



Wildlines

The quarterly newsletter of the Nongame and Endangered Wildlife Program of the New Hampshire Fish and Game Department

Wildlife in the Whites

Study Shows Decline of 5 Bird Species

Populations of five bird species in the White Mountain National Forest have declined over the past eight years, according to a recent report, and while that's certainly a disturbing trend, it's not surprising.

That's because all five species—the chestnut-sided warbler, common yellowthroat, mourning warbler, rose-breasted grosbeak and the veery—use a kind of habitat that is disappearing quickly from New Hampshire and the New England region.

That habitat, termed “early successional,” is characterized by the saplings and shrubs that emerge and begin growing on a site following an environmental disturbance, such as a fire, wind/ice storm, timber cutting or large-scale insect infestation. The bird species noted in the report seek out either shrubs and small trees or clumps of grass as nest sites. They find food and cover in the thickets these habitats provide.

But early successional habitat isn't just important to birds. Large

mammals like deer, small mammals like rabbits, and many reptile, amphibian and invertebrate species require it, as well.

The bird assessment is just one facet of a larger, more extensive monitoring program to determine how management practices are affecting wildlife in the White Mountain National Forest (WMNF). Fish and Game's Nongame and Endangered Wildlife Program contributes both funding and techni-

cal support to the program.

“The idea is to say: Are we meeting the (forest's) management goals, or do we need to change?” said Leighlan Prout, a WMNF wildlife biologist.

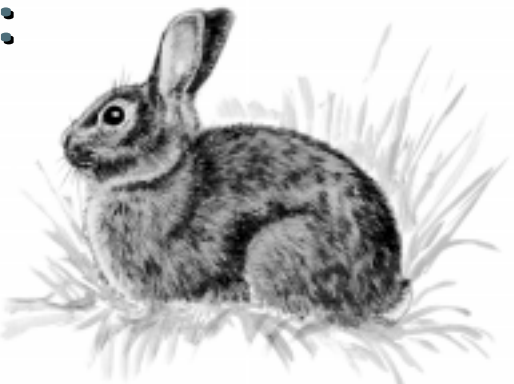
The monitoring program arose out of a lawsuit filed by a group of environmental organizations concerned about the WMNF's use of clear-cutting as a way to create wildlife habitat. As part of the suit's

DECLINE continued on page 2

Nowhere to go:

Habitat loss affects a wide range of wildlife species

As New Hampshire loses early successional habitat that is not replaced, many wildlife species that rely on these habitats face increased pressure from predators, fewer sources of food and, ultimately, a slimmer chance of surviving here.




New England Cottontail


the New England cottontail an abundance of food in proximity to cover, said John Litvaitis, a professor of wildlife ecology at the University of New Hampshire who has studied the rabbits for the past 10 years.

In summer, New England cottontails eat grasses and herbs, while in the winter they eat bark, twigs and buds of young trees. They eat mostly at night. In the day, they stay in thickets to keep warm and to hide from predators like coyotes.

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Wayne E. Vetter
Executive Director

Wildlines
John Kanter, *Nongame and Endangered
Wildlife Program Coordinator*
Carla Palaschuk, *Editor*
Brenda Charpentier, *Writer*

NEW ENGLAND COTTONTAIL

One of the species severely affected by loss of early successional habitat is the New England cottontail rabbit. The species has declined rapidly over the last several decades, so much so that last August several environmental groups petitioned the U.S. Fish and Wildlife Service to protect the rabbit under the federal Endangered Species Act.

Early successional habitat offers

DECLINE continued from page 1

settlement, the WMNF convened a panel of scientists to review the forest's wildlife strategy. The panel found that strategy sound, but in need of testing.

Central to the wildlife monitoring program are 360 "test" plots scattered across 45 miles of the WMNF. These plots comprise lands of three distinct types: lands managed through timber cutting, areas adjacent to managed lands; and remote, unmanaged areas.

Several kinds of surveys occur at each test plot, from small mammal trap surveys and surveys of animal tracks, to the sight-and-sound surveys used for the bird inventory.

The monitoring program is unique, said Dave Capen, a University of Vermont wildlife professor who designed, and is analyzing data from, the bird surveys.

"The White Mountain National Forest is one of the first places to really commit itself to a substantial

monitoring program that is adequate enough to determine long-term trends," he said. Long-term commitment is needed because establishing trends can take many years, even decades, of study.

John Lanier, now a wildlife biologist with the New Hampshire Fish and Game Department, created the wildlife management strategy during his 24 years as a wildlife ecologist for the WMNF. The findings from the bird study, he said, most notably the reduction in populations of five species that rely heavily on early successional habitat, back up other research showing the importance of this habitat for wildlife. He emphasized that the WMNF should more aggressively create and maintain early successional habitat with increased timber cutting.

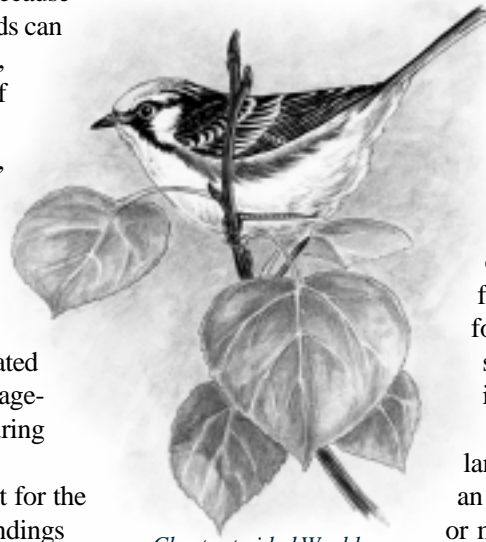
"Timber management is the

key," Lanier said. He noted that over the last 15 years, as clear-cutting has taken on a "politically-incorrect" status, the WMNF has decreased the number of acres open to clear-cutting. This drop in clear-cutting is increasing the age of vegetative communities on forest lands. And as forests age, early successional habitat is lost.

Because private landowners don't have an incentive to create or maintain different habitat types for wildlife,

Lanier added, it's up to public land managers to do so if we are to protect biodiversity.

"The national forest is our only shot at being able to set up a [forest management] policy on a large scale... that could provide a constant supply of an assortment of different habitats over time and space, where the economy isn't driving the system," Lanier said. 🐦



Chestnut-sided Warbler

A LOOK BACK AT HABITAT'S HISTORY IN N.H.

Early successional habitats have always been a part of the New Hampshire landscape and play an important role in the natural cycle of forests; natural disturbances, such as fires, floods and windstorms, created openings that hosted new generations of forest plants until another disturbance renewed the cycle again. Native Americans are thought to have contributed to this cycle by burning around their settlements.

Through much of the 19th Century, early successional habitat was abundant in New Hampshire. When scores of farm families abandoned the rocky fields of the Granite State and headed for more fertile plains to the west, early successional species thrived as fields spared from the plow sprouted into young forests, offering the food and cover many wildlife species require.

Today, development and mature forests are rapidly replacing early successional habitat. At the same time, creation of this habitat is limited by fire suppression and restrictions on timber cutting on public lands.

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HABITAT continued from page 1

Because of what some conservationists estimate to be a loss of 75 percent of its habitat, the native New England cottontail is in trouble. Once found across New England and into upstate New York, the species is now "scattered in nooks and crannies of habitat," Litvaitis said.

If people want the native New England cottontail to remain a part of the region's biodiversity, Litvaitis said, they need to recognize that periodic disturbance plays an important role in maintaining habitat and plant and animal diversity.

"In the situation of the New England

cottontail, protecting habitat without periodic disturbance to the habitat doesn't really help," he said.

REPTILES AND AMPHIBIANS

Reptiles and amphibians use a variety of forest and wetland types, but some species rely heavily on early successional habitats. Two New Hampshire snakes, for example, are known to prefer these areas.

The eastern hognose snake lives in thickets dominated by pitch pine and scrub oak, both of which grow in sandy soils regularly disturbed by fire. Because of vegetative succession and development, populations of the hognose snake and its habitat have decreased so much that the species recently was added to the state's threatened wildlife list.

The black racer also inhabits New Hampshire's thickets. Growing up to six feet in length, the racer is named for its speedy appearance when gliding through the grass. Like the eastern hognose snake, it is nonvenomous. The black racer is

known to exist only in the southern part of the state.

INVERTEBRATES

Some insects feed only on the plants that grow in early successional habitats, thus creating a dependency that spells trouble in light of the rapid loss of such habitats.

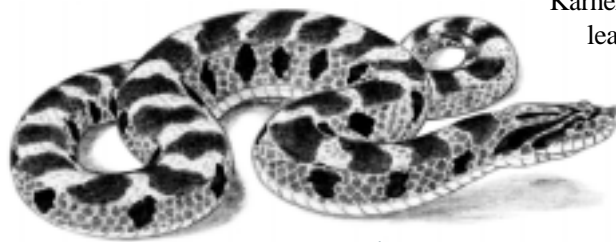
"We will lose a significant fraction of our natural heritage... if we fail to acquire and properly manage early successional habitat," said David Wagner, a University of Connecticut entomologist.

Our own state butterfly, for example, the federally endangered

Karner blue, feeds only on the leaves of wild lupine plants when in its larval stage. But these plants grow only in one kind of early successional habitat—pine barrens.

Similarly, five other species of Lepidoptera (butterflies and moths) rely solely on New Jersey tea for sustenance. Sweetfern, sumacs and blueberries are other plants that thrive in early successional habitats and provide a major food source for insects.

Insects use many kinds of early successional habitats. Sandy areas support some 200 to 300 species, while grasslands and scrub oak areas support in excess of several hundred, Wagner said. 🐛



Hognose Snake



CARA: Supporters Remain Hopeful

The Conservation and Reinvestment Act (CARA), which would have provided \$44 billion for wildlife conservation over the next 15 years, has become mired in Senate budget negotiations.

The U.S. House of Representatives passed the measure resoundingly in May, and a Senate companion bill passed in July. But because of opposition from Western lawmakers, CARA has been swapped for a much more limited proposal that would provide \$300 million this year but has no guarantee of continued funding after this year.

CARA supporters remain hopeful during these budget negotiations of increased funding for wildlife conservation. We'll keep you posted in future editions of *Wildlines*.



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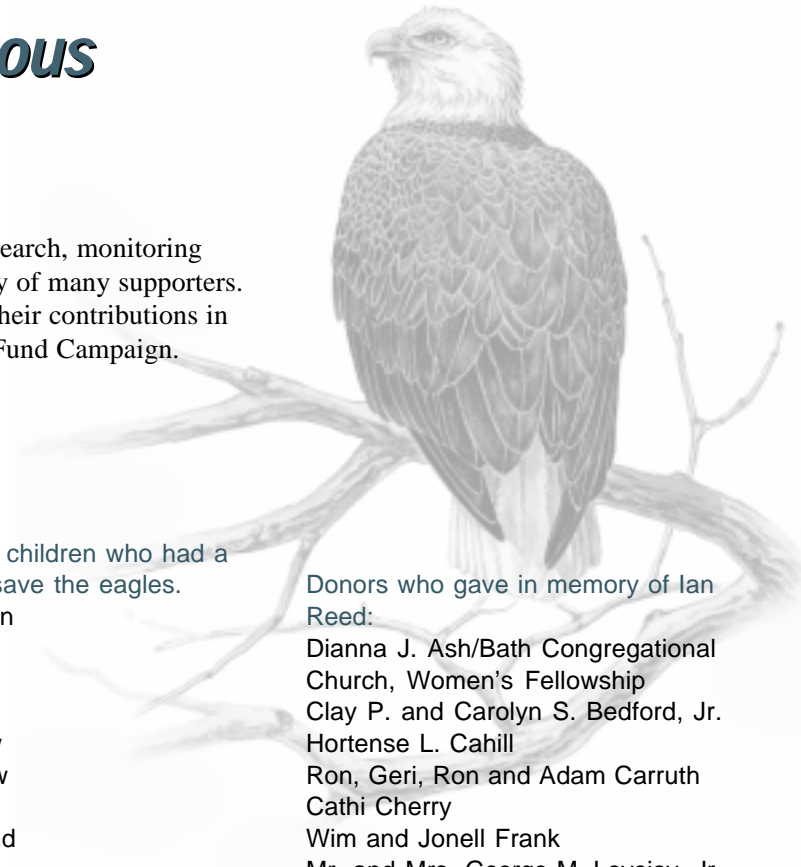
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WINTER OUTDOOR CALENDAR

January:

- Look for wintering bald eagles near ice-free rivers and lakes.
- Listen for woodpeckers drumming on trees to attract a mate.

February:

- Watch for eastern bluebirds and red-winged blackbirds returning from southern climes.
- Listen for spring songs of starlings, chickadees and titmice.

March:

- Listen for return of grackles and cowbirds.
- Watch for chipmunks emerging from their winter quarters.
- On warm days and nights, listen for the quacking sounds of wood frogs from vernal pools in wooded areas.

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