

PhD Opportunity – Movement Ecology of Coyotes at Long Point National Wildlife Area

The Geospatial Lab (<https://geospatial.uwo.ca/>) at Western University is seeking a PhD student to study the movement ecology of coyotes at Long Point National Wildlife Area on the north shore of Lake Erie. The project involves a close collaboration with Canadian Wildlife Service staff at Long Point, along with coyote experts from the Ontario Ministry of Natural Resources and Forestry. The student will be co-supervised by Dr Jed Long and Dr Tyler Wheeldon, enrolled at Western University, but also affiliated with the Canid Ungulate Lab (<https://canidungulatelab.wixsite.com/brentpatterson>) at Trent University.

An overarching goal of the project is a better understanding of the relationship between coyotes and the managed deer population at Long Point. We are also interested in studying coyote space-use patterns, habitat selection, and the territoriality / interactions between packs in the Long Point National Wildlife Area, along with potential movements out of the study site into southern Ontario. The student will gain experience in the spatial and statistical analysis of GPS tracking data, field deployment of GPS collars, data collection using camera traps, and learn about coyote behaviour and ecology. The project will involve several key stakeholders, and thus represents a good opportunity to build a scientific network. The student will be heavily involved in fieldwork, contribute to annual reports summarizing project progress and data analysis, and participate in scientific dissemination through academic presentations and articles.

Essential Qualifications:

- MSc degree in wildlife ecology, spatial ecology, biogeography, GISci, or a related field
- Experience using GIS and remote sensing software
- Demonstrated ability to conduct statistical data analysis (e.g., using R)
- Previous fieldwork experience and an ability to conduct physically demanding fieldwork
- Strong written and verbal communication skills

Desirable Qualifications:

- Experience handling wildlife in the field, including chemical immobilization training
- Scientific report writing
- Analysis of GPS tracking data
- Experience using camera traps
- Boating and/or ATV use and/or training

This position is fully funded through the Department of Geography & Environment at Western University which provides base-funding for all PhD students consisting of a scholarship and TA-ship. Additional project-specific funding will also be provided, resulting in a minimum annual funding package of \$35 000 / year for 4 years. Applicants will be strongly encouraged and supported to seek out additional scholarship funding. More information on our graduate program: <https://geoenvironment.uwo.ca/graduate/>.

The review of applications will begin on January 30, 2023 and the position will remain open until filled. It is anticipated the start date will be September 2023, but preliminary fieldwork may start earlier.

To apply please email a CV, copy of unofficial transcripts, and example of written work (e.g., a project paper) to jed.long@uwo.ca. Further questions can also be sent via email.