

New Hampshire Wildlife Action Plan

What is a wildlife action plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become more rare and more costly to protect.

New Hampshire snapshot

Geography: New Hampshire's diverse landscape includes granite peaks, forests, wetlands, grasslands, coastal islands, and nearly a thousand lakes and ponds. The state's seven major watersheds provide habitat for hundreds of fish and wildlife species, many of them at risk.



Karner Blue Butterfly/NHF&G

Wildlife: The increasing development pressure of recent years has forced New Hampshire to work harder than ever to conserve the state's wildlife and habitat, and to help the public understand the importance of wild places and wild things to the state's future. New Hampshire's Wildlife Action Plan helps accomplish this by pointing to where the most vulnerable species and habitats are in relationship to the rapidly transforming landscape.

New Hampshire's planning approach

To develop the New Hampshire Wildlife Action Plan, more than a dozen partner organizations, including UNH Cooperative Extension, NH Audubon, and The

Nature Conservancy, collaborated with NH Fish and Game to research, write, and compile the plan over three years.

Scientists first merged data from several existing sources in the state to identify New Hampshire's low and declining wildlife populations, as well as species that are indicative of overall wildlife diversity and health. Biologists

developed comprehensive profiles of each of these species and habitats, then used Geographic Information Systems mapping both to assess the location and relative condition of key wildlife habitats, and to predict potential habitats. To determine both threats and exposure pathways that continue to affect the state's natural resources at many levels, biologists completed a scientific risk assessment process for priority habitats and wildlife species.

Cross-referencing all of this information, Wildlife Action Plan team members were able to produce assessments and strategies at the species, habitat, and landscape levels. The resulting strategies are organized under four focus areas, covering needed conservation actions at every scale, from local to global. Region-

"Here in New Hampshire, wildlife and wild lands bring peace and relaxation to our lives. Fish and wildlife are at the heart of many of our family traditions -- fishing, hunting, birdwatching and moose-watching. These activities contribute to our overall enjoyment of the Granite State's scenery and natural wonders, as well as the New Hampshire economy. The Wildlife Action Plan is an investment in future generations -- of both wildlife and people."

*- Lee E. Perry,
Executive Director, N.H.
Fish and Game*

al air and water quality strategies target the reduction of harmful air and water pollutants by promoting sustainable energy, transportation, and industrial development practices. Plans for local land



Pine Barrens Controlled Burn/NHF&G

and water conservation include approaches for promoting sustainable development and resource use in order to support wildlife health and diversity through a combination of coordinated working groups, technical assistance, and the production of targeted information and education materials. Actions for biodiversity stewardship will

help maintain New Hampshire's biodiversity and habitats by coordinating management, restoration, and land and regulatory protection. And conservation science and information management actions will ensure that the best available science is

used to adapt management protocols and monitor those species and habitats of greatest conservation concern.

Primary challenges to conserving wildlife in New Hampshire

The greatest current and future danger for New Hampshire's wildlife is conversion of wildlife habitat into surfaces and structures – in a word, development. Many habitats are rapidly disappearing or are fragmented by roads and dams, and many ecosystems are pushed out of equilibrium by human activities. New Hampshire is the fastest-growing state in the Northeast, with a human population increase of more than 17 percent from 1990 to 2004. Conversion of land use to residential development increased at almost twice that rate; so, despite many local land conservation victories, some critical species and habitats show declines that need to be addressed right now. Nearly 27% of the state is now protected thanks to large purchases of National Forest Land in the early 20th century and multi-agency efforts to place easements and protection on large tracts

| Wildlife | Total number of species | Species of Conservation Concern* | Threatened/endangered listed species |
|--------------------|-------------------------|----------------------------------|--------------------------------------|
| Freshwater Mussels | 10 | 1 | 2 |
| Insects | ~10,000 | 8 | 8 |
| Fish | 56 | 22 | 2 |
| Amphibians | 22 | 5 | 1 |
| Reptiles | 18 | 7 | 2 |
| Birds | 315 | 33 | 19 |
| Mammals | 63 | 8 | 5 |
| Totals | 10,000+ | 84 | 39 |

*Species of conservation concern include: those in the NH Natural Heritage database as vulnerable to extinction due to rarity and biological fragility; species considered regionally rare according to the Northeast Wildlife Diversity Technical Committee; and those identified by a team of specialists as vulnerable. Since so little is known about many invertebrate species in New Hampshire, these experts feel that it is not yet possible to assess the health of many invertebrate populations. The need for more research is identified as a priority in the Wildlife Action Plan.

Wildlife highlights

| Key Habitats | Wildlife (examples) | Issue (examples) | Action (examples) |
|--|---|---|--|
| Appalachian Oak-Pine Forest 13% protected with 7.5% permanently protected in public and private ownership. | Eastern red bat, Timber rattlesnake, Whip-poor-will, Bobcat | Development or conversion of habitat into home lots, roads, businesses, etc.; resulting fragmentation degrades quality of remaining habitat. | <ul style="list-style-type: none"> • Develop and implement Regional Conservation Plans. • Advise Conservation Commissions, - Open Space Committees and Planning Boards. • Improve interagency coordination for environmental reviews. |
| Pine Barrens 19% protected in public/private partnerships and ownership. | Karner blue butterfly, Pine pinion moth, New England cottontail | Fire suppression (this habitat is maintained by fire and other natural disturbances); lack of active management results in habitat degradation. | <ul style="list-style-type: none"> • Develop protocols for limiting activity in sensitive habitats. • Prioritize and refine strategies to conserve wildlife. • Revise endangered species list. |
| Non-tidal Coastal Watershed 11% protected in public and private ownership. | Brook floater, Atlantic salmon, Shortnose sturgeon, Redfin pickerel, Banded sunfish, Bald eagle | Dams, culverts, and stream crossings fragment habitat and curtail spawning. Headwater streams have lowest amount of forested buffer in the state. | <ul style="list-style-type: none"> • Restore or maintain natural flow regimes. • Protect riparian/shoreland habitat and other wildlife corridors. • Develop stream crossing guidelines and restoration protocols. |

Recommended actions to conserve New Hampshire's wildlife

of forest in the late 20th century. Nevertheless, 75% of these protected lands are in the northern half of the state, and many of the state's most vulnerable species and habitats are found in the southern half of the state.

Even the best-protected wildlife populations and habitats -- and the clean air and water they depend on -- are threatened by climate change, environmental degradation, and pollution. Species and habitats in geographic extremes, such as mountaintops, northern lakes, and coastal islands, suffer most from climate change, while pollution such as acid deposition and mercury affects many



Salmon Parr/Eric Aldrich

habitats throughout the state.

Working together for New Hampshire's wildlife



Piscassic River/Eric Aldrich

A wide diversity of stakeholders and members of the public were incorporated into the planning process. The Wildlife Action Plan brings together the latest science with the opinions of hundreds of conservationists, foresters, academics, managers, planners, landowners, hunters, anglers, community

leaders, and many others with a stake in wildlife and habitat conservation.

Working with the Wildlife Action Plan coordinators, a Communications and Outreach Team developed and implemented plans to gather public input. At the beginning of the process, as part of a larger northeast regional project, a random telephone survey provided information on New Hampshire residents' wildlife priorities and concerns. An all-day

"Wildlife Summit" workshop brought together more than 100 people with an interest or an active role in conserving New Hampshire wildlife. A web survey helped further prioritize wildlife issues, and stakeholder meetings were held to understand participants' perceptions of threats to our wildlife and habitats. A Wildlife Conservation Strategy Forum was held to gather input on some of the major conservation strategies, and a second Wildlife Summit took place in February of 2006 to prioritize and begin implementation of the Wildlife Action Plan.

"The Wildlife Action Plan shows that wildlife face many challenges in New Hampshire, but if we invest in strategies now, we can conserve wildlife and vital natural habitats for future generations. The plan gives communities, conservation commissions, planning boards, and leaders in transportation and economic development more complete information about wildlife populations and critical habitats. As our communities grow, the Wildlife Action Plan will help guide their important decisions around local and regional land and water use and development, so we can fulfill our responsibility to safeguard wildlife and the places they live."

- John Kanter, coordinator, Nongame and Endangered Wildlife Program,
New Hampshire Fish and Game

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