

# What Lives In The Forest?

*Habitat* is any area that has all the requirements for survival of plants and animals. Food, cover, and water need to be abundant to ensure healthy populations. New Hampshire is home to more than 15,000 species, including: 11,000 known species of beetles, bugs, and other insects; 3,000 species of flowering plants, ferns, fungi, algae, and lichens; 175 species of nesting birds; 60 species of land mammals; 40 species of reptiles and amphibians; and more than 75 species of freshwater fish and mussels.

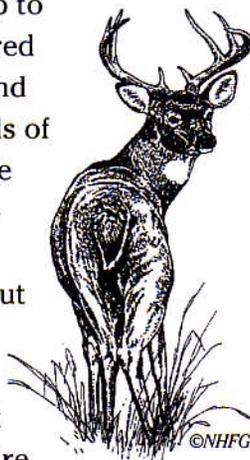
## Different Habitats For Different Species

Some types of habitat in New Hampshire are critical to the survival of even our most common wildlife. For example, when snow gets too deep for deer to travel, they congregate in groups under dense softwood trees.

These areas are known as *deer yards* and range in size from only a few acres up to

several hundred acres. Tens and even hundreds of deer use these yards as shelter during winter. Without deer yards, fewer deer would inhabit New Hampshire.

In southern New Hampshire, hemlock provides this cover; in the North Country, spruce and fir do.



Holes in living and dead standing trees, also known as *cavities*, are an important part of the habitat of many animals. More than 40 species of wildlife use cavity trees for nests, where they bear their young, or shelter. Black-capped chickadees, eastern bluebirds, and downy woodpeckers will use trees less than 8 inches in diameter. The chickadee is a primary excavator, an animal that creates a cavity to use for itself, but leaves it behind eventually for some other animal to use. Wood ducks, turkey vultures, red squirrels, porcupines, and long-tailed weasels use trees larger than 18 inches, and little brown bats, raccoons, and black bears need trees larger than 24 inches in diameter.



Dead trees lying on the ground also are important. They provide feeding sites for rodents, shrews, black bears, and woodpeckers, as well as winter shelter for 17 species of New Hampshire mammals. Amphibians also rest in the cool, moist micro-habitat that dead trees provide. In streams, the downed logs create pools and riffles for fish habitat, and create basking and nesting locations for turtles, waterfowl, mink, and otter. Juncos and winter wrens nest in the roots of upturned trees. Dead and down

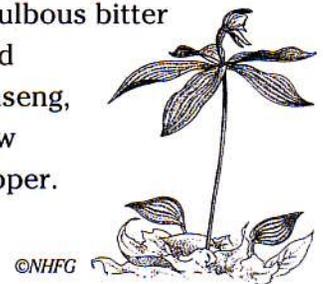
woody material also provides habitat for many lower organisms such as insects and other invertebrates, mosses, fungi, and lichen.

## Habitats For Rare Species

Some habitats in our state are critical to the survival of rare species. Nearly a decade ago, 5,000 Karner blue butterflies fluttered among the Concord pine barrens. Today only 50 of the federally endangered Karner blues survive on the fragile remains of the pine barrens that once stretched for miles along the Merrimack River.

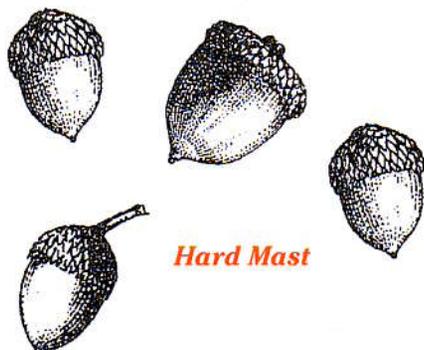


In addition to species listed by the federal government as *threatened and endangered*, there are state and local listings. An animal or plant may be common in other parts of the world, but be rare in New Hampshire. The state lists 289 plants and 34 wildlife species as rare, threatened, or endangered. Of those, three mammals, four birds, and 16 plants depend on forested habitat. They include the Canada lynx, pine marten, small-footed bat, bald eagle, northern harrier, Coopers hawk, osprey, bulbous bittercress, wild garlic, ginseng, and yellow lady's slipper.

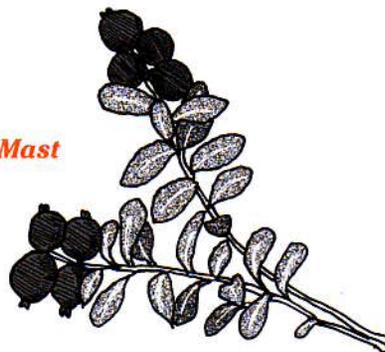


## Trees As Food

The seeds and fruit of trees and shrubs are consumed by New Hampshire wildlife. Hard seeds such as acorns from oak trees and beechnuts from beech trees are known as *hard mast*. Mice, voles, chipmunks, deer, bears, turkeys, and even wood ducks and blue jays consume acorns in great quantity. Soft, fleshy fruit such as blueberries, black cherries, and apples are known as *soft mast*. They are eaten by many of the same animals that eat the hard mast, but often at different times of the year.



*Soft Mast*



### Question

Draw, or picture in your mind, a forest. Don't read any further until you are satisfied with your picture!

Now, what does your forest look like? Are there tall, straight trees lined up in neat rows? Or are some trees tall and others short? Are some trees standing and others fallen logs? Do living things other than trees live in your forest, such as birds, butterflies, insects, and bears? Is there a brook or pond in your forest? What is the season of the year?

Draw a picture of the forest again. Does it look different? How?

### Fun Fact



While the bald eagle, our national symbol, was upgraded from "endangered" to "threatened" by the federal government in the mid-1990's, it is still considered an endangered species by the state of New Hampshire. Only four pair nested in the state in 2000.

To help interpret the information on this factsheet, turn to the *Project Learning Tree PreK-8 Activity Guide!*

## PLT Activity #22: Trees As Habitat

From their leafy branches to their tangled roots, trees provide habitat for many plants and animals. In this activity, students discover how plants and animals depend on trees in many ways.