

# 2007 Forest Health Highlights

## Connecticut



White Oak

January 2008

### The Resource

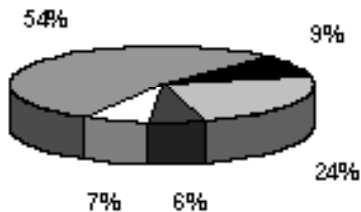
Connecticut's forests are 85 percent privately owned and consist of mostly oak/hickory and northern hardwood tree species. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber, and fuel. Forested parks and shade trees aesthetically enhance communities as well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

Record warm temperatures for November and December of 2006 and January of 2007 kept trees from reaching full winter dormancy, and extreme cold temperatures in February and early March resulted in considerable damage to many needled and deciduous trees. Tip dieback, failure to flower, and leaf damage became evident in the spring and continued through the summer on some species.

During the late summer and early autumn of 2007, many areas of the State received below-average rainfall, along with above-average temperatures, resulting in considerable **drought stress** and, in areas of thin rocky soil, early fall coloration of hardwood trees. The drought stress may adversely affect the overall health of trees in marginal areas. Rainfall in August 2007 totaled 2.64 inches, in September 2.51 inches, and as of mid-October, 0.29 inches. Historically rainfall during this period amounts to 12 to 15 inches. In total, 1,640 acres of the State showed some damage due to drought stress later in the season.

Defoliation due to larval feeding of **gypsy moth** was light, with only 3,204 acres damaged in 2007, while **forest tent caterpillar** defoliated 1,038 acres. **Orange-striped oakworm**, however, defoliated 22,046 acres, less than in 2006 but more than other defoliators.

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. In general, damage due to **elongate hemlock scale** continues to increase, especially on true firs and spruce, possibly due to mild winter conditions. **Circular scale** is found sporadically.

**Beech bark disease** and **Dutch elm disease** are endemic Statewide. The incidence of declining and dying elm was considerable, due to drought stress. **Ash rust** was not found, but ash trees continue to suffer from the ash decline complex.

## Special Issues cont.

**Butternut canker** and **dogwood anthracnose** are both found in Connecticut. Dogwoods exhibited heavy **powdery mildew** infection, due to humid weather in August, which resulted in deformed leaves, discoloration, and defoliation.

### *Surveys for other exotic pests:*

The following pests were surveyed for again in 2007 and have not been found in Connecticut: **Asian longhorned beetle**, **emerald ash borer**, and **Sirex woodwasp**.

A single **pine shoot beetle** was identified from a trap in 2006. Damage due to this exotic insect is generally restricted to nursery stock, but it bears watching.

Two watersheds were baited with Rhododendron leaves from May through September for *Phytophthora ramorum*, the causal agent of **Ramorum blight**. Although other species of *Phytophthora* were detected, *P. ramorum* was not detected.

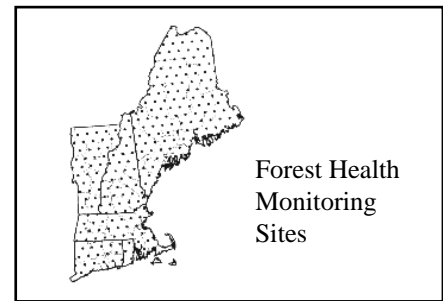
## Regional Surveys

### 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 summary report of *Forest Health*

*Monitoring in the Northeastern United States* can be found at: <http://fhm.fs.fed.us>.



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

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

