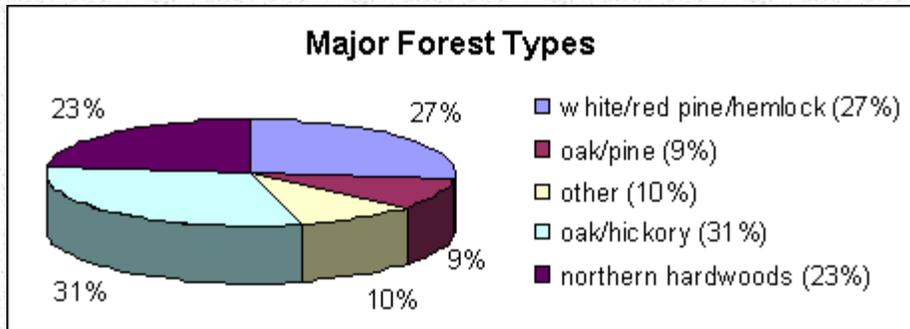


# 1996 Forest Health Highlights

## Massachusetts

### The Resource

The forest resource of Massachusetts has great demands placed on it. Although Massachusetts is thought of as an urban state, 64% of the land areas 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:

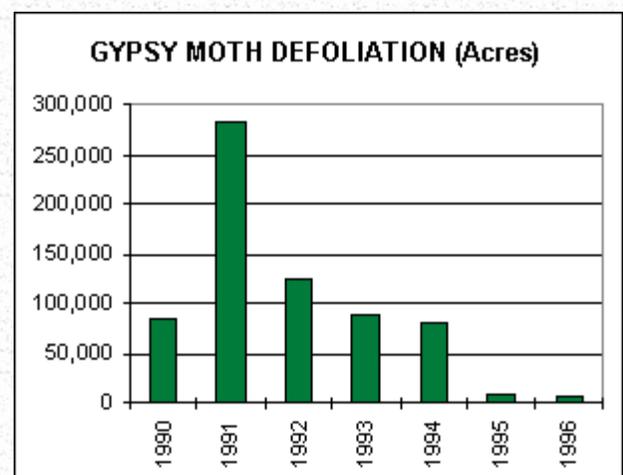
- 90.8 % timberland
- 9.2 % non commercial or reserved forestland

### Special Issues

With the significant wet weather experienced during the 1996 growing season, there was an increase in the incidence of tree **foliar diseases** reported. The most noticeable of these was tar spot on Norway maple and sugar maple. This disease was first observed in Northwestern Berkshire County in 1994 and now is found in most areas west of the Connecticut River.

The **gypsy moth** continued to cause defoliation, about 7,000 acres, in southeastern Massachusetts. The towns of Hingham and Cohasset experienced the majority of the defoliation. Very little heavy defoliation occurred, however, due to the presence of the fungus *Entomophaga maimaiga*, which kills the infected larvae. Preliminary surveys indicate that there will be noticeable defoliation in these areas again in 1997. In southern Berkshire County there has been an increase in egg masses and heavier male moth flight was reported, however, no significant defoliation is expected in this area in 1997.

**Hemlock woolly adelgid** continues to spread within the state. Four new infestations were confirmed in Wilbraham, Fall River, Gloucester, and Hingham in 1996. Some tree mortality has been observed in the infested areas



and other hemlock trees appear off-color and are stressed. A series of study areas are being established, in an effort to document the impact of this insect on the hemlock resource in Massachusetts.

## **Other Issues**

In an attempt to assess **urban tree health**, several communities in the state are conducting tree health surveys under the Urban and Community Forestry Program. The communities use volunteers who are trained to conduct the street tree inventories. The program is aided by the Northeast Center For Urban Forestry, established at the University of Massachusetts in Amherst. An assessment is also being conducted in the Boston area by a federal forest research group to look at the effect of Boston's vegetation on local and regional concentrations of air pollutants and to provide information on the health of the city's urban forests.

**Beech decline** has been observed in the Mt Wachusett area of Worcester County. Common problems found on trees were the presence of beech scale and Nectria cankers along with other types of cankers. The presence of these factors combined with poor site conditions and the intolerance of beech to drought and flooding, are responsible for this decline. There is also a lack of understory vegetation in the affected stands.

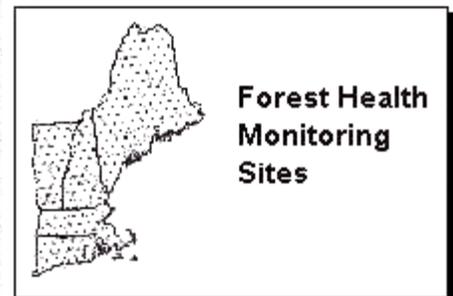
**Fall cankerworm** is still present in the South Shore communities of Hingham and Cohasset. Heavy male moth flight was reported in December 1996. A recently completed trap survey confirmed that there will be light defoliation in these communities again next spring. It should be noted that the area infested with the fall cankerworm coincides with the gypsy moth infested area, making the exact cause of the defoliation difficult to determine.

## **Regional Surveys**

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

### **FOREST HEALTH MONITORING PROGRAM**

The objective is to assess trend 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 7 years. In 1996, 98.5 percent of trees greater than 5 inches diameter had normal crown fullness. About 97 percent of the trees had little or no crown dieback, and 78 percent showed 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 with Canada was initiated in 1988 to look at change in sugar maple tree condition. There are several states in the Northeast involved including New York, New Hampshire, Vermont, Maine, and Massachusetts. Overall, sugar maple located within the sample sites are in good condition. Periodically, insect defoliation has affected crown condition in some areas. There was little difference found between sugarbush and non sugarbush stands.

## **For More Information**

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