

Forest Health Highlights

Rhode Island



February 2000

The Resource

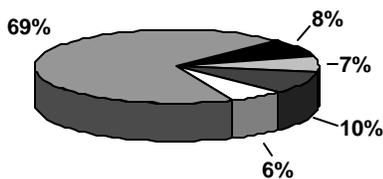
Forest land in Rhode Island is owned primarily by individuals who view their land as a source of enjoyment and a resource to be protected. The existence of intense public debate related to any impact on undeveloped lands is indicative of citizen concerns for the amenities provided by these lands, whether privately or publicly held. Rhode Island's forests are valued as a source of cleaner air, protected ground and surface water, wildlife habitat, wood fiber, and recreational opportunities.

• **55% of the state is forested**
(371,800 acres)

Out of the forested area:

- **91.8% timberland**
- **8.2% non commercial or reserved forestland**

Major Forest Types:



- oak/pine (8%)
- northern hardwoods (7%)
- other (10%)
- elm/ash/red maple (6%)
- oak/hickory (69%)

Special Issues

The forests of Rhode Island are monitored annually to assess forest condition. Statewide, aerial surveys are conducted over 350,000 acres of forest land. These surveys help to determine forest stressors and damage. Follow-up ground evaluations are undertaken to verify damage and ascertain cause. To incorporate forest health in urban and suburban tree management, the Rhode Island Division of Forest Environment provides technical information and workshops to arborists, which are regulated by the state arborist licensing statute.

Overall the health of the forest resource in the state is good, although the drought in 1999 caused significant stress to the forests throughout the state. In 1999, there was no damage from **hardwood defoliators**, including the forest tent caterpillar and the gypsy moth. For the past few years the population of the gypsy moth has been low, mostly due to the presence of the fungus, *Entomophaga maimaiga*, which attacks the caterpillar stage of the insect. This fungus has spread throughout the Northeast and now occurs in the natural environment.

Current forestry issues in the state are related to introduced forest insect pests. In response to the **hemlock woolly adelgid**, Rhode Island is participating in an effort to rear a ladybug beetle, *Pseudoscymnus tsugae*, which is an insect predator of the adelgid. This is a cooperative effort supported by the Urban and Community Forestry Program and the University of Rhode Island. Hemlock is a common component of town forests and many trees are declining due to the impacts from the adelgid. The goal is to rear the predatory beetles and release them in affected town forests, in order to decrease the populations of the adelgid and therefore increase the vigor of the infested trees. The Rhode Island Division of Forest Environment is also participating in the USDA Forest Service study to release the beetles in the state. In May 1999, 10,000 beetles were released in the northwest corner of the state. The affects are being monitored.

Other introduced insect pests, the **red pine scale** and **red pine adelgid**, have severely impacted red pine stands in the state which were mostly planted in the 1940's. Many areas where red pine is being harvested will be converted to white pine. Watershed managers and consulting foresters are working with the Division of Forest Environment forest health and stewardship foresters to develop strategies for these areas.

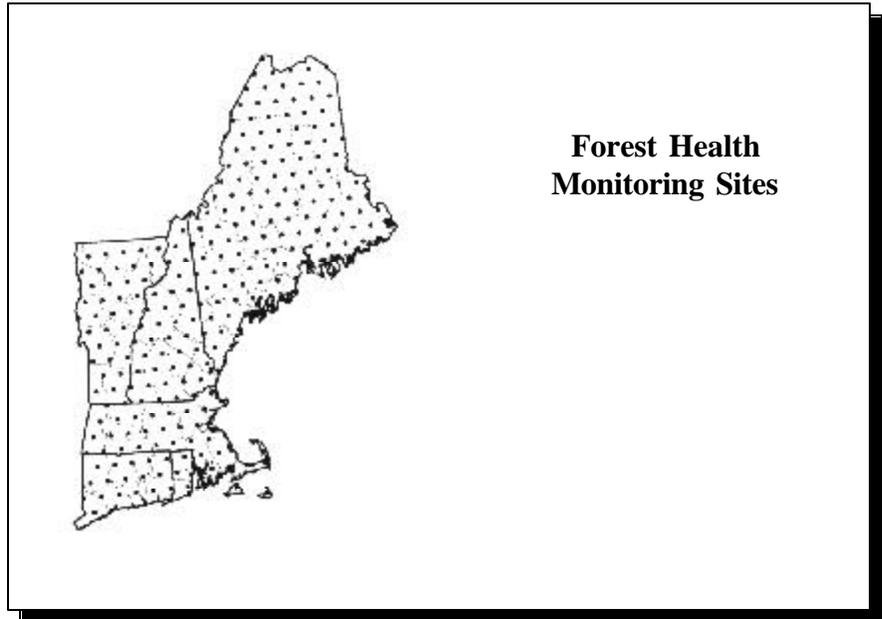
Regional Surveys

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 10 years. In 1999, 98 percent of trees greater than 5 inches diameter had normal crown fullness. About 98 percent of the trees had little or no crown dieback, and 76 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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