

Conservation Connections 2008

News from New Hampshire Audubon's Conservation Department



March, 2009

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Letter from the Director

We're pleased to bring you this report on the 2008 activities of New Hampshire Audubon's Conservation Department. It was a busy year in the field for our biologists and volunteers as they followed the activities of Bald Eagles, Peregrine Falcons, Common Nighthawks, dragonflies, and other native wildlife around the state. We have also been busy on the policy front—participating in local land use planning initiatives, regional conservation partnerships, and legislative committees on wetland issues. We bring sound science to public processes that have far-reaching impacts on New Hampshire communities.

As snow lies deep around the McLane Center, we are finishing up several major projects and making plans for the warmer field seasons ahead (except for Chris, who is enjoying field time with wintering Peregrines and Bald Eagles!). We are looking forward to a number of new projects in 2009—working with the Deerfield and Franklin planning boards, piloting survey protocols for Rusty Blackbirds, monitoring the Bicknell's Thrush population associated with the Mittersill ski area—as well as continuing work on long-term projects.

The Conservation Department plays a key role in New Hampshire Audubon's mission to protect and enhance New Hampshire's environment for wildlife and for people, and your support makes all this possible.

Thank you for being part of New Hampshire's conservation community.

Carol R. Foss

In January, New Hampshire Audubon welcomed Michael Bartlett to lead the organization. Mike brings with him a wealth of knowledge and experience from more than thirty-five years with the U.S. Fish and Wildlife Service. Most recently he was director of the New England Field office, working on wetlands and hydropower regulation, habitat restoration, endangered species recovery, and natural resource damage assessment at Superfund sites and oil spills.

I am delighted to be working with the great team of biologists in the Conservation Department. In my work at the U.S. Fish and Wildlife Service, we depended on New Hampshire Audubon and other organizations to provide key information and research. Thank you for being a partner in this important work and supporting New Hampshire Audubon's biologists. I look forward to meeting many of you in the months ahead and hope to see you in the field. Thanks again for your support.

~ Mike Bartlett

Thank You

A very special thank you to everyone who donated to the Conservation Department and helped to make these programs possible.

The New Hampshire Audubon Conservation Department gratefully acknowledges grants from the following:

New Hampshire GIS Conservation Collaborative
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2008 Important Bird Area Update

by Pamela Hunt

The number of Important Bird Areas (IBAs) in New Hampshire grew to 17 with the addition of the Brentwood Mitigation Area, home to the largest breeding population of Pied-billed Grebes in the state. The New Hampshire IBA Program is part of a national and international effort to identify areas that provide critical habitat to birds during some stage of their annual cycle. New Hampshire Audubon leads the state's partnership with NH Fish and Game and the University of New Hampshire Cooperative Extension. A complete list of New Hampshire IBAs, including site summaries, is available at the IBA web page (<http://nhbirdrecords.org/bird-conservation/IBA.htm>).

The goal of the IBA program is to foster conservation and there were several such examples at NH IBAs in 2008. New Hampshire Audubon and several partners met to discuss a Connecticut River conservation partnership modeled on the successful Great Bay Resource Protection Partnership. The proposed group would promote protection of agricultural lands and floodplain forests, recommend management practices, and identify key research needs for the IBA's bird populations. Studies are already underway on breeding bird use of floodplain forests and habitat use by migrating waterfowl by graduate students at Antioch University New England in Keene.

At the Powwow Pond IBA in Kingston the lake association proposed using herbicide treatments to control native aquatic plants in the pond, raising concerns about the effects of the treatment on the water birds that stop in migration. New Hampshire Audubon coordinated volunteer water bird surveys during October and November 2008 at Powwow Pond and five nearby ponds. We found that Powwow Pond consistently supports significantly more birds than any of the other ponds, and was essentially the only pond used by four species: Ring-necked and Ruddy Ducks, Pied-billed Grebe, and American Coot. Powwow Pond is the most important stopover site for these

species in the entire state, and given that all require dense aquatic vegetation, the proposed herbicide treatment has potentially serious effects on their habitat. These findings will be used to inform future policy as discussions about aquatic vegetation management continue in 2009.

In the fall of 2007, New Hampshire Audubon completed a study of bird use in the Hampton-Seabrook Estuary IBA. This study identified several key sites for shorebirds and salt marsh sparrows within the larger estuary, and made recommendations for future conservation work. Since then, we have joined the "Partnership to Restore New Hampshire's Estuaries," where our biologists can bring a bird perspective to the table and work to implement conservation strategies identified in the Hampton-Seabrook report.

Finally, New Hampshire Audubon and partners in New York, Vermont, and Maine have been working on a bird conservation plan for the Northern Forest. An earlier stage of this collaboration identified large unfragmented forest blocks that might qualify for IBA status, and we continue to explore the best way to implement bird conservation at such a large scale. The regional conservation plan will identify common issues facing this habitat and facilitate unified policy actions among the four states.

At an even larger scale, three of the state's IBAs were recognized as Globally Important by the program's National Technical Committee. Two of these, Great Bay and the Hampton-Seabrook Estuary, were recognized because of their populations of Saltmarsh Sharp-tailed Sparrows, a globally vulnerable species. The third was the "White Mountain High Elevation Forest," home to perhaps 30% of the world's Bicknell's Thrushes.

The NH IBA program is funded by a variety of project-specific grants and NH Fish and Game.



RING-NECKED DUCK FEMALE AND MALE, BY LEN MEDLOCK.

Volunteer Needs

There are many volunteer opportunities in the Conservation Department. They include field work throughout the state and in-office work, both at home and at the McLane Center in Concord. For a list of current openings, please see the web site, <http://nhbirdrecords.org/volunteer/nha-volunteering.htm> or contact Becky Suomala, 603-224-9909 x309, bsuomala@nhaudubon.org to receive a list by mail.

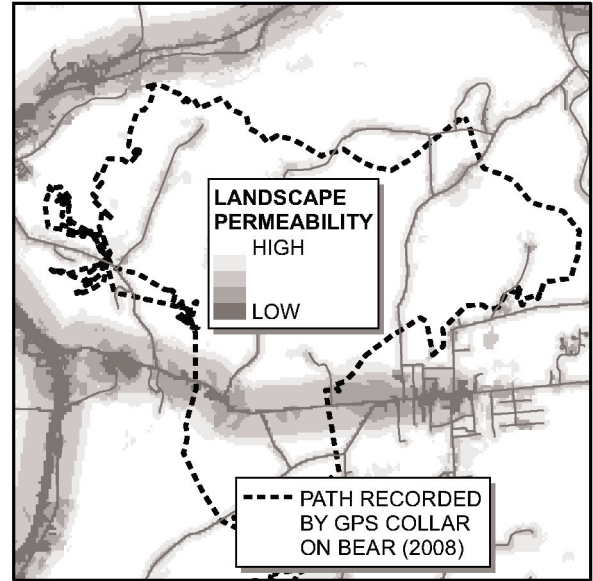
Wish List

- 10'X10' sheets of rubber roofing membrane
- Family Radio Service (FRS) radios
- Night vision binoculars
- Sturdy plastic 5 gallon buckets with metal handles (i.e., joint compound buckets)

A Wildlife Connectivity Model for New Hampshire

by Carol Foss

New Hampshire Audubon biologists, supported by a grant from the NH GIS Conservation Collaborative, worked with colleagues at the NH Fish and Game Department to develop a wildlife connectivity model for New Hampshire. Numerous agencies and organizations have been working for decades to protect core areas of important habitat, but development patterns in recent years have underscored the need to ensure that wildlife can move freely between areas of protected land. The new connectivity model weights different land cover types (e.g., forest, agricultural lands, developed areas, roads) based on the ease with which various animals can move across them, and identifies “paths of least resistance” through the New Hampshire landscape. Our presentation on the model at the Northeast Transportation and Wildlife Conference last fall was very well received, and colleagues in Maine have subsequently adopted our method for their state’s analysis. We look forward to working with interested communities to apply this new information to land use practices on the ground.



BLACK BEARS EQUIPPED WITH GPS COLLARS CROSSED ROADS AT AREAS OF HIGHER PERMEABILITY IDENTIFIED BY THE WILDLIFE CONNECTIVITY MODEL.

New Collaboration with Lakes Region Planning Commission

by Carol Foss

In an exciting new initiative, the Conservation Department teamed with the Lakes Region Planning Commission (LRPC) to provide a coordinated review of Bristol’s land use planning documents with respect to wildlife habitat, natural resources, and smart growth principles. Funded by the Samuel P. Pardoe Foundation, our part of the review involved evaluating the town’s master plan, zoning ordinance, site plan review and subdivision regulations, and application checklists to assess how well they address 26 habitat and natural resource topics. Simultaneously, the LRPC reviewed the town’s documents with respect to eight Smart Growth Principles. Working with the Bristol Planning Board, we consolidated our reviews and provided the town with a comprehensive report of findings and recommendations. While both New Hampshire Audubon and LRPC had conducted their respective reviews independently for other towns, this was the first effort to combine the smart growth and natural resource audits. Bristol officials have thoroughly reviewed the report, and have drafted ordinances for consideration at their upcoming Town Meeting to address several of our recommendations. We look forward to working with LRPC on behalf of other towns during 2009.

Wetland Protection Policies

by Laura Deming

Laura Deming has been participating in a legislative committee reviewing land development regulations and the effects of development on New Hampshire wetlands and surface waters. This committee was established after a 2006 NH Supreme Court decision that interpreted the state’s wetlands dredge and fill review to apply strictly to “direct impacts,” which are those related to the actual footprint of a dredge and fill activity. This ruling made it clear that the NH Department of Environmental Services does not have authority to consider “indirect impacts” of a proposed project, which can include water quality degradation from erosion and runoff, habitat loss and fragmentation caused by induced development, and impacts to wildlife from roads, development, and human activity. The scope of the committee’s study includes the adequacy of current local, state, and federal programs related to land development, opportunities for and obstacles to integrating land development regulations and techniques, and the need for legislation to implement recommended strategies.

Laura also testified on behalf of New Hampshire Audubon in support of Senate Bill 435, which would clarify the state’s authority to consider indirect impacts in the wetlands application process. SB 435 was defeated; a new legislative effort to address this issue is now underway.

Record Number of Bald Eagle Nests and Young in 2008

by Chris Martin

The 2008 New Hampshire Bald Eagle breeding season was highly successful, with several post-DDT era state records established. New Hampshire Audubon (NHA) biologists and volunteer observers, with support and cooperation from federal and state agencies and local landowners, documented a total of 15 territorial pairs in 2008, the same number confirmed in 2007. One new nesting pair was confirmed at Silver Lake in Tilton, but there was no evidence of a territorial pair that had been present at Merrymeeting Lake in New Durham in 2007. Pair activity without a known nest was observed for the second straight year on Surry Mountain Lake in Surry.

Incubation was confirmed at a record-high 13 active eagle nests, surpassing the 11 pairs confirmed incubating during both the 2006 and 2007 seasons. Twelve of these pairs fledged young, up 50% from the eight successful pairs last year, and 20% more than the former record-high of 10 successful pairs in 2006. A record-setting total of 24 young Bald Eagles reached fledging age in New Hampshire in 2008, twice as many as

in 2007 and more than the previous record-high of 21 fledged in 2006. It is fairly rare for Bald Eagles to fledge three young, but this year three different pairs (Moultonborough Bay, Nubanusit Lake, and Pontook Reservoir) produced three fledglings each.

Several interesting situations developed in 2008 that involved eagle nests or young eagles. Following a nesting failure in Hinsdale, the entire nest tree of the Vernon Dam pair fell into the Connecticut River after an extended period of erosive river flow in April. At Nubanusit Lake, an observer watched an eaglet tumble from the nest to the ground, breaking off several dead branches on the way, but surviving the fall without injury. At Moultonborough Bay, the nest that produced three young collapsed at fledging time, leaving all three fledglings "homeless" but unharmed.

This project is funded by NH Fish and Game and private donations.



MOULTONBOROUGH BAY BALD EAGLE CHICK
RETURNED TO THE NEST AFTER BANDING, 6/12/08.
PHOTO BY RICK GRAY, BIODIVERSITY RESEARCH INSTITUTE.

Peregrine Falcons Continue to Recover

by Chris Martin

New Hampshire's Peregrine Falcon breeding population continued its gradual recovery during 2008. Biologists and volunteers tallied 18 territories occupied by at least one resident Peregrine, equaling a post-DDT state record-high mark set in 2007. Another state record-high of 13 pairs (100% of those that hatched eggs) fledged young in 2008, surpassing the previous state high of 12 successful pairs in 2007. The statewide total of 27 young fledged in 2008 equaled the 2002 record high, which had not been matched again until this year.

New Hampshire biologists and cooperators accessed nine Peregrine eyries in 2008, banding a total of 16 nestlings at seven productive sites. Falcon banding efforts in the state were supported by a generous donor and coordinated by Chris Martin. Efforts continued in 2008 to determine the status of New Hampshire's banded Peregrines. Highlights include:

- 13-yr old male from Dixville, breeding in Franconia
- 8-yr old male from Bartlett, breeding in Manchester, mated to a 3-yr old female from Worcester, Massachusetts
- 6-yr old female from Dixville, breeding in Albany, wintering in Concord
- 5-yr old female from Milford, Connecticut, breeding in Lyme
- 4-yr old male from Rumney, breeding in Benton

A total of 66 (22%) of the 300 Peregrine fledglings that have been color-banded at New Hampshire nest sites have later been encountered (alive or dead) and reported to us.

The Peregrine Project is funded by NH Fish and Game and private donations.

Record-setting Osprey Breeding Season

by Chris Martin

The 2008 Osprey breeding season in New Hampshire has turned out to be another record-breaker! These statewide estimates for New Hampshire are all state-record highs:

- 68 territorial pairs
- 57 active nests (active = evidence that eggs were laid/incubated)
- 40 successful nests (success = at least one young fledged)
- 87 young fledged (1.53 young/active nest; 2.18 young/successful nest)

The 2008 season was the fourth consecutive year that we estimated 50 or more territorial pairs of Ospreys present across New Hampshire. Twenty years ago, all of our Osprey pairs were located in the Androscoggin River watershed. In 2008 the Merrimack River watershed, which had no Osprey pairs at all in 1996, took top honors for supporting the most territorial pairs (21). For only the second time since 1980 a New Hampshire Osprey nest fledged four young in 2008—a rare event in 669 documented Osprey breeding attempts in New Hampshire!

I am pleased to report that the pace of the state's Osprey population rebound (Figure 1) has enabled NH Fish and Game to remove Ospreys from the state's threatened and endangered wildlife list.

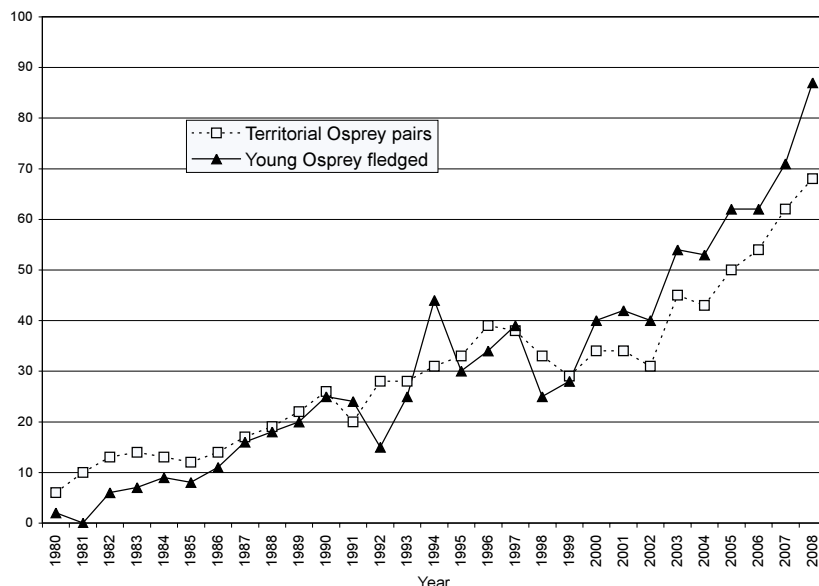


FIGURE 1. NUMBER OF TERRITORIAL OSPREY PAIRS AND YOUNG FLEDGED IN NEW HAMPSHIRE SINCE MONITORING BEGAN IN 1980.

This project is funded by NH Fish and Game and private donations.

New Hampshire Threatened and Endangered Species List Revision

by Pamela Hunt

Pamela Hunt (under contract with NH Fish and Game) led the 2007 revision of the state's list of threatened and endangered wildlife, which became official in the fall of 2008. During this process, experts evaluated data on threats facing wildlife populations, the size and trends of those populations, and the overall significance of New Hampshire for each species' broader conservation. Highlights of the revision from the bird perspective include progress towards the full recovery of several raptor species (see the Osprey 2008 Summary), as well as the tern colony on the Isles of Shoals. The only bird on the list considered worse off than before is the Common Nighthawk, a status that helped propel New Hampshire Audubon's Project Nighthawk.

We used a similar process to develop a working list of "species of special concern." This category is not legally defined, but is useful to biologists to prioritize conservation efforts and track species that show potential to become threatened or endangered in the foreseeable future or that have been recently de-listed. There are many additional declining species and New Hampshire Audubon will monitor distribution and population trends of these species.

Endangered Birds:

Northern Harrier
Golden Eagle
Piping Plover
Upland Sandpiper
Roseate Tern
Least Tern
Common Nighthawk
Sedge Wren

Threatened Birds:

Common Loon
Pied-billed Grebe
Bald Eagle
Peregrine Falcon
Common Tern
American Three-toed Woodpecker
Grasshopper Sparrow

Special Concern Birds:

Spruce Grouse
Least Bittern
Osprey
American Kestrel
Sora
Common Moorhen
Willet
Arctic Tern
Whip-poor-will
Olive-sided Flycatcher
Horned Lark
Purple Martin
Bank Swallow
Cliff Swallow
Bicknell's Thrush
American Pipit
Golden-winged Warbler
Cerulean Warbler
Vesper Sparrow
Nelson's Sharp-tailed Sparrow
Saltmarsh Sharp-tailed Sparrow
Seaside Sparrow
Eastern Meadowlark
Rusty Blackbird

Project Nighthawk Expands in 2008

by Rebecca Suomala

The summer of 2008 was the second year of New Hampshire Audubon's Project Nighthawk. This project is testing the potential for restoring urban-nesting nighthawks by placing simple gravel "nest patches" on flat rooftops in Concord and Keene. We continued to install additional gravel patches on buildings in Concord, and the Ashuelot Valley Environmental Observatory (AVEO) spearheaded the effort in Keene in partnership with Antioch University New England graduate student Ken Klapper. A new effort in the Hanover area, started by volunteer Lou-Anne Conroy, resulted in the installation of four nest patches there.

In response to many requests for "how-to" information, Project Nighthawk created the "Gravel Patch Handbook" with instructions for individuals interested in creating their own patches. Thanks to the help of volunteer Len Medlock, we created a new web page for the project that includes the Handbook as well as a Photo Gallery of patches and other project information. It's accessible from the *New Hampshire Bird Records* web site, <http://nhbirdrecords.org/bird-conservation/Nighthawk-main.htm>. Jane Koliass, volunteer Project Assistant, has contributed to all these efforts and is currently finishing an informational poster to place at sites that host a nest patch.

By the end of the 2008 field season, a total of 34 gravel patches had been installed statewide. Volunteers surveyed for nighthawks in towns with patches and monitored the patches, but so far no nighthawks have used a patch. Males have displayed over several



FEMALE COMMON NIGHTHAWK WITH TWO CHICKS. PHOTO BY PAMELA HUNT, 7/3/08, CONCORD, NH.

patches that overlay roofs with larger stones, but there was no evidence of nesting. Coordinated watches in Concord produced eight displaying males, two more than last year and in generally the same locations as in 2007. Two females and two chicks (see below) were also observed, making a total of at least 12 nighthawks in Concord.

For the second year in a row, a nighthawk nested on the ground at a business in Concord. Thanks to the help of workers at the plant, two chicks fledged successfully. Stephanie Parkinson monitored this nest closely and observed some fascinating behavior after the chicks began flying, including feedings, practice flights, and chases. We held our breath when the chick landed in the street in front of an oncoming car and Mark Suomala stood in the street to stop the car! (This is not officially recommended behavior!) There is very little written information on nighthawk behavior after chicks fledge and some observations were very puzzling. It shows how much there is to learn and that you can help!

For a more detailed summary of the field season, to volunteer, or to donate to the Nighthawk Project, please contact Becky Suomala at 603-224-9909 x309 or bsuomala@nhaudubon.org.

Whip-poor-will Project Begins Mapping Territories

by Pamela Hunt

This is the sixth year that New Hampshire Audubon coordinated Whip-poor-will surveys in the state, and the third year that surveys occurred across a much broader portion of the northeast U.S. Over 100 designated routes were surveyed in 2008, with top honors going to Maryland, New Jersey, and New York, each of which had routes with over 25 birds. New Hampshire's 13 survey routes tallied a respectable 24 Whip-poor-wills, at locations ranging from Milan to Swanzey. High counts continue to come from the Ossipee and Upper Merrimack River regions, although this year the blue ribbon goes to the Marlow survey route, with a total of six birds.

Partners at North Carolina State University helped the Northeast Nightjar Survey in 2008 by analyzing the data collected in 2007. Their analysis determined that there are two general "calling types" of Whip-poor-wills: those that seem to call continuously and those that call relatively infrequently. These results have application to the monitoring program because they give us an idea of how often birds call, and thus our chances of missing them even when they are there. By incorporating such information we can better interpret the trends we see from long-term surveys.

In addition to volunteer surveys on pre-determined routes, a

smaller band of hardcore Whip-poor-will fanatics helped map territories in two "hot spots," the Ossipee Pine Barrens and the Mast Yard State Forest in Hopkinton. This involved taking compass bearings on calling birds from fixed points and then using triangulation to determine the approximate location of each Whip-poor-will. We could then determine how many birds were there and what parts of the study area they were using. This information can inform future conservation activity, including possible habitat management.

In the Ossipee Pine Barrens, we focused our efforts on a 1.5 mile abandoned airstrip in Freedom, now part of an extensive area of conservation land owned by the town. I'm still plotting the data, but during one visit on June 20, I estimated 20–25 birds in this relatively small area—a number that is hard to believe unless you were there. More extensive coverage of Mast Yard provided a more confident population estimate of 12 pairs, most along forest edges (as one would expect). Next year we hope to continue this work and add a radio-telemetry component to better track individual birds.

The Whip-poor-will Project was funded by the Nuttall Ornithological Club, the American Bird Conservancy, and private donations.

New Hampshire Dragonfly Survey

by Pamela Hunt

The New Hampshire Dragonfly Survey completed its second year in 2008, with expansion to southwestern NH and the Ossipee area. Volunteers attended one of three training sessions in May and June, after which they were set loose to survey local wetlands. Early in the season, several observers encountered two relatively rare species: Ebony Boghaunter and Spatterdock Darner, establishing new town records in the process. This was followed later in June by the discovery in Hooksett of Banded Pennants, a species never before recorded in the state. The total number of dragonfly and damselfly species in New Hampshire now stands at a quite respectable 162, thanks to the efforts of volunteers.

In mid-summer the excitement continued, with new sites for two uncommon species that are only found in the Northeast: Scarlet Bluet and Martha's Pennant. The former is of particular interest, since it is considered threatened or endangered in some nearby states. This bright red damselfly was unknown in New Hampshire until 2002, but is now known from 30 sites statewide. The Granite State might turn out to have one of the better populations of this species in the world!

Overall, 23 volunteers spent more than 500 hours surveying for dragonflies in 2008. They found 135 of the 162 species recorded for New Hampshire. Regular surveys also occurred at three New Hampshire Audubon sanctuaries, helping us learn more about the biodiversity on our own properties. Most activity occurred in the southern and east-central parts of the state, but plans call for expanding volunteer training to the Lakes Region and White Mountains in 2009. For more information

on the NH Dragonfly Survey, visit the project web site at <http://www.wildlife.state.nh.us/Wildlife/Nongame/dragonflies.html>. Here you will find project materials and the quarterly "Dragonhunter" newsletter.

The New Hampshire Dragonfly Survey is funded by NH Fish and Game and private donations.



MALE COMMON WHITETAIL DRAGONFLY BY PAM HUNT.

New Hampshire Bird Records and Backyard Winter Bird Survey

by Rebecca Suomala

New Hampshire Audubon volunteers make a vital contribution to our projects as exemplified by the use of *New Hampshire Bird Records* data for Important Bird Area nominations and the NH Threatened and Endangered Species List Revision. We computerize the bird reports submitted by observers across the state. They're used not only in the quarterly publication, but also repeatedly over the years by researchers and conservationists. For many species it's the only source of data on present and past occurrences in the state.

New Hampshire Audubon's annual Backyard Winter Bird Survey is another broad-scale volunteer effort with more than 1,200 participants and over 20 years of data. Danielle Aube, a student at Plymouth Regional High School, conducted a research project using this long term data set. Danielle worked with her teacher, Ina Ahern, to analyze the survey data and write a research paper for the Northern New England Junior Science and Humanities Symposium competition held at the

University of New Hampshire. Danielle placed second at the regional competition, earning a \$1500 scholarship as well as an all-expense paid trip to the national competition in Orlando, FL.

The goal of Danielle's project was to determine if the winter ranges of several New Hampshire bird species had changed over the past two decades. After reading previous research on the subject of climate change and bird ranges, she hypothesized that bird ranges in New Hampshire might be changing in response to environmental changes. She worked with New Hampshire Audubon to obtain and use the data from the annual Backyard Winter Bird Survey to measure these changes. A link to Danielle's full research paper is available on the web page: <http://nhbirdrecords.org/bird-conservation/backyard-winter-survey.htm>.



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Fledgling Vocalizations of New England Landbirds

by Carol Foss

Fledgling birds are a virtually unknown realm. During the summer of 2008 Carol Foss worked with Hope Batcheller on a project to record fledgling landbirds in New England and start an archive of their vocalizations. Hope, a home-schooled high school junior from Petersburg, VT, received a Science Research Fellowship Award from the Vermont Institute of Natural Science for her project. The fellowship award of \$4,200 was split between Hope and New Hampshire Audubon. Hope's summer of recording and photographing fledgling landbirds in Vermont, New Hampshire, and Maine was successful beyond her wildest dreams. She left her original goal of recording fledglings of 16 species in the dust—with a final total of 35! The project also benefited greatly from the assistance of Lang Elliott, a well-known nature recordist from Ithaca, NY, who tutored Hope in field techniques and recording strategies, loaned her a high-quality parabolic reflector, and worked with Hope and Carol in his lab to create a project web site. You can read about her project in the Summer 2008 issue of *New Hampshire Bird Records* (online at www.nhbirdrecords.org), hear Hope's recordings at www.musicofnature.org/fledglings, and learn more about her project at www.vinsweb.org/assets/pdf/researchhopebatcheller.pdf.



HOPE BATCHELLER
RECORDING FLEDGLING
VOCALIZATIONS IN THE
FIELD, PHOTO BY
MARY BATCHELLER.

Rusty Blackbird Surveys Show Declines

by Laura Deming

In the summer of 2008, New Hampshire Audubon biologists hiked into remote wetlands in the White Mountain National Forest in search of Rusty Blackbirds. This reclusive species breeds in swamps, bogs, and beaver ponds throughout the spruce-fir forests of Canada, Alaska, and the northern United States. Despite the remoteness of their breeding habitat, Rusty Blackbirds are in trouble. Historical records and more recent studies across North America indicate that the Rusty Blackbird decline began in the early 1900s. Over the past forty years, however, this species has declined by about 95%, making it the fastest declining songbird in the northern forest.

The most likely causes of this decline are habitat loss and "blackbird control" programs conducted on the wintering grounds of the southeastern U.S. However, researchers are investigating potential problems with migration habitat and breeding habitat, where climate change, acid precipitation, and mercury deposition pose serious threats to northern ecosystems.

In an effort to determine the Rusty Blackbird's status and distribution in New Hampshire's spruce-fir forests, New Hampshire Audubon initiated surveys of historic and potential breeding sites in 2006. These surveys, which were funded by NH Fish and Game's Nongame Program, focused on the northern part of the state, and resulted in just three occupied sites out of 23 breeding sites surveyed. In 2008, New Hampshire Audubon staff and volunteers found Rusty Blackbirds in two of three historically occupied sites surveyed in the White Mountain National Forest. Plans are underway to expand surveys in the White Mountains in 2009. If you are interested in volunteering to survey for Rusty Blackbirds, please contact Laura Deming at (603) 224-9909 x335 or ldeming@nhaudubon.org.