

ZY BIESINGER

Lower Great Lakes Fish and Wildlife Conservation Office
US Fish and Wildlife Service
1101 Casey Road, Basom NY 14013

phone: 585.948.7046
FAX: 585.948.9538
zy_biesinger@fws.gov

Professional Positions

- 2013 – present. Fish Biologist. US Fish and Wildlife Service. Native species population restoration and assessment in the lower great lakes.
- 2014 – 2017. Adjunct Lecturer. Great Lakes Center at Buffalo State SUNY.
- 2012 – 2013. Post-doctoral Scholar. USGS Oregon Cooperative Fish and Wildlife Research Unit. Population assessment of amphibian population in arid wetlands.
- 2011 – 2012. Research Associate. University of Florida. Conducted surveys and collections of reef fish, benthic surveys, equipment deployment.
- 2006 – 2007. Graduate Teaching Assistant. University of Florida. Co-taught course on aquatic ecology and methods. Assisted a critical thinking and the philosophy of science course.
- 2005 – 2006. Graduate Research Assistant. University of Florida. Conducted surveys and collections of reef fish, benthic surveys, research equipment deployment.
- 2002 – 2004. Research Assistant II. The Ecosystem Center at the Marine Biological Laboratory. Modeled the soil thermal profile of arctic tundra to predict the onset and evolution of biologically active soil overlying permafrost. Assisted in harvesting vegetation at the Arctic LTER on the North Slope of Alaska for studies of nutrient cycling through the atmosphere, land, and water.

Publications and Reports

- Biesinger, Z.**, J. Deller, E. Weimer, J. Markham, T. MacDougall, L. Witzel, M. Hosack, M. Thomas, P. Kočovský, A. Pérez-Fuentetaja. 2015 March. Status of Lower Trophic Indicators and Forage Fishes in Lake Erie. Forage Task Group report to the Great Lakes Fishery Commission.
- Markham, J., K. Tallon, J. Braunscheidel, K. Kayle, A. Todd, T. MacDougall, L. Witzel, C. Murry, T. Sullivan, **Z. Biesinger**. 2015 March. State of Lake Erie 2015: Status of the Coldwater Fish Community. Coldwater Task Group report to the Great Lakes Fishery Commission.
- Biesinger, Z.**, D. Gorsky, G. Jacobs, J. Sweka, M. Webb, M. Talbott. 2014 March. Population Assessment of Lake Sturgeon in the Lower Niagara River in the NYSDEC Lake Ontario Annual Report 2013.
- Biesinger, Z.**, B. Bolker, D. Marcinek, T. Grothues, J. Dobarro, W. Lindberg. 2013. Testing an autonomous acoustic telemetry positioning system for fine-scale space use in marine animals. *J. Exptl. Mar. Biol. and Ecol.* 448: 46-56.
- Biesinger, Z.**, B. Bolker, W. Lindberg. 2013. Gag (*Mycteroperca microlepis*) space-use correlations with landscape structure and environmental conditions. *J. Exptl. Mar. Biol. and Ecol.* 443: 1-11.
- Biesinger, Z.**, B. Bolker, W. Lindberg. In prep. Comparing gag space use in two landscapes.
- Biesinger, Z.**, B. Bolker, W. Lindberg. 2011. Predicting local population distributions around a central shelter based on a predation risk-growth trade-off. *Ecol. Mod.* 222: 1448-1455.
- Bret-Harte, S., M.C. Mack, G.R. Goldsmith, D.B. Sloan, J. DeMarco, G.R. Shaver, P.M. Ray, **Z. Biesinger**, and F.S. Chapin, III. 2008. Plant functional types do not predict biomass responses to removal and fertilization in Alaskan tussock tundra. *J. Ecol.* 96:713-726.
- Biesinger, Z.**, E.B. Rastetter, and B.L. Kwiatkowski. 2007. Hourly and daily models of active layer evolution in arctic soils. *Ecol. Mod.* 206: 131-146.
- Biesinger, Z.** and J. Haefner. 2005. Proximate cues for predator searching: a quantitative analysis of hunger and encounter rate in the ladybird, *Coccinella septempunctata*. *An. Behav.* 69: 235-244.
- Biesinger, Z.**, J. Powell, B. Bentz, and J. Logan. 2000. Direct and indirect parametrization of a localized model for the mountain pine beetle — lodgepole pine system. *Ecol. Mod.* 129 (2-3): 273-296.

Selected Presentations

- Kočovský, P., **Z. Biesinger**, J. Deller, M. Hosack, T. MacDougall, J. Markham, A. Pérez-Fuentetaja, M. Thomas, E. Weimer, L. Witzel. 2015 August. The Lake Erie Forage Task Group: a model for cooperative forage fish monitoring. American Fisheries Society 145th Annual Meeting.
- Biesinger, Z.**, D. Gorsky, G. Jacobs. 2015 May. Lake Sturgeon spawning in the lower Niagara River. International Association for Great Lakes Research Meeting.
- Bruestle, E., D. Gorsky, **Z. Biesinger**. 2015 May. Tracking sturgeon movement and habitat use in the lower Niagara River. International Association for Great Lakes Research Meeting.
- Willink, P., G. Jacobs, Z. Woiak, D. Gorsky, **Z. Biesinger**, A. Kough. 2015 May. Monitoring activity patterns of Lake Sturgeon (*Acipenser fulvescens*) in Lakes Erie and Ontario using pop-off satellite archival tags. International Association for Great Lakes Research Meeting.
- Biesinger, Z.**, J. Deller, E. Weimer, J. Markham, T. MacDougall, L. Witzel, M. Hosack, M. Thomas, P. Kočovský, A. Pérez-Fuentetaja. 2015 March. Status of Lower Trophic Indicators and Forage Fishes in Lake Erie. Forage Task Group presentation to the Great Lakes Fishery Commission.
- Markham, J., K. Tallon, J. Braunscheidel, K. Kayle, A. Todd, T. MacDougall, L. Witzel, C. Murry, T. Sullivan, **Z. Biesinger**. 2015 March. State of Lake Erie 2015: Status of the Coldwater Fish Community. Coldwater Task Group presentation to the Great Lakes Fishery Commission.
- Biesinger, Z.**, 2014 April. Lake Sturgeon of the Great Lakes. Orleans County Federation of Sportsmen's Club.
- Biesinger, Z.**, C. Castiglione, D. Gorsky. 2014 February. Lake Sturgeon spawning habitat enhancement. Poster at the New York American Fisheries Society Annual Meeting.
- Biesinger, Z.**, 2013 March. Habitat effects of the space use and growth of reef-oriented fish in the Gulf of Mexico. The Great Lakes Center at Buffalo State SUNY.
- Biesinger, Z.**, 2012 August. Gag space use and fitness in two landscapes. Oregon Institute of Marine Science.
- Biesinger, Z.**, W. Lindberg, B. Bolker, D. Marcinek. 2012 January. Linking habitat, space use, and fitness of a mobile reef predator. University of Florida Marine Biology Symposium.
- Biesinger, Z.**, W. Lindberg, B. Bolker, D. Marcinek. 2011 March. Gag home range size in two landscapes. Benthic Ecology Meeting.
- Biesinger, Z.**, W. Lindberg, B. Bolker, D. Marcinek. 2011 January. Fine-scale movement and habitat data for gag grouper. Presentation and poster at the Southern Division – American Fisheries Society Meeting.
- Biesinger, Z.**, W. Lindberg, B. Bolker. 2010 February. Fine-scale movement and habitat data for gag grouper. Florida Chapter – American Fisheries Society Meeting.
- Biesinger, Z.**, W. Lindberg, B. Bolker. 2010 January. Fine-scale movement and habitat data for gag grouper. Poster at the Florida Artificial Reef Summit.
- Biesinger, Z.**, 2009 March. Landscape, movement, and growth in gag grouper. Florida Sea Grant Advisory Council.
- Biesinger, Z.**, W. Lindberg, B. Bolker. 2009 March. How the seascape shapes grouper behavior and affects fisheries conservation. Disney Worldwide Conservation Fund.
- Biesinger, Z.**, G. Niezgodna, P. Anson, M. Sisak, B. Bolker, and W. Lindberg. 2008 August. Obtaining fine-scale movement and habitat data for spatial fisheries modelling. American Fisheries Society Meeting.
- Biesinger, Z.**, 1997. Modeling Mountain Pine Beetle population redistribution. Mathematical Association of America Meeting.

Teaching Experience

2011. Invited lecture for Fish and Limnology FAS 6932 (graduate) and Introduction to Fishery Science FAS 4305C (undergraduate). 2011 May.
2007. Co-taught a Field Ecology course on Florida’s fresh and marine water ecology and methods at University of Florida.
2007. Graduate Teaching Assistant for “Foundations for Critical Thinking in Ecology” at the University of Florida.
1998 – 2001. Graduate Teaching Assistant for several labs at Utah State University’s Biology Department: microbial physiology lab, microbiology lab for majors, general microbiology lab, introductory biology lab.
1995 – 1998. Personal tutor in physics, algebra, calculus, statistics, writing at Utah State University.

Education

University of Florida	Fisheries and Aquatic Sciences	PhD, 2011
Utah State University	Biology and Ecology	MS, 2001
Utah State University	Biology (Magna Cum Laude with Honors)	BS, 1998
Brigham Young University	One semester of focused Marine Studies	1998

Honors and Awards

2010. Cynthia A. Melnick Endowment Award. \$4,000
2009 – 2010. Aylesworth Foundation for the Advancement of Marine Sciences Scholarship. \$6,000
2008. Disney Worldwide Conservation Fund. \$17,000
2008. American Academy of Underwater Sciences Kathy Johnston Award. \$2,500
2008. University Women’s Club. \$1,000
2008. Davidson Travel Grant. \$650
2008. Students United in the Research of Fisheries, University of Florida. \$100
2007. Rottmann Scholarship, Florida Chapter, American Fisheries Society. \$500
2004 – 2008. E.T. York Presidential Fellow, University of Florida
2004 – 2008. D.M. Smith Marine Fellow, University of Florida