

# 2006 Forest Health Highlights



## Connecticut

White Oak

January 2007

### The Resource

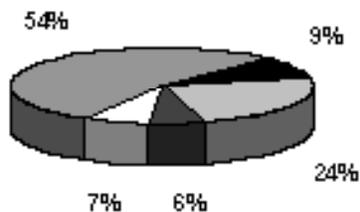
Connecticut's forests are 85 percent privately owned and consist of mostly oak/hickory and northern hardwood tree species. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber, and fuel. Forested parks and shade trees aesthetically enhance communities as well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



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

### Special Issues

In contrast to 2005, the effects of drought was not much of an issue in Connecticut in 2006. On the contrary, frequent, heavy downpours throughout the growing season resulted in **flooding** and standing water in many areas; root damage from these conditions might not be evident until next year. Due to the wet weather **anthracnose** was widespread and severe throughout the State on many hardwoods. Hosts include sycamore, oak, ash, beech, elm, and maple, which were particularly hard-hit with extensive browning and premature leaf drop. Over 25,212 acres were defoliated as a result of this foliage disease.

The major concern related to the health of the forest resource in 2006 was from defoliation. Results of the annual aerial survey conducted over the State indicate large areas of damage from insects. There was considerable feeding by **gypsy moth** larvae, affecting over 251,946 acres; however, the population crashed in mid-June, resulting in slight to moderate defoliation.

**Forest tent caterpillar** caused more defoliation than in previous years, with 15,583 acres defoliated. Defoliation by **orange-striped oakworm** was higher, with an estimated 12,000 acres affected. This is a 3 fold increase over the approximate 4,000 acres affected in 2005.

**Winter moth**, an newly introduced exotic insect reported in Massachusetts and Rhode Island, was detected in traps located in the southeastern corner of the State. Adults of this moth closely resemble bruce spanworm, a commonly found insect. The extent of feeding and infestation is currently unknown.

The health of hemlock stands in Connecticut continues to show general recovery from **hemlock woolly adelgid**, with large areas of the northern half of the State showing excellent new growth production. Infestations of **elongate hemlock scale** were very heavy throughout the state, causing some damage in infested areas.

Of concern are the incidences of **unexplained death** of mature white ash throughout the State for the past 2 to 3 years. This decline is possibly associated with ash yellows disease and previous drought conditions. There were also reports of dying oaks and sugar maple, in association with drought, Armillaria root rot, and other factors.

## Special Issues cont.

**Beech bark disease** and **Dutch elm disease** are endemic statewide. The incidence of declining and dying elm was greater than usual, possible related to the several years of drought in combination with other weather and site-related stressors. The incidence of **white pine blister rust** was also more active in 2006.

**Butternut canker** and **dogwood anthracnose** are both found throughout the State. The dogwoods exhibited heavy powdery mildew infection which resulted in leaf discoloration and deformation.

Considerable breakage from **ice storms** occurred early in 2006, especially in northern areas of Connecticut. There were also sporadic reports of hail and wind damage in localized areas.

### *Surveys for other exotic pests:*

Surveys near commercial nurseries and in isolated woodlands have not detected *Phytophthora ramorum*, the causal agent of **Ramorum blight**, formerly known as sudden oak death.

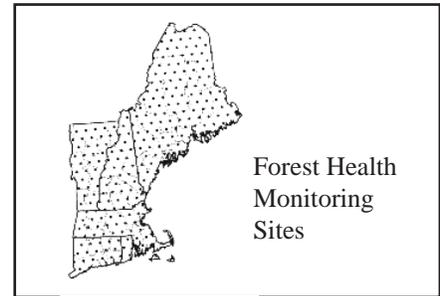
**Asian longhorned beetle** has not been found in the State and the extensive surveys continue. The closest infestation is in NYC and on Long Island. **Pine shoot beetle**, located in northern New England and New York, and **emerald ash borer**, found in the Midwest, have not been discovered in the State.

## Regional Surveys

### National Forest Health Monitoring Program

In cooperation with the USDA Forest Service, Connecticut participates in the National Forest Health Monitoring Program. The program's 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. A healthy forest is defined as having the capacity for renewal, for recovery from a wide range of disturbances, and for retention of its ecological resiliency.

The overall health of the forests in New England is good, with various damage agents present at different times and locations. Results from permanent sample sites indicate that there has been minimal change in crown condition in recent years. There are varying impacts from forest fragmentation, drought, fire, insects, and pathogens. The most significant pests are those that have arrived from other parts of the world, such as the gypsy moth, beech bark disease, and hemlock woolly adelgid. A



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

### For More Information

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