

Missouri's Forest Resources, 2008

Research Note NRS-40

This publication provides an overview of forest resource attributes for Missouri based on an annual inventory program 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

	2008 Estimate	Sampling error (%)	Change since 2003 (%)	2003 Estimate
Forest Land Estimates				
Area (1000 acres)	15,396.9	0.8	5.6	14,576.4
Number of all live trees 1 inch diameter or larger (million trees)	8,533.9	1.3	4.4	8,177.2
Biomass of all live trees 1 inch diameter or larger (1,000 tons)	620,235.2	1.0	10.2	562,770.7
Net volume of live trees (million cubic feet)	20,143.3	1.2	11.7	18,026.1
Annual net growth of live trees (thousand ft ³ yr ⁻¹)	536,216.0	3.7	NA	NA
Annual mortality of live trees (thousand ft ³ yr ⁻¹)	214,123.4	4.6	NA	NA
Annual harvest removals of live trees (thousand ft ³ yr ⁻¹)	132,437.4	9.6	NA	NA
Annual other removals of live trees (thousand ft ³ yr ⁻¹)	68,663.0	15.0	NA	NA
Timberland Estimates				
Area (1000 acres)	15,047.7	0.8	7.0	14,064.9
Number of all live trees 1 inch diameter or larger (million trees)	8,317.2	1.4	5.7	7,869.6
Biomass of all live trees 1 inch diameter or larger (1,000 tons)	606,444.0	1.1	11.6	543,225.9
Net volume of live trees (million cubic feet)	19,703.9	1.2	13.2	17,406.9
Net volume of growing stock trees (million cubic feet)	16,809.4	1.3	15.1	14,607.3
Annual net growth of growing stock trees (thousand ft ³ yr ⁻¹)	509,696.7	3.3	-19.0	629,381.8
Annual mortality of growing stock trees (thousand ft ³ yr ⁻¹)	128,629.9	5.2	57.2	81,836.2
Annual harvest removals of growing stock trees (thousand ft ³ yr ⁻¹)	114,293.0	10.1	36.2	83,908.1
Annual other removals of growing stock trees (thousand ft ³ yr ⁻¹)	60,402.6	16.6	74.2	34,681.1

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

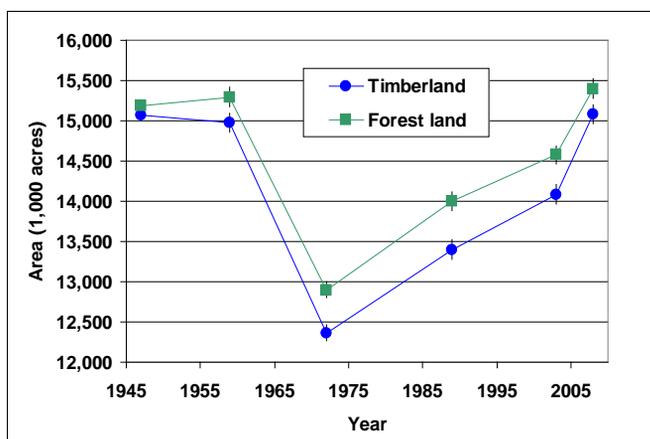


Figure 1. – Area of timberland and forest land by year.

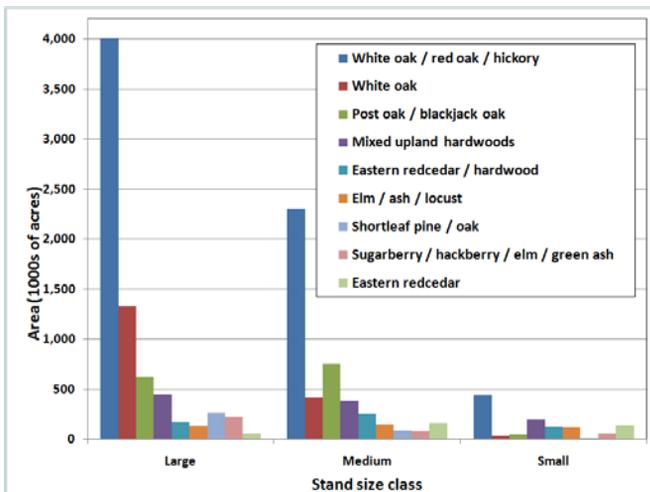


Figure 2.—Area of forest land area by top nine forest types and stand-size class, 2004-2008.

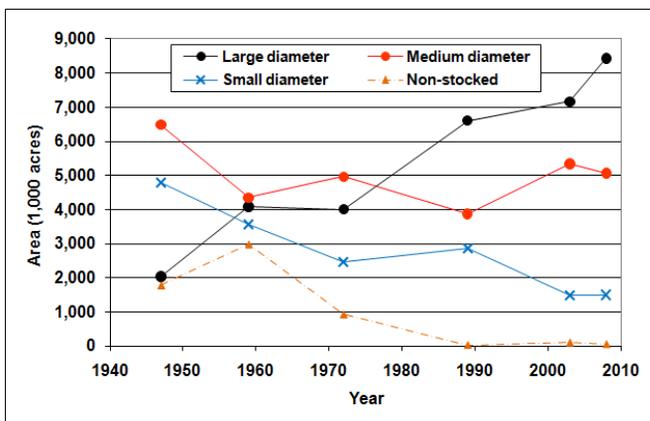
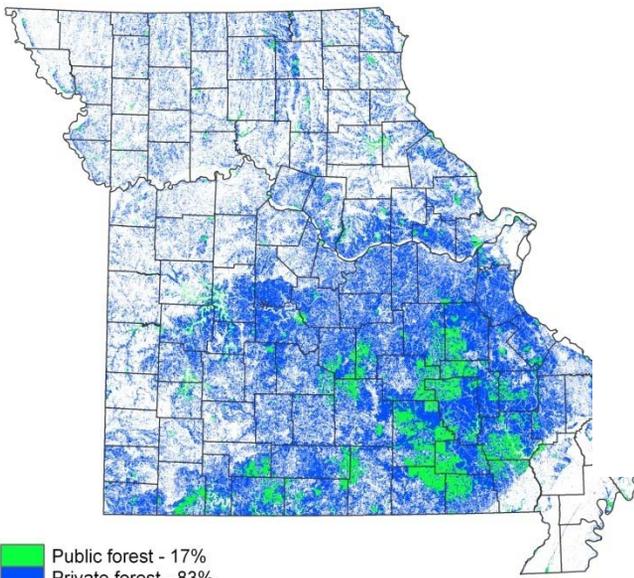


Figure 3.—Area of timberland by stand-size class and year.



Table 2.—Top 10 tree species by statewide volume estimates, 2004-2008

Rank	Species	Volume of live trees on forest land 2008 (1,000,000 ft ³)	Sampling error (%)	Change since 2003 (%)	Net volume of sawtimber trees on timberland (million board feet)	Sampling error (%)	Change since 2003 (%)
1	White oak	4,021.8	2.9	10.7	12,408.9	3.7	20.0
2	Black oak	2,941.4	3.2	5.5	9,564.2	4.0	11.4
3	Post oak	2,095.9	3.6	10.4	4,603.2	4.9	24.2
4	Northern red oak	1,018.2	5.7	3.5	3,642.6	6.9	8.7
5	Shortleaf pine	900.6	6.7	11.6	3,785.1	7.1	19.0
6	Eastern redcedar	672.6	5.4	24.9	996.9	9.9	5.7
7	Scarlet oak	654.2	5.7	9.9	2,064.6	6.9	14.8
8	Black walnut	617.6	6.3	21.2	1,787.7	8.3	35.2
9	Shagbark hickory	560.9	6.0	21.0	1,418.5	8.7	34.4
10	Black hickory	435.8	5.1	7.0	879.4	8.8	4.3
	Other softwood species	15.4	73.3	108.1	68.7	76.3	163.2
	Other hardwood species	6,208.8	2.7	15.1	14,106.3	4.1	24.6
	All species	20,143.3	1.2	11.7	55,326.2	1.8	19.1



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.

Figure 4.—Area of forest land by major owner group (34% of Missouri is forested).
Map courtesy of D.M. Meneguzzo

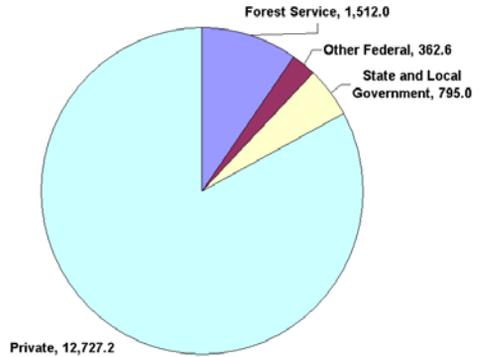


Figure 5.—Area of forest land, in 1,000's of acres, by major owner group.

Missouri's Family Forest Owners

Most of Missouri's forests are privately owned (Fig. 5) and of this private forest land, most is owned by families and individuals. In 2006, there were an estimated 339,000 family forest owners in Missouri who owned a total of 11.605 million acres of forest land or 77 percent of the State's total forested area. Along with an inventory of the biophysical characteristics of the forest, the U.S. Forest Service conducts the National Woodland Owner Survey (NWOS) to characterize the people who own these resources. The NWOS collects data on forest holding characteristics, ownership histories, ownership objectives, forest uses, forest management practices, preferred methods for receiving information, concerns, future intentions, and demographics. Below are some of the key findings for Missouri. For additional information about Missouri's family forest owners, see Butler (2008) or visit www.fia.fs.fed.us/nwos.

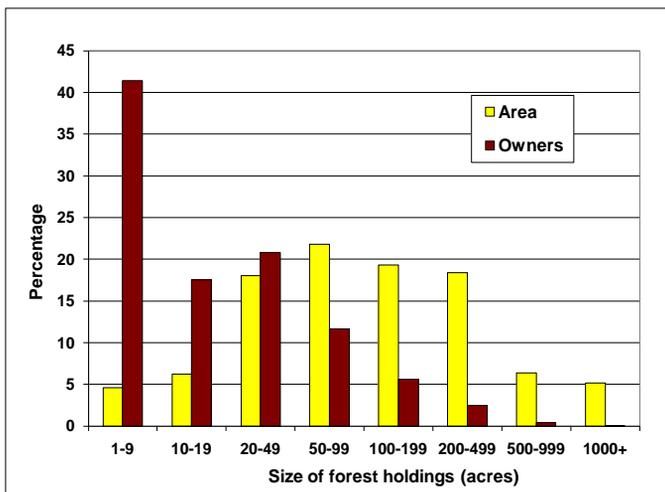


Figure 6.—Area and number of family forests in Missouri by size of forest landholdings (2006).

Demographics

Age

- 12% are <45 years old
- 54% are 45 to 64
- 34% are 65 or older

Education

- 32% have a college degree

Annual Household Income

- 55% under \$50,000
- 18% \$100,000 or more

New Owners

- 26% have purchased their forest land within last 5 years

Absentee Owners

- 32% do not live on or near (within 1 mile) their land

Farmers

- 38% have a farm associated with their forest land

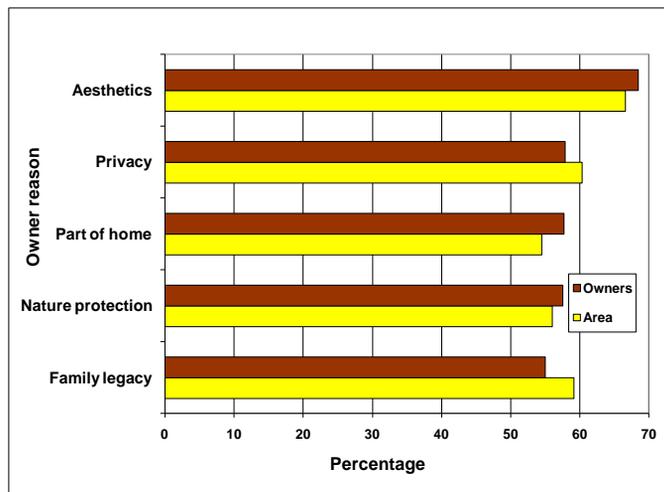


Figure 7. – Area and number of family forests in Missouri by reason for owning forest land (2006). Numbers include landowners who ranked each objective as very important (1) or important (2) on a seven-point Likert scale.

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Additional Missouri Inventory Information

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