

# Wildlines

WINTER 2014

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


# Conserving Nongame and Endangered Wildlife

By John Kanter

As 2013 came to a close, so did our year-long celebration of the Nongame and Endangered Wildlife Program's 25th anniversary. It was a phenomenal year, with many opportunities to reflect on the progress of efforts to protect and conserve at-risk species and their habitats in New Hampshire and honor those who helped establish the Nongame Program and implement projects in its early years. It also was an important chance to think about what the next 25 years will look like for wildlife.

Many of you were there in October for the Nongame and Endangered Wildlife Program's gala anniversary celebration at the Grappone Center in Concord. Over 165 guests attended, including a mix of past, present and future conservationists and nongame supporters, from Anne Tappan, who was the first coordinator of the Nongame Program at N.H. Fish and Game, to current staff and volunteers – including students who were recognized for their efforts to support the Nongame Program. It was great to see such a dynamic blend of people of all ages and backgrounds gather together to recognize and celebrate a common interest: protecting and conserving New Hampshire's wildlife.

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*John Kanter (right) congratulates Genesis Award winner Dick Henry of N.H. Audubon at the 25th Anniversary event.*

# Wind Farms and Wildlife Research Wraps Up

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Two separate research initiatives investigating the impacts of wind farm development on wildlife wrapped up in 2013. One project was in partnership with the University of New Hampshire and focused on American pine marten, which are listed as threatened in New Hampshire. The other was in partnership with Plymouth State University and looked at Bicknell's thrush, a rare, Nearctic-Neotropic migrant. Both species depend on high-elevation spruce-fir forests in New Hampshire. This research was funded in part by Granite Reliable Power, the developer of 33 wind turbines built along the high-elevation ridgeline in

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**mooseplate.com**

# Moose Plate Dollars at Work

Did you know that the New Hampshire Conservation License plate (a.k.a. Moose Plate) helps to support over a dozen different projects related to nongame, threatened and endangered wildlife conservation in New Hampshire? In 2013, more than $255,000 was allocated to the Nongame and Endangered Wildlife Program from the sale of NH Moose Plates! Following are some highlights of how this funding helps support nongame wildlife conservation:

- During the winter of 2013, a total of 109 potential **New England cottontail** habitat sites were visited in the Seacoast and Merrimack Valley regions. Fifty-eight pellet samples were collected and analyzed by the University of Rhode Island, of which 15 were confirmed to be New England cottontails! In addition, five New England cottontails that were born in captivity were equipped with radio transmitter collars and released into suitable habitat in the seacoast area.

- Summer 2013 brought the return of seven pairs of state-endangered and federally threatened **piping plovers** to New Hampshire's coastal beaches to nest and raise their young. Monitoring and protection efforts by Fish and Game staff and volunteers helped plovers successfully fledge a total of 12 chicks – the highest number in more than a decade!

- More wild **Karner blue butterflies** were documented living on the restored Pine Barrens in Concord than ever before. In 2013, captive breeding helped supplement the wild population. The Kids for Karners program also continued, with over 30 classes from five schools in the Concord area learning about Karners and their habitat and helping grow wild blue lupine.

- Turtle traps were set and monitored nearly every week over the course of the summer in 2013 as part of an ongoing study to learn about the abundance and distribution of state-endangered **Blanding's turtles**. Survey sites were expanded to include towns that are believed to be at the edge of the Blanding's turtle range and more developed areas previously not surveyed. Blanding's were found in all types of survey sites, and biologists learned that they certainly can utilize many different types of wetlands! Blood samples were collected, helping biologists identify distinct populations not only within New Hampshire, but throughout their range, which includes Maine, Massachusetts, Pennsylvania and New York (where biologists are conducting similar research).


For the full report, and to find out where the rest of the Moose Plate proceeds are allocated, visit ***mooseplate.com***.


# Fall Special Appeal Thanks

Thanks to everyone who did a good "tern" by supporting our 2013 fall appeal. We asked for your help on a special project that will further our knowledge and understanding of terns that use the Isles of Shoals to nest and raise their young. Since 1997, protection and restoration efforts, combined with ongoing monitoring, have led to the successful recovery of a breeding colony of terns at the Isles of Shoals that historically was, and now once again is, the largest breeding colony of terns in the Gulf of Maine.

Thanks to your contributions, biologists will be able to purchase necessary nanotag telemetry equipment to learn more about the foraging behavior of common terns. Monitoring terns during the summer while they are here at the Isles of Shoals is only part of the puzzle; the information transmitted by these nanotags and captured through the Northeast Regional Migration Monitoring Network will allow biologists to analyze tern foraging, trip duration, flight direction, foraging habitat and post-nesting migration.

Donations received for this special fall appeal also count as part of the private matching funds we need to help the Nongame Program qualify for federal funding from the U.S. Fish and Wildlife Service. This combination of private-public funding is what makes wildlife research and conservation possible in New Hampshire. Thanks for doing your part!

# *Fast Facts:*
## Sharp-shinned Hawk

**Status**: Little is known about the status of sharp-shinned hawks in N.H. and whether their population is increasing, decreasing or remaining the same. This may be in part because they are fast flyers and difficult to distinguish from other species, such as Cooper's hawks and merlin, which are similar in appearance and are also found here.

**Physical description**: 10-14 inches long from head to tail. Both the male and female have a dark grayish back and rusty barred chest. Their long, banded tails are square when perched, vs. Cooper's hawks, which are similar in appearance, but slightly larger in size and have a rounded tail.

**Habitat**: Mixed or coniferous forests bordering clearings or openings such as meadows and yards. Preys on small mammals and birds along forest edges and may be found preying on songbirds at backyard birdfeeders during winter.

**Range**: Year-round resident in southern and central New Hampshire. Breeds, but does not winter, in northern parts of the state.


Sharp-shinned Hawk
*(Accipiter striatus)*

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Naomi Edelson, Director of the State and Federal Wildlife Partnerships for the National Wildlife Federation, was the keynote speaker for the evening. Her enthusiasm and passion for conservation is always apparent and truly inspiring. Naomi eloquently brought the big picture to light and explained many of the current issues facing wildlife conservation nationwide.

Now, as a new year begins, so does the next chapter in the evolution of nongame, threatened and endangered species conservation in New Hampshire. It is time to put those boots to the ground, just as our predecessors before us did. From the steps of the State House to the shores of the seacoast and the top of Mount Washington, there is work to be done to ensure wildlife and wild places remain for future generations.

I encourage you to take a moment to view a short video on the history of the Nongame and Endangered Wildlife Program at ***wildnh.com/nongame***. On behalf of all of us here at the Nongame and Endangered Wildlife Program, thank you for your continued support!

## SUPPORT THE NONGAME AND ENDANGERED WILDLIFE PROGRAM

*Please count on me to help protect nongame wildlife! Enclosed is my gift of:*

❑ $35 ❑ $50 ❑ $100 ❑ $250 ❑ $500 ❑ $1,000 ❑ Other $_____

❑ Check enclosed

*Charge to:* ❑ VISA ❑ MasterCard ❑ DISCOVER Signature_____

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*Mail to:* Nongame Program, NHF&G, 11 Hazen Drive, Concord, NH 03301

*All gifts are tax-deductible. Please make checks payable to NHF&G/Nongame Program*

# WINTER Wildlife Almanac

**JANUARY**

- Look for flashes of color as blue jays, red Northern cardinals, and even the pale yellow plumage of non-breeding American goldfinches add splashes of color to the winter landscape! Test your identification skills by sight and sound. Start a birding journal.

**FEBRUARY**

- Look for signs of rabbits on the snow-covered ground. Eastern and New England cottontails leave pea-sized brown pellets and snowshoe hares leave pellets the size of lima beans. Eastern and New England cottontail tracks are approximately 3 inches long, while snowshoe hare tracks are 4-5 inches long. Browsing of twigs by rabbits leaves sharp-angled, clean cuts, vs. browsing by deer, which leaves torn, ragged tips at the ends of twigs.

**MARCH**

- Take a ride to the seacoast for a day of coastal birding. Stop at Chapman's Landing and other points around Great Bay for opportunities to view winter waterfowl, including mallards, American black ducks, greater scaup and common goldeneye.

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Millsfield and Dixville. The study included preconstruction and post-construction surveys to determine any changes in behavior or habitat use by wildlife.

During the research, American marten were live-trapped, radio-collared and marked with small ear tags to allow researchers to study their habitat use, movements and home range sizes. Trail cameras were also set up and snow track surveys were conducted to document the presence of additional marten and other wildlife within the study area before, during and after wind tower construction. Researchers found that during the construction phase of the wind towers, marten were periodically displaced and used the study area less. Although proximity did not return to that of the preconstruction period, it did gradually increase after construction ended, suggesting that marten were adjusting to the new site conditions.

The total number of Bicknell's thrush detected, and the number of other bird species recorded, remained stable during the study. Researchers reported a reduction in the number of Bicknell's thrush, as well as other species, at wind turbine study sites while the turbines were operational, but noted that Bicknell's thrush did not completely avoid areas with turbines, especially


if their preferred habitat structure was adjacent to the turbines. Male Bicknell's thrush did, however, increase their home ranges in areas with turbine noise, suggesting that the noise altered their behavior and habitat use.

A significant finding from both studies was related to an increase in predators and competitors. Researchers studying American marten documented an increase of red fox and coyotes in the study area following construction, likely due to maintained roads and snowmobile trails that provided easy access into high elevation habitats that predators otherwise would not have frequented. Researchers studying Bicknell's thrush reported about 62 acres of forest were cleared for development of the wind towers – this large opening within the forest allows more sunlight in and changes the vegetative composition around the edges of the clearing. These edges create habitat for a whole different suite of avian species (competitors) and predators such as hawks, fox and coyotes.

"Despite the growing interest in wind power in the Northeast, there had not been any studies documenting the effects of wind farm development on wildlife that depend on high-elevation habitats," said John Kanter, Nongame and Endangered Wildlife Program Coordinator. "It remains to be seen how wildlife are impacted by the operation of wind turbines and the direct loss of mature spruce-fir forest, combined with changes in plant and animal communities."

Now that the studies are complete and the final reports are in, biologists will review the findings in detail to gain a better understanding about the effects of wind tower development on high-elevation wildlife species. Results of these studies will be used to guide recommendations for future development of wind facilities and identify future research needs.