

The Siscowette

Profiling women in science in the Great Lakes

FEATURED RESEARCH

Smith, L. A. & P. Chow-Fraser. 2010. *Impacts of adjacent land use and isolation on marsh bird communities*. *Environ. Manage.* 45: 1040-1051.

Lyndsay Smith and her co-author evaluated how urbanization around coastal wetlands affects marsh bird communities in southern Ontario. Birds specialized for nesting in wetlands were found to prefer rural over urban wetlands, whereas generalist species showed no preference. Synanthropic species

(those using human-associated habitats for nesting) tended towards increased species richness and abundance in urban wetlands.

Rural wetlands, in comparison to urban wetlands, had significantly higher scores for an index of biological integrity specifically designed for marsh-bird communities (the Index of Marsh Bird Community Integrity). More isolated wetlands had lower biological integrity

and lower species richness of obligate marsh-nesters than less isolated wetlands.

Management implications from this research include limiting urban development next to wetlands and the protection of all existing wetlands to preserve biodiversity and to mitigate against isolation effects.

Lyndsay is a Postdoctoral Fellow working in the Biology Department at McMaster University in Hamilton, Ontario.



Lyndsay Smith with a hooded warbler



Ashley Moerke is Associate Professor of Biology and Co-Director of the Aquatic Research Laboratory at Lake Superior State University, Sault

FEATURED PROFESSIONAL

Sainte Marie, Michigan. Her career path began as an undergrad, when she spent two summers doing research at Toolik Lake LTER Field Station in northern Alaska. After receiving her B.S. from the University of Minnesota-Duluth, she focused on aspects of aquatic ecology for her M.S. and Ph.D. at the University of Notre Dame.

At LSSU, Ashley strives to share her passion for aquatic ecology in and out of the class-

room. Through extensive collaboration, she introduces her students to stimulating research experiences and helps them build their professional networks. Ashley's greatest thrill is to hear from former students about their personal and professional accomplishments.

One of Ashley's goals is to create a center of freshwater sciences in the Upper Great Lakes region, located in Sault Sainte Marie, that will advance scien-

tific understanding of freshwater issues in the Great Lakes basin and provide hands-on training opportunities for students.

Outside of the classroom and field, Ashley takes advantage of living in the beautiful Upper Peninsula of Michigan. She spends her winters snowshoeing and cross-country skiing, her summers fishing, biking, canoeing, kayaking, and camping, and her autumns bird hunting with her husband and two dogs.

FEATURED STUDENT OR POSTDOC

Amanda Haponski is a Ph.D. student at the University of Toledo studying the population genetic structure of walleye. Her main interest is in how fine-scale temporal and spatial genetic structure and composition of Lake Erie spawning groups has changed with the introduction of invasive species, climate change, and harvesting.

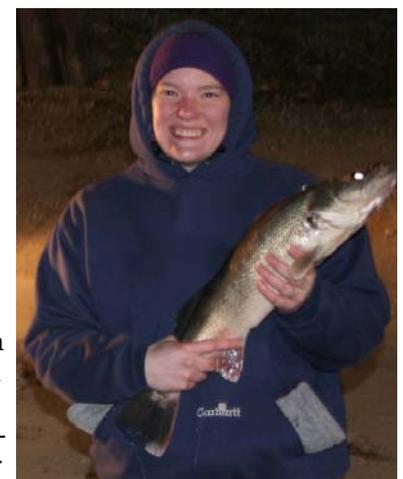
Amanda began her academic career as an undergrad at the University of Maine, studying

marine biology. With a prestigious National Science Foundation (NSF) Research Experience for Undergraduates award in hand, she went to study the phylogenetics of the greenside darter with Carol Stepien, University of Toledo. This project sparked her interest in genetics, and formed the basis of her subsequent M.Sc. research.

Amanda, now hooked on population genetics and conservation of native fishes, stayed on to

begin her dissertation on walleye.

Amanda has six publications, with three first-authored. Recently, she was awarded the International Association for Great Lakes Research Norman S. Baldwin Fishery Science Scholarship, Sigma Xi Grants-in-Aid of Research, NSF DeepFin Student Exchange Program Award, and a Smithsonian Institution Fellowship to support her studies.



Amanda with a walleye