### **Description**

Graduate assistantship focused on population dynamics, space-use, and movement of moose and their predators- we are seeking two highly motivated people to pursue PhD degrees in the Environmental and Life Sciences Graduate Program at Trent University in Peterborough, Ontario, Canada. The graduate students will join a large team implementing a field research project on the factors limiting and regulating moose populations in Ontario. Specific student project objectives will be determined collaboratively between the students and research team, but will generally focus on moose population ecology, space-use and movement OR predator prey dynamics between moose and wolves. The field project is a multi-year program that will entail the GPS radio collaring of moose and wolves to assess cause-specific mortality. The successful applicant will have considerable responsibility and freedom to formulate and address basic and applied research questions grounded in ecological theory. Field work will be highly varied and could include deployment of collars on adult and calf moose, wolf and white-tailed deer live trapping to deploy collars, deployment of remotely triggered trail cameras, collection of noninvasive samples for black bear population estimation, vegetation surveys, hunter surveys, aerial population surveys and more. The student will be expected to conduct significant field work for their specific project AND assist in all field aspects of the broader project. The student will be co-supervised by Dr. Joe Northrup and Dr. Brent Patterson both of the Ontario Ministry of Natural Resources and Forestry & 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 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 have significant field experience, 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, 2024. Application deadline is January 19, 2024 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 February 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 may be hired externally as technicians and, if so, would receive additional compensation on top of the \$34,000 indicated above. Current domestic student tuition is \$9,160.11 (https://www.trentu.ca/graduatestudies/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: <a href="http://www.canidungulatelab.wixsite.com/brentpatterson">http://www.canidungulatelab.wixsite.com/brentpatterson</a> and here: <a href="https://www.joenorthrup.com/">https://www.joenorthrup.com/</a>