

Forest Health Highlights

Connecticut



June 1999

The Resource

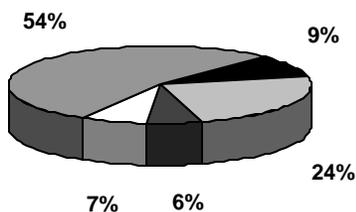
Connecticut's forests are 85% privately owned and made up of mostly oak/hickory and northern hardwood tree species. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber and fuel. Forested parks and shade trees aesthetically enhance communities as well as provide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

Major Forest Types:



- white/red pine/hemlock (9%)
- northern hardwoods (24%)
- other (6%)
- elm/ash/red maple (7%)
- oak/hickory (54%)

Special Issues

Most forest problems in Connecticut continue to be caused by organisms which have been introduced into the United States since the mid-1800s. These exotic pests have thrived in their new environment and caused major forest health concerns.

The **gypsy moth** was brought to Massachusetts from Europe in 1860 in an attempt to develop a better silkworm. The insect was accidentally released several years later near Medford and reached Stonington, Connecticut by 1905. For over 100 years, scientists have been trying to control the gypsy moth and its spread. Fortunately, populations have been low in Connecticut recently. The major reason has been due to the impact from the fungus, *Entomophaga maimaiga*, which infects gypsy moth caterpillars. This naturally occurring fungus has kept the destructive moth under control in several states and resulted in a dramatic drop in the number of wooded areas that were defoliated. In 1998, states with gypsy moth infestations reported the lowest amount of defoliation in 30 years. No defoliation was observed in Connecticut during the aerial surveys over the state in the summer of 1998. Statewide egg mass surveys, that were conducted in the fall, indicated that gypsy moth population levels are very low. Therefore, no significant defoliation is expected during the spring and summer of 1999.

The **hemlock woolly adelgid**, which originated in Japan, has been in the eastern United States since 1921 and was found in Connecticut in 1985. This insect remains an important problem of eastern hemlock in Connecticut. Only 5 of the 169 towns in the state remain uninfested. Researchers at the Connecticut Agricultural Experiment Station are working in cooperation with the USDA Forest Service and the New Jersey Beneficial Laboratory to rear 10,000 predatory ladybug beetles. The beetles will be released in Rhode Island, Massachusetts, New York, Pennsylvania, Maryland, West Virginia, and North Carolina in an effort to reduce adelgid populations in infested hemlock stands.

Butternut canker is a fungus disease that was first reported in the United States in Wisconsin in 1967 and is widespread throughout the

Special Issues cont.

range of butternut. Cankers, which develop on the twigs, branches, and stems, can coalesce and kill the tree. During the summer of 1998, approximately 80 percent of the butternut trees examined in the state were infected, nearly 10 percent more than the previous year. Some trees have shown a resistance to the disease. Connecticut is cooperating with the USDA Forest Service and the New Hampshire Division of Forests and Lands to locate healthy trees and graft material to test for disease resistance.

The **Asian long-horned beetle** is a significant introduced insect that was discovered in New York City in 1996 and in Chicago in 1998. The infested areas are under quarantine and an extensive eradication program is underway to eliminate the insect. Many different species of hardwoods have been found infested, with large bored holes, in the affected areas. The insect has not been found in Connecticut. Extensive surveys around ports in the southern part of the state have been conducted in cooperation with the United States Department of Agriculture, Animal and Plant Health Inspection Service. Monitoring of various sites in the state is continuing.

The most recent introduced pest into Connecticut is the **smaller Japanese cedar longhorn**

beetle, discovered in Milford in the fall of 1998. This is the first find of infested live aborvitae trees in the United States. Over 200 nurseries in Connecticut have been inspected and about 19,000 trees examined. Infestations were found in Milford, Greenwich, North

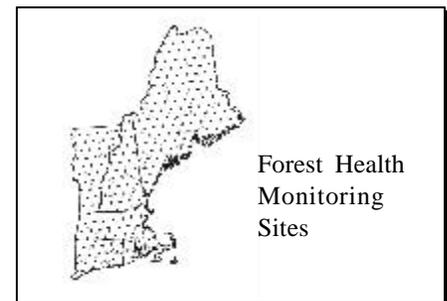
Haven, and Stamford. Areas surrounding the nurseries, and sold plant material, were also inspected. This pest poses a serious threat to the nursery industry in the state. Research has been initiated to determine development of the insect and potential chemical control.

Regional Surveys

Connecticut participates in the National Forest Health Monitoring program to help provide a regional assessment of forest conditions. Also, a network of 51 permanent forest sites has been established to monitor forest health on state, Nature Conservancy, and municipal water company properties. The sites are visited annually to assess whether state forests remain healthy or are declining.

National Forest Health Monitoring Program

The objective of this program 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 9 years. In 1998, 96 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 76 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.

For More Information

CT Agric. Experimental Station
P.O. Box 1106
123 Huntington Street
New Haven, CT 06504-1106

(203) 974-8474



Forest Health Protection
USDA Forest Service
P.O. Box 640
Durham, NH 03824

(603) 868-7709



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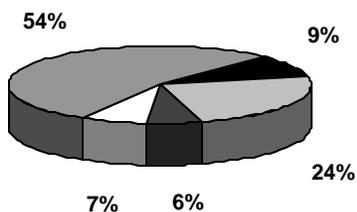
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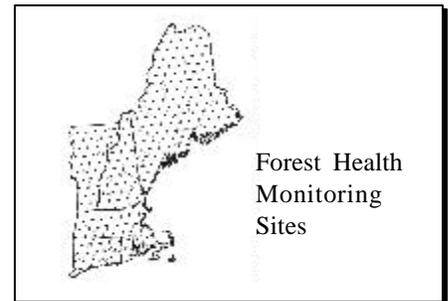
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