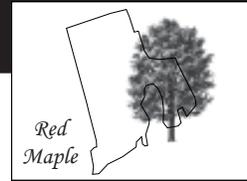


2004 Forest Health Highlights

Rhode Island



January 2005

The Resource

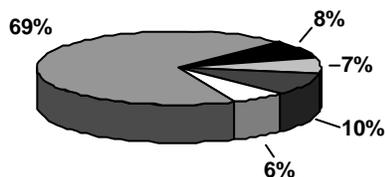
Forest land in Rhode Island is owned primarily by individuals who view their land as a source of enjoyment and a resource to be protected. The existence of intense public debate related to any impact on undeveloped lands is indicative of citizen concerns for the amenities provided by these lands, whether privately or publicly held. Rhode Island's forests are valued as a source of clean 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% noncommercial or reserved forest land**

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. These surveys help to determine forest stressors and damage. Special evaluations are undertaken to 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, who are regulated by the State arborist licensing statute.

Defoliators presented few problems during the 2004 growing season. **Forest tent caterpillars** in East Providence, East Greenwich, and Warwick were vigorous, yet their numbers were low. A greater degree of damage is anticipated in 2005.

Woodland surveys were conducted for **gypsy moth** egg masses. Results indicate low population numbers statewide. Other surveys for exotic pests including **emerald ash borer** and *Phytophthora ramorum*, the pathogen that causes **sudden oak death**, were conducted with the results showing no positive finds in Rhode Island.

Frost damage, particularly on rhododendron plants was common following the sustained bitter cold of the 2003-2004 winter. Almost to compensate, though, the 2004 growing season was moderate in temperature with adequate precipitation.

Hemlock woolly adelgid populations seemed to be diminished following the bitter cold temperatures of the previous winter. However, hemlock stands surveyed in Rhode Island during the late fall had viable adelgid populations.

A survey of Rhode Island urban, suburban, and rural landowners, along with nursery operators, landscapers, foresters, and loggers, was conducted in 2004 to evaluate impacts of the adelgid. The results of the survey indicate that the impact of the insect on the condition of hemlock trees in Rhode Island is significant. One-third of the landowners have experienced hemlock mortality. It was also reported that 96 percent of landscape hemlocks are in fair to very poor condition and 70 percent of forest hemlocks are in poor to very poor condition. Surprisingly, the most commonly chosen replacement tree by property owners is another hemlock, with the total cost for replacement ranging from \$556 to \$1,233. Many homeowners are protecting surviving trees annually with horticultural oil spray. Outreach efforts resulting from survey findings include recommendations for alternative plantings and incorporation of soil injection treatments as an effective option to protect high value trees.

Special Issues cont.

Coastal areas of Rhode Island had serious damage and mortality from the **spruce aphid** in landscape and nursery settings on white spruce. Aquidneck Island in Newport County was hardest hit. Growing populations of **beech blight aphid** with the resulting heavy mats of sooty mold are reported in Kent and Washington Counties. American beech, as a component of Rhode Island forest stands, is increasing as the forests mature. Beech has become a more common understory and intermediate species over the last 20 years, with a resulting concern for beech health.

Outreach is a strong component of the Rhode Island Division of Forest Environment's Forest Health Program. Tree care training sessions for arborists and volunteer tree stewards are held several times each year. Diagnostic assistance to forest landowners, Christmas tree growers, and homeowners is available.

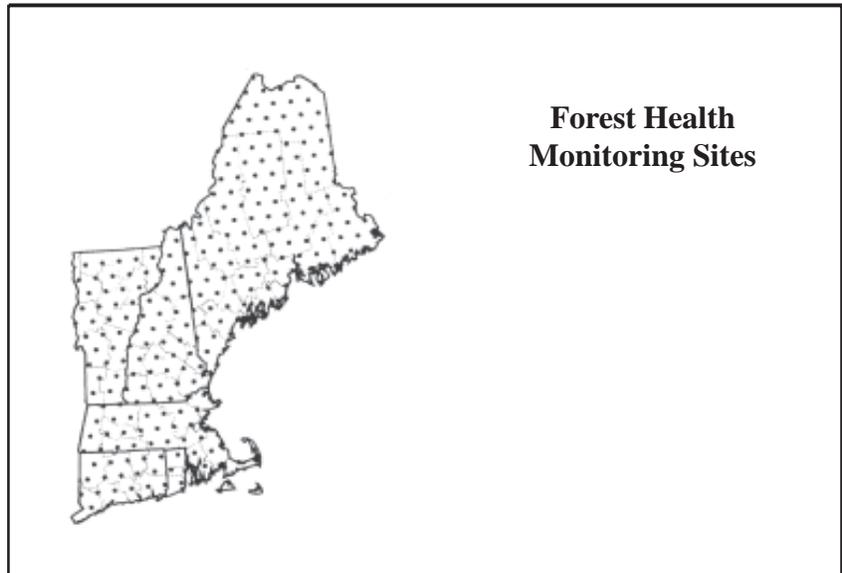
Regional Surveys

National Forest Health Monitoring Program

Interest in regional forest condition prompted the implementation of the National Forest Health Monitoring Program. In cooperation with the USDA Forest Service, Rhode Island continues to participate in the program. Plot data and general survey data is collected annually.

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.

Plot results indicate that there has been minimal change in crown condition in the last 15 years, with about 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.



For More Information



RI Dept. of Environmental Management
Division of Forest Environment
1037 Hartford Pike
North Scituate, RI 02857
(401) 647-3367

Forest Health Protection
USDA Forest Service
P.O. Box 640
Durham, NH 03824
(603) 868-7709

