

University of Toronto Scarborough, Mandrak Lab

Three field assistant positions available; salary is 12.73\$/hr for approximately 40hrs/week, with 4% vacation pay. Please contact:

fielding.montgomery@mail.utoronto.ca and rowshyra.castaneda@mail.utoronto.ca

1. Field Assistant: 12-14 weeks, start late-May, early-June

Project overview

Sampling for rare freshwater fishes, such as species at risk, may be restricted due to potential stress and mortality from handling in the field; thus, developing new passive detection methods is required. Underwater visual analysis (UWVA) is a passive method gaining popularity in freshwater systems. UWVA uses underwater cameras to assess species composition, richness, and abundance. To calibrate the use of underwater camera images to detect and calculate species abundance, we must compare UWVA and conventional sampling such as seining and electrofishing. The purpose of our research is to evaluate this novel, non-invasive detection technique for the Redside Dace (*Clinostomus elongatus*), assessed by COSEWIC and listed under the Ontario Endangered Species Act as Endangered.

Job description

The applicants hired for this position will be assisting a PhD student with her thesis research. Fish sampling and habitat assessments will be conducted in streams in southwestern Ontario and in the Greater Toronto Area. Skills and experience in the following:

Required skills:

- Class G Ontario Driver's License or equivalent
- Comfortable wading in streams and wetlands
- Can work away from the city 5 days a week (Mon-Thurs)
- Comfortable working long hours outdoors
- Ability to work in a team
- Able to get to UTSC, Scarborough (University of Toronto Scarborough)

Assets:

- Backpack electrofishing
- Seining
- Ontario Stream Assessment Protocol
- Fish identification skills

2. Field Assistant: 12 weeks, start June 6th

Project overview

Targeted sampling to monitor the Endangered Pugnose Shiner (*Notropis anogenus*)

populations and detect new occurrences is a priority recovery action. Historical sites in southwestern Ontario and sites with suitable habitat will be inventoried. This research will allow us to develop predictive models to identify areas of potentially suitable habitat, and to delineate areas of protected habitat. Sampling both wetlands and agricultural drains will increase knowledge on populations in healthy and degraded systems.

Job description

The applicants hired for this position will be assisting a PhD student with her thesis research. Fish sampling and habitat assessments will be conducted in wetlands and agricultural drains in southwestern Ontario. Skills and experience in the following:

Required skills:

- Class G Ontario Driver's License or equivalent
- Comfortable wading in streams and wetlands
- Can work away from the city 4 days a week (Mon-Thurs)
- Comfortable working long hours outdoors
- Ability to work in a team
- Able to get to CCIW in Burlington, Ontario (Canadian Centre for Inland Waters)

Assets:

- Boat electrofishing
- Seining/Fyke netting
- Ontario Stream Assessment Protocol
- Fish identification skills