USDA Forest Service, U.S. Department of Agriculture
Northern Research Station
Forest Inventory & Analysis

West Virginia's Forest Resources, 2009

Research Note NRS-100

This publication provides an overview of forest resource attributes for West Virginia 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 and uncertainty

	Estimate 2009	Sampling error (%)	Change since 2008 (%)
Forest Land Estimates			
Area (1,000 acres)	12,081	0.7	0.9
Number of live trees 1-inch diameter or larger (million trees)	6,276	1.6	1.3
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	789,402	1.1	0.5
Net volume in live trees (1,000,000 ft^3)	27,231	1.2	0.5
Annual net growth of live trees (1,000 ft^3/year)	731,542	7.1	NA
Annual mortality of live trees (1,000 ft^3/year)	196,038	11.2	NA
Annual harvest removals of live trees (1,000 ft^3/year)	258,690	26.6	NA
Annual other removals of live trees (1,000 ft^3/year)	1,846	105.9	NA
Timberland Estimates			
Area (1,000 acres)	11,824	0.7	0.9
Number of live trees 1-inch diameter or larger (million trees)	6,146	1.6	1.3
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	770,276	1.2	0.5
Net volume in live trees (1,000,000 ft^3)	26,408	1.2	0.5
Net volume of growing-stock trees (1,000,000 ft^3)	25,176	1.3	0.6
Annual net growth of growing-stock trees (1,000 ft^3/year)	665,921	6.5	NA
Annual mortality of growing-stock trees (1,000 ft^3/year)	137,983	12.7	NA
Annual harvest removals of growing-stock trees (1,000 ft^3/year)	222,037	26.7	NA
Annual other removals of growing-stock trees (1,000 ft^3/year)	3,984	72.9	NA

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

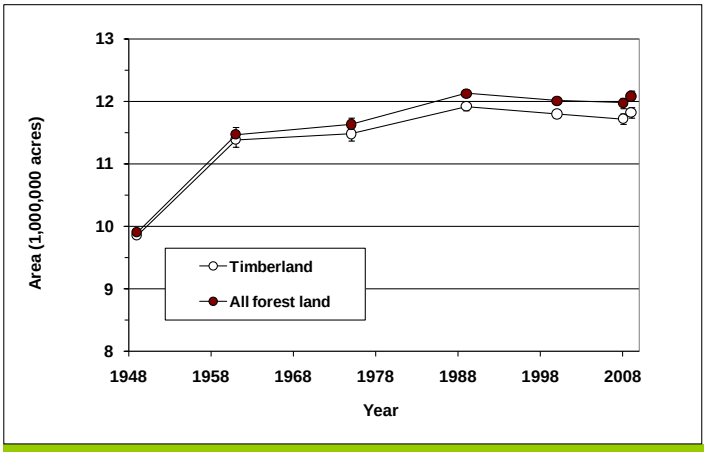


Figure 1. – Area of timberland and forest land by year.

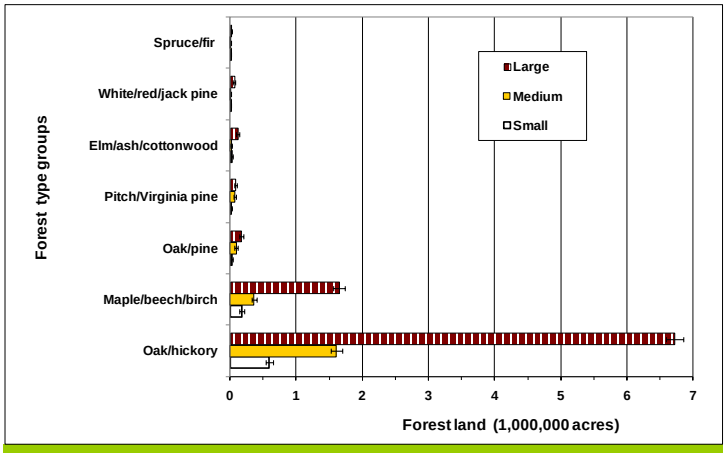


Figure 2. – Area of forest land by top seven forest type groups and stand size class, 2005-2009.

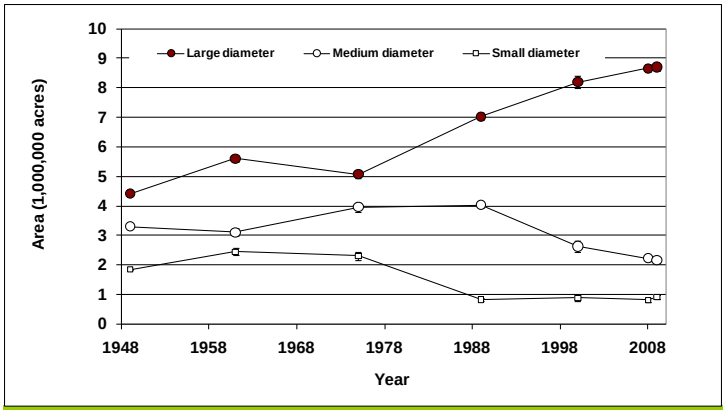
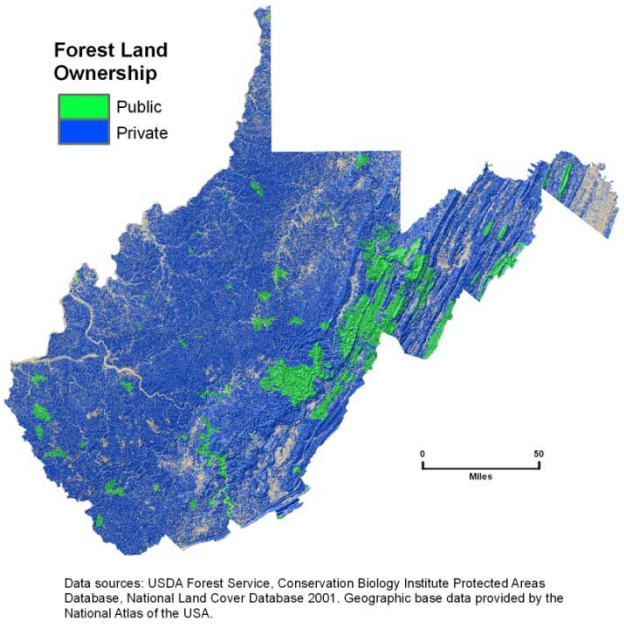


Figure 3. – Area of timberland by stand size class and year.

Table 2. – Top 10 tree species by statewide volume estimates, 2005-2009

Rank	Species	Volume of live trees on forest land (1,000,000 ft^3)	Sampling error (%)	Proportion of total live tree volume (%)	Volume of sawtimber trees on timberland (1,000,000 bdft)	Sampling error (%)	Proportion of total sawtimber volume (%)
1	Yellow-poplar	3,930	4.1	14.4	15,901	4.7	18.0
2	Chestnut oak	2,445	4.5	9.0	7,823	5.2	8.8
3	Red maple	2,438	3.8	9.0	5,833	5.3	6.6
4	White oak	2,406	4.3	8.8	8,734	5.1	9.9
5	Northern red oak	2,140	5.0	7.9	9,115	5.9	10.3
6	Sugar maple	1,891	4.5	6.9	5,169	6.4	5.8
7	Black oak	1,205	5.6	4.4	4,810	6.8	5.4
8	American beech	1,078	6.3	4.0	3,610	8.5	4.1
9	Black cherry	988	7.7	3.6	3,138	10.0	3.5
10	Pignut hickory	805	5.9	3.0	2,364	7.8	2.7
	Other softwoods	1,459	6.2	5.4	4,328	7.8	4.9
	Other hardwoods	6,446	2.3	23.7	17,665	3.4	20.0
	All Species	**27,231**	**1.2**	**100.0**	**88,489**	**1.7**	**100.0**



Data sources: USDA Forest Service, Conservation Biology Institute Protected Areas Database, National Land Cover Database 2001. Geographic base data provided by the National Atlas of the USA.

Public forest land – 13 percent of all forest land

Private forest land – 87 percent of all forest land

(Of the 10.4 million acres of privately owned forest land, 7.2 million acres is held by family forest owners with the remainder held by a combination of corporations, partnerships, and other forms of ownership.)

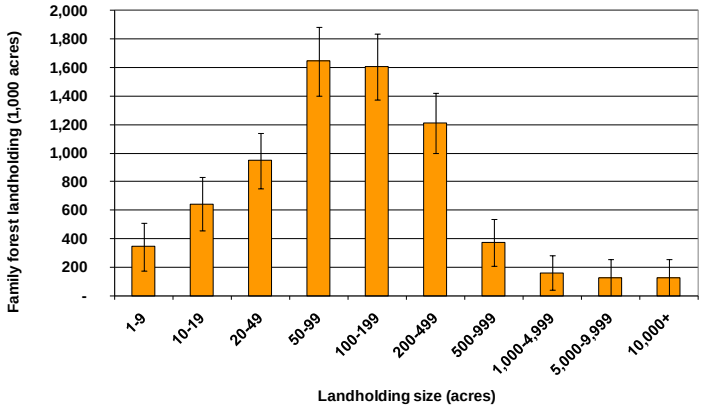


Figure 4. – Area of forest land by major owner group (2008) and size of private family forest landholding (2006).

West Virginia's Ash Resource at Risk from the Emerald Ash Borer

The emerald ash borer (EAB; *Agrilus planipennis* Fairmaire) is an exotic bark-boring beetle native to Asia that was discovered in Detroit, Michigan in 2002 (Kovacs 2010). It is especially dangerous because there is no known treatment for EAB infestations. Since 2002, EAB has spread and killed millions of ash trees in Michigan and Ohio. As of November, 2010, it has been detected at sites in several West Virginia counties (Raleigh, Nicholas, Fayette, Roane, Calhoun, and Morgan). EAB represents a major threat to the State's ash resource. All ash species, regardless of tree vigor, are at risk. Ash species are common and well distributed throughout the state, though stands dominated by ash are rare. On average, ash volume averages 2.6 percent of the total volume of trees 5 inches and larger d.b.h., and averages 59 cubic feet of wood per acre of forest land (Figs. 5 and 6). Currently, about 12 million board feet of ash saw logs are harvested annually in the State (7 percent of total harvest). Not include here, but also at risk, are ash shade trees in urban areas.

When an emerald ash borer infestation is found, quarantine procedures are put in place to limit the spread of the pest through human behavior (moving firewood, transporting logs, purchasing infested plants, etc.). Currently West Virginia is under a quarantine that restricts the export of hardwood firewood of all species to other states and requires a permit to ship ash logs to mills in other states. It is believed that the movement of firewood is a major cause of the spread of EAB. By restricting its movement, it is hoped that EAB will be contained until biological controls are found.

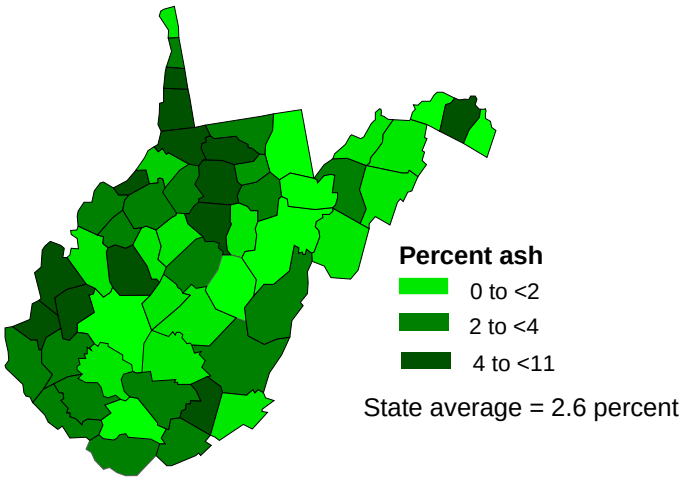


Figure 5. – Ash species as a percentage of total live volume by county, 2008.

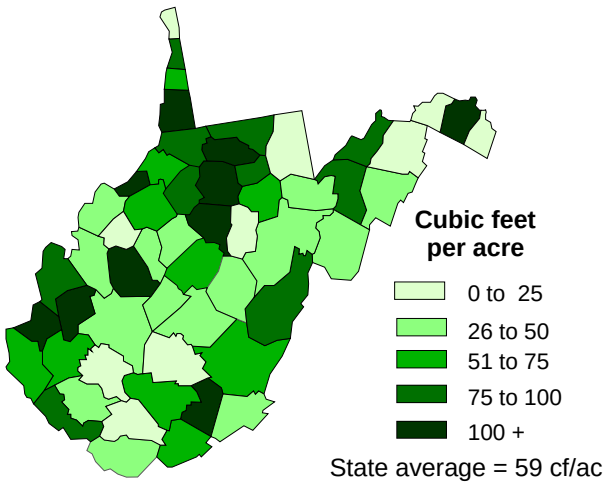


Figure 6. – Average cubic foot volume of ash per acre of forest land by county, 2008.

Citation for this Publication

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FIA Program Information

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Additional information

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Estimates, tabular data, and maps from report may be generated at: www.fia.fs.fed.us/tools-data