

Conserve Wildlife Matching Grants Program

NJ Division of Fish and Wildlife Endangered and Nongame Species Program



Funding for the Conserve Wildlife Matching Grants Program comes from the annual renewal of your Conserve Wildlife license plate. The following are examples of the dozens of innovative wildlife conservation projects that have been awarded funding since 2008:

Conserve Wildlife Foundation of New Jersey

Title: Amphibians Crossing: Moving Forward

Objectives: In northern NJ, several species of frog and salamander rely on vernal pools to reproduce. During the first thawing nighttime rains of spring, hundreds or even thousands of amphibians may converge on the same breeding pool. In present-day NJ, their ancestral routes are often bisected by roads, and high roadkill rates year after year have caused many amphibian populations to crash. An ENSP study in Warren County, NJ, found that more than half of road-crossing frogs and salamanders were killed by traffic rates of just 15 vehicles per hour. Our annual Amphibian Crossing Project tackles the problem at a six high-priority road crossings, but the work is intensive, difficult to predict (weather-dependent), and the fix is temporary.

Our “Amphibians Crossing: Moving Forward” project will increase the public’s awareness of this human-caused conflict while moving toward more permanent solutions. Our objectives are to:

- Use migration data from volunteers to document all significant amphibian road-crossings with GIS and photos, and survey existing drainage culverts along those road corridors.
- Educate at least two communities about amphibian crossings and other wildlife connectivity shortfalls.
- Conduct a public opinion survey about roads-and-wildlife conflicts and the proposed efforts to alleviate them.
- Work with local agencies (towns, counties), contractors, and other stakeholders to implement long-term solutions such as amphibian tunnel systems and/or seasonal traffic detours at 2-3 priority locations.

Title: Statewide Mobile Acoustic Bat Survey

Objectives: This survey will deploy five AnaBat SD2 (Titley Scientific) acoustic detectors to record bat calls along driving transects across New Jersey from Spring through Fall, 2011. Our objectives are to:

- Develop suitable mobile acoustic monitoring routes (approximately 30 transects, each at least 10 miles long) across the state, ideally with at least one transect per county;
- Digitize the routes in ArcMap GIS;
- Enlist and train at least 30 volunteers to assist key staff in conducting the mobile surveys;
- Complete 1-3 surveys along each transect between May and October, 2011;
- Analyze call data to determine bat abundance and species presence (to the extent possible) along each transect;
- Furnish data to the NJ ENSP and to national acoustic monitoring coordinator;
- Increase public awareness of bat research and conservation through at least 3 acoustic survey demonstrations.

D&R Greenway Land Trust

Title: Cider Mill Grassland Enhancement

Objectives:

Enhance grassland-dependent species habitat by

- Eradicating invasive *Ailanthus altissima* from infested fields and hedgerows
- Establishing warm season grasses and forbs for structural diversity in those previously infested fields
- Removing a hedgerow between two fields to create a larger contiguous field

Title: Invasive Species Inventory for the Hamilton-Trenton-Bordentown Marsh

Objectives:

- Conduct surveys to determine where invasive plant species infestations exist, and in the process evaluate the relative 'health' of the various habitats located within the marsh boundaries.
- Obtain GPS locations of target species and map the locations of the infestations for management planning.
- Develop a task force to implement invasive species reduction.

Friends of Hopewell Valley Open Space

Title: Sourland Mountain Forest Restoration

Objective: Our objective is to conduct a forest restoration on 8 acres of abandoned agricultural land to increase core forest area and improve habitat for area-sensitive species such as Kentucky and Hooded Warblers. This will be achieved by constructing a deer enclosure and planting native trees, shrubs and herbs.

Title: Highlands-Piedmont Cooperative Weed Management Project

Objectives:

- Establishment of an early detection/rapid response function in the Hopewell Valley and Upper Raritan Watershed
- Preparation of strategic management plans that focus on protection of wildlife habitat through efficient efforts to control invasive species infestations
- Significant outreach efforts to support early detection/rapid response programs, improve private lands management, and reduce the use of invasive species in both public and private plantings

In addition, full invasive species management plans will be prepared for multiple preserves managed by FoHVOS and URWA. Preserve areas under these management plans will total approximately 1,000 acres (500 acres at each project area). These management plans will identify and map invasive species infestations and conservation targets by utilizing the WAP and Landscape Project.

Friends of Forsythe National Wildlife Refuge

Title: Native Landscaping & Demonstration Area at the Visitor Contact Station of Edwin B. Forsythe National Wildlife Refuge

Objectives:

- Develop a native plant landscape beneficial to resident and migratory wildlife for the new EBFNWR Visitor Contact Station that serves as a demonstration area for the visiting public. The EBFNWR entertains over 200,000 visitors annually.
- Provide self and guided interpretation and education, demonstrating the benefits of using native plants such as less watering, less use of harmful fertilizers and pesticides, and less maintenance.

Groundwork Elizabeth

Title: Student Education Program-Cataloging for BioBlitz 2008

Objectives: To work with the 2008 Union County Department of Parks and Community Renewal on the Elizabeth River Basin Bio-Blitz 2008 event as volunteers, learning the scientific method for counting and chronicling fish and wildlife, and then sharing information learned with peers and the community. We expect more than 50 such student volunteers.

Hudsonia Limited

Title: Creating effective preservation and restoration policies in the Meadowlands.

Objectives:

- Contribute to and compile a stronger information base on biological resources in the Meadowlands. Taxonomic and geographic areas of focus in 2008 include reptiles and amphibians, birds, terrestrial and aquatic invertebrates, rare plants, and understudied sites (e.g., natural and artificial uplands, small habitat remnants, freshwater marshes). In addition, existing data will be compiled from interviews and reviews of published and grey literature.
- Effectively disseminate the best available biological information to stakeholders and the general public. Vehicles for sharing information include databases, maps, written resources, workshops, presentations, and comments on proposed plans. Guiding decision-makers on the inclusion of available scientific information in sound preservation and restoration policies is an important aspect of this project.

Montclair State University Foundation

Title: Prevalence of the *Batrachochytrium* and *Ranavirus* Pathogens Among New Jersey Amphibian Populations.

Objectives:

- Use a non-invasive molecular test to screen for the presence of *Bd* in New Jersey amphibians and their habitats.
- Use a non-invasive molecular test to screen for the presence of *Ranavirus* in New Jersey amphibians and their habitats.
- Increase public awareness of amphibian conservation and wildlife disease, primarily through student participation.

Title: Status of the Common Snapping Turtles in New Jersey: Assessment of Human Consumption Safety.

Objectives: This proposed project aims to assess the risk of NJ snapping turtles for human consumption. Specific hypotheses to be tested in this research include: [Whether] NJ snapping turtles contain high level of mercury and are unsafe for human consumption.

Procedures: This proposed project is the second part of the research project to assess the status of the current common snapping turtle populations in NJ. The first part of the project aims to assess the sustainability of snapping turtles in NJ. During the first part of the project, snapping turtle population sizes will be estimated using noninvasive capture-mark-recapture technique during the non-harvesting season (May 1-June 14) at the most heavily harvested waterbody in NJ, the Cohannsey River. Commercially available snapping turtle traps will be placed to collect snapping turtles. Traps will be observed after 24 hours. Turtles found in traps will be measured, marked, weighed, notched, and released. Additionally, 0.25 g samples of keratin will be snipped from shells for measurement of mercury levels.

New Jersey Audubon Society

Title: Ecology of Colonial Waterbirds in the NY/NJ Harbor: 2nd Phase

Objectives: We propose a second phase to the “Harbor Heron” survey to conduct additional surveys during the later part of the season and examine site use patterns of NY/NJ Harbor wetlands by these birds after the young have fledged and/or during fall migration.

Specific objectives of this project are:

- to determine the abundance of long-legged colonial waterbirds at specific sites in the NY/NJ Harbor, especially later in the breeding season;
- to relate changes in abundance to potential seasonal changes in water depths and tides;
- to collaborate with NYCA and correlate numbers and patterns of occurrence in foraging habitats to those in the breeding colonies;
- to mobilize and coordinate citizen scientists to conduct observations of these colonial waterbirds and thereby engage them in nature study and create stewards of the birds and their habitat.

Title: Pine Barrens and Piedmont Landowner’s Guide: What You Can Do For Wildlife on Your Property.

Objective: To educate landowners in the Pine Barrens and Piedmont physiographic regions of New Jersey about how they can help a variety of bird and wildlife species by enhancing habitat on their property. The Landowner Guide is a booklet that discusses actions private landowners can take on numerous habitat types including grasslands, agricultural land, scrub-shrub habitat, forests, wetlands and developed areas.

Pinelands Preservation Alliance

Project Title: Northern pine snake survey and population monitoring study at the Warren Grove Gunnery Range

Objectives:

- Develop a model to estimate the population size of the northern pine snake in New Jersey.
- Survey, census, and monitor the pine snake population at the Warren Grove Gunnery Range to calibrate the model.
- Compare differences in the densities of the number of pine snakes from natural hibernacula at Warren Grove Gunnery Range (WGR) and Stafford Forge Wildlife Management Area (SFWMA).
- Compare spatial patterns (e.g., distances) of adult pine snakes egressing from selected hibernacula at WGR and SFWMA.

Protect Our Wetlands, Water and Woods

Title: White-tailed Deer Exclosure and Forest Restoration Study in Jonathan's Woods

Objectives: The primary objectives of this project are to erect a 3 acre deer exclosure in Jonathan's Woods and to collect baseline forest health data to which the long-term results of this project will be compared. Within the one year period of this Grant Program, POWWW plans to:

- Erect a deer exclosure fence;
- Use GPS/GIS technology to record the extent of the occurrences of invasive plants and their densities within the exclosure;
- Establish sampling plots to measure forest health using Bowman's Hill Wildflower Preserve's Plant Stewardship Index (PSI); and
- Create and install an interpretative sign that outlines the long-term goals of the project and provides contact information for individuals that would like to become involved.

Shark River Cleanup Coalition

Title: Meet Southern Monmouth County's Endangered Beach Nesting Birds

Objectives: We plan to do outreach and education for 3000 people over the summer of 2008 and into 2009 and immediately install appropriate signage at each of two nesting sites to keep dogs away from the nesting sites and to educate people about threatened beach nesting birds.

- Educate the public with brochures, signs, and outreach programs about endangered beach nesting birds, particularly Piping Plover and Least Terns, in southern Monmouth County, NJ.
- Create viewing opportunities for the public in conjunction with public outreach programs to see Piping Plover and Least Terns.
- Educate pet owners to reduce the minimum negative impacts of domestic dog activity on the beach.

South Jersey Land & Water Trust

Title: Critical Habitat Survey & Threatened/Endangered Species Identification Project

Objectives:

The Critical Habitat Survey Project is a multi-pronged approach to identifying and documenting rare plant and animal species and their associated habitats, as well as other habitats that feature high biological diversity and unique environmental characteristics, throughout the greater Woodstown-Pilesgrove community.

South Jersey Land & Water Trust (SJLWT) in partnership with the Woodstown-Pilesgrove Joint Environmental Commission (WPJEC) will encourage the use of the Woodstown-Pilesgrove Critical Habitat Survey Project for:

- Aiding in future sight plan compliance reviews;
- Filing of rare species sighting reports for inclusion in NJDEP Landscape Project and Natural Heritage Program databases;
- Working toward certification of all vernal habitats within Woodstown and Pilesgrove;
- Aiding in the designation of Conservation Zoning Districts that exhibit rare species and important or sensitive habitat.