

David Richard Bowne, Ph.D.
Curriculum Vitae

Current Position: Associate Professor, Department of Biology, Elizabethtown College, Elizabethtown, PA 17022, USA. (717) 361-1317 bowned@etown.edu

Research Interests: Landscape ecology, vertebrate ecology, and conservation biology.

Post-Doctoral Experience:

Visiting Assistant Professor and Research Associate, Department of Biology, Franklin and Marshall College.	2005 – 2007
Adjunct Assistant Professor, Department of Biology, Franklin and Marshall College.	Spring 2005
Adjunct Assistant Professor, Department of Biology, Elizabethtown College.	2004 – 2005
Visiting Assistant Professor of Ecology, Department of Biology, University of Richmond.	2003 – 2004
Undergraduate Research Coordinator and Visiting Scientist, Blandy Experimental Farm, University of Virginia.	Summer 2003
Research Associate, Department of Biology, University of Richmond.	2002 – 2003
Geographic Information Systems Specialist, Information Services, University of Richmond. Dr. Patricia Schoknecht, supervisor.	2002 – 2003
Instructor, Department of Landscape Architecture, University of Virginia.	Summer 2002, 2003

Education:

Ph.D., Environmental Sciences with a concentration in Ecology, University of Virginia, Charlottesville, Virginia. May 2002. Dr. Michael Bowers, advisor.

M.S., Conservation Ecology and Sustainable Development, University of Georgia, Athens, Georgia. August 1997. Dr. Gary W. Barrett, advisor.

B.S. with Honors, Natural Resource Management with a concentration in Wildlife Science, Cook College, Rutgers University, New Brunswick, New Jersey. May 1994. Dr. Jean Marie Hartman, advisor.

George H. Cook Scholar.
Cook College Honors Program.

Publications (peer-reviewed): (* designates undergraduate co-author)

Bowne, D.R. and E. Johnson.* 2013. Comparison of soil carbon dioxide efflux between residential lawns and corn fields. *Soil Science Society of America Journal*. doi:10.2136/sssaj2012.0346N

Bowne, D.R. 2013. Talking Turkey: Using a short story to facilitate learning and appreciation of energy flows through ecosystems. EcoEd Digital Library <http://ecoed.esa.org/index.php?P=FullRecord&ID=510>

Bowne, D.R., A. L. Downing, M.F. Hoopes, K. LoGiudice, C. L. Thomas, L. J. Anderson, T. Gartner, D. J. Hornbach, K. Kuers, J.L. Machado, B.R. Pohlad, and K. L. Shea. 2011. Transforming Ecological Science at Primarily Undergraduate Institutions through Collaborative Networks. *Bioscience*. 61(5): 386-392.

- Bowne, D.R. 2008. Terrestrial activity of *Chrysemys picta* in northern Virginia. *Copeia*. 2008(2): 306 – 310.
- Bowne, D.R. 2007. Is the insurgency growing? A novel analysis of the spatial and temporal dynamics of the Iraqi insurgency. *Defense and Security Analysis*. 23: 115 – 118.
- Freedberg, S. and D.R. Bowne. 2006. Mark-recapture of maturing juveniles reveals non-Fisherian sex ratios in a reptile with environmental sex determination. *Evolutionary Ecology Research*. 8: 1499 – 1510.
- Bowne, D.R., M.A. Bowers, and J.E. Hines. 2006. Connectivity in an agricultural landscape as reflected by interpond movements of a freshwater turtle. *Conservation Biology*. 20: 780 – 791.
- Bowne, D.R. and H. White*. 2004. Searching strategy of *Chrysemys picta* (painted turtle) across spatial scale. *Animal Behaviour*. 68: 1401 – 1409.
- Bowne, D.R. and M.A. Bowers. 2004. Interpatch movements in spatially structured populations: a literature review. *Landscape Ecology*. 19: 1 – 20.
- Bowne, D.R. 2003. Interpond movement patterns of *Chrysemys picta picta* (eastern painted turtle) in Virginia. *Chelonian Conservation and Biology*. 4: 739 – 741.
- Stewart, S.D. and D.R. Bowne. 2003. Geographic Information Systems (GIS) exercise in demography. Syllabi and Instructional Materials in Demography, 4th edition. Rebecca Nees and Loretta Bass, editors. American Sociological Association: Washington, D.C.
- Haddad, N., D.R. Bowne, A.Cunningham, B. Danielson, D. Levey, S. Sargent, T. Spira. 2003. Corridor use by diverse taxa. *Ecology*. 84: 609 – 615.
- Bowne, D.R. 2002. *Chrysemys picta picta* (Eastern painted turtle). Predation. *Herpetological Review*. 33(2): 132.
- Wohl, D.L. and D.R. Bowne. 2002. Collected thoughts on negotiating for a position in academia. *Bulletin of the Ecological Society of America*. 83: 129 – 130.
- Barrett, G.W., J.D. Peles, and D.R. Bowne. 2001. Predation on the hispid cotton rat (*Sigmodon hispidus*) by snakes and owls. *Georgia Journal of Science*. 59: 94 – 100.
- Bowne, D.R., J.D. Peles, and G.W. Barrett. 1999. Effects of landscape spatial structure on movement patterns of the hispid cotton rat (*Sigmodon hispidus*). *Landscape Ecology*. 14: 53 – 65.
- Peles, J.D., D.R. Bowne, and G.W. Barrett. 1999. Influence of landscape structure on movement patterns of small mammals. *Landscape Ecology of Small Mammals*. Gary W. Barrett and John D. Peles, editors. Springer-Verlag: New York.

Manuscripts in Preparation (peer-reviewed): (* designates undergraduate co-author)

- Bowne, D.R. and J.M. Schoonmaker*. In Preparation. Biased sex ratio and age distribution in an urban population of *Chrysemys picta* (painted turtle). *Chelonian Conservation and Biology*.
- Bowne, D.R. and D.L. Wohl. In Preparation. The influence of land use on bacterial antibiotic resistance. *Frontiers in Ecology and Evolution*

Writing (fiction and non-peer reviewed nonfiction):

- “Control.” Original, 60,000 word novel.
- “Henry Ford Hated Glaciers.” An original short story I wrote for use in general ecology courses to promote engagement with various aspects of global climate change.
- “Breeding Discussion.” An original short story I wrote for use in introductory biology courses to promote engagement with various aspects of population biology.

“Biocarbon and corporate climate strategy: a business brief on emissions reductions via forestry and land use projects.” Editor. Business for Social Responsibility. November 2007.

“Ecosystem Marketplace: Scientific Insights.” Contributing Writer.
www.ecosystemmarketplace.com

Teaching Experience (Primary Instructor):

Elizabethtown College

Ecology in Short Fiction (BIO/EN 170)	Spring 2014
Conservation Biology (BIO 320)	Spring 2014
Geographic Information Systems (BIO 225)	Spring 2013
Principles of Evolution, Ecology, and Diversity of Life (formerly named Introduction to Biological Science II) (BIO 112)	Spring 2012 - 2014
Conservation Biology (BIO 373)	Spring 2010 - 2012
Geographic Information Systems (BIO 374)	Spring 2010 – 2012
Molecules, Cells, and Animal Systems (formerly named Introduction to Biological Science I) (BIO 111)	Fall 2008 – 2011, 2013
General Ecology (BIO 313)	Fall 2008 – 2011, 2013
General Ecology Laboratory (BIO 313L)	Fall 2008 – 2011, 2013
Living with the Environment (BIO 103)	Spring 2009 - 2011
Introduction to Biological Science II Lab (BIO 112)	Spring 2005
Biological Concepts (BIO 101)	2004 – 2005
Introduction to Biological Science I Lab (BIO 111)	Fall 2004

Franklin and Marshall College

Biostatistics (BIO 210)	Spring 2008
Principles of Evolution, Heredity, and Ecology (BIO 110)	Spring 2005 - 2008

University of Richmond

Community Ecology (BIO 109, lecture & lab)	Spring 2004
Fundamentals of Ecology (BIO 351)	Fall 2003
Integrative Biology (BIO 203, lecture & lab)	Fall 2003
Independent Study in GIS (IS 390)	Spring 2003
Geographic Information Systems (workshops)	2002-2003

University of Virginia

Introduction to Field Ecology (LAR 502)	Summer 2002, 2003
---	-------------------

Teaching Experience (Graduate Assistant):

University of Virginia

Applied Ecology (LAR 535)	Spring 2001
Advanced Geographic Information Systems (EVSC 466/796)	Spring 1999
Geographic Information Systems (EVSC 362/795)	Fall 1998
Applied Statistics for Environmental Scientists (EVSC 503)	Spring 1998
Biodiversity (EVSC 426)	Fall 1997

University of Georgia

General Biology (BIO 108)

1996 – 1997

General Biology (BIO 104).

Fall 1995

Undergraduate Research Students:

Elizabethtown College

Lindsay Diehl. Fall 2013. “Relationship between impervious surfaces and asthma.”

Kimberly Grouser. Fall 2013. “Basking orientation preferences in *Trachemys scripta*.”

Alexandra Doran. Summer and Fall 2013. “Amphibian and turtle ecology in Pennsylvania and across the nation.”

Ryan Conway. Summer 2103. “Amphibian and turtle ecology in Pennsylvania and across the nation.”

Aleah Miller. 2011. “Mapping trees on the Elizabethtown College campus.”

2012-2013. “Is Bog turtle habitat buried under 300 year old sediment?”

Chelsea Payne. 2011-2013. “Frogs and salamanders of Big Spring Run.”

Samantha Hartzell. 2012. “Salamander use of Big Spring Run.”

Autumn Phillips. 2011-2012. “Carbon sequestration by trees on the Elizabethtown College campus.”

Melanie Sturm. 2011-2012. “Induction of antibiotic resistance in *Enterobacter* through exposure to increasing concentrations of cadmium in soil.” **Departmental honors research.**

Erin Johnson. 2010-2012. “A comparison of soil respiration levels in turf grass and agricultural environments.” **Departmental honors research.**

Jennifer Schoonmaker. 2009-2010. “Population study of freshwater turtles on a Pennsylvania college campus: the effects of suburban habitat on population structure.” **College honors research.**

Michael Torre. 2009- 2010. “Amphibian use of agricultural streams.”

Franklin and Marshall College

Catherine Luik. Undergraduate Researcher at Franklin and Marshall College. 2007.

“Relation of antibiotic resistance in bacteria and heavy metal content of soil.”

Blandy Experimental Farm, Field Station of the University of Virginia

Corinne Campbell. 2003. “Age and sex-specific rates of movement in *Chrysemys picta picta* as a result of re-established habitats.”

Jennifer Torgerson. 2003. “Habitat selection by *Chrysemys picta*: Is it the ideal free distribution?”

Kristen M. Reinhart. 2001. “Source/sink: the influence of common snapping turtles (*Chelydra serpentina*) on the percent population of juvenile eastern painted turtles (*Chrysemys picta picta*).”

Heather White. 2000. “Analysis of the effects of landscape structure on terrestrial movement of the eastern painted turtle (*Chrysemys picta picta*).”

Daniel Scott. 1998. “Orientation by eastern painted turtles toward water.”

University of Virginia

Rebecca Goldman. 2001. “Promises and limitations of corridors.”

Presentations at professional conferences: (*designates undergraduate co-author)

- Skillen, M. and D.R. Bowne. 2014. Ecology in Short Fiction: An innovative approach to teaching ecology and creative writing. Ecological Society of America. Sacramento, CA.
- Bowne, D.R. 2014. Land use impacts on freshwater turtle populations: Insights from a national faculty/undergraduate student collaborative research project. Ecological Society of America. Sacramento, CA.
- Bowne, D.R. and M. Skillen. 2014. *Breeding Discussion*: Using fiction to understand population ecology. In REEFS 2014: Resources for Ecology Education Fair and Share. Ecological Society of America. Sacramento, CA.
- Doran, A.*, S. Smith*, and D.R. Bowne. 2014. Do roads impact populations of freshwater turtles? Ecological Society of America, Mid-Atlantic Chapter. College Park, MD. **Won 2nd place for Best Undergraduate Oral Presentation.**
- Bowne, D.R., A. Doran*, C.P. Bloch, D.L. Druckenbrod, J. Dosch, T.S. Fredricksen, D. Garneau, K.S. Genet, P.A. Kish, M.B. Kolozsvary, F.T. Kuserk, E.S. Lindquist, C. Mankiewicz, J.G. March, T.J. Muir, K.G. Murray, J.A. Simmons, R. Urban, C. Zimmermann. 2013. Population structure of freshwater turtles across North America: An Ecological Research as Education Network (EREN) collaborative project. Ecological Society of America. Minneapolis, MN.
- Bowne, D.R., C. Grand Pre, J. Hartranft, W. Hilgartner, D. Merritts, A. Miller*, M. Rahnis, and R. Walter. 2013. Is bog turtle (*Glyptemys muhlenbergii*) habitat buried under 250 year-old sediment? Re-evaluating conventional wisdom concerning habitat loss. International Congress for Conservation Biology. Baltimore, MD.
- Hilgartner, W., D. Merritts, R. Walter, M. Rahnis, J. Hartranft, D. Bowne, A. Miller*, C. Grand Pre, and C. Bernhardt. 2013. Millennial Stability and Post-settlement Burial of Bog Turtle (*Glyptemys muhlenbergii*) Habitat in Two Piedmont Valleys of Maryland and Pennsylvania. International Congress for Conservation Biology. Baltimore, MD.
- Walter, R., D. Merritts, D. Bowne, J. Hartranft, W. Hilgartner, C. Grand Pre, P. Mayer, M. Rahnis, and A. Miller*. 2013. Habitat Restoration in Watersheds Impacted by Legacy Sediments and Implications for the Bog Turtle (*Glyptemys muhlenbergii*). International Congress for Conservation Biology. Baltimore, MD.
- Miller, A.*, D.R. Bowne, C. Grand Pre, J. Hartranft, W. Hilgartner, D. Merritts, M. Rahnis, and R. Walter. 2013. Impact of historical milldams on habitat of the bog turtle (*Glyptemys muhlenbergii*), a federally listed species. Ecological Society of America, Mid-Atlantic Chapter. Dover, DE. **Won 2nd place for Best Undergraduate Poster.**
- Payne, C.* and D.R. Bowne. 2013. Response of salamanders to legacy sediment removal at Big Spring Run, Lancaster, Pennsylvania. Ecological Society of America, Mid-Atlantic Chapter. Dover, DE.
- Payne, C.*, S. Hartzell,* and D.R. Bowne. 2012. Restoration stream data for amphibian populations at Big Spring Run, Lancaster County, PA, USA. Ecological Society of America. Portland, OR.
- Bowne, D.R., and J. Schoonmaker.* 2012. Biased sex ratio and age distribution in a suburban population of *Chrysemys picta* (painted turtle). Ecological Society of America. Portland, OR.
- Johnson, E.* and D.R. Bowne. 2012. A comparison of soil respiration in turf grass and agricultural environments. Ecological Society of America, Mid-Atlantic Chapter. Blacksburg, VA.

- Payne, C.*, S. Hartzell,* and D.R. Bowne. 2012. Pre-restoration stream data for amphibian populations at Big Spring Run, Lancaster County, PA. Ecological Society of America, Mid-Atlantic Chapter. Blacksburg, VA. **Won 1st place for Best Undergraduate Poster.**
- Phillips, A.* and D.R. Bowne. 2012. Carbon sequestration by trees on the campus of Elizabethtown College, Pennsylvania. Ecological Society of America, Mid-Atlantic Chapter. Blacksburg, VA.
- Bowne, D.R. 2011. TURTLEPOP: Population Structure of Freshwater Turtles along an Urbanization Gradient. *In* Developing Collaborative Research Projects in the Ecological Research as Education Network (EREN). Ecological Society of America. Austin, TX.
- Bowne, D.R. 2011. Hey Buddy, How Much for the Carbon? Understanding a Biogeochemical Cycle by Developing a Business Plan to Sequester Carbon *In* REEFS 2011: Resources for Ecology Education Fair and Share. Ecological Society of America. Austin, TX.
- Bowne, D.R. 2010. Internalizing the environment: Using short stories to foster comprehension and personal appreciation of ecological concepts. Ecological Society of America, Pittsburgh, PA.
- Wohl, D.L. and D.R. Bowne. 2010. A landscape perspective on antibiotic resistance in soil bacteria. American Society of Microbiologists. Toronto, CN.
- Wohl, D.L. and D.R. Bowne. 2010. A landscape perspective on antibiotic resistance in soil bacteria. International Society of Microbial Ecology. Seattle, WA.
- Schoonmaker, J.* and D.R. Bowne. 2010. Population study of freshwater turtles: the effects of suburban habitat on population structure. Ecological Society of America, Mid-Atlantic Chapter. Fredericksburg, VA.
- Torre, M.* and D.R. Bowne 2010. Amphibian use of agricultural streams. Ecological Society of America, Mid-Atlantic Chapter. Fredericksburg, VA.
- McDonald, R.*, D.R. Bowne, and D.L. Wohl. 2009. Urban Ecology in Miniature: Spatial analysis of antibiotic resistance in *Enterobacter* spp. Isolates gathered from soils of Lancaster City, Pennsylvania. Ecological Society of America, Mid-Atlantic Chapter. Trenton, NJ.
- Bowne, D.R. and D.L. Wohl. 2008. Mapping antibiotic resistant bacteria across a landscape: a collaborative ecological experience for high school students, undergraduates, and faculty. Ecological Society of America, Milwaukee, WI.
- Wohl, D.L. and D.R. Bowne. 2008. Superbugs are everywhere! Antibiotic resistant bacteria in farms, forests, and front yards. Ecological Society of America, Milwaukee, WI.
- Bowne, D.R. 2007. Can ecology inform security? A metapopulation analysis of the insurgency in Iraq. Ecological Society of America, Mid-Atlantic Chapter. York, PA.
- Bowne, D.R. 2006. Can ecology inform security? A metapopulation analysis of the insurgency in Iraq. Ecological Society of America. Memphis, TN.
- Bowne, D.R. 2005 (Invited speaker). Connecting behavior to the landscape: Interactions between vertebrate behavior and landscape structure in measures of connectivity. International Congress of Ecology and Ecological Society of America. Montreal, Canada.
- Bowne, D.R. 2004. Non-nesting terrestrial behavior of *Chrysemys picta* (painted turtle). Society for the Study of Amphibians and Reptiles. Norman, OK.
- Bowne, D.R. 2003. How much dry land does a small, aquatic turtle use? Society for Conservation Biology. Duluth, MN.
- Bowne, D.R. 2003. What your students need to know: Core Concepts in GIS. Associated Colleges of the South - GIS Symposium. Southwestern University. Georgetown, TX.

- Bowne, D.R. 2003. Finding a university's place in the community: training local organizations in GIS. Associated Colleges of the South - GIS Symposium. Southwestern University. Georgetown, TX.
- Bowne, D.R. 2002. Contribution of immigration to population growth in *Chrysemys picta picta* (eastern painted turtle). Ecological Society of America. Tuscon, AZ.
- Reinhart, K.M.* and D.R. Bowne. 2002. Source/sink: the influence of common snapping turtles (*Chelydra serpentina*) on the population density of juvenile eastern painted turtles (*Chrysemys picta picta*). Ohio Academy of Sciences. Columbus, OH.
- Haddad, N., D.R. Bowne, A. Cunningham, B. Danielson, D. Levey, S. Sargent, and T. Spira. 2001. Corridor use by diverse taxa: a comparative synthesis from a large-scale experiment. Society for Conservation Biology. Honolulu, HI.
- Bowne, D.R. 2001. Age/sex-specific rates of interpond movement of *Chrysemys picta picta* (eastern painted turtle). Ecological Society of America. Madison, WI.
- Bowne, D.R. and M.A. Bowers. 2001. Interpatch movements in spatially structured populations. American Institute of Biological Sciences. Washington, D.C.
- Bowne, D.R. 2000. Metapopulation, patchy populations, or separate populations? Frequency and extent of interpond movements by eastern painted turtles (*Chrysemys picta picta*). International Association for Landscape Ecology. Fort Lauderdale, FL.
- Bowne, D.R. 2000. Should I Stay or Should I Go?: Frequency and extent of movements between ponds by eastern painted turtles (*Chrysemys picta picta*) and implications for conservation. First Annual Arts and Sciences Research Exhibition, University of Virginia, Charlottesville, VA.
- Bowne, D.R. and J.T. Callahan. 1999. Painted Landscapes: Movement ecology of the eastern painted turtle (*Chrysemys picta*) in northern Virginia. Society for Conservation Biology. College Park, MD.
- Bowne, D.R. and J.T. Callahan. 1999. Painted Landscapes: Movement ecology of the eastern painted turtle (*Chrysemys picta*) in northern Virginia. Southeastern Population Ecology and Genetics meeting. Mountain Lake Biological Station, Mountain Lake, VA.
- Bowne, D.R., J.D. Peles, and G.W. Barrett. 1998. Microhabitat selection by *Sigmodon hispidus*. American Society of Mammalogists. Blacksburg, VA.
- Bowne, D.R. 1998. The nature of natural: towards a reconciliation of the natural/unnatural dichotomy. University of Virginia's Sixth Annual Interdisciplinary Conference. Academic Apocalypse Now: Thinking Toward 2000. University of Virginia, Charlottesville, VA.
- Bowne, D.R., J.D. Peles, and G.W. Barrett. 1997. Movement patterns of *Sigmodon hispidus* in a heterogeneous landscape. International Association for Landscape Ecology. Durham, N.C.
- Bowne, D.R. 1997. Ecological considerations for the Etowah River Greenway. Red Clay Conference. University of Georgia School of Law. Athens, GA.
- Peles, J.D., D.R. Bowne, and G.W. Barrett. 1996. Effects of landscape spatial structure on movement patterns of *Sigmodon hispidus*. American Society of Mammalogists. Oklahoma City, OK.

Grants:

- 2013: Scholarship, Creative Arts and Research Program (SCARP), Elizabethtown College. "Amphibian and turtle ecology in Pennsylvania and across the nation."

Student participants: Alexandra Doran and Ryan Conway. Outcome: Awarded. May – July 2013.

- 2012: Collaborative Interdisciplinary Scholarship Program, Elizabethtown College. “Integrating Science and Creative Writing to Enhance Student Learning.” Co-PI: Dr. Matthew Skillen, Elizabethtown College. Outcome: Awarded. \$23,728.00. 2013-2015.
- 2010: Pennsylvania Department of Environmental Protection. “Herpetological Assessment of Big Spring Run, Lancaster County, PA.” Outcome: Awarded. \$13,914.94. Summer 2010 and 2011.
- 2008: Student Challenge Awards Program, Earthwatch Institute. “Mapping antibiotic resistant bacteria across a landscape.” Project includes support and training for 8 high school students. Co-PI: Dr. Debra Wohl, Elizabethtown College. Outcome: Awarded. \$16,326. Summer 2009.
- 2006: Student Challenge Awards Program, Earthwatch Institute. “Mapping antibiotic resistant bacteria across a landscape” Project includes support and training for 8 high school students. Co-PI: Dr. Debra Wohl, Elizabethtown College. Outcome: Awarded. \$16,895. Summer 2007.
- Wildlife Habitat Policy Research Program, National Council for Science and the Environment. “At your service: Provision of ecosystem services by habitat conservation.” Co-PI: Dr. Kevin J. Boyle, Virginia Polytechnic Institute and State University. Outcome: Not funded.
- 2005: National Science Foundation. Directorate for Biological Sciences. “Population structure of painted turtles (*Chrysemys picta*) along an urbanization gradient.” Outcome: Not funded.
- Virginia Department of Transportation. “Predicting sites of turtle mortality by automobiles.” Outcome: Not funded
- 2001: National Science Foundation. Doctoral Dissertation Improvement Grants (DDIG) in the Directorate for Biological Sciences. 2001. “Linking individual behavior to populations processes at the landscape level.” Outcome: Funded, \$9892.
- 1999: Linnaeus Fund. Chelonian Research Foundation. “Terrestrial movement and subsequent effects on population dynamics of *Chrysemys picta picta* (Eastern Painted Turtle).” Outcome: Funded, \$1000.
- Sigma Xi Grants-in-Aid of Research. “Quantification of costs associated with terrestrial travel by the eastern painted turtle.” Outcome: Funded, \$700
- Exploration and Field Research Grant. The Explorers Club Washington Group and The A. Harvey and Phyllis K. Schreter Exploration Fund of Baltimore, Maryland “Habitat selection by the eastern painted turtle (*Chrysemys picta picta*): Terrestrial movement and subsequent effects on population dynamics.” Outcome:

Funded, \$1000.

Awards:

Merit in Scholarship and Professional Activity. Elizabethtown College. Awarded May 29, 2013.
DuPont Fellowship, University of Virginia. 2000 – 2002.
First Annual Arts and Sciences Research Exhibition. Third place in the Biological/Medical Sciences category. University of Virginia, Charlottesville, VA. 2000.
Dean's Reserve Fellowship, University of Virginia. 1999 – 2000.
Winston E. Parker Forestry Scholarship, 1992 – 1994.
College of Agriculture and Environment Scholarship, Rutgers University. 1991 – 1994.
Garden State Scholar, New Jersey. 1990 – 1994.

Service to Elizabethtown College:

Sustainability Working Group (2013 – present)
 Appointed by the Dean of Faculty
Professional Development Committee (2013 - present)
CORE Committee (2011 – present)
 Assisted in creation of rubric for NPS assessment
Student Conduct and Appeals Board (2010 – present)
 Started as an elected position then appointed by the Provost
Safety Committee (2010 – 2011)
Biology Club advisor (2011 – present)
 Initiated Bio Mentoring, a type of peer mentoring for Bio111 students
 Initiated Biology Speaker series, a means for students to learn about Biology faculty
Science in Motion Advisory Committee (2009 – 2011)
Instructional Resources and Technology Committee (2009 – 2011)
Ad hoc Committee on Public Health (2009 – 2011)
Planning Committee for Woodrow Wilson Visiting Fellow Dr. Joseph Romm (Fall 2009)
 Introduced Dr. Romm for his Wednesday at 11 talk “Can we avoid catastrophic global warming?” September 16, 2009.
Purposeful Life Work Group (2009)
Informally worked with faculty, staff, and community organizations to develop interdisciplinary, “real-world” opportunities for students, primarily through the use of geographic information systems. Examples from Spring 2013 include:
 Dr. Donald Kraybill (Young Center) and environmental science major Bryan Strode. “Land Ownership of the Amish in Lancaster County, Pa.”
 Dr. Sanjay Paul (Business), Myron R. Schwartz (Myron R. Schwartz Research), and biology major Stephen Smith. “Public Parking Utilization in the Central Business District of Elizabethtown: Its Relationship to Community Development.” Resultant publication given to the Elizabethtown Borough office to guide parking policies.
 Sherrie Moyer (Facilities Management) and biology student Hailey Parsons. “Acreage of mowed land on the Elizabethtown College campus.”
 Noël Strattan (The Bureau for Historic Preservation, Pennsylvania), Dr. Robert Wheelersburg (Anthropology), and environmental science major Cody Schmoyer. “Indian paths of Pennsylvania.”

- Participant with the Office of Marketing and Communications on several articles in the *Elizabethtown* magazine and college website
- Fall 2009. "Elizabethtown puts *Science in Motion*" and "Elizabethtown Project Nurtures Citizen Science"
 - Fall 2010. "Elizabethtown Collaborates in Founding Ecological Research Network"
 - Winter 2013. "Scenic Roots Bring Life to Campus"
 - Fall 2013. "Lake Placida through the Years"
 - College-created video of turtle research in Bio112
<http://www.youtube.com/watch?v=vKWIOflj1vI>
- Invited Speaker at Elizabethtown College
- "The Science of Fiction: Storytelling and Imagination in the Science Classroom." Bowers Writers House. April 4, 2011.
 - "Everything happens somewhere: incorporating spatial data into research and teaching with a geographic information system (GIS). April 30, 2009.
 - "Counterinsurgency strategy in Iraq and Afghanistan: an ecological perspective." Campus Forum on Iraq, Afghanistan and Terrorism. February 16, 2009.
 - "Sustainability and Hope in the 21st Century." October 14, 2009.

Service to the Community:

- Member of Stewardship Committee. Lancaster County Conservancy. 2010-Present.
 - Formed an agreement between the college and the LCC to allow the use of their nature preserves by our students and faculty.
 - Community-based learning: Bio373 students created a hiking trail at the Donegal Highlands Preserve
- Developed educational videos on how to measure turtles using a spring scale for Bear Creek Elementary School, Fall 2013.
http://www.youtube.com/channel/UCRJ_o8zzZg9vhRSa8kDiEzA
- Invited speaker. "Confronting Climate Change: What can be done?" Church of the Brethren. Elizabethtown, PA. May 18, 2013.
- Invited speaker. "Impacts of Climate Change: How would you recognize climate change when it is occurring?" Church of the Brethren. Elizabethtown, PA. March 11, 2012.
- Invited speaker. "Let's learn about turtles." Hildebrandt Learning Center, Elizabethtown, PA. July 12, 2012.
- Little League Baseball coach. Rheems Athletic Association. Spring 2011.
- Planning Committee member. "Accessing Data for Positive Community Change." This leadership forum brought together academics, local government representatives, community leaders, and funders to discuss and illustrate the need for a clearinghouse of data to support community-based endeavors in Richmond, VA. University of Richmond, Jepson Alumni Center. November 2002
- Aquatics Judge, Envirothon, Area II Virginia Soil and Water Conservation Districts, Blandy Experimental Farm, VA. April 23, 1999.

Service to the Profession:

- Chair-elect, Mid-Atlantic Chapter of the Ecological Society of America. Present. Will be Chair from July 2013 – July 2014 and will host the annual meeting.
- Judge of student presentations, Mid-Atlantic Chapter of the Ecological Society of America annual meetings. 2012 and 2013.
- Founder and member of Leadership Group. Ecological Research as Education Network (EREN). A National Science Foundation-funded national collaboration of ecologists at primarily undergraduate institutions. www.erenweb.org
- Project leader. TurtlePop: Population Structure of Freshwater Turtles along an Urbanization Gradient. An Ecological Research as Education (EREN) Pilot Project. Coordinating and leading faculty at 32 institutions on a national research project. <http://erenweb.org/new-page/turtle-pop-project/> Ongoing.
- Written and shared research protocols, laboratory exercise, and student assessment questions. Summer 2011, 2012, and 2013.
- Created training videos on how to capture, measure, and mark turtles. http://www.youtube.com/channel/UCRJ_o8zzZg9vhRSa8kDiEzA
- Led a research breakout session at EREN All Members meeting. Meredith College, N.C., June 28, 2012
- Led a research training session at EREN All Members meeting. Meredith College, N.C., June 29, 2012
- Led sessions at EREN All Members meeting. Trinity University, TX. June 24 & 25, 2013.
- Led session at EREN All Members meeting. Augustana College, IL. June 25 – 27, 2014.
- Invited speaker. Lindquist, E., L. Anderson, D.R. Bowne, H. Dalgeish, D. Dolan, S.B. Hager, J. Kilgore, T. McCay, T. Menzel, J. Simmons, M. Steele. “Transforming Ecological Research and Education at Primarily Undergraduate Institutions through Collaborative Networks: The EREN model.” Duke University. October 4, 2013.
- Invited speaker. “Where to Go and Why? Movement behavior of painted turtles in an agricultural landscape.” Colloquium Series at Millersville University. September 18, 2013
- Invited speaker. “Turtles, Roads, and Undergrads: Advancing environmental science and education through a national collaboration.” Seminar series at Franklin and Marshall College, Department of Earth and the Environment. October 18, 2013.
- Invited speaker. “Understanding the past to inform the future: The impact of legacy sediments on aquatic ecosystems and their restoration.” Seminar Series at Rider University. September 28, 2012.
- Invited speaker. “Amphibians at Big Spring Run: Pre-restoration.” Big Spring Run Research Meeting. Franklin and Marshall College. May 18, 2012.
- Invited speaker. “Colonial History meets 21st Century Ecology: Factors Influencing Aquatic Salamanders in Lancaster County.” Biology Seminar Series at Millersville University. February 16, 2011
- Invited Speaker with D.L. Wohl. “A Landscape Perspective on Antibiotic Resistance.” Kings Gap Environmental and Training Center. Exposure Risks and Concerns health symposium. March 20, 2009.

- Participant. Developing an ecological research collaboration at small colleges. Ohio Wesleyan University. March 26 – 28, 2009.
- Invited Speaker with D.L. Wohl. “A Landscape Perspective on Antibiotic Resistance.” Pennsylvania Department of Environmental Protection. Emerging Contaminants Forum. January 24, 2008.
- Invited Speaker with D.L. Wohl. “Superbugs are everywhere!!! Antibiotic Resistant Bacteria in the Farms, Forests, and Front Yards of Lancaster County.” Franklin and Marshall College, November 2007.
- Invited Speaker. “Which way to a pond? Search Strategy of the Painted Turtle (*Chrysemys picta*).” Elizabethtown College. November 2007.
- Invited Speaker. “Which way to a pond? Search Strategy of the Painted Turtle (*Chrysemys picta*).” Lafayette College. February 2007.
- Invited Speaker. “Animal movements across fragmented landscapes: Can’t get there from here?” Dickinson College. December 2006.
- Invited Speaker. “Animal movements across fragmented landscapes: Can’t get there from here?” Ithaca College. December 2006.
- Invited Speaker. “Can ecology inform security? A metapopulation analysis of the insurgency in Iraq.” International Studies program. Franklin and Marshall College. February 2006.
- Participant. Congressional Visits Day. Met with staff on Capital Hill to advocate federal funding for ecological research. Sponsored by the Ecological Society of America. May 2005.
- Invited Speaker. “Can’t get there from here? Animal movements in fragmented landscapes.” University at Albany. April 2005.
- Invited Speaker. “Can’t get there from here? Animal movements in fragmented landscapes.” Franklin and Marshall College. April 2004.
- Invited Speaker. “Can’t get there from here? Animal movements in fragmented landscapes.” Alfred University. February 2004.
- Invited Speaker. “Over hill, over dale, a turtle’s journey will never fail? Movement patterns of *Chrysemys picta picta*.” Presentation to high school students. St. Christopher’s School, Richmond, VA. Spring 2002.
- Discussion Organizer. “Dealing for your future: Negotiating salary, start-up, and other essentials in academic hiring.” Organized and led with Dr. Debra Wohl, University of Richmond, a discussion section at the Ecological Society of America national meeting. Madison, WI. August 2001.
- Invited Participant. “Facilitating an electronic library of learning resources for undergraduate biology educators.” American Association for the Advancement of Science. Washington, D.C. March 4 – 6, 2000.
- Graduate Student Representative, Institute of Ecology, University of Georgia. 1996 – 1997.
- Reviewer. *Acta Theriologica*, *American Midland Naturalist*, *Animal Behaviour*, *Animal Conservation*, *Behaviour*, *Canadian Journal of Zoology*, *Ecology*, *Freshwater Biology*, *Geoderma*, *Herpetologica*, *Journal of Herpetology*, *Landscape and Urban Planning*, *Landscape Ecology*, *Southeastern Naturalist*

Additional Professional Experience:

GIS Center Manager. Blandy Experimental Farm, Boyce, Virginia. Established and supervised the use of GIS (Arc/Info and ArcView) at this environmental field station and state arboretum of Virginia. Worked with faculty, staff, and students to integrate GIS into their research and job duties by teaching workshops, creating necessary spatial datasets, and guiding their projects. 1998 – 2002.

Natural Resource Assistant. Florida Park Service and the Student Conservation Association. 1995. Conducted surveys of flora and fauna to contribute to the management of Jonathon Dickinson State Park, Florida.

Organic Farm Apprentice. Sussex, New Jersey. Engaged in the growing, harvesting, and marketing of organic produce. Summer 1994.

Naturalist. Wharton State Forest, Hammonton, New Jersey. Created a nature program for the general public including guided hikes in the Pine Barrens and slide show presentations. Summer 1992.

Membership in Professional Organizations:

Ecological Society of America, 1996 – present.

Ecological Society of America, Education section, 2001 – present.

Ecological Society of America, Mid-Atlantic chapter, 2007 – present.

Elected Chair for 2013-2014.

Society for Conservation Biology, 1996 – present.

American Society of Ichthyologists and Herpetologists, 2006 - present.

Society for the Study of Amphibians and Reptiles, 1999 – 2006.

Sigma Xi, 1998 – present.

Golden Key National Honor Society, 1992 – present.

American Society of Mammalogists, 1996 – 1997.