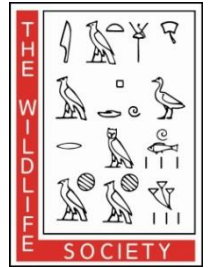




## U.S. Forest Service Native American Research Assistantship: Student Instructions



The U.S. Forest Service (USFS), through partnership with The Wildlife Society, is offering research assistantships for Native American graduate or undergraduate 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. **Assessment of camera trap surveys to estimate wild pig and white-tailed deer density**

*Project Objectives:* The objective of this project is to assess the effectiveness of camera-trap surveys to estimate wild pig (*Sus scrofa*, aka feral swine, feral hog, wild boar) and white-tailed deer (*Odocoileus virginianus*) population density as part of ongoing efforts to estimate and monitor populations of these species in response to management actions. Fortunately, both pig and deer populations can be estimated from data collected during the same survey.

*Location, Estimated Duration, and Housing:* South Carolina. The assistantship will last for approximately 12 to 16 weeks within the August 15, 2018 - December 15, 2018 time period. The Savannah River Site is home to several research organizations with many students and seasonal workers, so rental housing with flexibility for short-term leases can easily be located within local communities near the duty station (Aiken, New Ellenton, and/or Jackson, SC). The Forest Service itself does not have housing at the Savannah River Site. The student must secure and pay for his/her own housing. Assistance with the identification of housing options can be provided.

#### 2. **Integrating wildlife habitat into non-conventional forest management**

*Project Objectives:* Increase capacity to study and teach non-conventional forestry practices that enhance habitat for wildlife in managed forests by developing wildlife tree attribute databases for training and research and developing timber marking training exercises focused on creating and promoting wildlife habitat. Successful applicant will 1) assist with wildlife tree and habitat field data collection and summary and 2) assist with curriculum development to train professionals and students about forestry practices that benefit wildlife.

*Location, Estimated Duration, and Housing:* Wisconsin. The assistantship will last for approximately 12 weeks with a start date of mid-April or May. Student must secure his/her own housing. Most seasonal hires working in Rhineland live and drive to/from the dormitories at a nearby University of Wisconsin field station for reasonable, flexible, social, and fully-furnished accommodations.

3. **Evaluating regional and landscape-scale movement patterns of wood turtles**

*Project Objectives:* Research objectives are to: (1) quantify genetic structure and estimate gene flow across northern MN, MI, and WI using standard landscape genetic approaches (e.g., isolation-by-distance); (2) combine genetic data with landscape variables to determine potential movement corridors and barriers (e.g., distribution of river systems, dams, flow regimes, and (3) link results with regional conservation genetic research being completed in eastern portion of their range. Successful applicant will assist with collecting wood turtle tissue samples throughout upper Great Lakes region.

*Location, Estimated Duration, and Housing:* Wisconsin. The assistantship will last approximately 12 weeks and take place sometime between April and August. Student must secure his/her own housing. Most seasonal hires working in Rhinelander live and drive to/from dormitories at a nearby University of Wisconsin field station for reasonable, flexible, social, and fully-furnished accommodations.

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

*Project Objectives:* The primary objectives of this project are as follows: (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 silvicultural treatments; (3) Identify general trends regarding the spatial arrangement of wildfire risk around MSO nest sites; (4) Correlate MSO occupancy and reproduction rates to fuel loading and wildfire potential within breeding territories.

*Location, Estimated Duration, and Housing:* New Mexico. The assistantship will last approximately 10 weeks, starting no sooner than May 1, 2018 and ending no later than Sept 30, 2018. Local USFS housing is available in Ruidoso and tribal housing could be available.

5. **Space use, survival, and nesting ecology of avian cavity excavators in prescribed burns**

*Project Objectives:* Our objectives are to examine space use, survival, and nesting ecology of avian cavity excavators in recent prescribed burns. Specifically, this assistantship would involve: (1) Assisting with capturing, banding, and radio-tagging nestling and adult woodpeckers; (2) Assisting with blood sampling and banding of songbirds that use woodpecker cavities, such as bluebirds, wrens, swallows, and kestrels; (3) Monitoring and reviewing video of nest predators at woodpecker nest sites; (4) Measuring vegetation in plots at nest sites; (5) Sampling wood decay fungi at nest sites post-fledging; (6) Assisting with radio telemetry tracking, from ground or fixed-wing aircraft.

*Location, Estimated Duration, and Housing:* Washington. Field work involves hiking in mountainous terrain. The assistantship would last for approximately 12 weeks sometime between May 15, 2018 and August 1, 2018. Local USFS housing is typically available in Naches. If housing is not available due to housing shortages, the principal investigator will work with the student to find affordable housing in the area.

6. **Woodpecker Surveys in the Black Hills of South Dakota and Wyoming**

*Project Objectives:* To conduct surveys of Black-backed and/or American Three-toed Woodpeckers in the Black Hills area of South Dakota and Wyoming in order to gain population abundance data on species with local conservation status. Qualified applicants would be trained in the calls used to detect the species of interest. Various measures of the vegetation will be collected at each point in order to relate habitat characteristics to abundance of woodpeckers.

*Location, Estimated Duration, and Housing:* South Dakota and Wyoming. The assistantship will

last approximately 14 weeks and take place sometime between March and June. Student must secure his/her own housing.

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

### **Expectations:**

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

During the research assistantship students will have opportunities to develop 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).

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. Research assistants will be responsible for arranging their own transportation to and from the assistantship location. Please note, transportation that is not work-related is left up to the research assistant.

### **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 Associates degrees from TCUs or other community colleges will be considered.

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 and remote 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 2018 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 of approximately \$5,500 for approximately 12 weeks. Housing will be available in the area, and may be 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 FS 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 **OCTOBER 18, 2017**.

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. **Even if you are only interested in one research project, please rank all of the research projects in the order of most to least interested (#1 being most interested and #6 being least interested).**

If you have any questions about the application process or the assistantship program please contact Mariah Simmons at [MSimmons@wildlife.org](mailto:MSimmons@wildlife.org) or 301-897-9770 x310. Application packages can be emailed as a single PDF to Mariah Simmons, TWS Unit Services Coordinator, at [MSimmons@wildlife.org](mailto:MSimmons@wildlife.org) or mailed to The Wildlife Society office at:

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