



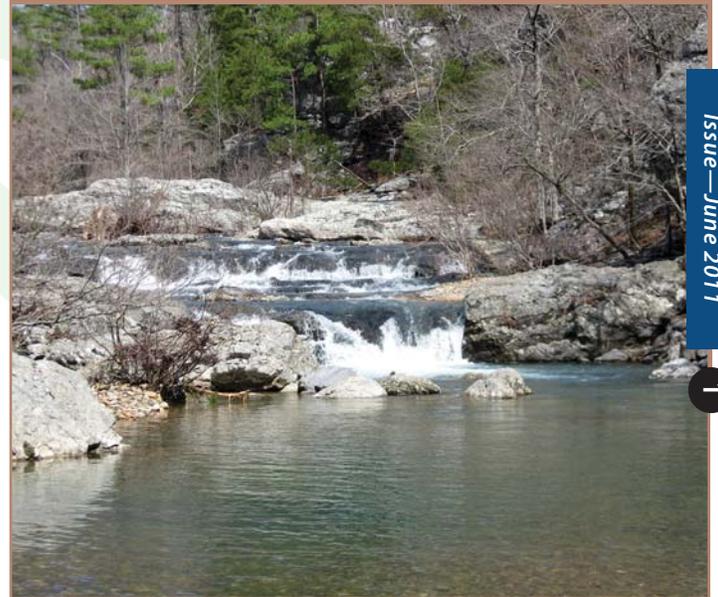
Arkansas, 2010

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FOREST INVENTORY & ANALYSIS FACTSHEET



This annual factsheet is a brief look at some of the basic metrics that describe forest resources in Arkansas. Estimates presented here are for the measurement year 2010 with resource changes compared against the 2009 survey year. Factsheet information is updated every year by means of the Forest Inventory and Analysis (FIA) annualized sample design. Arkansas has about 5,700 sample plots across the State, and each year 20 percent of these plots (one panel) are visited and measured by field crews, the data compiled, and new estimates produced. Users should keep in mind that each year of new estimates, and the subsequent resource changes, are strongly influenced by the newest 20 percent of the sample; the older data comprise the remaining 80 percent of the sample. This small sample may result in sharp spikes in estimates when comparing successive survey years but in most instances the annualized design should give a reasonable indication of directional trends in the resource, such as increasing, decreasing, or no change. After 5 years of measurements, the full sample complement (a cycle) is complete and a new survey cycle begins. Because the 20 percent panel sample size is small, the strongest and most reliable trend information (especially that concerning magnitude of change) comes from comparing two full cycles of data.



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Little Missouri Falls, AR.
(photo by James M. Guldin)

The Arkansas factsheet is based on data processed and posted on the FIA database (FIADB) on April 13, 2011 (2010 data), and Feb. 11, 2011 (2009 data), at <http://fia.fs.fed.us/tools-data/>. Definitions can be found in the FIADB user's manual at <http://fia.fs.fed.us/tools-data/docs/default.asp>. Additional information concerning definitions and descriptive statistics can be found in the report Arkansas' Forests, 2005 (RB-SRS-166) at <http://www.srs.fs.usda.gov/pubs/34894>.

in the region of Arkansas in which they have the most interest.

The summary includes estimates of forest land area (table 1), ownership (table 2), forest-type groups (table 3), volume (tables 4 and 5), biomass (tables 6 and 7), and pine plantation area (table 8) along with maps of Arkansas' survey units (fig. 1) and percent forest by county (fig. 2). The estimates are presented by survey units so users can assess resource attributes and change

An important element in State surveys is a description of stand dynamics. One simple metric is to determine the proportional division of softwoods and hardwoods in each stand across the State and the area in each proportional class (fig. 3). Since the 2005 survey, the area of stands that were predominantly hardwood (the 95 percent class) has increased. While the area in stands predominantly in softwoods also has increased, the acreage increase in the softwood stands increased much more than the hardwood stands: 380,000 versus 164,000 acres, respectively. This is most likely due to the focus on pine management, especially in south Arkansas.

Table 1—Area of forest land and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>thousand acres</i>			
North Delta	1,384.4	1,389.1	4.7
South Delta	759.0	768.0	9.0
Southwest	6,804.4	6,811.2	6.8
Ouachita	3,371.0	3,373.9	2.9
Ozark	6,362.8	6,377.8	15.0
All units	18,681.5	18,720.0	38.5

Table 2—Area of forest land and change, by ownership class, Arkansas, 2009 and 2010

Ownership class	2009	2010	Change
<i>thousand acres</i>			
National forest	2,536.3	2,513.8	-22.5
Other public	1,148.9	1,154.9	6.0
Forest industry	3,815.3	3,738.7	-76.6
NIPF	11,181.0	11,312.5	131.5
All classes	18,681.5	18,720.0	38.5

NIPF = nonindustrial private forest.



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Table 3—Area of forest land and change, by forest-type group, Arkansas, 2009 and 2010

Forest-type group	2009	2010	Change
<i>thousand acres</i>			
Loblolly-shortleaf	5,400.3	5,495.7	95.4
Eastern red cedar	291.5	301.8	10.3
Oak-pine	2,125.0	2,105.7	-19.3
Oak-hickory	7,757.9	7,741.7	-16.2
Bottomland hardwoods	2,944.8	2,946.3	1.5
Nontyped	162.0	128.8	-33.2
All groups	18,681.5	18,720.0	38.5

Table 6—Biomass dry weight of softwoods on forest land and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>million pounds</i>			
North Delta	18,825.4	18,704.1	-121.3
South Delta	6,581.8	6,391.8	-190.0
Southwest	247,516.3	255,975.9	8,459.6
Ouachita	120,095.5	121,253.4	1,157.9
Ozark	75,336.7	79,034.9	3,698.2
All units	468,355.7	481,360.2	13,004.5

Table 4—Volume of softwoods on forest land and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>million cubic feet</i>			
North Delta	457.1	456.2	-0.9
South Delta	165.5	160.6	-4.9
Southwest	5,793.1	5,987.0	193.9
Ouachita	2,858.1	2,885.9	27.8
Ozark	1,720.8	1,809.1	88.3
All units	10,994.7	11,298.7	304.0

Table 7—Biomass dry weight of hardwoods on forest land and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>million pounds</i>			
North Delta	122,095.1	121,884.8	-210.3
South Delta	73,653.6	74,957.4	1,303.8
Southwest	289,406.0	287,910.5	-1,495.5
Ouachita	149,666.2	152,592.6	2,926.4
Ozark	467,205.7	470,439.9	3,234.2
All units	1,102,026.6	1,107,785.1	5,758.5

Table 5—Volume of hardwoods on forest land and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>million cubic feet</i>			
North Delta	2,297.5	2,280.9	-16.6
South Delta	1,326.4	1,341.1	14.7
Southwest	4,805.8	4,745.7	-60.1
Ouachita	2,322.8	2,350.8	28.0
Ozark	7,636.2	7,639.6	3.4
All units	18,388.7	18,358.1	-30.6

Table 8—Area of forest land in plantations and change, by survey unit, Arkansas, 2009 and 2010

Survey unit	2009	2010	Change
<i>thousand acres</i>			
North Delta	227.6	217.5	-10.1
South Delta	37.7	40.9	3.2
Southwest	2,158.8	2,163.7	4.9
Ouachita	607.9	595.5	-12.4
Ozark	243.5	244.2	0.7
All units	3,275.4	3,261.9	-13.5

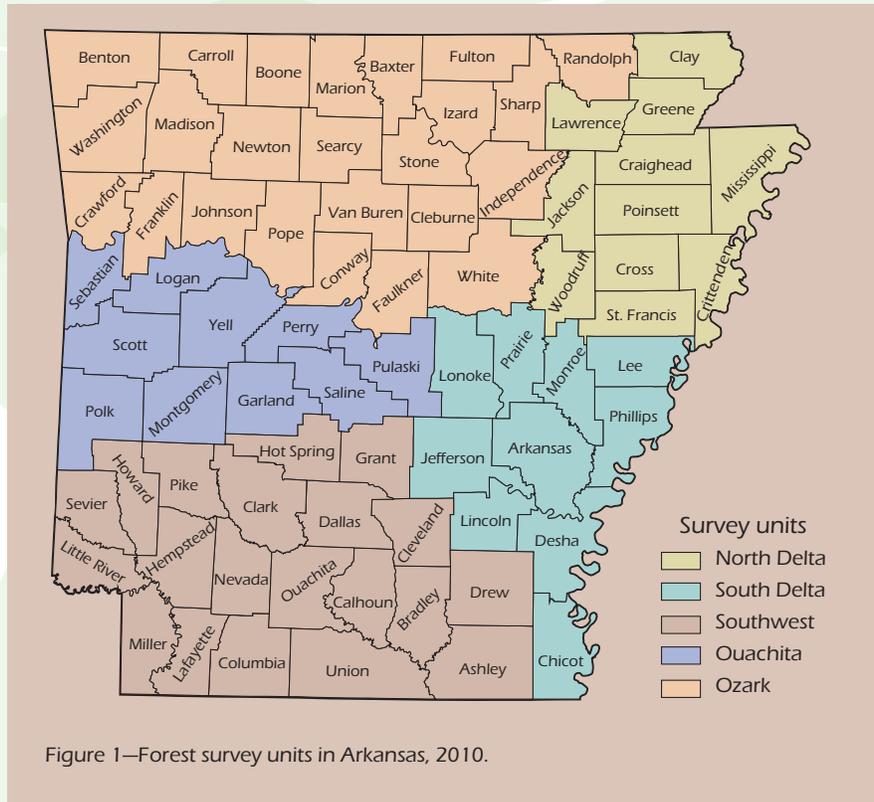


Figure 1—Forest survey units in Arkansas, 2010.

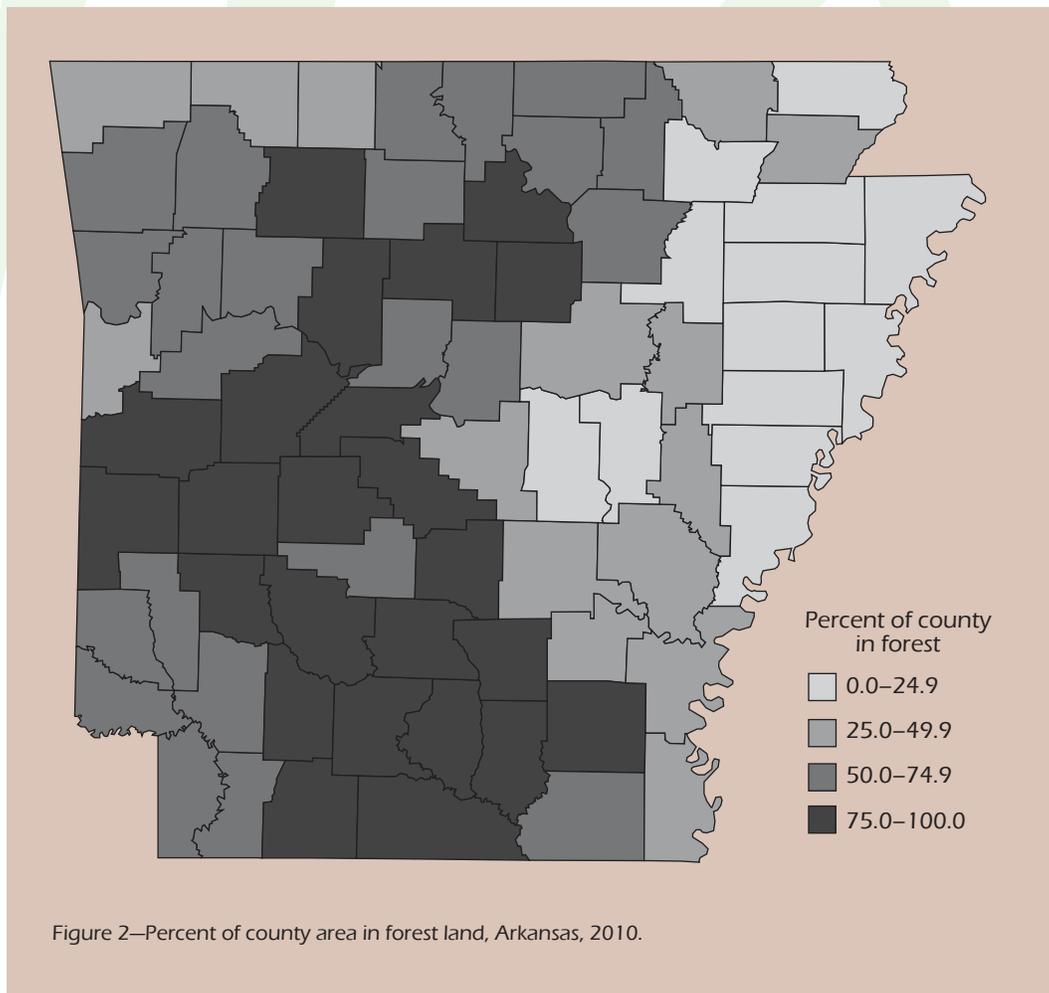


Figure 2—Percent of county area in forest land, Arkansas, 2010.

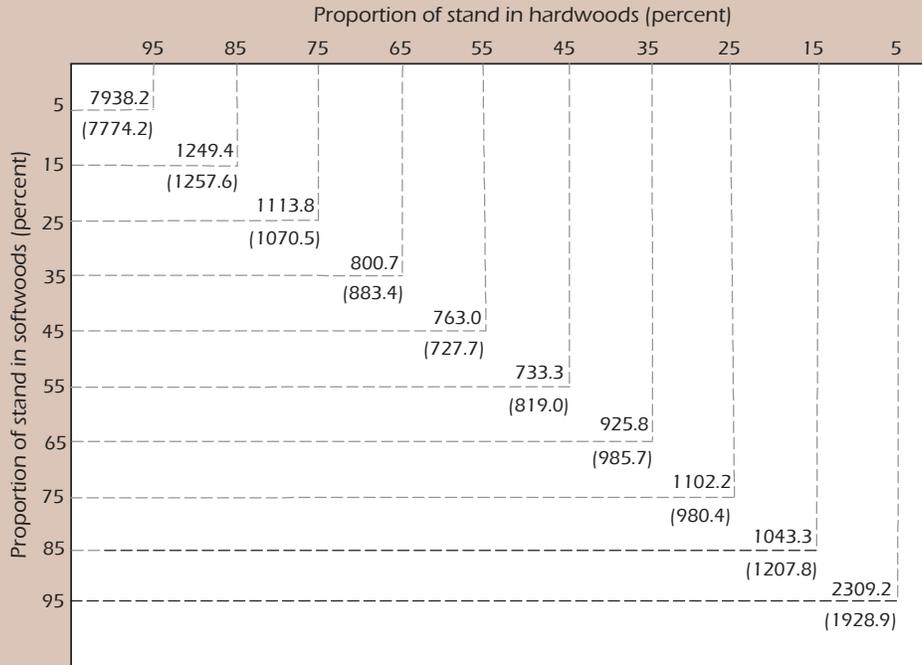


Figure 3—Area of forest land by proportion of stand in softwoods and hardwoods, Arkansas, 2005 and 2010. The percentage values are the midpoints of the deciles. Thus, 85 percent includes values >80 percent but <90 percent. Area is in thousand acres; acreage above the dashed line is from the 2010 survey while acreage below the dashed line, and in parentheses, is from the 2005 survey. Proportions were based on basal area and only stands with trees ≥ 1.0 inch in diameter at breast height were included.

How to Cite This Publication

Rosson, James F., Jr. 2011. Arkansas, 2010 forest inventory and analysis factsheet. e-Science Update SRS-036. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 4 p.

Tree farm near Monticello, AR. (photo by Christina Fowler, Arkansas Forestry Commission)

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