

PhD Graduate Research Assistantships (2) - Influence of the Conservation Reserve Program on Population Structure, Demography, and Space Use by Greater Prairie-Chickens in Kansas and Nebraska

Kansas State University and the University of Nebraska-Lincoln are each hiring a PhD student (two total) that will be fully funded with graduate research assistantship and tuition covered.

The students will hierarchically evaluate the influence of Conservation Reserve Program (CRP) grasslands on greater prairie-chicken populations in landscapes with varying proportions of native working grassland and enrolled CRP that will inform habitat management actions in the region. The PhD students will be responsible for managing a team of technicians through the capture, marking with GPS transmitter, and monitoring of greater prairie-chickens during lekking, nesting, brood rearing, and the nonbreeding season. Objectives of the project include: (1) Comparing greater prairie-chicken population demography, habitat use, and movements between landscapes lacking CRP and those with available CRP, (2) Evaluating the response of greater prairie-chickens to CRP type, (3) Evaluating the relative effects of Conservation Practices on use of CRP by greater prairie-chickens, and (4) Assessing the ecological function of CRP fields in the facilitation of movements, including dispersal, and landscape levels of genetic diversity.

One PhD position will be housed in the School of Natural Resources at the University of Nebraska-Lincoln and will develop multi-locus genomic data sets and conduct landscape genomic analysis to address research aims. One PhD position will be within the Division of Biology at Kansas State University located in Manhattan, Kansas and will use a variety of data types (e.g., life history, vegetation and remote sensing data) to evaluate population demography and/or resource selection at landscape scales. Students will collaborate on the project overall to achieve all objectives.

Both PhD students will perform field research and will live at provided field housing near one of the four Kansas and Nebraska study sites for a portion of each year (~ 5-6 months). Field research will involve using walk in funnel traps and rope-tensioned drop nets to capture greater prairie-chickens, attaching GPS transmitters, monitoring survival and reproduction of marked individuals, extensive vegetation/habitat data collection, and supervision of technicians. Data analysis will include estimation of vital rates, population growth rates, habitat selection, and landscape genetics. PhD students will be paid through a research assistantship for 4 years. Tuition and health insurance will be covered by the project. Students are responsible for student fees outside of tuition.

Location:

Lincoln, NE or Manhattan, KS

Required Qualifications:

A driver's license and completed MS degree in Wildlife Management, Natural Resources, Biology, Spatial Science, or equivalent field is required. Applicants need to have demonstrated proficiency in working both independently and as a part of a team as this project will be part of a collaborative effort with multiple stakeholders including federal and state agencies, NGOs, and private landowners.

Preferred Qualifications:

A strong candidate will have experience in at least three of the following areas: molecular analysis, population demography, wildlife-habitat relationships, grassland ecology, surveying wildlife populations, quantitative ecology, spatial analyses, remote sensing, and/or data management. Also of interest is a candidate with experience driving 4X4 vehicles, vegetation monitoring, and plant identification.

Start date:

Between October 1, 2024 and January 2, 2024 but flexible.

How to Apply:

To apply, please e-mail a cover letter, CV, unofficial transcripts, and names and contact information of three references (preferably as a single PDF) to Sarah Sonsthagen (ssonsthagen2@unl.edu) and Dan Sullins (sullins@ksu.edu) with the subject line as "Prairie-chicken GRA <last name>". If possible, please include a writing example (published manuscript, official report, etc). Review of applications will begin late August, 2024 and continue until a suitable candidate is identified.

Kansas State University is an Equal Opportunity Employer of individuals with disabilities, protected veterans and actively seeks diversity among its employees. Background check is required. UNL and NECFWRU values equity, diversity, and inclusion.