
 \_\_\_ Dunlin *Calidris alpina*  
 \_\_\_ Baird's Sandpiper *Calidris bairdii*  
 \_\_\_ Least Sandpiper *Calidris minutilla*  
 \_\_\_ White-rumped Sandpiper *Calidris fuscicollis*  
 \_\_\_ Buff-breasted Sandpiper *Calidris subruficollis*  
 \_\_\_ Pectoral Sandpiper *Calidris melanotos*  
 \_\_\_ Semipalmated Sandpiper *Calidris pusilla*  
 \_\_\_ Western Sandpiper *Calidris mauri*  
 \_\_\_ Short-billed Dowitcher *Limnodromus griseus*  
 \_\_\_ Wilson's Snipe *Gallinago delicata*  
 \_\_\_ **American Woodcock** *Scolopax minor*  
 \_\_\_ Wilson's Phalarope *Phalaropus tricolor*  
 \_\_\_ Pomarine Jaeger *Stercorarius pomarinus*  
 \_\_\_ Parasitic Jaeger *Stercorarius parasiticus*  
 \_\_\_ Long-tailed Jaeger *Stercorarius longicaudus*  
 \_\_\_ Sabine's Gull *Xema sabini*  
 \_\_\_ Bonaparte's Gull *Chroicocephalus philadelphia*  
 \_\_\_ Black-headed Gull *Chroicocephalus ridibundus*  
 \_\_\_ Laughing Gull *Leucophaeus atricilla*  
 \_\_\_ Franklin's Gull *Leucophaeus pipixcan*  
 \_\_\_ Ring-billed Gull *Larus delawarensis*  
 \_\_\_ Herring Gull *Larus argentatus*  
 \_\_\_ Tayer's Gull *Larus thayeri*  
 \_\_\_ Iceland Gull *Larus glaucoides*  
 \_\_\_ Lesser Black-backed Gull *Larus fuscus*  
 \_\_\_ Great Black-backed Gull *Larus marinus*  
 \_\_\_ Brown Noddy *Anous stolidus*  
 \_\_\_ Sooty Tern *Onychoprion fuscatus*  
 \_\_\_ Bridled Tern *Onychoprion anaethetus*  
 \_\_\_ Caspian Tern *Hydroprogne caspia*  
 \_\_\_ Black Tern *Chlidonias niger*  
 \_\_\_ Common Tern *Sterna hirundo*  
 \_\_\_ Forster's Tern *Sterna forsteri*  
 \_\_\_ Royal Tern *Thalasseus maximus*  
 \_\_\_ Black Skimmer *Rynchops niger*  
 \_\_\_ **Rock Pigeon** *Columba livia*  
 \_\_\_ Band-tailed Pigeon *Patagioenas fasciata*  
 \_\_\_ **Eurasian Collared-Dove** *Streptopelia decaocto*  
 \_\_\_ Passenger Pigeon (extinct) *Ectopistes migratorius*  
 \_\_\_ Common Ground-Dove *Columbina passerina*  
 \_\_\_ White-winged Dove *Zenaida asiatica*  
 \_\_\_ **Mourning Dove** *Zenaida macroura*  
 \_\_\_ **Yellow-billed Cuckoo** *Coccyzus americanus*  
 \_\_\_ Black-billed Cuckoo\* *Coccyzus erythrophthalmus*  
 \_\_\_ **Barn Owl** *Tyto alba*  
 \_\_\_ **Eastern Screech-Owl** *Megascops asio*  
 \_\_\_ **Great Horned Owl** *Bubo virginianus*  
 \_\_\_ Snowy Owl *Bubo scandiacus*  
 \_\_\_ **Barred Owl** *Strix varia*  
 \_\_\_ Short-eared Owl *Asio flammeus*  
 \_\_\_ Northern Saw-whet Owl *Aegolius acadicus*  
 \_\_\_ **Common Nighthawk** *Chordeiles minor*  
 \_\_\_ **Chuck-will's-widow** *Antrostomus carolinensis*  
 \_\_\_ **Eastern Whip-poor-will** *Antrostomus vociferus*  
 \_\_\_ **Chimney Swift** *Chaetura pelagica*  
 \_\_\_ **Ruby-throated Hummingbird** *Archilochus colubris*  
 \_\_\_ Black-chinned Hummingbird *Archilochus alexandri*  
 \_\_\_ Anna's Hummingbird *Calypte anna*  
 \_\_\_ Calliope Hummingbird *Selasphorus calliope*  
 \_\_\_ Rufous Hummingbird *Selasphorus rufus*  
 \_\_\_ **Belted Kingfisher** *Megaceryle alcyon*  
 \_\_\_ **Red-headed Woodpecker** *Melanerpes erythrocephalus*  
 \_\_\_ **Red-bellied Woodpecker** *Melanerpes carolinus*  
 \_\_\_ Yellow-bellied Sapsucker *Sphyrapicus varius*  
 \_\_\_ **Downy Woodpecker** *Picoides pubescens*  
 \_\_\_ **Hairy Woodpecker** *Picoides villosus*  
 \_\_\_ **Northern Flicker** *Colaptes auratus*  
 \_\_\_ **Pileated Woodpecker** *Dryocopus pileatus*  
 \_\_\_ **American Kestrel** *Falco sparverius*  
 \_\_\_ Merlin *Falco columbarius*  
 \_\_\_ **Peregrine Falcon** *Falco peregrinus*  
 \_\_\_ Carolina Parakeet (extinct) *Conuropsis carolinensis*  
 \_\_\_ Olive-sided Flycatcher *Contopus cooperi*  
 \_\_\_ **Eastern Wood-Pewee** *Contopus virens*  
 \_\_\_ Yellow-bellied Flycatcher *Empidonax flaviventris*  
 \_\_\_ **Acadian Flycatcher** *Empidonax virescens*  
 \_\_\_ Alder Flycatcher *Empidonax alnorum*  
 \_\_\_ **Willow Flycatcher** *Empidonax traillii*  
 \_\_\_ Least Flycatcher *Empidonax minimus*  
 \_\_\_ **Eastern Phoebe** *Sayornis phoebe*  
 \_\_\_ **Great Crested Flycatcher** *Myiarchus crinitus*  
 \_\_\_ Western Kingbird *Tyrannus verticalis*  
 \_\_\_ **Eastern Kingbird** *Tyrannus tyrannus*  
 \_\_\_ **Loggerhead Shrike** *Lanius ludovicianus*  
 \_\_\_ **White-eyed Vireo** *Vireo griseus*  
 \_\_\_ **Yellow-throated Vireo** *Vireo flavifrons*  
 \_\_\_ Blue-headed Vireo\* *Vireo solitarius*  
 \_\_\_ Warbling Vireo *Vireo gilvus*  
 \_\_\_ Philadelphia Vireo *Vireo philadelphicus*  
 \_\_\_ **Red-eyed Vireo** *Vireo olivaceus*  
 \_\_\_ **Blue Jay** *Cyanocitta cristata*  
 \_\_\_ **American Crow** *Corvus brachyrhynchos*  
 \_\_\_ **Fish Crow** *Corvus ossifragus*  
 \_\_\_ **Common Raven** *Corvus corax*  
 \_\_\_ **Horned Lark** *Eremophila alpestris*  
 \_\_\_ **Purple Martin** *Progne subis*  
 \_\_\_ **Tree Swallow** *Tachycineta bicolor*  
 \_\_\_ Violet-green Swallow *Tachycineta thalassina*  
 \_\_\_ **Northern Rough-winged Swallow** *Stelgidopteryx serripennis*  
 \_\_\_ Bank Swallow *Riparia riparia*  
 \_\_\_ **Cliff Swallow** *Petrochelidon pyrrhonota*  
 \_\_\_ **Barn Swallow** *Hirundo rustica*  
 \_\_\_ **Carolina Chickadee** *Poecile carolinensis*  
 \_\_\_ **Tufted Titmouse** *Baeolophus bicolor*  
 \_\_\_ Red-breasted Nuthatch *Sitta canadensis*  
 \_\_\_ **White-breasted Nuthatch** *Sitta carolinensis*  
 \_\_\_ **Brown-headed Nuthatch** *Sitta pusilla*  
 \_\_\_ Brown Creeper *Certhia americana*  
 \_\_\_ **House Wren** *Troglodytes aedon*  
 \_\_\_ Winter Wren *Troglodytes troglodytes*  
 \_\_\_ Sedge Wren *Cistothorus platensis*  
 \_\_\_ Marsh Wren *Cistothorus palustris*



- \_\_\_ **Carolina Wren** *Thryothorus ludovicianus*
- \_\_\_ Bewick's Wren (extirpated) *Thryomanes bewickii*
- \_\_\_ **Blue-gray Gnatcatcher** *Poliophtila caerulea*
- \_\_\_ Golden-crowned Kinglet *Regulus satrapa*
- \_\_\_ Ruby-crowned Kinglet *Regulus calendula*
- \_\_\_ **Eastern Bluebird** *Sialia sialis*
- \_\_\_ Veery *Catharus fuscescens*
- \_\_\_ Gray-cheeked Thrush *Catharus minimus*
- \_\_\_ Swainson's Thrush *Catharus ustulatus*
- \_\_\_ Hermit Thrush *Catharus guttatus*
- \_\_\_ **Wood Thrush** *Hylocichla mustelina*
- \_\_\_ **American Robin** *Turdus migratorius*
- \_\_\_ **Gray Catbird** *Dumetella carolinensis*
- \_\_\_ **Brown Thrasher** *Toxostoma rufum*
- \_\_\_ **Northern Mockingbird** *Mimus polyglottos*
- \_\_\_ **European Starling** *Sturnus vulgaris*
- \_\_\_ American Pipit *Anthus rubescens*
- \_\_\_ **Cedar Waxwing** *Bombycilla cedrorum*
- \_\_\_ Lapland Longspur *Calcarius lapponicus*
- \_\_\_ **Ovenbird** *Seiurus aurocapilla*
- \_\_\_ **Worm-eating Warbler** *Helmitheros vermivorum*
- \_\_\_ **Louisiana Waterthrush** *Parkesia motacilla*
- \_\_\_ Northern Waterthrush *Parkesia noveboracensis*
- \_\_\_ Golden-winged Warbler *Vermivora chrysoptera*
- \_\_\_ Blue-winged Warbler *Vermivora cyanoptera*
- \_\_\_ **Black-and-white Warbler** *Mniotilta varia*
- \_\_\_ **Prothonotary Warbler** *Protonotaria citrea*
- \_\_\_ **Swainson's Warbler** *Limnithlypis swainsonii*
- \_\_\_ Tennessee Warbler *Oreothlypis peregrina*
- \_\_\_ Orange-crowned Warbler *Oreothlypis celata*
- \_\_\_ Nashville Warbler *Oreothlypis ruficapilla*
- \_\_\_ Connecticut Warbler *Oporornis agilis*
- \_\_\_ Mourning Warbler *Oporornis agilis*
- \_\_\_ **Kentucky Warbler** *Geothlypis formosa*
- \_\_\_ **Common Yellowthroat** *Geothlypis trichas*
- \_\_\_ **Hooded Warbler** *Setophaga citrina*
- \_\_\_ **American Redstart** *Setophaga ruticilla*
- \_\_\_ Kirtland's Warbler *Setophaga kirtlandii*
- \_\_\_ Cape May Warbler *Setophaga tigrina*
- \_\_\_ Cerulean Warbler *Setophaga cerulea*
- \_\_\_ **Northern Parula** *Setophaga americana*
- \_\_\_ Magnolia Warbler *Setophaga magnolia*
- \_\_\_ Bay-breasted Warbler *Setophaga castanea*
- \_\_\_ Blackburnian Warbler *Setophaga fusca*
- \_\_\_ **Yellow Warbler** *Setophaga petechia*
- \_\_\_ Chestnut-sided Warbler *Setophaga pensylvanica*
- \_\_\_ Blackpoll Warbler *Setophaga striata*
- \_\_\_ Black-throated Blue Warbler *Setophaga caerulescens*
- \_\_\_ Palm Warbler *Setophaga palmarum*
- \_\_\_ **Pine Warbler** *Setophaga pinus*
- \_\_\_ Yellow-rumped Warbler *Setophaga coronata*
- \_\_\_ Yellow-throated Warbler *Setophaga dominica*
- \_\_\_ **Prairie Warbler** *Setophaga discolor*
- \_\_\_ Black-throated Green Warbler *Setophaga virens*
- \_\_\_ Canada Warbler *Cardellina canadensis*
- \_\_\_ Wilson's Warbler *Cardellina pusilla*
- \_\_\_ **Yellow-breasted Chat** *Icteria virens*
- \_\_\_ **Eastern Towhee** *Pipilo erythrophthalmus*
- \_\_\_ Bachman's Sparrow\* *Peucaea aestivalis*
- \_\_\_ **Chipping Sparrow** *Spizella passerina*
- \_\_\_ Clay-colored Sparrow *Spizella pallida*
- \_\_\_ **Field Sparrow** *Spizella pusilla*
- \_\_\_ Vesper Sparrow *Poocetes gramineus*
- \_\_\_ Lark Sparrow *Chondestes grammacus*
- \_\_\_ Savannah Sparrow *Passerculus sandwichensis*
- \_\_\_ **Grasshopper Sparrow** *Ammodramus savannarum*
- \_\_\_ Henslow's Sparrow\* *Ammodramus henslowii*
- \_\_\_ Le Conte's Sparrow *Ammodramus leconteii*
- \_\_\_ Nelson's Sparrow *Ammodramus nelsoni*
- \_\_\_ Fox Sparrow *Passerella iliaca*
- \_\_\_ **Song Sparrow** *Melospiza melodia*
- \_\_\_ Lincoln's Sparrow *Melospiza lincolnii*
- \_\_\_ Swamp Sparrow *Melospiza georgiana*
- \_\_\_ White-throated Sparrow *Zonotrichia albicollis*
- \_\_\_ White-crowned Sparrow *Zonotrichia leucophrys*
- \_\_\_ Dark-eyed Junco *Junco hyemalis*
- \_\_\_ **Summer Tanager** *Piranga rubra*
- \_\_\_ **Scarlet Tanager** *Piranga olivacea*
- \_\_\_ Western Tanager *Piranga ludoviciana*
- \_\_\_ **Northern Cardinal** *Cardinalis cardinalis*
- \_\_\_ Rose-breasted Grosbeak *Pheucticus ludovicianus*
- \_\_\_ **Blue Grosbeak** *Passerina caerulea*
- \_\_\_ **Indigo Bunting** *Passerina cyanea*
- \_\_\_ Painted Bunting *Passerina ciris*
- \_\_\_ **Dickcissel** *Spiza americana*
- \_\_\_ Bobolink *Dolichonyx oryzivorus*
- \_\_\_ **Red-winged Blackbird** *Agelaius phoeniceus*
- \_\_\_ **Eastern Meadowlark** *Sturnella magna*
- \_\_\_ Rusty Blackbird *Euphagus carolinus*
- \_\_\_ Brewer's Blackbird *Euphagus cyanocephalus*
- \_\_\_ **Common Grackle** *Quiscalus quiscula*
- \_\_\_ **Brown-headed Cowbird** *Molothrus ater*
- \_\_\_ **Orchard Oriole** *Icterus spurius*
- \_\_\_ Hooded Oriole *Icterus cucullatus*
- \_\_\_ Bullock's Oriole *Icterus bullockii*
- \_\_\_ **Baltimore Oriole** *Icterus galbula*
- \_\_\_ **House Finch** *Haemorhous mexicanus*
- \_\_\_ Purple Finch *Haemorhous purpureus*
- \_\_\_ Red Crossbill *Loxia curvirostra*
- \_\_\_ Common Redpoll *Acanthis flammea*
- \_\_\_ Pine Siskin *Spinus pinus*
- \_\_\_ **American Goldfinch** *Spinus tristis*
- \_\_\_ Evening Grosbeak *Coccothraustes vespertinus*
- \_\_\_ **House Sparrow** *Passer domesticus*

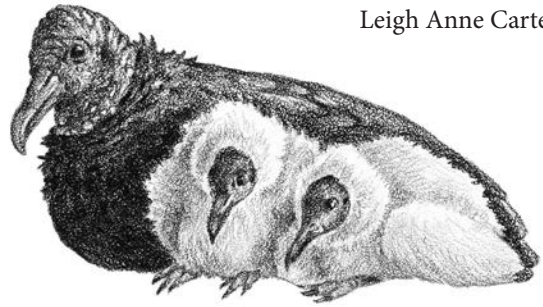


**The Top 50 Breeding Birds in Mecklenburg County, NC**

Nearly ubiquitous, widespread, and fairly widespread species, those found in the most survey blocks, are one of the metrics derived from Atlas data. The top 50 breeding species in Mecklenburg County are listed for quick reference along with the number of blocks (out of a total of 62) in which they were recorded.

\*The presence of the Rock Pigeon is believed to be underrepresented by this Atlas survey.

**Black Vulture**  
Leigh Anne Carter



**Breeding Bird Voucher Photos**

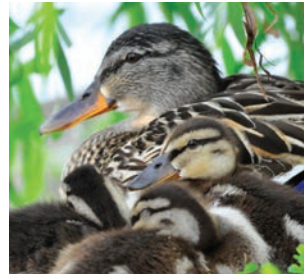
A total of 116 birds breed in Mecklenburg County. Below are the 84 voucher photos taken inside the county border. Thirty-two species do not have photographic evidence and are listed at the end. Any future voucher photos can be sent to: Natural Resources Coordinator, (704-566-9061), 9001 Plaza Road Extension, Charlotte, NC 28215.



**Canada Goose**  
Staff



**Wood Duck**  
Staff



**Mallard**  
Phil Fowler



**Hooded Merganser (young)** Will Stuart



**Northern Bobwhite (nest)**  
Staff



**Wild Turkey**  
Staff



**Pied-billed Grebe**  
Jeff Lemons



**Great Blue Heron**  
Jarrett Wyant



**Green Heron**  
Phil Fowler



**Yellow-crowned Night-Heron** Jeff Lemons



**Black Vulture**  
Kevin Metcalf



**Turkey Vulture**  
Kevin Metcalf



**Osprey**  
Bill Archer



**Mississippi Kite**  
Phil Fowler



**Bald Eagle (at nest)**  
Carole Buie-Jackson



**Red-shouldered Hawk**  
John Scavetto



**Broad-winged Hawk**  
Phil Fowler



**Killdeer**  
Bill Archer



**American Woodcock**  
Staff



**Eurasian Collared-Dove**  
Phil Fowler



**Mourning Dove**  
Jeff Lemons



**Yellow-bellied Cuckoo**  
Staff



**Barn Owl**  
Mathias Engelmann



**Eastern Screech-Owl**  
Staff



**Great Horned Owl**  
Jim Guyton



**Barred Owl (banding at nest)**Staff



**Chuck-will's-widow (old record)** Wm G. Cobey



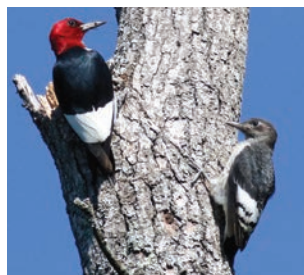
**Eastern Whip-poor-will**  
Donald W. Seriff



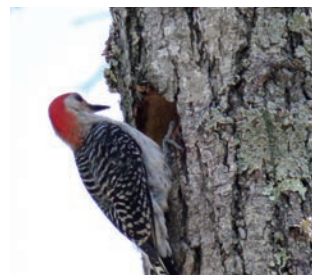
**Ruby-throated Hummingbird** Phil Fowler



**Belted Kingfisher (nest hole)** Staff



**Red-headed Woodpecker**  
Will Stuart



**Red-bellied Woodpecker**  
Leigh Anne Carter



**Downy Woodpecker (juvenile)** Staff



**Hairy Woodpecker (hatch-year male)** Staff



**Northern Flicker**  
William G. Cobey



**Peregrine Falcon**  
Debbie Foster



**American Kestrel**  
Tom Sanders



**Peregrine Falcon (at nest)**  
Jeff Maw



**Eastern Phoebe**  
Phil Fowler



**Great Crested Flycatcher (brood patch)** Staff



**Eastern Kingbird**  
Staff



**White-eyed Vireo**  
Staff



**Blue Jay**  
William G. Cobey



**Common Raven**  
Jeff Lemons



**Purple Martin**  
Jeff Lemons



**Tree Swallow**  
Jeff Lemons



**Northern Rough-winged Swallow** Staff



**Cliff Swallow**  
Gary P. Carter



**Barn Swallow**  
Phil Fowler



**Carolina Chickadee**  
Jeff Lemons



**Tufted Titmouse**  
Staff



**White-breasted Nuthatch (juvenile)** Jeff Lemons



**Brown-headed Nuthatch**  
Will Stuart



**House Wren**  
Mary Wyant



**Carolina Wren**  
Mary Wyant



**Blue-gray Gnatcatcher**  
Lee Weber



**Eastern Bluebird**  
Tom Sanders



**Wood Thrush**  
Jeff Lemons



**American Robin**  
Phil Fowler



**Gray Catbird**  
William G. Cobey



**Brown Thrasher**  
Phil Fowler



**Northern Mockingbird**  
William G. Cobey



**European Starling**  
Jeff Lemons



**Worm-eating Warbler  
(brood patch)** Staff



**Louisiana Waterthrush**  
Staff



**Black-and-white Warbler  
(brood patch)** Staff



**Prothonotary Warbler**  
Tom Sanders



**Kentucky Warbler**  
Staff



**Common Yellowthroat**  
Staff



**Pine Warbler**  
Kevin Metcalf



**Prairie Warbler**  
William G. Cobey



**Yellow-breasted Chat**  
Staff



**Eastern Towhee**  
Staff



**Chipping Sparrow**  
Kevin Metcalf



**Field Sparrow**  
Staff



**Grasshopper Sparrow**  
Staff



**Northern Cardinal**  
William G. Cobey



**Blue Grosbeak**  
Staff



**Indigo Bunting**  
Staff



**Red-winged Blackbird**  
Jeff Lemons



**Eastern Meadowlark**  
William G. Cobey



**Brown-headed Cowbird**  
(left egg) Staff



**Baltimore Oriole**  
Phil Fowler



**House Finch**  
Staff

### **MISSING: Breeding Bird Voucher Photos**

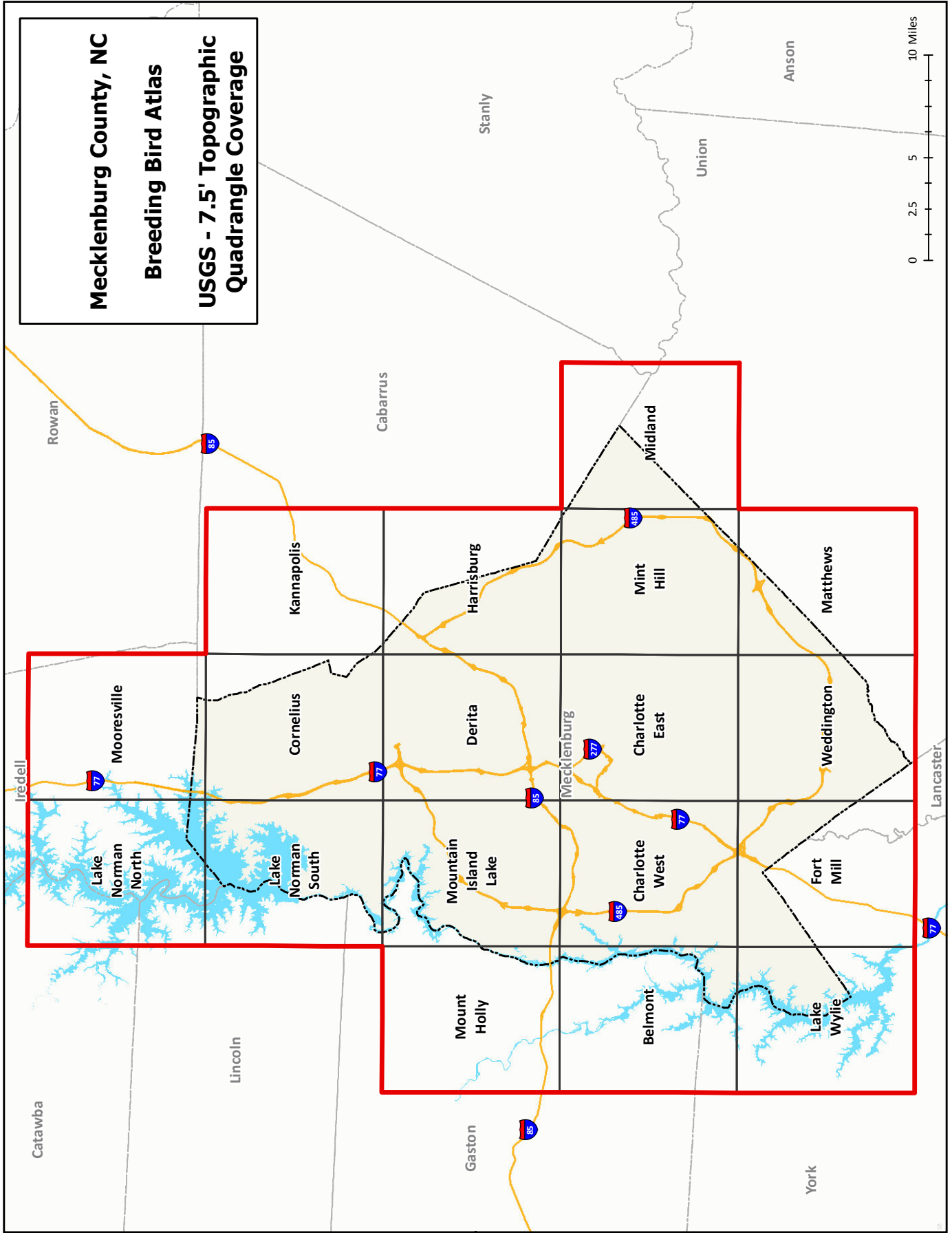
The following species are known breeding birds in Mecklenburg County, but no publishable voucher photo of breeding evidence are on file. Any future voucher photos can be sent to: Natural Resources Coordinator, (704-566-9061), 9001 Plaza Road Extension, Charlotte, NC 28215.

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Sharp-shinned Hawk     | 17. Cedar Waxwing           |
| 2. Cooper's Hawk          | 18. Ovenbird                |
| 3. Red-tailed Hawk        | 19. Swainson's Warbler      |
| 4. Spotted Sandpiper      | 20. Hooded Warbler          |
| 5. Rock Pigeon            | 21. American Redstart       |
| 6. Common Nighthawk       | 22. Northern Parula         |
| 7. Chimney Swift          | 23. Yellow Warbler          |
| 8. Eastern Wood-Pewee     | 24. Yellow-throated Warbler |
| 9. Acadian Flycatcher     | 25. Song Sparrow            |
| 10. Willow Flycatcher     | 26. Summer Tanager          |
| 11. Loggerhead Shrike     | 27. Scarlet Tanager         |
| 12. Yellow-throated Vireo | 28. Dickcissel              |
| 13. Red-eyed Vireo        | 29. Common Grackle          |
| 14. American Crow         | 30. Orchard Oriole          |
| 15. Fish Crow             | 31. American Goldfinch      |
| 16. Horned Lark           | 32. House Sparrow           |

**Acadian Flycatcher**  
Leigh Anne Carter



**Mecklenburg County, NC**  
**Breeding Bird Atlas**  
**USGS - 7.5' Topographic**  
**Quadrangle Coverage**

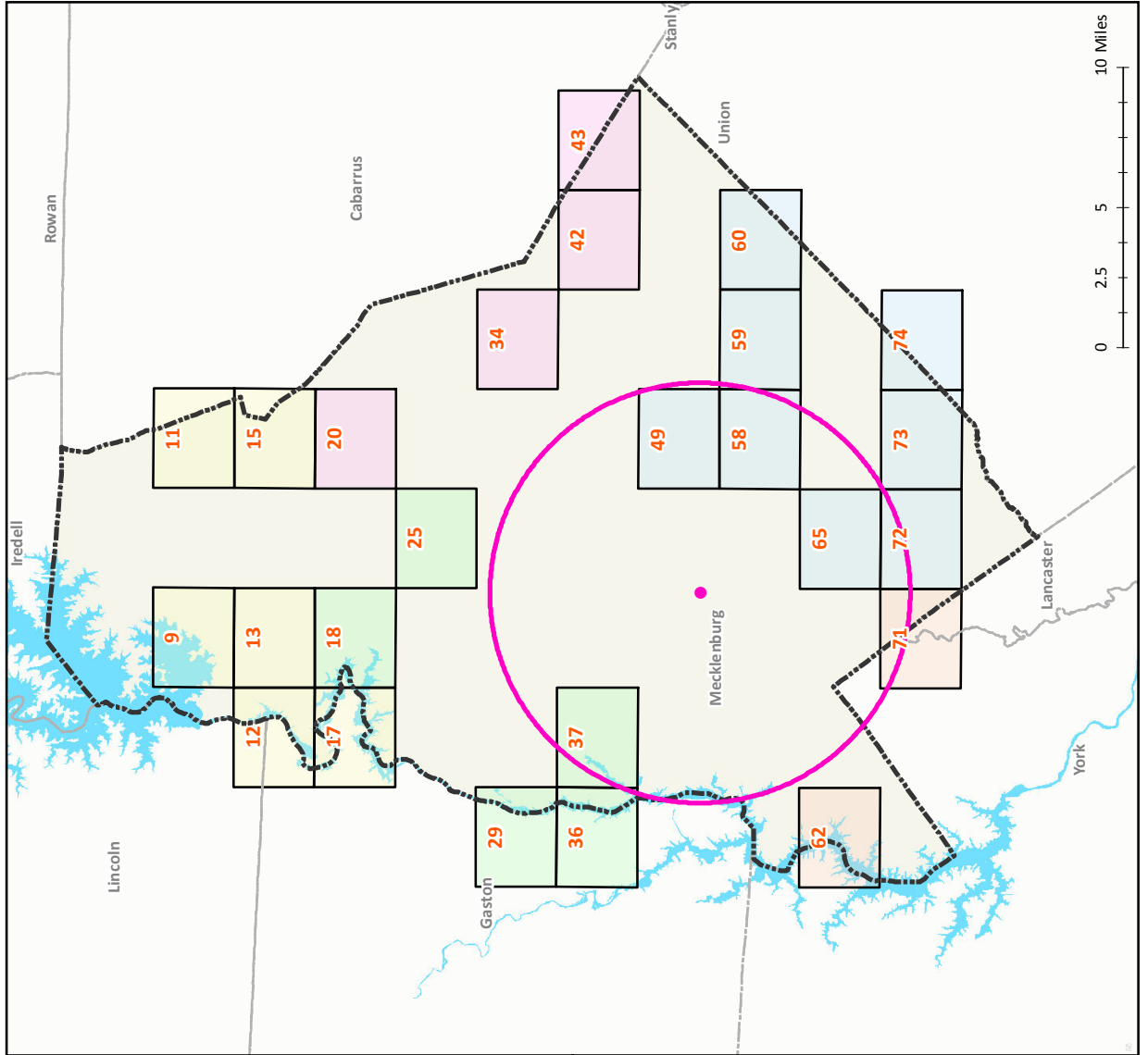




# Mecklenburg County, NC

## Breeding Bird Atlas

### Priority Block Locator Map



● South Bv & Woodlawn Rd  
 ○ 7.5 Mile Radius  
**Priority Block Region**  
 Region 1: North  
 Region 2: West  
 Region 3: East  
 Region 4: Southwest  
 Region 5: Southeast

### Priority Blocks By Region

<b>Region 1: North</b>	9	11	12	13	15	17
<b>Region 2: West</b>	18	25	29	36	37	
<b>Region 3: East</b>	20	34	42	43		
<b>Region 4: Southwest</b>	62	71				
<b>Region 5: Southeast</b>	49	58	59	60	65	72
	62	71	72	73	74	






There are 25 priority blocks within the survey area.

# Example Block Map: Planimetric

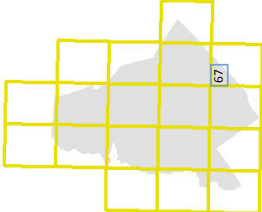
## Mecklenburg County Breeding Bird Atlas

Map Displayed:  
Matthews - 67

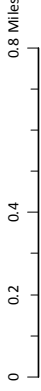
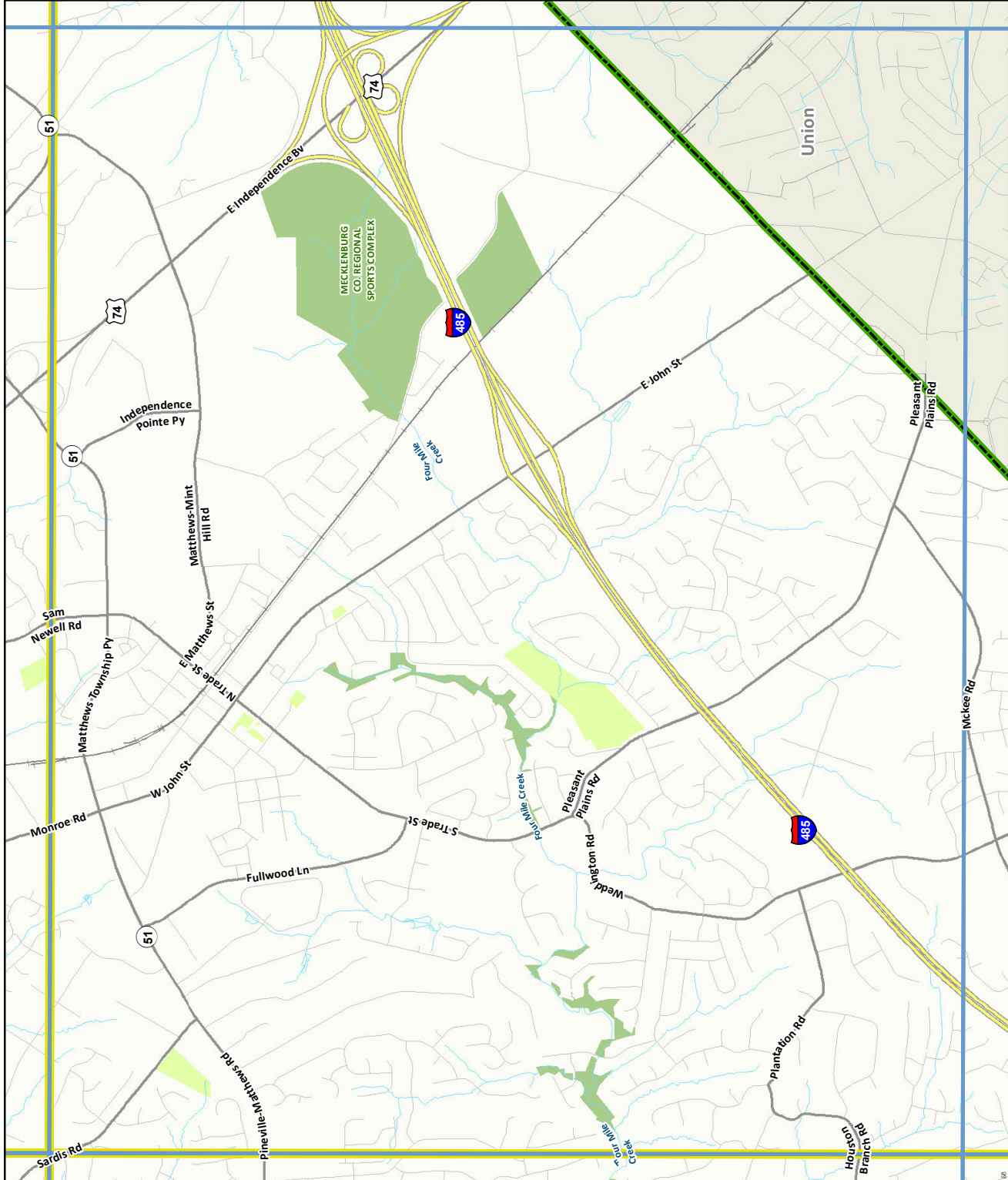
**Legend:**

-  Atlas Block Border
-  Topo Quad Border
-  County Boundary
-  Parks/Open Space
-  Town Parks

Topo/Grid Location:  
Matthews - 67




Date Generated  
3/9/2011







# Example Block Map: Satellite Imagery

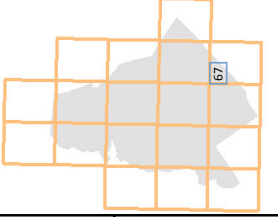
## Mecklenburg County Breeding Bird Atlas

Map Displayed:  
Matthews - 67

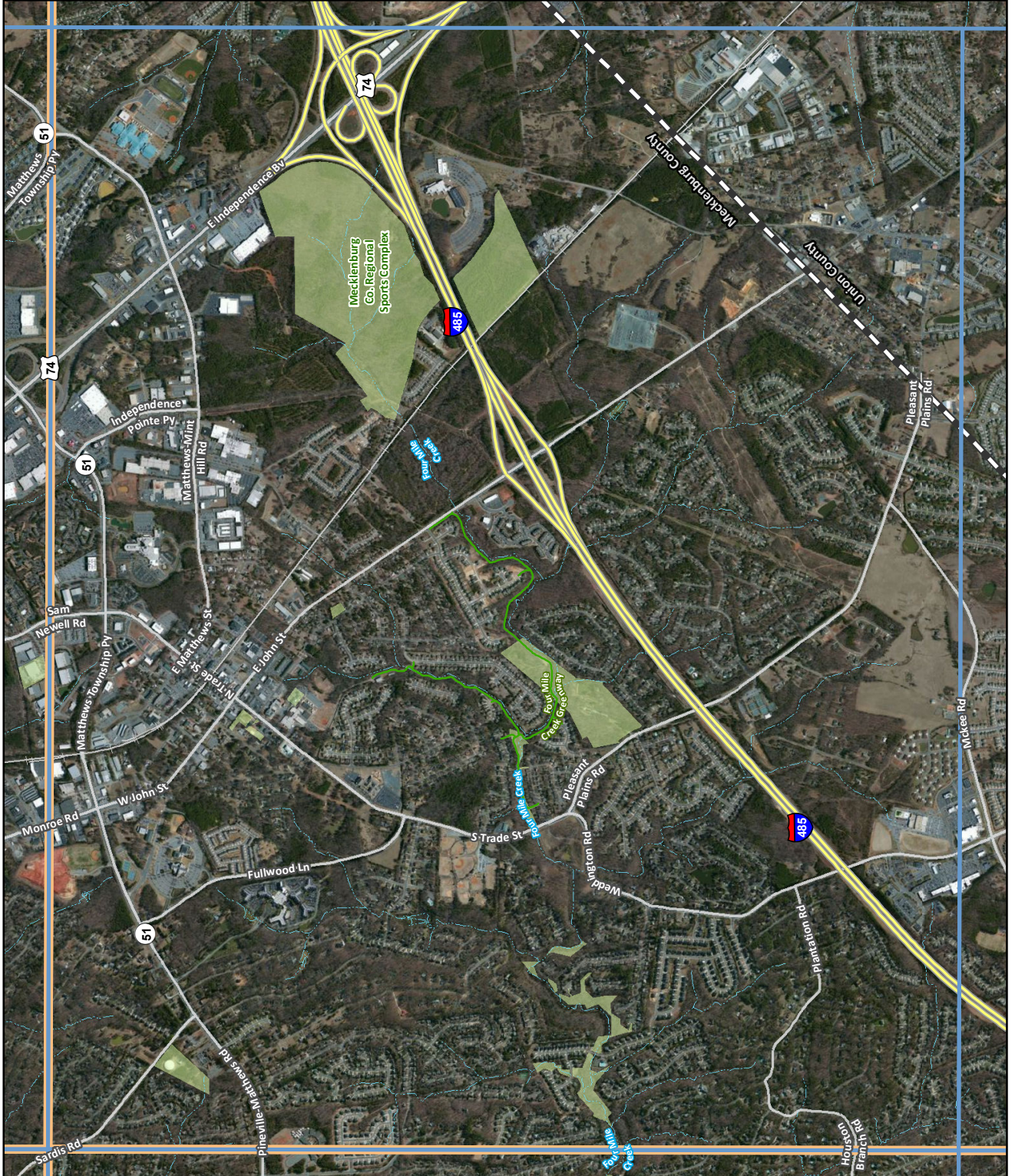
**Legend:**

-  Atlas Block Border
-  Topo Quad Border
-  County Boundary
-  Parks/Open Space

Top o/Grid Location:  
Matthews - 67




Date Generated  
1/30/2012



Species	Safe Dates			Habitat	Status
Canada Goose	3	15	30	Parks, golf courses, lawns, ponds, lakes, rivers	C
Wood Duck	4	15	30	Wooded swamps, marshes, streams, rivers	L
Mallard	3	15	30	All wetlands and adjacent yards, etc.	C
Hooded Merganser	5	1	6	Wooded swamps, marshes, streams, rivers	L
Wild Turkey	3	15	30	Mature deciduous woods, edge	L
Northern Bobwhite	3	15	30	Open fields, pastures, scrub	R
Great Blue Heron	1	15	30	Wooded swamps, beaver ponds, river islands	L
Green Heron	5	15	30	Woody growth near marshes or open water	L
Yellow-crowned Night-Heron	4	15	30	Pine trees in older neighborhoods with adjacent streams	R
Black Vulture	4	15	30	Woods, rocky outcrops, abandoned buildings	L
Turkey Vulture	4	15	30	Woods, rocky outcrops, abandoned buildings	L
Osprey	4	15	31	Tall trees or towers along river edges	L
Mississippi Kite	5	15	30	Tall trees along stream bottomland	?
Bald Eagle	1	15	30	Tall trees along large lake and river margins	?
Sharp-shinned Hawk	5	15	30	Conifers in mature woodlands	R
Cooper's Hawk	5	15	30	Mixed woodlands, groves, copses	U
Red-shouldered Hawk	3	15	30	Wet mixed pine-hardwood forests, swamps	C
Broad-winged Hawk	5	15	30	Mature mixed woodlands	U
Red-tailed Hawk	4	15	30	Mature woodlands often near edges	U
American Kestrel	5	15	30	Open country, scattered trees, edge, nest boxes	R
King Rail	5	15	30	Reedy ponds, or marshes	*
Killdeer	3	15	30	Open, sparsely vegetated areas; flat rooftops	C
American Woodcock	1	1	6	Forest edges, wet fields	U
Rock Pigeon	1	1	12	Buildings, bridges, towers in urban areas, farms	C
Eurasian Collared-Dove	1	1	12	Buildings, bridges, towers in urban areas, farms	?
Mourning Dove	3	15	30	Suburbs, woodlots, farmlands	C
Yellow-billed Cuckoo	5	15	30	Forested habitats, edge	R
Black-billed Cuckoo	5	15	30	Forested habitats, edge	*
Barn Owl	1	1	12	Farm barns, silos, out buildings near large open habitats	R
Eastern Screech-Owl	12	1	6	Cavities in open deciduous forests, woodlots, residential areas	U
Great Horned Owl	12	1	6	Wide variety of habitats from forest to farmland	U
Barred Owl	12	1	6	Moist woods, wooded swamps, bottomlands	C
Common Nighthawk	5	15	30	Tops of buildings	L
Chuck-will's-widow	5	15	30	Open oak woodlands	R
Eastern Whip-poor-will	5	15	30	Secondary forest, copses, scrub pine-oak, edge	R
Chimney Swift	5	15	30	Urban chimneys	U
Ruby-throated Hummingbird	5	1	6	Open woodland, rural and suburban gardens, edge	C
Belted Kingfisher	4	1	6	Stream, river, or lake shore with banks	U
Red-headed Woodpecker	5	15	30	Open country with scattered trees	R

Species	Safe Dates			Habitat	Status	
Red-bellied Woodpecker	3	1	6	30	Older-growth forests and wood lots	C
Downy Woodpecker	3	1	6	30	Forests, copses, suburbs	C
Hairy Woodpecker	3	1	6	30	Forests	C
Northern Flicker	5	15	6	30	Forest, park lands	U
Pileated Woodpecker	3	1	6	30	Mature forest, especially bottomlands	R
Eastern Wood-Pewee	5	15	6	30	Mature forest	U
Acadian Flycatcher	5	15	6	30	Bottomland forest, forested floodplain and stream edges	U
Willow Flycatcher	5	15	6	30	Willow shrub swamps	R
Eastern Phoebe	4	1	6	30	Ledges, bridges, porch sills, etc. usually near water	C
Great Crested Flycatcher	5	15	6	30	Mature forest edge, nest boxes	C
Eastern Kingbird	5	15	6	30	Open habitats, including edge, copses, often near water	C
Loggerhead Shrike	5	15	6	30	Farmland and other open habitats	R
White-eyed Vireo	5	15	6	30	Moist area thickets, tangles of vines, or briars	C
Yellow-throated Vireo	5	15	6	30	Open deciduous and mixed forest and riparian woodlands	U
Blue-headed Vireo	5	15	6	30	Mature coniferous or mixed pine-hardwood forests	*
Warbling Vireo	5	15	6	30	Open groves of deciduous trees often adjacent to rivers	?
Red-eyed Vireo	5	15	6	30	Mixed and deciduous forests	C
Blue Jay	5	15	7	15	Varied; most forest types, thickets, yards, parks	C
American Crow	4	1	6	30	Conifers in forested areas, woodlots, yards, parks	C
Fish Crow	4	15	6	30	Mixed woods, woodlots, yards, parks	U
Common Raven	3	1	6	30	Rock ledges in local rock quarry sites	L
Horned Lark	4	15	6	30	Abandoned agricultural fields, sparsely vegetated areas, airports	*
Purple Martin	5	15	6	30	Farms, large yards, and golf courses in artificial nest boxes	U
Tree Swallow	5	15	6	30	Open areas near wetlands, in nest boxes	L
Northern Rough-winged Swallow	5	15	6	30	Often near water, in cavity, pipe, or excavated burrow	U
Cliff Swallow	5	15	6	30	Eaves and sides of bridges	L
Barn Swallow	5	15	6	30	Structures - eaves of barns, garages, sheds, bridges	U
Carolina Chickadee	3	1	6	30	Woodlands, orchards, shade trees, yards, and city parks	C
Tufted Titmouse	3	1	6	30	Deciduous oak forests, riparian woodlands, and residential areas	C
White-breasted Nuthatch	3	1	6	30	Deciduous forest	C
Brown-headed Nuthatch	3	1	6	30	Natural or artificial nest cavities in open pine woods	C
Carolina Wren	3	1	6	30	Wet woods, stream edges, thickets, brush piles suburban yards	C
House Wren	5	15	6	30	Open forests, wood edges, farms, suburbs, parks	C
Blue-gray Gnatcatcher	5	15	6	30	Wooded edges along ponds, rivers, streams, swamps	C
Eastern Bluebird	4	1	6	30	Natural or artificial nest cavities in fields with scattered trees	C
Wood Thrush	5	15	6	30	Mature forest	U
American Robin	5	15	6	30	Almost anywhere except the most open habitats	C
Gray Catbird	5	15	6	30	Dense tangles and thickets	C
Northern Mockingbird	4	1	6	30	Suburban or semi-rural habitats with thickets, brushy edges	C
Brown Thrasher	5	1	6	30	Dry second-growth; powerlines, overgrown pastures, thickets	C

Species	Safe Dates		Habitat	Status
European Starling	4	15 6 30	Everywhere except remote rural areas	C
Cedar Waxwing	5	15 6 30	Second-growth forests, parks, margins of waterways	?
Northern Parula	5	15 6 30	Woodlands with <i>Usnea</i> lichen	U
Yellow Warbler	5	15 6 30	Marsh margins, wet brushy areas, farmlands	*
Yellow-throated Warbler	5	15 6 30	Pine woods, or swamps and bottomlands -esp. in conifers	U
Pine Warbler	5	15 6 30	Variety of pine forests	C
Prairie Warbler	5	15 6 30	Brushy fields, powerline cuts, edges	R
Black-and-white Warbler	5	15 6 30	Primarily deciduous forest	?
American Redstart	5	15 6 30	Secondary forest, copses	?
Prothonotary Warbler	5	15 6 30	Wooded swamps, nest cavities over water	R
Worm-eating Warbler	5	15 6 30	Brushy undergrowth of rocky wooded hillsides and ravines	R
Swainson's Warbler	5	15 6 30	Dense shrub thickets, vine tangles, privet hedges in forest wetlands	R
Ovenbird	5	15 6 30	Open forests with little or no understory vegetation and ample leaf litter	R
Louisiana Waterthrush	5	15 6 30	Rocky streams in forest areas	L
Kentucky Warbler	5	15 6 30	Wet thickets, dense understory in moist or wet deciduous forest bottomlands	R
Common Yellowthroat	5	15 6 30	Brushy areas, thickets, powerline cuts, preferably wet	C
Hooded Warbler	5	15 6 30	Moist thickets in woodlands	R
Yellow-breasted Chat	5	15 6 30	Thickets in fields, pastures, utility corridors	U
Summer Tanager	5	15 6 30	Variety of forests - most often in open pines	C
Scarlet Tanager	5	15 6 30	Mature deciduous forests	L
Eastern Towhee	4	15 6 30	Dry, open forest, edge, brushy habitats including thickets and utility corridors	C
Bachman's Sparrow	5	15 6 30	Open, park-like pine stands with grassy ground cover maintained by fire	*
Chipping Sparrow	4	15 6 30	Open mixed forest, suburbs, parks, cemeteries	C
Field Sparrow	4	15 6 30	Brushy areas, weedy fields, utility corridors	R
Grasshopper Sparrow	4	15 6 30	Grasslands, hayfields, possibly airport areas	R
Henslow's Sparrow	5	15 6 30	Weedy fields, wet meadows	*
Song Sparrow	4	15 6 30	Forest edge, brushy areas, marsh edges, suburbs	C
Northern Cardinal	4	1 6 30	Suburban or semi-rural areas; forest edge, woodlots, thickets, parks, gardens	C
Blue Grosbeak	5	15 6 30	Brushy habitats, woodland edge, fields, pastures, overgrown fields, utility corridors	U
Indigo Bunting	5	15 6 30	Brushy habitats including forest edge, overgrown fields, utility corridors	C
Red-winged Blackbird	5	1 6 30	Wide variety of densely vegetated wet habitats	U
Eastern Meadowlark	5	1 6 30	Extensive grasslands, hayfields, possibly airport areas	R
Common Grackle	4	15 6 30	Wide variety of urban and rural habitats	C
Brown-headed Cowbird	4	15 6 30	Virtually all habitats	C
Orchard Oriole	5	15 6 30	Open patchy forest, copses, often near river, stream, or pond	U
House Finch	4	15 6 30	Scattered trees, especially conifers - usually in residential areas	C
American Goldfinch	6	1 8 30	Forest edge, copses, brushy areas, residential areas	C
House Sparrow	1	1 12 31	Residential areas, farms	C

## Dates and Hours of Atlas Trips: Please record all trips.

Date	Hours	Date	Hours

## Breeding Codes

**OBSERVED:** Use during **Safe Dates** for species known to breed in Mecklenburg County, but only seen "passing through" your block. **Record date in column.** Examples: vultures or raptors seen in transit through block, late migrants out of habitat, or colonial nesting birds not at a nesting colony.

**POSSIBLE:** Use during **Safe Dates** for male or female seen or heard in suitable nesting habitat but no further evidence of breeding was uncovered. **Record date in column.**

**PROBABLE:** Only use during **Safe Dates**, except for the "C" code. **Record date & code.**

- P** A pair (male and female, together, not fighting) seen in suitable nesting habitat.
  - S** Permanent territory presumed through song (or drumming), heard at same location on at least two occasions, 7 days (or more) apart, both singing dates during safe dates.
  - T** Permanent territory presumed through defense. Most birds will not tolerate another bird of the same species, other than their mate or young, near them while nesting. Birds are quite aggressive when breeding, and some territory squabbles are intense.
  - A** Agitated behavior or anxiety calls from adult.
  - C** Courtship and/or reproductive behavior seen or heard. (OK to use out of Safe Dates, but not out of Safe Dates for ducks). Consult birding reference for breeding displays.
  - N** Visiting probable nest site, no nest seen (e.g. the tops of trees, nest boxes, chimneys).
  - B** Building a nest by a wren, or excavation of holes by single woodpeckers.
- CONFIRMED: (can be used outside of Safe Dates) Record date & code.**
- ON** Occupied nest: adult seen sitting on nest and likely incubating eggs or brooding.
  - CN** Carrying nesting material, such as hair, sticks, grass, bark, etc.
  - NB** Nest building at the actual nest-site.
  - PE** Physiologic evidence of breeding (e.g. brood patch or egg in oviduct).
  - DD** Distraction display or injury feigning.
  - UN** Used nest or eggshells found.
  - PY** Precocial young (downy, capable of walking – think duck hatchling).
  - FL** Recently fledged young (either precocial or altricial) incapable of sustained flight.
  - CF** Carrying food: adult carrying food for the young.
  - FY** Adult feeding recently fledged young.
  - FS** Adult carrying fecal sac.
  - NE** Nest with egg(s).
  - NY** Nest with young seen or heard.

## Mecklenburg County Breeding Bird Atlas – Field Checklist

Doc. ID#: \_\_\_\_\_ (office use only)

ASSIGNED BLOCK or INCIDENTAL (circle one)

Atlas Name(s) \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

Do you live in the block? \_\_\_\_\_

Have you reported all **bold** species? \_\_\_\_\_

Have you entered all data into USGS? \_\_\_\_\_

Enter **data on-line** via USGS data entry link.

\* = Formerly nested—get photo/exact location

? = Breeding status uncertain—get photo/exact location

R = Rare breeder—species of local conservation concern

Report species with \* / ? / R to Regional Coordinator.

L = LOCAL breeder

U = Uncommon (see list in handbook)

C = Common (see list in handbook)

Block # \_\_\_\_\_  
 Special Area: \_\_\_\_\_  
 Year \_\_\_\_\_  
**Record all hours on back page. Thank You!**

After all data entry is complete, please send **this card** to:  
 Conservation Science Office  
 Breeding Bird Atlas  
 9001 Plaza Road Ext.  
 Charlotte, N.C. 28215



Species	Safe Date	Status	OBS Date	POSS		PROB		CONF	
				Date	Code	Date	Code	Date	Code
Canada Goose	3/15-6/30								
Wood Duck	4/15-6/30	L							
Mallard	3/15-6/30								
Hooded Merganser	5/1-6/30	L							
Wild Turkey	3/15-9/30	L							
<b>Northern Bobwhite</b>	3/15-9/30	R							
Great Blue Heron	1/15-6/30	L							
Green Heron	5/15-6/30	L							
<b>Yellow-crowned N.-Heron</b>	4/15-6/30	R							
Black Vulture	4/15-6/30	L							
Turkey Vulture	4/15-6/30	L							
Osprey	4/15-7/31	L							
<b>Mississippi Kite</b>	5/15-6/30	?							
<b>Bald Eagle</b>	1/15-6/30	?							
<b>Sharp-shinned Hawk</b>	5/15-6/30	R							
Cooper's Hawk	5/15-6/30	L							
Red-shouldered Hawk	3/15-6/30	L							
Broad-winged Hawk	5/15-6/30								
Red-tailed Hawk	4/15-6/30								
<b>American Kestrel</b>	5/15-6/30	R							
<b>King Rail</b>	5/15-6/30	*							

# BIRD ATLAS NEST RECORD: Species

Nest Location /date:

Nest Description (materials?, # of eggs?, # of young?, food remains, parasites):

Nest Placement (height above ground, in tree, on ground, tree size, etc.):

Habitat (forest type, water feature, farm, oldfield):

Species	Safe Date	Status	OBS Date	POSS Date	PROB Date	CONF Date
Killdeer	3/15-6/30					
American Woodcock	1/1-6/30					
Rock Pigeon	1/1-12/31					
<b>Eurasian Collard-Dove</b>	1/1-12/31	?				
Mourning Dove	3/15-6/30					
<b>Yellow-billed Cuckoo</b>	5/15-6/30	R				
<b>Black-billed Cuckoo</b>	5/15-6/30	*				
<b>Barn Owl</b>	1/1-12/31	R				
Eastern Screech-Owl	12/1-6/30					
Great Horned Owl	12/1-6/30					
Barred Owl	12/1-6/30					
Common Nighthawk	5/15-6/30	L				
<b>Chuck-will's-widow</b>	5/15-6/30	R				
<b>Eastern Whip-poor-will</b>	5/15-6/30	R				
Chimney Swift	5/15-6/30					
Ruby-throated Hummingbird	5/1-6/30					
Belted Kingfisher	4/1-6/30					
<b>Red-headed Woodpecker</b>	5/15-6/30	R				
Red-bellied Woodpecker	3/1-6/30					
Downy Woodpecker	3/1-6/30					
Hairy Woodpecker	3/1-6/30					
Northern Flicker	5/15-6/30					
<b>Pileated Woodpecker</b>	3/1-6/30	R				
Eastern Wood-Pewee	5/15-6/30					
Acadian Flycatcher	5/15-6/30					
<b>Willow Flycatcher</b>	5/15-6/30	R				
Eastern Phoebe	4/1-6/30					
Great Crested Flycatcher	5/15-6/30					
Eastern Kingbird	5/15-6/30					
<b>Loggerhead Shrike</b>	5/15-6/30	R				
White-eyed Vireo	5/15-6/30					
Yellow-throated Vireo	5/15-6/30					
<b>Blue-headed Vireo</b>	5/15-6/30	*				
<b>Warbling Vireo</b>	5/15-6/30	?				
Red-eyed Vireo	5/15-6/30					
Blue Jay	5/15-6/30					
American Crow	4/1-6/30					
Fish Crow	4/15-6/30					





NOTES

Species	Safe Date	Status	OBS		POSS		PROB		CONF	
			Date	Date	Date	Date	Date	Date	Date	Date
<b>Hooded Warbler</b>	5/15-6/30	R								
Yellow-breasted Chat	5/15-6/30									
Summer Tanager	5/15-6/30									
<b>Scarlet Tanager</b>	5/15-6/30	L								
Eastern Towhee	4/15-6/30									
<b>Bachman's Sparrow</b>	5/15-6/30	*								
Chipping Sparrow	4/15-6/30									
<b>Field Sparrow</b>	4/15-6/30	R								
<b>Grasshopper Sparrow</b>	4/15-6/30	R								
<b>Henslow's Sparrow</b>	5/15-6/30	*								
Song Sparrow	4/15-6/30									
Northern Cardinal	4/1-6/30									
Blue Grosbeak	5/15-6/30									
Indigo Bunting	5/15-6/30									
Red-winged Blackbird	5/1-6/30									
<b>Eastern Meadowlark</b>	5/1-6/30	R								
Common Grackle	4/15-6/30									
Brown-headed Cowbird	4/15-6/30									
Orchard Oriole	5/15-6/30									
House Finch	4/15-6/30									
American Goldfinch	6/1-8/30									
House Sparrow	1/1-12/31									

NOTES

ATLAS SPONSORS



## Species Breeding in Four or Fewer Atlas Regions: only CO and PR codes

Species	Block Code	Block Name	Best Evidence	Region
Hooded Merganser	67	Matthews - 1	CO	5: Southeast
Yellow-crowned Night-Heron	27	Harrisburg - 3	CO	3: East
	40	Charlotte East - 2	CO	3: East
	48	Charlotte East - 3	CO	4: Southwest
Eastern Whip-poor-will	7	Cornelius - 2	PR	1: North
	11	Cornelius - 4	PR	1: North
	12	Lake Norman South - 5	PR	1: North
	17	Mountain Island Lake -1	PR	1: North
	18	Mountain Island Lake -2	CO	2: West
Common Nighthawk	39	Charlotee East - 1	PR	2: West
	59	Mint Hill - 5	PR	5: Southeast
Barn Owl	9	Lake Norman South - 4	PR	1: North
Kentucky Warbler	11	Cornelius - 4	CO	1: North
	41	Mint Hill - 1	PR	3: East
Hooded Warbler	18	Mountain Island Lake - 2	CO	2: West
Ovenbird	34	Harrisburg - 5	PR	3: East
	51	Mint Hill - 4	PR	3: East
	52	Midland - 3	CO	3: East
	60	Mint Hill - 6	CO	5: Southeast
American Redstart	19	Derita - 1	CO	2: East
Yellow-throated Vireo	18	Mountain Island Lake - 2	CO	2: West
Horned Lark	47	Charlotte West - 4	CO	4: Southwest
American Kestrel	27	Harrisburg - 3	PR	3: East
	29	Mount Holly - 6	CO	2: West
	40	Charlotte East - 2	CO	3: East
	64	Fort Mill - 2	PR	4: Southwest
Black-and-white Warbler	62	Lake Wylie - 2	CO	4: Southwest
Grasshopper Sparrow	10	Cornelius - 3	PR	1: North
	12	Lake Norman South - 5	CO	1: North
	64	Fort Mill - 2	CO	4: Southwest
Northern Bobwhite	12	Lake Norman South - 5	CO	1: North
	17	Mountain Island Lake - 1	PR	1: North
	18	Mountain Island Lake - 2	PR	2: West
	62	Lake Wylie - 2	CO	4: Southwest
Eastern Screech-Owl	2	Mooreville - 5	CO	1: North
	6	Cornelius - 1	CO	1: North
	11	Cornelius - 3	CO	1: North
Bald Eagle	12	Lake Norman South - 5	CO	1: North
	72	Weddington - 3	CO	5: Southeast

Species	Block Code	Block Name	Best Evidence	Region
Mississippi Kite	66	Weddington - 2	CO	5: Southeast
	73	Weddington - 4	PR	5: Southeast
Common Raven	2	Mooresville - 5	PR	1: North
	25	Derita - 3	PR	2: West
	59	Mint Hill - 5	PR	5: Southeast
	64	Fort Mill - 2	CO	4: Southwest
Tree Swallow	7	Cornelius - 2	CO	1: North
	8	Lake Norman South - 3	CO	1: North
	11	Cornelius - 4	CO	1: North
Peregrine Falcon	39	Charlotte East - 1	CO	2: West
Baltimore Oriole	15	Cornelius - 6	CO	1: North
Dickcissel	64	Fort Mill - 2	CO	4: Southwest
Pied-billed Grebe	29	Mount Holly - 6	CO	2: West
Spotted Sandpiper	19	Derita - 1	CO	2: West
Willow Flycatcher	15	Cornelius - 6	PR	1: North
Swainson's Warbler	59	Mint Hill - 5	PO	5: Southeast
	76	Weddington - 5	CO	5: Southeast
Cedar Waxwing	9	Lake Norman South - 4	PR	1: North
	47	Charlotte West - 4	PR	4: Southwest
Cliff Swallow	9	Lake Norman South - 4	CO	1: North
	29	Mount Holly - 6	CO	2: West
	36	Belmont - 2	CO	2: West
	37	Charlotte West - 1	CO	2: West
	54	Belmont - 6	CO	4: Southwest
	62	Lake Wylie - 2	CO	4: Southwest
Red-headed Woodpecker	18	Mountain Island Lake - 2	CO	2: West
	34	Harrisburg - 5	CO	3: East
	40	Charlotte East - 2	CO	3: East
	64	Fort Mill - 2	CO	4: Southwest
	69	Lake Wylie - 4	PR	4: Southwest
	72	Weddington - 3	CO	5: Southeast
Broad-winged Hawk	18	Mountain Island Lake - 2	PR	2: West
	24	Mountain Island Lake - 4	PR	2: West
	34	Harrisburg - 5	CO	3: East
	49	Charlotte East - 4	CO	5: Southeast
	58	Charlotte East - 6	CO	5: Southeast
Purple Martin	6	Cornelius - 1	PR	1: North
	9	Lake Norman South - 4	CO	1: North
	10	Cornelius - 3	CO	1: North
	12	Lake Norman South - 5	PR	1: North
	15	Cornelius - 6	CO	1: North
	21	Harrisburg - 1	CO	3: East
	60	Mint Hill - 6	CO	5: Southeast
	67	Matthews - 1	CO	5: Southeast

Species	Block Code	Block Name	Best Evidence	Region
Prothonotary Warbler	12	Lake Norman South - 5	PR [CO]	1: North
	18	Mountain Island Lake - 2	PR	2: West
	29	Mount Holly - 6	PR	2: West
	36	Belmont - 2	PR	2: West
	59	Mint Hill - 5	CO	5: Southeast
	62	Lake Wylie - 2	CO	4: Southwest
	72	Weddington - 3	CO	5: Southeast
Northern Flicker	32	Derita - 5	PR	2: West
	40	Charlotte East - 2	CO	3: East
	59	Mint Hill - 5	CO	5: Southeast
	66	Weddington - 2	CO	5: Southeast
	72	Weddington - 3	CO	5: Southeast
	74	Matthews - 3	PR	5: Southeast
Pileated Woodpecker	14	Cornelius - 5	CO	1: North
	18	Mountain Island Lake - 2	PR	2: West
	34	Harrisburg - 5	PR	3: East
	58	Charlotte East - 6	CO	5: Southeast
	65	Weddington - 1	PR	5: Southeast
	66	Weddington - 2	CO	5: Southeast
	72	Weddington - 3	CO	5: Southeast
	74	Matthews - 3	PR	5: Southeast
Wild Turkey	7	Cornelius - 2	CO	1: North
	12	Lake Norman South - 5	CO	1: North
	13	Lake Norman South - 6	PR	1: North
	14	Cornelius - 5	PR	1: North
	15	Cornelius - 6	PR	1: North
	17	Mountain Island Lake - 1	PR	1: North
	29	Mount Holly - 6	PR	2: West
	34	Harrisburg - 5	CO	3: East
	62	Lake Wylie	CO	4: Southwest
	64	Fort Mill - 2	CO	4: Southwest
Great Blue Heron	5	Lake Norman South - 2	CO	1: North
	36	Belmont - 2	CO	2: West
	57	Charlotte East - 5	CO	4: Southwest
	58	Charlotte East - 6	CO	5: Southeast
	62	Lake Wylie - 2	CO	4: Southwest
	66	Weddington - 2	CO	5: Southeast
	72	Weddington - 3	CO	5: Southeast
Turkey Vulture	9	Lake Norman South - 4	CO	1: North
	12	Lake Norman South - 5	PR	1: North
	18	Mountain Island Lake - 2	CO	2: West
	26	Derita - 4	PR	3: East
	72	Weddington - 3	PR	5: Southeast
Black Vulture	12	Lake Norman South - 5	CO	1: North
	19	Derita - 1	CO	1: North
	34	Harrisburg - 5	CO	3: East
	62	Lake Wylie - 2	CO	4: Southwest
	72	Weddington - 3	PR	5: Southeast
Eurasian Collared-Dove	64	Fort Mill - 2	CO	4: Southwest

Species	Block Code	Block Name	Best Evidence	Region
Osprey	2	Mooreville - 5	CO	1: North
	5	Lake Norman South - 2	CO	1: North
	6	Cornelius - 1	CO	1: North
	8	Lake Norman South - 3	CO	1: North
	9	Lake Norman South - 4	CO	1: North
	10	Cornelius - 3	CO	1: North
	12	Lake Norman South - 5	CO	1: North
	17	Mountain Island Lake - 1	CO	1: North
	18	Mountain Island Lake - 2	CO	2: West
	19	Derita - 1	CO	2: West
	24	Mountain Island Lake - 4	CO	2: West
	29	Mount Holly - 6	CO	2: West
	36	Belmont - 2	CO	2: West
	37	Charlotte West - 1	CO	2: West
	46	Charlotte West - 3	CO	4: Southwest
	54	Belmont - 6	CO	4: Southwest
	73	Weddington - 4	CO	5: Southeast
Chimney Swift	2	Mooreville - 5	PR	1: North
	6	Cornelius - 1	PR	1: North
	7	Cornelius - 2	PR	1: North
	9	Lake Norman South - 4	PR	1: North
	10	Cornelius - 3	PR	1: North
	14	Cornelius - 5	PR	1: North
	15	Cornelius - 6	PR	1: North
	21	Harrisburg - 1	PR	3: East
	26	Derita - 4	PR	3: East
	27	Harrisburg - 3	CO	3: East
	33	Derita - 6	PR	3: East
	40	Charlotte East - 2	PR	3: East
	41	Mint Hill - 1	PR	3: East
	50	Mint Hill - 3	PR	5: Southeast
	57	Charlotte East - 5	CO	4: Southwest
	58	Charlotte East - 6	PR	5: Southeast
	63	Fort Mill - 1	PR	4: Southwest
66	Weddington - 2	PR	5: Southeast	
72	Weddington - 3	PR	5: Southeast	
74	Matthews - 3	PR	5: Southeast	

# Lost Birds

## Of Mecklenburg County, NC

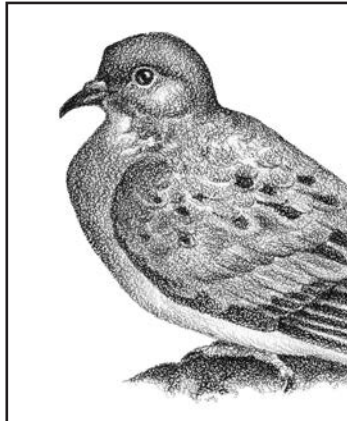


2011 - 2015  
Breeding  
Bird Atlas  
Mecklenburg County

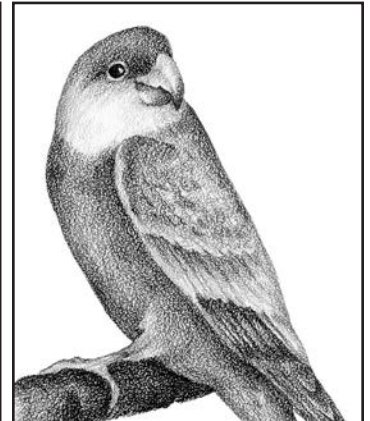
### Extinct

The Passenger Pigeon was last seen in Charlotte in October 1875, and the Carolina Parakeet was last reported in North Carolina in 1782.

Populations of these unique birds are believed to have once numbered in the millions.



Passenger Pigeon

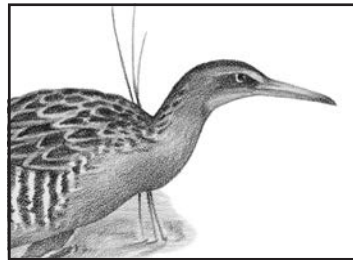


Carolina Parakeet

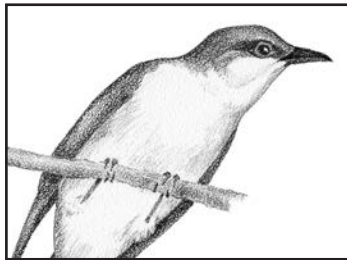
### Lost

Seven of these species once nested here. They are listed with their last confirmed nesting record.

Bewick's Wren did not breed in the county. It was a rare migrant or rare winter visitor. The last county sighting was June 6, 1990. This wren is no longer found anywhere in North Carolina.



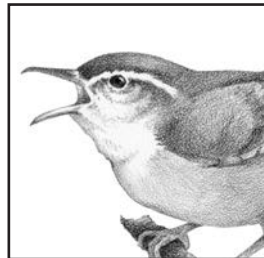
King Rail  
June 1945 nest



Black-billed Cuckoo  
June 1943 nest



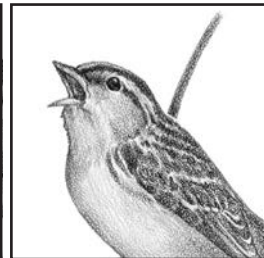
Blue-headed Vireo  
June 1939 nest



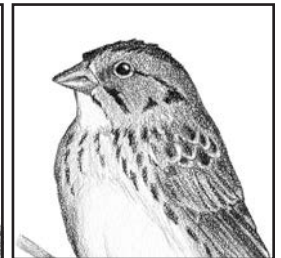
Bewick's Wren  
June 6, 1990 sighting



Least Bittern  
May 1990 family group



Bachman's Sparrow  
May 1947 nest

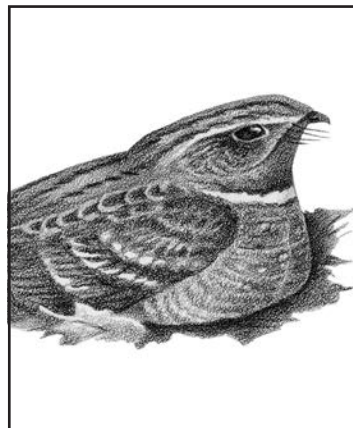


Henslow's Sparrow  
June 1943 nest



### Lost?

These species recently nested in the county. No current evidence of their breeding was found during the 2011-2015 Mecklenburg County Breeding Bird Atlas Survey.



Chuck-will's-widow



Loggerhead Shrike



Yellow-throated Warbler

# Imperiled Breeding Birds

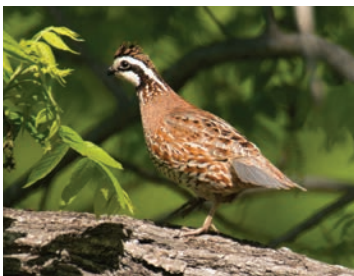
Of Mecklenburg County, NC



## Imperiled

Breeding Bird Atlas survey results indicate a breeding code of either confirmed or probable in **five or fewer** survey blocks in Mecklenburg County, and the local breeding population is not known to be increasing. Only species with established populations are included. These birds are especially vulnerable to extirpation.

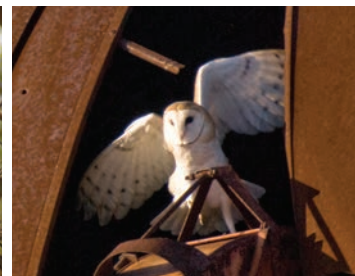
\* - Indicates the species has historically nested here in relatively low numbers



Northern Bobwhite



Yellow-crowned Night-Heron\*



Barn Owl



Eastern Screech-Owl



Common Nighthawk



Eastern Whip-poor-will



American Kestrel



Horned Lark\*



Yellow-throated Vireo



Ovenbird



Black-and-white Warbler



Kentucky Warbler



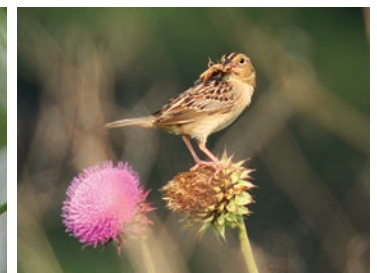
Hooded Warbler



American Redstart\*



Yellow Warbler



Grasshopper Sparrow

**ALL PHOTOS ARE TAKEN IN MECKLENBURG COUNTY. PHOTO CREDITS 1st row:** all Jeff Lemons. **2nd row:** Phil Fowler, Phil Fowler, Jim Guyton, Will Stuart. **3rd row:** Will Stuart, Will Stuart, Chris Talkington, Phil Fowler. **4th row:** Jeff Lemons, Jim Guyton, Jim Guyton, John Scavetto.



# Vulnerable Breeding Birds

of Mecklenburg County, NC



## Vulnerable

Breeding Bird Atlas survey results indicate a breeding code of either confirmed or probable in **six to ten** survey blocks in Mecklenburg County, and the local breeding population is not known to be increasing. These birds are rare or uncommon breeders, restricted to a few locations, or because of some other factor, are vulnerable to extirpation.

- \* - Indicates that a species is difficult to survey
- △ - Included here based on Ducks Unlimited nest box data



Hooded Merganser\*<sup>△</sup>



Wild Turkey



Black Vulture\*



Turkey Vulture\*



Broad-winged Hawk



American Woodcock



Red-headed Woodpecker



Northern Flicker



Pileated Woodpecker



Purple Martin



Cliff Swallow



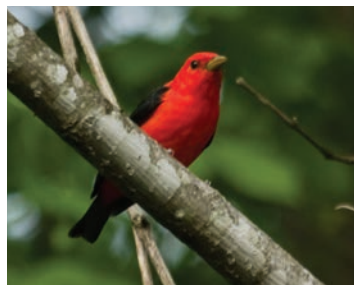
Louisiana Waterthrush



Prothonotary Warbler



Prairie Warbler



Scarlet Tanager

**ALL PHOTOS ARE TAKEN IN MECKLENBURG COUNTY. PHOTO CREDITS 1st row:** Jeff Lemons, Donald Seriff, Will Stuart, Jeff Lemons. **2nd row:** Phil Fowler, Jarrett Wyant, John Scavetto, Jeff Lemons. **3rd row:** Debbie Foster, Phil Fowler, Jeff Lemons, Jeff Lemons. **4th row:** Jeff Lemons, John Scavetto, Jarrett Wyant.

# New Breeding Birds

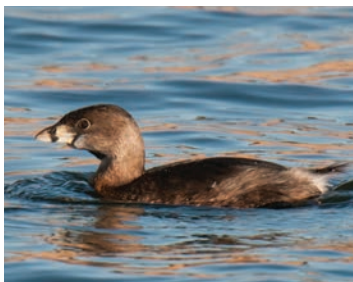
## Of Mecklenburg County, NC



### Newly Discovered

Eleven of the twelve species listed below were not confirmed breeding in Mecklenburg County prior to the turn of the twenty-first century. As indicated by footnote, several of these species have already established, or may possibly establish, regular breeding populations in the county. There are two confirmed nest records for Baltimore Oriole here. They were recorded 87 years apart. The first was found in May 1926, and the second was discovered in May 2013.

- \* - Observations indicate these species may (or have) become local established breeders
- Δ - Sporadic breeder not expected to establish a local breeding population



Pied-billed Grebe<sup>Δ</sup>  
April 2015



Mississippi Kite\*  
June 2014



Bald Eagle\*  
February 2009



Spotted Sandpiper<sup>Δ</sup>  
July 2010



Eurasian Collared-Dove\*  
April 2011



Peregrine Falcon\*  
April 2013



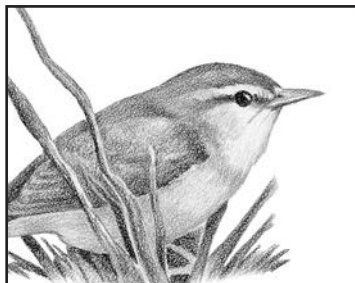
Willow Flycatcher<sup>Δ</sup>  
June 2004



Common Raven\*  
March 2010



Tree Swallow\*  
June 2003



Swainson's Warbler<sup>Δ</sup>  
May 2006



Dickcissel<sup>Δ</sup>  
May 2011



Baltimore Oriole<sup>Δ</sup>  
May 2013

# Credits

Our sincerest thanks go out to the following people who provided information, support, photographs, etc. for the Mecklenburg County Breeding Bird Atlas:

Roy Alexander, George Andrews, Bill Archer, Kimberly Balcos, Alexandra Ball, Larry Barden, Louise Barden, Burt Bell, Dan Belongia, Rob Bierregaard, Scott Black, Bill Blakesley, Laura Blakesley, Mike Blanton, John Bonestell, Marshall Brooks, Carol Buie-Jackson, Sheila Bumgarner, Bob Butt, Pat Butt, Susan Campbell, David Carroll, Becky Carter, Gary Carter, Leigh Anne Carter, Valerie Castano, Jeff Catlin, Adriana Cerbin, Jose Chavez, Ron Clark, Staci Clark, Flo Cobey, William Cobey, John DeKemper, Stephen J. Dinsmore, Laura Domingo, Bernadette Durkin, Melissa Elder, Susan Ellerman, Chuck Elyea, Mathias Engleman, Nancy Favor, Steve Fields, Linn Finger, Debbie Foster, Jan Fowler, Phil Fowler, Sharon Freedman, Susan Freedman, Karyl Gabriel, Lisa Gaffney, Sara Gagne, Carl Ganser, Sue Gardner, Kim Garrett, John Gerwin, Martha Geyer, Greg Greer, Rob Gilson, Dexter Greene, Lenore Greenwald, Jim Griffith, Cynthia Griffith, Marja Grillo, Mary Grizzard, Jim Guyton, John Haire, John Hanna, Chris Hanna, Kirk Hargis, Ann Harlan, Matthew Harrell, Bob Haussler, Greg Hays, Christy Hill, Heather Hovde, Carol Hull, Sherrie Ingram, Matt Janson, Andy Kane, Chris Kelly, Kerry Kenner, Dennis Kent, Don Klinger, Alan Kneidel, Ken Kneidel, Brad Kuntz, Lenny Lampel, Amy Landers, Howard Landers, Sherry Lane, Dennis Lankford, Tom Ledford, Carla Ledford, Barbara Lembo, Jeff Lemons, Spring Ligi, Vivian Lord, Carol Lostbom, Carol Lovett, Dave Lovett, Bob Lyberopoulos, Christy Lynch, Chris Martin, Ann Marsh, Gary Marshal, Dwayne Martin, Jeff Maw, Tori McCasland, Karyl McClusky, Rob McHenry, Ben McIlwaine, Ernie McLaney, Jack Meckler, Kevin Metcalf, Jamie Metz, Todd Mustard, Martina Nordstrand, Chris North, Georgia Oakes, Ann Olsen, John Orchard, Jill Palmer, Deb Park, Charles Payne, Nancy Pelligrini, Travis Phifer, Lorraine Piephoff, Taylor Piephoff, Amber Plantz, Ellen Plyler, Elaine Powell, Eli Pressley, Lucy Quintilliano, Nancy Rash, Fred Reddel, Heather Reed, Ronny Roberts, Christa Rogers, Kristin Rothrock, Barry Rowan, Linda Safir, Amy Sanders, Tammy Sanders, Tom Sanders, Terry Scaia, Marcia Scaia, John Scavetto, James Schaffernoth, Lauren Schexnider, Sandy Schoonover, Frank Schultz, Geoffrey Schott, Dave Scott, Don Seriff, Liam Seriff, Suzannah Seriff, Anthony Shaheen, Paulette Shaw, Josh Sims, Jessica Smedley, George Smith, Nancy Smith, Penny Soares, Debara Splendorio, Dean Sprehe, Vivian Sprehe, Mark Stanback, Will Stuart, Allison Sussman, Vicki Sutton, Danny Swicegood, Cheryl Talkington, Chris Talkington, Simon Tan, Peter Taylor, Mike Teague, Steve Thomas, Abbey Thornton, Robin Tingley, Carol Tomko, Steve Tracy, Mike Trescott, Ron Underwood, Rob Van Epps, Amber Ververka, Stase Vonsiatsky, Judy Walker, Joan Walsh, Lee Weber, Evelyn Weddle, Kathy Weiss, Daniel West, Pam Whistler, Melody Wilkes, Mark Wimer, David Wright, Marcia Wright, Jarrett Wyant, Mary Wyant, Jay Wylie, Ron Zick.

# Image Credits

**Bill Archer** 30

**Gary P. Carter** 18, 41, 57, 81, 85, 86, 88, 92, 131, 133

**Leigh Anne Carter** 23, 26, 45, 49, 50, 64, 65, 75, 77, 101, 103,

**Ron Clark** 70

**William G. Cobey** 95

**Debbie Foster** 60

**Phil Fowler** 20, 31, 35, 36, 47, 51, 66, 78, 82, 104, 119, 130

**Jim Guyton** 54, 61, 94, 97, 107, 108, 109, 111, 121, 123, 127, 128, 132

**Jeff Lemons** 21, 22, 24, 27, 32, 34, 37, 38, 42, 46, 52, 58, 59, 63, 67, 68, 69, 74, 80, 99, 100, 102, 106, 113, 118, 124, 125, 126

**Jeff Maw** 62, 122

**Kevin Metcalf** 28, 105, 115

**John Scavetto** 29, 76, 112, 117

**Mecklenburg County Park and Recreation Department Staff** 33

**Will Stuart** 19, 25, 43, 44, 53, 55, 56, 71, 72, 73, 83, 84, 87, 90, 91, 93, 96, 98, 110, 114, 116, 120

**Chris Talkington** 39, 129

**Lee Weber** 79, 89

**Jarrett Wyant** 40, 48



**Voucher Specimen Record:** A specimen of this species was collected in the region and deposited in a curated collection.



**Specimen Examined:** A specimen of this species was examined in the region in hand by a competent authority and released, discarded, or lost.



**Banded Bird Record:** A specimen of this species was captured, banded, and released in the region.



**Photographic Record:** A photograph of this species was taken in Mecklenburg County.



**Outlined Photographic Record:** A photograph of this species has been taken in the region, but not in Mecklenburg County.



**Sight Record:** A dated sight record exists for this species in the Central Carolina region.



**Red Sight Record:** The only evidence of this species in the Central Carolina region is a sight record.



**Christmas Bird Count Record:** Species has been recorded on a Christmas Bird Count in the region.



**Spring Bird Count Record:** Species has been recorded on a Spring Bird Count in the region.



**Nest Record:** This species has been recorded nesting in the region.



**Orange Nest Record:** Mecklenburg County Breeding Bird Atlas designated Vulnerable. See page 554.



**Red Nest Record:** Mecklenburg County Breeding Bird Atlas designated Imperiled. See page 553.



**Outlined Nest Record:** This species has been recorded nesting in the region, but not in Mecklenburg County.



**Blue Nest Record:** Former Breeder. Mecklenburg County BBA designated Lost. See page 552.

× **Historical**

○ **Accidental, Casual, or Very Rare**

— **Rare**

≡ **Uncommon**

≡≡ **Fairly Common**

≡≡≡ **Common, Very Common, or Abundant**

■ **ND - No Data**

■ **OB - Observed**

■ **PO - Possible**

■ **PR - Probable**

■ **CO - Confirmed**



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