Forest Ecology Research Group

Summer 2024 Research Assistant Positions

Wilfrid Laurier University's Forest Ecology Research Group (FERG, led by Dr. Jennifer Baltzer: www.forestecology.ca) is hiring research assistants for two exciting research projects with fieldwork in the Northwest Territories (NWT) and the Yukon.

Background and project information:

The summer of 2023 was unprecedented in terms of its impacts on Canada's boreal forest. More than 18 million hectares of forested land burned. In the NWT, 4 million hectares burned, including many of FERG's previously established forest monitoring plots. These sites provide an opportunity to evaluate how pre-fire forest conditions affect forest ecology. At these sites, FERG researchers will measure attributes such as tree and soil combustion severity. The NWT team will also be establishing new plots in the NWT in the area around Fort Smith to evaluate wildfire impacts.

The Yukon team will establish a new network of ecological monitoring sites in the central Yukon across areas that have burned relatively recently up to more than 100 years ago. The team will be measuring a range of vegetation characteristics to investigate post-fire forest structure and composition shifts. One possible outcome of wildfires is a transition from predominantly conifer dominated forests to forests dominated by broadleaf species such as aspen. Recently, a new-to-science pathogen, the aspen running canker, has been identified in Alaska (where it is leading to high levels of aspen mortality), along with the Yukon. As such, the Yukon team will also be surveying for visual symptoms of aspen running canker and taking samples for lab analysis.

In addition to tree impacts, wildfires consume of most or all caribou lichen, an important food source for caribou. Lichen recovery following wildfire is slow and is impacted by other complex factors such as permafrost thaw. Both teams will be investigating caribou lichen recovery including measuring caribou lichen biomass at the sites they are establishing or resurveying.

Research assistantship overview:

- Research assistants will spend 6-14 weeks in the field in the NWT or the Yukon.
- Positions will be 3-4 months from May or June through August 2024.
- Prior to and following the field season, research assistants will undergo training such as Wilderness First Aid and bear safety training, support fieldwork preparation, and help with lab work (such as processing plant samples) and/or data entry on campus at Wilfrid Laurier University in Waterloo.
- Travel between Waterloo and the field site(s), food, and accommodation while in the field will be covered by FERG.
- Researcher assistants will work an average of 35 hours per week over the course of the summer, paid at $17.25-$20.25/hour depending on experience. In the field, long days and weekend work will be required.

Essential qualifications and experience:

You MUST clearly state how you meet these mandatory requirements in your application.

- Hold a valid class G driver's license (G2 not accepted)
- Be a student in or have completed a science-based university program (preferably in ecology or environmental sciences)

Preferred skills and experience:

- Strong teamwork and communication skills
- Ability to adapt to changing priorities
- Perseverance in physically demanding work
- Resilience and positive attitude in the face of challenging conditions
- Experience with the outdoors such as hiking and/or camping for multiple days, ideally in remote locations
- Fieldwork experience
- Boreal tree, plant and/or lichen identification experience
- Boating experience

How to apply:

Please send your application including a cover letter, resume, and unofficial transcript to Emma Sherwood (Research Lab Coordinator) at esherwood@wlu.ca. Please contact Dr. Jennifer Baltzer at jbaltzer@wlu.ca with questions about the position or FERG. Applications will be evaluated on a rolling basis beginning February 26th, 2024.