

# Ohio's Forest Resources, 2012

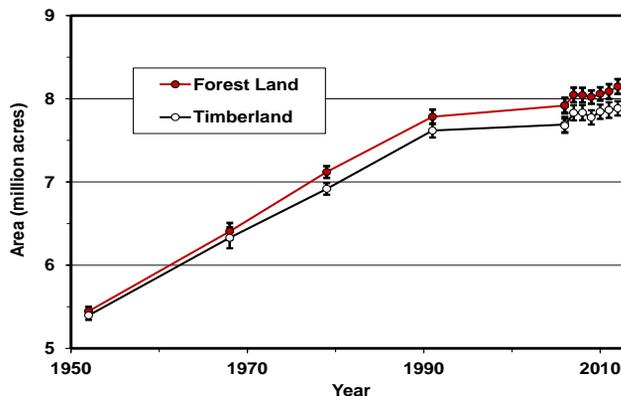
Research Note NRS-187

This publication provides an overview of forest resource attributes for Ohio based on an annual inventory conducted by the Forest Inventory and Analysis (FIA) program at the Northern Research Station of the U.S. Forest Service. These estimates, along with web-posted core tables, will be updated annually. For more information please refer to page 4 of this report.

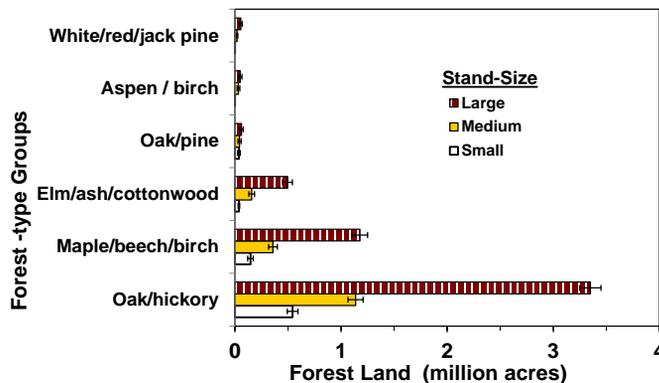
**Table 1. – Annual estimates, uncertainty, and change**

	Estimate 2012	Sampling error (%)	Change since 2007 (%)
<b>Forest Land Estimates</b>			
Area (1,000 acres)	8,147	1.1	1.3
Number of live trees 1-inch diameter or larger (million trees)	4,134	2.1	1.0
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	480,595	1.7	4.3
Net volume in live trees (1,000,000 ft <sup>3</sup> )	16,503	1.8	3.8
Annual net growth of live trees (1,000 ft <sup>3</sup> /year)	471,252	4.0	1.3
Annual mortality of live trees (1,000 ft <sup>3</sup> /year)	180,794	5.8	-3.6
Annual harvest removals of live trees (1,000 ft <sup>3</sup> /year)	210,369	10.4	6.7
Annual other removals of live trees (1,000 ft <sup>3</sup> /year)	8,311	35.3	2.5
<b>Timberland Estimates</b>			
Area (1,000 acres)	7,886	1.2	0.8
Number of live trees 1-inch diameter or larger (million trees)	4,011	2.2	0.1
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	464,427	1.7	3.7
Net volume in live trees (1,000,000 ft <sup>3</sup> )	15,944	1.8	3.2
Net volume of growing-stock trees (1,000,000 ft <sup>3</sup> )	13,687	2.0	-2.5
Annual net growth of growing-stock trees (1,000 ft <sup>3</sup> /year)	367,111	3.6	-9.2
Annual mortality of growing-stock trees (1,000 ft <sup>3</sup> /year)	116,325	6.4	-5.5
Annual harvest removals of growing-stock trees (1,000 ft <sup>3</sup> /year)	171,663	10.7	6.6
Annual other removals of growing-stock trees (1,000 ft <sup>3</sup> /year)	29,623	28.1	325.8

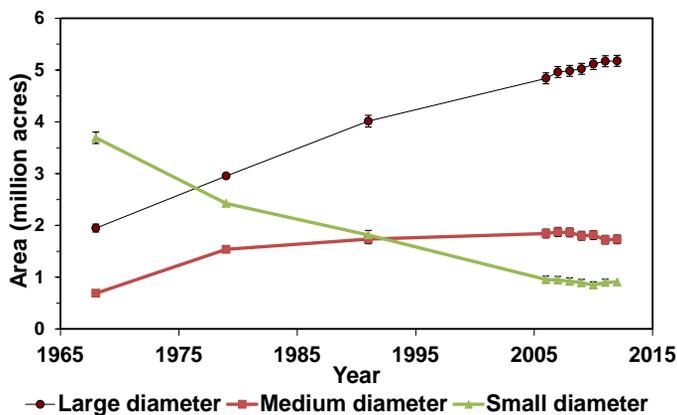
Note: When available, sampling errors/bars provided in figures and tables represent 68 percent confidence intervals.



**Figure 1. – Area of timberland and forest land by year.**



**Figure 2. – Forest land area by stand-size class\* for most common forest-type groups, 2011.**

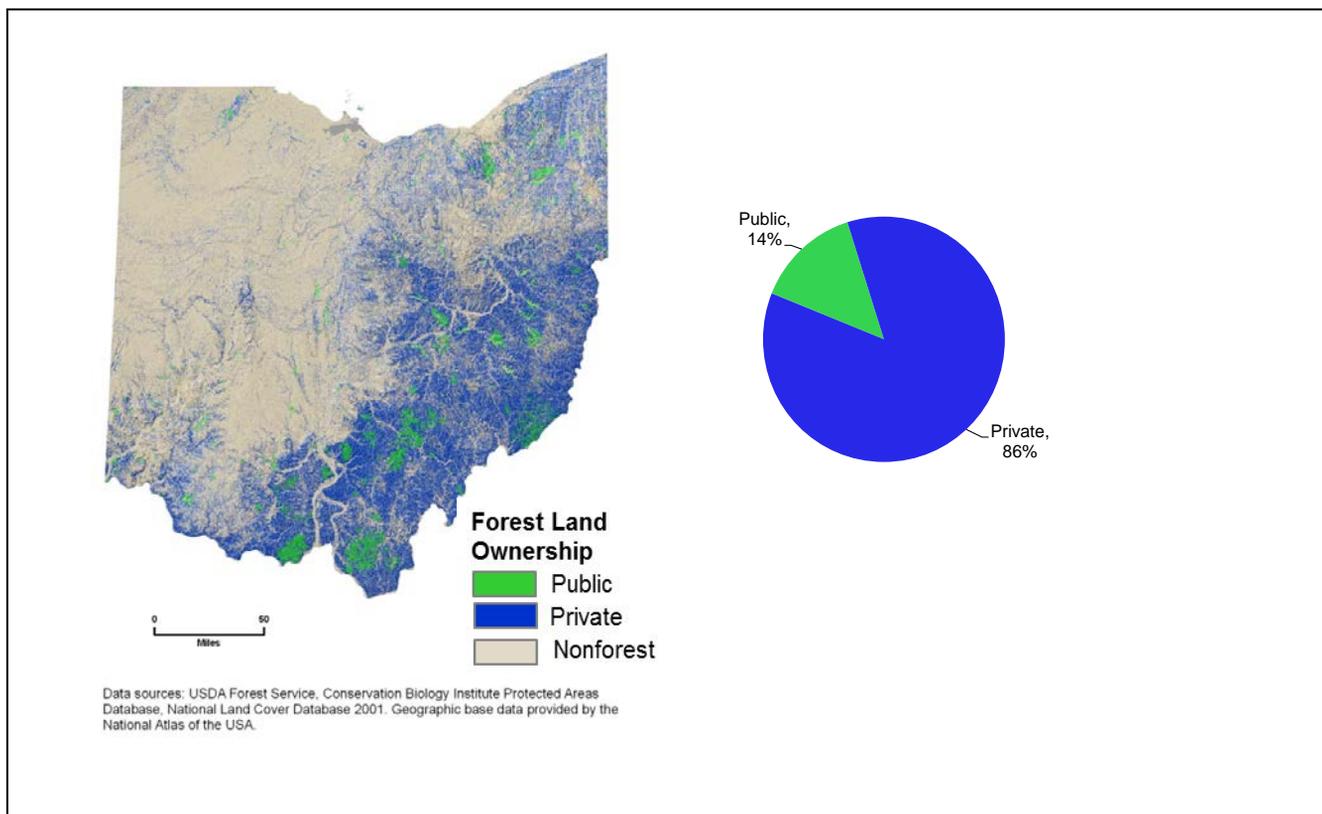


**Figure 3. – Area of timberland by stand-size class\* and year.**

\* Small: dominated by trees less than 5.0 inches d.b.h.; Medium: 5.0 to 8.9 inches d.b.h. for softwoods and 5.0 to 10.9 inches d.b.h. for hardwoods; Large: ≥ 9.0 inches for softwoods and 11.0 d.b.h. for hardwoods.

**Table 2. – Top 10 tree species by statewide volume estimates, 2007-2012**

Rank	Species	Volume of live trees on forest land (million ft <sup>3</sup> )	Sampling Error (%)	Change since 2007 (%)	Volume of sawtimber trees on timberland (million bdf)	Sampling error (%)	Change since 2007 (%)
1	Red maple	1,730	5.2	9.0	4,118	7.4	10.1
2	Yellow-poplar	1,647	7.0	8.6	6,466	8.5	10.8
3	Sugar maple	1,442	5.4	10.9	3,769	7.3	6.8
4	Black cherry	1,146	5.8	4.2	2,611	8.9	-4.6
5	White oak	960	6.9	-1.3	3,791	8.1	-0.9
6	White ash	939	6.3	-6.4	2,974	9.0	-8.2
7	Northern red oak	877	7.9	5.8	3,583	9.7	5.0
8	Shagbark hickory	537	7.6	12.1	1,599	9.6	14.1
9	American beech	510	9.9	-1.8	1,736	13.3	-6.5
10	Black oak	487	10.1	-3.9	1,827	12.3	-11.1
	<b>Softwood species</b>	<b>621</b>	<b>11.9</b>	<b>5.6</b>	<b>1,911</b>	<b>14.8</b>	<b>10.4</b>
	<b>Other hardwood species</b>	<b>5,609</b>	<b>2.9</b>	<b>2.1</b>	<b>16,298</b>	<b>4.2</b>	<b>-1.2</b>
	<b>All species</b>	<b>16,503</b>	<b>1.8</b>	<b>3.8</b>	<b>50,682</b>	<b>2.6</b>	<b>1.7</b>



**Figure 4. – Area of forest land by major owner group, 2012.**



# Thousand Cankers Disease in Ohio

An emerging health issue for forests in the eastern United States, thousand cankers disease of black walnut (*Juglans nigra*), is caused by a recently identified fungus (*Geosmithia* spp.) and the walnut twig beetle (*Pityophthorus juglandis*). Walnut twig beetles carry fungal spores, and when they tunnel through the outer bark into the tree, the fungus is transmitted. The fungus kills an area under the bark and the areas of dead tissue are called cankers. Thousand cankers disease has been causing black walnut dieback and mortality in many western states for over a decade, but it has now been discovered in several eastern states including Ohio, Pennsylvania, Tennessee, Virginia, and North Carolina.

In late 2012, the walnut twig beetle was detected in southwestern Ohio, followed by isolation of the thousand cankers disease fungus in walnut branch samples collected in the Butler County area. A quarantine is currently in effect that attempts to prevent the spread of walnut twig beetle and *Geosmithia* fungus in the State. It is believed that the spread of the fungus across the United States has been mainly due to the transportation of beetle-infested walnut logs and firewood. Black walnut makes up about 2 percent of both total volume and saw log volume in Ohio, and there are an estimated 86,000 acres in the walnut forest type. Walnut is most abundant in forests in the southwest part of State (Fig. 5).

Although black walnut is a minor component of the forests in Ohio, it is an extremely valuable species for lumber and veneer. Therefore landowners and homeowners are encouraged to visually inspect their walnut trees for presence of thousand cankers disease. The earliest symptom is yellowing foliage that progresses rapidly to brown wilted foliage, then finally branch mortality. Other major symptoms of this disease are numerous small cankers on branches and the bole, and evidence of tiny bark beetles.

Additional information about thousand cankers disease and quarantine restrictions in Ohio can be found at [www.agri.ohio.gov/](http://www.agri.ohio.gov/) and [www.thousandcankers.com/](http://www.thousandcankers.com/).

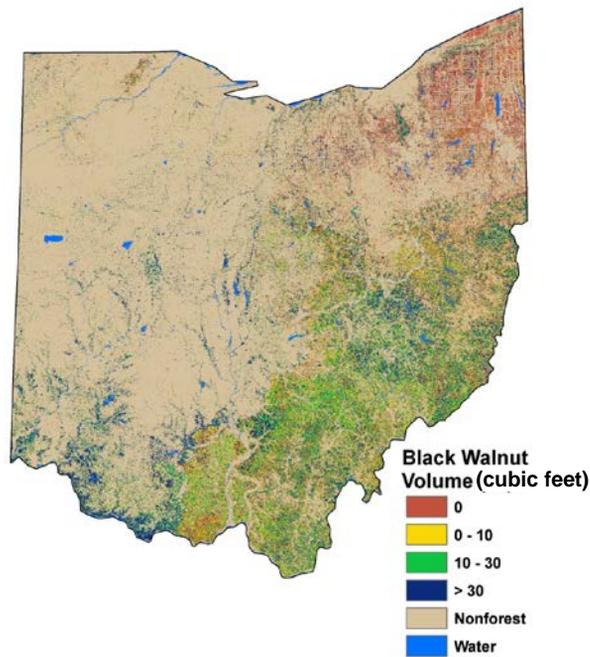


Figure 5. —Volume per acre (cubic feet) of black walnut on forest land, Ohio, 2009.

### Citation for this Publication

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### Additional Ohio Inventory Information

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Estimates, tabular data, and maps from report may be generated at: [fiatools.fs.fed.us](http://fiatools.fs.fed.us)

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