

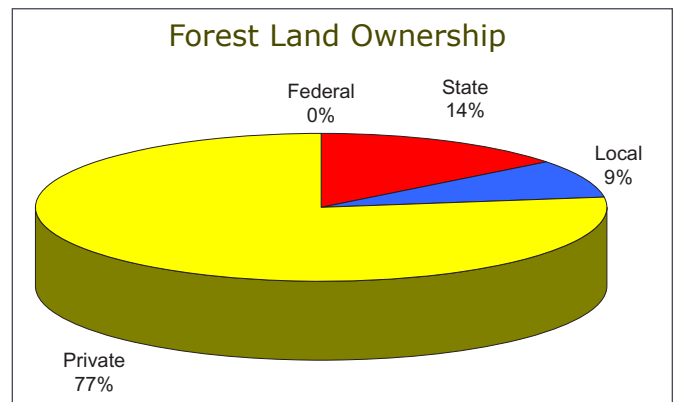
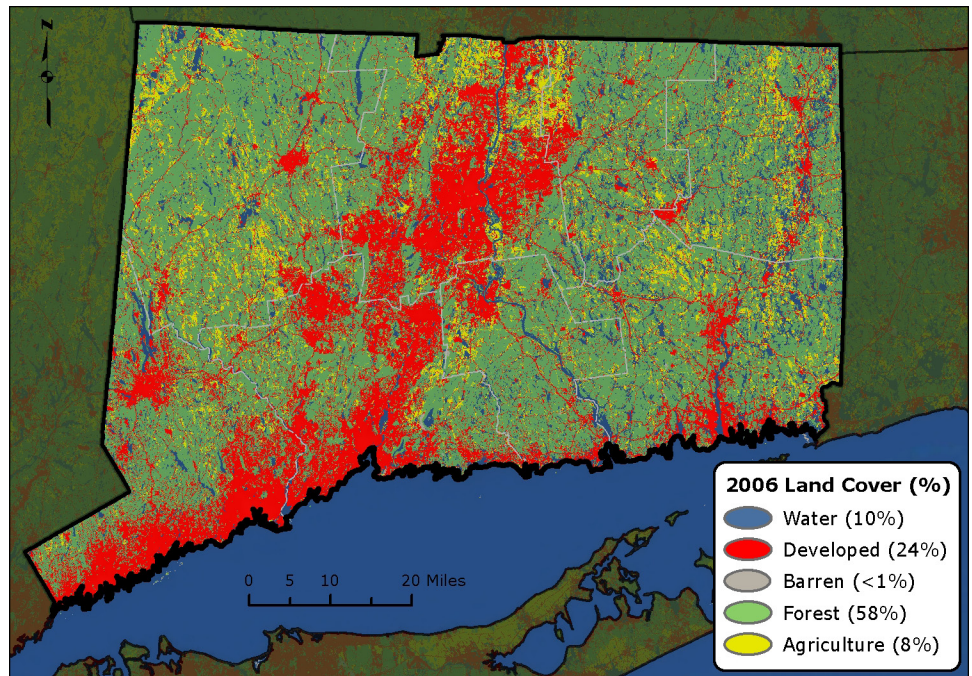
# 2011 Forest Health

## CONNECTICUT *highlights*



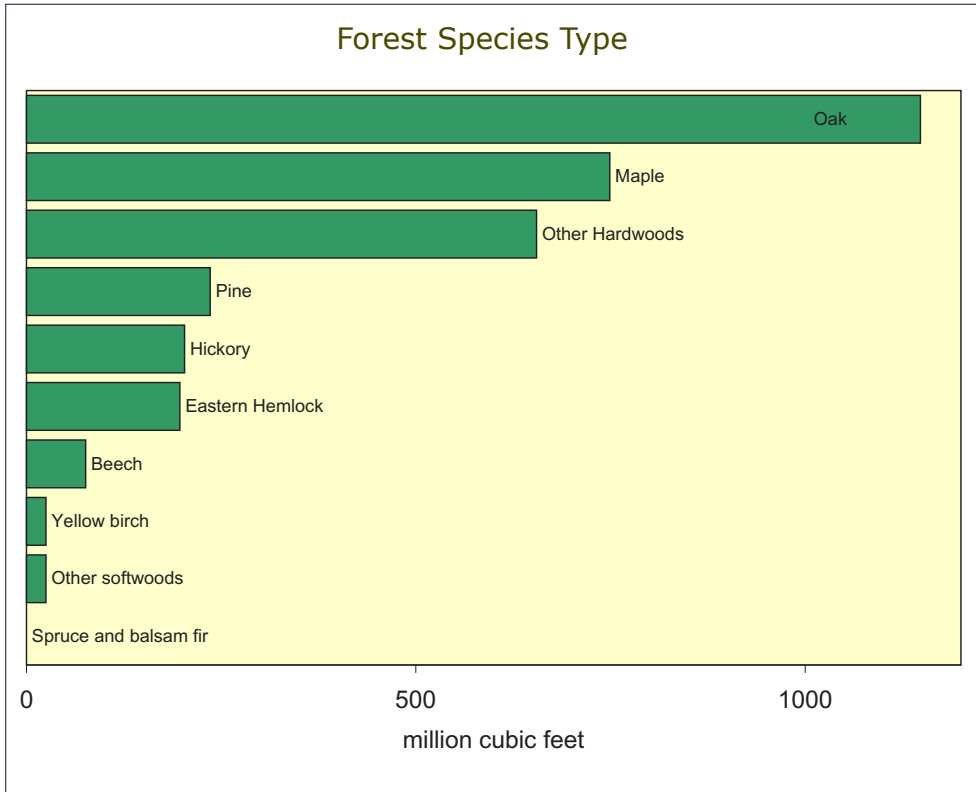
### Forest Resource Summary

Connecticut's forests are 77 percent privately owned, with the remainder of the lands in State or local town ownership. These forests provide clean water and air, wildlife habitat, and sources of recreation, timber, and fuel. Forested parks and shade trees aesthetically enhance communities as well as provide energy savings, habitat for wildlife, and recreation opportunities. The latest Connecticut forest inventory estimates that there are approximately 1.8 million acres in the State that are forested. The forest resource is made up of a variety of forest types—mostly oak, maples, and other hardwoods—along with pine and eastern hemlock.



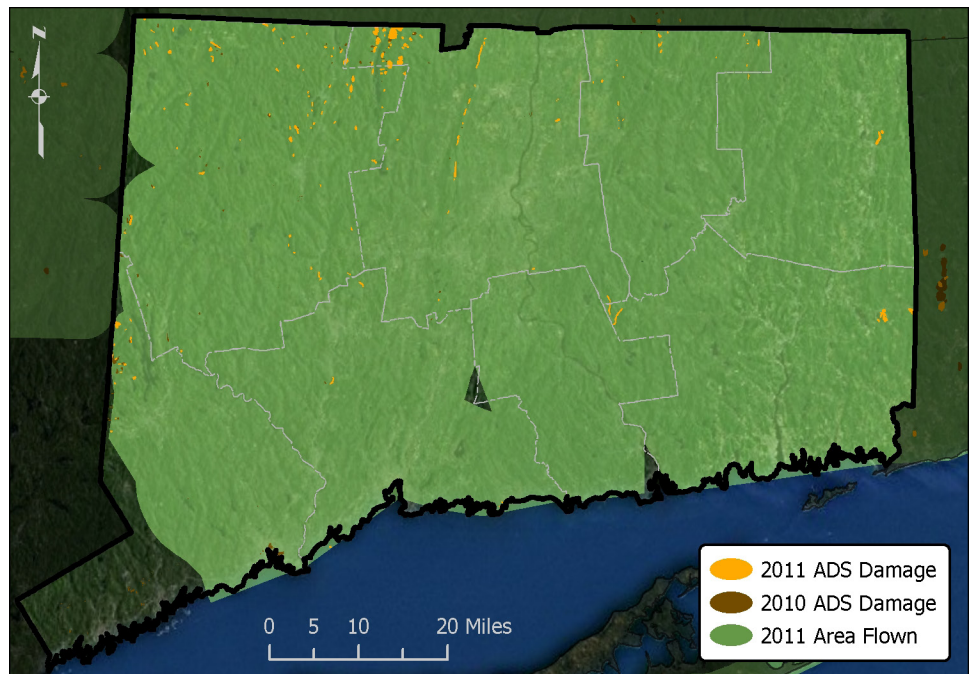
### Forest Health Programs in the Northeast

State forestry agencies work in partnership with the U.S. Forest Service to monitor forest conditions and trends in their State and respond to pest outbreaks to protect the forest resource.



## Aerial Surveys

In Connecticut, about 8,000 acres were mapped as damaged in 2011. Most of the damage was reported on eastern hemlock from the hemlock woolly adelgid. Locust leafminer caused hardwood defoliation, and orange striped oakworm damage was also evident. Red pine scale and storm events also caused damage.



*This map delineates aerial detection survey (ADS) results for Connecticut in 2011 and 2010.*



## Forest Damage

In 2011, Connecticut received above-average levels of rainfall following a winter of record amounts of snow. **Foliar diseases** were widespread and severe, resulting in premature autumn coloration, browning of leaves, and in some cases, defoliation.

**Hurricane Irene** struck the State on August 27 as a Category 1 storm, then degenerated rapidly into a tropical storm. Strong winds toppled many trees and damaged the branches and crowns of many more (figure 1). Salt spray tattered and damaged foliage, especially in coastal areas.

In the days that followed, prolonged **flooding** occurred in areas along streams and rivers, which especially affected the Housatonic and Connecticut River watersheds. Beach erosion was common, particularly in the East Haven area of New Haven County. The effects of this hurricane will be felt for years to come—damage to trees from breakage and the effects of flooding will be reflected in increased tree mortality and susceptibility to diseases and insect pests.

The **Halloween Nor'easter** that occurred on October 29 and 30, 2011, caused extensive damage to trees and landscapes. Heavy snowfall on trees that had not yet shed their leaves resulted in branches breaking under the weight, trees collapsing, and tree stress. The northwestern counties were most severely impacted, with numerous roads blocked by downed trees and power lines. Many of the trees that succumbed were probably weakened by Hurricane/Tropical Storm Irene. The long-term consequences of these two storms will be seen in forested areas for a long time.

No defoliation due to **forest tent caterpillar** larval feeding was recorded in 2011. There was also no observable damage due to **gypsy moth**. Very few viable gypsy moth egg masses were found during surveys in



Figure 1.—Storm damage from Hurricane Irene.  
(Photo: Connecticut Agricultural Experiment Station)

the winter of 2010-2011. However, **orange-striped oakworm** affected 546.1 acres in Fairfield County, 547.7 acres in New London County, and 251.1 acres in Windham County, for a total of 1,344.9 acres statewide.

**Red pine scale**, which was first described in Connecticut in the 1940s, has affected plantations across the State and continues to cause sporadic damage. In Hartford County, 27.1 acres were affected by this introduced scale, along with 5.1 acres in Litchfield County and 59.5 acres in Tolland County, for a total of 91.7 acres statewide.

Personnel have carried out surveys of a variety of invasive pests in Connecticut, none of which have been found. These include the **Asian longhorned beetle** (figure 2), **emerald ash borer**, **light brown apple moth**, and **Sirex wood wasp**. Interest in Asian longhorned beetle is high. The Connecticut Agricultural Experiment Station has fielded over 175 calls of possible reports. Most of the findings have been either white spotted sawyer or Western conifer seed bug. To report possible sightings of Asian longhorned beetle, send an e-mail to [CAES.StateEntomologist@ct.gov](mailto:CAES.StateEntomologist@ct.gov).

The health of hemlock stands in Connecticut continues to exhibit general recovery from **hemlock woolly adelgid**, with large areas

of the northern half of the State showing excellent new growth. In general, damage due to **elongate hemlock scale** is increasing, especially on true firs and spruce, possibly due to mild winter conditions. **Circular scale** is found sporadically.

**Beech bark disease** is endemic statewide and is killing stressed trees. Ash trees continue to suffer from ash decline complex, even though the incidence of **ash rust** was low. **Butternut canker** is widespread in the butternut population and is caused by several fungi in the genus *Phomopsis*. Another pathogen, *Melanconis*, is widespread on hybrid trees.

One watershed was baited from April through September for *Phytophthora ramorum*, the causal agent of **Phytophthora blight**. Although other species of *Phytophthora* were detected, *P. ramorum* was not found.

Due to the limited number of walnut trees in Connecticut, there is no monitoring program for **thousand cankers disease**, even though this disease is the subject of a number of newly-enacted quarantine regulations for many States.

## References

### Land Cover Map:

U.S. Geological Survey. 2011. 2006 National land cover dataset. Sioux Falls, SD.

### Forest Land Ownership, Forest Species Type:

U.S. Department of Agriculture, Forest Service. 2009. Forest resources of the United States, 2007. Gen. Tech. Rep. WO-78. Washington, DC. 336 p.



Figure 2.—Asian longhorned beetle. (Photo: Donald Duerr, USDA Forest Service, [Bugwood.org](http://Bugwood.org))



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