

Master of Science in *Natural Resources & Environmental Studies*
University of Northern British Columbia (UNBC)

*****M. Sc. position on *Small Lakes Fisheries Ecology in a Changing Environment* available*****

We are looking for candidates for one M.Sc. position within a collaborative fisheries ecology project led by biologists at the Omineca [Fish and Wildlife Section](#) of BC Ministry of Forest Lands, Natural Resource, Operations, and Rural Development ([FLNRORD](#)) and the University of Northern British Columbia ([UNBC](#)) in Prince George, BC, Canada.

Co-Supervisors: Dr. Nikolaus Gantner, FLNRORD Omineca Region & Environmental Science Program, UNBC, Prince George, BC and Dr. Eduardo Martins, Ecosystem Science and Management Program, UNBC, Prince George, BC

The M.Sc. position is embedded in the new multi-disciplinary project aiming to evaluate the '*Omineca Small Lakes Management Plan*' led by Dr. Nikolaus Gantner, Senior Fisheries Biologist (Omineca), in collaboration with Dr. Eduardo Martins at UNBC's [Freshwater Fish Ecology Laboratory](#).

The specific aim of the M.Sc. research is to characterize spatial and temporal trends in ecological conditions of selected small lakes (<1000ha) and evaluate the suitability of current fish stocking prescriptions within study lake systems. Trophic position and other lines of evidence will be used to infer suitability of selected Rainbow Trout strains stocked for small lakes of varying ecological conditions (e.g., food web characteristics, pH, oxythermal conditions). These conditions are driven by climatic conditions, hydrology, and land use in their watersheds. Sample collections will coincide with FLNRORDs regional Small Lakes Stock Assessments where study lakes will be assessed with RIC7 gillnets.

In order to optimize science-based decisions regarding FLNRORDs regional small lakes stocking program, we need to better understand the terminal trophic position, condition and growth of stocked Rainbow Trout in comparison to wild populations. Coupling thermal habitat use and occupancy of particular feeding habitats with actual feeding (diet and stable isotope analysis) provides a powerful tool to optimize stocking prescriptions and to inform conservation action. The outcomes of the student-led study will inform FLNRORDs Omineca Small Lakes Management Plans, thus directly leading to application of study outcomes.

Joining our FLNRORD Omineca Fisheries team is a great opportunity to work independently while being part of a team of professional biologists. This project will provide a balanced experience of lab- and field-based research. A suitable candidate for this position will have a strong background in fish ecology, aquatic ecology, and limnology. Knowledge of trophic ecology and stock assessment methods is an asset. A combination of research skills is needed and/or will be gained: attention to detail for laboratory work will be paired with ability to conduct fieldwork in remote locations in Northern BC. Candidates must have a valid Driver's License. The successful candidate will be required to obtain a Pleasure Craft Operators License, First Aid (Level 1), WHMIS training, UNBC Laboratory and Field Safety Orientation.

The tentative location of this position is the University of Northern British Columbia in Prince George, BC, under co-supervision of Dr. Nikolaus Gantner and Dr. Eduardo Martins. A [suitable graduate program](#) within the College of Science and Management will be selected based on the candidate's background and future academic aspirations. The desired start date is September 2018 (negotiable).

Partial funding for this position is available through project grants from the [Freshwater Fisheries Society of BC](#), the [Fraser Basin Council](#), and in-kind support through FLNRORD. Several [Graduate Scholarships and Awards](#) are available at UNBC and prospective students are encouraged to apply.

Interested candidates may inquire via [email](#) to Dr. Nikolaus Gantner and apply by submitting:

- 1) A statement of relevant experience and interest in the position (1-page Cover Letter)
- 2) An up-to-date curriculum vitae outlining academic standing and related experience,
- 3) Contact information for three references.

Closing date: Applications will be accepted immediately and the position remains open until filled.

Please note: Position subject to final approval and availability of funding and candidate's acceptance at UNBC.

Submit your application to: nikolaus.gantner@unbc.ca.