Postdoctoral Fellowship in Ecological Modeling

Renewable Resources
University of Alberta

Joint with

Mathematics and Statistics
University of Victoria

Posting date: October 24, 2022

Application deadline: Consideration of applications will begin on November 7, 2022 and will continue until the position is filled.

Description: Applicants are invited for a Postdoctoral Fellowship in Ecological Modelling. The successful applicant will develop and apply statistical tools for the modelling of capture-recapture data of Lake Sturgeon in the Saskatchewan River in a collaborative research environment.

Specifically, the successful applicant will:
1. Develop analytical methods needed to analyze and critically evaluate mark-recapture data collected by angling on the North and South Saskatchewan Rivers.
2. Determine population size estimates through time for Lake Sturgeon in the North and South Saskatchewan Rivers.
3. Determine estimates of survival and recruitment for Lake Sturgeon in the North and South Saskatchewan Rivers.

This work will be conducted under the supervision of Dr. Mark Poesch (University of Alberta) and Drs. Laura Cowen and Mark Lewis (University of Victoria), in collaboration with Dr. Andrew Paul (Alberta Environment and Parks), and Dr. Stephen Spencer (Alberta Environment and Parks), with the location of the candidate to be determined.

This is a 12-month position. The position is available with a preferred start date of January 1, 2023. The salary will be $70,000 per year plus benefits. Additional funding is also available to support research related travel, including collaborative meetings and the dissemination of research results at meetings, conferences or workshops.

Qualified applicants should have completed a doctoral degree in statistics, applied mathematics, or quantitative biology with a focus on ecology. Other required qualifications include demonstrated research abilities in statistics, strong communication and presentation skills, and

experience working with complex data structures using modern data modelling software such as R.

Candidates with a background in capture-recapture methods will be preferred; however other areas of interest are: hidden Markov models, state-space models, or hierarchical Bayesian models. The work will be interdisciplinary and conducted in collaboration with researchers from other disciplines. Consequently, experience and/or an interest in fisheries science and in applications generally are also important.

Applications will be accepted by email. To apply, please submit the following items as pdf files to Kim Budinski (kbudinsk@ualberta.ca):

1. A cover letter that outlines their qualifications and experience, interest in this position, and available start date and preferred location (Victoria or Edmonton);
2. An up to date curriculum vitae (CV) that includes contact information for three referees and explains any career interruptions;
3. A list of graduate courses taken, and grades obtained;
4. Up to three examples of representative research publications;
5. An EDI statement including past experiences and activities and future plans to advance equity, diversity, and inclusion.

Consideration of applications will begin on November 7, 2022 and will continue until the position is filled. We thank all applicants for their interest, but only those selected for an interview will be contacted.