Ph.D. positions (2): University of Saskatchewan

Movement ecology of American black ducks and eastern mallards

Description: Two Ph.D. studentships are available with Dr. Mitch Weegman in the Department of Biology at the University of Saskatchewan. The positions are part of the launch of the Ducks Unlimited Canada Endowed Chair in Wetland and Waterfowl Conservation (https://www.ducks.ca/our-work/science/saskatchewan-endowed-chair/). These projects comprise independent and integrated objectives because black ducks and mallards co-exist in the northern and mid-Atlantic Flyway. The students will use state-of-the-art tracking devices deployed on both species to conduct research in movement ecology and conservation planning.

These projects are international partnerships among the Black Duck Joint Venture, Canadian Wildlife Service, Ducks Unlimited, US Fish and Wildlife Service, The State University of New York-Brockport, University of Saskatchewan, Ripley Waterfowl Conservancy, and member states of the Atlantic Flyway (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia). Our primary project goals are to (1) quantify movements and wetland use during the breeding season, (2) quantify reproductive attempts, full-term incubation and brood-rearing, (3) assess the extent to which migration characteristics, proportion of time feeding, energy expenditure and habitat used during wintering, staging and the reproductive period explain variation in reproductive attempts, full-term incubation and brood-rearing, and (4) use the relationships identified in objectives 1-3 to link the annual cycle for holistic conservation planning. We anticipate deploying 500 units on black ducks and 600-800 units on mallards over a 4-year period. These units will generate millions of data points providing examples of individual decision-making.

Prerequisites: Ideal candidates will have an undergraduate and master's degree in statistics, wildlife ecology or a closely related field, and interpersonal skills to lead discussions among collaborators. Preference will be given to those with a strong quantitative background (e.g., experience with Program R, Bayesian methods, spatial analysis), knowledge of migratory bird ecology and management, and field experience (e.g., handling birds, sampling aquatic vegetation). Students must have a valid driver's license. The successful applicants will be expected to publish manuscripts in peer-reviewed journals and present papers at scientific meetings.

Location: Saskatoon, Saskatchewan (with field work in eastern Canada and US)

Salary and benefits: Approximately $25,000 Canadian per year plus tuition.

Start date: September 2021

Last date to apply: 16 April 2021 or until a suitable candidate is selected

To be considered for this position, please send the following (preferably as a single PDF) to Dr. Mitch Weegman (weegmanm@missouri.edu):

(1) Letter of interest summarizing your experience, (2) Curriculum vitae or resume, (3) University transcripts (unofficial are fine), (4) Contact information for three references.