

Masters Research – Food webs supporting salmon production in an interior British Columbia watershed

Simon Fraser University, Department of Biological Sciences



Description:

We are seeking a masters student to join a large collaborative project investigating watershed-scale habitat-productivity dynamics of coho salmon in the North Thompson, interior British Columbia. The larger project is led by Fisheries and Oceans Canada and broadly focuses on how fish use diverse habitats across the watershed (e.g., small streams, wetlands), how shifting habitat conditions through space and time contribute to population-level productivity, and how human land use may impact these dynamics. This specific project will focus on lower trophic levels and ecosystem processes that support juvenile coho growth and production in streams and wetlands. This could include investigations into (1) primary production and ecosystem metabolism; (2) availability of aquatic and terrestrial invertebrates; (3) coho diets and food web structure; or (4) other related themes depending on student interests. There is a significant field work component to this project as well as opportunities to develop skills in data analysis and modelling and laboratory work. The ideal candidate would have previous experience in some or all of these areas, and have an interest in spatial ecological dynamics.

The student will be advised by Dr. Chelsea Little (SFU: www.littleecologygroup.ca) and work closely with Dr. Sean Naman and a small but growing team of researchers with Fisheries and Oceans Canada, Freshwater Ecosystems Section. Both of these teams value diversity and seek to build inclusive spaces. You will have a crucial role to play in building lab culture and defining our values. Those from under-represented groups are encouraged to apply. Unfortunately, we are only able to consider applications from Canadian citizens and permanent residents.

Funding and Timeline:

Given funding constraints, it is essential for this position to start by July 2022. Initially, the student will be employed by Fisheries and Oceans Canada for the first field season, then would start a masters program in the Department of Biological Sciences at SFU in fall 2022. Masters students will receive a minimum of \$24,000 per year in compensation (normally for two years). It is expected that a portion of this will come from teaching assistantships, and that students will apply for appropriate fellowships/scholarships. Funding from TAs and fellowships will be complemented with research funding.

To Apply:

Applicants should email a CV and brief cover letter to sean.naman 'at' dfo-mpo.gc.ca by **December 10, 2021**. Your CV should include relevant work and education experience and contact information for 3 references. Your cover letter should be 1 page or less and include a short description of your research interests and career goals.

The successful applicant will then apply to the Biological Sciences MSc program in January, 2022. Information about the MSc program and its requirements can be found at <https://www.sfu.ca/biology/graduate/prospective/degree-programs/MSc.html>.

If you have questions about the project or graduate school at SFU please reach out to Sean Naman (sean.naman 'at' dfo-mpo.gc.ca) or Chelsea Little (chelsea_little 'at' sfu.ca)