MSc/PhD position: Ecotoxicology of Farmland birds in Prairie Canada

Location: University of Saskatchewan, Saskatoon, Saskatchewan, Canada

Application deadl:ne: January 31 2025 or as soon as suitable candidate found

Start date: Position available to start asap ideally by May 2025 (Sept 2025 is possible for some projects but funding is available to start as soon as possible).

Duration: 2+ years MSc or 4+ years PhD from start date in 2025. Min 2 positions available

Funding: MSc $24K/year (domestic) for 28 months; PhD 25K/year for 52 months plus opportunity to receive scholarships or TAing.

Description:

We are seeking 2 or 3 talented students to conduct research addressing questions about farmland bird (grassland and granivorous) use of agricultural lands in the prairie regions of Canada (SK, MB, and AB). There are multiple projects available to tailor to the student's interest and background. The goal is to determine whether pesticides or other agricultural threats are affecting common and rare species population viability through seasonal use of croplands for breeding and foraging and how to reverse population declines with on farm conservation measures. The projects broadly include:

1) Identifying the relative impact of application timing and type of pesticides on field or other activities such as haying or mowing of field margins affecting individuals and populations. The student will measure pesticide exposure and effects in select resident and migratory farmland bird species (blackbirds, sparrows, larks, longspurs).

2) Quantifying the benefits of planting perennial forages and other regenerative practices in marginal croplands to enhance and conserve avian diversity on farms while also enhancing agricultural sustainability. This is part of a large collaborative project working with farmers to implement experimental planting of perennial vegetation on farms across the region.

3) Characterizing the importance of old homesteads and shelterbelts as habitat for avian or other wildlife. The goal is to understand the value of these sites as reservoirs or hotspots for biodiversity.

Our lab uses a variety of techniques for example surveys, bioacoustics, capture, banding, blood, fecal and feather sampling, vegetation and insect sampling, nest searching and/or Motus telemetry or GPS tagging with the option to conduct captive toxicology studies at the USASK Facility for Applied Avian Research.

Undergraduates- we are also seeking to hire summer undergraduate students to work on various projects May to Aug 2025. Feel free to apply.

Qualifications: BSc or MSc degree in biology, toxicology, animal science, agriculture or related field with excellent oral and written communication skills. Some field or research experience and quantitative statistical experience (working in R) preferred. Experience with nest searching, mistnetting and bird handling skills and first aid an asset. Must have valid driver's license and clean driving record.

How to apply:

If interested and qualified, please send a cover letter with statement of interest and suitability, your CV (including names of references), and a copy of your unofficial transcript by email to Dr. Christy Morrissey christy.morrissey@usask.ca