

# 2003 Forest Health Highlights

## Connecticut



January 2004

### The Resource

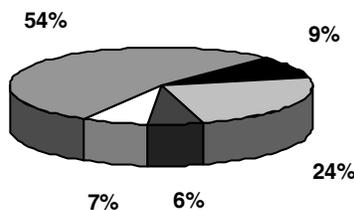
Connecticut's forests, consisting of mostly oak/hickory and northern hardwood tree species, are 85 percent privately owned. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber, and fuel. Forested parks and shade trees aesthetically enhance communities as well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

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

#### Of the forested area:

- 97.3% timberland
- 2.7% noncommercial or reserved forest land

#### 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-1800's. These exotic pests have thrived in their new environment and caused major forest health concerns.

Over 1.8 million acres were examined as a part of an aerial survey of urban/suburban forest to assess possible damage from the **European gypsy moth**, *Lymantria dispar*. No was defoliation observed in 2003. The parasitic fungus *Entomophaga maimaiga* has been suppressing the gypsy moth population in Connecticut since 1989. Gypsy moth egg mass counts were very low in the annual survey conducted at 102 sites on a 7-mile grid throughout the State.

The **hemlock woolly adelgid**, *Adelges tsugae*, remains a serious pest of hemlock in Connecticut. The adelgid has spread northward since its coastal detection in 1985 and now occurs in all 169 towns in the State. Assessments of 2003 winter mortality of hemlock woolly adelgid were conducted at *Pseudotsuga tsugae* release and non-release sites in early spring 2003. This beetle has been reared and released in an attempt to control the adelgid. After a prolonged and severe winter, adelgid mortality was generally very high over 23 sites throughout the State. At *P. tsugae* release sites, previously infested hemlocks showed either vigorous new shoot production with low levels of adelgid, or moderate new shoot production and moderate levels of adelgid. Sites that had concurrent heavy **elongate hemlock scale**, *Fiorinia externa*, infestations showed decline in hemlock health and little new shoot production. At other release sites, adelgid levels on hemlock crowns were low, while there was abundant new shoot production over most of the crowns. The abundance of new shoots on hemlock crowns over much of the State was in stark contrast to drought stressed crowns in 2002, and can be attributed to cool moist conditions prevalent in most of 2003.

**Asian longhorned beetle**, *Anoplophora glabripennis*, has not yet been observed in Connecticut, although it has been found within 25 miles of the New York/Connecticut border. It was first found in New York City in 1996 and a Federal quarantine is in effect in an attempt to eradicate the infestation. Various species of maple, horse chestnut, birch, poplar, willow, elm, and hibiscus have been attacked. Intensive surveys for this beetle within a 75-square-mile area in the southwestern corner of Connecticut are continuing.

## Special Issues cont.

**Butternut canker**, *Sirococcus clavigignenti-juglandacearum*, has been found throughout Connecticut. Large limbs and tree trunks are girdled by the cankers, causing mortality. Over 95 percent of the trees monitored in the State have been found to be infected. Scion material has been collected from disease-free trees and tested for disease resistance, but so far all have been susceptible.

The **pine shoot beetle**, *Tomicus piniperda*, first discovered in Ohio in 1992, is now found in nine States and Canada, most recently in Maine, New Hampshire, and Vermont. Surveys at Christmas tree farms and the examination of cut Christmas trees shipped into Connecticut indicate that the beetle has not entered the State.

**Beech bark disease**, *Nectria coccinea*, continues to become more widespread across the State.

The **orange-striped oakworm**, *Anisota sentoria*, is a common native pest of oak species in Connecticut. Local infestations occur when oaks have been stressed by other factors, such as drought or gypsy moth. In 2003, defoliation due to the insect was detected by aerial survey on 761 acres in Windham County, in the towns of Canterbury and Killingly.

**Anthracnose**, *Gnomonia* spp., was present throughout the State, affecting the foliage of maple, and hickory. Sycamore various hardwoods, including

sycamore, oak, ash, beech, was particularly hard hit; many trees re-foliated three times and anthracnose developed on newly formed leaves each time.

Aftereffects of recent years' **drought** and other contributing

factors caused instances of dieback and mortality of white pine, ash, sugar maple, and oak. Breakage from **ice storms** occurred over the winter of 2002–2003, especially in northern and central areas.

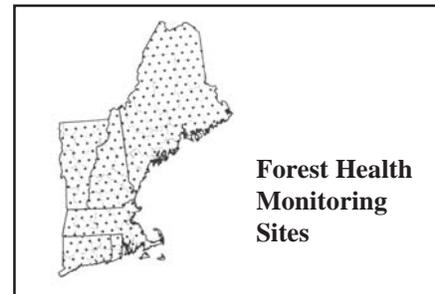
## Regional Surveys

### National Forest Health Monitoring Program

Connecticut participates in the National Forest Health Monitoring Program to help provide a regional assessment of forest conditions.

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 14 years, with about 95 percent of trees greater than 5 inches diameter having normal crown fullness, about 85 percent with little or no crown dieback, and 70 percent showing no measurable signs of damage. The most common damage was decay indicators, which were more evident on hardwoods than softwoods. Additional surveys indicate that



Forest Health Monitoring Sites

there are concerns for individual species such as ash, butternut, and hemlock due to various damage agents.

In addition to the Forest Health Monitoring Program, 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 the State's forests remain healthy or are declining. Trees are evaluated for signs of defoliation and disease. These plots will continue to be used to assess the health of the State's forests.

### 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

