

2007 Forest Health Highlights

Rhode Island



January 2008

The Resource

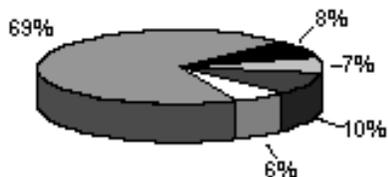
Forest land in Rhode Island is owned primarily by individuals who view their land as a source of enjoyment and a resource to be protected. The existence of intense public debate related to any impact on undeveloped lands is indicative of citizen concerns for the amenities provided by these lands, whether 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.

Part of the monitoring effort incorporates aerial surveys which are conducted to map forest damage throughout the State. Follow-up ground observations within the damage areas help to verify aerial observations and causal agent.

In 2007, **hardwood defoliation** was observed throughout Rhode Island. Approximately 2870 acres of damage from the forest tent caterpillar occurred in the northern and central parts of the State. The gypsy moth defoliated about 4500 acres in Bristol, Kent, Newport, and Providence County. An additional 5470 acres of combined forest tent and gypsy moth defoliation were also detected. In association with the defoliation, there were approximately 800 acres of mortality in Providence County, with most of the area having 100 percent mortality of all oak species. This also occurred in an area that was previously defoliated by the orange-stripped oakworm. The population of orange-stripped oakworm is currently reduced after five years of defoliation which reached a peak of 15,932 acres in 2005. No areas of defoliation from this insect was observed in 2007.

Hemlock woolly adelgid, an introduced species, remains present throughout all five counties. The population varies, a result of the intensity of the winter weather. This forest and landscape pest will continue to have an impact on the State's hemlock trees.

The Providence Water Supply Board has harvested large tracts of red pine mortality due to the **red pine scale**. This nonnative pest has been in southern New England for many years. Approximately 60 acres of mortality was observed in Rhode Island in 2007.

A recently introduced insect, the **winter moth**, was a concern in 2005, however populations diminished in 2006 with 233 acres of defoliation occurring in the eastern part of the State near the Massachusetts border. In 2007 only small patches of defoliation east of the bay were detected in Bristol and Newport Counties.

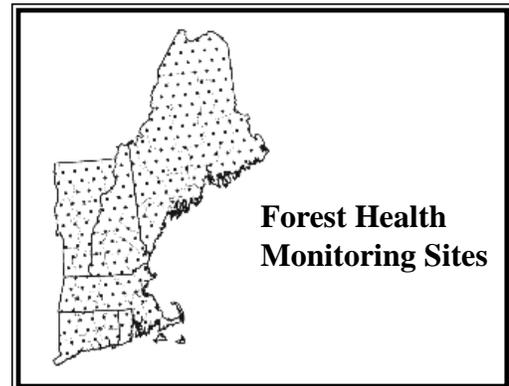
There were numerous reports of an unknown **twig borer** on the tips of white pine now believed to be *Pityophthores* sp. These symptoms were similar to those observed in northern New England.

Regional Surveys

National Forest Health Monitoring Program

In cooperation with the USDA Forest Service, Rhode Island 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>.



For More Information



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