

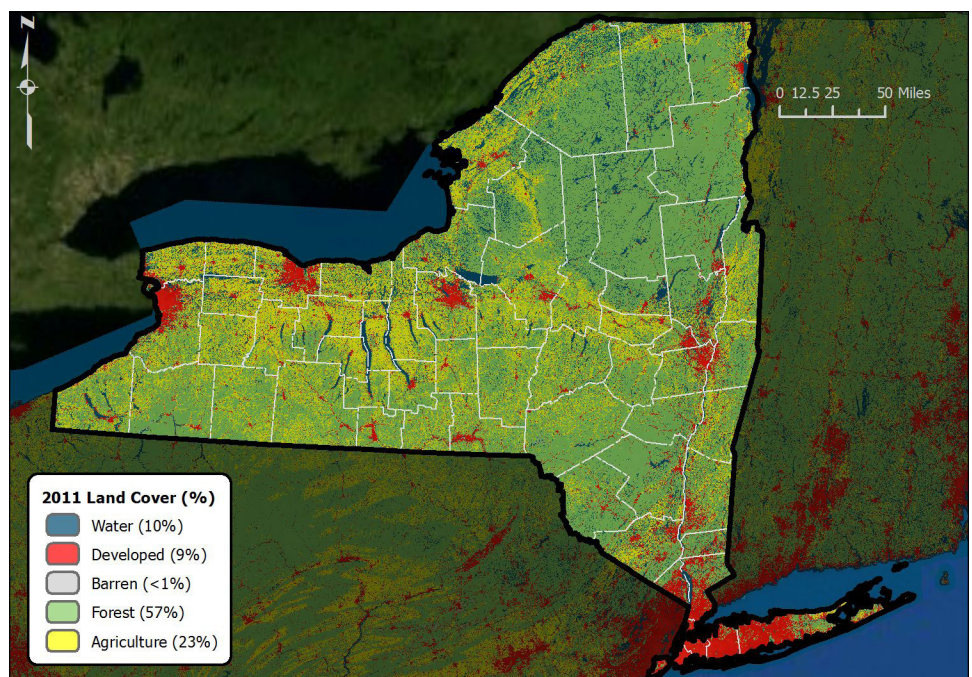
2014 Forest Health highlights

NEW YORK

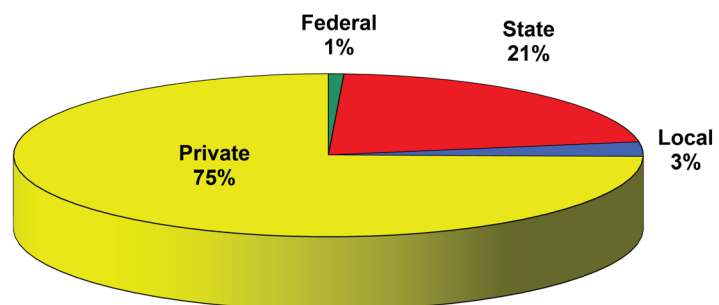


Forest Resource Summary

New York's forests are 75 percent privately owned. The 21 percent of the land that is owned by the State mostly encompasses the Adirondack Park. These forest lands provide a recreational base for millions of residents and others visiting the State's scenic regions. Since 2007, inventories have shown the amount of forested land in New York to be stable and forest land lost to development has been balanced by gains in abandoned farm land reverting to forest. The latest New York forest inventory estimated that 63 percent of the State is forested—almost 19 million acres—and 23 percent is in agriculture. The forest resource is made up of a variety of forest types—mostly maple and other hardwoods, along with pine, oak, beech, eastern hemlock, and other softwoods.



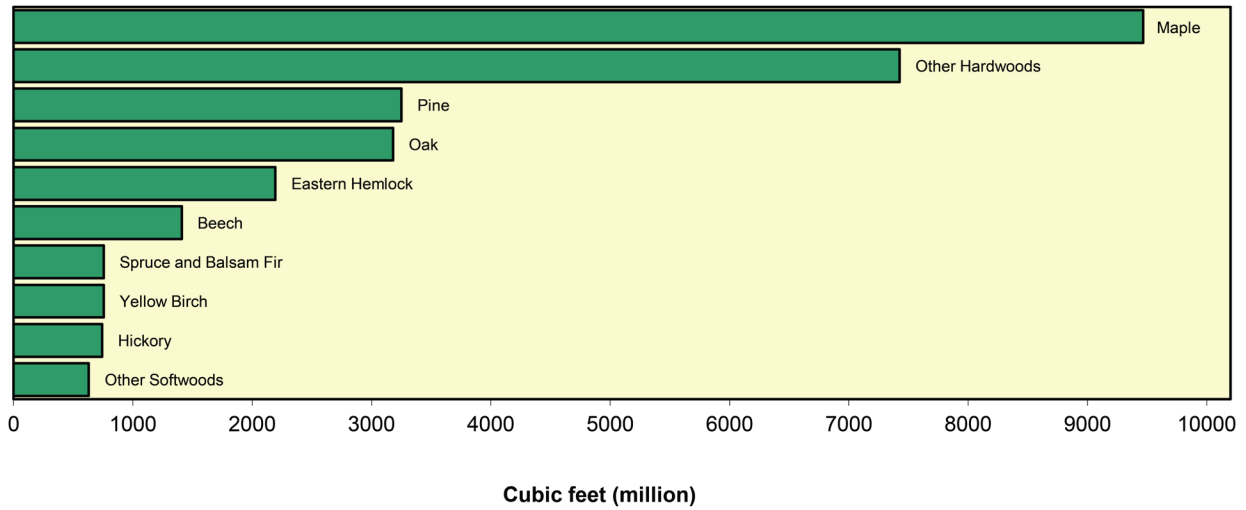
Forest Land Ownership in New York, 2012



Forest Health Programs in the Northeast

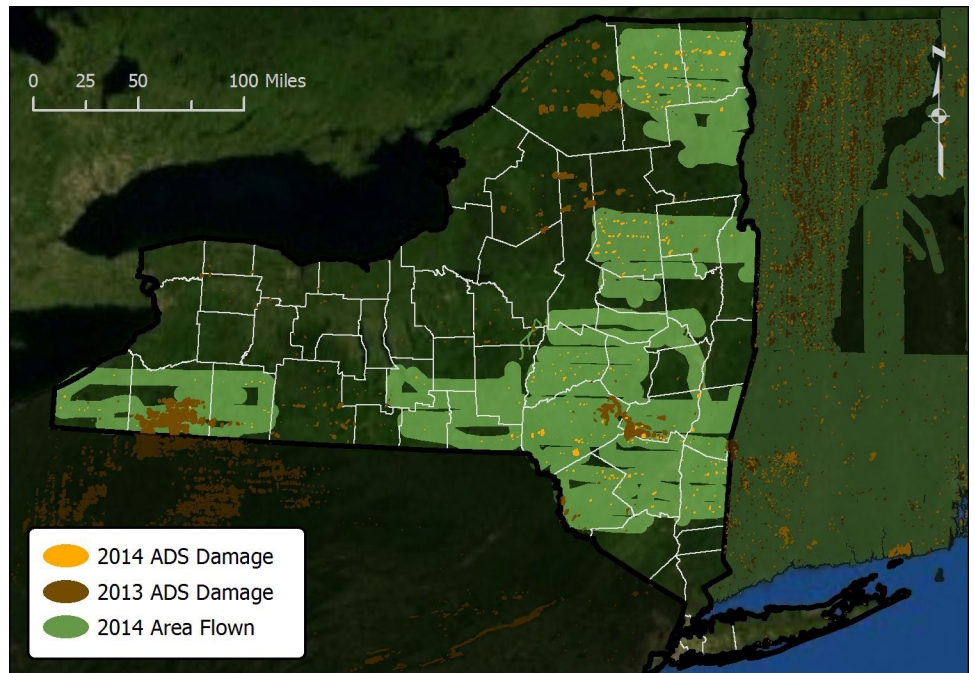
State forestry agencies work in partnership with the U.S. Forest Service to monitor forest conditions and trends in their State and respond to pest outbreaks to protect the forest resource.

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



Aerial Surveys

In New York State, damage mapped from the 2014 forest health aerial survey totaled about 36,000 acres of the approximately 10 million acres surveyed by air. This is a significant decrease in damage detected from the previous year. Much of the difference is attributed to a collapse of gypsy moth populations in western New York.



Aerial Detection Survey (ADS) observations in New York in 2013 and 2014.

Forest Damage

Insects

There are several invasive insects of concern in New York. The **emerald ash borer** is currently the most significant invasive insect species in the State. In 2014, this insect was positively confirmed in two new counties: Broome and Westchester. Older infestations are growing exponentially, especially those in Monroe, Steuben, and Albany Counties. Research activities and efforts to slow the spread of the beetle and ash mortality are being conducted in all infested areas of New York. Work in Ulster County appears to have been especially effective in slowing mortality.



*Emerald ash borer galleries and emerging adult near Syracuse.
(Photo: Maria Moskalee, New York State Department of Environmental Conservation (NYSDEC))*

Cooperative efforts to eradicate **Asian longhorned beetle** from quarantined areas in New York City and Long Island are ongoing. In 2014, the Federal quarantine in central Long Island was expanded to include beetle finds just outside the previously quarantined area near West Babylon. Currently, 135 square miles in New York State are under quarantine for this pest.

Southern pine beetle was discovered in the pine barrens of Long Island in the fall of 2014, the first time this North American pest has been found in New York and the northernmost known extent of the beetle. At the time of this report, efforts are underway to thoroughly delineate the population(s), form a response plan, and better inform land managers about this pest.

After causing significant defoliation in 2013, **gypsy moth** populations collapsed in 2014 with no significant damage detected.



*Both images: This pitch pine has been attacked by southern pine beetle.
(Photos: Jason Denham, NYSDEC)*

Late-season damage by **locust leafminer** was prevalent throughout the Hudson Valley and totaled about 2,000 acres.

Hemlock woolly adelgid continues to cause damage and mortality to native forest and ornamental eastern hemlock trees. Three new infested counties were discovered in 2014: Cattaraugus, Chenango, and Onondaga. Damage is most severe in areas that have been infested for several years in the Catskills and southern part of the State. However, several infested stands within the Finger Lakes region are also beginning to have hemlock mortality. In some areas, a majority of the trees are infested, and many of those are in declining health or dead. In cooperation with the State Parks and Cornell Cooperative Extension, the State has introduced predatory beetles and applied pesticide treatments in some specific areas to slow or reduce hemlock mortality.



David Paradowski (NYSDEC) and Mark Whitmore (Cornell) survey the Zoar Valley for hemlock woolly adelgid. (Photo: Jason Denham, NYSDEC)

Elongate hemlock scale is common in approximately the same range as hemlock woolly adelgid and is often, but not always, found in the same stands. Damage from the scale is hard to separate from damage by the adelgid at times, but both have caused significant decline and mortality of hemlocks.

Balsam woolly adelgid has been increasingly noted on balsam fir in the Adirondacks over the past few years. Surveys in 2014 found stem infestations in several locations, with the most severe damage, including some mortality, centered on Indian Lake. It is currently unclear what other factors may be contributing to balsam fir decline in this area.

It is assumed that much of the State is likely infested with **Sirex woodwasp**, although no new affected counties were detected in New York in 2014. Within the known infestation, much of the worst damage is still found on pine plantations that are overstocked, overmature, or otherwise in declining health.

Pathogens

Oak wilt was detected in New York for the first time in 2008 in Schenectady County in the town of Glenville, where at least six oaks had been killed. In the winter of 2008–2009, 73 infested or likely-to-become-infested trees were destroyed. In September 2013, one more tree in the same residential neighborhood was confirmed to be infected. That tree and 17 others within a 150-foot buffer were cut and destroyed in 2014. Monitoring of the area is ongoing, and aerial surveys have shown no other infections. As of 2014, oak wilt has still not been found in any other part of New York.

Beech bark disease can be readily found throughout New York State. The symptoms of **Dutch elm disease** are also conspicuous statewide. Many of the trees now succumbing to Dutch elm disease are mature trees in urban and suburban settings that survived the initial wave of the disease throughout the region. **Butternut canker** is common in New York wherever butternut is found. It is rare to see a symptom-free butternut tree.

Dogwood anthracnose continues to affect understory and ornamental flowering dogwood across the State. This disease was not reported in any new areas in 2014.

Invasive Plants

Giant Hogweed, a noxious invasive plant that causes a severe skin reaction, is present in 47 counties in the State. There are now 1,239 known populations of the plant, with the largest and densest of these in the western half of the State. This was the seventh year of manual eradication and the sixth year of herbicide use. During the 2014 field season (late April through September), field crews visited 1,489 sites: plants in 548 sites were controlled by root cutting, plants in 547 sites were controlled with herbicide, plants in 307 sites had their flower heads removed, and 364 sites that were controlled previously had no plants found in 2014. The giant hogweed hotline received and returned a total of 1,019 calls and 1,472 e-mails; the giant hogweed main Web page was viewed 593,596 times between January and August 2014.

Approximately 30 percent of all sites now have no giant hogweed plants, indicating that our control methods have been very successful. We have found that small sites can be eradicated fairly quickly. For larger sites, crews are reporting that many sites have fewer plants and that they are seeing fewer large flowering plants as well.



Andy Moskalee applies herbicide to giant hogweed plants at a forest edge. (Photo: Hayden Premore, NYSDEC)

Kudzu has been present in New York since at least the early 20th century when it was promoted for use in erosion control. However, there has been little formal tracking of populations until the past few years. There is a growing concern that a warming climate will allow the species to become as problematic for New York as it has been further South for decades. Beginning in 2013, the New York State Department of Environmental Conservation (NYSDEC), Long Island Partnership for Invasive Species Management, New York City Parks Department, and other stakeholders formed a kudzu task force to thoroughly inventory and prioritize all kudzu infestations in the State for management. There are currently over 50 known infestations stretching from eastern Long Island to as far as the mid-Hudson Valley. In 2014, the NYSDEC and its partners began a program of systematic control using herbicides and mechanical removal of root crowns.

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Net Volume of Growing Stock on Timberland by Species:

Oswalt, Sonja N.; Smith, W. Brad; Miles, Patrick D.; Pugh, Scott A. 2014. Forest resources of the United States, 2012: a technical document supporting the Forest Service 2015 update of the RPA Assessment. Gen. Tech. Rep. WO-91. Washington, DC: U.S. Department of Agriculture, Forest Service, Washington Office. Table 23 & 24.

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