



Wildlines

SPRING 2012

New Hampshire Fish and Game's quarterly newsletter of the Nongame and Endangered Wildlife Program

Tracking Marten in the North Country

Research explores possible impacts of recently completed wind farm

Cold temperatures and two feet of snow on the ground made this past winter a busy field season for University of New Hampshire graduate student Alexej Siren, who is studying state-threatened American (pine) marten at the Granite Reliable Power wind-park in northern New Hampshire. On most weekends, Siren traveled from the seacoast to the Great North Woods and cruised by snowmobile over countryside he has become quite familiar with over the past year. Currently, he is tracking 8 marten that are equipped with radio collars. Siren has been documenting their locations weekly to determine home range size, movement patterns and seasonal differences in their habitat use. So far, he has recorded almost 20 locations for each of the collared marten for the "leaf off" (aka winter) season.

Siren is also using other methods to get a handle on marten density and habitat use, ranging from high-tech towers with data loggers, which continuously scan for signals from the collared animals, to good old-fashioned, on-the-ground tracking. "The data loggers are calibrated to monitor high-elevation habitat (2,700 feet in elevation and above)," said Siren. "This will help us address the question of whether or not wind tower development affects marten movements and use of high-elevation terrain."

In addition to the collared animals, a total of 9 new



marten were caught in live traps, marked with ear tags and released this winter. Siren and Peter Abdu (a UNH undergraduate) are working on a non-invasive method to determine marten density. "Camera trapping" refers to the use of trail cams to identify individuals without

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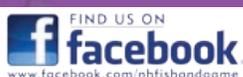
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Wildlines is funded in part
through the sale of
Conservation License Plates.
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Funding Wildlife Conservation

Future nongame work is at risk without dedicated funding source

In our last issue of *Wildlines*, Nongame Program Coordinator John Kanter wrote about uncertainty regarding funding for nongame, threatened and endangered species work in New Hampshire. Federal money for nongame wildlife conservation is appropriated each year through State Wildlife Grants (SWG), so we can never be sure how much funding will be available, if any.

"We were extremely concerned when Congress proposed to entirely eliminate all funding through

the State Wildlife Grants program for this fiscal year," said Kanter. "The loss of these funds would result in many states losing their Nongame and Endangered Wildlife programs and put our nation back to a reactive approach of saving species, rather than a more cost-effective, proactive strategy to keep common species common and prevent further species listings."

While the appropriation for this year ultimately provided continuation of funding, it is only a temporary fix. "Conservationists have been trying since the mid-1990s to secure dedicated funding for all wildlife

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Great Wetlands = Great Wildlife!

Support New Hampshire's Nongame and Endangered Wildlife Program's 2012 Annual Fundraising Campaign

We are fortunate in New Hampshire to have such a great variety of wildlife to see and enjoy. Painted turtles, spring peepers and red-winged blackbirds are some of the common sights and sounds of spring that we look forward to each year.

Since 1988, when the Nongame and Endangered Wildlife Program was founded, private donations have provided the building blocks for us to carry out our work to protect New Hampshire's wildlife diversity.

As our 2012 Annual Fundraising Campaign gets underway this spring, we like to think about the greater benefits of our conservation efforts. The positive impact of healthy habitats extends beyond wildlife, helping people as well. Those spring species we love to see and hear each spring depend on healthy wetlands. Healthy wetlands in turn provide clean water to supply our private wells and public drinking water supplies.

When you receive our Annual Fund Campaign appeal in the mail, please con-

sider continuing your support again this year. Your donation will be matched dollar-for-dollar, up to \$50,000, by a matching grant from the State of New Hampshire.

Thank you for doing your part to help safeguard New Hampshire's wildlife!

Sincerely,



John J. Kanter
Nongame and Endangered Wildlife
Program Coordinator



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– not just game species,” said Kanter. “The Conservation and Reinvestment Act (CARA) proposed in 1999 could have provided long-term funding for conservation, but it was killed before the House and Senate even had a chance to vote on it. State Wildlife Grants are the closest thing we have right now, but strong public support is needed to keep it going.”

To help gather ideas on creating a stable financial future for the Nongame Program – and to learn more about you, our supporters – we ran an online survey earlier this year. Many of you (119 in all) took part.

“For our first voluntary online survey, the response was tremendous,” said John Kanter. “It was wonderful to see so many people take time to respond and show their support for nongame, threatened and endangered species protection and its positive impact on New Hampshire's quality of life.”

In general, survey participants ranged in

age from 18 or younger to 76 or older, and they share a love of getting outside to enjoy activities like wildlife and bird watching, canoeing, kayaking and hiking.

It was encouraging to see that many respondents feel it is extremely important for the Nongame Program to have dedicated long-term funding. They strongly support the establishment of such funding for state wildlife conservation, rather than the existing annual federal appropriation that can change from year to year.

Kanter said he is eager to review the survey results in more detail and develop a plan to move forward and engage our supporters more in actively working to protect New Hampshire's wildlife.

Thank you to all who participated, and congratulations to the five lucky winners who were chosen to receive a Nongame and Endangered Wildlife hat featuring the state-endangered spotted turtle. 

Spring Into Action – Volunteer!

Spring is upon us, and our busiest field season is now through the end of summer, when wildlife populations are most active. The Nongame and Endangered Wildlife Program is looking for volunteers to help this spring and summer on a variety of projects around the state. From monitoring state-endangered piping plovers at the seacoast, to reporting sightings of reptiles and amphibians, to counting bats for conservation, there are plenty of opportunities, no matter where you are or how much time you have to contribute. Whether you see 1 or 100, every sighting counts!

For a complete list of volunteer opportunities, visit N.H. Fish and Game online at www.wildnh.com and click on “volunteer” at the bottom of the page. 

Warm Winters and Wildlife

Is that a salamander in the snow? Why, yes, it is!

This winter's lack of snow and above-average temperatures kept heating and snow removal costs down for many New Hampshire residents, but what have the costs been for wildlife adapted to survive our typically frigid, snowy New England winters?

Throughout the food chain, from butterflies to barred owls, entire ecosystems are affected by warm winters. Karner blue butterflies, already endangered in New Hampshire, are at greater risk of extirpation in winters with little to no snow cover. The butterflies lay their eggs on plants low to the ground, and the snow cover acts as a blanket, insulating them from temperature fluxes and bitter winds. Without snow, the eggs become cold, lose moisture and can die.

Mild winters without snow affect the entire food chain, from small mammals to large avian predators. Moles and voles stay under the snow for warmth. Weasels are subnivean hunters, traveling through corridors under the snow to catch their prey. Owls use their keen sense of hearing to detect small mammals traveling through these hidden tunnels. Both ermine (also called long-tailed weasels) and snowshoe hare turn white in the winter to blend in with their surroundings and hide from predators.

Aquatic ecosystems are also at risk. No snow means no spring melting, which means rivers and streams don't get that cleansing rinse of fresh water to wash away sediments that build up over the winter. Aquatic insect life cycles may be altered, and the fish that feed on them may have less to eat this spring and summer. Vernal pools don't get the supply of water needed to create temporary pools that many frogs and salamanders depend upon to lay their eggs. They may be forced to breed in larger waterbodies that support predators like fish that could eat the eggs, or they may lay their eggs in suboptimal habitat, risking their survival.

"Weather extremes can certainly cause stress on plants and animals," said John Kanter, Coordinator of the Nongame and Endangered Wildlife Program. "But it would take several years of consecutive extreme weather patterns to really impact



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wildlife populations overall. Right now, we don't know how climate change may impact our local species."

As for salamanders being seen in the snow? That is true! According to Brendan Clifford, a Nongame biological technician, there was a verified observation of a salamander walking on snow in Bartlett, N.H., this January. "It's not uncommon for

us to get reports of snakes or salamanders being seen out during the winter," said Clifford. "In fact, we have been checking some known black racer locations this winter and often see them out on southern-facing slopes, basking on warm days." He noted that observations of reptiles or amphibians can be reported to N.H. Fish and Game at www.wildlifesignings.com.



Fast Facts: Great Blue Heron



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Great Blue Heron
(*Ardea herodias*)

N.H. Species of Conservation Concern

Protection Status: Protected under the Migratory Bird Treaty Act (1918).

Physical description: 39-52 inches tall, with a 5-6-foot wingspan; weighs 4-7 pounds. Male and female are similar, with blue-gray body color, whitish face and neck, long legs, long neck and long, thick bill.

Habitat: Fresh and saltwater marshes; beaver impoundments; wet meadows; margins of lakes and ponds, rivers and streams. Often nests in colonies, called rookeries.

Range: Most common heron in New Hampshire; occurs throughout the state.

Diet: Variable; includes insects, fish, reptiles, amphibians, crustaceans and sometimes even small birds and mammals.

Threats: Habitat loss and water quality deterioration.

Lifespan: About 15 years. The oldest recorded wild great blue heron lived to be 21 years old.

Fun fact: Great blue herons also occur in a white morph called a "Great White Heron." These birds have pure white plumage and are found only in Florida and the Caribbean.

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physically capturing them. “We wanted to compare the efficacy of camera trapping to live trapping,” Siren said. “So far, we have lots of marten caught on camera, but are still developing a technique to be able to identify individuals.” Whether caught in a live trap or on film, the marten’s favorite snack seems to be sardines.

A work crew comes by snowmobile every day to the wind farm during the winter, but Siren has not directly witnessed any disturbance to marten from noise created by the snowmobiles. “The bigger question is going to be what predators move into marten habitat because of the new roads that provide easy travel corridors,” said Siren.

To test this, he has established “track transects” along different path types that access high-elevation terrain. At least once a month, he counts tracks of fisher, coyote and fox along these transects and takes snow measurements every kilometer. Doing so will help him understand if compacted snow or certain types of paths (i.e., high-elevation roads, snowmobile trails and snowshoe trails) allow predators to access winter marten habitat. As of February, Siren had been

able to conduct three tracks surveys.

Siren’s survey work with the marten will continue through the summer. By conducting surveys both before and after the wind tower construction, biologists are assessing direct impacts to American marten. In particular, the study is generating information on whether or not pine marten alter their habitat use in response to the development of wind turbines. Through this work, the Nongame Program and UNH are producing information that may be used to address potential impacts on marten for future large-scale wind farm development projects in high-elevation habitat and – ideally – get incorporated into broader guidelines relating to the construction of such facilities. Learn more about state-threatened American (pine) marten at www.wildnh.com/nongame.



Alexej Siren tracked 8 marten equipped with radio collars last winter.

Correction

The Winter 2012 issue incorrectly stated the number of bats found during surveys of the World War II bunkers. The actual number of bats found were 77 (2010) and 114 (2011), none of which showed signs of being infected with the deadly white nose syndrome.

SPRING Wildlife Almanac

APRIL

- Turtles and snakes emerge from hibernation. Look for them sunning themselves on rocks and logs.



MAY

- Great blue heron chicks hatch. They are born without feathers and have to be fed by their parents. Around two months of age, the young birds will be mature enough to leave the nest, which typically is built 16-50 feet above ground!

JUNE

- Little brown bats give birth to pups late this month and in early July.
- Look for the flashing lights of fireflies over meadows and lawns.

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