

EDUCATION

- 2010 Ph.D. Pennsylvania State University, Wildlife and Fisheries Science
Dissertation: *Dams, Dredging, and Development: Effects of Anthropogenic Disturbances on Fish Ecology.* (Advised by Dr. Jay Stauffer and Dr. Robert Carline)
- 2005 M.Sc. University of New Brunswick, Biology
Thesis: *Movement Patterns and Trophic Structure of a Reservoir Fish Community Assessed Using Stable Isotope Analysis.* (Advised by Dr. Allen Curry and Dr. Kelly Munkittrick)
- 2001 B.Sc. University of Guelph, Zoology
Thesis: *Why are there no really, really big bony fishes?* (Advised by Dr. David Noakes)

POSITIONS HELD

- 2014-present Courtesy Assistant Professor
University of Florida, Fisheries and Aquatic Sciences Program, School of Forest Resources and Conservation, Gainesville, FL.
Research: *Ecology and trophic subsidies in Florida springs and rivers; Fisheries science and management; Aquatic ecology and conservation.*
- 2013-present Environmental Consultant
Self-employed. Gainesville, FL.
Projects: *Technical reviews of environmental impact statements and proposals for projects impacting freshwater and marine species; Design of ecological risk criteria for integrated ocean management; Evaluation of regional productivity models; Evaluation of hydrological models for tailings-dam failures; Participation and representing stakeholder interests at technical meetings.*
- 2013-2014 Brown Scholar and Visiting Assistant Professor
Stetson University, Department of Biology. DeLand, FL.
Research: *Ecology and trophic subsidies in Volusia Blue Spring, FL; Physiological adaptations of fish to hypoxia.*
- 2010-2013 Postdoctoral Research Associate/Aquatic Ecologist
University of Illinois, Illinois Natural History Survey. Sullivan, IL.
Research: *Ecological impacts of invasive Asian Carp; Gear efficiency for sampling Asian Carp; Assessing Relative gear efficiency for sampling river fishes; Fish community ecology; Effects of Gizzard Shad on macroinvertebrate communities; Effects of Largemouth Bass predation on stocked Walleye.*

- 2006-2010 Graduate Research and Teaching Assistant
Pennsylvania State University, School of Forest Resources and Pennsylvania
Cooperative Fisheries and Wildlife Research Unit. State College, PA.
*Research: Effects of dams and dredging on structure and function of fish community
and nutrient flow; Effects of dams on fish morphology; Development of fish sampling
gear and methodology; Crayfish and trout interactions in streams; Trophic
relationships of sympatric cichlid species.*
- 2003-2005 Graduate Research Assistant
University of New Brunswick, Department of Biology and Canadian Rivers Institute
*Research: Effects of pulp mill and sewage effluents on fish community and food web
structure; Environmental effects monitoring; Tracing methane-derived nutrients in
fishes; Age structure analysis of White Sucker.*

AWARDS AND GRANTS

Grants and Research Awards

- 2012-2013 Investigate enhanced sampling and assess detectability for Asian carp in the Illinois
Waterway. *Illinois Department of Natural Resources*. D.H. Wahl, R.E. Colombo, T.W.
Spier, M.J. Diana, **J.A. Freedman**, & S.E. Butler. \$800,000.
- 2011 Impacts of Invasive Asian Carps on Native Food Webs. *Illinois-Indiana SeaGrant*. **J.A.
Freedman**, D.H. Wahl, & S.E. Butler. \$9,796.
- 2011-2012 Investigate enhanced sampling with traditional and new gears to assess detectability for
Asian Carp in the Illinois Waterway. *Illinois Department of Natural Resources*. D.H.
Wahl, G.G. Sass, R.E. Colombo, T.W. Spier, M.J. Diana, **J.A. Freedman**, & S.E.
Butler. \$877,850.
- 2007 Food-web and Habitat Responses of Imperiled Benthic Fishes to Large-Scale
Disturbances. *Pennsylvania Wild Resource Conservation Program*. **J.A. Freedman** &
R. F. Carline. \$22,000.
- 2007-2010 Fish Community Assessments of the Upper Ohio and Lower Allegheny Rivers. *State
Wildlife Grant*. J.R. Stauffer, R.F. Carline, **J.A. Freedman** & T.D. Stecko. \$309,965.

Individual Honours and Awards

- 2009 Roger Latham Memorial Award, School of Forest Resources, Pennsylvania State
University
- 2009 John Moring Travel Award, American Fisheries Society, Northeastern Division
- 2004 Peter A. Larkin Student Travel Award, American Fisheries Society, Canadian Aquatic
Resources Section
- 2004 Clemens-Rigler Student Travel Award, Canadian Conference for Fisheries Research
- 2003-2005 Industrial Postgraduate Scholarship, Natural Sciences and Engineering Research
Council of Canada

PUBLICATIONS

Publications in Refereed Journals

- Freedman, J.A.**, B.D. Lorson, R.B. Taylor, R.F. Carline, & J.R. Stauffer Jr. 2014. River of the Dammed: Longitudinal changes in fish assemblages in response to dams. *Hydrobiologia*. 727: 19-33. DOI: 10.1007/s10750-013-1780-6
- Freedman, J.A.**, R.F. Carline, & J.R. Stauffer Jr. 2013. Gravel dredging alters diversity and structure of riverine fish assemblages. *Freshwater Biology*. 58: 261-274. DOI: 10.1111/fwb.12056
- Freedman, J.A.**, R.A. Curry, & K.R. Munkittrick. 2012. Stable Isotope Analysis Reveals Anthropogenic Effects on Fish Assemblages in a Temperate Reservoir. *River Research and Applications*. 28: 1804–1819. DOI: 10.1002/rra.1576
- Freedman, J.A.**, R.J.H. Hoxmeier, L.M. Einfalt, R.C. Brooks, & D.H. Wahl. 2012. Largemouth bass predation effect on stocked walleye survival in Illinois impoundments. *North American Journal of Fisheries Management*. 32: 1039-1045. DOI: 10.1080/02755947.2012.716014
- Wahl, D.H., M.D. Wolfe, V.J. Santucci, & **J.A. Freedman**. 2011. Invasive carp and prey community composition disrupt trophic cascades in eutrophic ponds. *Hydrobiologia*. 678: 49-63. DOI: 10.1007/s10750-011-0820-3
- Freedman, J.A.**, T.D. Stecko, B.D. Lorson, & J.R. Stauffer Jr. 2009. Development and efficacy of an electrified benthic trawl for sampling riverine fishes. *North American Journal of Fisheries Management*. 29: 1001-1005. DOI :10.1577/M08-219.1
- Freedman, J.A.**, T.D. Stecko, R.W. Criswell, & J.R. Stauffer Jr. 2009. Extensions of the Known Ranges of *Percina shumardi* Girard and Three Species of *Etheostoma* (subgenus *Nothonotus*) in Pennsylvania. *Journal of the Pennsylvania Academy of Science*. 83: 42-44.
- Freedman, J.A.** & D.L.G. Noakes. 2002. Why are there no really big bony fishes? A point-of-view on maximum body size in teleosts and elasmobranchs. *Reviews in Fish Biology and Fisheries*. 12: 403-416. DOI: 10.1023/A:1025365210414

Manuscripts in Preparation

- Freedman, J.A.**, M.J. Diana, & D.H. Wahl. *In Preparation*. Differences in benthic macroinvertebrate communities in lakes with and without gizzard shad.
- Freedman, J.A.**, S.E. Butler, & D.H. Wahl. *In Preparation*. Impacts of Invasive Asian Carps on Native Food Webs.
- Freedman, J.A.**, S.E. Butler, M.J. Diana, & D.H. Wahl. *In Preparation*. Evaluation of gears for sampling riverine fish communities.
- Butler, S.E., **J.A. Freedman**, D.C. Glover, D., J.E. Garvey, J. Trushenski, J. Bowzer, M.J. Diana, & D.H. Wahl. Spatial distribution of Asian carp condition and proximate composition along the Illinois River as it relates to food availability.
- Butler, S.E., **J.A. Freedman**, M.J. Diana, & D.H. Wahl. *In Preparation*. Detection probability and occupancy modeling for Asian carp in the Illinois River.

Selected Technical Reports and Presentations

- Freedman, J.A.** & D.T. DeKerckhove. 2014. Design of Ecological Risk Criteria for the integrated management of Canadian oceans. *Fisheries and Oceans Canada. (CSAS DRAFT)*
- Freedman, J.A.** 2014. Technical Review of Shelburne Basin Venture Exploration Drilling Project Environmental Impact Statement, with plain language summary for SMFN. *MSES Consulting/St. Mary's (New Brunswick) First Nation.*
- DeKerckhove, D.T., & **J.A. Freedman.** 2013. Technical Review of Fisheries Resources issues for Northcliff Resources Ltd. Sisson Mine Project. *MSES Consulting/St. Mary's (New Brunswick) First Nation.*
- Butler, S.E., **J.A. Freedman**, M.J. Diana, D.H. Wahl, G.G. Sass, R.E. Colombo, T.W. Spier. 2013. Investigate enhanced sampling with traditional and new gears to assess detectability for Asian Carp in the Illinois Waterway – 2012 Annual Report. *Illinois Department of Natural Resources.*
- Freedman, J.A.**, S.E. Butler, M.J. Diana, & D.H. Wahl. 2012-2013. Investigate enhanced sampling with traditional and new gears to assess detectability for Asian Carp in the Illinois waterway. Quarterly Reports (January, April, July, October). *Illinois Department of Natural Resources.*
- Freedman, J.A.**, S.E. Butler, M.J. Diana, D.H. Wahl. 2012. Asian Carp Gear Efficiency and Detection Probability Study – 2011 Asian Carp Monitoring and Rapid Response Plan Interim Summary Reports. *Illinois Department of Natural Resources.*
- Butler, S.E., **J.A. Freedman**, M.J. Diana, D.H. Wahl. 2012. Larval Fish and Productivity Monitoring – 2011 Asian Carp Monitoring and Rapid Response Plan Interim Summary Reports. *Illinois Department of Natural Resources.*
- Butler, S.E., **J.A. Freedman**, M.J. Diana, D.H. Wahl, G.G. Sass, R.E. Colombo, T.W. Spier. 2012. Investigate enhanced sampling with traditional and new gears to assess detectability for Asian Carp in the Illinois Waterway – 2011 Annual Report. *Illinois Department of Natural Resources.*
- Freedman, J.A.**, D.H. Wahl, & S.E. Butler. 2012. Impacts of Invasive Asian Carps on Native Food Webs. *Illinois-Indiana SeaGrant.*
- Butler, S.E., **J.A. Freedman**, M.J. Diana, D.H. Wahl, G.G. Sass, R.E. Colombo, T.W. Spier. 2011. Investigate enhanced sampling with traditional and new gears to assess detectability for Asian Carp in the Illinois Waterway. *Illinois Department of Natural Resources.*
- Stauffer Jr., J.R. & **J.A. Freedman.** 2010. Final Report: Survey of the Fishes of Deep Waters of the Ohio, Allegheny, and Monongahela Rivers – Pennsylvania (SWG T-42). *Pennsylvania Fish & Boat Commission.*
- Stauffer Jr., J.R. & **J.A. Freedman.** 2010. Progress Report: Survey of the Fishes of Deep Waters of the Ohio, Allegheny, and Monongahela Rivers – Pennsylvania (SWG T-42). *Pennsylvania Fish & Boat Commission.*
- Freedman, J.A.** & J.R. Stauffer Jr. 2009. Fish community assessments of the upper Ohio River drainage. In: State Wildlife Grants: Advancing Understanding and Conservation of Pennsylvania's Diverse Natural Heritage (Ed: David Day). *Pennsylvania Fish & Boat Commission.*

Stauffer Jr., J.R., T.D. Stecko, T.D., & **J.A. Freedman**. 2009. Year Two State Wildlife Grant Report (T-42): Fish Community Assessments of the Upper Ohio and Lower Allegheny Rivers. *Pennsylvania Fish & Boat Commission*.

Freedman, J.A. 2004. Fish Survey Report in Cycle 3 Environmental Effects Monitoring interpretive report. *St. Anne-Nackawic Pulp Company Ltd., Nackawic, New Brunswick and Stantec Consulting Ltd., Brampton, ON*.

PRESENTATIONS

Invited and Departmental Seminars

Freedman, J.A. 2014. Assessing Ecological Effects on Aquatic Communities: Integrating Stable Isotopes and Ecological Metrics. University of Florida, Fisheries and Aquatic Sciences. May 13, Gainesville, FL.

Freedman, J.A. 2014. Examining ecological relationships using stable isotope analysis. Stetson University, Department of Biology. January 31, DeLand, FL.

Freedman, J.A. 2012. Asian Carp in the Illinois River: Sampling, Monitoring, and Foodweb Effects. Fisheries and Oceans Canada, Canadian Centre for Inland Waters. December 21, Burlington, ON.

Freedman, J.A. 2009. Dams, dredging, and darters: How large-scale habitat disturbances affect benthic fish assemblages. Pennsylvania State University, Scranton. October 23, Scranton, PA.

Freedman, J.A. 2009. Stable isotope analysis: Applications in wildlife and fisheries (and forest) sciences. Pennsylvania State University, School of Forest Resources. February 9, University Park, PA.

Freedman, J.A. 2005. Determining movements and trophic dynamics of fishes: a stable isotope approach; or, How I learned to stop worrying and love stable isotopes. Queen Mary University of London, School of Biological and Chemical Sciences. May 24, London, UK.

Selected Conference and Meeting Presentations

Freedman, J.A., M.J. Diana, & D.H. Wahl. 2015. Macroinvertebrate assemblages differ in lakes with and without gizzard shad. Annual Meeting of the Florida Chapter of the American Fisheries Society. February 17-19. Altoona, FL. (Oral)

Workman*, E.S., K.E. Work, M.A. Gibbs, & J.A. Freedman. 2015. Variation in the Blue Spring food web as determined by stable isotope analysis. Annual Meeting of the Florida Chapter of the American Fisheries Society. February 17-19. Altoona, FL. (Poster, *undergraduate student presenter)

Freedman, J.A. 2015. Sampling Large-River Fish Communities – Challenges and Solutions. Annual Meeting of the Southern Division of the American Fisheries Society. January 29-February 1. Savannah, GA. (Oral)

Freedman, J.A., S.E. Butler, M.J. Diana, & D.H. Wahl. 2014. Management and ecology of Asian carp in Illinois. Annual Meeting of the Florida Chapter of the American Fisheries Society. February 18-20. Altoona, FL. (Oral)

- Butler, S.E., **J.A. Freedman**, M.J. Diana, D.H. Wahl. 2013. Evaluation of gears for sampling different life stages of Asian Carp. Annual Meeting of the American Fisheries Society. September 8-12. Little Rock, AR. (Oral, presented by S.E. Butler)
- Freedman, J.A.**, S.E. Butler, M.J. Diana, & D.H. Wahl. 2012. Larval fish/productivity sampling and Gear evaluation and development - Project Updates. *Asian Carp Monitoring and Rapid Response Work Group*. Chicago, IL. November 13. (Oral Presentation)
- Freedman, J.A.**, M.J. Diana, & D.H. Wahl. 2012. Macroinvertebrate assemblages differ in lakes with and without gizzard shad. Annual Meeting of the American Fisheries Society. August 19-23. Saint Paul, MN. (Oral)
- Butler, S.E., **J.A. Freedman**, M.J. Diana, & D.H. Wahl. 2012. Investigate enhanced sampling with traditional and new gears to assess detectability for Asian Carp in the Illinois Waterway – Project Update. *Asian Carp Regional Coordinating Committee Science Meeting*. La Crosse, WI. March 13-14. (Oral Presentation)
- Freedman, J.A.**, S.E. Butler, M.J. Diana, & D.H. Wahl. 2012. Evaluation of gears for sampling various life stages of Asian Carp. Annual Meeting of the Illinois Chapter of the American Fisheries Society. February 21-23. Starved Rock, IL. (Oral)
- Freedman, J.A.**, S.E. Butler, M.J. Diana, & D.H. Wahl. 2011. Evaluation of gears for sampling various life stages of Asian Carp. Midwest Fish & Wildlife Conference. December 4-7. Des Moines, IA. (Oral)
- Freedman, J.A.**, B.D. Lorson, R.F. Carline, & J.R. Stauffer Jr. 2011. Dams, Dredging, and Darters: Effects of Anthropogenic Disturbances on Fish Assemblages. Annual Meeting of the Illinois Chapter of the American Fisheries Society. March 2-4. Peoria IL. (Oral)
- Freedman, J.A.**, R.F. Carline, & J.R. Stauffer Jr. 2010. Dams, Dredging, and Darters: Effects of Anthropogenic Disturbances on Fish Assemblages. Annual Meeting of the American Fisheries Society. September 12-16. Pittsburgh, PA. (Oral)
- Freedman, J.A.**, R.A. Curry, K.R. Munkittrick, R.F. Carline, & J.R. Stauffer Jr. 2009. Canonical correspondence analysis as a tool for integrating species abundance and stable isotope data. Ecological Society of America Annual Meeting. August 2-7. Albuquerque, NM. (Poster)
- Freedman, J.A.** 2009. Interaction of competition and nutrient pathways in shaping the trophic structure of benthic fish communities. Annual Joint Meeting of Ichthyologists and Herpetologists. July 23-27, Portland, OR. (Oral)
- Freedman, J.A.**, T.D. Stecko, B.D. Lorson, & J.R. Stauffer Jr. 2009. Development and efficacy of an electrified trawl for sampling benthic fishes. Northeast Fish and Wildlife Conference. April 26-28, Lancaster, PA. (Oral)
- Freedman, J.A.**, T.D. Stecko, D.A. Argent, W. Kimmell, R.F. Carline, & J.R. Stauffer Jr. 2008. The Structure and Function of Riverine Fish Assemblages: Natural and Anthropogenic Effects. Annual Meeting of the American Fisheries Society. August 17-21, Ottawa, ON. (Oral)
- Freedman, J.A.**, R.A. Curry & K.R. Munkittrick. 2006. The Lost Cohort: Back-tracking a year-class collapse in white sucker. Annual Meeting of the American Fisheries Society. September 10-14, Lake Placid, NY. (Poster)

- Freedman, J.A.**, R.A. Curry & K.R. Munkittrick. 2005. Assessing fish communities: integration of stable isotope analysis and traditional methodologies. Annual Meeting of the American Fisheries Society. September 11-15, Anchorage, AK. (Oral)
- Freedman, J.A.**, C.A. Doherty, R.A. Curry, K.R. Munkittrick, W.R. Parker & E. Blair. 2004. Effects of pulp mill effluent on fish communities. Canadian Water Network - National Symposium. June 20-22, Ottawa, ON. (Poster)
- Freedman, J.A.**, R.A. Curry, K.R. Munkittrick, W.R. Parker & E. Blair. 2004. Determining the effects of pulp mill effluent on fish communities using stable isotope analysis. Annual Meeting of the American Fisheries Society. August 22-26, Madison, WI. (Oral)
- Freedman, J.A.**, R.A. Curry, K.R. Munkittrick, W.R. Parker & E. Blair. 2004. Effects of pulp mill effluent on fish communities. Annual Meeting of the Canadian Society of Zoologists. May 11-15, Wolfville, NS. (Oral)
- Freedman, J.A.**, R.A. Curry, K.R. Munkittrick, W.R. Parker & E. Blair. 2004. Effects of pulp mill effluent on fish communities. Canadian Conference for Fisheries Research, January 8-10. St. John's, NL. (Oral)
- Freedman, J.A.** & D.L.G Noakes. 2002. Why are there no really, really big bony fishes? A comparison of maximum body size between teleosts and elasmobranchs. Ecology and Evolutionary Ethology of Fishes. August 2002, Quebec City, QC. (Poster)

PUBLIC OUTREACH, EXTENSION, AND MEDIA COVERAGE

Popular Press Articles

- Freedman, J.A.**, K.A. Nelson, S.E. Butler, M.J. Diana, & D.H. Wahl. 2013. Understanding the Effects of Asian Carp on Native Fishes. *Illinois Natural History Survey Reports* (No. 410; Summer Issue).
- Butler S.E., **J.A. Freedman**, M.J. Diana, & D.H. Wahl. 2011. Understanding the Asian Carp Invasion. *Illinois Natural History Survey Reports* (No. 406; Summer Issue).
- Freedman, J.A.** 2009. Fishes of Little Salt Spring: What can they reveal about the ghosts of fishes past? *Warm Mineral Spring/Little Salt Spring Archaeological Society Newsletter* (November/December Issue)

Programs and Presentations

- Careers and Grad School in Natural Resources Conservation & Management*. Guest lecture for BIOL 100 freshman seminar. Stetson University. April 22, 2014; DeLand, FL.
- Management of Asian Carp in the Illinois River*. Presentation for Student Subunit of the American Fisheries Society. University of Illinois. January 23, 2013; Champaign-Urbana, IL.
- Foodweb effects of Asian Carp in the Illinois River*. Presentation at the Prairie Lightning Symposium. November 30, 2012; Champaign-Urbana, IL.
- Aquatics Module – Fishes & Crayfishes of Illinois*. Taught program for East Central Illinois Master Naturalists (University of Illinois Extension). September 18, 2012; Penfield, IL.
- Fishes of Pennsylvania*. Taught fish sampling and identification for a non-credit field course for Tom Ridge Environmental Center. June 6-11, 2010; Erie, PA.

Fishes of Pennsylvania. Conceived and organized multimedia educational display for K-12 students at Penn State Exploration Day. April 18, 2009; University Park, PA.

The life and times of a science diver: Biology, archaeology, and paleontology in Florida's springs and rivers. Presentation to Nittany Divers. February 17, 2010; University Park, PA.

Our Constitution's Intelligent Design. Organized and arranged funding and logistics for public seminar given by Judge John Jones for Darwin Day 150/200 Celebrations. December 1, 2009; University Park, PA.

Jacques Cousteau's Legacy. Interview for a class project at Mount Nittany Middle School. December 5, 2008; State College, PA.

Little Salt Spring. Underwater videography for multimedia online presentation available at <http://www.ems.psu.edu/sciencediving/>

Science on a River Bottom. Underwater videography for multimedia online presentation available at <http://www.ems.psu.edu/sciencediving/>

Popular Press and Media Coverage

Study: Small fish don't like dug-out river bottom. June 16, 2013. Pittsburgh Post-Gazette. <http://www.post-gazette.com/stories/local/region/study-small-fish-dont-like-dug-out-river-bottom-691843/>, and see also the related story:

Commercial dredging to end on Allegheny River. June 16, 2013. Pittsburgh Post-Gazette. <http://www.post-gazette.com/stories/local/region/commercial-dredging-to-end-on-allegheny-river-691899/>

Research shows gravel dredging in river reduced fish numbers, diversity. June 7, 2013. Penn State News (featured by Eureka Science News, Science Daily, E! Science News, and others). <http://news.psu.edu/story/278878/2013/06/07/research/research-shows-river-dredging-reduced-fish-numbers-diversity>

Carpe diet? Chinese firm's plan to export Asian carp could help US waterways. June 5, 2013. <http://www.csmonitor.com/USA/2013/0605/Carpe-diet-Chinese-firm-s-plan-to-export-Asian-carp-could-help-US-waterways>

A closer look at how Asian carp impact food webs. Spring, 2013. The Helm: Illinois-Indiana SeaGrant newsletter. http://www.iisgcp.org/newsroom/helm/helm13_spr_final.pdf

Scientific surveys set 'lightning' talks. November 28, 2012; Champaign-Urbana News-Gazette. <http://www.news-gazette.com/news/education/2012-11-28/scientific-surveys-set-lightning-talks.html>

Going against the research grain: Largemouth Bass Predation Effect on Stocked Walleye Survival in Illinois Impoundments. November 24, 2012; Big Indiana Bass.com. http://www.bigindianabass.com/big_indiana_bass/2012/11/going-against-the-research-grain.html

Researchers find state's first river darter in the Ohio River. September 16, 2007; Pittsburgh Post-Gazette. <http://www.post-gazette.com/stories/news/environment/researchers-find-states-first-river-darter-in-the-ohio-river-501936/>

TEACHING AND ADVISING

Training

- 2014* Master Online Teacher Certificate. Illinois Online Network, University of Illinois.
(*in progress)
- 2009 Certificate in College Teaching. Schreyer Institute for Teaching Excellence, Pennsylvania State University.

Teaching Experience

University of Florida

- 2015 Riverine Ecology
Instructor (with Dr. Bill Pine) for undergraduate/graduate level course (13 students)

Stetson University

- 2014 Fish Ecology/Invertebrate Zoology Field Course
Instructor (with Dr. Terry Farrell) for upper division field course to Florida Keys (10 students)
- 2014 *Fish Ecology*
Instructor for upper division class (18 students)
- 2013 *Introductory Biology II*
Instructor for freshman lecture/lab (40/20 students).

University of Illinois

- 2013 *Fish Ecology and Management*
Instructor (with Dr. David Wahl) for graduate level class (10 students).

Pennsylvania State University

- 2009 *Biology: Basic Concepts and Biodiversity*
Teaching assistant for freshman level laboratory (25 students per section).
- 2009 *Diving into Prehistory: Florida's Rivers, Springs, and Mastodons*
Teaching and dive safety assistant for field course (15 students).
- 2008 *General Fishery Science*
Teaching assistant and guest lecturer for senior level laboratory and lectures (20 students).
- 2007 *General Fishery Science*
Teaching assistant and guest lecturer for senior level laboratory and lectures (20 students).
- 2007 *Diving into Prehistory: Florida's Rivers, Springs, and Mastodons*
Teaching and dive safety assistant for field course (15 students).
- 2006 *General Fishery Science*

Teaching assistant and guest lecturer for senior level laboratory and lectures (20 students).

University of New Brunswick

2004 *Human Physiology I*

Teaching assistant for sophomore level laboratory (25 students per section).

2004 *Mammalogy*

Teaching assistant for senior level laboratory (20 students per section).

2003 *Introductory Biology I*

Teaching assistant for freshman level laboratory (25 students per section).

Advising and Mentoring

2014 Careers and Graduate School in the Natural Resources

2009 Xi Sigma Pi Graduate School Information Session

2008 School of Forest Resources Undergraduate Mentoring Program

PROFESSIONAL SERVICE & LEADERSHIP

Service and Committees

2014-2015 Florida Chapter AFS Annual Meeting, Raffle, Fundraising, Refreshment Committees

2009-2010 Annual Meeting of AFS, Student Activities Subcommittee

2007-2010 Darwin Day Program Organizing Committee, Founder and Chair

2007-2008 School of Forest Resources Graduate Student Organization, President

2007 Coop. Fish & Wildlife Assistant Unit Leader Search Committee

2007 School of Forest Resources Seminar Committee, Chair

2004-2005 Graduate Student Alden Nowlin House, Board of Directors

2003-2005 Graduate Student Association, Biology Department Representative

Professional Organizations

American Fisheries Society

Education Section, Water Quality Section, Introduced Fish Section, Florida Chapter, Southern Division

American Institute of Fishery Research Biologists

American Society of Ichthyologists and Herpetologists

Ecological Society of America

Aquatic Ecology Section, Natural History Section, Applied Ecology Section

Society for Freshwater Science

Grant Proposal Reviewer

University of Wisconsin Water Resources Institute (with D. Wahl); Pennsylvania SeaGrant.

Journal Referee

The American Naturalist, Canadian Journal of Fisheries and Aquatic Sciences, Environmental Biology of Fishes, Journal of Fish and Wildlife Management, Fisheries, Freshwater Biology, Global Ecology and Biogeography, Hydrobiologia, Journal of Hydro-environment Research, North American Journal of Fisheries Management and Northeastern Naturalist.