



Wild Resource Conservation Program 2016 Grant Priorities

WRCP is soliciting grant applications in the following categories – surveys, research, and conservation & management. Below are detailed priorities within each of these categories.

The grant round opens Monday, August 1, 2016 and closes Wednesday, September 28, 2016.

Surveys

- **Identify and catalog areas of legacy sediment within state parks located in the Piedmont and Ridge and Valley physiographic provinces.**
These areas, where historic wetlands and floodplains are buried beneath deposition from now-breached mill dams, have very high restoration potential. Identifying legacy sediment sites will help the Bureau of State Parks identify and prioritize key locations for wetland and floodplain restoration.
- **Perform baseline surveys of aquatic species (fish/macroinvertebrates/mussels) in State Parks.**
Surveys of aquatic species are needed in French Creek, Evansburg, and Ridley Creek State Parks
- **Salamander Mussel and Mudpuppy surveys**
The Salamander mussel has an obligatory relationship with the Mudpuppy (as it's only host species). Distribution and demographic data is lacking for the Mudpuppy and is inexorably linked to the Salamander mussel distribution in PA.
- **Perform baseline surveys of amphibians & reptiles in State Parks, with an emphasis on seasonal pool inventories.**
Surveys of amphibians and reptiles found in seasonal pools are needed in Oil Creek, Parker Dam, and Black Moshannon State Parks.
- **Identify Bat Maternity Sites**
Conduct fall telemetry on northern long-eared bats at a maternity site. By trapping an active colony in fall, determine roost locations and follow use of each with counts. As transmitters near end of battery life, trap additional female(s) until site is no longer occupied (determining departure dates/weather patterns etc.), or follow females to a location that may represent a hibernation area. Conservation of this newly-listed species require identification of these locations.

- **Goshawk Status Assessment**

This project would continue the effort to assess the breeding status of goshawks in Pennsylvania. A combination of approaches could be used, including: revisiting locations of past goshawk nests within the state to determine presence or absence, conducting surveys in areas that may harbor goshawks but not visited in 2012 to 2015, and engaging citizen scientists across the state in finding and reporting goshawk nests, including falconers, hunters, birders, hikers and foresters. Clarification of the basic status of this species is needed.

- **Life history of the Chesapeake Loggerhead**

Information is needed including updating distribution, status, diet, growth, and habitat usage – which will be essential in the development of a reintroduction plan.

- **Surveys for Hellbenders in historically occupied streams and data gap areas, including deep water habitats**

Surveys of historic sites and data gap areas are needed to continue to assess the broad range of the Eastern Hellbender in PA. Among the areas with major data gaps are deep water habitats in the main stem rivers like the Allegheny, Susquehanna, and large lakes or impoundments (e.g., Kinzua dam).

Research

- **Rare Plant Propagation study**

Many endangered or threatened plant recovery plans call for augmentation of populations, either through creation of new populations, increased number of individuals in existing populations, or other means of increasing plant numbers. Investigate the methods, efficacy, and cost of plant propagation for *Agalinus auriculata*, *Carex bicknellii*, *Pycnanthemum torreyi*, and *Trollius laxus*. Appropriate planting and management methods will be determined such as location, timing, etc. and implementation of propagation trials if feasible and appropriate.

- **Goldenseal and Yellow Lady's Slipper ecological and social data**

The collection of ecological and social aspects of Goldenseal and Yellow Lady's Slipper is needed to have an understanding of the management needs for these rare, but collected species. Areas of investigation will include:

1. Ecological data: Compilation of survey data and population distribution information as well as a determination of the species habitat that is preferred or most common, and effective management techniques.
2. Social information: Collection of harvest needs from a public perspective, such as how much and where goldenseal and yellow lady's-slipper are being harvested, where it is being sold, is it sold inter-state or mostly kept for personal consumption, etc.

Conservation & Management

- **Installing Nano-tag Receiving Stations**

Identify priority locations for nano-tag receiving stations to fit the Motus Network for wildlife monitoring and install receivers (motus-wts.org). Motus links the efforts of many independent researchers interested in

terrestrial animal movement, both birds and bats, at multiple spatial and temporal scales. The purpose of Motus is to facilitate landscape-scale research and education on the ecology and conservation of migratory animals. Each telemetry station can detect signals from active tags at distances of up to 15 km. When combined, this array can track animals across a diversity of landscapes covering thousands of kilometers. This network is valuable to collect information for specific projects, but networked across North America, this contributes to an infrastructure to support a broad array of wildlife movement projects. Pennsylvania's wide east-west extent is a huge gap in this infrastructure.

- **Rare Plant Recovery Plans**

The Department is interested in continuing our effort to develop recovery plans for the rarest plants in PA. This is step one of a conservation strategy that will be used as a blueprint in the future. Researcher will develop recovery and implementation plans for the following PA Endangered plant species:

Aconitum reclinatum, white monkshood

Lycopodiella margueritae, Marguerite's club-moss

Paxistima canbyi, Canby's mountain-lover

Malaxis bayardii, Bayard's malaxis

Polemonium vanbruntiae, Jacob's ladder