

Graduate Research Assistant – Environmental Dynamics

Start date: January or August 2026

Home program: Environmental Dynamics (ENDY), University of Arkansas, Fayetteville AR

Advisors: Dr. Kusum Naithani (University of Arkansas, Fayetteville) & Dr. Douglas Osborne (University of Arkansas at Monticello)

Position overview

We seek a doctoral-level Graduate Research Assistant to study the intersection of waterfowl movement ecology and landscape dynamics using a rich GPS-telemetry dataset on mallards. The student will develop independent research aligned with their expertise and interests, with opportunities to address questions such as:

- How landscape change influences waterfowl distribution
- Recursion and movement patterns to identify critical corridors and sanctuaries
- Effects of clean energy development on waterfowl behavior
- Habitat selection and distribution modeling across seasons
- Design of wetland habitat complexes to support waterfowl population

The GRA will join an interdisciplinary team across the University of Arkansas System (University of Arkansas at Fayetteville, University of Arkansas at Monticello, the Snowden Waterfowl Center of Excellence) and collaborate with external partners including the Lower Mississippi Valley Joint Venture and the U.S. Fish & Wildlife Service.

Responsibilities

- Analyze GPS-transmitter data and related environmental/landscape datasets
- Design and execute quantitative, geospatial, and modeling workflows
- Contribute to field efforts as needed (capture, tagging, habitat assessment)
- Prepare manuscripts, reports, and conference presentations
- Collaborate with academic, agency, and NGO partners; mentor undergraduate assistants

Minimum qualifications

Bachelor's degree plus relevant research experience or a Master's degree in ecology, wildlife science, geospatial sciences, ecological modeling, landscape ecology, or a closely related field

- Demonstrated quantitative and GIS skills (e.g., R/Python, spatial analysis)
- Strong scientific writing and communication skills
- Enthusiasm for occasional fieldwork and team-based research

Preferred qualifications

- Experience with animal movement data (telemetry/GPS, step-selection, recursion/UDs)
- Background in habitat or species distribution modeling
- Familiarity with remote sensing or landscape change analyses
- Record of peer-reviewed publication or conference presentations

Support

- Annual stipend: \$26,664
- Full tuition waiver
- Supplemental funding for conference travel and presentations
- Partial health insurance (66%)
- Qualified students are eligible to be nominated for the additional four year [university wide doctoral fellowships \(DDF: \\$22,000/year, DAF: \\$12000/year\)](#).

How to apply

Email the following materials (as a single PDF preferred) to kusum@uark.edu and osborne@uamont.edu with the subject line “**Application for Waterfowl Assistantship**”. Review of applications will begin immediately and continue until the position is filled. We welcome applicants from all backgrounds and are committed to fostering an inclusive and collaborative research environment.

- Cover letter (brief statement of research experience and interests)
- Curriculum vitae
- GPA and GRE score
- Names and contact information for three references

Application Deadline:

Spring: November 1, 2025

Fall: January 15, 2026

Please contact us at least two weeks earlier than the deadline.