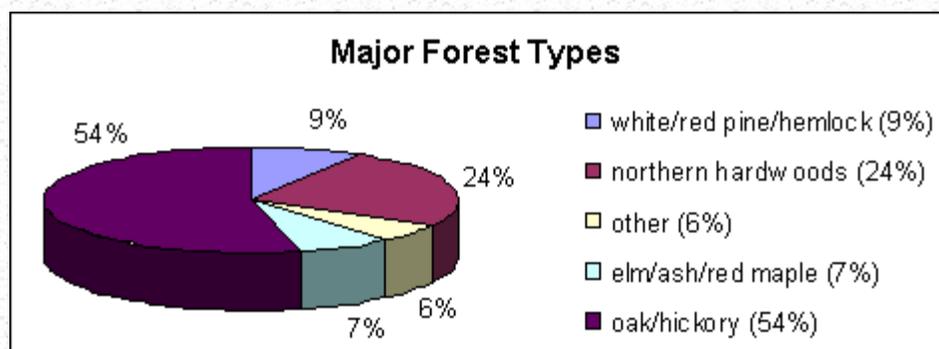


1996 Forest Health Highlights

Connecticut

The Resource

Connecticut's forests are 85% privately owned and made up of mostly of oak/hickory and northern hardwood tree species. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber and fuel. Forested parks and shade trees aesthetically enhance communities as well as provide energy savings, habitat for wildlife, and recreation opportunities.



- 59% of the state is forested (1,826,000 acres)

Out of the forested area:

- 97.3% timberland
- 2.7% non commercial or reserved forestland

Special Issues

In July 1996, the annual aerial survey of Connecticut was conducted over 1.8 million acres of urban and suburban forests to assess forest damage. Approximately 1,420 acres were found defoliated by the **gypsy moth** in New Haven, Litchfield, and Hartford Counties. The defoliation was spotty, mainly occurring on ridgetops within the towns of Naugatuck, Beacon Falls, Rocky Hill, Cromwell, Glastonbury, and South Windsor. In addition, a gypsy moth egg mass survey was conducted on favorable host sites, on a 7-mile grid throughout the state. There were no sites where egg masses were found in large numbers to be considered a potential problem for defoliation in 1997. More thorough surveys were conducted in ten towns attempting to determine if it was necessary to budget for suppression programs in 1997. Research shows that *Entomophaga maimaiga*, a pathogen of the gypsy moth, is still abundant in the state and has had a significant effect on keeping the gypsy moth population at low levels.

A winter survey in 1996 for the **hemlock woolly adelgid** revealed that the insect now occurs in 156 of the 169 towns in Connecticut. Maine, New Hampshire, and Vermont have established regulations for hemlock being shipped from Connecticut due to this insect. State inspectors observed 10 pesticide treatments and issued phytosanitary certificates to cover shipments of nearly 800 hemlock trees. Western hemlock plantings were established in the state at 11 sites in 1993. The western hemlock is a potential replacement for eastern hemlock threatened by the adelgids. The seedling survival on the drier sites was poor, although on moist sites it was about 30 percent, with most mortality due to shrub competition and mouse girdling. Deer browse damage was also significant, although mesh tubes were effective in reducing deer damage.

As in recent years, butternut trees were surveyed for the [butternut canker](#) disease. Of the 550 marked trees examined, 169 were found uninfected, while 378 trees were determined positive for the infectious canker. Currently, about 66 percent of these butternut trees surveyed in Connecticut are infected with the fungus. The disease continues to threaten the survival of the butternut tree throughout its range.

Other Issues

A dramatic event in 1996 was the emergence of the 17-year **periodical cicada**, *Magicicada septendecim*, from May to early July. The cicada occurred in 22 Connecticut towns in the counties of Hartford, Middlesex, and New Haven. Populations were concentrated in forests associated with rock ridges in the Connecticut River Valley.

The *Tomicus* pine shoot beetle is an exotic pest that has been discovered in sites around the Great Lakes including western New York. Annually Christmas trees in Connecticut have been surveyed for the presence of the insect pest. To date, it has not been found in the state. In 1996, 115 Christmas tree farms in 56 towns were inspected, encompassing over 2,000 acres and 84,000 trees. In late November and early December, Christmas trees shipped into 7 counties were inspected to ensure that the insect was not being introduced into the state. Insect pheromone traps were also utilized to ensure that the beetle was not present.

The Connecticut Agricultural Experiment Station also provided assistance to other states in biological control pest management in 1996. They provided adult *Calosoma* beetles to Maine where they were released against the brown-tail moth on an Island in Casco Bay. They were also sent to West Virginia to be used against the gypsy moth. These locations will be monitored to determine effectiveness.

Abundant *foliar diseases*, including powdery mildew, anthracnose diseases, and other leaf spots in 1996 were the result of the cool, wet weather. Dogwoods in the landscape and in the forest were severely affected by powdery mildew. Dogwood anthracnose caused a "shot-hole" type damage and flowering dogwood trees looked tattered by autumn. Severe mildew problems were also observed on maple and other plants in the urban environment.

Regional Surveys

Interest in regional forest conditions 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 trends 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 7 years. In 1996, 98.5 percent of trees greater than 5 inches diameter had normal crown fullness. About 97 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 that 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 examine changes 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.

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