Curriculum vitae Michael J. Rubbo, Ph.D.

Clinical Associate Professor
Department of Environmental Studies and Science
Pace University, Pleasantville, NY 10570
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Education

Ph.D. in Biology, The Pennsylvania State University, 2004.

Dissertation title "The influence of natural and human-induced environmental change on the community composition of temporary ponds."

Joseph M. Kiesecker and Katriona Shea, advisors.

M.S. in Biology, The University of Louisiana at Lafayette, 2000.

Thesis title "Ecological interactions and sensory adaptations of three species from the terrestrial leaf-litter community."

Robert G. Jaeger, advisor.

B.S. in Biology, SUNY College of Environmental Science and Forestry, 1995.

Professional Positions

Executive Director, Woodcock Nature Center, Wilton, CT, 2016-2017

- Responsible for all aspects of the management of a private nature center:
 - Strategic planning and program evaluation.
 - Developing external partnerships.
 - Budgeting and financial oversight.
 - Fundraising including donor cultivation, events, and grant writing.
 - Human resources and staff management.
 - Capital projects and grounds management.
 - Program development and implementation.

Director of Conservation Science, Teatown Lake Reservation, Ossining, NY, 2006-2016

- Management of Stewardship and Science Departments including staff oversight, strategic planning, and budgeting.
- Scientific research program including defining research priorities and measures of success as well as mentoring college and high school students, volunteers, and citizen scientists.
- Creating relationships with local communities to facilitate the conservation of natural resources.
- Development of regional research consortiums including identifying strategic partners and leadership development.
- Development and implementation of science-based education programs.
- Ecological monitoring and development of adaptive management practices (watershed conservation, deer management, invasive species control, forest management, etc.).
- GIS mapping and data management.
- Fundraising for science programs (e.g., grant writing, donor cultivation).
- Public outreach and education on conservation issues.

• Development and maintenance of trail system including associated infrastructure (kiosks, directional and interpretive signage, trail structures).

Adjunct Assistant Professor, Dept. of Biology, PACE University, Pleasantville, NY 2013-

- Instructor of field course in Natural History.
- Advisor for graduate students.

Adjunct Assistant Professor, Dept. of Biology, Fordham University, Bronx, NY 2007-

- Instructor of graduate course in Ecosystems Ecology.
- Research mentor in Fordham's Calder Summer Undergraduate Research (REU) program.

Senior Scientist, The Chazen Companies, Poughkeepsie, NY, 2005-2006

- Aquatic ecosystem assessments and rare species surveys.
- Wetland functional assessments, delineation, and permitting.
- Environmental Impact Statements (EIS).
- Ecological analysis and mitigation design.

Postdoctoral Research Associate, Virginia Tech, Blacksburg, VA, 2004-2005

- Instructor of General Ecology course.
- Research on the influence of climate change on wetland ecosystems.

Signature Programs

- The Environmental Monitoring and Management Alliance (www.emmahv.org). Consortium of 10 organizations in the Hudson Valley with a common long-term environmental monitoring program.
- The Environmental Leaders Learning Alliance (www.ellahhh.net). Training and education network for conservation commissions in Westchester County (120 members representing 28 municipalities) whose goal is to help communities conserve their natural resources.
- Teatown Environmental Science Academy. Field-based ecology course for high school students where participants conduct independent research.

Teaching Experience

Lecture Courses

- Natural History of the Hudson Valley, PACE University, 2015, 2016.
- Ecosystems Ecology, Fordham University, 2011, 2013, 2014.
- General Ecology, Virginia Polytechnic Institute and State University, 2004.
- General Ecology (*Instructor of Ecosystems Unit*), Pennsylvania State University, 2000-2002.

Guest Lecturer

- Ecological Modeling, Pennsylvania State University, 2004.
- Population Ecology, Pennsylvania State University, 2002-2003.
- Ecology and Evolution, University of Louisiana at Lafayette, 1998-2000.

Teaching Assistant

- Ecological Modeling, Pennsylvania State University, 2004.
- General Biology, Pennsylvania State University, 2000-2002.
- General Biology, University of Louisiana at Lafayette, 1998-2000.
- Ornithology, University of Louisiana at Lafayette, 2000.
- Ecology and Evolution, University of Louisiana at Lafayette, 2000.

Publications

- Rubbo, M.J., L.K. Belden, S.I. Storrs, J.J. Cole, and J.M. Kiesecker. 2012. Species loss in the brown world: are heterotrophic systems inherently stable? Aquatic Sciences 74:397-404.
- Rubbo, M.J., J.L. Lanterman, R.C. Falco, and T.J. Daniels. 2011. The influence of amphibians on mosquitoes in seasonal pools: can wetlands protection help to minimize disease risk? Wetlands 31:799-804.
- Brunner, J.L., K.E. Barnett, C.J. Gosier, S.A. McNulty, M.J. Rubbo, and M.B. Kolozsvary. 2011. Ranavirus infection die-offs of vernal pool amphibians in New York, USA. Herpetological Review 42:76-79.
- Rubbo, M.J., L.K. Belden, and J.M. Kiesecker. 2008. Differential responses of aquatic consumers to variations in terrestrial carbon subsidies. Hydrobiologia 605:37-44.
- Belden, L.K., M.J. Rubbo, J.C. Wingfield, and J.M. Kiesecker. 2007. Searching for the physiological mechanism of density-dependence: does corticosterone regulate tadpole responses to density? Physiological and Biochemical Zoology 80: 444-451.
- Rubbo, M.J., J.J. Cole, and J.M. Kiesecker. 2006. Terrestrial subsidies of organic carbon support net ecosystem production in temporary forest ponds: evidence from an ecosystem experiment. Ecosystems 9: 1170-1176.
- Rubbo, M.J., K. Shea, and J.M. Kiesecker. 2006. The influence of multi-stage predation on population growth and the distribution of the pond-breeding salamander (*Ambystoma jeffersonianum*). Canadian Journal of Zoology 84:449-458.
- Rubbo, M.J., R.S. Mirza, L.K. Belden, J.J. Falkenbach, S.I. Storrs, and J.M. Kiesecker. 2006. Evaluating a predator-prey interaction in the field: the interaction between beetle larvae (predator) and tadpoles (prey). Journal of Zoology 269:1-5.
- Rubbo, M.J., and J.M. Kiesecker. 2005. Amphibian breeding distribution in an urbanized landscape. Conservation Biology 19:504-511.
- Rubbo, M.J., and J.M. Kiesecker. 2004. Leaf-litter composition and community structure: translating regional species changes into local dynamics. Ecology 85:2519-2525.
- Kiesecker, J.M., L.K. Belden, K. Shea, and M.J. Rubbo. 2004. Amphibian decline and emerging disease. American Scientist 92:138-147.
- Rubbo, M.J., V.R. Townsend, Jr., S.D. Smyers, and R.G. Jaeger. 2003. An experimental assessment of invertebrate/vertebrate predation: the predatory relationship between wolf spiders and terrestrial salamanders. Journal of Zoology 261:1-5.
- Smyers, S.D., M.J. Rubbo, V.R. Townsend, Jr., and C.S. Swart. 2002. Intra- and interspecific characterizations of burrow use and defense by juvenile ambystomatid salamanders. Herpetologica 58:422-429.
- Rubbo, M.J., V.R. Townsend, Jr., S.D. Smyers, and R.G. Jaeger. 2001. The potential for invertebrate-vertebrate intraguild predation: the predatory relationship between wolf spiders (*Gladicosa pulchra*) and ground skinks (*Scincella lateralis*). Canadian Journal of Zoology 79:1465-1471.
- Smyers, S.D., M.J. Rubbo, and R.G. Jaeger. 2001. Interactions between juvenile ambystomatid salamanders in a laboratory experiment. Copeia 2001:1017-1025.

Recent Grants Received

- The Land Trust Alliance, New York State Conservation Partnership Program. 2016. Coordinating land trusts to galvanize public support for land conservation, \$38,000.
- The Dorr Foundation. 2015. Teacher training for independent science research, \$10,000.
- Westchester Community Foundation. 2012. Developing an on-line training and certification for program for conservation boards, \$20,000.
- The Land Trust Alliance, New York State Conservation Partnership Program. 2012. Creating a long-term data collection system for the Hudson Valley, \$37,500.
- Westchester Community Foundation. 2011. Interpreting the environmental impacts of development: a site plan training program for municipal officials, \$20,000.
- Hudson River Estuary Program. 2011. Developing an inventory and assessment protocol for vernal pools in the lower Hudson watershed, \$15,000.
- New England Interstate Water Pollution Control Commission. 2010. Identifying priority conservation areas in the Indian Brook-Croton Gorge watershed, \$10,000.
- Westchester Community Foundation. 2010. The ELLA Stream Conservation Initiative, \$15,000.
- The Land Trust Alliance, New York State Conservation Partnership Program. 2008. Blurring the boundaries: protecting parklands by working with adjoining landowners, \$17,000.
- New York State Office of Parks, Recreation, and Historic Preservation. 2007. Lakeside Trail Restoration Project, \$29,070.
- Hudson River Estuary Program. 2007. Integrating community education with biodiversity preservation, \$22,815.

Honors & Awards

- Conservation Partner Award from the Hudson River Estuary program, 2011.
- Student travel award provided by the Society of Wetland Scientists, 2003.
- Gaige Fund award provided by the American Society of Ichthyologists and Herpetologists, 2001.
- Sherman A. Minton travel award provided by the Society for the Study of Amphibians and Reptiles, 2001.
- Braddock Fellowship provided by the Eberly College of Science, Pennsylvania State University, 2000.
- Tibor T. Polgar Fellowship provided by the Hudson River Foundation, 1998.

Selected Presentations

Invited talks

- Preserve management and ecosystem services: the human dimensions. 2016. Northeast Natural History Conference, Springfield, MA.
- Using wildlife cameras to teach students about data. 2016. NY Department of Environmental Conservation Educator's Workshop, Hyde Park, NY.
- Why land stewardship matters, Teatown's role in protecting our landscape. 2014. Mt. Kisco Rotary, Mt. Kisco, NY.

- Disease ecology in suburbia: why biodiversity matters. 2013. Dept. of Biology, PACE University, Pleasantville, NY.
- What can local municipalities do to conserve biodiversity? 2011. Town of Cortlandt, NY.
- The science and politics of preparing a local wetlands law. 2009. Hudson River Watershed Alliance, Poughkeepsie, NY.
- Forum on Opportunities in Ecology. 2008. Cary Institute of Ecosystem Studies, Millbrook, NY.
- Planning and development strategies for conserving woodland pool wildlife. 2008.
 Cornell Cooperative Extension and the Hudson River Estuary Program, Acra, NY.
- Linking terrestrial and aquatic systems: the influence of leaf-litter on community composition and ecosystem functioning in temporary forest ponds. 2007. Department of Biology, Fordham University.
- The natural history and conservation of vernal pools in the Hudson Valley. 2007. Hudson River Watershed Alliance, Poughkeepsie, NY

Service

- Reviewer for: Ecology, Oecologia, Oikos, Biological Conservation, Ecological Applications, Freshwater Biology, Functional Ecology, Biological Invasions, Wetlands, Hydrobiologia, Herpetologia, Journal of Herpetology, Behavioral Ecology and Sociobiology, Northeastern Naturalist, Northwestern Naturalist, Amphibia-Reptilia.
- Town of Hyde Park Conservation Advisory Council, 2007-2010.
- Co-organized Vernal Pool Symposium at Northeast Natural History Conference X, 2008.
- Undergraduate research mentor, Virginia Tech, 2004-2005.
- Undergraduate research mentor, Pennsylvania State University, 2001-2004.
- President of the Biology Department Graduate Student Association, Pennsylvania State University, 2003.
- President of the Biology Department Graduate Student Association, University of Louisiana at Lafayette, 2000.
- Co-organized inaugural graduate student research symposium at the University of Louisiana at Lafayette, 1999.