

# The Siscowette

## Profiling women in science in the Great Lakes

### FEATURED RESEARCH

Dawson, HA., and M.L. Jones. 2009. *Factors affecting recruitment dynamics of Great Lakes sea lamprey (Petromyzon marinus) populations.* *J Great Lakes Res.* 35:353-360.

In this paper, Heather Dawson and her colleague explore the population dynamics of sea lamprey, an important predator of fish species in the Great Lakes. They found that larval production of sea lampreys varies tre-

mendously among streams and lake basins independently of other factors, and that spawning and/or larval habitat quality must play a critical role.

Heather recently became an assistant professor in the Wildlife Biology program (Biology Dept.) at the Univ. of Michigan-Flint. Her research program uses field, laboratory, and modeling techniques to study and predict impacts of species invasive to the Great Lakes. Heather is a

native Michigander who enjoys fishing and the outdoors. She is dedicated to solving natural resource management problems, and doing her part to protect and enhance the fish communities of the Great Lakes.

Heather received a dual Ph.D. in Fisheries and Wildlife and Ecology, Evolutionary Biology, and Behavior from Michigan State University in 2007. She then worked as a fishery biologist from 2007-09 for the U.S. Fish



Heather Dawson

and Wildlife Service in their sea lamprey control office located in Marquette, MI.

### FEATURED PROFESSIONAL

Elizabeth Wright is the Coordinator of Fish Health and Aquaculture with the Great Lakes Branch, Ontario Ministry of Natural Resources. Beth initially studied Marine Biology (B.Sc., Univ. Guelph) but switched to freshwater fisheries research for her M.Sc. (Laurentian Univ.) and Ph.D. (McGill Univ.). Beth grew up in Brampton, Ontario spending summers at the family cottage on Lake Huron where she was encouraged by family and

neighbours to examine dead fish on the beach. Beth started her career as a summer student with MNR and has worked in Ontario, Quebec, and B.C. Beth now provides fish health expertise to the provincial fish culture program and partner hatcheries. She helps to develop MNR programs and policies related to fish health management, aquaculture, and emerging fish health issues. Most of Beth's recent work has focused on understanding and treating viral

and bacterial infections in fish. Beth represents MNR on national fish health committees, at workshops and conferences, and is the current Chair of the Great Lakes Fish Health Committee. Beth encourages young women to pursue interests and careers in science, by doing volunteer work with CAGIS, the Canadian Association for Girls in Science. This is a fantastic association that encourages girls to explore science through a hands-on approach.



Elizabeth Wright

### FEATURED STUDENT OR POSTDOC

Natalie Sopinka is a M.Sc. student in Sigal Balshine's lab at McMaster University, in Hamilton, Ontario. Natalie was first introduced to the world of research as an undergrad studying African cichlids in Balshine's lab. Compelled by the wonderful intersection of evolution, ecology, and animal behaviour, she went on to study the aggressive behaviour of round gobies as an undergrad research project. A summer was spent collecting round gobies in Hamil-

ton Harbour; here she thoroughly enjoyed long, and sometimes rainy, summer days! With Ph.D. candidate Julie Marentette, they observed how round gobies compete with each other when contesting a shelter (an important resource for breeding and predator avoidance). Knowledge of round goby behaviour will hopefully aid in understanding how these fish tolerate living at high densities in the Great Lakes.

A growing interest in conversation biology led Natalie to study how exposure to aquatic pollutants influences male reproductive traits in fish for her M.Sc. research. This research focuses on round gobies from contaminated areas in Hamilton Harbour and plainfin midshipman from areas near pulp and paper mills in British Columbia. Data analyses have begun and she is excited to learn more about her systems and share the results!



Natalie Sopinka with a plainfin midshipman