



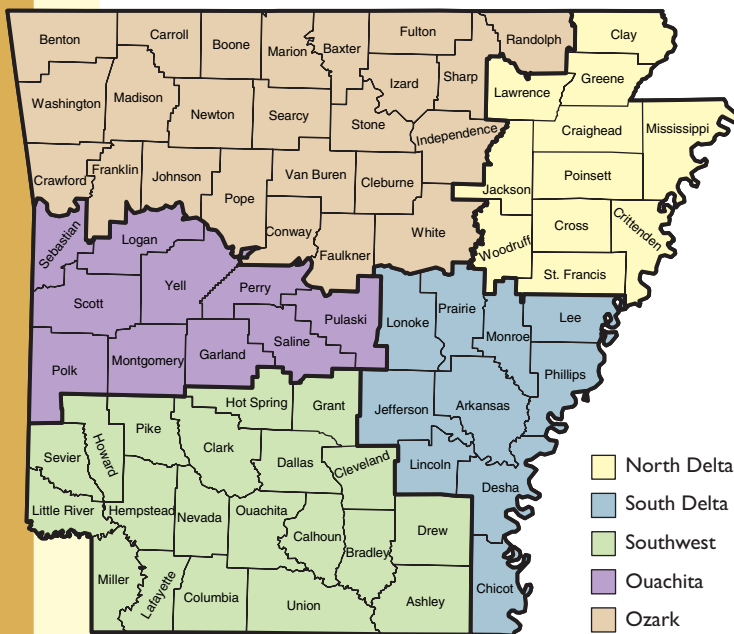
# Forest Inventory & Analysis Factsheet

## Arkansas 2005

December  
2006

The following factsheet provides an overview of the latest forest survey information for Arkansas. This information pertains to the latest full cycle of data collected under the new annual inventory sample design and represents cycle 8, the 8th forest survey of the State. The data were collected between 1999 and 2005 and are dated 2005. Information is presented by forest survey units, where unit boundaries approximate natural physiographic boundaries of the State. The North Delta and South Delta units cover the Mississippi Embayment. The Southwest unit covers the Coastal Plain. The Ouachita unit covers the Ouachita Mountains and Arkansas River Valley while the Ozark unit covers the Boston Mountains and the Springfield-Salem Plateaus.

### Arkansas Survey Units



### Ownership

Most of Arkansas' timberland is held in NIPF ownership, 59%. However, Arkansas also has some of the largest National Forest area in the south, with 2,439,600 acres in forest. Most of the National Forest timberland is in the Ouachita and Ozark units. Forest industry held 4,221,900 acres of timberland, with 76% of these holdings in the Southwest unit.

Forest survey unit	Total timberland	National forest	Other public	Forest industry	NIPF
<i>thousand acres</i>					
South Delta	1,386.8	32.3	256.0	211.4	887.1
North Delta	716.4	—	120.8	22.6	573.0
Southwest	6,907.1	19.7	201.0	3,196.4	3,490.1
Ouachita	3,344.5	1,423.1	165.6	602.8	1,153.0
Ozark	6,124.7	964.5	242.0	188.6	4,729.5
<b>State</b>	<b>18,479.6</b>	<b>2,439.6</b>	<b>985.4</b>	<b>4,221.9</b>	<b>10,832.7</b>

### Forest Area

Arkansas has 18,829,900 acres of forest on 33,323,600 acres of land. Most of the forest land is in the Southwest and Ozark units. The forest land base is composed of timberland, reserved forest, and nonproductive forest land.

Forest survey unit	All land	All forest land	Timberland	Reserved forest	Non-productive forest	Non-census water	Non-forest
<i>thousand acres</i>							
South Delta	4,580.1	1,415.0	1,386.8	28.2	—	22.8	3,142.3
North Delta	4,640.2	728.9	716.4	6.8	5.7	14.2	3,897.1
Southwest	8,786.1	6,925.1	6,907.1	17.9	—	34.9	1,826.2
Ouachita	4,755.5	3,405.8	3,344.5	46.8	14.5	24.8	1,324.9
Ozark	10,561.7	6,355.1	6,124.7	132.8	97.6	32.3	4,174.3
<b>State</b>	<b>33,323.6</b>	<b>18,829.9</b>	<b>18,479.6</b>	<b>232.5</b>	<b>117.8</b>	<b>129.0</b>	<b>14,364.7</b>

## Forest-type Groups

The oak-hickory forest-type group makes up 7,812,700 acres of timberland, 42% of all Arkansas timberland. Most of this type is in the Ozark unit. Ranked next is the loblolly-shortleaf pine forest-type group with 5,414,800 acres. The majority of this latter forest-type group grows in the Southwest unit.

Forest survey unit	All types	Loblolly-shortleaf	E. red-cedar	Oak-pine	Oak-hickory	Bottomland hardwoods	Non-stocked	Misc.
<i>thousand acres</i>								
South Delta	1,386.8	156.6	—	57.4	312.2	842.5	18.0	—
North Delta	716.4	13.0	4.7	14.8	290.9	389.7	3.5	—
Southwest	6,907.1	3,389.2	5.1	905.0	1,502.2	1,037.9	67.8	—
Ouachita	3,344.5	1,352.2	52.5	510.4	1,238.9	168.9	21.6	—
Ozark	6,124.7	503.8	268.6	535.5	4,468.6	318.9	21.7	7.5
State	18,479.6	5,414.8	330.9	2,023.1	7,812.7	2,757.9	132.7	7.5

## Stand-size

Most of Arkansas' forest area is in sawtimber-sized stands, 10,220,500 acres (55%). Over 55% of Arkansas' regenerating stands (the sapling-seedling size class) are in the Southwest unit.

Forest survey unit	All classes	Non-stocked	Sapling-seedling	Poletimber	Sawtimber
<i>thousand acres</i>					
South Delta	1,386.8	18.0	177.7	233.4	957.8
North Delta	716.4	3.5	76.1	188.4	448.4
Southwest	6,907.1	67.8	1,633.7	1,501.2	3,704.4
Ouachita	3,344.5	21.6	461.9	984.5	1,876.6
Ozark	6,124.7	21.7	596.3	2,273.3	3,233.4
State	18,479.6	132.7	2,945.6	5,180.7	10,220.5

## Plantations

There are almost 3,000,000 acres of timberland in artificially regenerated stands. Sixty-nine percent of these are in the Southwest unit.

Forest survey unit	All stands	Natural stands	Planted stands
<i>thousand acres</i>			
South Delta	1,386.8	1,268.7	118.0
North Delta	716.4	703.1	13.3
Southwest	6,907.1	4,850.4	2,056.8
Ouachita	3,344.5	2,747.4	597.1
Ozark	6,124.7	5,926.2	198.4
State	18,479.6	15,495.9	2,983.7

## Softwood Volume

There is 10,555.6 million cubic feet of softwood live-tree volume in Arkansas. Over 55% is in the Southwest unit. Most of the softwood volume is in the 10.0- to 15.0-inch diameter class, 37%.

Forest survey unit	All classes	Diameter class (inches)					
		5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0+
<i>million cubic feet</i>							
South Delta	498.6	104.0	89.6	66.4	41.7	33.9	163.1
North Delta	113.7	13.0	20.8	35.7	25.1	10.2	8.9
Southwest	5,828.1	1,391.4	2,073.7	1,504.0	672.5	166.3	20.2
Ouachita	2,615.7	786.7	1,174.9	575.5	78.7	—	—
Ozark	1,499.4	621.5	594.2	236.7	43.1	4.0	—
State	10,555.6	2,916.6	3,953.2	2,418.2	861.0	214.3	192.2

## Hardwood Volume

There is 17,382.9 million cubic feet of hardwood live-tree volume in the State. The Ozark unit has most of this volume, 40%. Most of this hardwood volume is in the 10.0- to 15.0-inch diameter class, 33%. Only 19% of hardwood volume is in trees >20.0 inches in diameter.

Forest survey unit	All classes	Diameter class (inches)					
		5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0+
<i>million cubic feet</i>							
South Delta	2,387.4	351.5	603.0	593.5	434.2	228.5	176.9
North Delta	1,232.6	236.4	357.1	310.7	150.4	134.1	44.0
Southwest	4,603.1	1,256.1	1,388.3	1,033.5	580.4	242.7	102.2
Ouachita	2,169.7	714.0	758.1	446.0	146.5	54.1	51.0
Ozark	6,990.1	1,990.8	2,596.7	1,505.0	646.1	178.2	73.4
State	17,382.9	4,548.7	5,703.1	3,888.6	1,957.6	837.5	447.4

## Softwood Species

Loblolly pine is the leading conifer in the State (by live-tree volume). This species accounts for 6,199.1 million cubic feet of volume. Second in rank is shortleaf pine with 3,455.1 million cubic feet. Together, these two species account for 92% of all softwood volume.

Species	All classes	Diameter class (inches)					
		5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0+
<i>million cubic feet</i>							
Loblolly pine	6,199.1	1,819.8	2,192.1	1,397.3	628.0	148.0	13.9
Shortleaf pine	3,455.1	797.2	1,578.9	921.4	142.1	15.5	—
Baldcypress	491.9	27.9	62.6	83.3	88.9	50.9	178.3
E. redcedar	400.3	264.6	117.4	16.3	2.0	—	—
Ashe juniper	9.2	7.1	2.2	—	—	—	—
Total softwoods	10,555.6	2,916.6	3,953.2	2,418.2	861.0	214.3	192.2

## Hardwood Species

White oak is the leading hardwood in Arkansas (by live-tree volume). Sweetgum and post oak follow in the second and third position, respectively. The top 10 hardwood species account for 64% of all hardwood volume.

Species	All classes	Diameter class (inches)					
		5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0+
<i>million cubic feet</i>							
White oak	2,620.5	694.0	990.1	641.9	219.2	54.1	21.3
Sweetgum	1,973.8	574.3	695.2	429.6	167.0	72.9	34.7
Post oak	1,505.4	477.2	572.6	312.9	112.9	24.8	5.0
N. red oak	982.1	193.2	396.7	265.8	98.5	20.1	7.6
Black oak	918.6	183.6	348.7	217.8	118.4	39.8	10.1
S. red oak	868.4	138.8	288.4	251.5	115.4	52.4	21.9
Water oak	629.8	113.5	174.3	168.8	104.9	41.1	27.1
Cherrybark oak	588.7	61.2	114.3	150.2	115.0	87.9	60.1
Willow oak	565.1	62.5	124.8	165.0	146.9	44.8	20.9
Overcup oak	461.2	39.3	89.7	101.5	122.8	80.0	27.9
Top 10 hardwoods	11,113.6	2,537.6	3,794.8	2,705.0	1,321.0	517.9	236.6

## Softwood Biomass

There are 482,409.7 million pounds of dry softwood biomass in Arkansas. This is the oven-dry weight of wood and bark from a 1-foot stump to twig tip at the top of the tree. Foliage is not included. Most of the softwood biomass, 79%, is in the Southwest and Ouachita units.

Forest survey unit	Total weight	Diameter class (inches)						30.0+
		1.0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	
<i>dry weight, million pounds</i>								
South Delta	24,815.0	764.1	4,965.7	3,744.9	2,817.2	1,936.7	1,629.7	8,956.6
North Delta	5,418.3	112.2	602.6	884.0	1,604.0	1,214.3	523.2	478.0
Southwest	263,314.8	14,448.8	64,293.2	86,727.9	62,161.2	27,797.4	6,970.7	915.6
Ouachita	116,478.6	5,462.9	34,753.3	49,064.1	23,933.3	3,264.8	—	—
Ozark	72,383.0	6,543.1	28,825.4	25,066.9	9,929.9	1,851.6	166.2	—
State	482,409.7	27,331.2	133,440.2	165,487.8	100,445.6	36,064.8	9,289.7	10,350.3

## Hardwood Biomass

There are 1,012,668.5 million pounds of dry hardwood biomass in the State. This is the oven-dry weight of wood and bark from a 1-foot stump to twig tips at the top of the tree. Foliage is not included. Sixty-eight percent of the hardwood biomass is in the Ozark and Southwest units.

Forest survey unit	Total weight	Diameter class (inches)						30.0+
		1.0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	
<i>dry weight, million pounds</i>								
South Delta	125,666.0	6,453.4	16,721.8	28,953.2	29,828.0	22,736.0	11,880.6	9,092.9
North Delta	67,396.5	5,181.0	11,293.2	17,162.8	16,015.5	7,905.1	7,367.1	2,471.8
Southwest	276,049.0	40,445.8	61,504.6	67,897.3	54,194.8	31,871.9	13,868.5	6,266.1
Ouachita	132,031.8	18,194.9	36,860.4	38,839.3	23,899.1	8,021.0	3,078.2	3,139.0
Ozark	411,525.1	38,742.5	104,283.3	136,055.9	81,903.5	36,220.1	10,222.9	4,096.9
State	1,012,668.5	109,017.6	230,663.3	288,908.5	205,840.9	106,754.1	46,417.3	25,066.7

## Growth, Removals, and Mortality

Softwood and hardwood growth have both exceeded their respective removals for the survey period. This indicates a positive increase in the inventory situation.

Forest survey unit	Softwoods			Hardwoods		
	Net growth	Mortality	Removals	Net growth	Mortality	Removals
<i>million cubic feet</i>						
South Delta	21.3	2.1	17.7	49.0	36.3	30.3
North Delta	4.8	0.6	0.5	37.3	16.4	26.0
Southwest	367.3	47.6	395.8	153.7	55.0	140.1
Ouachita	103.3	34.0	79.3	54.5	34.3	29.6
Ozark	71.8	8.3	34.2	228.4	90.1	107.7
State	568.4	92.6	527.5	522.9	232.0	333.6

Note: Definitions of terms can be found in the glossary of the field manual, available at: [http://srsfia2.fs.fed.us/data\\_acquisition/manual.shtml](http://srsfia2.fs.fed.us/data_acquisition/manual.shtml)

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