Graduate Student Opportunity (MS or PhD level): Freshwater turtle ecology
Massachusetts Cooperative Fish and Wildlife Research Unit (MA Coop Unit)
University of Massachusetts, Department of Environmental Conservation, Amherst, MA

Applications due: Sunday, 03 March 2024 by 11:59 pm
Position start date: Summer/Fall 2024

Position description

North American freshwater turtles are facing several significant threats and stressors, with a notable number of species listed as endangered, threatened, or of concern. Unfortunately, it is not always clear what types of habitats should be protected to help conserve freshwater turtles because we lack information about their habitat use (nesting, foraging, and overwintering grounds), as well as population status. Therefore, in partnership with the U.S. Fish & Wildlife Service (USFWS), the U.S. Department of Defense, and the Massachusetts Division of Fisheries and Wildlife, we are seeking a MS or PhD level graduate student interested in evaluating habitat use and conducting population surveys of at-risk freshwater turtles in eastern Massachusetts. Specifically, the student will likely be working in and around Fort Devens RFTA and/or Hanscom Air Force Base. This is a heavily field-based project, with the student expected to drive to study site locations and collect data on tagged turtles throughout the year. We highly encourage people from historically underrepresented groups or non-traditional backgrounds to apply. The purpose of this position is to support access to higher education for students who might otherwise find it difficult or impossible to successfully pursue graduate study. The student will work closely with collaborators from the USFWS to design and carry out the study; the project will likely involve trapping, telemetry, GPS, and/or PIT tagging turtles. Focal species of interest include Blanding's turtle, Wood Turtle, and Spotted Turtle. The successful candidate will enroll in the MS or PhD program in the Department of Environmental Conservation (https://eco.umass.edu/degree-programs/graduate-programs/) and be part of the MA Cooperative Fish and Wildlife Research Unit (https://www1.usgs.gov/coopunits/unit/Massachusetts).

Salary/Benefits

The graduate student will be provided:

1. Research assistantship funding for several years through the University of Massachusetts, Amherst, which includes graduate student stipend (~$35,000 per year for 20 hrs/week), health benefits, tuition waiver, travel to conferences and field sites, and field supplies. More information about benefits is available through the UMass Graduate Employee Organization (https://www.geouaw.org/).
2. Professional development experiences that are specific to a career with the USFWS but transferable to other conservation agencies.
3. There will be an opportunity to apply for a USFWS Pathways Position, which would provide non-competitive hiring status at the USFWS following graduation.
4. Mentoring, encouragement, and autonomy to ensure that they see and understand how they and their perspectives are vital to achieving the mission of the USFWS.

Expectations

The graduate student will be provided training and support to learn and accomplish the following:

- Collect and analyze spatial data to evaluate population status and habitat use of freshwater turtles – including Blanding's turtle, which may involve working in deep marshes
- Use regional protocols to sample for freshwater turtles to maximize the value of the sampling effort and minimize risk to the turtles
- Work with GIS data and analyze spatial data using appropriate spatial models
- Perform field work on public and military lands – this is a heavily field based project, and previous field work is highly desirable but not required
- Present research findings to USFWS and at scientific conferences
- Prepare at least one manuscript (for MS level) or three manuscripts (for PhD level) for submission to a peer-review journal(s)

- Work with state agencies, private landowners, federal agencies, and other stakeholders to identify field locations
- Apply for and obtain state permits and Institutional Animal Care and Use Committee (IACUC) approval

Eligibility

- Minimum of a 3.0 GPA on a 4.0 scale (or equivalent) for undergraduate students
- U.S. citizen or permanent legal resident to be eligible for conversion to a USFWS position (https://www.usajobs.gov/Help/working-in-government/us-citizens/)

Qualities of preferred applicants

The following will be considered positive factors in choosing a successful candidate. We do not expect applicants to have all of these qualities and do not mean to discourage applicants.

- Evidence of a strong desire to learn (as supported by evidence of superior academic achievement, extracurricular activities, or life experiences)
- Membership in one of the following groups that have been traditionally underrepresented in the USFWS:
    - Women
    - Black/African American
    - Hispanic/ Latinx
    - Asian
    - Native American
    - Alaska Native
    - Pacific Islander
    - LGBTQIA
    - Disabled (https://www.opm.gov/policy-data-oversight/disability-employment/reference-materials/#url=Glossary)
- Interest and/or experience conducting field work (experience in wetland habitats, with turtles, or tracking animals with telemetry preferred)
- Interest in population ecology, spatial ecology, habitat use, GIS, and/or conservation of imperiled species
- Previous experience working with Blanding's turtles or sampling wildlife in deep marshes
- If applying for the PhD level position, an MS degree is highly desirable

Application

To apply, please send the following materials in a single PDF with the following document name "YOUR LAST NAME-turtle app-2024.pdf" in an email with the subject "Turtle application" to Dr. Graziella DiRenzo at gdirenzo@umass.edu by **Sunday March 03, 2024, 11:59 pm**:

(1) Cover letter (300–600 words) describing your interest in the position, past research experiences, interest in conducting fieldwork, desire to pursue graduate work, which degree you are interested in pursuing (MS or PhD), any discrepancies in your academic record, and/or aspects of your background that speaks to a unique perspective (e.g., membership of an underrepresented group in STEM, first person or generation in family to achieve college degree or seek advanced degree);
(2) Curriculum vitae or resume;
(3) Contact information (name, position, relationship to applicant, email, and phone number) for three references;
(4) Transcripts (unofficial).

Please send questions to any of the project investigators listed below.

Project investigators

Dr. Lisabeth Willey (lisabeth_willey@fws.gov), U.S. Fish & Wildlife Service
Dr. Katherine Ineson (katherine_ineson@fws.gov), U.S. Fish & Wildlife Service
Dr. Allison Roy (aroy@eco.umass.edu), U.S. Geological Survey, MA Coop Unit
Dr. Graziella DiRenzo (gdirenzo@umass.edu), U.S. Geological Survey, MA Coop Unit