

## PhD studentship/postdoctoral fellowship in population dynamics of migratory birds

The Department of Biology at the University of Saskatchewan is seeking either a PhD student or 2-year postdoctoral fellow to lead two projects focused on population dynamics and conservation planning of migratory birds:

**Project 1:** We will develop novel population models for mourning doves in Missouri to guide harvest and conservation decisions. This project is a collaboration with Tom Thompson (Missouri Department of Conservation) and Dr. Tom Bonnot (US Fish and Wildlife Service). The PhD student/postdoc will focus on estimating demographics, including survival, productivity, harvest and movements. In addition, we seek to prioritize collection of data sets that contribute most strongly to demographic estimation and monitoring in future years.

**Project 2:** We will use all available demographic and population survey information collected since 1961 for the population of barnacle geese that breed in Greenland and winter in Ireland to estimate demographic rates and abundance in an integrated population model. We will identify demographic contributions to population growth rate, and test hypotheses about how land use and climate change are influencing barnacle goose population dynamics.

There will be opportunities to explore related research questions and collaborate on several projects in movement and population ecology in the Weegman lab.

### Minimum qualifications:

MSc in statistics, wildlife ecology or closely related field

Skills in Program R

Demonstrated excellence in verbal and written communication

Ability to work independently and as part of a research team

### Preferred qualifications:

Skills in JAGS, NIMBLE, Stan

Experience forming and running integrated population models

Knowledge and experience in avian ecology

Salary and benefits: For the PhD student: \$35,000 Canadian per year plus compensation for tuition and fees; for the postdoc: \$65,000 Canadian per year plus benefits

Start date: 1 May 2024

Last date to apply: 1 Dec 2023

To be considered for this position, please send a cover letter, curriculum vitae, and contact information for three references to Dr. Mitch Weegman ([mitch.weegman@usask.ca](mailto:mitch.weegman@usask.ca)).