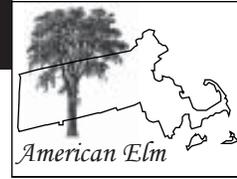


2002 Forest Health Highlights

Massachusetts



January 2003

The Resource

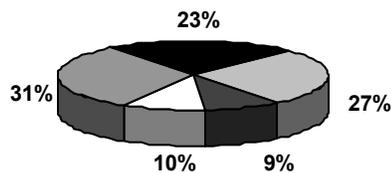
The forest resource of Massachusetts has great demands placed on it. Although Massachusetts is thought of as an urban State, 64 percent of the land area is forested. This forested area is managed for a multitude of purposes, including recreation, water quality, wildlife habitat, and a forest product industry.

•64% of the State is forested
(3,225,000 acres)

Out of the forested area:

- 90.8% timberland
- 9.2% noncommercial or reserved forest land

Major Forest Types:



- white/red pine/hemlock (27%)
- oak/pine (9%)
- other (10%)
- oak/hickory (31%)
- northern hardwoods (23%)

Special Issues

The overall health of the urban and rural forests of Massachusetts is good. However, there are some concerns about the impact on the forest resource from native and introduced forest diseases and insect pests. The level of damage from these pests often varies from year to year, depending on weather and other factors.

Judging from the requests for assistance from the general public, the insect of major concern continues to be the **hemlock woolly adelgid**. In response, State forest health specialists have provided pest alerts and control information to numerous property owners. The insect continues to spread across the State, with confirmed infestations in 39 new communities in 2002.

During the annual aerial survey, 114 acres of hemlock mortality were detected that can be attributed to the hemlock woolly adelgid. In an effort to control the insect, the State is continuing in a cooperative program to purchase and release a predatory ladybug, *Pseudocymnus tsugae*, with funds provided by the Massachusetts Legislature and the USDA Forest Service. Since 1999, a total of 56,633 beetles have been released at 8 sites.

Gypsy moth defoliation was down considerably in both acreage and the severity of defoliation from previous years, with a total of 4,744 acres of defoliation documented in this year's aerial survey. The population collapse in all areas was caused by a fungus, *Entomophaga maimaiga*, which infects gypsy moth caterpillars.

Fall cankerworm continues to cause defoliation in Plymouth and Norfolk Counties. This year, for the first time, notable defoliation was recorded in Essex County.

Beech bark disease is a major decline factor in Berkshire County. This disease, coupled with the continuing effects of the past year's drought, is causing an increase in mortality in beech stands at higher elevations.

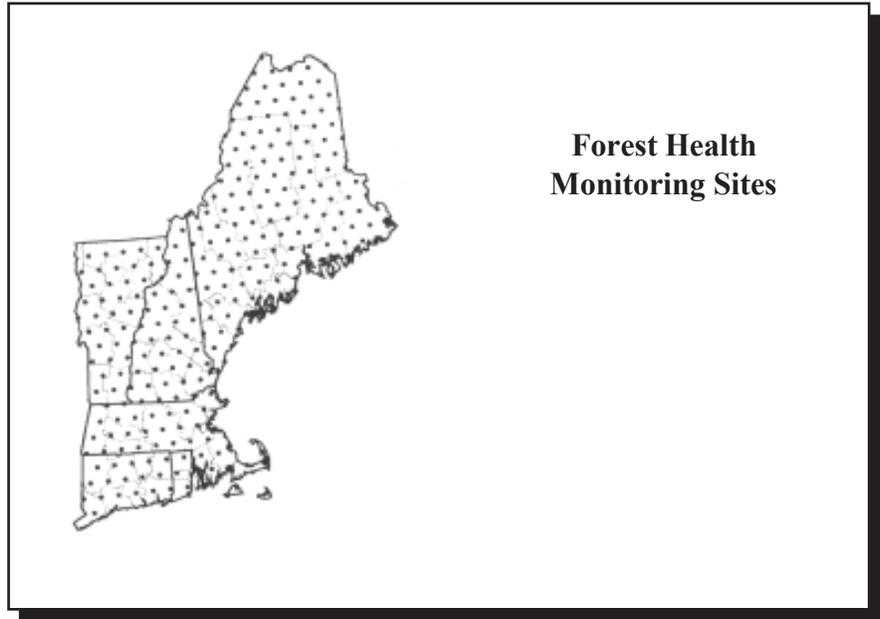
Regional Surveys

Interest in regional forest condition prompted the implementation of the National Forest Health Monitoring Program and the North American Maple Project.

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. Results indicate that there has been

minimal change in crown condition in the last 13 years, with 95 percent of trees greater than 5 inches diameter having normal crown fullness, about 85 percent with little or no crown dieback, and over 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 there are concerns for individual species such as ash, butternut, and hemlock due to various damage agents.



North American Maple Project

This cooperative project, involving several Northeastern States and Eastern Canadian Provinces, was initiated in 1988 to evaluate change in sugar maple tree condition. The New England States that continued to survey maple stands in 2001 were New Hampshire, Vermont, and Massachusetts. Overall, sugar maple located within the sample sites were in good condition. Periodically, insect defoliation has affected crown condition in some areas. There was little difference found between sugarbush and nonsugarbush stands.

For More Information



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