

Wisconsin's Forest Resources, 2006

Research Note NRS-2

(revised 7 Aug. 2008)

This publication provides an overview of forest resource attributes for Wisconsin based on an annual inventory conducted by the Forest Inventory and Analysis program at the Northern Research Station of the US Forest Service from 2002 – 2006. These estimates, along with associated core tables posted on the Internet, are updated annually. For more information regarding past inventory reports for this state, inventory program information, and sampling/estimation procedures, please refer to the citations at the end of this report or visit our website: <http://www.fia.fs.fed.us/>

Table 1 – Annual estimates, uncertainty, and change

	2006 estimate	SE (%)	Change since 2005 (%)
Forest land estimates			
Area (1,000 acres)	16,274.7	0.5	1.0
Number of live trees 1 inch diameter or larger (million trees)	10,800.3	1.1	0.4
Biomass of live trees 1 inch diameter or larger (1,000 tons)	608,236.0	0.8	0.5
Net volume of live trees (million cubic feet)	22,486.6	0.9	0.7
Net volume of growing stock trees (million cubic feet)	20,558.3	1.0	1.4
Annual net growth of live trees (thousand cubic feet per year)	604,941.7	3.5	-1.3
Annual mortality of live trees (thousand cubic feet per year)	276,492.3	4.0	8.7
Annual removals of live trees (thousand cubic feet per year)	376,045.9	7.1	-8.9
Timberland estimates			
Area (1,000 acres)	16,042.2	0.5	1.0
Number of live trees 1 inch diameter or larger (million trees)	10,665.0	1.1	0.4
Biomass of live trees 1 inch diameter or larger (1,000 tons)	599,971.5	0.8	0.5
Net volume of live trees (million cubic feet)	22,174.0	0.9	0.7
Net volume of growing stock trees (million cubic feet)	20,272.4	1.0	1.3
Annual net growth of growing stock trees (thousand cubic feet per year)	604,112.6	3.5	-0.6
Annual mortality of growing stock trees (thousand cubic feet per year)	192,437.4	4.5	8.5
Annual removals of growing stock trees (thousand cubic feet per year)	352,398.1	7.8	-4.5

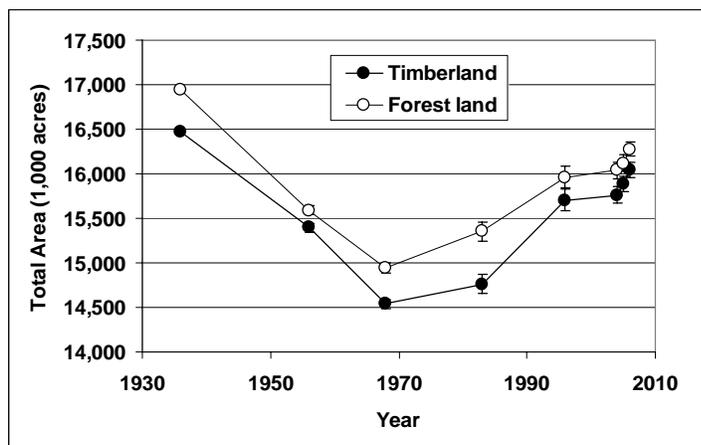


Figure 1 – Area of timberland and forest land by year

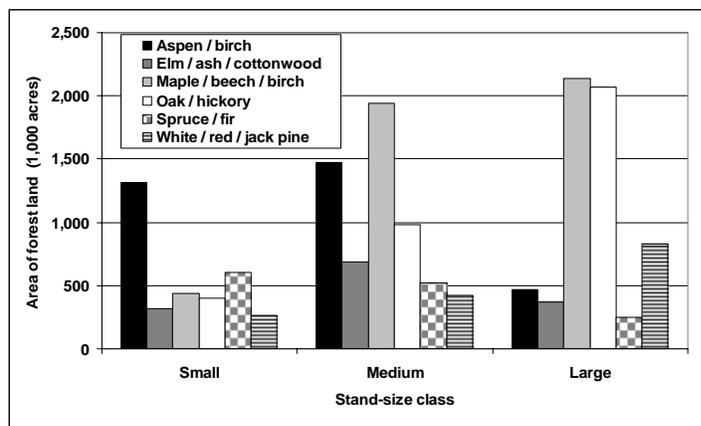


Figure 2 – Area of forest land for top six forest types by stand-size class

Note: Large diameter trees are at least 11.0 inches diameter for hardwoods and at least 9.0 inches diameter for softwoods. Medium diameter trees are at least 5.0 inches diameter but not as large as large diameter trees. Small diameter trees are less than 5.0 inches diameter. Additional details are available in USDA Forest Service (2004).

Earlier versions of this document reversed the small and large stand-size classes.

Image credit: Bill Cook, Michigan State University, Bugwood.org

Table 2 – Top 10 tree species by statewide volume estimates

Rank	Species	Volume of live trees on timberland (million cubic feet)	Sampling error (%)	Change since 2005 (%)	Volume of sawtimber on timberland (million board feet)	Sampling error (%)	Change since 2005 (%)
1	Sugar maple	2,414.1	3.3	-0.80	5,387.3	4.5	2.30
2	Red maple	2,276.3	2.6	0.60	3,765.5	4.3	3.10
3	Northern red oak	1,803.4	3.9	1.40	6,441.9	4.5	2.80
4	Quaking aspen	1,781.0	3.0	-0.70	3,128.8	4.6	0.40
5	Red pine	1,467.3	5.4	2.80	5,727.5	6.0	3.10
6	Eastern white pine	1,329.2	5.8	1.90	6,254.9	6.4	2.50
7	American basswood	1,117.7	4.0	0.80	3,126.7	4.9	3.70
8	White oak	821.2	4.6	1.50	2,552.6	5.6	2.40
9	Northern white-cedar	748.0	6.4	0.80	2,124.0	7.5	2.70
10	Bigtooth aspen	716.9	5.9	1.10	2,037.9	7.5	2.20
	Other softwood species	1,968.8	2.9	1.00	5,385.7	4.0	0.90
	Other hardwood species	5,730.1	1.7	0.50	11,737.8	2.7	1.90
	All species	22,174.0	0.9	0.70	57,670.5	1.5	2.30

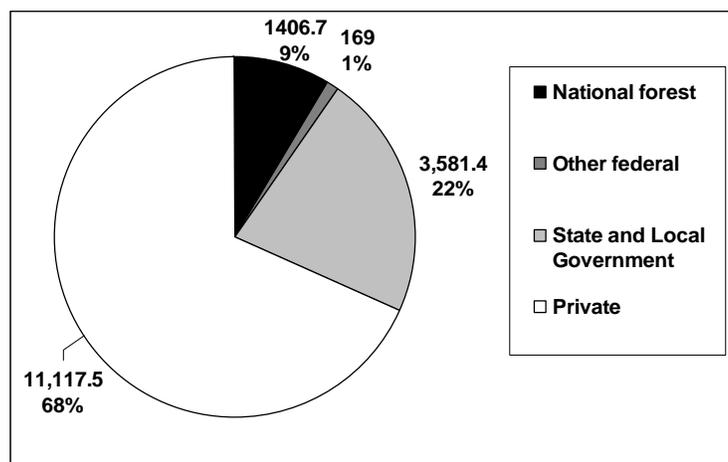


Figure 3 – Forest land area (1,000 acres) by ownership group

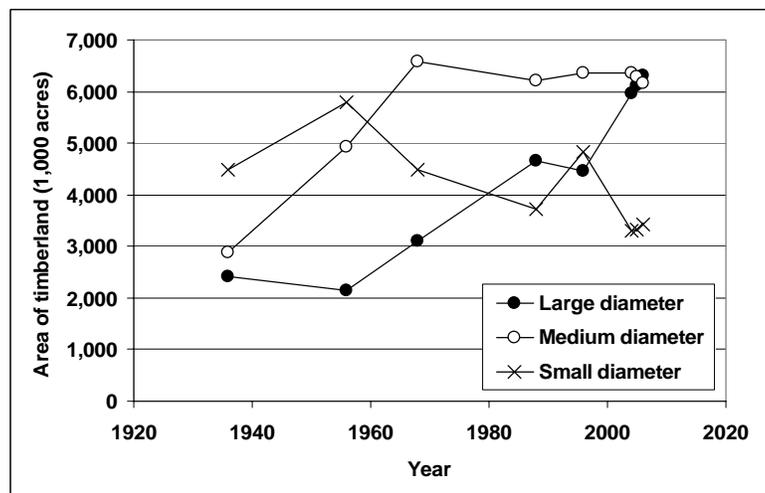


Figure 4 – Area of timberland by stand-size class and year

Note: Large diameter trees are at least 11.0 inches diameter for hardwoods and at least 9.0 inches diameter for softwoods. Medium diameter trees are at least 5.0 inches diameter but not as large as large diameter trees. Small diameter trees are less than 5.0 inches diameter. Additional details are available in USDA Forest Service (2004).

Wisconsin Issue Update – The Risk of Emerald Ash Borer

Emerald ash borers have not been found in Wisconsin, but there is tremendous concern about the effect this invasive pest could have on the state's ash resource. Governor Jim Doyle recently highlighted this issue by proclaiming the week of May 20 – 26, 2007, as Emerald Ash Borer Awareness Week in Wisconsin.

There are more than 757 million ash trees in the State. Black ash, generally found in swampy woodlands, is by far the most common species of ash (420 million trees). The 176 million green ash trees also tend to be found naturally in wet places – along streams and river banks. White ash (161 million trees) is the most useful native ash when it comes to making wood products and it grows best on rich, moist, well-drained soils. Taken together, ashes can be found throughout the state.

The Wisconsin Department of Natural Resources analyzed the risk of emerald ash borer introduction and spread by considering several factors identified as significant in infections of adjacent states. These factors include: human population density, the number of campsites in a county, the basal area (or volume) of live ash, and the density of seasonal homes.

You can visit <http://emeraldashborer.wi.gov/> or <http://dnr.wi.gov/org/land/Forestry/FH/Ash/index.htm> to learn more about this pernicious invasive pest.

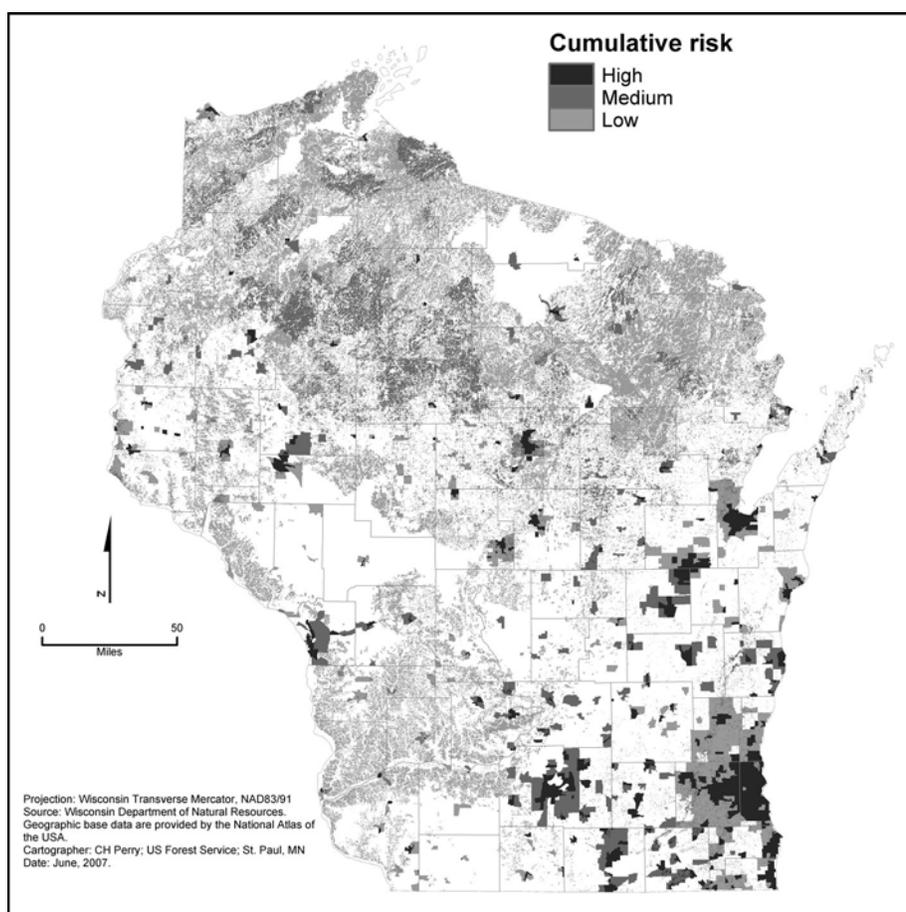


Figure 6 – Risk of emerald ash borer introduction and spread in Wisconsin based upon locations where ash is abundant and emerald ash borer is at high risk for introduction. (Adapted from WDNR risk maps.)

Citation for this Publication

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FIA Program Information

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Additional Wisconsin Forest Inventory Information

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