

Some species focus of greatest conservation need



NYSDEC

American marten

The American marten, often incorrectly called the pine marten, is a member of the mustelid (weasel) family. The name mustelid comes from the fact that members of this family have scent glands which produce strong odors that are often used to mark territories. Other members of this family that can be found in New York include fisher, weasel, mink, and the river otter.

Eastern red bat

Common in warmer southern states, the red bat is less abundant in New York. In the late 1800s, red bats were reported migrating in substantial flocks during the daytime. Today, daytime encounters rarely exceed more than a few individuals. Female red bats are noticeably grayer than the reddish-orange males. Reds typically roost low in the trees among dense foliage.



Smithsonian, at www.discoverlife.org

Wood thrush

This large thrush is smaller than a robin, has a spotted breast and brown back, and makes a beautiful flute-like call that sounds like “ee-oh-layyy”. They nest in mature, deciduous forests with a thick understory, moist soils, and heavy leaf litter on the forest floor. Populations of these birds are declining, partly due to forest destruction in their Mexican wintering grounds. Providing large forest blocks, unfragmented by development, may help sustain this species.



Larry Thompson, www.discoverlife.org

Ruffed Grouse

The Ruffed Grouse is dependent on early succession stages of forest growth, and its numbers have declined in recent years as forests have matured. If habitat is managed for grouse, up to 40 additional species of early successional habitat species of wildlife may also flourish as well.



Paul Curtis, Cornell University

Some wildlife species found in Northern Hardwood-Conifer forests

The species listed here are closely associated with Northern Hardwood-Conifer forests. Be on the lookout for these species and follow stewardship guidelines to help maintain or enhance habitats for these and other species that depend on these woodlands. The species below in **bold face** are listed as Species of Greatest Conservation Need (SGCN) as identified in the N.Y. State Wildlife Action Plan.

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|------------------------------------|--------------------------|----------------------------|
| American marten | Flying squirrel | Smooth green snake |
| American woodcock | Gray fox | Veery |
| Black bear | Hoary bat | White breasted nuthatch |
| Black-throated blue warbler | Moose | White-tailed deer |
| Blue spotted salamander | Northern goshawk | Wood thrush |
| Bobcat | Ovenbird | Wood turtle |
| Canada warbler | Pileated woodpecker | Wild turkey |
| Cooper’s hawk | Ribbon snake | Wood duck |
| Eastern red bat | Ruffed grouse | Worm eating warbler |
| Eastern wood pewee | Silver haired bat | Worm snake |

Authorship

The New York Habitat Stewardship brochures are produced by Cornell Cooperative Extension, an equal opportunity educator and employer. We gratefully acknowledge permission of the University of New Hampshire Cooperative Extension Service and original author Malin Clyde for allowing us to adapt the UNH Habitat Stewardship Series brochures for use in New York State. In New York, funding was provided by the N.Y.S. Department of Environmental Conservation, through a State Wildlife Grant to the New York Forest Owners Association and administered by Cornell Cooperative Extension of Chenango County, with assistance from the Cornell University Department of Natural Resources. Adapted for use in New York State by Rich Taber, CCE Chenango.

About the Habitat Stewardship Series

Much of the land in New York State is privately owned. Landowners are the primary stewards of our wildlife and woodlands, which also provide clean water, scenic views, fresh air, natural and cultural heritage, forest products, and recreational resources. The Habitat Stewardship Series has been created to help landowners and land managers recognize the habitats critical for wildlife species at risk, and to illustrate the role private landowners can play in sustaining these species through conservation, management, and sound stewardship.

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For more information on woodland management, Wildlife Species of Greatest Conservation Need, and the N.Y. State Comprehensive Wildlife Conservation Strategy, go to:
<http://www.dec.ny.gov/animals/30483.html>,
 or
<http://www.nyfoa.org> and click on “Wild About Wildlife”



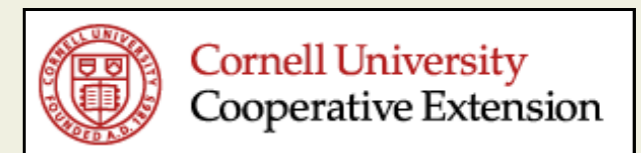
Northern Hardwood-Conifer Forests

Habitat Stewardship Series



A collaborative effort of:

**The New York State Department of Environmental Conservation,
 The New York Forest Owners Association ,
 Cornell Cooperative Extension of Chenango County ,
 Cornell University Department of Natural Resources**



Recognizing Northern Hardwood–Conifer Forests

Thousands of acres of Northern Hardwood-Conifer forests grow on well-drained, fertile slopes of hillsides in New York State, typically between 1,500 and 2,500 feet in elevation. Northern hardwood forest is usually made up mostly of sugar and red maple, American beech, yellow birch and, to a lesser extent, black cherry and white ash. Other tree species that are fairly common in northern hardwood forests include eastern hemlock, basswood, red oak, and white pine. Striped maple, witch hazel, and hobblebush shrubs are typical in the understory of these with wild sarsaparilla, starflower, and blue-bead lily on the forest floor. Our vast expanses of northern hardwood-conifer forests found over much of New York State are famous for both spring wildflower displays and brilliant fall foliage. The best examples of northern hardwood-conifer forests have patches of large trees in the canopy, young trees in the understory, many standing dead trees (snags), and abundant dead and decaying trees on the ground. Large cavity trees, pockets of wetlands, spring seeps and interspersed patches of conifers make some areas of northern hardwood-conifer forests especially rich for wildlife.



A typical mixed Northern Hardwood-Conifer forest interspersed with cropland, grassland, and shrubland in New York State, providing a diverse variety of wildlife habitat

Where are northern hardwood-conifer forests in New York?

Northern hardwood-conifer forests make up about 70% of the forested area in New York State, which is itself 63% covered in forests; about 18.9 million acres total with over 13 million acres in Northern Hardwoods-Conifers. Lands with extensive examples of northern hardwood-conifer forests include parts of the Adirondack and Catskill Parks. They can also be found over much of the rest of the state, such as the vast Southern Tier which stretches from New England to southwestern New York. Northern hardwood-conifer forests are also found up through the Saint Lawrence River Valley and down through the Champlain Valley of eastern New York.

Why are New York State's Northern Hardwood-Conifer Forests Important?

New York is 63% covered with forest land, with up to 70% of it being the Northern-Hardwood–Conifer type. These forests provide habitat for hundreds of species of wildlife, including reptiles, amphibians, mammals, birds, and freshwater fish.



•Keeping common wildlife common:

Northern hardwood-conifer forests help keep our common wildlife common, providing space for everything from the smallest insects to the widest-ranging mammals and birds. Today, sightings of black bears, scarlet tanagers, pileated woodpeckers, and fisher are commonplace.

•Uniformity: Many stands of northern hardwood-conifer forest in New York are the same age, roughly 80-100 years old. They grew back after extensive timber harvesting and abandonment of farms throughout the last century. Many wildlife species of conservation concern found in northern hardwood-conifer forests are attracted to patches of old growth, or younger early successional habitat within the larger forest area. Today's forests don't support the same high diversity of wildlife species as older forests that contain a diversity of live and dead trees of different ages and sizes.

Refuge for forest birds: New York forests are home to a high concentration of breeding songbirds found in the United States. Migrating birds such as eastern wood-pewee, black-throated blue warbler, wood thrush and many others time their arrival to coincide with the swarms of insects (such as black flies and mosquitoes!) that are an important food source for young birds. Maintaining rich and healthy breeding areas for these birds is especially important.

•Habitat loss to development: Residential and second-home development in northern hardwood-conifer forests has increased in the last quarter century. The problem is cumulative, as each new development fragments the forest into smaller and smaller blocks, eliminating habitat, separating wildlife populations, inhibiting migration, increasing predation and promoting car/wildlife collisions on roads.

•High-grading is a non-sustainable logging practice where the best trees are cut and poor quality trees are left to grow; “take the best and leave the rest”. Some northern hardwood-conifer forests have been repeatedly high-graded, and are now dominated by low-quality, low-value trees and are less dense, less mature, and less diverse. High-grading affects wildlife by removing the larger diameter trees, which reduces the development of large nut-producing trees, large diameter cavity trees, and lessens woody material on the woodland floor.

Stewardship Guidelines for Northern Hardwood-Conifer Forests

•Conserving large blocks (>1000 acres) of northern hardwood-conifer forest from development will provide habitat for wide-ranging wildlife such as black bear, bobcat, and northern goshawk. Yet landowners with small holdings can make an important contribution by allowing some land to revert to old-growth.

Focus on northern hardwood-conifer habitat with these unique features:

•Large trees (>18” diameter) which are important for roosting bats, goshawk nests, and as future snags (standing dead trees) and den trees for bears, bats, birds, and other species.

•Forested areas near wetlands, streams, ponds, or spring seeps which provide moist habitat for wood turtle, blue-spotted salamander, ribbon snake, wild turkeys, and many songbirds.

• Areas of young, regrowing forest, which provide critical habitat for many wildlife species of conservation concern such as American woodcock, Canada warbler, and ruffed grouse. Patches at least five (5) acres in size will benefit the most wildlife.

• Areas of mature forest with characteristics of old-growth, such as:

- many snags and cavity trees;
- a diversity of tree sizes including both young and old trees growing at all levels of the forest;
- fallen, decaying trees on the forest floor;
- gaps in the canopy where trees have fallen or been cut.



•Pockets of spruce, fir, pine or hemlock trees (conifers), used as winter shelter by northern goshawk, great horned owl, red squirrel, and white-tailed deer.

•Using forest management, work to regenerate a mix of tree age classes and tree species.

A full range of age classes, well-distributed across the landscape, is important to support the great diversity of wildlife dependent on northern hardwood-conifer habitats.

•Provide a supply of patches, over time, of young, regenerating forest habitat (>2 acres) to enhance cover for wildlife, berry-producing shrubs, hardwood stump sprouts, and other key features of “early successional” habitats. The larger the forest opening or clearcut, the greater benefit it has for breeding birds, including those breeding in surrounding forests. To maximize the benefit of new forest openings to wildlife, create new patches, at least 5 acres in size, near utility corridors, shrub wetlands, or brushy old fields.

•Discuss land stewardship plans with neighboring landowners, and consider cooperating to create on-going, coordinated habitat management projects.

•Always consult a NYSDEC Cooperating Consulting forester before conducting a timber harvest on your property.