# **New Hampshire**

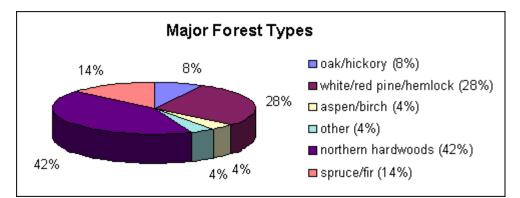
## **The Resource**

New Hampshire's forests provide a wide variety of goods and services to those living in and visiting the state. Forests comprise 87 % of New Hampshire's land mass. Of the total forested acreage in New Hampshire, 97 % or 4,812,100 acres, is classified as "timberland;" land that is growing or capable of growing merchantable trees. These forests are used for recreation, habitat for wildlife, and forest products such as paper, lumber, and maple syrup. New Hampshire's forest also contribute to clean air, water, and the prevention of soil erosion. For these and other reasons, maintaining healthy forests in New Hampshire is important.

• 87% of the state is forested (4,987,200 acres)

Out of the forested area:

- 96.5% timberland
- 3.5% non commercial or reserved forestland



# **Special Issues**

In 1994 the most damaging forest insect pest in New Hampshire was the **gypsy moth**. This insect is on the decline in most of the state but continues to defoliate trees in Rockingham County in the southeastern part of the state. Gypsy moth defoliated 8,110 acres of oak forest type in 1994. Egg mass counts per acre in these areas indicate that some defoliation should be expected in 1995. The egg masses in the defoliated area are smaller and the area of distribution was more concentrated than in 1994. Disease killed larvae were found at 90 % of defoliated areas, which helps to keep gypsy moth populations at endemic levels.

A survey of butternut stands for **butternut canker** brought to attention the devastation this pathogen is causing. This disease is affecting butternuts in every county in the state. The damage varied among trees, which ranged from light decline to dead. The areas with the most widespread severe damage were in Belknap and Hillsborough counties. Some butternut in Coos and Grafton Counties appear to be unaffected by the disease and are being used in a statewide program to propagate disease resistant butternut.

**Hemlock woolly adelgid** detection monitoring was intensified in 1994. This insect is absent from our forests and a quarantine to prevent it's entry into the state is in effect. Hemlock stands along the southern New Hampshire border and along major rivers through the state have been areas of concentration for monitoring. Sawmill owners that receive hemlock logs from out of state were educated on the identification

of this insect and agreed to comply with recommendations to prevent insect spread into New Hampshire. Sawmills dealing with hemlock were inspected as a part of the field survey.

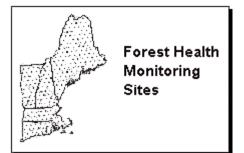
Overall, forest damage, due to insects or diseases, was minimal in 1994. There was scattered **salt** damage to roadside white pine and hemlock in the spring. Insects that had caused widespread damage in previous years, such as **hemlock looper**, **pear thrips**, **oak leaf tier**, **saddled prominent** and **maple leafcutter**, were absent or caused negligible damage. **Spruce budworm** pheromone trapping in Coos county resulted in no moths caught. Spruce budworm has been at negligible population levels since 1984. **Forest fires** burned approximately 280 acres in 1994.

## **Regional Surveys**

Interest in regional forest condition prompted the implementation of the National Forest Health Monitoring Program and the North American Maple Project.

#### FOREST HEALTH MONITORING PROGRAM

The objective is to assess trend in tree condition and forest stressors. All of the New England States have been involved since the program was initiated in 1990. Results indicate that there has been minimal change in crown condition in the last 5 years. In 1994, 99 percent of trees greater than 5 inches diameter had normal crown fullness. About 96 percent of the trees had little or no crown dieback, and 78 percent showed no measurable signs of damage. The most common damage was decay indicators, which were more evident on hardwoods than softwoods. Additional surveys indicate there are concerns for



individual species such as ash, butternut and hemlock due to various damage agents.

### NORTH AMERICAN MAPLE PROJECT

This cooperative project with Canada was initiated in 1988 to look at change in sugar maple tree condition. There are several states in the Northeast involved including New York, New Hampshire, Vermont, Maine, and Massachusetts. Overall, sugar maple located within the sample sites are in good condition. Periodically, insect defoliation has affected crown condition in some areas. There was little difference found between sugarbush and non sugarbush stands.

#### **For More Information**

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