



In Memoriam: Norine Dobiesz

NORINE DOBIESZ was a dedicated and talented environmental and fishery researcher who sought to make a difference. Norine's first professional career was as a computer programmer for the phone company. She felt something was missing in that career choice and decided to retool and learn how she might harness her analytical talents to make a difference for the environment. This led her to complete an M.S. degree in environmental science at the University of Wisconsin-Green Bay in 1998 and a dual Ph.D. in fisheries and wildlife and ecology, evolutionary biology, and behavior at Michigan State University in 2003.



Early on, her promise as a Great Lakes researcher was recognized by the award of the 2001 Norman S. Baldwin Fishery Science Scholarship. Her Ph.D. focused on the status of top predators in the main basin of Lake Huron. This work provided a launching point for an important review she led and published on the status of the Lake Huron fish community, as part of the Salmonid Communities of Oligotrophic Lakes (SCOL) Revisited initiative, in which she identified warning signs of the impending changes in that lake (Dobiesz et al., 2005). Norine was consistently concerned with translating complex technical topics for stakeholders and managers, and this led her to take the lead authorship in the predator-prey chapter for the Lake Huron Committee report on the state of Lake Huron in 1999 (Dobiesz and Bence, 2005), and to present summaries of her dissertation and SCOL work to the

Lake Huron Committee multiple times.

In 2004 Norine took a post-doctoral position with Nigel Lester at University of Toronto and lived in Owen Sound, Ontario. There she undertook a study of environmental monitoring data from lakes Huron, Erie, and Ontario, requiring the collation of data from numerous government agencies in Canada and the United States, to determine

changes in these lakes for the period 1968 to 2002. She documented significant warming rates in these lakes as well as remarkable changes in Secchi disc transparencies (Dobiesz and Lester, 2005). The lake warming was related to warming air temperatures, while increased transparency corresponded with phosphorus control in the lower lakes initially, which was amplified in all three lakes after dreissenid mussel invasion and establishment. The study was exemplary of Norine's competency and vision as it uses large, diverse data sets to reach compelling and important conclusions about large lakes. Her interest in great lakes went global when she took a position with Robert Hecky, first at University of Waterloo and then moving to the University of Minnesota-Duluth, Large Lakes Observatory (LLO), with sponsorship from the Great Lakes Fishery Commission. Along with an international group of authors, she led the development of a common set of metrics for comparing the ecosystem health of 10 of the largest lakes in the world (Dobiesz et al., 2010). While at LLO with funding from the Institute on the Environment of University of Minnesota, she also led development of a prototype for a common web-

based fishery and environmental database that could increase accessibility to lake-wide data for management, research, and public use across great lakes (globalgreatlakes.org).

Norine returned to Michigan State University in 2013 as a senior research associate at the Quantitative Fisheries Center (QFC), with duties both to research and to provide high-end computing and programming support on multi-disciplinary projects. Norine was heavily involved in a number of Great Lakes projects, including an updated evaluation of the status of predator-prey interactions in Lake Huron (He et al., 2015) and development, maintenance, and use of an operating model to evaluate alternative approaches to control of sea lamprey (e.g., Dobiesz et al., 2018). She had a strong interest in how to harness limited data to provide useful information to managers; in her last years at the QFC, she was seeking opportunities to provide fishery assessment support in such situations in Africa, and to the assessment of round goby abundance in Lake Huron (this work will be presented posthumously at IAGLR's 2019 Conference on Great Lakes Research). Norine became a fixture

at the QFC, providing computing advice to students, postdocs, and faculty, and providing hard thinking and advice regarding data integrity and management.

Norine was a quiet but committed champion of the Great Lakes. She cared deeply about their water quality, fisheries, riparian peoples, and their future. She will be missed.

Norine loved the International Association for Great Lakes Research. She looked forward to and made regular presentations at the annual conferences since 2003. Her presentations were clear, interesting, and always

included humor. She joined the *Journal of Great Lakes Research* team in 2012, providing valuable behind-the-scenes support to authors, reviewers, and the editors in her role as technical editor. She volunteered with various committees to promote the JGLR on social media. She presented at multiple author and reviewer workshops at IAGLR's annual conference. Norine was a quiet but committed champion of the Great Lakes. She cared deeply about their water quality, fisheries, riparian peoples, and their future. She will be missed.

James Bence, Michigan State University

Stephanie Guildford, University of Minnesota Duluth

Robert Hecky, University of Minnesota Duluth

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