

Post-Doctoral Fellowship

Canada lynx movement ecology and predator-prey dynamics in the Yukon

The Integrative Wildlife Conservation lab at Trent University (Dennis Murray), in collaboration with the University of Alberta (Stan Boutin) and the Government of Yukon (Thomas Jung), is offering a PDF on lynx movement and foraging ecology.

Our research on lynx and their prey in the Kluane region of the Yukon spans decades, and the current project combines lynx GPS telemetry, accelerometry, and acoustic tracking, with intensive snowshoe hare population monitoring and landcover mapping, to infer dynamic interactions between lynx, hares and their landscapes. The fieldwork spanned four winters through the peak-to-low phases of a lynx-hare population cycle, where hare densities underwent a 20-fold change and 23 lynx were instrumented and intensively tracked with >1000 hare kills being recorded. We are primarily interested in understanding how lynx vary their movements and resource selection in response to dramatic changes in the density of their primary prey, and whether dynamic behavioural responses allow lynx to overcome extreme variation in their environments.

This rich dataset is ripe for testing a variety of basic and applied questions related to lynx foraging and movement ecology, and the fellow will have the opportunity to develop specific research questions within the scope of the larger project. For example, we also have abundant GPS telemetry and accelerometry data for snowshoe hares and can combine the lynx movement analysis with information on hare feeding, movement and habitat selection. Opportunities for graduate teaching and student mentoring may also be available.

Successful candidates MUST have an PhD in Ecology, Conservation Biology, or related field, demonstrated evidence of peer-reviewed publishing (including as senior author), strong quantitative skills, and an interest in working collaboratively within a large and diverse research group. Additional desirable skills include movement analysis, habitat selection analysis, processing GPS telemetry data, and remote sensing and GIS analysis.

Salary: \$70,000/year (CDN) plus research-related travel costs. The position is for a minimum of one year, with the opportunity for extension. Start date ASAP.

To apply, send a cover letter, curriculum vitae, unofficial academic transcript, and contact information for three references to: Dennis Murray (dennismurray@trentu.ca; www.dennismurray.ca)

The position will be filled as soon as a suitable candidate is found.