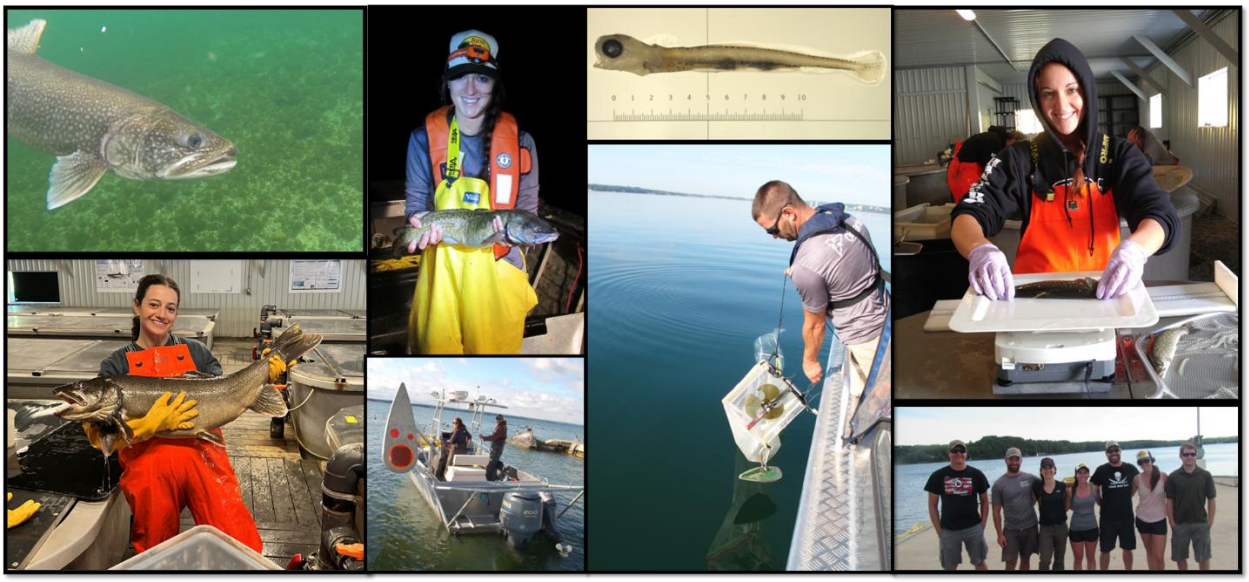
Graduate Student Opportunities – Sustainability of Great Lakes Fish Populations

Environmental & Life Sciences Graduate Program, Trent University
Supervisor: Dr. Erin S. Dunlop



Trent University is seeking motivated and passionate graduate students (MSc or PhD) to join research projects centered on the **sustainability, ecology, and management of Great Lakes fish populations**. Students will join a collaborative and dynamic research environment within the Environmental & Life Sciences Graduate Program under the supervision of **Dr. Erin S. Dunlop**, Senior Research Scientist with the Ontario Ministry of Natural Resources.

About the Research

Successful candidates will contribute to interdisciplinary projects focused on understanding the ecological processes that shape the persistence and productivity of native Great Lakes fishes in a rapidly changing ecosystem. These projects are carried out in **close partnership with First Nations, Parks Canada, and biologists and managers at the Ontario Ministry of Natural Resources**, providing students with unique opportunities for applied research, knowledge co-creation, and meaningful engagement with management and policy.

Potential Thesis Topics

Projects are flexible and will be tailored to align with the student's interests, expertise, and career goals. Possible areas of focus include:

- **Movement ecology of lake whitefish or lake trout** using large-scale **acoustic telemetry** networks
- **Early life history bottlenecks in coregonines** (e.g., lake whitefish, cisco) and implications for recruitment
- **Climate-driven changes in larval fish ecology**, including temperature, phenology, and lake dynamics

- **Zooplankton community dynamics in nearshore environments** and consequences for larval fish survival and growth

Students will have the opportunity to gain experience in field sampling, data analysis, science transfer, and collaborative research with government and Indigenous partners.

What We Offer

- A supportive and engaged research team and the opportunity to work closely with technicians, biologists, scientists, and management staff working for the Ontario Ministry of Natural Resources
- Access to state-of-the-art field equipment and laboratory facilities
- Opportunities for co-production of knowledge with First Nation partners and experience in conducting research using a Two-Eyed Seeing Approach
- Hands-on experience in applied fisheries science and resource management
- Competitive funding packages through the Environmental & Life Sciences Graduate Program

Ideal Candidates

We welcome applicants from diverse academic backgrounds including biology, ecology, environmental science, fisheries science, or related fields. Strong quantitative skills, the ability to communicate science, and enthusiasm for applied ecological research are important for this position. Curiosity, motivation, and the ability to work collaboratively are also key.

How to Apply

Interested candidates should email the following to **Dr. Erin S. Dunlop (erin.dunlop@ontario.ca)**:

- A brief statement of interest
- CV
- Academic transcripts (unofficial accepted initially)
- Contact information for two references (will only be contacted if the student is a good fit with the position)

The preferred start date is September 2026. However, some flexibility in the start date can be accommodated if needed.