

RACHEL K. THIET, PhD

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TEACHING APPROACH

Throughout my career as a science mentor and educator I have developed very strong skills of delivering complex science content to students with highly variable skill sets and experiences in the sciences, and I teach science from an explicitly interdisciplinary standpoint. I value immensely this interdisciplinary approach to teaching and learning environmental studies, because students learn and practice ecology and conservation science as they truly occur – with and within human communities that have unique histories, perspectives, and needs. Further, many conservation professionals are also called upon as educators; thus, I model strong skills of science communication and integrate science communication skills development into all of my courses regardless of subject. I optimize student learning by modeling curiosity and humanity as ways of being, creating a safe learning environment in which students can take risks, and expressing care for my students as individuals.

RESEARCH ACTIVITY

I am a systems ecologist with broad interests in coastal restoration, sediment and soil ecology, plant ecology, invertebrate ecology, aboveground-belowground interactions, and biogeochemistry. My research in inland, terrestrial ecosystems is focused primarily on the interactions among plants, soil organisms, and above- and belowground invertebrates. My work in coastal systems is largely focused on the effects of tidal restoration on salt marsh hydrophyte reestablishment, benthic food webs, and biogeochemistry, and I have also studied the ecology of heathland and sand dune restoration.

EDUCATION

Post-doctoral Research and Teaching Associate, Natural Resources (specialization: Soil Microbial Ecology), University of New Hampshire, Durham, NH
PhD Evolution, Ecology, and Organismal Biology (specialization: Soil Microbial Ecology and Plant Ecology), The Ohio State University, Advisor: Ralph E.J. Boerner, Dissertation title: Soil Microbial Community Pattern and Process: Impacts on Vascular Plant Communities in Three Ecosystems of High Conservation Value
MS Natural Resources (specialization: Wetlands Ecology), The Ohio State University, Advisor: Craig B. Davis, Thesis title: Floristic and Seed Bank Composition of Two Lake Erie Wetlands: Differences between Diked and Undiked Freshwater Marshes
BA Social Sciences, University of Michigan, Advisor: Tom Weisskopf, Thesis title: Women, Power, Empowerment: Women as Agents of Change Throughout US History

RELEVANT PROFESSIONAL POSITIONS

Professor of Environmental Studies, Environmental Studies Department, Antioch University New England, 2016-present; Associate Professor (2009-2016) and Assistant Professor (2003-2009)

Director, Conservation Biology, Antioch University New England, 2016-present

Director, Master's Program in Environmental Studies, Antioch University New England, 2010-2015

The Master's Program in Environmental Studies offers degrees in Conservation Biology, Sustainable Development and Climate Change, Environmental Education, Advocacy for Social Justice and Sustainability, Science Teacher Certification, and Self-designed Studies. Ours is the oldest interdisciplinary Environmental Studies Program in the United States, and the Master's Program in Environmental Studies is the largest degree program at any of the five Antioch University campuses.

Co-Director, Doctoral Program in Environmental Studies, Antioch University New England, 2012-2013

The Doctoral Program in Environmental Studies trains practitioner-scholars through interdisciplinary environmental coursework, service projects, and applied research.

Director, Field Study Trip Program, Environmental Studies Department, Antioch University New England, 2007-2012

Our field study trip courses are central to our applied, field-based curriculum. Our field study trips range in duration from five days to three weeks, and emphasize ecology, natural and cultural history, geology and geomorphology, environmental management, stakeholder and community involvement, and environmental justice in regions all over the world.

Director, Self-Designed Studies Concentration, Environmental Studies Department, Antioch University New England, 2007-2011

The Self-Designed Studies Concentration serves Environmental Studies students whose professional vision is best realized through a customized degree program that draws on coursework from various concentrations in the ES Master's Program.

Teaching Assistant, Departments of Biology, Natural Resources, and Evolution, Ecology, and Organismal Biology, The Ohio State University, various undergraduate courses, 1996-2002

Head Teaching Assistant, Department of Biology, The Ohio State University, Honors Organismal Biology, 2001

COURSES TAUGHT

Graduate level

Antioch University New England, Department of Environmental Studies Master's and Doctoral Programs (2003-present):

Community Ecology of New England

Comparative Ecological Analysis

Soil Ecology

Earth Systems and Climate Change

Research Seminar

Wetlands Ecology
Evolutionary Ecology
Global Environmental Change
Coastal Geocology (5-day field study trip on Cape Cod)
Desert Ecology (14-day field study trip in the Sonoran Desert)
Tropical Ecology and Conservation: Costa Rica (14-day field study trip in Costa Rica)
Human and Natural Landscapes of Alaska (19-day field study trip in Alaska)
Supervised Independent Studies in Biogeochemistry and Scientific Writing
Learning Domain II Seminar

Undergraduate level

The Ohio State University (as a Teaching Assistant, 1996-2002):
Honor Biology: Evolution of Organismal Form, Function, and Ecology
Community Ecology and Ecosystems
Natural Resources Statistics
Plant Population Ecology
Plant Biology: Plants, People, and the Environment
Environmental Policy and Law
Wildlife Ecology and Management
Environmental Economics
Environmental Education Theory and Methods

Community level

Geocology of New Hampshire Soils, Harris Center for Conservation Education, Hancock, NH, 2011

GRADUATE STUDENT CAPSTONE PROJECT ADVISING

Current MS thesis and PhD dissertation advisees

Tom Farney (PhD), Benthic and epibenthic food webs and habitat modeling to improve decision making in a partially restored back-barrier lagoon on Cape Cod, MA
Elena Pousland (MS), Shoreline habitat assessment of horseshoe crab nesting areas in Great Bay Estuary, Durham, NH
Jodi Curtin (MS), Horseshoe crab spawning dynamics in a partially restored back-barrier salt marsh lagoon on Cape Cod, MA
Andrew Taylor (MS), Restoring giant clam communities to enhance finfish productivity in the Philippines
Brianna Fagan (MS), The effect of water turbidity on electropositive deterrent success in sandbar sharks (*Carcharhinus plumbeus*) and implications for bycatch mitigation
Katie Kibler (PhD), A participatory assessment of household agricultural resilience to food insecurity: The case of food access in Bikotiba, Togo, West Africa
Debby Geltner (MS), Designing rural and suburban residential landscapes to optimize wild biodiversity
Micki Colbeck (MS), Mapping natural and recreational resource type and distribution in a central NH residential community

Olivia Chitayat (MS), The effectiveness of biochar and compost for remediating petroleum-polluted soils in NH
Nicole Cardona (MS), Common loon (*Gavia immer*) epidemiology and pathogen transmission in New England lakes
Juniper Kozlowski (MS), An illustrated guidebook to the medicinal uses of common freshwater wetland plants of VT

Graduated MS thesis and PhD dissertation advisees

Krystal House, Conservation Biology concentration graduate (2017), Horseshoe crab population structure in a partially restored back-barrier salt marsh lagoon on Cape Cod National Seashore, MA
Hillary Ballantine, Conservation Biology concentration graduate (2017), The effect of whale-watch trips on participants' pro-environmental behaviors
Lara Hooper, Environmental Education graduate (2017), Soil science: What gardeners should know – A script for the New Hampshire Master Gardeners Speaker's Bureau
Isis Lawson, Conservation Biology concentration graduate (2017), The effects of invasive earthworms on small burrowing mammals in New England forests
Joshua Lipkowitz, Conservation Biology concentration graduate (2016), The effect of oyster aquaculture on finfish community diversity and productivity in the Damariscotta River Estuary, ME
Heather Conkerton, Conservation Biology concentration graduate (2016), Invasive green crab (*Carcinus maenas*) abundance, distribution, and prey preferences in a New England back-barrier salt marsh lagoon
Kelly Garner, Conservation Biology concentration graduate (2015), The effect of educational programs on New England vernal pool ecology
Tiffany Gillen, Environmental Education concentration graduate (2015), Herbal medicinal remedies: A curriculum project
Elizabeth Pascale, Conservation Biology concentration graduate (2014), The role of ants in reaching federal recovery goals for Karner blue butterfly (*Lycaeides melissa samuelis*) in the restored pine barrens of Concord, NH
Erin Hilley, Conservation Biology concentration graduate (2014), Ant myrmecochory and seed dispersal of endangered broom crowberry (*Corema conradii*) in restored heathlands on Cape Cod, MA
Dave Janas, Conservation Biology concentration graduate (2014), Tropical plant propagation and conservation in Hawai'i
Stephanie Putnam, Conservation Biology concentration graduate (2014), Comparing hydroperiod and animal use of natural and anthropogenic vernal pools in Big Darby Headwaters Preserve, OH
Octavia Salisbury, Conservation Biology concentration graduate (2013), Marine ecology interpretation manual for the Boston Aquarium
Larry Clarfeld, Conservation Biology concentration graduate (2013), Conservation and environmental advocacy implications of citizen science amphibian crossing guard programs
Rebecca Clark, Conservation Biology concentration graduate (2012), The role of soft shell clams in facilitating macroalgal blooms in restored New England salt marshes

Erica Kidd, Conservation Biology concentration graduate (2012), Molluscan community recovery in a restored salt marsh on Cape Cod, MA

Alexis Doshas, Conservation Biology concentration graduate (2012), Effects of biological soil crusts on germination and productivity of key successional dune plants *Deschampsia flexuosa* and *Morella pennsylvanica* on Cape Cod, MA

Anthony Krutiak, Advocacy for Social Justice and Sustainability concentration graduate (2012), Developing social justice and poverty curricula for US high school students

Chadd Meerbergen, Individualized Program graduate (2012), Integrating the construction and woodworking trades with public school math and environmental science education

Allen Tate, Conservation Biology concentration graduate (2012), Monitoring finfish species abundance on oyster reef restoration areas of coastal Mississippi

Victoria Rubino, Conservation Biology concentration graduate (2011), Evaluating mollusk-algae feedbacks underlying macroalgal blooms in East Harbor, a partially restored, back-barrier salt marsh lagoon on Cape Cod, MA

Megan Boyle, Conservation Biology concentration graduate (2011), The effectiveness of seeding native halophyte species in restored salt marsh sediments on Cape Cod, MA

Elizabeth Finn, Conservation Biology concentration graduate (2011), The composition and functions of biological soil crusts in three coastal ecosystems of the northeastern US

Jodie Wennemer, Conservation Biology concentration graduate (2011), The relationship between submersed aquatic vegetation and mollusk community recovery and stability at East Harbor, a partially restored, back-barrier salt marsh lagoon on Cape Cod, MA

Angela Beltrani, Conservation Biology concentration graduate (2010), Prevalence of congenital, juvenile cataracts among five owl species in the contiguous 48 states: A status survey

Jesse Wheeler, Conservation Biology concentration graduate (2010), *Phragmites* elimination and halophyte re-establishment in Hatches Harbor, a restored salt marsh on Cape Cod, MA

Barbara Beers, Individualized concentration graduate (2010), Program development and project-based learning to engage high school students in authentic, field-based ecological work

Mandy Gaudreau, Conservation Biology concentration graduate (2010), Incidence of *Batrachochytrium dendrobatidis* in Rhode Island anuran populations

Alexis Mullen, Conservation Biology concentration graduate (2009), Development of an amphibian habitat conservation plan for the town of Dummerston, VT

Tim Dexter, Conservation Biology concentration graduate (2009), Potential habitat importance of vernal pools for white-tailed deer (*Odocoileus virginianus*) and moose (*Alces alces*) in a New Hampshire wilderness area

Caroline Scully, Conservation Biology concentration graduate (2009), Bumblebee species composition, diversity, and landscape use in the Berkshires, MA

Megan McLean, Conservation Biology concentration graduate (2009), Predicting spadefoot toad activity and mortality on Province Lands Road, Provincetown, Cape Cod, MA

Amy Borgia, Individualized Program graduate (2008), A plan for business: GreenGlobePublishing Sustainability Consultants

Molly Janis, Individualized Program graduate (2008), Business plan: Just Sustainabilities, Inc.

Kristin Jones, Individualized Program graduate (2008), Business plan: Studio Greening

Outreach Los Angeles

- Corey Miles, Conservation Biology concentration graduate (2008), The role of biological soil crusts in hydrology and nutrient cycling in the Provincelands parabolic dunes at Cape Cod National Seashore
- Nate Colbert, Conservation Biology concentration graduate (2008), A developer-initiated conservation plan for pool-breeding amphibians in Maine, USA
- Melinda Scott, Conservation Biology concentration graduate (2008), The effects of landscape composition and configuration on the occurrence of three mammalian carnivores in an urbanizing region of Vermont
- Brandi Bornt, Conservation Biology concentration graduate (2007), Assessment of rocky shore environmental education programs at the Seacoast Science Center, Rye, NH
- Corinna Photos, Conservation Biology concentration graduate (2007), Relationship between pH, hydrology, and vegetation distribution in a VT peatland
- Nada Wigand, Conservation Biology concentration graduate (2007), Black bear population distribution and movement in the Monadnock Region, NH
- Elizabeth Rose, Conservation Biology concentration graduate (2007), *Phragmites australis* density and distribution at Parker River National Wildlife Refuge, Plum Island, MA
- Brett Amy Thelen, Conservation Biology concentration graduate (2006), Incorporating reliable citizen science into research and monitoring programs at Cape Cod National Seashore and Mollusk re-establishment at East Harbor, a restoring estuary on Cape Cod National Seashore
- Kelly Biedenweg, Conservation Biology concentration graduate (2005), Assessment of the success of environmental leadership programs in Honduras
- Amos Alex Gonyaw, Resource Management and Administration Program graduate (2005), The impact of Yankee Nuclear Power Plant effluent on Connecticut River macroinvertebrate community diversity

MS thesis and PhD dissertation committee service

- Jessica Charpentier, PhD candidate, The effects of fire on forest structure, composition, and ecosystem functions in boreal forests of Acadia National Park, ME
- Tim Holt, PhD candidate, The cultural and ecological legacy of flax production in New England
- Luanne Johnson, PhD, Skunk population structure and conservation on Martha's Vineyard, MA
- Peggy Eppig, PhD, Russell Lord: Changing methods and minds in American agriculture
- Nora Velazquez, PhD, Health and environmental risk assessment in community transitions to biodiesel use
- Lynn McNamara, MS, Invasive wild chervil abundance, distribution, and management in Vermont

TEACHING TRAININGS ORGANIZED AND ATTENDED

- Workshop organizer, Best practices in Soil Ecology teaching, International Soil Ecology Society meetings: Moab, UT (April 2007), Burlington, VT (July 2009), and Camden, NJ (June 2013)

Leadership Teacher: Education Co-Chair for Science and Biotechnology training workshops for NH teachers to expand and improve their science and biotechnology classroom curricula

Week-long college teaching conference at The University of New Hampshire offered by the UNH Teaching Excellence Program, with day-long workshops: The Power Syllabus; Teaching Large Classes; Effective Presentation; Using Active Learning; and Effective Discussions

Various college teaching workshops at The Ohio State University offered by the OSU Office of Faculty and Teaching Associate Development and the Biology Teaching Associate Organization: Documenting your Teaching as Part of your Academic Job Search; Using your Teaching Portfolio for Promotion and Tenure; Taking the Guesswork out of Multiple Choice; Leading Effective Discussions; Effective Teaching in Large Classes; Interactive Learning in Lab Sections

Experienced-Teaching Associate Panel participant, The Ohio State University Introductory Biology Program New Graduate Teaching Associate Training

SERVICE AND CONSULTING ACTIVITY

External

Coordinating Editor, Restoration Ecology, September 2014-present

Reviewer for Restoration Ecology, Ecological Restoration, Journal of Malacological Research, Northeastern Naturalist, Biodiversity and Conservation, Soil Biology and Biochemistry, Mycorrhiza, Plant and Soil, Soil Science Society of America Journal, Applied Soil Ecology, and Prentice Hall and Elsevier Publishers, on-going

Board Member (elected): International Soil Ecology Society, 2008-2015

Webmistress and Newsletter Editor, International Soil Ecology Society, 2010-2014

Conference co-organizer, 14th Biennial International Soil Ecology Society meeting, Camden, NJ, June 2013

Volunteer, La Isla Foundation, León and Chichigalpa, Nicaragua. La Isla Foundation is a human rights organization that supports agricultural workers in Chichigalpa, Nicaragua, afflicted by an epidemic of chronic renal disease owing to the poor working conditions in the sugar cane plantations where they work. Volunteer responsibilities included grant proposal translation (Spanish to English), demographic mapping, and community outreach, 2009-2011

Volunteer and voting member, Keene Cities for Climate Protection Committee, 2012-2013

Volunteer consultant on state soil judging competition, Keene High School Envirothon team, 2009-2011

Conference co-organizer, 13th Biennial International Soil Ecology Society meeting, Kenowa, BC, Canada, May 2011

Conference co-organizer, 12th Biennial International Soil Ecology Society meeting, Burlington, VT, July 2009

Chair, Lifetime of Professional Achievement Award committee, International Soil Ecology Society meeting, Burlington, VT, July 2009

Board Member: Secretary (elected), International Soil Ecology Society, 2008-2010

Educational Testing Service, Table Leader, high school environmental science Advanced

Placement exam evaluation, Cincinnati, Ohio, June 2010
Educational Testing Service, Reader/Evaluator of high school environmental science
Advanced Placement exam evaluation, Lincoln, Nebraska, June 2008, June 2009, June
2011
Conference program co-organizer, International Soil Ecology Society meeting, Moab, UT,
April, 2007
Contracted reviewer of best high school Advanced Placement Environmental Studies
curricula, University of Oregon Center for Environmental Science and Policy,
Washington, D.C., May-June 2006
Contracted contributor to The Encyclopedia of the Environment, Sage Publications, 2006
Reviewer of soil research grant proposals submitted to the National Science Foundation
and the USDA Forest Service Soils and Soil Biology Division, 2004
Presider, The Ecological Society of America Soil Biogeochemistry oral session, Portland, OR,
August 2004

Internal

Organizer, Annual Environmental Studies Graduate Student Research Symposium, 2006,
2010, 2012, 2014, 2017 (biennial responsibility)
Co-coordinator, Annual research planning workshop for Master's International students,
2016-present
Leader, Collaborations between the Antioch Environmental Studies Department and
regional undergraduate Environmental Studies and Science Departments, on-going
Committee Member, Environmental Studies Student and Alumni Awards Committee: 2012,
2017
Committee Member, Environmental Studies Curriculum Committee, 2014-present
Search Committee Member, Clinical Psychology Core Faculty Search Committee, 2014-2015
Search Committee Chair, AUNE Environmental Studies Department Core Faculty search in
Conservation Biology, September 2013-March 2014
Steering Committee Member, Antioch University New England Strategic Planning Steering
Committee, September 2011-May 2012.
Search Committee Member, Antioch University New England Vice President for Academic
Affairs, October 2010-May 2011
Working Group Member, Antioch Environmental Studies research, restoration/systems
ecology, and SIS working groups, 2010-11
Student SEEDS Scholarship Review Committee Member, Antioch Center for Tropical
Ecology and Conservation, 2004-2006
Committee Member, Antioch Environmental Studies Department laboratory and space
committee, on-going
Committee Member, Antioch University bookstore transition committee, September 2010-
May 2011
Search Committee Member, one-year replacement faculty in Environmental Studies,
Antioch University New England, Spring 2006
Committee Member, Antioch University New England Faculty Colloquium Planning
Committee, 2006
Committee Member, Switzer Foundation Student Fellowship Committee, Antioch

University New England Department of Environmental Studies, 2004-2006
Committee Member, Antioch University New England Department of Environmental
Studies Sterling Student Scholarship in Forestry review committee, 2004
Editorial Board and Environmental Studies Faculty Advisor, *Whole Terrain: A Journal of
Reflective Environmental Practice*, 2003-2004
Committee Member, Antioch University New England Strategic Planning committee, 2003-
2004

INVITED PRESENTATIONS

Ecology in the Anthropocene: How embracing the underdog will advance ecological
understanding and (hopefully) save the world. Featured scientist / presenter, Women
in Science lecture series in celebration of Women's History Month, Keene State College,
Keene, NH, upcoming March 2018
Benthic ecology at East Harbor back-barrier lagoon: 10 years of post-restoration outcomes
in an equilibrating system. Featured scientist / presenter, Cape Cod National Seashore
Science in the Seashore Symposium, August 2014.
Aboveground-belowground ecology: A sampling of New England research, Environmental
Studies Department Colloquium, September 2013.
Geology and human ecology in Nicaragua: Chronic renal disease in sugarcane workers of
the Pacific lowlands, Center for Tropical Ecology and Conservation seminar, March
2011.
The scientific case for action against destructive global environmental change, Step It Up!
Rally for Climate Action, Keene, NH, April 2007.
Seeing the forest in the seeds: Can agroecosystems function as natural systems? University
of Vermont Department of Plant and Soil Science, Burlington, VT, October 2005.
Soil microbes and nutrient cycling, Dartmouth College Department of Earth Sciences,
Dartmouth, NH, April 2005.
Incorporating soil processes into conservation goals: Spatial and deterministic studies at
the soil surface, Antioch New England Graduate School Doctoral Program in
Environmental Studies, Keene, NH, September 2003.
The impact of soil microbes on Virginia pine (*Pinus virginiana*) invasion of eastern U.S.
barrens plant communities: Ectomycorrhizal fungi as an agent for invasion, John Carroll
University Department of Biology, University Heights, OH, April 2002.
Mycorrhizal fungi and global climate change, University of New Hampshire Department of
Natural Resources, Durham, NH, November, 2002 and September 2003.
Biological soil crusts: Structures, functions, and responses to a changing global climate,
University of New Hampshire Department of Natural Resources, Durham, NH,
November 2002 and October 2003.

FELLOWSHIPS, GRANTS, AND AWARDS

National Park Service, Cape Cod National Seashore, Assessing the benthic community in a
partially restored lagoon to improve management decision-making (currently funded
for 2018-2020, \$151,451)
National Science Foundation Academic Research Infrastructure Program: Recovery and

Reinvestment, Renovation of Existing Laboratory Facilities at Antioch University New England (not funded \$383,300)

Garden Club of America, The effects of biological soil crusts on seed germination, seedling establishment, and tissue chemistry of key dune plants at the Province Lands sand dunes, Cape Cod National Seashore, MA (to Alexis Doshas, funded \$8000)

Friends of Cape Cod National Seashore Nickerson Conservation Fellowship, The effects of fire on myrmecochory and seedling establishment of globally imperiled broom crowberry (*Corema conradii*) in restored coastal heathlands of Cape Cod National Seashore, MA (to Erin Hilley, funded \$3000)

Friends of Cape Cod National Seashore Nickerson Conservation Fellowship, The effects of fire and mowing on *Phragmites* removal and halophyte reestablishment at Hatches Harbor, a restored salt marsh on Cape Cod National Seashore, MA (funded \$3000)

Antioch University New England Faculty Grant, Impacts of invasive European fire ants (*Myrmica rubra*) on coastal Maine soils (to Jesse Wheeler, funded \$3000)

Antioch University New England Faculty Grant, Composition and functions of biological soil crusts in three coastal sand plain ecosystems in the northeastern US (funded \$3000)

Antioch University New England President's Scholarship for Faculty, various research projects (\$750-\$1500 each year for four years)

The University of New Hampshire Faculty Development Grant, The relative contributions of soil bacteria and fungi to C sequestration in US agricultural soils (funded \$1500)

The Ohio State Graduate Student Alumni Research Award, A test of two landscape models of invasion: Mycorrhizal inoculum as a mechanism for Eastern red cedar invasion into rare tall-grass prairie outcrops in the eastern US (funded \$1000)

Janice Carson Beatley Herbarium Research Travel Grant, A test of two landscape models of invasion: Mycorrhizal inoculum as a mechanism for Eastern red cedar invasion into rare tall-grass prairie outcrops in the eastern US (funded \$500)

The Ohio State University Ecology Graduate Student Teaching Award (not monetary)

The Ohio State University Preparing Future Faculty Fellowship (not monetary)

MEMBERSHIP IN HONOR AND PROFESSIONAL SOCIETIES

Ecological Society of America
International Soil Ecology Society
National Association of Biology Teachers
Association for Environmental Studies and Sciences
Gamma Sigma Delta Honor Society of Agriculture

PUBLICATIONS

*Denotes student co-author

Thiet, R.K. 2017. An interactive, instant polling exercise to allay student anxiety in science courses. *The American Biology Teacher* 79(6):496-498.

Thiet, R.K. and J. Karlan. 2017. Sabotaging presentations to assist learning: A dynamic, interactive presentation exercise to generate fundamental questions and integrate theory and practice. *The American Biology Teacher* 79(9):769-777.

- Conkerton, H.*, R.K. Thiet, M. Tyrrell, K. Medeiros, and S. Smith. 2017. Selection and availability of shellfish prey for invasive European green crabs [*Carcinus maenas* (Linneaus 1758)] in a partially restored back-barrier salt marsh lagoon on Cape Cod, Massachusetts. *Journal of Shellfish Research* 36(1):189-199.
- Baum, J.* and R.K. Thiet. 2016. Using Soil Organisms to Explore Ecosystem Functioning, Services, and Sustainability. Chapter 11 (pp. 97-103) in: *Learner-Centered Teaching Activities for Environmental and Sustainability Studies* (L.B. Byrne, editor), Springer International Publishing, Switzerland.
- Byrne, L., R.K. Thiet, and B. Chaudhary. 2016. Pedagogy for the Pedosphere. *Frontiers in Ecology and the Environment* 14(5):238-240.
- Pascale, E.* and R.K. Thiet. 2016. The relationship between ants and *Lycaeides melissa samuelis* (Lepidoptera: Lycaenidae) at Concord Pine Barrens, NH, USA. *Environmental Entomology* 45(3):633-641.
- Hilley, E.* and R.K. Thiet. 2015. Vulnerable broom crowberry (*Corema conradii*) benefits from ant seed dispersal in coastal US heathlands. *Plant Ecology* 216(7):493-503.
- Thiet, R.K., S.M. Smith, V. Rubino*, R. Clark*, J. Oset, and K. Lee. 2014. Soft shell clams (*Mya arenaria*) contribute to macroalgal blooms in a partially restored Gulf of Maine back-barrier lagoon. *Ecological Restoration* 32(1):46-58.
- Thiet, R.K., A. Doshas*, and S.M. Smith. 2014. The effect of biological soil crusts on germination and productivity of two early-successional dune plants *Deschampsia flexuosa* and *Morella pennsylvanica* on Cape Cod, MA. *Plant and Soil* 377(1):235-244.
- Thiet, R.K., E. Kidd*, J.M. Wennemer*, and S.M. Smith. 2014. Molluscan community recovery in a New England back-barrier salt marsh lagoon 10 years after partial restoration. *Restoration Ecology* 22(4):447-455.
- Thiet, R.K. 2014. Students dig deep for the Mystery Soil Lab: An inquiry-based, problem-solving soil ecology laboratory project. *The American Biology Teacher* 76(1):47-52.
- Wheeler, J.*, R.K. Thiet, and S.M. Smith. 2013. Enhancing habitat for native halophytes through removal of *Phragmites australis* in a restored salt marsh on Cape Cod, Massachusetts. *The Journal of Park Science* 29(2):42-48.
- Colbert, N.*, R. Baldwin, and R.K. Thiet. 2011. A developer-initiated conservation plan for pool-breeding amphibians in Maine, USA. *Journal of Conservation Planning* 7:27-38.
- Thelen, B.A*. and R.K. Thiet. 2009. Molluscan community recovery following partial tidal restoration of a New England estuary. *Restoration Ecology* 17(5):695-703.
- Thelen, B.A*. and R.K. Thiet. 2008. Cultivating connection: incorporating meaningful citizen science into Cape Cod National Seashore's estuarine research and monitoring programs. *The Journal of Park Science* 25(1):74-80.
- Thiet, R.K. and R.E.J. Boerner. 2007. Spatial pattern of ectomycorrhizal fungal inoculum in arbuscular mycorrhizal barrens communities: implications for controlling invasion by *Pinus virginiana*. *Mycorrhiza* 17:507-517.
- Thiet, R.K. 2007. Loess. In: P. Robbins (Ed.), *Encyclopedia of Environment and Society* (pp. 1065-1066). SAGE Publications, Thousand Oaks, CA.
- Thiet, R.K. 2007. Dust. In: P. Robbins (Ed.), *Encyclopedia of Environment and Society* (p. 494). SAGE Publications, Thousand Oaks, CA.
- Thiet, R.K. 2007. Decomposition. In: P. Robbins (Ed.), *Encyclopedia of Environment and Society* (pp. 418-419). SAGE Publications, Thousand Oaks, CA.
- Thiet, R.K., S.D. Frey, and J. Six. 2006. Do growth yield efficiencies differ between soil

- microbial communities differing in fungal:bacterial ratios? Reality check and methodological issues. *Soil Biology and Biochemistry* 38:837-844.
- Six, J., S.D. Frey, R.K. Thiet, and K. Batten. 2006. Bacterial and fungal contributions to carbon sequestration in agroecosystems. *Soil Science Society of America Journal* 70:555-569.
- Thiet, R.K., R.E.J. Boerner, M. Nagy*, and R. Jardine. 2005. The effect of biological soil crusts on rainwater and nitrogen infiltration into Lake Michigan sand dune soils. *Plant and Soil* 278:235-252.
- Simpson, R.T.*, S.D. Frey, J. Six, and R.K. Thiet. 2004. Preferential stabilization of microbial-derived carbon in microaggregates contained in macroaggregates of no-tillage soils. *Soil Science Society of America Journal* 68:1249-1255.
- Thiet, R.K. 2002. Diversity comparisons between diked and undiked coastal freshwater marshes on Lake Erie during a high-water year. *Journal of Great Lakes Research* 28:285-298.
- Smith, S.M., K. Chapman, K. Lee, M. Tyrrell, J. Wennemer*, and R.K. Thiet. 2008. Annual Report on Estuarine Restoration at East Harbor (Truro, MA), Cape Cod National Seashore, 2008. NPS Technical Report, Cape Cod National Seashore, Wellfleet, MA.
- Wennemer, J.* and R.K. Thiet. 2007. Chapter 8: Shellfish. In: Portnoy, J., S.M. Smith, K. Lee, K. Chapman, M. Galvin, E. Gwilliam, P. Lyons, and C. Thornber. Annual Report on Estuarine Restoration at East Harbor (Truro, MA), Cape Cod National Seashore, 2007. NPS Technical Report, Cape Cod National Seashore, Wellfleet, MA.

PUBLICATIONS IN PREPARATION

- Thiet, R.K., M.J. James-Pirri, J. Curtin*, and K. House*. A partially restored, back-barrier salt marsh lagoon on Cape Cod National Seashore provides a refugium for globally vulnerable Atlantic horseshoe crabs (*Limulus polyphemus*). Target journal: *Restoration Ecology*.
- Thiet, R.K., L.B. Byrne, and B. Chaudhary. Missing: Soil ecology content in college life sciences and earth science courses – A content analysis. Target journal: *Frontiers in Ecology and the Environment*.
- Corbin, J., R.K. Thiet, and B. Fitzgerald*. Species composition, distribution, and ecosystem functions of algal, bryophytic, and lichen biomats in pitch pine-scrub oak and sand plain ecosystems of the northeastern US. Target journal: *Plant and Soil*.
- Chitayat, O*. and R.K. Thiet. Use of biochar and compost to remediate petroleum-polluted soils in New Hampshire. Target journal: *International Biodeterioration and Biodegradation*.

PRESENTATIONS AT PROFESSIONAL MEETINGS

- Chitayat, O.* and R.K. Thiet. 2017. Bioremediation of Diesel-Polluted Soil. Poster presentations: 33rd Annual International Conference on Soils, Sediments, Water, and Energy, Amherst, MA, October 2017 and 14th International Phytotechnologies Conference, Montréal, Canada, September 2017.
- Kahoun, F.* and R.K. Thiet. 2017. Structural Microhabitat Utilization of the Invasive Cuban Brown Anole (*Anolis sagrei*) in a Naturalized Habitat of South Florida. Abstract and

- poster presentation: Greater Everglades Ecosystem Restoration Conference, Coral Springs, FL, April 2017.
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