

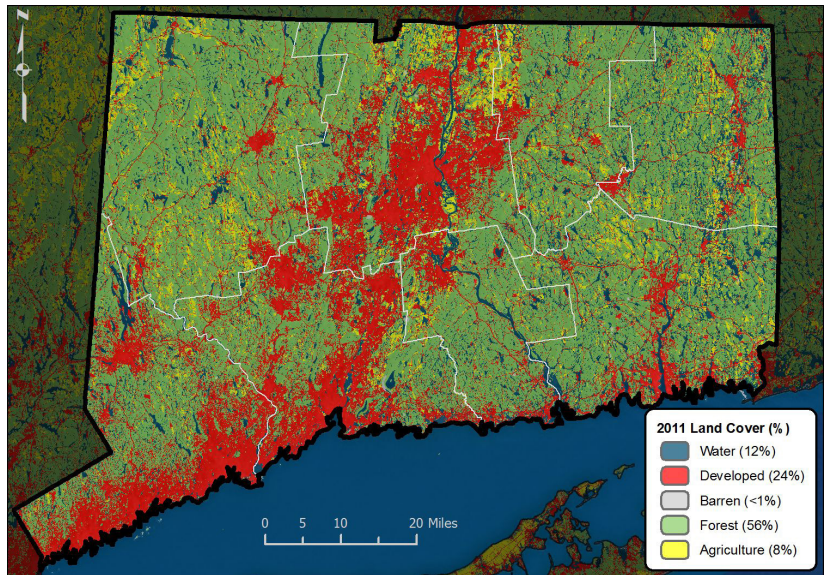


2015 Forest Health CONNECTICUT highlights

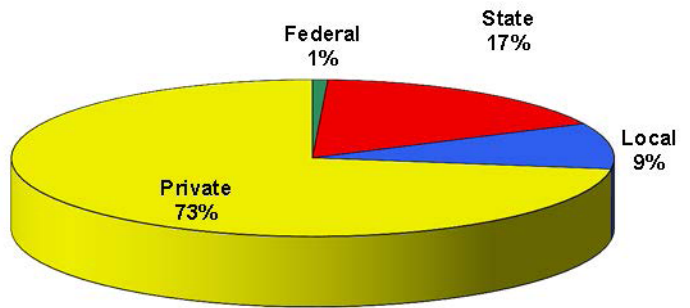
Forest Resource Summary

Connecticut's forests are 73 percent privately owned, predominantly by families and individuals, but also by corporations, tribes, conservation groups, and clubs. The other 27 percent of Connecticut's forest land is in Federal, State, or local town or county ownership. These forests provide clean water and air; wildlife habitat; and sources of recreation, timber, and fuel. Forested parks and shade trees esthetically enhance communities and provide energy savings, habitat for wildlife, and recreation opportunities. Connecticut has approximately 1.8 million acres of forest according to the U.S. Forest Service 2014 forest inventory--a figure that has not changed substantially in the last 5 years.

The forest resource is made up of many forest types and tree species. Oak/hickory is the predominant forest type group and covers about 70 percent of the State. This group is dominated by oak species but also includes maple, birch, ash, hemlock, and beech. On plots inventoried between 2009 and 2014, 60 species were recorded—mostly red maple, oak, and other



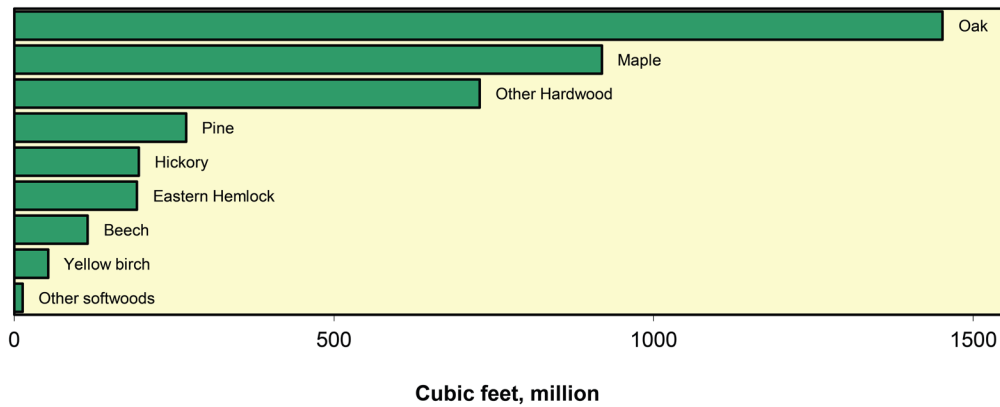
Forest Land Ownership in Connecticut, 2012



hardwoods, along with white pine, hickory, beech, yellow birch, and eastern hemlock.

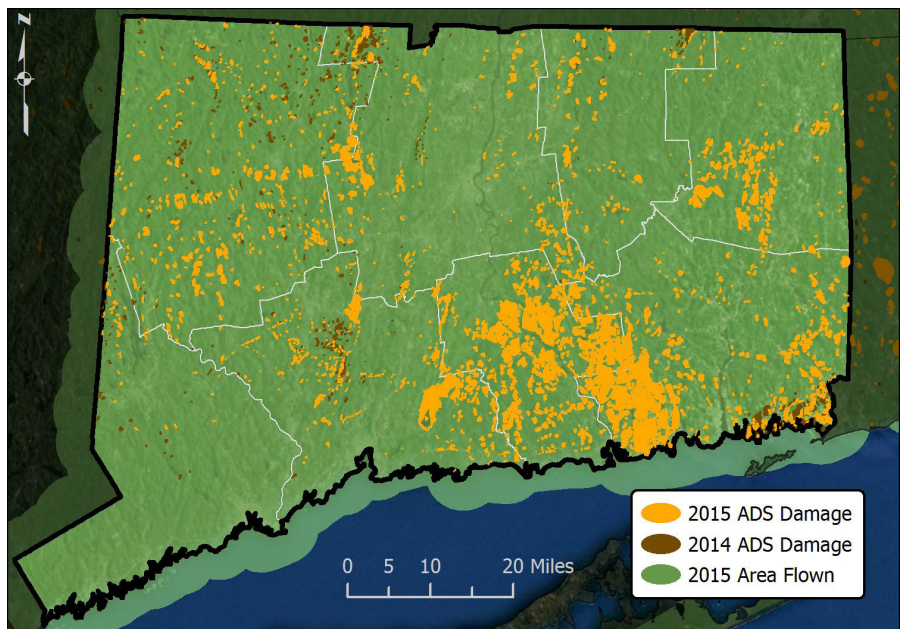


Net Volume of Growing Stock on Timberland by Species in Connecticut, 2012



Aerial Surveys

Over 206,000 acres of damage were mapped by aerial survey in Connecticut in 2015, a substantial increase over 2014. The predominant offender was gypsy moth, for which almost 180,000 acres of defoliation were observed. A little over 4,000 acres in New London County was conjointly defoliated by winter moth. An additional 3,100 acres were defoliated by winter moth alone. Discoloration of hemlock due to hemlock woolly adelgid and elongate hemlock scale totaled almost 12,000 acres. Also, hemlock discoloration on about 2,300 acres was from drought, and on 2,000 acres was from anthracnose. Emerald ash borer caused defoliation and mortality on almost 1,800 acres throughout most of the State, and orangestriped oakworm defoliated over 1,700 acres of mixed northern hardwoods.



Comparison of aerial detection survey (ADS) results for Connecticut in 2014 and 2015
(Map: U.S. Forest Service)

Forest Damage

Insects

Emerald ash borer was found in New Haven County in July 2012, in a colony of *Cerceris* wasps. Since then, the insect has been found, both in wasp colonies and in purple traps, in six additional counties—Fairfield, Litchfield, Hartford, Middlesex, New London, and Tolland. Monitoring of *Cerceris* colonies continued in 2015. Trapping was discontinued as Connecticut became part of the contiguous emerald ash borer quarantine when the Federal quarantine was expanded to include the entire State. In the areas of New Haven County where the infestation was first detected, 1,826 acres of dead and declining trees were found.

Due to drought conditions in spring 2015, the fungus that usually keeps **gypsy moth** larvae in check did not “kick in,” and damage due to larval feeding was considerable. We observed defoliation due to gypsy moth on 175,273 acres, mostly in Middlesex, New Haven, and New London Counties. Combined damage due to both gypsy moth and winter moth occurred on 4,166 acres, mostly in southern New London County. In November and December 2015 a gypsy moth egg mass survey was conducted on 80 – 95 percent of favorable host sites on a 7-mile grid (102 sites) throughout Connecticut. Egg mass counts were very high in most locations surveyed. Even if natural fungal and viral control measures take effect, it is expected that damage due to larval feeding will be considerable in 2016.



Gypsy moth female and egg mass (Photo: Peter Trenchard, Connecticut Agricultural Station)



Lots of gypsy moths (Photo: Peter Trenchard, Connecticut Agricultural Station)

No defoliation due to larval feeding of **forest tent caterpillar** was recorded in 2015. **Red pine scale** was described in Connecticut in the 1940s and causes sporadic damage. Statewide, about 6 acres were affected by red pine scale; many stands of red pine have been eliminated due to presence of red pine scale. **Orangestriped oakworm** caused defoliation on 1,763 acres, mostly in New London County.



Orangestriped oakworm caterpillar (Photo: Peter Trenchard, Connecticut Agricultural Station)

Surveys were conducted in 2015 but did not find the following pests: **Asian longhorned beetle**, **light brown apple moth**, and **Sirex wood wasp**. **Brown marmorated stink bug** causes sporadic damage to fruit crops, and is increasingly becoming an indoor pest, especially in the late summer and autumn, when the insects move into homes in search of overwintering sites.

Hemlock woolly adelgid and **elongate hemlock scale** have been present in Connecticut for many years and continue to cause patchy damage and decline among the remaining population of hemlocks. Statewide 6,060 acres were affected by hemlock woolly adelgid and elongate hemlock scale in 2015. **Circular scale** is found sporadically.

Black oak gall wasp, or the crypt gall wasp, was detected in New London County in 2014. In 2015 it was found in one or two new locations, but damage was not heavy enough to be recorded by aerial survey and was limited to black oak, which is sporadically found in coastal areas of Connecticut. Since the detection of this insect, monitoring of oaks in the coastal reserves is scrutinized.

Damage due to feeding by **winter moth** larvae has been concentrated in coastal New London County, and continues to increase. Over 3,109 acres were affected in 2015. Parasitoids of winter moth were released in this area, but their effectiveness in reducing populations has not been significant as yet; a lag time of up to 5 years is expected. Also, some defoliation was combined with gypsy moth damage on 4,166 acres.

Southern pine beetle was recently detected in Connecticut, in Hartford, Litchfield, and New Haven Counties. Damage estimates are still in the preliminary stage; however, the infestation appears to be widespread.

Pathogens

Beech bark disease is endemic Statewide and is causing mortality of stressed trees.

Due to the limited number of walnut 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.

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(1 March 2016).



Forest Health Programs

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.

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