

OMAFRA RESEARCH IN ACTION WEBINAR SERIES

Advancing Ontario Aquaculture - Research and Indigenous Collaboration



September 29, 2026



Virtual (Zoom)



10:00 - 11:30 AM

Dr. Marcia Chiasson, *Manager, Ontario Aquaculture Research Center*

- Delivering Training to Ontario Fish Farmers and Indigenous Communities for the Culture of Lake Whitefish

Dr. Neil Rooney, *Associate Professor, University of Guelph*

- Towards sustainable freshwater aquaculture in Ontario: Knowledge dissemination, collaboration, and dialogue among researchers and research users

Advancing Ontario aquaculture through partnerships that bring together Indigenous knowledge and scientific research to support sustainable stewardship of aquatic resources.

MEET THE SPEAKERS

Dr. Marcia Chiasson



Dr. Marcia Chiasson is Manager of the Ontario Aquaculture Research Centre where she leads research supporting sustainable fish farming in Canada. She holds degrees in Biology from the University of New Brunswick and a PhD in Genetics and Breeding from the University of Guelph. Her career spans academic, government, and industry roles, including a postdoctoral fellowship at the Center for Aquaculture Technologies.

Active in the sector, she also has served on the boards of the Ontario Aquaculture Association and the Aquaculture Association of Canada.

Dr. Neil Rooney



Dr. Neil Rooney is a professor and aquatic ecologist at the University of Guelph whose research examines food webs, biodiversity, and the functioning of aquatic ecosystems. His work spans fundamental and applied ecology, with particular interests in how human activities alter ecosystem structure and processes. His current research includes the environmental effects and sustainability of freshwater aquaculture, including nutrient cycling, benthic and water quality responses, and interactions with wild fish.

He works collaboratively with Indigenous communities, provincial and federal governments, the Great Lakes Fishery Commission, and cottage associations to support environmental monitoring and sustainable aquatic resource management, emphasizing research programs that address ecological, regulatory, and social dimensions together.

PROJECT SPOTLIGHT



Delivering Training to Ontario Fish Farmers and Indigenous Communities for the Culture of Lake Whitefish (*UG-KTTM-2023-102318: Dr. Marcia Chiasson*)

Lake whitefish populations in the Great Lakes have declined significantly, increasing the need for sustainable aquaculture production. This project developed practical training resources, including a culture manual, online course, and instructional videos, to provide accessible, science-based guidance for fish farmers, Indigenous communities, and conservation practitioners. Through partnerships with industry, Indigenous, and academic organizations, the project strengthened knowledge sharing and collaboration across Canada. Outreach activities, including the 2nd Lake Whitefish Culture Workshop, helped build the knowledge, skills, and connections needed to support sustainable lake whitefish production and rural and Indigenous economic development.

Towards sustainable freshwater aquaculture in Ontario: Knowledge dissemination, collaboration, and dialogue among researchers and research users (*UG-KTTM-2023-102326: Dr. Neil Rooney*)

Freshwater net-pen aquaculture can support sustainable food production and economic growth in Ontario. This project brought together First Nations, industry, government, academia, and other stakeholders to share knowledge and help guide future aquaculture research. Through collaborative workshops, participants explored sustainable aquaculture practices, discussed environmental challenges, identified opportunities to reduce the ecological footprint of rainbow trout farming, and strengthened partnerships across sectors.