

EDUCATION

Ph.D. (*in progress*) University of Wisconsin-Madison, Department of Zoology, Dissertation Title:

Climate, land use and multiple ecosystem services: consequences for future ecosystem service provision in forested landscapes.

Advisor: Dr. Monica G. Turner

M.S. (2011) Natural Resources and Ecological Planning, University of Vermont, Thesis: *Habitat linkage designs for black bear, bobcat, and fisher in the Split Rock Wildway Planning Area, Essex County, NY.* Advisor: Dr. Deane Wang

B.S. (2005) Wildlife Ecology and Conservation Biology, University of Maine - Orono, Thesis: *Bullfrog (*Rana catesbeiana*) movement among seasonal pools in Acadia National Park, ME.* Magna cum Laude and High Honors. Advisors: Dr. Aram JK Calhoun and Dr. Judith Rhymer

RESEARCH INTERESTS

Landscape ecology * Land-use patterns and ecosystem services* Climate change * Wildlife ecology* Conservation biology * Species distribution modeling * Global change * Social-ecological systems

TEACHING & MENTORING EXPERIENCE

2015 Guest Lecturer, ENVST 651 Conservation Biology, University of Wisconsin-Madison. (1) *Introduction to Landscape Ecology* and (2) *Landscape Ecology and Conservation Biology*

2014 - 2015 Mentor: U of Wisconsin-Madison, Undergraduate Biology Mentored Research Program
Mentees and project titles:
Zoe Hane, *Bird community composition changes with increased building density.*
Jess Mackie, *Effects of urbanization on wildflower phenology and abundance in the Southern Appalachian Mountains.*
Connor Kotte, *The effects of forest cover and building density on the frequency of observation of three avian species in the Southern Appalachians.*

2013 Guest Lecturer, GHY 3812 Introduction to GIS, Department of Geography and Planning, Appalachian State Univ. *Linking GIS Models and Ecological Knowledge: Implications for Conservation Planning*

2012-2014 Graduate Teaching Assistant, University of Wisconsin-Madison. Courses taught: Introductory Biology, Comparative Vertebrate Anatomy, Behavioral Ecology

2012 Tutor: University of Wisconsin-Madison. Bio 101/102.

2013 Guest Lecturer (2) in Behavioral Ecology. University of Wisconsin-Madison. (1)*Predator-prey Arms Race*; (2)*Parasites and Predation Risk*

2012 Guest Lecturer, Eastern Wilderness Issues. University of Vermont. *Wildlife habitat linkages: planning for wilderness areas in the East.*

2011-2012 Tutor: Introductory Biology (undergraduate course)

- 2011 Guest Lecturer, Environmental Problem Solving and Assessment, University of Vermont. *The Importance of Service-learning: Career Advice to Graduating Seniors*
- 2011 Guest Lecturer, Natural History of Centennial Woods, University of Vermont. *Wildlife Track and Sign in an Urbanizing Landscape.*
- 2009-2011 Graduate Teaching Assistant, University of Vermont. Courses taught: Environmental Problem Solving and Assessment, Small Woodlot Management, Forest Conservation, Natural History and Field Ecology, Solutions for a Sustainable Future.
- 2010 Lead Teaching Assistant, Natural History and Field Ecology, University of Vermont.
- 2009- 2011 Invited teacher: “Natural History and Ecology of Vermont.”
Charlotte Land Trust, Charlotte, VT; Raven Ridge Preserve, TNC Vermont, Charlotte, VT; South Burlington Elementary School, S. Burlington, VT.
- Fall 2010 Invited presenter: “Decoding the Pieces, Patterns, and Processes in your Landscape.” New England Environmental Education Association Annual Conference, Promise of Place. Fairlee, VT.
- Fall 2008 Visiting Naturalist program at local elementary schools, Montana Natural History Center, Missoula, MT.
- 2007 – 2008 Summer natural history camp counselor, Montana Natural History Center, Missoula, MT.
- Spring 2007 Paraeducator, Monroe School District, Monroe, NH
- 2005 – 2007 Substitute teacher: multiple grades. Monroe School District, Monroe, NH; Caledonia County School District, Danville, VT; St. Johnsbury School District, St. Johnsbury, VT
- 2004-2005 Teacher and community coordinator: Wetland Connections. University of Maine and Orono High School, Orono, ME.

PROFESSIONAL EXPERIENCE

- 2011-2012 Conservation Director. Northeast Wilderness Trust, Bristol, VT.
- 2010 Ecological Consultant: Raven Ridge Preserve Landscape Analysis. The Nature Conservancy and University of Vermont, Burlington, VT.
- 2010 Researcher. Ecosystem Service Modeling: Viewshed Analysis. ARTificial Intelligence for Ecosystem Services (ARIES) Team, University of Vermont, Burlington, VT.
- 2009 Wildlife Researcher. Montana Department of Natural Resources and Conservation, Trust Land Management Division, Missoula, MT.
- 2006-2008 Education Director. NorthWoods Stewardship Center, East Charleston, VT .
- 2006 Field Biologist: Bicknell’s Thrush and High Elevation Bird Population Monitoring, Vermont Institute of Natural Science, Quechee, VT.
- 2005-2006 Field Researcher and Community Outreach Coordinator: Wildlife movement corridors and roadways in northern New Hampshire. New Hampshire Audubon, Concord, NH.
- 2005 Field Researcher: Effects of logging on bird communities on the Tahuayo River, Peru. Plymouth State University, Plymouth, NH.
- 2005 Field Biologist: Loon Preservation Committee and Lake Umbagog National Wildlife Refuge, Errol, NH.
- 2002 – 2005 Undergraduate Research Assistant. University of Maine, Orono, ME.
- 2002 – 2003 Research volunteer. USGS Biological Resources Division, Orono, ME.

HONORS & AWARDS

- 2016 US-IALE Student Travel Award, \$500
- 2015 Graduate Student Research Award, U Wisconsin-Madison, Graduate School \$600
Graduate Student Research Award, U Wisconsin-Madison, Zoology \$2000
John Jefferson Davis Travel Award, U Wisconsin-Madison, Zoology \$600
- 2014 ThinkSwiss Fellow, Embassy of Switzerland Office of Science, Technology, and Higher Education (OSTHE), \$1,300
Graduate Student Research Travel Award, U Wisconsin-Madison, Zoology \$500
John Jefferson Davis Travel Award, U Wisconsin-Madison, Zoology \$800
- 2012 Biological Sciences Scholar Award, U Wisconsin-Madison Graduate School, \$2,250
- 2010 Gloria Barron Scholar, The Wilderness Society, \$10,000
- 2005 Phi Beta Kappa Honor Society
Xi Sigma Pi Honor Society, Gamma Chapter
- 2005 Malcolm W. Coulter Wildlife Leadership Award, University of Maine.
- 2005 Robert I. Ashman Award, University of Maine.
- 2005 Outstanding Service Award: Department of Wildlife Ecology, University of Maine.
Outstanding Service Award: Department of Forest Resources, University of Maine.
- 2005 Cumberland Farms-Paul Hand Scholarship, University of Maine, \$1250
- 2004 Green Endowment Research Grant, University of Maine, \$750
- 2002-2005 Presidential Scholar, University of Maine.
- 2004-2005 Penobscot County Conservation Association Scholarship, University of Maine, \$1500

PEER-REVIEWED PUBLICATIONS

- Record, S., P. F. B. Ferguson, E. Benveniste, **R. A. Graves**, V. W. Pfeiffer, M. Romolini, C. E. Yorke and B. Beardmore. 2016. Graduate students navigating social-ecological research: insights from the Long-Term Ecological Research Network. *Ecology and Society* 21 (1):7. [online] URL: <http://www.ecologyandsociety.org/vol21/iss1/art7/>
- Graves, R.A.**, S.M. Pearson, and M.G. Turner. 2015. Landscape patterns of bioenergy production in changing climate: implications for crop allocation and land-use competition. *Ecological Applications*. *In press* [online] <http://dx.doi.org/10.1890/15-0545.1>
- Graves, R.A.** and D. Wang. 2012. Wildlife Habitat Linkages in the eastern Adirondacks: Applying landscape connectivity models to focal species conservation planning. *Adirondack Journal of Environmental Studies* 18. Online only: <http://www.ajes.org/v18/>
- Gahl, M.K., Calhoun, A.J.K, and **Graves, R.** 2009. Facultative use of seasonal pools by American Bullfrogs (*Rana catesbeiana*). *Wetlands* 29(2):697-703.

PRESENTATIONS AT SCIENTIFIC CONFERENCES

- Graves, R.A.**, S.M. Pearson, and M.G. Turner. 2015. Spatial and temporal dynamics of wildflower blooms in the Southern Appalachians. LTER All Scientists Meeting, Estes Park, CO. Poster presentation.
- Graves, R.A.**, S.M. Pearson, and M.G. Turner. 2015. Spatial and temporal dynamics of a biodiversity-based cultural ecosystem service in the Southern Appalachians. International Association of Landscape Ecology Word Congress, Portland, OR. Oral presentation.

- Graves, R.A.,** S.M. Pearson, and M.G. Turner. 2014. Bioenergy production in a changing landscape: Farmlands in the Southern Appalachians. Ecological Society of America, Sacramento, CA. Oral presentation.
- Graves, R.A.,** S.M. Pearson, and M.G. Turner. 2013. Landscape consequences of bioenergy and exurban development scenarios in the Southern Appalachian Mountains. Ecological Society of America, Minneapolis, MN. Poster presentation.
- Graves, R.** 2011. Mapping Wildlife Movement Corridors in Essex County, NY. 18th Annual Conference on the Adirondacks, Adirondack Research Consortium, Lake Place, NY. Oral presentation.
- Graves, R.,** Gahl, M.K., and Calhoun, A.J.K. 2008. Facultative use of vernal pools by a highly aquatic amphibian, *Rana catesbeiana*. Northeast Natural History Conference X. N.Y. State Museum, Albany, NY. Poster presentation.

POPULAR PRESS AND TECHNICAL REPORTS

- Graves, R.A.** 2011. Natural Communities of the Proposed Barre Town Forest, Barre, VT. (report submitted to the Trust for Public Land). Available online at: <http://www.barretown.org/pages/boards/forest/appDEcological2011.pdf>
- Graves, R.** 2010. "I Believe: 'Without our connection to the land, what will motivate us to make conservation successful?'" Burlington Free Press, July 4, 2010.
- Graves, R.,** D.Wang, and C. M.Hogan. 2010. "Ecotone". In: Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment). Encyclopedia of Earth, May 24, 2010.
- Graves, R.** 2009. Wildlife Survey on Sula State Forest: 8 Years Post-Fire. (report submitted to the Montana Department of Natural Resources and Conservation).
- Graves, R.** Natural history of the Spruce Grouse *in* Williamson, S.J., D. Keppie, R. Davison, D. Budeau, S.Carrière, D. Rabe and M. Schroeder. 2008. Spruce Grouse Continental Conservation Plan. Association of Fish and Wildlife Agencies. Washington, DC. 60 pages.

PROFESSIONAL ACTIVITIES

- 2015 Workshop: "Applied Hierarchical Modeling". Patuxent Wildlife Research Center, November 3-9.
- 2015 Symposium Co-organizer: "Meeting the challenge of landscape sustainability: balancing multiple ecosystem services and biodiversity in heterogeneous landscapes." IALE World Congress, July 5 – 10.
- 2015 Communicating Science Workshop: "Art Journalism, and Science at Work." University of Wisconsin-Madison, March 28.
- 2014 13th International Swiss Climate Summer School: "Linking Land Use, Land Cover, and Climate." Invited participant, August 31– September 5.
- 2013 Workshop: "Modeling plant growth with a process-based model, ALMANAC." USDA-Agricultural Research Station, Temple, TX, August 14 – 19.
- 2013 Long-term Ecological Research (LTER) Synthesis Working Group: "Best Practices for Socio-Ecological Research." Coweeta Hydrological Station, NC, March 22-24.

PROFESSIONAL SERVICE

- 2015 – 2017 US IALE Student Representative

2014 - 2016 Graduate Student Co-chair, Wisconsin Ecology
2014 Manuscript reviewer: Biological Conservation
2013 – 2015 Science Advisory Board Member, Algonquin to Adirondacks (A2A) Collaboration
2012 – 2014 Graduate Student Representative, UW-Madison Arboretum Committee
2010 Editor, Rubenstein School of Natural Resources News, University of Vermont.
2004 – 2005 President, University of Maine Chapter of the Society for Conservation Biology

PROFESSIONAL AFFILIATIONS

Ecological Society of America (ESA)
International Association for Landscape Ecology (IALE)
Society for Conservation Biology (SCB)
Graduate Women in Science – Beta Chapter