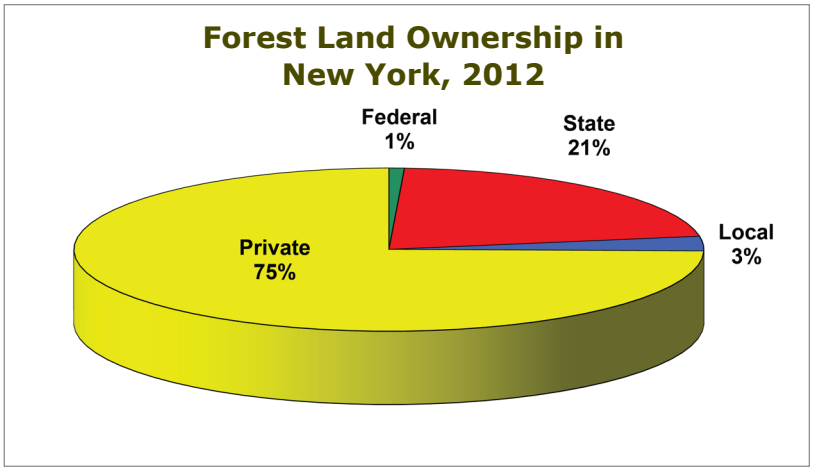
United States Department of Agriculture

2015 Forest Health NEW YORK *highlights*

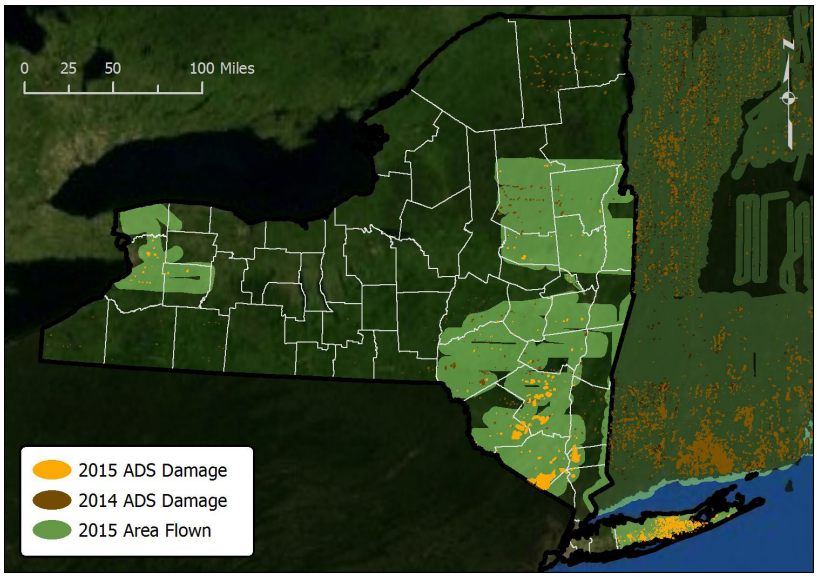
Forest Resource Summary

New York's forests are 75 percent privately owned. The remaining 25 percent is in public ownership, of which the State owns 21 percent, mostly encompassed by the Adirondack Park. These forest lands provide a recreational base for millions of residents and others visiting the State's scenic regions. New York's forests also produce timber, providing employment to 2 percent of the State's workforce. The manufacture of wood products provides $2.4 billion annually to the State's economy. The New York forest inventory conducted in 2014 estimated that 63 percent of the State is forested—approximately 18.9 million acres—with 22 percent in agriculture (Widmann 2015). The forest resource is made up of a variety of forest species, mostly maple and other hardwoods, along with pine, oak, and eastern hemlock.



Aerial Surveys

In New York State, damage mapped from the 2015 forest health aerial survey totaled about 150,000 acres, of approximately 9 million acres surveyed by air. Gypsy moth defoliation



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

Forest Service
Northeastern Area
State and Private Forestry

New York State
Department of Environmental
Conservation

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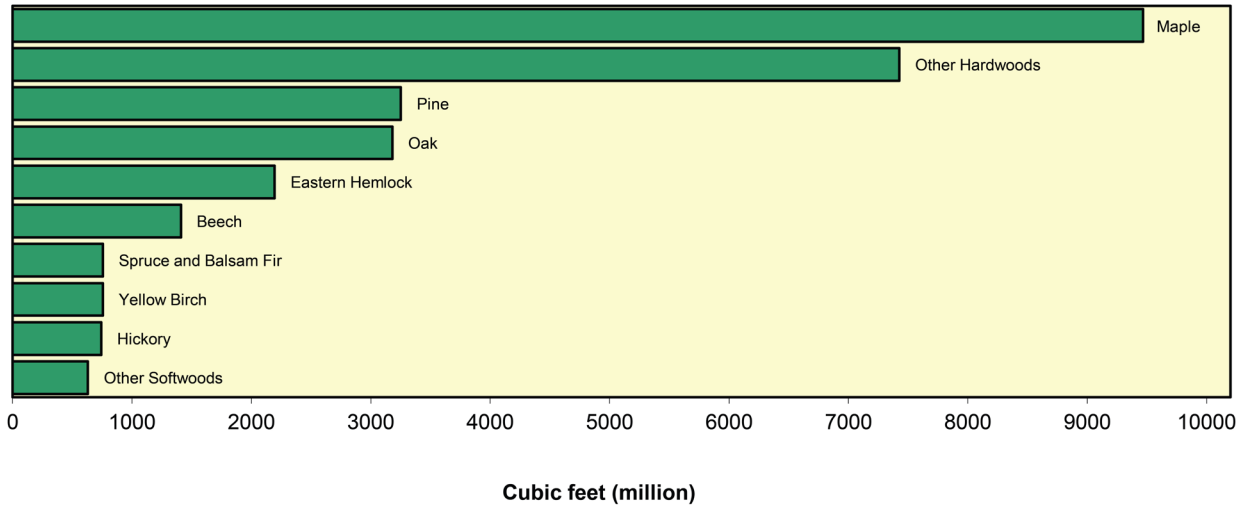
Net Volume of Growing Stock on Timberland by Species in New York, 2012



accounted for about two-thirds of all damage mapped, while mortality from southern pine beetle was a significant portion of the remainder.

Forest Damage

Insects

Several invasive insects are of concern in New York. The newest, **southern pine beetle**, was discovered in the pine barrens of Long Island in fall 2014. This was the first time this North American pest had been found in New York and the northernmost known extent of the beetle at the time. In 2015, multiple aerial, ground, and trapping surveys have shown that the beetle is widespread throughout the pine barrens of Long Island, especially near the southern coast. It was estimated at the time of this report that there may be as many as 40,000 infested pines on Long Island. In addition, adult beetles have been detected by pheromone traps in Ulster and Orange Counties, although so far no infested trees have been found near those traps.

In cooperation with multiple Federal, State, and local authorities, southern pine beetle population suppression by tree felling and preventative thinning is underway. The New York Department of Environmental Conservation (DEC) and partners are also doing research on the ecology and impacts of southern pine beetle at this new northern edge of its range.

The **emerald ash borer** is another significant invasive insect species in New York. In 2015, this insect was positively confirmed in one new county—Schenectady County. Older infestations are growing exponentially, especially those around Rochester and in the Hudson Valley. Research activities and efforts to slow the spread of the beetle and ash mortality are being conducted in all of the infested areas of New York. In 2015, the State quarantine on emerald ash borer was redrafted in an attempt to further slow the spread within the State. There are now 14 separate "restricted zones" within which emerald ash borer has been confirmed.

Southern pine beetle bark sampling (Photo: Jerry Carlson, New York State Department of Environmental Conservation)

Southern pine beetle gallery under bark (Photo: Jessica Cancelliere, New York State Department of Environmental Conservation)

Southern pine beetle area after treatment (Photo: Molly Hassett, New York State Department of Environmental Conservation

Emerald ash borer damage in the Buffalo area (Photo: Scott McDonnell, New York State Department of Environmental Conservation)

Cooperative efforts to eradicate **Asian longhorned beetle** from quarantined areas in New York City and Long Island are ongoing. No new infested areas were found in 2015. Currently, 135 square miles in New York State are under quarantine for this pest.

After a quiet 2014, **gypsy moth** populations in southeastern New York rebounded, causing nearly 100,000 acres of defoliation during the 2015 growing season.

Hemlock woolly adelgid continues to cause damage and mortality to native forest and ornamental eastern hemlock trees. No new infested counties were found in 2015, but

some spread and tree mortality within infested counties were noted. Damage is most severe in areas that have been infested the longest, such as the Catskills and southern part of the State. Several infested stands within the Finger Lakes region are also heavily infested and contain hemlock mortality. In some areas, a majority of the trees are infested, and many of those are in declining health or are dead. In cooperation with State Parks and Cornell Cooperative Extension, predatory beetles and pesticide treatments have been applied in some specific areas to slow or reduce hemlock mortality.

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; 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, and that trend continued in 2015. The adelgid is easily found throughout the range of balsam fir in New York, but the heaviest infestations and mortality are occurring in the Adirondack Mountains.

Much of the State is likely infested with **Sirex woodwasp**, although no new affected counties were detected in New York in 2015. Within the known infestation, much of the worst damage is still found on pine plantations that are overstocked, overmature, or otherwise in declining health.

Locust leafminer caused defoliation and discoloration of black locust on about 5,100 acres in Dutchess and Putnam Counties.

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 winter 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 2015 oak wilt has still not been found in any other part of New York.

Beech bark disease can be found readily 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 from any new areas in 2015.

Invasive Plants

Giant hogweed, a noxious invasive plant that causes a severe skin reaction, is present in 49 counties in the State. There are 1,310 known sites where giant hogweed plants are present, with the largest and densest of these found in the western half of the State. Of sites that previously had giant hogweed plants, 641 had no plants in 2015 due to past control efforts; 278 of these sites are considered eradicated. This was the 8th year of manual eradication and the 7th year of herbicide use

by DEC Forest Health and partner agency staff. During the 2015 field season (late April through August) DEC or partner agency field crews visited 1,681 sites, of which 758 sites were controlled by root cutting, 444 sites were controlled with herbicide, and 320 sites had flower heads removed. On 450 sites that were controlled previously, no plants were found in 2015. The giant hogweed hotline received and returned a total of 1,099 calls and 1,312 e-mails. The giant hogweed main Web page was viewed 517,394 times between January and October 2015.

Of all sites, 33 percent now have no giant hogweed plants, and another 30 percent have less than 20 giant hogweed plants, indicating that our control methods have been successful. Small sites can be eradicated fairly quickly. Crews are reporting that many larger sites have fewer plants, and they are seeing fewer large flowering plants as well.

Kudzu has been present in New York since at least the early 20th century, when it was promoted for use in erosion control. Until the past few years, there has been little formal tracking of populations. Concern is growing 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 DEC, Long Island Partnership for Invasive Species Management, New York City Parks Department, and other stakeholders formed a kudzu task force, in order to thoroughly inventory and prioritize for management all kudzu infestations in the State. Over 50 infestations are currently known, stretching from eastern Long Island as far as the mid Hudson Valley. In 2015 the DEC and its partners continued a program of systematic control using herbicides and mechanical removal of root crowns.

Kudzu along a trail near Nyack, NY (Photo: Jason Denham, New York State Department of Environmental Conservation)

References

Forest Land Ownership

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 update of the 2010 RPA Assessment. Gen. Tech. Rep. WO-91. Washington, DC: U.S. Department of Agriculture, Forest Service, Washington Office. Table 2. http://www.fs.fed.us/sites/default/files/media/types/publication/field_pdf/GTR-WO-91.pdf. (1 March 2016).

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 update of the 2010 RPA Assessment. Gen. Tech. Rep. WO-91. Washington, DC: U.S. Department of Agriculture, Forest Service, Washington Office. Tables 23 & 24. http://www.fs.fed.us/sites/default/files/media/types/publication/field_pdf/GTR-WO-91.pdf. (1 March 2016).

New York Forest Inventory

Widmann, Richard H. 2015. Forests of New York, 2014. Resource Update FS-59. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 4 p. http://www.fs.fed.us/nrs/pubs/ru/ru_fs59.pdf. (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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