

Conserving Wisconsin's Natural Heritage

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*Trumpeter swan in
northwest Wisconsin*

Photo by Brian Collins

Wisconsin's Natural Heritage Conservation Program

Dear Wisconsin Conservationist:

It was a banner year for Wisconsin's Natural Heritage Conservation Program. We added three new field ecologists, increasing our support of local conservation efforts, completed phase one of our new State Natural Areas Management Strategy and brought in a record number of grants, making 2014 one of our best grant funding years ever.

While we have significant challenges to face, like the discovery of white-nose syndrome affecting bats in our state, and the continued impact of invasive species to our native plants and animals, we have been heartened by the increasing support of volunteers and partner conservation groups throughout the state.

In 2015, we look forward to completing an update of Wisconsin's Wildlife Action Plan, which guides the state's management of non-game species. We will also launch two new initiatives: the Natural Heritage Site Program, which recognizes and supports landowners who restore native habitat on their properties, and the State Natural Areas Stewards Program, which trains and supports volunteers who help manage their local State Natural Area.

We invite you to join us in restoring and preserving Wisconsin's natural heritage by becoming a volunteer in one of our many programs, managing your property for rare species or by making a financial contribution. Your participation truly makes a difference.

Sincerely,



Erin Crain
Natural Heritage Conservation Program Director

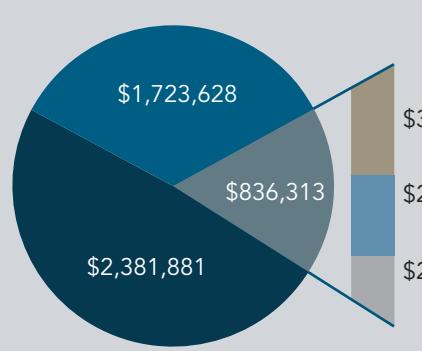


Natural Heritage Conservation Program staff.

FISCAL YEAR 2014		
REVENUES		
Category	Total	%
State Funds ¹	\$ 2,381,881	48.2
Grants	\$ 1,723,628	34.9
Donations	\$ 836,313	16.9
Total	\$ 4,941,822	100

DONATIONS (DETAIL BY TYPE)		
Donation Type	Total	Donors
License Plate Sales	\$ 368,410	14,736
Individual/Group Donations	\$ 250,282	–
Tax Return Donations	\$ 217,621	10,277
Total	\$ 836,313	25,013

¹ Includes General Purpose Revenue (GPR), funds from other state agencies, and revenue from DNR services such as license and timber sales.

Natural Heritage Conservation Program (FY 2014 Revenue)	
	<ul style="list-style-type: none">State Funds: \$1,723,628Grants: \$368,410License Plate Sales: \$250,282Individual/Group Donations: \$836,313Tax Return Donations: \$217,621

Taking care of your treasures

As few as 150 years ago, Wisconsin contained a mosaic of natural communities, from the rolling prairies and oak savannas in the south, to the verdant pine forests and boggy wetlands of the north. The Natural Heritage Conservation Program works to protect these treasures, now and for future generations.



JOSH MAYER

"Little Lake"

State Natural Areas

State Natural Areas (SNAs) protect Wisconsin's best remaining native landscapes, geological formations and archeological sites, and provide some of the last refuges for the state's rare plants and animals. Our SNAs pre-

serve our state's genetic and biological diversity, provide places for research and education and serve as benchmarks for determining stressors on managed lands.



- In 2014, the SNA Program acquired more than 126 acres of natural lands, including vitally important wetlands. The Wisconsin Chapter of the Nature Conservancy donated 1,700 acres to the DNR, expanding DNR-owned SNA lands to nearly 6,500 acres at Quincy Bluff and Wetlands SNA.
- Cliff Germain, the SNA Program's first ecologist and long-time chief, was inducted into the Wisconsin Conservation Hall of Fame.



JOSH MAYER

Cedarburg Bog State Natural Area, Ozaukee County.

Wisconsin Wildlife Action Plan

The Wisconsin Wildlife Action Plan (WWAP) is a statewide plan for species of greatest conservation need and the places they live. The plan's greater mission is to conserve and protect habitats and species with low or declining populations now, before they become too rare or costly to restore.



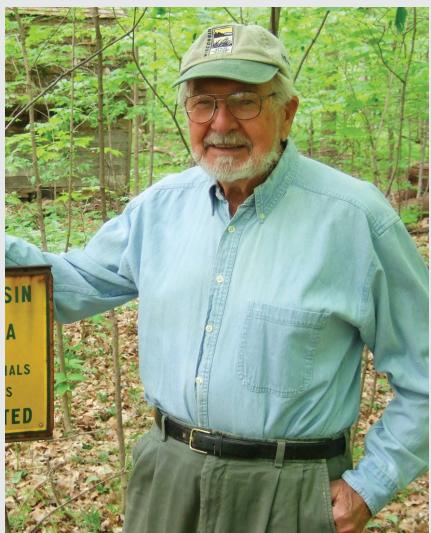
DNR FILE



Dean Edlin at a restored prairie in Trempealeau County.

Meet your district ecologist

One of the new field ecologists hired this past year was Dean Edlin. Edlin has considerable skills and expertise in prairie and oak savanna restoration and invasive plant control, and is one of the NHC Program staff who completes the annual bald eagle and osprey nest surveys from a single-engine aircraft. Edlin's working area covers Eau Claire and nine counties within west-central Wisconsin.



THOMAS A. MEYER

Cliff Germain.

- In 2015, the NHC Program will update the plan to help guide our partners, who contribute knowledge, time and other resources to conserve our natural heritage.

Field ecologists

Scattered across the state are field ecologists who provide on-the-ground expertise to partners and public land organizations. This past year the NHC Program hired three additional ecologists. These ecologists help both private and public land managers with the conservation and restoration of natural communities and rare species.

Partnering with others

No single entity can manage all the rare plants and animals of the state on its own. Gathering information, developing management plans and preserving habitat are all crucial aspects of the Natural Heritage Conservation Program's rare species work, but partnering is truly essential to preserving Wisconsin's special places and species.



JOSH MAYER

"Chiwaukee Prairie"

Citizen-based monitoring

The Natural Heritage Conservation (NHC) Program's Citizen-based Monitoring Network is designed to expand public involvement in terrestrial and aquatic natural resources. NHC works with community and school groups, conservation organizations and other agencies to gather critical, statewide information.

- In June 2014, NHC staff helped organize and teach a week-long workshop for teachers on how to integrate monitoring projects into science curricula and offer students the opportunity to contribute to real-world conservation efforts.
- In 2014, the network helped fund 22 citizen-based monitoring projects throughout the state.

State Natural Area volunteers

Since the State Natural Areas (SNAs) Volunteer Program's beginning in

2011, volunteers have helped take care of southern Wisconsin SNAs by cutting brush, pulling or spraying invasive plants, collecting seeds, monitoring rare species, preparing fire breaks and encouraging native plant and animal communities to thrive.

- In 2014, volunteer teams donated more than 2,500 hours at 21 SNAs in southern Wisconsin.
- In 2015, the program will expand statewide and target sites that need invasive species control and rare species monitoring work. To get involved, email Jared.Urban@wisconsin.gov or call 608-267-0797.

Rare plant monitoring

The Rare Plant Monitoring Program trains volunteers interested in searching for and documenting rare plants in southern and southwestern Wisconsin.

- In the program's first two years, volunteers have collected important data on known rare plant populations at over 30 sites and have even discovered a few new ones.



WENDY BRAUN

Experienced State Natural Area volunteers teaching United Way volunteers how to bundle phragmites.

- In 2015, a new website will launch on the Wisconsin Aquatic and Terrestrial Resources Inventory (wi-atri.net) where you can learn how to participate in the Rare Plant Monitoring Program.

Endangered resources review

The Endangered Resources Review Program (ERRP) helps customers and partners comply with Wisconsin's endangered species laws and helps conserve the rare plants, animals and ecosystems found in Wisconsin.

- In 2014, EERRP released the Public Portal, which is an online mapping application for landowners planning on-the-ground projects to see if their project may have impacts to endangered resources.

Access the Public Portal by visiting dnr.wi.gov and searching keywords "Public Portal."

Incentives for landowners

In Wisconsin, more than 97 percent of the 7.4 million acres within the Driftless Area are privately-owned, making landowners a critical factor in the conservation and protection of the at-risk species found in the region. The Landowner Incentive Program helps private landowners create and manage habitat for species of greatest conservation need by providing management advice, assistance with management plans and cost-share funding to individuals and organizations.



- In 2014, the Landowner Incentive Program provided nearly \$100,000 in cost-share funds to 20 Driftless Area landowners for management that will occur over the next year.

Join the community

The majority of the Natural Heritage Conservation Program is supported through donations and grants. You can join the natural heritage community in several ways, including volunteering as a citizen scientist or by making a financial contribution to a specific project.

Natural heritage sites

The Natural Heritage Site Program will recognize households, businesses, schools, organizations and communities that voluntarily create and manage wildlife habitat on their properties. Core elements of the program will be establishing native and removing invasive plant species, providing food, water and shelter for animals and participating in other resource and habitat conservation practices. Whether your habitat is a backyard, farm, business, campus, recreational property or land spread throughout a community, you can receive certification from the Natural Heritage Conservation Program as a Natural Heritage Site.

- In 2015, the Natural Heritage Site Program will begin as a pilot project. For more information, email Lucas.Olson@wisconsin.gov or call 608-266-0545.

Adopt an eagle's nest

Your financial support for bald eagles helps with their continued protection and management and you will receive a certificate of adoption for your eagle nest. For more information, email Amanda.Kamps@wisconsin.gov.

Adopt a State Natural Area

Adopt a State Natural Area by providing financial or volunteer support for a property's upkeep. For more information, email Tyler.Brandt@wisconsin.gov.

The badger license plate and income tax check off are two ways to support the NHC Program.



DNR FILE

Eagle and nest.

Buy the badger

Show your support for Wisconsin's natural heritage with the badger plate and traditional wolf plate. Both plates are offered when you renew your license plate. For each plate purchased, \$25 goes directly to efforts to conserve Wisconsin's natural heritage.

Double your donation

You can also support NHC by making a direct donation to the program. You can donate to the general NHC



DNR FILE



"Yellow Water Buttercup"

JOSH MAYER

Program or to specific projects like the Trumpeter Swan Fund or the Wisconsin Bat Program. Donations are matched dollar for dollar up to \$500,000. To learn more or to donate, visit dnr.wi.gov and search keyword "NHC."

- Financial contributions, like donating through the Wisconsin income tax check off, provide up to 40 percent of all funds the NHC Program uses to protect Wisconsin's rare wildlife and natural areas.
- Donate \$50 and get a State Natural Areas guidebook.
- Donate \$40 and get an exhibition-quality 8x10-inch State Natural Area photo by photographer Josh Mayer (see back cover).
- Donate \$25 and receive a 24x24-inch print of "Endangered Wisconsin" by Madison artist Thomas Ferrella. Donate \$300 and get a 36x36-inch signed print.

Follow us online

Weekly quiz – Win prizes like a State Natural Area guidebook and NHC Program apparel by participating in our weekly quiz about Wisconsin's native plants and animals.

State Natural Area spotlight

– Learn more about some of our state's most pristine public lands. Each week we feature a new property.

Go to wiatri.net/NHC/ to get started!

R & D for conservation

Maintaining Wisconsin's rare plants and animals is a challenging task. With many native plants and animals becoming less common, gathering the most accurate and up-to-date scientific information through research and development (R and D) is a critical component to their conservation.

Bats

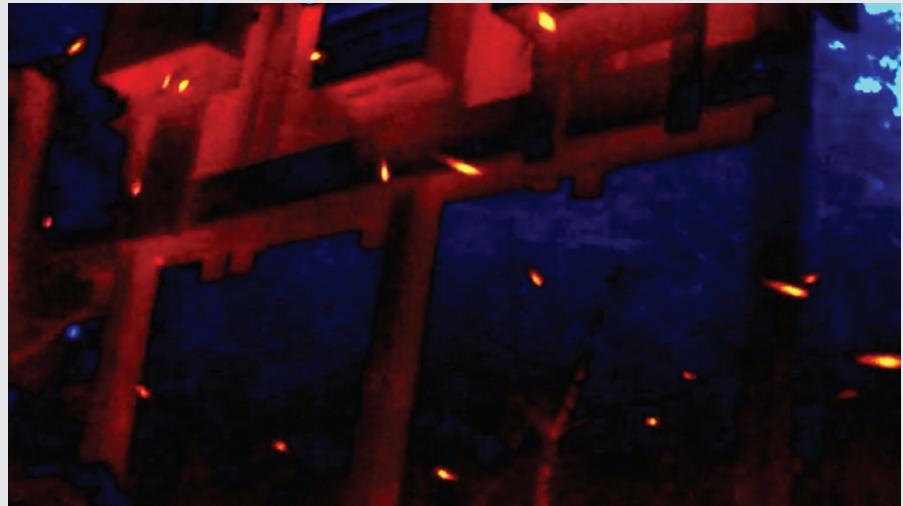
In March 2014, white-nose syndrome (WNS), a disease that affects bats, was confirmed in a site in Grant County, Wis. This unfortunate news has accelerated the monitoring need and information gathering efforts of the Wisconsin Bat Program (WBP). WBP staff work with cave and mine landowners to conserve and manage these important bat habitats. WBP coordinates with landowners and volunteers across the state to monitor summer bat colonies and complete bat acoustic surveys.

- In winter 2014, WBP staff visited over 120 caves and mines, including finding several new hibernacula. In spring and summer, over 1,000 volunteers conducted roughly 300 acoustic surveys and monitored over 50 summer roost sites across the state. These monitoring efforts helped increase program staff's understanding of Wisconsin bats and educated thousands of citizens.
- In 2015, the Wisconsin Bat Program will continue coordinating citizen-based summer roost monitoring efforts and acoustic surveys, and will conduct surveillance for WNS, which will aid in management of critical habitat in the fight against this deadly bat disease.

Birds

Part of NHC's mission is the conservation of rare, endangered and threatened non-game bird species in Wisconsin and the habitats in the state that they rely upon. In 2014, the bird team:

- Continued work with the Whooping Crane Eastern Partnership to reintroduce a migratory population of whooping cranes to eastern North America.
- Conducted statewide bald eagle



HEATHER KAARAKKA

Thermal cameras have helped the Wisconsin Bat Program monitor bat populations. The cameras can detect even the slightest rise in temperature.

and osprey nesting surveys.

- Completed nesting surveys for all four state endangered terns, the piping plover, red-shouldered hawk, northern goshawk, Kirtland's warbler, cerulean warbler and the American white pelican.
- Surveyed for and found the endangered Kirtland's warbler in six counties and banded nestlings in an attempt to document dispersal of the young.

Plants

Dwarf lake iris (*Iris lacustris*) is a federally-threatened plant found only near the shores of Lakes Michigan and Huron. In Wisconsin, almost all populations are found on the Door Peninsula, growing under white cedar trees. In hopes of recovering this rare member of our native flora, NHC staff is studying the effects of canopy thinning on dwarf lake iris seed viability. The results will help inform future habitat management decisions.



ELIZABETH HABER

Blue-spotted salamander.

Amphibians and reptiles

Wisconsin is home to 54 species of amphibians and reptiles, including six state endangered species. Wisconsin's amphibians and reptiles can be found in almost every habitat in the state, including northern hardwood swamps, pine barrens, sedge meadows and dry sand prairies.

- In 2014, the NHC Program began two multi-state projects, to restore wood turtle nesting habitat and track habitat use in northern Wisconsin, and to detect the significance of an emerging snake fungal skin disease in Wisconsin snakes.



JOSH MAYER

"Turk's Cap Lily"

- Ongoing monitoring efforts include the use of "turtle dogs" (Boykin spaniels) that have been specially trained to locate ornate box turtles by scent.
- The Wisconsin Frog and Toad Survey, a volunteer program, and the Wisconsin Turtle Conservation Program help teach citizens about frogs and turtles in Wisconsin and the things they can do to help manage and protect them.

Dragonflies and damselflies

The Wisconsin Odonata Survey engages citizen volunteers to document populations of dragonflies and damselflies. Knowing where Wisconsin's 164 Odonata species live allows managers to make informed decisions about protecting their habitats.

- In June 2014, the NHC Program co-hosted the 25th annual meeting of the Dragonfly Society of the Americas. The event drew participants from 25 states and one Canadian province.

- Citizen scientists using outreach

tools provided by the Wisconsin Odonata Survey reported the discovery of a population of dragonfly, the mocha emerald, that had previously never been found in Wisconsin.

Invertebrates

NHC's Invertebrate Team is responsible for collecting data, monitoring and conserving rare terrestrial and aquatic invertebrates, including insects, snails, mussels, crustaceans and other rare species in Wisconsin.

- In 2015, the NHC Program will fund projects to study the northern blue butterfly and ottoe skipper.

Natural Heritage Inventory

The Natural Heritage Inventory (NHI) provides land managers with high-quality information on natural communities and rare and declining species. The NHI Program maintains the state's only comprehensive database on rare species observations and works closely with other programs and partners to help guide conservation. In 2014:

- NHI helped identify and conserve ephemeral ponds in managed forests, the primary breeding habitat for wood frogs, spotted salamanders and blue-spotted salamanders.
- Utilized Wisconsin's incredible network of State Natural Areas to better define what is meant by a "high-quality" wetland to help improve wetland restorations.
- Conducted a series of workshops for nearly 150 natural resource professionals to assess how environmental change and other threats might affect Wisconsin's natural communities.



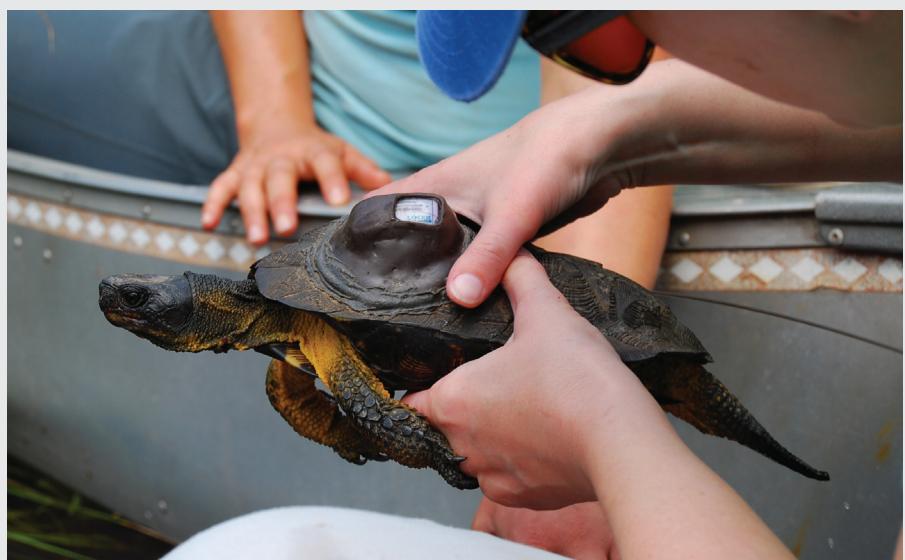
SUMNER MATTESON

NHC staff retrieved geolocators from Lake Superior common tern adults that will provide wintering and stopover location information.



JM WOODFORD

Annual snow tracking surveys for endangered American martens and other rare mammal species were completed by NHC staff in northern Wisconsin.



DREW FELDKIRCHNER

NHC staff received a Competitive State Wildlife Grant to help provide safe turtle nesting habitat.

Own a piece of Wisconsin's natural heritage



"Little Lake"



"Turk's Cap Lily"



"Chiwaukeee Prairie"



"Yellow Water Buttercup"



"Locoweed"



"Moonlight Bay"

Featured artist

The camera, a graduation present, had sat unused on a shelf for months. Determined to put it to good use, Josh Mayer searched the DNR website for somewhere off the beaten path to explore. One spring day, he took the camera out of the box and headed to Hemlock Draw, Tower Hill Bottoms, and Natural Bridge and Rockshelter State Natural Areas and was instantly hooked.

A few years later, Josh is approaching 500 State Natural Areas visited and thousands of photographs taken. Josh is happy to donate his photographs to the DNR for use in spreading the word about Wisconsin's State Natural Areas and the rare ecosystems and species preserved within.

"It is amazing to see the breadth of SNA sites, from the 'deserts' along the Wisconsin River to the prairies, forests, cliffs, bogs and everything in between, and it's important that we continue to protect these sites and the species that call them home," explains Mayer.

To read Josh's blog, go to wiscsnablog.wordpress.com.



Josh Mayer and family.

SUBMITTED BY JOSH MAYER



Conservation of our natural heritage requires long-term vision and support. The Natural Resources Foundation of Wisconsin was created specifically to serve Wisconsin's diverse conservation needs. We are here to advise you and to discuss how establishing a fund can provide critical support for the lands and species you cherish. Contact the Foundation at info@wisconservation.org or call 866-264-4096.



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