

PhD Position - Ecology of Zebra Mussel Invasions in Lakes

Location: McGill University

Start date: September 2022 (but can start as early as June)

Stipend: \$24,000 (minimum) per year, 4 years.

The Ricciardi Lab at McGill University (<http://redpath-staff.mcgill.ca/ricciardi/>) will recruit a PhD student to investigate the ecology and impact of zebra mussel (*Dreissena polymorpha*) invasions in lake ecosystems.

Recent invasions of southern Quebec lakes (L. Memphremagog and L. Massawippi) by the zebra mussel provide a valuable opportunity to study the population expansion and associated ecological impacts at an early invasion stage in contrasting water chemistries. The PhD candidate will 1) test models of population density and impact in these lakes, using lake surveys and in situ mesocosm experiments; 2) quantify changes to the benthic invertebrate, zooplankton, and fish communities as zebra mussel populations expand; and 3) conduct a risk assessment of zebra mussel colonization and impact potential in lakes distributed across the southern Quebec region.

The position is fully funded for at least 4 years and will begin no later than September (and possibly as early as June) 2022. The student will be able to interact with an exceptional group of ecologists, conservation biologists, and evolutionary biologists in the McGill Biology department. They will have opportunities to collaborate with government scientists at the provincial and/or federal level. Furthermore, the student will be able to take a unique McGill graduate-level course on Invasion Ecology.

Qualifications: 1) a MSc or BSc (Hons) in ecology, zoology, or limnology by Spring 2022; 2) independent research experience and training in freshwater or marine environments; and 3) excellent oral and written communication skills in English; the ability to communicate functionally in French would be an asset. Previous experience sampling aquatic invertebrates is preferred.

This advertisement is aimed primarily at Canadians, but international students meeting the above qualifications will be considered. Candidates who are successful in obtaining a major scholarship (e.g. from NSERC or Quebec FQRNT) will be given an additional annual \$5,000 top-up salary. Applicants must meet the requirements of the graduate program of the Department of Biology (<http://biology.mcgill.ca/grad/gradstudies.html>) to enroll for September 2022. Please provide:

- 1) An up-to-date c.v.
- 2) University transcripts (a scanned copy or unofficial pdf is acceptable).
- 3) Contact information for at least two referees.
- 4) A statement (~ 1-2 pages) of research interests and relevant experience.

Submit applications as a single combined pdf, if possible, to Prof. Anthony Ricciardi (tony.ricciardi@mcgill.ca). Applications will be accepted until 31 January 2022, or until a student is chosen.