2004 Forest Health Highlights

Connecticut

January 2005

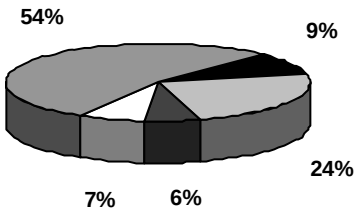
The Resource

Connecticut's forests are 85 percent privately owned and consist 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% noncommercial or reserved forest land**

Major Forest Types:



Special Issues

Most forest problems in Connecticut continue to be caused by introduced organisms, including weeds, insects, and diseases. In addition, development pressures on forests have been increasing, as land values have risen.

Over 1.8 million acres were examined as part of the annual aerial survey of urban/suburban forests to assess possible damage from various forest pests. Only 626 acres were found to be defoliated by the **gypsy moth**, *Lymantria dispar,* in 2004. Ground surveys showed that larger than usual numbers of egg masses were found, indicating there may be additional defoliation again in 2005. Overall, the parasitic fungus *Entomophaga maimaiga* still seems to be suppressing gypsy moth populations.

Landscape populations of the invasive pest **hemlock woolly adelgid**, *Adelges tsugae*, are down in Connecticut. Due to predator release, adelgid mortality on woodland sites was generally very high. This heavy winter mortality over 2 successive years, followed by moist cool growing seasons, has resulted in widespread recovery of hemlocks in the State. At predator release sites, hemlocks exhibited vigorous new shoot production and low levels of adelgid in the crown. At sites where no predators were released, new growth of hemlock was recorded at most of the sites, while levels of adelgid were very low, and some northernmost sites remained uninfested. Of 28 sites surveyed, 93 percent were rated as in good condition. Predators of the adelgid had spread about 1,000 meters downhill from the 1999 original release area in northeastern Connecticut. **Elongate hemlock scale,** *Fiorinia externa,* infestations were heavy throughout the State in 2004, moving further north and east, on both landscape *Tsuga* and plantation grown *Abies*.

Asian longhorned beetle, *Anoplophora glabripennis*, introduced into New York City several years ago, has not been reported nor found in surveys within Connecticut. In addition to the intensive surveys within a 75-square-mile area in the southwestern portion of the State, areas adjoining industrial parks that receive material and supplies packed in pallets are now being inspected, as the beetle may gain entry by that route.

Balsam woolly adelgid, *Adelges picaea*, first reported in the United States in the early 1900s, was observed on scattered landscape fir trees. The few indigenous populations do not seem to threaten nearby managed fraser fir Christmas trees.

Special Issues cont.

In regards to invasive forest pests of concern in other parts of the country, surveys indicate that **common pine shoot beetle**, *Tomicus piniperda*, and **emerald ash borer**, *Agrilus planipennis*, have not been found in Connecticut. Also, forest perimeter surveys near commercial nurseries and in isolated woodlands have not detected *Phytophthora ramorum*, the causal agent of ramorum blight (commonly known as **sudden oak death**). This organism has been transported around the country on infected nursery stock from the west coast.

Butternut canker, *Sirococcus clavigignenti-juglandacearum*, has been found throughout Connecticut, and significant tree mortality continues to occur.

Native pests have also caused damage to landscape and forest trees. The **orange-striped oakworm**, *Anisota sentoria*, is a common native pest of oak species in Connecticut. Defoliation occurred on 261.5 acres in Windham County, in the town of Canterbury. Also, **oak skeletonizer,** *Bucculatrix ainsliella*, caused 30 to 50 percent defoliation of 374 acres of red and chestnut oak forest in Sharon in Litchfield County.

White pine weevil, *Pissodes strobi*, caused more damage than in previous years on white pine and, especially, on spruce. This makes the second consecutive year with extensive damage from this shoot boring insect.

Eastern red cedar damage was observed in late March and early April 2004. Symptoms included needle browning and drop (primarily of older, inner needles), tip and twig dieback, and dead branches. No pathogens, or insects have been directly associated with the damage, which may be weather related.

Many tree species, including oak, black walnut, and hickory, had very reduced nut production in 2004. Poor pollination, due to **wet rainy conditions** during bloom, may be a factor.

Regional Surveys

National Forest Health Monitoring Program

In cooperation with the USDA Forest Service, 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. Plot and general survey data is collected annually.

Plot results indicate that there has been minimal change in crown condition in the last 15 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 aerial and ground surveys indicate that there are concerns for individual species such as ash, butternut, and hemlock due to various damage agents.

Forest Health Monitoring Sites

In addition to the Forest Health Monitoring Program, a network of 51 permanent forest sites have been established to monitor forest health on various State, Nature Conservancy, and municipal water company properties. The sites are visited annually to assess whether State forests remain healthy or are declining. Trees are evaluated for signs of defoliation and disease. These plots will continue to be used to assess if the State's forests remain healthy.

For More Information

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State and Private Forestry