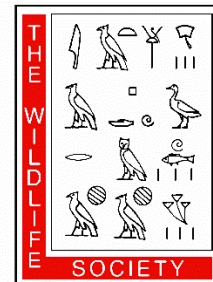




## U.S. Forest Service Native American Research Assistantship: Student Instructions

Applications due by **JANUARY 15, 2021.**



The [U.S. Forest Service](#) (USFS), through partnership with [The Wildlife Society](#), is offering research assistantships for Native American undergraduate or graduate students as part of the TWS professional development program for Native Americans. The program will facilitate student mentoring opportunities with USFS Research & Development (R&D) scientists, and promote student advancement and training for careers in natural resource and conservation-related fields. A paid stipend will be provided to cover living expenses during the assistantship time period. The Forest Service uses an ecological science-based approach to make informed decisions on the multiple-use management of the National Forests and Grasslands.

### Description

Short-term research assistantships are available for Native American students interested in wildlife and forest resources and excited to learn and work with an interdisciplinary team of researchers. We are seeking upper-level undergraduate (junior/senior) or graduate (M.S. or Ph.D.) students interested in conducting research in one of the following areas:

#### 1. Long term monitoring of treated and untreated Mexican spotted owl (*Strix occidentalis lucida*/MSO) territories on tribal lands

**Project Objectives:** 1) Identify the composition of fuel loading in treated and untreated MSO breeding territories (preliminary assessments done); 2) Identify the degree to which wildfire risk is reduced in MSO territories that have experienced moderate to low intensity silviculture treatments; 3) Identify general trends regarding the spatial arrangement of wildfire risk around MSO nest sites; and 4) Correlate MSO occupancy and reproduction rates to fuel loading and wildfire potential within breeding territories.

**Location, Estimated Duration, and Housing:** South-central New Mexico, Mescalero Apache Indian Reservation. The assistantship will last for approximately 12 to 16 weeks within the May 15 – September 15, 2021 time period. Local housing is available through USFS and other housing may also be available, student will be able to work with project leader to identify available options.

**Required Skills:** Must be able to hike long distances in steep, rugged terrain in adverse weather conditions at high elevations (7,000-9,000ft) – no exceptions. This is equivalent to passing a pack or Work Capacity Test (WCT) required for USFS wildland firefighters. Wildlife and forestry monitoring techniques, ecology, botany and ornithology background/experience is highly preferred. General competency using Excel, GIS, and GPS units as well as hard copy maps and communication radios. Ability to convey knowledge and information both through oral and written format regarding project purpose, methods, results and conclusion.

## 2. **Bison grazing and grassland birds: Evaluating prairie restoration on Midewin National Tallgrass Prairie**

**Project Objectives:** 1) Determine how bison grazing improves the diversity of native vegetation during the restoration of prairie ecosystems; 2) Determine how grassland birds respond to bison grazing during prairie restoration; and 3) Design and implement a grazing management program for prairie restoration and management that promotes desired conditions for grassland bird habitat.

**Location, Estimated Duration, and Housing:** Illinois. The assistantship will last for approximately 12 to 16 weeks during May 1 – August 31, 2021. Shared local housing (with other field technicians and graduate students working on the project) will be provided at no cost to the student.

**Required Skills:** It is expected the student will work 40 hours per week with pre-dawn starts, sometimes in hot and humid conditions and over uneven terrain. Attention to detail, strong observational skills, familiarity with excel, interest and experience in birds and wildlife monitoring a plus. Ability to communicate clearly with all team members. Strong written (report) and oral (poster presentation) communication skills.

## 3. **Tracking Native Species Distributions with Environmental DNA**

**Project Objectives:** To use environmental DNA (eDNA) sampling to understand the distribution aquatic species relevant to tribal natural resource management with a specific focus on Chinook salmon. The results of this sampling will be used to inform management actions benefiting populations of native fish managed by the Shoshone-Bannock Tribes.

**Location, Estimated Duration, and Housing:** Montana. The assistantship will last for approximately 12 to 16 weeks during March 1 – October 31, 2021. Local, affordable housing options are available. While students will need to secure and pay for their housing, the project leader will assist with connecting students to local resources.

**Required Skills:** Should be able to work independently on tasks for 1-2 hours at a time, follow written protocols, and record detailed notes in a lab book, and enter results in the computer. Experience working with Microsoft excel. Experience using a pipette will be helpful but is not required. This position may require sitting or standing in one location for up to 1 hour at a time. Applicants should have clear verbal and written communication skills, attention to detail and the ability to ask for clarification or assistance on tasks when necessary. Some experience reading peer reviewed papers and writing short papers or reports (e.g., school reports) is preferred.

## 4. **Acoustic bat surveys on the Buffalo Gap National Grassland of South Dakota**

**Project Objectives:** Conduct acoustic surveys of bats located on the Buffalo Gap National Grassland using Wildlife Acoustic recorders.

***Location, Estimated Duration, and Housing:*** South Dakota. The assistantship will last for approximately 12 to 16 weeks during May 1 – August 31, 2021. Local, affordable housing options are available. While students will need to secure and pay for their housing, the project leader will assist with connecting students to local resources.

***Required Skills:*** Microsoft Suite (Excel, Word, PowerPoint), GPS device, non-paved road driving of 4-wheel drive vehicles, and detail oriented. Students may experience some 10-hour field days and long periods of driving, and exposure to ticks, mosquitos, and hot and cold conditions.

Only a limited number of projects will be funded and are dependent on a suitable student/mentor match.

### **Expectations:**

Applicants will participate in laboratory or field data collection, data entry, and analysis as it relates to wildlife ecology and management.

During the research assistantship students will improve their oral and written communication skills. The successful applicant will be provided the opportunity to assist in publishing manuscript(s) in peer-reviewed journals, popular press, and/or present findings at scientific meetings along with USFS R&D scientists (dependent on travel funding). At the conclusion of the assistantship, students will also be encouraged to bring the benefit of their knowledge back to their tribe (for example, mentoring and teaching middle or high school Native American students about the natural resources and wildlife field).

Applicants must uphold and conduct their activities in accordance with the [Code of Ethics and Standards for Professional Conduct](#) as prescribed by The Wildlife Society. The selected students will be given a brief orientation to The Wildlife Society and to the Forest Service prior to the start of the assistantship.

Applicants will be expected to work independently and as part of a research team. Some travel may be expected for the project.

### **Qualifications:**

Applicants must be a member of an American Indian or Alaska Native tribe, First Nations, or a Native Hawaiian or Pacific Islander, or have some other indigenous identification, and be currently enrolled in an undergraduate or graduate program from an accredited academic institution. A bachelor's or master's degree in wildlife biology, ecology, forestry or other closely related natural resource discipline is preferred. Students with associate's degrees from tribal colleges or universities or other community colleges are also eligible.

The ideal candidate will have strong verbal and written communication skills with demonstrated capabilities in science writing, ability to work both independently and as a productive member of a research team, and an ability to work under adverse field conditions (possible extreme weather, difficult terrain, venomous snakes and biting/stinging insects). Submission of a writing sample is optional.

Students with a GPA above 3.0 are preferred, and students with a minimum 2.5 GPA will be considered.

Current membership with The Wildlife Society is not required; however, please note if you are a current TWS member.

### **Additional Information:**

The appointment is for 3 to 5 months within the 2021 calendar year, depending on the project. Starting dates are negotiable within the context of the seasonality of the research topics. Support includes a living stipend (subject to adjustment depending on housing situation). Provided housing is not guaranteed, but may be available in the area, offered at USFS facilities, or rented in local towns, dependent on project. See the project descriptions for more timing, location, and housing information.

Coverage under a medical insurance plan is required and the responsibility of the applicant. Transportation and relocation to and from the USFS office location will not be paid. Taxes and others federal, state, and local deductions are the responsibility of the applicant.

### **Application Procedure**

All application materials must be received by **JANUARY 15, 2021**.

To apply, please submit a brief cover letter indicating which research project you are applying for, resume/CV, official transcripts, verification of Native American ethnicity (e.g. tribal member enrollment), and two recommendation letters. Please list your research project preferences in the order of most to least interested.

If you have any questions about the application process or the assistantship program please contact Jamila Blake at [JBlake@wildlife.org](mailto:JBlake@wildlife.org) or 301-897-9770 x307. Application packages can be emailed as a single PDF to Jamila Blake, TWS Professional Development Manager at [JBlake@wildlife.org](mailto:JBlake@wildlife.org).