

Description

Graduate assistantship focused on population estimation of moose- we are seeking a highly motivated person to pursue a PhD degree in the Environmental and Life Sciences Graduate Program at Trent University in Peterborough, Ontario, Canada. The graduate student will join a large team implementing a field research project on the factors limiting and regulating moose populations in Ontario. The student project will be focused on population estimation techniques for moose using a variety of different field and associated sampling methods including helicopter-based aerial surveys, the development of sightability models, drone surveys, and trail cameras. The field project is a multi-year program that entails the GPS radio collaring of moose and wolves to assess cause-specific mortality, and the successful applicant will be expected to contribute substantially to the overall field efforts in addition to their own research. Data collection for the broader project began in 2023 and will be ongoing throughout the student's tenure. This field work is highly varied and will include conducting aerial surveys, deploying collars on adult and calf moose, wolves, and white-tailed deer, deploying and maintaining remotely triggered trail cameras, collecting non-invasive samples for black bear population estimation, vegetation surveys, hunter surveys, and more. The student will be co-supervised by Dr. Joe Northrup and Dr. Brent Patterson both of the Ontario Ministry of Natural Resources & Trent University.

Requirements

M.Sc. degree in ecology, wildlife biology, or related field is desired, but exceptional past experience may be considered in place of a M.Sc. degree. Applicants must meet the minimum entrance requirements for the Environmental & Life Sciences graduate program at Trent University. Desired qualifications include a GPA >3.5 (4.0 scale). A strong background in ecology, demonstrated analytical capabilities, and passion for wildlife research are required. Strong quantitative, writing, and oral communication skills are also required. The strongest applicants will have demonstrated experience publishing in peer-reviewed journals, and with programming languages commonly used for statistical and scientific applications (e.g., R and Python), and familiarity with geospatial software (e.g., ArcMap, QGIS). Applicants should be physically fit, have significant field experience, be comfortable with flying in small planes and helicopters, and be capable of working in varied terrain for extensive periods in extreme conditions (e.g., temperatures that will range between 30 and -40 C, lots of biting insects etc.).

Application instructions

Initially, all applications are to be sent as follows. Please email a cover letter with an explicit statement of analytical/quantitative AND field experience and abilities, current CV, unofficial transcripts, scientific writing sample and contact info for ≥ 3 references as a single attachment to moose.project.applications@gmail.com. **The successful applicant is expected to begin in fall, 2025. Application deadline is May 9, 2025 but review of applications will begin immediately and continue until a suitable candidate is found. Once a successful applicant has been determined a formal application to the University is required, with a deadline of June 1.**

Compensation

Students will receive a funding package of approximately \$34,000 per year. This includes a combination of a graduate teaching assistantship, internal fellowships and a research assistantship. Further, during the first 2-3 years of the project, students working fulltime in the field will be provided shared housing. Tuition fees can be found here:

<https://www.trentu.ca/graduatestudies/financial-matters/student-account-and-tuition/research-and-thesis-based-program-fees>. Numerous scholarships are also available and students are encouraged to apply (<https://www.trentu.ca/graduatestudies/tuition-awards-funding/graduate-scholarships-and-awards>). This funding package will not be reduced if a student is successful in obtaining a scholarship.

Patterson and Northrup Labs

More information about the research groups of Drs. Brent Patterson and Joe Northrup can be found here: <http://www.canidungulatelab.wixsite.com/brentpatterson> and here:

<https://www.joenorthrup.com/>. More information on the project can be found here:

<https://www.ontariomooseproject.ca/>