CURRICULUM VITAE

SALLY D. HACKER

Department of Integrative Biology
Oregon State University
3029 Cordley Hall
Corvallis, OR 97331

Email: hackers@science.oregonstate.edu
Phone: 541-737-3707
Fax: 541-737-0501

EDUCATION

Ph.D. 1996 Department of Ecology and Evolutionary Biology, Brown University, Providence, RI.
Co-advisors: Dr. Mark Bertness and Dr. Steven Gaines
Title: *Species diversity in a New England salt marsh: significance of positive plant interactions*

M.S. 1988 Department of Zoology, University of Maine, Orono, ME.
Advisor: Dr. Robert Steneck
Title: *The effect of habitat architecture on the abundance and body size scaling of a mobile phytal amphipod,* Gammarellus angulosus *(Rathke).*

B.S. 1984 Department of Zoology, University of Washington, Seattle, WA.

EMPLOYMENT

11-present: Professor, Department of Integrative Biology (formerly Zoology), Oregon State University.

04–11: Associate Professor, Department of Zoology, Oregon State University.

07-09 Chair of Graduate Studies, Department of Zoology, Oregon State University.

02–04: Associate Professor, School of Biological Sciences and Program in Environmental Science, Washington State University Vancouver.

96–02: Assistant Professor, School of Biological Sciences and Program in Environmental Science, Washington State University Vancouver.

92–94: Teaching Assistant, Brown University, Providence, RI.

89–91: Research Technician, Woods Hole Oceanographic Institution, Woods Hole, MA.

85–88: Teaching Assistant, University of Maine, Orono, ME.

AWARDS/FELLOWSHIPS/RECOGNITION

11–present: Co-author of the best selling ecology textbook nationally and internationally (2011, 2014, 2017 editions) and adopted by over ~300 universities.

17: Co-author of the second best selling introductory biology textbook nationally and internationally (2017 edition) and adopted by over ~400 universities.

13: Co-author of 2011 article in *Ecological Monographs* ranked first of top ten publications on marine ecosystem services by a global survey of marine academics and professionals. 904 citations.

06–09: Served as Chair and Member of the National Center for Ecological Analysis and Synthesis (NCEAS) Science Advisory Board.

00: Faculty Research Excellence Award, WSU Vancouver.

97: Young Investigator Prize, American Society of Naturalists, Annual Meeting, Boulder, CO.

95: Murray F. Buell Award, Best Student Presentation, Ecological Society of America Meeting, Snowbird, UT.

94–96: Mellon Doctoral Fellowship, Brown University, Providence, RI.

91–92: Clare Boothe Luce Women in Science Fellowship, Brown University, Providence, RI.

TEACHING ASSIGNMENTS

OSU 2004–present: Ecology (Bi 370), Marine Biology (Bi 450), Community Ecology (Z 594), and Graduate Seminars (Meta-analysis, Species Invasion, Disease Ecology, Generalities in Ecology, Research Presentations, Communicating Science)

WSU Vancouver 1996–2004: General Ecology (Bio 372), Community Ecology (Bot 462/562), Field Ecology (Bot 463/563), and Wetland Ecology (ESRP 490).

SCHOLARSHIP

PUBLICATION STATISTICS

Total Citations = 4,812, H–index = 27, i10–index = 39

BOOKS PUBLISHED

5. Sadava, D., D. M. Hillis, H. C. Heller, **S. D. Hacker**. **2017**. *LIFE: The Science of Biology 11th Edition*, MacMillan Publishers/Sinauer Associates, Sunderland, MA.

Chapter 53: Physical Environment and Biogeography

Chapter 54: Populations

Chapter 55: Species Interactions

Chapter 56: Communities

Chapter 57: Ecosystem Ecology

Chapter 58: A Changing Biosphere

4. Bowman, W.D., **S.D. Hacker**, M.L. Cain. **2017**. *Ecology, 4th Edition,* Sinauer Associates, Sunderland, MA.

Chapter 12: Predation and Herbivory

Chapter 13: Parasitism

Chapter 14: Competition

Chapter 15: Mutualism and Commensalism

Chapter 16: The Nature of Communities

Chapter 17: Change in Communities

Chapter 18: Biogeography

Chapter 19: Species Diversity in Communities

3. Cain, M.L., W.D. Bowman, **S.D. Hacker**. **2014**. *Ecology, 3rd Edition,* Sinauer Associates, Sunderland, MA. 667 pp.
   Chapter 16: The Nature of Communities
   Chapter 17: Change in Communities
   Chapter 18: Biogeography
   Chapter 19: Species Diversity in Communities
2. Cain, M.L., W.D. Bowman, and **S.D. Hacker**. **2011.** *Ecology, 2nd Ed.,* Sinauer Associates, Sunderland, MA. 648 pp.
   Chapter 15: The Nature of Communities
   Chapter 16: Change in Communities
   Chapter 17: Biogeography
   Chapter 18: Species Diversity in Communities
1. Cain, M.L., W.D. Bowman, and **S.D. Hacker**. **2008.** *Ecology, 1st Ed.,* Sinauer Associates, Sunderland, MA. 648 pp.
   Chapter 15: The Nature of Communities
   Chapter 16: Change in Communities
   Chapter 17: Biogeography
   Chapter 18: Species Diversity in Communities

BOOK REVIEWS PUBLISHED

1. **Hacker, S.D. 2014.** Planning for coastal wetland change: fortress marsh or ecomarsh? **Ecology 95:3453–3454.**

JOURNAL ARTICLES OR BOOK CHAPTERS PUBLISHED OR IN PRESS

65. Chan, F. J.A. Barth, C.A. Blanchette, R.H. Byrne, F. Chavez, O. Cheriton, R. A. Feely, G. Friederich, B. Gaylord, T. Gouhier, **S.D. Hacker**, T. Hill, G. Hoffman, M.A. McManus, B.A. Menge, K.J. Nielsen, A. Russell, E. Sanford, J. Sevadjian, and L. Washburn. **In Press**. Evidence of widespread progression of nearshore ocean acidification in the California Current System**. Scientific Reports.**
64. **Hacker S.D. In Press**. Positive interspecific interactions. In: **Encyclopedia of Life Sciences** (ELS). John Wiley & Sons, Ltd: Chichester.
63. Ruggiero, P., **S.D. Hacker**, E. Seabloom, P. Zarnetske. **In Press**. The role of vegetation in determining dune morphology, exposure to sea level rise, and storm-induced coastal hazards: A U.S. Pacific Northwest perspective. Chapter 11. Pages xxx-xxx in Moore, L., B. Murray. **Barrier Dynamics and the Impacts of Climate Change on Barrier Evolution,** Springer.
62. Barner, A. K., **S. D. Hacker**, B. A. Menge, and K. J. Nielsen. **2016**. The complex net effect of reciprocal interactions and recruitment facilitation maintains an intertidal kelp community. **Journal of Ecology 104:33-43.**
61. Henderson, J., **S.D. Hacker**. **2015**. Buried alive: an invasive seagrass (*Zostera japonica*) changes its reproductive allocation in response to sediment disturbance. **Marine Ecology Progress Series 532:123–136.**

60. Zarnetske, P., P. Ruggiero, **S.D. Hacker**, E. Seabloom. **2015**. Coastal foredune evolution: the relative influence of vegetation and sand supply in the US Pacific Northwest. **Journal of the Royal Society Interface 12: http://dx.doi.org/10.1098/rsif.2015.0017.**
59. Hessing-Lewis, M., **S.D. Hacker**, B.A. Menge, S. McConville, J. Henderson. **2015**. Are large macroalgal blooms necessarily bad? Nutrient impacts on seagrass in upwelling-influenced estuaries. **Ecological Applications 25:1330-1347.**
58. David, A.S., P.L. Zarnetske, **S.D. Hacker**, P. Ruggiero, R.G. Biel, and E.W. Seabloom. **2015**. Invasive congeners differ in successional impacts across space and time. **PLoS ONE 10(2): e0117283.doi:10.1371/journal.pone.0117283**
57. Menge, B.A., T.C. Gouhier, **S.D. Hacker**, F. Chan and K. Nielsen. **2015**. Are metaecosystems organized hierarchically? A model and test in rocky intertidal habitats. **Ecological Monographs 85:213–233.**
56. Bakker, J.P., K.J. Nielsen, J. Alberti, F. Chan, **S. D. Hacker**, O.O. Iribarne, D.P.J. Kuijper, B.A. Menge, M. Schrama and B. R. Silliman. **2015**. Bottom-Up and Top-Down Interactions in Coastal Interface Systems. Chapter 7. Pages 157-200 in Hanley, T.C. and K.J. La Pierre. **Bottom-Up and Top-Down Interactions across Aquatic and Terrestrial Systems**, Cambridge University Press, Cambridge.
55. **Hacker S.D. 2014**. Salt and brackish marshes. In: **Encyclopedia of Natural Resources**. Taylor and Francis Group, LLC: New York. Doi: 10.1081/E-ENRL-120047521.
54. Hessing-Lewis, M.L., **S.D. Hacker. 2013**. Latitudinal trends in macroalgal blooms and seagrass production in northeast Pacific upwelling-influenced estuaries. **Limnology and Oceanography 58: 1103–1112.**
53. Keammerer, H., **S.D. Hacker. 2013**. Negative and neutral interactions dominate in early life stages and across stress gradients in an Oregon estuary. **Plant Ecology 214:303-315.**
52. Seabloom, E.W., P. Ruggiero, **S.D. Hacker**, J. Mull, P.L. Zarnetske. **2013.** Invasive grasses, climate change, and exposure to storm-wave overtopping in coastal dune ecosystems. **Global Change Biology 19:824-832.**
51. Zarnetske, P., T. Gouhier, **S.D. Hacker**, E. Seabloom, V. Bokil. **2013**. Indirect effects and facilitation among native and non-native species promote invasion success along an environmental stress gradient. **Journal of Ecology** doi: 10.1111/1365-2745.12093.
50. Wagner, E., B.R. Dumbauld, **S.D. Hacker**, A.C. Trimble, L.M. Wisehart, J.L. Ruesink. **2012.** Density-dependent effects of an introduced oyster, *Crassostrea gigas*, on a native intertidal seagrass, *Zostera marina*. **Marine Ecology Progress Series 468:149-160**.
49. Ruesink J.L., J. Fitzpatrick, B.R., Dumbauld, **S.D. Hacker**, A.C. Trimble, E.L. Wagner, L.M. Wisehart. **2012.** Life history and morphological shifts in an intertidal seagrass following multiple disturbances**. Journal of Experimental Marine Biology and Ecology 424-425:25-31**
48. Zarnetske, P., **S.D. Hacker**, E.W. Seabloom, P. Ruggiero, J.R. Killian, T.B. Maddux, D. Cox. **2012.** Biophysical feedback mediates effects of invasive grasses on coastal dune shape. **Ecology 93:1439-1450.**
47. Aswani, S., P. Christie, N.A. Muthiga, R. Mahon, J.H. Primavera, L.A. Cramer, E.B. Barbier, E.F. Granek, C. Kennedy, E. Wolanski, and **S.D Hacker**. **2012**. The way forward with ecosystem-based management in tropical

contexts: Reconciling with existing management systems. **Marine Policy 36:1-10**.

46. **Hacker S.D.**, P. Zarnetske, E. Seabloom, P. Ruggiero, J. Mull, S. Gerrity, and C. Jones. **2012**. Subtle differences in two non-native congeneric beach grasses significantly affect their colonization, spread, and impact. **Oikos 121:138–148.**
45. Gutierrez J.L., C.G. Jones, J.E. Byers, K.K. Arkema, K. Berkenbusch, J.A. Committo, C.M. Duarte, **S.D. Hacker**, P.J. Hogarth, J.G. Lambrinos, M.G. Palomo, C. Wild, and I.E. Hendriks. **2011**. Physical ecosystem engineers and the functioning of estuaries and coasts. Pages 53-81 *in* C.H.R. Heip, C.J.M., Philippart, and J.J. Middelburg, editors. Volume 7: Functioning of Estuaries and Coastal Ecosystems, in the **Treatise on Estuarine and Coastal Science** (E. Wolanski, and D. McLusky, series editors), Elsevier. DOI: 10.1016/B978-0-12-374711-2.00705-1.
44. Barbier E., **S.D. Hacker**, E. Koch, B. Silliman, and A.D. Stier. **2011**. Estuarine and coastal ecosystems and their services. Pages 109-127 *in* M. van den Belt and R. Costanza, editors. Volume 12: Ecological Economics of Estuaries and Coasts, in the **Treatise on Estuarine and Coastal Science** (E. Wolanski, and D. McLusky, series editors), Elsevier.
43. Ruggiero, P., J. Mull, P. L. Zarnetske, S. D. Hacker, and E. W. Seabloom. **2011.** Interannual to decadal foredune evolution. *in* ASCE, editor. **Proceedings of Coastal Sediments, Miami, FL.**
42. Gouhier, T. C., B. A. Menge, **S.D. Hacker. 2011.** Recruitment facilitation can promote coexistence and buffer population growth in metacommunities. **Ecology Letters 14: 1201–1210**.
41. Menge, B.A., **S.D. Hacker**, T. Freidenburg, J. Lubchenco, R. Craig, G. Rilov, M. Noble, E. Richmond. **2011.** Potential impact of climate-related changes is buffered by differential responses to recruitment and interactions. **Ecological Monographs 81:493–509.**
40. Moulton O.M. and **S.D. Hacker**. **2011**. Congeneric variation and environmental gradients influence community structure: Surfgrasses and macroinvertebrates along the Oregon coast. **Marine Ecology Progress Series 433:53–63.**
39. Hessing-Lewis M., **S.D. Hacker**, B.A. Menge, S. Rumrill. **2011**. Context dependent eelgrass-macroalgae interactions along an estuarine gradient in the Pacific Northwest, USA. **Estuaries and Coasts 34:1169–1181**.
38. Guarderas A.P., **S.D. Hacker**, and J. Lubchenco. **2011**. Analysis of the ecological effects of marine reserves in Latin America and the Caribbean. **Marine Ecology Progress Series 429:219–225.**
37. Barbier E., **S.D. Hacker**, C. Kennedy, E. Koch, B. Silliman, and A.D. Stier. **2011**. The value of estuarine and coastal ecosystem services. **Ecological Monographs 81:169–193.**
36. Zarnetske P.L., E.W. Seabloom, and **S.D. Hacker**. **2010**. Non-target effects of invasive species management: Beach grass, birds, and bulldozers in coastal dunes. **Ecosphere 1: 13**.
35. **Hacker S.D.**, and M.N. Dethier. **2010**. Where do we go from here? Alternative control and restoration trajectories for a marine grass (*Spartina anglica*) invader in different habitat types. Pages 211-216 in Ayres, D. R., D. W. Kerr, S.D. Ericson, and P. R. Olofson (editors). **Proceedings of the 3rd International Conference on Invasive *Spartina*, San Francisco, CA, USA.** San Francisco Estuary Invasive *Spartina* Project of the California

State Coastal Commission, Oakland, CA.

34. Foley M.M., B.S. Halpern, F. Micheli, M.H. Armsby, M.R. Caldwell, E. Prahler, D. Sivas, C.M. Crain, N. Rohr, M.W. Beck, M.H. Carr, L.B. Crowder, J.E. Duffy, **S.D. Hacker**, K. McLeod, C.H. Peterson, H.M. Regan, P.A. Sandifer, and R.S. Steneck. **2010**. Guiding ecological principles for marine spatial planning. **Marine Policy** 34: 955-966. DOI: 10.1016/j.marpol.2010.02.001.
33. Ruesink J.L., J-S. Hong, L. Wisehart, **S.D. Hacker**, B.R. Dumbauld, A.C. Trimble, and M. Hessing-Lewis. **2010**. Congener comparison of native (*Zostera marina*) and introduced (*Z. japonica*) eelgrass at multiple scales within a Pacific Northwest estuary. **Biological Invasions** 12: 1773–1789.
32. Granek E., Polasky, S., Barbier, C. Kappel, D. Stoms, D.J. Reed, J. Primavera, E.W. Koch, C. Kennedy, L.A. Cramer, **S.D. Hacker**, G.M.E. Perillo, S. Aswani, B. Silliman, E. Barbier, E. Wolanski, and D. Bael. **2010**. Ecosystem services as a common language for coastal ecosystem-based management. **Conservation Biology** 24: 207-216. DOI: 10.1111/j.1523-1739.2009.01355.x.
31. **Hacker S.D. 2009**. Positive interspecific interactions. In: **Encyclopedia of Life Sciences** (ELS). John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0021901.
30. Tallis H.M., J.L. Ruesink, B. Dumbauld, **S.D. Hacker**, and L.M. Wisehart. **2009**. Oysters and aquaculture practices affect eelgrass density and productivity in a Pacific Northwest estuary. **Journal of Shellfish Research** 28: 251–261.
29. Koch E.W., E.B. Barbier, B. Silliman, G.M.E. Perillo, D.J. Reed, **S.D. Hacker**, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, D. Bael, and C. Kappel. **2009**. Nonlinearity in ecosystem services: temporal and spatial variability in coastal protection. **Frontiers in Ecology and the Environment** 7:29–37. DOI: 10.1890/080126.
28. **Hacker S.D**. and M.N. Dethier. **2009**. Differing consequences of removing ecosystem–modifying invaders: significance of impact and community context to restoration potential. Pages 375–385 in: **Marine Bioinvasions: Ecology, Conservation and Management Perspectives**, Editors: Gil Rilov and Jeffrey Crooks, Springer-Verlag.
27. Barbier E.B., E.W. Koch, B. Silliman, **S.D. Hacker**, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, D. Bael, C. Kappel, G.M.E. Perillo and D.J. Reed. **2008**. Ecological quality changes preceding changes in quality of mangrove: Reply. **Science.** Response to N. Koedam and F. Dahdouh-Guebas's E-letter. http://www.sciencemag.org/cgi/eletters/319/5861/321?ck=nck.
26. Guarderas A.P., **S.D. Hacker**, and J. Lubchenco. **2008**. Current status of marine protected areas in Latin America and the Caribbean. **Conservation Biology** 22: 1630-1640. DOI: 10.1111/j.1523-1739.2008.01023.x.
25. Barbier E.B., E.W. Koch, B. Silliman, **S.D. Hacker**, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, D. Bael, C. Kappel, G.M.E. Perillo and D.J. Reed. **2008**. Vegetation's role in coastal protection: Reply. **Science** 320: 176-177.
24. Barbier E.B., E.W. Koch, B. Silliman, **S.D. Hacker**, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L.A. Cramer, D. Stoms, C. Kennedy, D. Bael, C. Kappel, G.M.E. Perillo and D.J. Reed. **2008**. Coastal ecosystem-based

management with non-linear ecological functions and values. **Science** 319: 321-323.

23. Richardson N.F., J.L. Ruesink, S. Naaem, **S.D. Hacker**, H.M. Tallis, B.R. Dumbauld, and L.M. Wisehart. **2008**. Bacterial abundance and aerobic microbial activity across natural and oyster aquaculture conditions in a northeastern Pacific estuary. **Hydrobiologia** 596:269-278.
22. Wisehart L.M., B.R. Dumbauld, J.L. Ruesink, and **S.D. Hacker**. **2007**. Importance of eelgrass life history stages in response to oyster aquaculture disturbance. **Marine Ecology Progress Series** 344:71-80.
21. **Hacker S.D.** and M.N. Dethier. **2006**. Community modification by a grass invader has differing impacts for marine habitats. **Oikos** 113: 279-286.
20. Dethier M.N. and **S.D. Hacker**. **2005**. Physical factors vs. biotic resistance in controlling the invasion of an estuarine marsh grass. **Ecological Applications**. 15:1273-1283.
19. Dethier M.N. and **S.D. Hacker**. **2004**. Improving management practices for invasive cordgrass in the Pacific Northwest: A case study of *Spartina anglica*. **Washington Sea Grant Program Publication**, Seattle, WA. WSG-AS 04-05. 21pp. http://www.wsg.washington.edu/research/pdfs/spartinaang.pdf
18. Reeder T.G. and **S.D. Hacker**. **2004**. Factors contributing to the removal of a marine grass invader (*Spartina anglica*) and subsequent potential for habitat restoration. **Estuaries** 27: 244-252.
17. **Hacker S.D**. and M.N. Dethier. **2003**. Community dependent invasion and removal of English cordgrass, *Spartina anglica*, in Puget Sound, Washington. **Botanical Electronic News**. No. 312.
16. **Hacker S.D. 2002**. Positive Interactions. Pages 591-594 in N. Eldridge, editor. **Encyclopedia of Biodiversity**, ABC–CLIO Publishers, Santa Barbara, CA.
15. **Hacker S.D. 2002**. Coastal Wetlands. Pages 234-235 in N. Eldridge, editor. **Encyclopedia of Biodiversity**, ABC–CLIO Publishers, Santa Barbara, CA.
14. **Hacker S.D**., D. Heimer, C.E. Hellquist, T.G. Reeder, B. Reeves, T. Riordan, and M.N. Dethier. **2001**. A marine plant (*Spartina anglica*) invades widely varying habitats: potential mechanisms of invasion and control. **Biological Invasions** 3: 211-217.
13. **Hacker S.D.** and M.D. Bertness. **1999**. Experimental evidence for the factors maintaining plant species diversity in a New England salt marsh. **Ecology** 80: 2064–2073.
12. Wu M.–Y., **S.D. Hacker**, D. Ayres and D.R. Strong. **1999**. Potential of *Prokelisia* spp. as biological control agents of English cordgrass, *Spartina anglica*. **Biological Control** 16: 267–273.
11. Levine J.M., **S.D. Hacker**, C.D.G. Harley and M.D. Bertness. **1998**. Nitrogen effects on an interaction chain in a salt marsh community. **Oecologia** 117: 266–272.
10. **Hacker S.D.** and S.D. Gaines. **1997**. Some implications of direct positive interactions for community species diversity. **Ecology** 78: 1990–2003.
9. Madin L., P. Kremer, **S.D. Hacker**. **1996**. Distribution and vertical migration of salps (Tunicata, Thaliacea) near Bermuda. **Journal of Plankton Research** 18:747–755.
8. **Hacker S.D.** and M.D. Bertness. **1996**. Trophic consequences of a positive plant interaction. **The American**

Naturalist 148: 559–575.

7. **Hacker S.D.** and M.D. Bertness. **1995**. Morphological and physiological consequences of a positive plant interaction. **Ecology** 76: 2165–2175.
6. **Hacker S.D.** and M.D. Bertness. **1995**. A herbivore paradox: why salt marsh aphids live on poor quality plants. **The American Naturalist** 145: 192–210.
5. Bertness M.D. and **S.D. Hacker. 1994**. Physical stress and positive associations among marsh plants. **The American Naturalist** 144: 363–372.
4. Goyet C. and **S.D. Hacker. 1992**. Procedure for calibration of a coulometric system used for total inorganic carbon measurements of seawater. **Marine Chemistry** 38: 37–51.
3. **Hacker S.D.** and L.P. Madin. **1991**. Why habitat architecture and color are important to shrimp living in pelagic *Sargassum*: use of camouflage and plant–part mimicry**. Marine Ecology Progress Series** 70: 143–155.
2. Steneck R.S., **S.D. Hacker**, and M.N. Dethier. **1991**. Mechanisms of competitive dominance between crustose coralline algae: an herbivore-mediated competitive–reversal. **Ecology** 72: 938–950.
1. **Hacker S.D.** and R.S. Steneck. **1990**. Habitat architecture and the abundance and body size–dependent habitat selection of a phytal amphipod. **Ecology** 71: 2269–2285.

PROFESSIONAL INVITED SEMINARS/TALKS ([1]Research, [2]Educational, [3]Public) **Last 5 years**

2016-2017

92. [1] NOAA NCCOS Ecological Effects of Sea Level Rise, NOAA office at Duke Marine Lab, Beaufort, North Carolina.
91. [2]Coastal Invasion Course, Hatfield Marine Science Center, Oregon State University, Newport, OR.
90. [1] NOAA NCCOS Ecosystems Services Project, Corvallis, OR.
89. [1, 3]Oregon Shellfish Task Force, Netarts Bay, OR.

2014-2015

88. [2]Coastal Invasion Course, Hatfield Marine Science Center, Oregon State University, Newport, OR.
87. [1, 3]Tillamook County Coastal Futures Project, Tillamook, OR.
86. [1, 3]Cheahmill Chapter, Native Plant Society, McMinneville, OR.
85. [1] University of Bordeaux, Bordeaux, France.
84. [2]Coastal Invasion Course, Hatfield Marine Science Center, Oregon State University, Newport, OR.

2012-2013

83. [1]Oregon Institute of Marine Biology, University of Oregon, Charleston, OR.
82. [2]Coastal Hazards Course, CEOAS, Oregon State University, Corvallis, OR.
81. [2]Coastal Invasion Course, Hatfield Marine Science Center, Oregon State University, Newport, OR.
80. [1]Science Programs, Washington State University Vancouver, Vancouver, WA.
79. [1]Sand Dune Symposium, EcoSummit, Columbus, OH.
78. [1, 3]Invasive Gorse Management Meeting, Oregon State Parks and Recreation, Bandon, OR.

WORKING GROUP MEETINGS

March 2016	Organizer and Participant, Advisory Board Meeting, A Multidisciplinary Approach to Valuing Ecosystem Services from Natural Infrastructure, Oregon State University, Corvallis, OR.
January 2013	Invited Participant, Future of Pacific Northwest Seagrasses in a Changing Climate, Friday Harbor Marine Labs, University of Washington, Friday Harbor, WA.
March 2012	Invited Participant, Trends in Ecological Analysis and Synthesis, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
December 2010	Invited Participant, Communicating Ecosystem Service Science to Decision Makers, COMPASS, Washington, DC.
March 2010	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
December 2009	Invited Participant, Community Science to Journalists and Policymakers, COMPASS, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
March 2009	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
January 2009	Invited Participant, Ecological Principles of Marine Spatial Management, Center for Ocean Solutions, Stanford University and Monterey Bay Aquarium, Monterey, CA.
Sept 2008	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
January 2008	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA
Sept 2007	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
January 2007	Invited Participant, Land-sea interfaces and conservation, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.
April 2004	Invited Participant, Ramsar-sponsored workshop entitled “Can mankind and nature have common futures in estuaries?”, Baie de Somme, France.
May 2003	Invited Participant, Alpine Elevational Gradients Workshop, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.

GRANTS FUNDED

Title	PI and co-PIs	Agency
23. Does ocean productivity contribute to dune ecosystem function? Connecting wrack subsidies to Oregon dune coastal protection and conservation services	Hacker PI with co-PIs Ruggiero, Chan	NOAA Oregon Sea Grant Program **FUNDED**
22. A multidisciplinary, integrative approach to valuing ecosystem services from natural infrastructure	Dundas PI with co-PIs Hacker, Lewis, Kling, Cox, Ruggiero, Parrish	NOAA NCCOS **FUNDED**
21. The Coastal Recovery from Storms Tool (CREST): A model for assessing the impact of sea level rise on natural and managed beaches and dunes	Ruggiero PI with co-PIs Hacker, Moore	NOAA/NOS/NCCOS/CS OR Ecological effects of sea level rise **FUNDED**
20. Consequences of climate change for coastal protection and other ecosystem services provided by coastal dunes	Ruggiero PI with co-PIs Hacker, Bolte	NOAA COCA **FUNDED**
19. Preparing for Climate Change in Oregon Estuaries: Flooding, Ecological Impacts, and an Integrated Approach Toward Adaptive Management	Hill PI with co-PIs Hacker, Allen	Oregon Sea Grant Program, NOAA **FUNDED**
18. Systems Science in Marine Biology (SSIMBio): Developing the symbiotic anemone *Anthopleura elegantissima* as a systems biology model for studying response to climate change	Novak, Meyer PIs with co-PIs Chan, Denver, Hacker, Menge, Vega Thurber, Weis	Oregon Sea Grant Program, NOAA **FUNDED**
17. Systems Science in Marine Biology (SSIMBio): Building a multidisciplinary research, education, and outreach program to study climate change from molecules to ecosystems	Denver, Hacker PIs with co-PIs Chan, Menge, Meyer, Novak, Vega Thurber, Weis	Oregon Sea Grant Program, NOAA **FUNDED**
16. Collaborative Research: The role of calcifying algae as a determinant of rocky intertidal macrophyte community structure at a meta-ecosystem scale	Menge PI with co-PIs Hacker, Chan, Nielsen	National Science Foundation **FUNDED**
15. Beach grass invasions and coastal flood protection: forecasting the effects of climate change on coastal vulnerability	Hacker PI with co-PIs Seabloom, Ruggiero	EPA, USDA, STAR Program **FUNDED**
14. Integrating invasion ecology and dune geomorphology to project coastal vulnerability in Oregon and Washington	Hacker PI with co–PIs Seabloom, Ruggiero	Oregon Sea Grant Program, NOAA **FUNDED**
13. Collaborative: Scaling up from community to meta-ecosystem dynamics in the rocky intertidal–a comparative-experimental approach	Menge PI with co-PIs Hacker, Chan, Nielsen	National Science Foundation **FUNDED**
12. Scale-dependent and indirect effects of filter feeders on eelgrass: understanding complex ecological interactions to improve environmental impacts of aquaculture	Ruesink PI with co-PIs Hacker, Dumbauld	Western Regional Aquaculture Center, USDA **FUNDED**
11. The role of marine-influenced primary producers as mediators to the light environment of eelgrass habitats in the South Slough NERR, Oregon	Hacker PI with co-PI Hessing-Lewis	NERRS, Graduate Research fellowship, NOAA **FUNDED**
10. Communicating the science of marine reserves to Latin American audiences	Lubchenco PI with co-PIs Hacker, B. Simler	David and Lucile Packard Foundation **FUNDED**

9. Invasion and removal of two invasive grasses in Pacific Northwest coastal dune systems	Hacker PI with co–PI E. Seabloom	Oregon Sea Grant Program, NOAA **FUNDED**
8. *Spartina* eradication and education service-learning project–Phase 2	Hacker PI with co–PIs S. Richards, J. Feldman, C. Burt	Washington Sea Grant Program, NOAA **FUNDED**
7. Does timing of removal of an invasive marine grass increase successful control and habitat restoration?	Hacker PI with co-PI M. Fleming	M.J. Murdock Charitable Trust, Partners in Science **FUNDED**
6. *Spartina* eradication and education service-learning project: A regional community based partnership	Hacker PI with co–PIs S. Richards, J. Feldman, C. Burt	Washington Sea Grant Program, NOAA **FUNDED**
5. Mechanisms of invasion of the English cordgrass, *Spartina anglica:* seed production and seedling establishment	Hacker PI with co–PI M. Dethier	Washington Sea Grant Program, NOAA **FUNDED**
4. Factors controlling plant species diversity in a Pacific Northwest salt marsh	Hacker PI	WSUV and WSU College of Sciences, Mini Grant 2000 **FUNDED**
3. Predicting the invasion potential and consequences of the cordgrass, *Spartina anglica*, within Padilla Bay, WA.	Hacker PI with co-PI E. Hellquist	National Estuarine Research Reserve System, Graduate Fellowship **FUNDED**
2. Invasion in salt marshes and mud flats in Puget Sound, WA on and eradication of the alien plant, *Spartina anglica*	Hacker PI with co–PI M. Dethier	National Sea Grant Program, Aquatic Nuisance Species Program, NOAA
1. Pattern of invasion and eradication of the alien plant, *Spartina anglica*, in Puget Sound salt marshes	Hacker PI	WSU, College of Sciences Mini Grant **FUNDED**

MENTORING, ADVISING, AND SUPERVISORY ASSIGNMENTS

SUPERVISION OF GRADUATE STUDENT RESEARCH

18. Katya Jay, PhD Zoology, 2016–2021 Pending. Thesis proposal title: TBD.
17. Rebecca Mostow, 2016 Provost Graduate Fellowship, PhD Zoology, 2016-2021 Pending, Thesis proposal title: TBD.
16. Caitlin White, OSU PhD Zoology, 2015–2020 Pending, Thesis proposal title: TBD.
15. Vanessa Constant, OSU PhD Zoology, 2014–2019 Pending, Thesis proposal title: Cross-ecosystem productivity in the face of climate change: connecting marine subsidies to dune coastal protection services in the Pacific Northwest.
14. Jennifer Motley, OSU MS MRM, 2014-2016 Pending, Thesis proposal title: Characterizing mesograzers in upwelling-influenced eelgrass ecosystems: relative importance of local versus regional effects.
13. Reuben Biel, 2011 Provost Graduate Fellowship, 2014 EPA STAR Fellowship, OSU PhD Zoology, 2011–2017 Pending, Thesis proposal title: Tradeoffs in ecosystem services provided by coastal dunes.

12. Alison Barner, 2012 EPA STAR Fellowship, OSU PhD Zoology, 2010–2016 Completed (Co–advisor: Bruce Menge), Thesis title: Predictability and Constraints on the Structure of Ecological Communities in the Context of Climate Change.
11. Lindsay Carroll, OSU MS MRM, 2013–2016 Completed, Thesis title: Evaluating Coastal Protection Services Associated with Restoration Management of an Endangered Shorebird in Oregon, U.S.A.
10. Jessica Reimer, OSU MS Zoology, 2011–2014 Completed (Co–advisor: Bruce Menge), Thesis title: Patterns of macrophyte wrack deposition on sandy beaches of the Pacific Northwest Coast, U.S.A.
9. Jeremy Henderson, OSU MS Zoology, 2010–2013 Completed, Thesis title: Direct effects and tradeoffs affect vegetative growth and sexual reproduction in an invasive seagrass experiencing different disturbance regimes.
8. Phoebe Zarnetske, OSU PhD Zoology, 2006–2011 Completed (Co-advisor: Eric Seabloom), Thesis title: The influence of biophysical feedbacks and species interactions on grass invasions and coastal dune morphology in the Pacific Northwest, USA.
7. Margot Hessing–Lewis, OSU PhD Zoology, 2005–2011 Completed (Co–advisor: Bruce Menge), Thesis title: Context dependent eelgrass-macroalgal interactions in upwelling-influenced estuaries.
6. Orissa Moulton, OSU MS Zoology, 2008–2010 Completed, Thesis title: Surfgrasses (*Phyllospadix* spp.) as dynamic foundation species for macroinvertebrates along the Oregon coast.
5. Paulina Guarderas, OSU MS Environmental Science, Completed 2007 (Co-advisor: Jane Lubchenco), An analysis of marine reserves in Latin America: Are they serving their intended role?
4. Lorena Wisehart, OSU MS Environmental Science, Completed 2006, Impacts of oysters on eelgrass (*Zostera marina* L.): Importance of early life history stages in response to disturbance.
3. Nathan Reynolds, WSU Vancouver MS Environmental Science, Completed 2005, Historical plant communities of southwest Washington State.
2. Rebecca Martin, WSU Vancouver MS Environmental Science, Completed 2005, Identifying common stream characteristics using geomorphological associations on the Gifford Pinchot National Forest: implications for management and restoration.
1. Tabitha Reeder, WSU Vancouver MS Environmental Science, Completed 2002, Removing a nonindigenous marine plant (*Spartina anglica*): importance of habitat type and consistent, long-term control on regrowth and reinvasion.

GRADUATE THESIS COMMITTEE SERVICE Last 5 years

35. Barbara Spiecker, OSU Zoology, Pending 2020.
34. Alyssa Rickborn, OSU Zoology, Pending 2020.
33. Kristen Finch, OSU Forestry Sciences, Pending 2020.
32. Heather Broughton, OSU Zoology, Pending 2017.
31. Todd Lemein, OSU Horticulture, Pending 2016.
30. Elizabeth Cerny Chipman, OSU Zoology, Completed 2016.

29. Katelyn Bosley, OSU PhD Fish/Wildlife, Completed 2016. Grad Representative.
28. Jeremy Rose, OSU Zoology, Completed 2015.
27. Rhea Hanselmann, OSU Zoology, Completed 2015.
26. Sarah Close, OSU Zoology, Completed 2014.
25. Sandy Letzing, OSU MRM, Completed 2014. Grad Representative.
24. Nate Lewis, OSU MRM, Completed 2014.
23. Alison Iles, OSU Zoology, Completed 2012.
22. Ian Pfingsten, OSU MS Botany, Completed 2012. Graduate Representative.
21. Tim Seung-chui Lee, OSU MS Environmental Science, Completed 2012.
20. John Hornung, OSU MS COAS, Completed 2011.
19. Dafne Eerkes-Medrano, OSU PhD Zoology, Completed 2011.
18. Angela Brandt, OSU PhD Zoology, Completed 2011.
17. Joseph Tyburczy, OSU PhD Zoology, Completed 2011.

SUPERVISION OF UNDERGRADUATE RESEARCH Last 5 Years

53. Patricia Gonzalez Cruz, STEM Leadership/SURE fellowship, OSU BS Biology, 2016/2017, Fieldwork/Sample analysis/data entry.
52. Emily Tom, STEM Leadership/SURE fellowship, OSU BS Biology/STEM Leadership/SURE fellowship, 2015/2016/2017. Fieldwork/Sample analysis/data entry.
51. Levi Vasquez, Work Study, OSU BS Biology, 2015/2016. Fieldwork/Sample analysis/data entry.
50. Max Afshar, Research Internship, OSU BS Biology, 2015/2016. Fieldwork/Sample analysis/data entry.
49. Natalia Valencia Bailey, Work Study, OSU BS Biology 2014. Sample analysis/data entry.
48. Ana Bienvenida, Work Study, OSU BS Biology, 2013/2014. Sample analysis/data entry.
47. Alyssa Loggins, Work Study, OSU BS Biology, 2013/2014. Sample analysis/data entry.
46. Aastha Shah, Work Study, OSU BS Biology, 2013/2014. Sample analysis/data entry.
45. Melanie Ripley, Work Study, OSU BS Biology, 2012/2013/2014. Sample analysis/data entry.
44. Joshua Borland, Honors Thesis, OSU BS Biology HONORS, 2014. Thesis title: Evidence for the Potential Hybridization of *Ammophila breviligulata* and *Ammophila arenaria* in the Pacific Northwest.
43. Nick McKee, Work Study, OSU BA Natural Resource Science, 2012/2013. Sample analysis/data entry.
42. Asia Bloodgood, Work Study, OSU BS Biology/Microbiology, 2012/2013. Sample analysis/data entry.
41. Hailey Roberts, Work Study, OSU BS, 2012/2013. Sample analysis/data entry.
40. Kellie Miller, Work Study, OSU BS, 2012/2013. Sample analysis/data entry.
39. Sage Losh, Work Study, OSU BS, 2012/2013. Sample analysis/data entry.
38. Kyle Jones, Work Study, OSU BS Environmental Science, 2012/2013. Sample analysis/data entry
37. Doug Bateson, Internship, OSU BS Biology, 2012/2013. Fieldwork/sample analysis/data entry.
36. Kayla Johnston, Work Study, OSU BS Biology, 2012. Sample analysis/data entry

35. Danielle Asson, Internship, OSU BS Biology, 2011. Sample analysis/data entry.

34. Sheanna Steingass, Volunteer, OSU Post Bacc. Sample analysis/data entry.

33. Jennie Yoder, Volunteer, OSU Post Bacc. Sample analysis/data entry.

32. Sea–Oh McConville, COSEE Fellowship/Work Study, OSU BS Biology, 2011. Fieldwork/analysis/data entry.

31. K. Wayne Haimes, Work Study, OSU BS Environmental Science, 2011. Fieldwork/sample analysis/data entry.

30. Alma Sanchez, Work Study, OSU BS Biology, 2012. Sample analysis/data entry.

29. Wyatt Rice-Narusch, Work Study, OSU BS Biology, 2011. Fieldwork/sample analysis/data entry.

28. Melissa Pretchl, Work Study, OSU BS Biology, 2011. Fieldwork/sample analysis/data entry.

SUPERVISION OF POSTDOCTORAL RESEARCH

3. Annaliese Hettinger, 2013-2015, PhD UC Davis. Research on the effects of ocean acidification on marine algae. Co-Mentors: Bruce Menge and Francis Chan.

2. Leigh Tate, 2010-2012, PhD University of Canterbury. Research on the effects of ocean acidification on marine algae. Co-Mentors: Bruce Menge and Francis Chan.

1. I–Yun Mandy Tu, PhD 2000, University of California Davis. Research on invasion and control on reed canary grass, *Phalaris arundinacea*, in collaboration with The Nature Conservancy.

SUPERVISION OF FACULTY RESEARCH ASSISTANT RESEARCH

2. Shawn Gerrity, 2009-2015. Research on dune plant invasions and the effects of ocean acidification.

1. Ryan Craig, 2008-2011. Research on community ecology of rocky intertidal systems.

PROFESSIONAL SERVICE

DEPARTMENTAL, COLLEGE, AND UNIVERSITY SERVICE

16–present: Member, Annual Peer Review of Faculty, Integrative Biology, OSU

15-present: Primary Mentor, Andrew Bouwma, Integrative Biology, OSU.

15–present: Member, Personnel Committee, Integrative Biology, OSU.

12–present: Co-Chair, Undergraduate Curriculum Committee, Integrative Biology, OSU.

14–present: Member, School of Life Sciences Curriculum Committee, College of Science, OSU.

13–present: Member, *Ad hoc* Marine Studies Strategic Planning Committee, Integrative Biology, OSU.

13-present: Senator, Faculty Senate, College of Science, OSU.

13-present: Primary Mentor, Mathew Orr, Integrative Biology, OSU.

10-present: Primary Mentor, Sarah Henkel, Integrative Biology, OSU.

05-15: Member, HMSC Academic Programs Committee, OSU.

15–16: Chair, Faculty Promotion Committee, Devon Quick, Integrative Biology, OSU.

14–15: Co-Chair, Learning Models Subcommittee, Marine Studies Initiative Executive Committee, OSU

13–14: Member, *Ad hoc* Provost Initiative Hiring Committee, Integrative Biology, OSU.

13-14: Member, Personnel Committee, Integrative Biology, OSU.

12-13: Member, *Ad Hoc* Strategic Planning Subcommittee, Zoology, OSU.

12-13: Member, Director of Research Development, Research Office, OSU.

12-13: Member, Personnel Committee, Zoology, OSU.

11-12: Member, HMSC Director Search, Research Office, OSU.

11-12: Chair, Women in Science Award Committee, COS, OSU

11-12 Member, Provost's HMSC Action Team, Research Office, OSU.

11-12: WIC faculty training course (5 wks), proposal for WIC approval for Bi 450, OSU.

11-12: Chair, Promotion Committee, Jerod Sapp, Zoology, OSU.

11-12: Chair, Annual Peer Review of Faculty, Zoology, OSU.

10-11: Chair, Ecosystem Ecology Faculty Search, Zoology, OSU.

10: Affirmative Action Training, Office of Affirmative Action, OSU.

10-11: Member, HMSC External Review, Research Office, OSU.

09-10 Member, Ad hoc Life Sciences Reorganization Committee, Zoology, OSU.

09-10 Member, Graduate Studies Committee, Zoology, OSU.

08-09: Member, Life Sciences Curriculum Committee, COS, OSU.

07-09: Chair, Graduate Studies Committee, Zoology, OSU.

06-07: Member, Mission Subcommittee, Zoology, OSU.

06-07: Member, Life Sciences Reorganization Task Force, COS, OSU.

05-06: Member, Ecology and Evolutionary Biology Steering Committee, COS, OSU.

05-06: Member, Undergraduate Fellowship Committee, Zoology, OSU.

04–05: Member, Graduate Student Admissions, Zoology, OSU.

04-05: Member, Strategic Planning Committee, Zoology, OSU.

02–04: Member, Faculty Mentoring Committee, WSU Vancouver.

01–02: Chair, Ecology Faculty Search, WSU Vancouver.

00–01: Member, Conservation Biology Faculty Search, WSU Vancouver.

00–04: Member, Graduate Student Admissions, Environmental Science, WSU Vancouver.

99–04: Member, Student Conduct Board Committee, WSU Vancouver.

98–01: Member, Project Planning Committee, Engineering/Sciences Building, WSU Vancouver.

97–99: Member, Academic Integrity Committee, Faculty Senate, WSU Pullman.

96–97: Member, Evolutionary Genetics Faculty Search, WSU Vancouver.

96–97: Member, Environmental Science Faculty Search, WSU Vancouver.

INTERNATIONAL/NATIONAL PROFESSIONAL SERVICE

94–present: Journal/Proposal Reviewer; over 500 proposals and scientific papers.

11–14: Subject Matter Editor, *Marine Biology Research* journal, Taylor and Francis Group, UK.

11: Reviewer, Review of the National Coastal Condition Report IV, Chapter 6: West Coast Coastal

Condition, EPA, Triangle Park, NC.

09: Member, Review Committee, Conservation Resource Management Program, NCEAS, UC Santa Barbara, Santa Barbara, CA

08-09: Chair, Science Advisory Board, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.

06-09: Board Member, Science Advisory Board, National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, CA.

01–09: Receiving Editor, *Ecology Letters*, Blackwell Scientific, Paris, France.

05: Guest Subject Matter Editor, *Ecology/Ecological Monographs*, Ecological Society of America.

04: Panelist, Washington Sea Grant Program Performance Review, University of Washington.

02–04: Advisor, Aquatic Nuisance Species Advisory Committee, Washington Sea Grant Program.

02: Panel Member, National Science Foundation, Ecology Program Advisory Panel.

01–04: Council Member, Natural Heritage Advisory Council, State of Washington.

99: Panel Member, National Science Foundation, Physiological Ecology Advisory Panel.

98–99: Board Member, Northwest Scientific Association.

MEDIA AND PUBLIC RELATIONS

15: Portland Monthly magazine, July 2015, "How the Oregon dunes inspired sci-fi classic *Dune,*" interviewed on beach grass invasions for the article.

10-11: Television feature on dune grass invasion, *Oregon Field Guide*, aired in spring 2011.

08: Perspectives article in *Science* magazine (volume 319: 290-291) featured our paper (Barbier et al. 2008 Science 319).

08: Article in *Discover* magazine, dune grass invasions on the Oregon Coast.

08 Article in Terra magazine, OSU Research magazine, dune grass invasions on the Oregon Coast.

07: Media Training, Office of Campus Advancement, OSU.

07: Article in *Register Guard*, dune grass invasions on the Oregon Coast.

05: Textbook *Elements of Ecology 6th Ed*, Smith and Smith, Benjamin Cummings Publisher, features personal profile of career and research on positive interactions.

05: Admissions Office classbook, photos and text featuring undergraduate marine biology educational opportunities at OSU.

05: President's Annual Report, photos and text featuring undergraduate marine biology educational opportunities at OSU.

05: Washington Sea Grant quarterly publication, *Sea Star*, article entitled "Repelling the green invader" features photos and interview on *Spartina* research and educational outreach.

04: Textbook *Biology 7th Ed*, Campbell and Reece, Benjamin Cummings Publisher, features photos and text about research on positive interactions in salt marshes.

04: *Northwest Science and Technology*, regional science magazine, article entitled "Island County students confront invasive grass, educate community" features photos and interview on *Spartina* educational outreach.

02: *Washington State Magazine*, WSU alumni magazine, article entitled "An English import invades Puget Sound" features photos and interview on *Spartina* research.

01: ABC News.com, Lee Dye's column Dye Hard Science, article entitled "The weed that won't die: beautiful but indestructible grass invades Northwest" features photos and interview on *Spartina* invasion.

97: *Universe Magazine*, WSU alumni magazine, article entitled "The effect of good neighbors," features photos and interview on salt marsh research.

97: *Oregonian* newspaper, Richard Hilll's column on news releases, short article featuring research on positive interactions.

96: Textbook *Ecology: Theories and Applications 2nd Ed*, Stiling, Prentice Hall, features figures and text about research on positive interactions in salt marshes.

96: President's Annual Report, photos featuring undergraduate environmental science educational opportunities at Washington State University.