

PITTSBURGH

WINGS

2016

ACROSS THE AMERICAS

celebrating conservation



CELEBRATING **13** YEARS OF CONSERVATION



A bat with its wings spread wide, perched on a cactus. The background features a repeating chevron pattern in shades of brown and tan, with several out-of-focus bokeh lights scattered throughout. The bat is the central focus, with its wings fully extended, showing the intricate structure of the membranes. The cactus it is perched on is a cholla cactus, with its characteristic segmented, spiny branches. The overall tone is warm and monochromatic, dominated by earthy browns and oranges.

WINGS ACROSS THE AMERICAS
is a program to conserve birds, bats,
butterflies, and dragonflies.

WINGS ACROSS THE AMERICAS



The US Forest Service—National Forest System, State & Private Forestry, Research & Development and International Programs—works with a wide range of partners here in the United States and overseas to conserve habitats and populations of birds, bats, butterflies and dragonflies.

Conserving Priority Birds

Wildlife watching is an increasingly popular American activity--and birding represents the lion's share. Almost 72 million people,

age 16 and older, fed, photographed or observed wildlife in 2011 and spent nearly \$55 billion on their activities.

Birds are indicators of national and international environmental health and trends. Unfortunately, many bird populations are significantly declining due to habitat loss, climate change, development, fragmentation, invasive species, and other causes both here and abroad.

The 193 million acres of National Forests and Grasslands managed by the US Forest Service are critical to maintaining bird populations. However, more than 350 bird species migrate to Latin America and the Caribbean each year. Habitat conservation on our nation's forests and grasslands is not sufficient. Conservation is needed range-wide, in breeding, migration and wintering areas, to ensure habitat and populations; otherwise, investments we make here at home for bird conservation will not be enough for us to see common migrants in the future.

Wings Across the Americas invests in international conservation and uses US

Forest Service experience and expertise to improve bird conservation at home and abroad. Scarce federal dollars are leveraged through partnerships with other agencies, non-governmental conservation organizations, local communities and private/corporate sources, both in the United States and abroad, to ensure long-term sustainable projects that benefit birds throughout their range.

Conserving Bats Worldwide

Bats are vital to the health of ecosystems and human economies worldwide. As primary predators of night-flying insects, bats consume enormous quantities of agricultural pests and reduce the need for chemical pesticides. Some bats are critical pollinators and seed dispersers for plants, many with great economic value such as the durian (high-priced Asian fruit) or the agave (source of tequila), closer to home in North America.

Protected bat colonies all over the world have become popular and valuable tourist attractions. A colony in downtown Austin, TX, adds some \$10 million tourist dollars a year to the local economy. The city boasts



that it is the “Bat Capital of America”.

Bats are threatened worldwide. Populations are in alarming decline because their colonies and habitats are destroyed both intentionally and inadvertently. Development, agriculture, climate change, and lack of scientific understanding of bat ecology lead to the inadvertent destruction of their habitats. With more than 1,200 species, bats account for nearly a quarter of all mammals, but they are among the least studied. In fact, population status and conservation needs of most bats have never been documented. Tragically, their populations also suffer from intentional destruction due to myths and misinformation.

Wings Across the Americas is working to assist in bat research, conservation management and capacity building to maintain healthy ecosystems in our National Forests and Grasslands, as well as provide US Forest Service expertise and experience for bat conservation internationally. Our investment at home and abroad increases our scientific knowledge of bats and creates a cadre of trained scientists and managers to conserve an important group of mammals that is often ignored by conservation planners.



Conserving Monarch Butterflies

The monarch butterfly is in serious decline. The loss of habitat on the wintering grounds and in the breeding areas is a continuing concern. In fact, this loss could severely affect the migration of the monarchs, as well as threaten their population. Current land use practices in the United States

and in northern Mexico are degrading the pathways. There are fewer milkweed plants (for larvae) and nectar resources (for adults) available, and hence, fewer suitable breeding sites. Furthermore, in Canada and the United States, land use and farming practices (i.e., pesticides and herbicide-resistant crops) are unfriendly to milkweed. In the overwintering areas, habitat is threatened by deforestation and pressure exerted by human settlements, like in

areas around the Monarch Butterfly Biosphere Reserve. There, local communities greatly depend on both the monarch and the forests for their livelihood and identity.

As part of the *Wings Across the Americas* program, the US Forest Service is working with partners to address habitat issues in Canada, the

WINGS ACROSS THE AMERICAS

Supports habitat conservation activities on National Forests and Grasslands, and from Canada’s Boreal Forest to the Grasslands and Wetlands of South America;

Organizes an annual awards program to recognize conservation partnerships involving Forest Service employees and their cooperators;

Provides training opportunities for biologists, land managers and administrators;

Participates in national and international conservation initiatives;

Enables partners and Forest Service employees to become more knowledgeable about global conservation needs.





US and Mexico for the monarch, through the Monarch Joint Venture and educational and outreach efforts for inner city youth and wildlife biologists.

Protecting Dragonflies and Wetland Habitats

Although dragonflies are an endless source of fascination, they have received little attention from biologists. Consequently, little is known about them. Flying over ponds, streams and rivers, these charismatic species are derived from an ancient order of insects that emerged 300 million years ago. Fossil records show that little has changed in their design over time. Dragonflies are efficient predators. They use their extendable lower lip and teeth to snag mosquito larvae, tadpoles and even small fish. They are used as indicator species for assessing habitat and water quality in wetlands, riparian forests and lakeshore habitat around the world. In North America, citizen monitoring networks—involving teachers, school groups, birders, nature societies and other partners—are forming to gather information and to collect data on dragonflies.

In North America, there are 5 common migrating dragonfly species. There is not, however, much information on the natural history or ecology of their migration. The best known of these five species is the Common Green Darner, which travels south in the fall and whose offspring return in the spring. Various reports have specified migrations of the Common Green Darners in Chicago, IL; Cape May, NJ; Crescent Beach, FL; and Veracruz, Mexico.

Through the *Wings Across the Americas* program, the US Forest Service has launched the Migratory Dragonfly Partnership, a flyway-level collaborative project that will increase awareness of the importance of dragonflies and their habitats as well as link projects and partners in Canada, the United States and Mexico for research, monitoring, capacity building, outreach and education. Recently, scientists and conservationists with an interest and expertise in migrating dragonfly research convened to discuss issues related to its migration in Canada, Mexico and the United States. A Migratory Dragonfly Action Plan that includes research, citizen science and education priorities related to migration, range shifts due to climate change and conservation of key habitats in North America is being developed.





RESEARCH PARTNERSHIP AWARD
Multi-scale Landscape Approach for Studying
the Secondary Effects of White-nose
Syndrome in Bats of the Upper Midwest

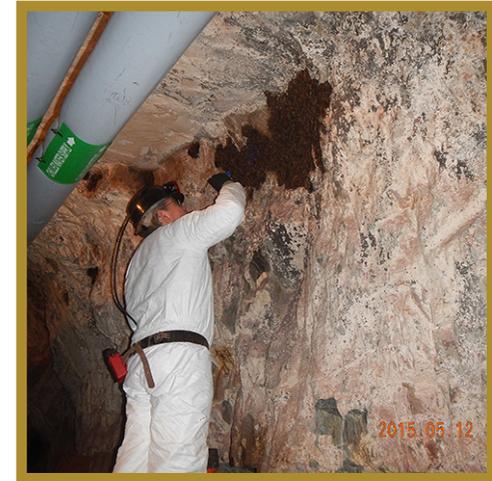
Multi-scale Landscape Approach for Studying the Secondary Effects of White-nose Syndrome in Bats of the Upper Midwest

In 2014, the US Forest Service began an innovative partnership to help bat populations across the Upper Midwest in response to the continued spread of white-nose syndrome (WNS). A team of scientists and managers have been developing the science and tools required to recover and conserve bat populations. Together, the partners involved in this effort are exploring the interactions between bats and their environment. They are investigating regional movements and habitat use by integrating large-scale, seasonal movement patterns with smaller-scale habitat information.

Although it is well known that bats migrate from summer roosting sites to winter hibernacula, not much is known about the details of movement patterns, the paths taken, and habitats used during migration. Through genetic analysis, scientists are trying to answer these questions. Tissue samples, for example, from little brown bats (*Myotis lucifugus*) and northern long-eared bats (*Myotis septentrionalis*) in winter hibernacula and summer roosting locations across Wisconsin, Minnesota, and Upper

Michigan may be able to provide valuable information about movement details. In addition, bat wing tissue biopsies from little brown bats may identify potential immunity (or adaptation) to WNS and determine whether the diversity of naturally occurring skin microbiota on bats could slow down or resist growth of the WNS fungus. Conservation of disease-resistant populations will be important to recovery. These bats will be valuable in passing along WNS resistance across landscapes and generations. Obtaining these samples involved the participation and collaboration of many biologists from the Wisconsin, Michigan and Minnesota Department of Natural Resources, several US Forest Service units, and universities.

Wing biopsies are currently needed to obtain genetic samples, yet there is concern about their impact on the animals. Those involved in this partnership are developing methods for isolating DNA from cheek swabs, which are less invasive. If successful, the approach can be adopted by other researchers and potentially lower handling stress of bats, especially in caves where



bats are more susceptible to WNS.

Genetic information has been used to understand seasonal movement patterns by associating individual bats captured from summer areas with a specific hibernacula, or areas where they spend the winters. Greater understanding of this relationship will allow land managers to restore or improve these habitat areas, especially for federally endangered and threatened species. Sound forest management can play a key role in providing and/or enhancing habitats and to maximize insect availability during spring emergence and fall swarming. The availability of such food resources in the general vicinity of hibernacula can be





critically important to bats affected by WNS as they emerge in spring and attempt to restore body fat and repair tissue damage from WNS infection.

Additionally under this partnership, there has been acoustic monitoring to evaluate bat activity patterns and habitat use at the landscape scale. The principal investigators established numerous study grids on the Chequamegon-Nicolet (WI) and Ottawa (MI) National Forests using the framework established by the North American Bat Monitoring Program (NABat). The NABat is a continent-wide, grid-based survey composed of both fixed-plot and driving acoustic transects to monitor trends in bat

activity across all land ownerships. Using both mobile and stationary acoustic monitoring methods within each study grid, bat activity patterns can be examined in relation to the surrounding landscape (habitat). By integrating this information with local-scale timber management activities, we can gain valuable insight into how bats use the habitats. This in turn can guide future management planning and implementation by ensuring that adequate protections and mitigations are in place to protect those habitat features favored by bats, especially during the first 14 days of spring emergence, as that period of a bat's life-cycle is crucial when recovering from WNS.

Lastly, the collaborators on this program are working to complete a full-genome mapping of the northern long-eared bat. Unfortunately, this information is currently not available for this species, which is why many studies use little brown bats as surrogates.

award winners

- Deahn Donner,
Northern Research Station,
US Forest Service
- Brian Heeringa,
Chequamegon-Nicolet National Forest
and Northern Research Station,
US Forest Service
- Paula Marquardt,
Northern Research Station,
US Forest Service
- Daniel Eklund,
Chequamegon-Nicolet National Forest,
US Forest Service
- Dan Lindner,
Northern Research Station,
US Forest Service
- Jacquelyn Frair,
SUNY College of Environmental Science
and Forestry





certificate recipients

- Tim Catton,
Superior National Forest,
US Forest Service
- J. Paul White,
Wisconsin Department of Natural
Resources

- Jennifer Redell,
Wisconsin Department of Natural
Resources
- Jon Palmer,
Northern Research Station,
US Forest Service

- Ben Prom,
SUNY College of Environmental
Science and Forestry
- Michelle Jusino,
Northern Research Station,
US Forest Service
- Bill Scullon,
Michigan Department of Natural
Resources
- Mike Scafani,
Pennsylvania Game Commission
- Kari Kirshbaum,
Chippewa National Forest,
US Forest Service
- Alyssa Bennett,
Vermont Fish and Wildlife Department
- Carl Herzog,
New York State Department of
Environmental Conservation





**HABITAT CONSERVATION
PARTNERSHIP AWARD**
Brule St. Croix Legacy Forest



Brule St. Croix Legacy Forest

The Brule St. Croix Legacy Forest is a 65,867-acre conservation initiative started by the State of Wisconsin in 2012 and completed with the cooperation of the US Forest Service's Forest Legacy Program. It contains valuable water resources and wildlife habitat that will remain undeveloped under a Forest Legacy conservation easement

held in perpetuity by the State of Wisconsin. This Legacy Forest spans across four counties in northwestern Wisconsin and includes the headwaters of both the St. Croix National Scenic River and the Bois Brule River. It represents a missing puzzle piece of protected lands across the Great Lakes states, because it links together a nearly 1 million acre expanse of protected lands.

Much of the easement area lies within one of the best landscapes in North America to restore the globally rare Pine Barrens community. This unique ecosystem supports a high number of species, including Sharp-tailed Grouse, the federally endangered Kirtland's Warbler and 28 species found on the Wisconsin state list of Species of Greatest Conservation Need, including the Vesper Sparrow and Brown Thrasher.

Wisconsin Pine Barrens habitat sup-

ports a new population of the federally endangered Kirtland's Warbler. Wisconsin, Michigan and Ontario, Canada, have the only documented nesting pairs of this species in the world. The project area is one of five counties in Wisconsin with recently documented warbler sightings. Kirtland's Warblers' limited nesting requirements, requiring both specific tree species and soil conditions (young jack pine forests growing on a special type of sandy soil), make the protection and proper management of their habitat critical to their survival. In order to maintain this important habitat, fire is a required management tool.

The permanent easement ensures that large blocks of Pine Barrens habitat will be maintained at different successional stages and managed on a rotational basis to meet the habitat requirements of all the species that rely on the property during breeding and migratory seasons. Having a variety of successional stages enhances the globally rare Pine Barrens community and complements management schemes of adjacent public lands.

In 2013, much of the property burned. Significant habitat benefits have resulted from the wildfire. Charred and standing dead trees provide foraging areas for woodpeckers to eat insects that are attracted to the trees. Large areas of salvage provide nesting habitat for grassland bird species in the initial years following harvest. Declining





species such as Sharp-tailed Grouse are known to be breeding in the area and will benefit from the fire. As the wildfire-affected areas regenerate with brush and small trees, brushland birds such as Brown Thrashers, Eastern Towhees and Clay-colored Sparrows will use the area for nesting.

The Brule St. Croix Legacy Forest lies within the focus area of the US Fish and Wildlife Service's Upper Mississippi River and Great Lakes Joint Venture, which aims to achieve healthy populations of all birds through regional conservation. Brule St. Croix Legacy Forest is

in Bird Conservation Region 12: Boreal Hardwood Transition, the main breeding region for Kirtland's, Golden-winged and Connecticut Warblers, all of which breed in the Brule-St. Croix Legacy Forest. In addition, this forest provides a significant wildlife corridor for species, such as white-tailed deer, black bear and migratory songbirds, and links existing conservation lands, including Chequamegon-Nicolet National Forest, Brule River State Forest and county forests.

In addition, the Property permanently protects a one-mile segment of the

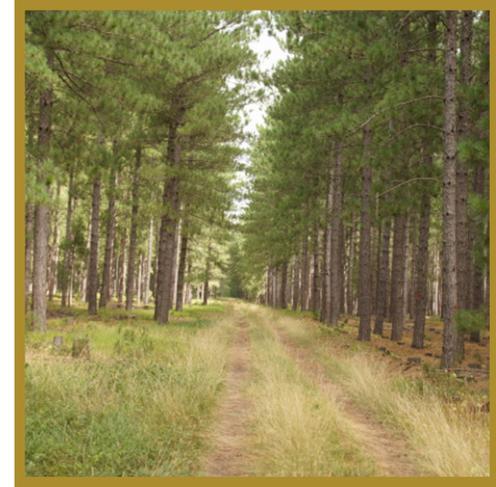
North Country National Scenic Trail. Construction efforts underway will eventually make the North Country Trail the longest of the 11 National Scenic Trails, with 4,600 miles spanning seven states.

The conservation easement on the Brule St. Croix Legacy Forest was endorsed by a diverse coalition. In addition to support from the Wisconsin Department of Natural Resources and the US Forest Service's Forest Legacy Program, supporting parties also include: former US Senator Herb Kohl, Chequamegon-Nicolet National Forest, St. Croix National Scenic Riverway-US Department of Interior-National Parks Service, North Country Trail Association, former Wisconsin Senator Bob Jauch, Wisconsin Representative Nick Milroy, The Nature Conservancy, The Conservation Fund, Wisconsin Sharp-tailed Grouse Society, Douglas County Department of Forestry, Gathering Waters Conservancy, Partners in Forestry Cooperative, Bayfield Regional Conservancy, St. Croix River Association, Washburn County Lakes and Rivers Association, Friends of the Bird Sanctuary (Douglas County Wildlife Management Area), Friends of the Hunt Hill Audubon Sanctuary, Inc, and the Brule River Preservation Inc.



award winners

- Tony Ferguson,
Forest Legacy Program,
Northeastern Area State and Private
Forestry, US Forest Service
- Mark Buccowich,
Forest Legacy Program,
Northeastern Area State and Private
Forestry, US Forest Service
- Jada Jackson,
Forest Legacy Program,
Northeastern Area State and Private
Forestry, US Forest Service
- Neal Bungard,
Forest Legacy Program,
Northeastern Area State and Private
Forestry, US Forest Service
- Doreen Urquhart,
Forest Legacy Program,
Northeastern Area State and Private
Forestry, US Forest Service
- Forest Legacy Program,
Washington Office State and Private
Forestry, US Forest Service
- Department of Natural Resources,
State of Wisconsin
- Amy Singh,
Wisconsin Forest Legacy Program,
Department of Natural Resources,
State of Wisconsin
- Division of Forestry,
Department of Natural Resources,
State of Wisconsin
- Doug Haag,
Bureau of Facilities and Lands,
Department of Natural Resources,
State of Wisconsin
- Thomas Duffus,
Conservation Acquisition,
Midwest Region,
The Conservation Fund
- Bethany Olmstead,
Midwest Real Estate and Working
Forest Fund, The Conservation Fund





**HABITAT CONSERVATION
PARTNERSHIP AWARD**
Big Muddy Bottomland Habitat Improvement

Big Muddy Bottomland Habitat Improvement



The elimination and destruction of bottomland wetland habitats along the Mississippi River floodplain has taken place at an alarming rate over the past 100 years, resulting in a small fraction of the acres of seasonally flooded bottomland habitat that once existed within this critically imperiled landscape. This loss has harmed the diverse terrestrial and aquatic resources that depend on this habitat type.

The Big Muddy River flows through southern Illinois into the Mississippi River. Its 13,500-acre bottomland constitutes

one of the largest continuous bottomland hardwood tracts in Illinois. However, the hydrology and wetland functions of this landscape have been greatly modified. The US Forest Service acquired the majority of its Big Muddy River floodplain tracts from 1936 through 1938 and incorporated them into the Shawnee National Forest. Before Forest Service ownership, the emphasis was to improve the drainage of the floodplain and to control or eliminate the natural wetland functions. Today, man-made ditches still run across the landscape in all directions and continue to rapidly drain

the floodplain. As a result, the natural water table is lowered, and many historic ephemeral wetland depressions have been eliminated or degraded. In addition, the construction of large flood control levees, channelization, dredging, and other flood control measures have altered the wetland functions and functionally disconnected bottomland habitat from the river floodplain. Protected areas inside the levees lack normal water fluctuations and lose their wetland characteristics, while outside the levees, flooding occurs for longer time periods and to greater water depths, greatly reducing the productivity of the wetland.

Since 2005, the project area has been part of a coordinated management plan that involves more than 20 agency and non-government partners together in the Middle Mississippi River Partnership. Because of the productivity and biodiversity of the site, the project area has several local and national designations such as Conservation Opportunity Area in the Illinois State Wildlife Action Plan, wetland focus area by the Central Hardwoods Joint Venture and Important Bird Area by the National Audubon Society. Within the heart of the internationally significant Mississippi Flyway, the area is an important stopover, wintering, and breeding habitat for migratory wildlife





before

and fish, including 5 species of geese, 17 species of ducks, herons, egrets and other waterbirds.

Since acquiring the property, the Agency has been working to restore the ecosystem through a variety of measures. In March 1958, the Mississippi Flyway Council issued a "Guide for Management of Waterfowl in the Flyway". As part of the response to these problems, the first stages of construction on the Oakwood Bottoms Green-tree Reservoir began in 1964. Oakwood Bottoms makes up the western half of the project area.



after

The project goals include a comprehensive plan to acquire and restore wetlands, enhance bottomland hardwood forests and restore the hydrology of the area. Ducks Unlimited has been a major partner of the Shawnee National Forest and has worked in this project area for more than 30 years. Since May of 2009, Ducks Unlimited has boosted their efforts to restore and enhance bottomland forests and wetlands of the Shawnee.

From 2009 to 2014, Ducks Unlimited engineers and biologists worked with the US Forest Service to survey, design and restore 680 acres of seasonal forested and shrub-

scrub wetland habitat. In 2012 the National Wild Turkey Federation joined forces with the Shawnee and Ducks Unlimited to create 883.5 acres of bottomland forest habitat improvements and reforestations within the project area. Ducks Unlimited will further reforest or enhance 1,523 acres of forested, scrub-shrub, and open-water wetland habitat, while a Climate Change Adaptation Grant from the Wildlife Conservation Society in 2014 will restore or enhance 814 acres of bottomland forested habitat.

In addition to major habitat restoration efforts, the Shawnee National Forest is engaging partners (especially Heartlands Conservancy and Ducks Unlimited) to assist with and develop an acquisition strategy with a goal to acquire, restore and reforest sub-marginal farmlands within and adjacent to the project area.

The Mississippi River corridor is the main spring and fall migration route for millions of waterfowl and Neotropical songbirds migrating through Illinois. These projects will provide migration and wintering habitat for Mallards, Northern Pintails, American Wigeon, Blue- and Green-winged Teal, Gadwall, and several other waterfowl species. The thousands of acres of forested, emergent, and scrub-shrub wetland





acres identified in the project area also provide important migration and wintering habitat for geese and ducks. The project also contributes to the conservation of other wetland-dependent species such as Red-headed Woodpecker, Little Blue Heron, Cerulean Warbler, American Woodcock and the federally listed Indiana and northern long-eared bats.

In total, this project collaboration has brought \$1,331,943 of partner cash and in-kind contributions to match \$348,562 of US Forest Service funds resulting in over 3,900 acres of bottomland habitat restoration and enhancement. Partnerships make it possible.

award winners

- Allen Nicholas,
Shawnee National Forest,
US Forest Service
- Timothy Pohlman,
Shawnee National Forest,
US Forest Service
- Mathew Lechner,
Shawnee National Forest,
US Forest Service
- Chad Deaton,
Shawnee National Forest,
US Forest Service

- Bryan King,
Shawnee National Forest,
US Forest Service
- Michael Sertle,
Ducks Unlimited
- Eric Schenck,
Ducks Unlimited
- John Burk
Ducks Unlimited
- Dave Eustis,
Ducks Unlimited
- Steve Widowski,
Heartland Conservancy

certificate recipients

- Kenneth Mezo,
Grand Tower Township Highway
- Bill Kuhnert,
Kuhnert Farms Inc.





BIRD CONSERVATION
PARTNERSHIP AWARD
Kirtland's Warbler Recovery Team

Kirtland's Warbler Recovery Team



Modern fire suppression has substantially decreased the frequency and size of wildfires in the jack pine ecosystem. It has consequently restricted the amount of breeding habitat naturally produced for Kirtland's Warbler, which breeds primarily in Michigan with a few pairs in Wisconsin and Ontario. While fire suppression is necessary to protect human life, property, and valuable natural resources, it does eliminate a natural disturbance factor necessary in that ecosystem and on which many species of animals, plants, and insects

depend. Therefore, intensive habitat management activities that mimic the regenerative effects of wildfire are critical to maintaining the Kirtland's Warbler population.

Managers typically develop Kirtland's Warbler breeding habitat by harvesting and regenerating large stands of jack pine trees. Approximately 3,830 acres are planned to be harvested annually: 1,560 acres on state lands and 2,270 acres on federal lands. Harvested areas are then reforested either by using me-

chanical and manual methods to plant seedlings or by encouraging natural regeneration. Over a forty year period, an estimated 100,000 acres have been managed to recover this species.

Due to significant Brown-headed Cowbird parasitism and resulting low Kirtland's Warbler fledging rates, the US Fish and Wildlife Service began trapping and removing cowbirds from Kirtland's Warbler nesting areas in 1972. After the cowbird control program began, parasitized nests dropped to 10% while average number of young per nest rose to 2.7. By all accounts, the trapping program was extremely effective and likely prevented the species' extinction. Approximately 60 cowbird traps are placed and maintained in or adjacent to Kirtland's Warbler breeding habitat on state and federal lands in the northern Lower Peninsula of Michigan and on commercial forest lands in central Wisconsin.

Kirtland's Warbler is considered a conservation reliant species because it requires ongoing habitat management and cowbird control.

Kirtland's Warbler was one of the first species protected under the Endan-





gered Species Act of 1973. A recovery plan for Kirtland’s Warbler was issued in 1976 (later updated in 1985). After the recovery plan was completed, the Kirtland’s Warbler Recovery Team – with additional partners joining over the years from agencies, universities, and non-government organizations – continued to meet biannually to coordinate habitat management actions, research, and information and education activities.

For the past 40 years, the Kirtland’s Warbler Recovery Team has facilitated the collaboration, coordination, and information sharing that has been central to this species’ recovery. The Michigan Department of Natural Resources, US

Forest Service, and US Fish and Wildlife Service have been very successful in recovering this bird by developing breeding habitat through timber harvest and reforestation and by controlling cowbirds. The population is estimated by counting singing males. In 2015, there were 2,366 pairs—the largest ever recorded and ten times larger than the number of pairs at the time of listing. It is also more than double the primary recovery objective of 1,000 breeding pairs. The population has exceeded the recovery goal every year since 2001. Such success has led to the possibility of delisting the species if the necessary conservation measures can be guaranteed into the future.

award winners

- Huron-Manistee National Forest, US Forest Service
- Hiawatha National Forest, US Forest Service
- Ottawa National Forest, US Forest Service
- Chequamegon-Nicolet National Forest, US Forest Service
- Carol Bocetti, California University of Pennsylvania



- Michigan Department of Natural Resources
- East Lansing Field Office, US Fish and Wildlife Service
- Kirtland's Warbler Wildlife Management Area, US Fish and Wildlife Service
- Bahamas National Trust
- Environment Canada
- Huron Pines

certificate recipients

- Christie Deloria-Sheffield, US Fish and Wildlife Service
- Daniel Eklund, Chequamegon-Nicolet National Forest, US Forest Service
- Abigail Ertel, Huron Pines

- Daniel Kennedy, Michigan Department of Natural Resources
- Keith Kintigh, Michigan Department of Natural Resources
- Sara Siekierski, US Fish and Wildlife Service
- Timothy Greco, Michigan Department of Natural Resources
- Ken Tuininga, Environment Canada
- Philip Huber, Huron-Manistee National Forest, US Forest Service
- Eric Carey, Bahamas National Trust
- Stephen Sjogren, Hiawatha National Forest, US Forest Service





**BIRD CONSERVATION
PARTNERSHIP AWARD**
Arapaho National Recreation Area
Osprey Management



Arapaho National Recreation Area Osprey Management

The nesting Osprey population in the Arapaho National Recreation Area has grown from 21 nesting pairs (producing 17 chicks in 1991) to 52 nesting pairs (producing 56 chicks in 2015). It was established in 1978 and includes 31,000 acres of public land and 4,000 acres of private land in Grand County, Colorado. It also includes 9,000 acres of reservoirs (Lake Granby, Monarch Lake, Shadow Mountain Lake, Meadow Creek Reservoir and Willow Creek Reservoir).

Electrical poles are attractive nesting sites for birds that want to nest at the top of the tallest trees with a view of the water. Nests on active electrical poles pose a danger to the birds and a vulnerability to the electrical system. A mountain pine beetle epidemic killed the majority of tall lodgepole pines in the recreation area near the lakes and, as the dead trees fell down, often electrical poles were the last tall structures available for nesting ospreys.

Mountain Parks Electric, Inc., Operations Manager Bruce Van Bockern has worked closely with the Arapaho and Roosevelt National Forests to provide safe nesting sites for the recreation area's Ospreys. His proactive approach

to Osprey management has prevented species mortality and safe-guarded electrical infrastructure for a growing population. Bruce and US Forest Service staffers have coordinated:

- Installation of 19 poles and nest platforms to successfully relocate nesting pairs from electrical poles;
- Installation of longer cross-arms on structures to accommodate safe perching next to nests;
- Placement of perch guards to discourage perching on high-risk structures;
- Monofilament fishing line removal from nests, and;
- Capture assistance for a joint Rocky Mountain Bird Observatory, Rocky Mountain National Park and US Forest Service telemetry project.

These activities have been a catalyst in neighboring Summit, Routt and Moffat Counties, where individuals and agencies are cooperating with their local Rural Electrical Associations to install poles and nest platforms to safeguard nesting ospreys and support growing populations.

The success of cooperative osprey



management in the Arapaho National Recreation Area has launched a community volunteer Adopt-a-Nest program to monitor nests for activity, including incubation and chick survival as well as a volunteer Adopt-a-Monofilament Collection Bin where discarded fishing line is collected and recycled to avoid avian entanglement.

Mountain Parks Electric also provided equipment and personnel to biologists from Bird Conservancy of the Rockies and Rocky Mountain National Park to capture two adult female Ospreys to fit with telemetry harnesses for breed-





ing season and migration data collection. Results showed when, where and how long both females migrated and that they independently followed similar routes to separate winter habitats in coastal and inland Mexico.

award winners

- Doreen Sumerlin,
Sulphur Ranger District,
US Forest Service
- Bruce Van Bockern,
Mountain Parks Electric, Incorporated

certificate recipients

- Mike Britten,
Rocky Mountain Inventory and
Monitoring Network, National Park Service
- Jason Beason,
Bird Conservancy of the Rockies
- Jeff Connor,
retired, Rocky Mountain National Park
- Nancy Gobris,
Bird Conservancy of the Rockies





**INTERNATIONAL COOPERATION
AWARD**
Southern Cone Grasslands Alliance



Southern Cone Grasslands Alliance

The temperate grasslands of southern South America—or the Southern Cone—originally encompassed an area of over 1 million square kilometers. It was one of the richest grazing areas in the world, and also one of the most important grassland biomes for biodiversity conservation. A key element of this biodiversity is a suite of Neotropical migrants of conservation concern, primarily shorebirds, which depend on the ecosystem for their wintering habitat. These include several national Birds of Conservation Concern, such as Buff-breasted Sandpiper, Swainson’s Hawk, Peregrine Falcon, American Golden-Plover, Solitary Sandpiper, Lesser Yellowlegs and Upland Sandpiper, and other species of conservation concern, such as Bobolink. Now, only a tiny percentage of their habitats in the Southern Cone Grasslands remain in a natural state, and these are increasingly threatened by agricultural intensification.

In response to this dramatic loss, in 2005, the BirdLife International partners in the Southern Cone came together to develop a large-scale, multinational initiative for grassland biodiversity conservation. It was modeled on the North American Joint Venture approach and capitalized on the deep cultural roots and low biodiversity impact of traditional cattle ranching. This highly successful initial project, supported in part by US Forest Service International Programs, generated broad interest both within the region and with several North American Joint Ventures. It began with an important first exchange of experiences and eventually led to support from a broad diversity of donors.

The project identified the 20 highest priority sites for the conservation of both Neotropical migrants and resident species and documented fledgling best practice experiences in biodiver-

sity-friendly grassland management at sites in both Brazil and Uruguay. A follow-up project focused on the consolidation (and documentation) of existing and the development of new, best practice management regimes at seven key sites (Important Bird Areas) within the four countries: Brazil, Uruguay, Argentina, and Paraguay.

A partnership between the US Forest Service International Programs and BirdLife has focused on consolidating the Alliance to include ranchers and their business partners (There are now over 450 “rural establishment” members). The collaboration also helped refine best management practices, developed a protocol for the certification of “bird-friendly” beef and established pilot ecotourism ventures. A Certification Council was formed; a label was developed; and an agreement was reached with a major meat marketer in the region (Marfrig). The Alliance then launched a pilot certification scheme, led by national coordinators and supported by the Certification Council—using the expertise and experience within the Alliance—as a proof of concept. By early 2014, a total of 83,475 hectares had been certified at 29 properties in Argentina, and 10,000 kilograms of certified “bird-friendly” or “natural grasslands” beef was being sold domestically per month (and with a first export to European markets). Certification is now underway in all four countries, with approximately 200,000 hectares having been certified at 300 properties. Certified beef is now on sale in Brazil as well as Argentina.

Another key component of the success of the Alliance has been the annual meeting of natural grasslands ranchers, or “Encuentro de Ganaderos”. First held in Bage, Rio Grande do Sul, Brasil in 2007, the “encuentro” now brings together over 450 ranchers, agricultural extension agents, and grassland conservationists, and provides an excellent opportunity to share best management practices, exchange experiences among ranchers, and expand the network of ranchers associated with the Alliance. The “encuentro” has empowered the ranching community to become the driver and promoter of ranching practices that help conserve biodiversity (including Neotropical migrants) while improving the economic sustainability of ranching, and helping to conserve traditions and the “gaucho” culture.

The grassland shorebird survey is another key annual event. This volunteer-based census provides an important baseline regarding the importance of habitat types/management regimes for Neotropical migrant shorebirds and is starting to provide information on grassland shorebird population trends. In addition, it helps monitor the value of certified grasslands for Neotropical migrants. More than 40 properties have ongoing detailed monitoring, linking specific grassland management practices to the richness and abundance of native grassland biodiversity (including Neotropical migrants).

The Alliance has succeeded in developing a suite of additional tools that help maintain, manage and restore natural grasslands habitats. Among these is the Index of Contribution of Grassland Conservation which is helping to support the implementation of existing and new incentives for grasslands conservation, including a Payment for Ecosystem Services effort in Paraguay.

award winners

- Carol Lively, retired, International Programs, US Forest Service
- Anibal Parera, BirdLife International
- Nicolas Marchand Abal, BirdLife International
- Aves Argentina
- Aves Uruguay
- Fundación Vida Silvestre Argentina
- Guyra Paraguay
- SAVE Brasil

- Ian Davidson, formerly with BirdLife International Americas Secretariat
- Fernando Adauto Loureiro de Souza
- Doug Ryan, retired, US Fish and Wildlife Service
- BirdLife International, Americas Secretariat

certificate recipients

- Gregory Butcher, International Programs, US Forest Service
- James Chu, International Programs, US Forest Service
- Daniel Svingen, US Forest Service
- Andres Bosso, Aves Argentinas
- Santiago D'Alessio, Aves Argentinas



- Agustín Carriquiry, Aves Uruguay
- Ines Paulier, Aves Uruguay
- Jaqueline Goerck, SAVE Brasil
- Pedro Develey, SAVE Brasil
- Alberto Yanosky, Guyra Paraguay
- Amiro Pérez-Leroux, BirdLife International Americas Secretariat
- Guillermo Stamati, Aves Argentinas
- Amanda Tapia, BirdLife International Americas Secretariat
- Gustavo Marino, Aves Argentinas
- Joaquín Aldabe, Aves Uruguay
- Esteban Carriquiry, Aves Uruguay

- Cristina Morales, Guyra Paraguay
- Rogério Jaworski dos Santos, SAVE Brasil
- Pablo Rocca, Aves Uruguay
- Marcelo Fett Pinto, SAVE Brasil
- Lorena Sforza, Guyra Paraguay
- Isadora Angarita, BirdLife International Americas Secretariat
- Caroline Pridham, BirdLife International
- José Luis Cartes, Guyra Paraguay
- Luiza Chomenko
- Gerardo Evia
- María Elena Zacagnini
- Carlos Hernández

- Esteban Vasconcellos
- Carlos Nabinger
- Adrián Azpiroz
- Adrián Di Giacomo
- Glayson Bencke
- Rafael Antúnez Dias
- Fabían Rabuffetti, Aves Argentinas
- Diego Ocampos, Alliance Certification Council
- Mauricio Moresco, Alliance Certification Council
- Juan María Raggio, Alliance Certification Council
- Ángelo Queirolo Aguinaga, Alliance Certification Council
- Fernando Miñarro, Fundación Vida Silvestre Argentina



Meet Our Beneficial Eastern Bats



Bats are our most important natural predators of night-flying insects consuming mosquitoes, moths, beetles, crickets, leafhoppers, chinch bugs, and much more! Many of these insects are serious crop or forest pests, and others spread disease to humans or livestock. Every year bats save us billions of dollars in pest control by simply eating insects. We'd like to introduce you to this mighty workforce.

an important role in sustaining
cave systems. (Bats are
invertebrates and
caves and mines to survive.
Bat guano is a valuable
ecosystem and invertebrates, w
salamanders, frogs, and
more than half of our Michigan
caves and mines to survive.

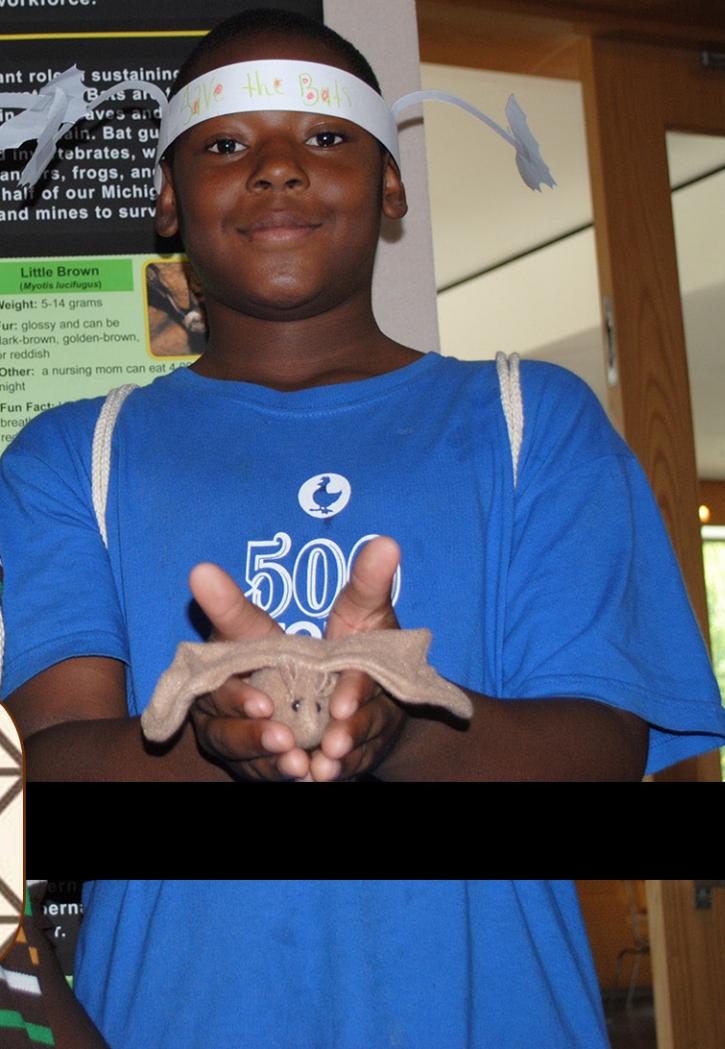
Little Brown (*Myotis lucifugus*)

Weight: 5-14 grams

Fur: glossy and can be dark-brown, golden-brown, or reddish

Other: a nursing mom can eat 400 insects a night

Fun Facts: Little Brown Bats are the most common bat species in the United States. They are also the most common bat species in Michigan.



Reflections Cafe

URBAN COMMUNITIES IN CONSERVATION AWARD
"Green" Bat Houses for National Forests:
Connecting Bats, People & Public Lands

“Green” Bat Houses for National Forests: *Connecting Bats, People & Public Lands*



The existence of bats in urban areas is not new. In spite of their presence, there are still many misconceptions and a lack of scientific knowledge about them. Urban Connections—an outreach program carried out by staff of the Eastern Region Public and Governmental Relations Department of the US Forest Service—has helped to spread the word about their benefits to people and nature.

loss of habitat and other threats such as the non-native invasive fungus responsible for white-nose syndrome, which has killed several million bats in less than 10 years.

In the city of Detroit, building awareness of bat conservation was a challenge that the US Forest Service Eastern Region’s Urban Connections program helped advance by connecting ongoing conservation activities being done by urban partners—Orga-

nization for Bat Conservation (OBC) and General Motors Corporation (GM)—and by providing stewardship opportunities for urban audiences in the metropolitan area.

Eating their own weight each night, bats are a primary predator of vast numbers of insects, such as mosquitoes that spread disease and other pests that cost farmers and foresters billions of dollars annually. Some bats are pollinators and key to the reproductive survival of various flower and fruit species around the world. Unfortunately, bat populations are in decline due to

nization for Bat Conservation (OBC) and General Motors Corporation (GM)—and by providing stewardship opportunities for urban audiences in the metropolitan area.

For example, in southeastern Michigan, the Chevrolet Volt, a plug-in, hybrid compact car, is manufactured at the Detroit/Hamtramck Assembly. GM recognizes that the remaining Volt battery packaging covers are difficult to recycle and normally end up as scrap materials. Rather than sending all of these materials to landfills, they have been reused to make houses for nesting bats. The outside of the bat house is made from the Volt’s battery cover and is painted black, which allows the boxes to absorb the sun’s heat, in turn providing a perfect environment for bats, especially young bats. Even the screws and wood used in the construction of bat boxes are originally from the pallets used in shipping Volt parts! GM’s waste reduction expert, John Bradburn, developed conversion plans to reuse the cover and worked with volunteers to place the bat houses at company properties around the US. In urban areas, bat houses can give bats a safe alternative to roosting in residential home attics. Bat houses provide these pups with a chance to survive and for populations to be healthy.



Another example is the Great Lakes Bat Festival spearheaded by the Organization for Bat Conservation. Since 2001, volunteers have learned about bat habitats, white-nose syndrome, and other information about these unique mammals. For the past 4 years, volunteers have learned to put together “green” (and black) bat houses with the help of GM volunteers using materials donated by the General Motors Corporation. These boxes are packaged by Organization for Bat Conservation staff who send them on to National Forests all over the Eastern United States.

Since 2012, employee volunteers of GM with children at community outreach events in Metro Detroit have built over 700 bat houses. Urban Connections facilitated getting over 100 bat houses to sites on 13 National Forests. Once installed, the bat houses provide habitat for bats and educational opportunities for humans through US Forest Service programs. For example, the Youth Conservation Corps (YCC) installed bat houses in Silver Mines Recreation Area on the Potosi/Fredericktown Ranger District of the Mark Twain National Forest. GM-supplied bat houses are also installed on company property, private land in urban areas and state parks.





award winners

- Lisa Perez,
Detroit Urban Connection Program,
Eastern Region, US Forest Service
- Cynthia Sandeno,
Eastern Region, US Forest Service
- Rebecca Ewing,
Potosi/Fredericktown Ranger
District, Mark Twain National
Forest, US Forest Service
- Rob Mies,
Organization for Bat Conservation

- Staff & Volunteers
Organization for Bat Conservation
- John Bradburn,
General Motors Corporation
- Susan Kelsey,
General Motors Corporation
- teamGM Cares

certificate recipients

from the US Forest Service:

- Allegheny National Forest
- Chequamegon-Nicolet National
Forest
- Chippewa National Forest
- Green Mountain National Forest
- Hiawatha National Forest
- Huron-Manistee National Forest
- Mark Twain National Forest
- Midewin National Tallgrass Prairie
- Monongahela National Forest
- Ottawa National Forest
- Shawnee National Forest
- Superior National Forest
- White Mountain National Forest





wings
ACROSS
the
americas



2016 CONSERVATION AWARD WINNERS

Studying White-nose Syndrome in Bats of the Upper Midwest

Brule St. Croix Legacy Forest

Big Muddy Bottomland Habitat Improvement

Kirtland's Warbler Recovery Team

Arapaho National Recreation Area Osprey Management

Southern Cone Grasslands Alliance

Green Bat Houses for National Forests

