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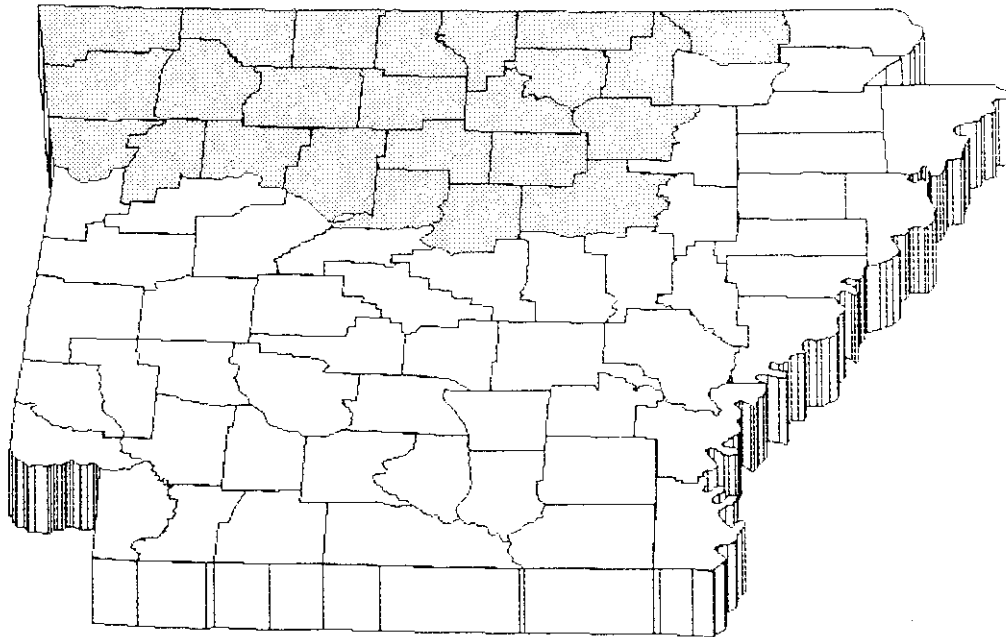
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Forest Statistics for Arkansas' Ozark Counties - 1988

F. Dee Hines



SUMMARY

The 1988 survey of the Ozark Unit in Arkansas showed several changes since the 1978 survey.

- * Timberland area now covers 5729.6 thousand acres, up 10 percent since 1978.
- * Private ownership accounts for 4417.1 thousand acres, up 11 percent.
- * Area covered by loblolly-shortleaf forest type is up 16 percent.
- * Oak-pine forest types showed a 22 percent increase in acreage.
- * Bottomland hardwood forest types increased by 66.2 thousand acres, 48 percent.
- * Sawtimber stands increased 30 percent, poletimber stands increased 26 percent, sapling-seedling stands decreased 29 percent.
- * Plantation acreage is up 74 percent.
- * Softwood volumes have increased; 26 percent for growing stock, 25 percent for sawtimber.
- * Hardwood volumes have increased, 39 percent for growing stock, 54 percent for sawtimber.
- * Softwood growth and removals decreased for both growing stock and sawtimber.
- * Hardwood growth estimates for growing stock and sawtimber are up substantially from the 1978 estimates.
- * Removals of hardwood growing stock have decreased, while removals of hardwood sawtimber have increased.
- * Mortality estimates are up more than 90 percent.

FOREWORD

The Southern Forest Survey, an activity of the Southern Forest Experiment Station Forest Inventory and Analysis work unit, covers the States of Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, and East Texas, and the island of Puerto Rico.

This survey is part of the nationwide Forest Survey originally authorized by the McSweeney-McNary Act of 1928. More recent legislation pertinent to the survey mission includes the Forest and Rangeland Renewable Resources Planning Act of 1974 and the Forest and Rangeland Renewable Resources Research Act of 1978. The survey mission is to develop, analyze, and maintain renewable forest resource information. This information is essential for formulation of forest policies and programs.

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*Core tables are presented in response to the Southern Industrial Forestry Research Council's recommendations. These tables are identical among Forest Inventory and Analysis units in the eastern United States.



Figure I.—The forest survey regions of Arkansas

Forest Statistics for Arkansas' Ozark Counties—1988

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INTRODUCTION

Tabulated results were derived from data obtained during a recent inventory of 24 counties comprising the Ozark Unit of Arkansas (fig. 1). Data on forest acreage and timber volume were secured by a three-step process. A forest-nonforest classification using aerial photographs was accomplished for points representing approximately 230 acres. These photo classifications were adjusted based on ground observations at sample locations representing approximately 3,840 acres. Finally, field measurements were made at forest locations on the intersections of grid lines spaced 3 miles apart. At these forest locations, per-acre estimates were obtained from trees measured on ten 37.5 basal area factor prism points.

The sampling methods were designed to achieve suitable sampling errors for estimates of area and volume at the State level. Sampling error increases as the area or volume considered decreases. The sampling errors presented in table I, equal to one standard deviation for the sample data, may be used to construct confidence intervals for population parameters. For example, at the 95 percent confidence level, the confidence interval for growing stock volume (in million cubic feet) in the Ozark region of Arkansas (with a sampling error of 3.1 percent) is

$$4,764.8 \pm 1.96(0.031 \times 4,764.8) = \\ 4,764.8 \pm 289.5$$

where 1.96 is the number of standard deviations. This confidence interval indicates that the actual growing-stock volume lies in the range 4475.3 to 5054.3 million cubic feet, unless a 1 in 20 chance has occurred.

Sampling errors for sub-groups of counties in the unit may be estimated by the following formula:

$$SE_g = \frac{SE_t \sqrt{X_t}}{\sqrt{X_g}}$$

where:

- SE = standard error of estimate
(expressed as a percent)
- X = variable of interest
(area or volume)
- g = group of counties to be combined
- t = total for the unit.

For example, the sampling error estimate of growing-stock volume for Benton, Washington, Madison, and Carroll counties is 7.6 percent. Thus, the 95 percent confidence interval for growing stock volume is 801.3 ± 119.4 million cubic feet.

Ownership information is obtained by the same systematic sample outlined above. County courthouse records are used to obtain ownership information for each forested plot. An expansion factor representing timberland area in that county is then applied to the ownership group the plot represents. Next, the ownership groups are totaled for each county. Thus, acreages reported at the county level are estimates and may not exactly match known totals for each ownership category within that county.

In order to achieve greater compatibility among Forest Inventory and Analysis Projects, a new tree grading classification has been initiated for the 1988 Arkansas Survey. Tree grade 5 is used for trees currently or prospectively capable of producing at least

Table I—Sampling errors¹ for timberland, growing stock, and sawtimber, Ozark Counties, Arkansas, 1988

County	Timberland	Growing stock			Sawtimber volume
		Volume	Growth	Removals	
		Percent			
Baxter	4.5	11.3	13.7	2.6	13.6
Benton	2.1	17.1	12.7	(2)	21.4
Boone	3.7	17.9	36.1	(2)	24.9
Carroll	3.1	12.0	17.1	19.6	17.7
Cleburne	3.0	10.8	15.4	20.9	15.1
Conway	3.0	17.8	19.0	30.9	22.9
Crawford	2.5	14.0	12.6	30.1	19.0
Faulkner	3.1	14.5	17.1	28.3	20.3
Franklin	2.8	14.9	35.6	21.5	20.0
Fulton	3.7	12.1	19.5	46.8	16.1
Independence	1.9	13.3	15.4	22.4	18.9
Izard	4.5	9.1	10.9	(2)	13.1
Johnson	2.1	11.0	15.5	36.0	14.3
Madison	1.9	11.0	13.3	20.5	14.8
Marion	4.9	13.8	18.2	...	17.7
Newton	1.6	7.9	7.8	30.0	11.4
Pope	1.8	8.8	17.3	25.2	12.4
Randolph	2.1	25.8	24.5	23.1	34.6
Searcy	2.2	9.4	11.4	39.7	13.9
Sharp	2.7	10.5	17.0	30.5	16.8
Stone	2.1	12.4	13.9	19.6	18.8
Van Buren	1.8	11.4	11.6	40.2	13.6
Washington	1.8	11.5	14.1	30.5	16.6
White	1.8	28.3	11.9	27.7	32.2
All counties	0.6	3.1	3.3	6.9	4.3

¹ By random-sampling formula.

² Sampling error greater than 50.

one 12-foot log or two 8-foot logs in the sawlog portion but not able to produce a 12-foot log in the butt 16 feet. These trees, formerly classed as rough or rotten, are now included in growing stock. Table II shows the impact of this change on volume and growth.

Other changes of importance in the 1988 Arkansas Survey include a reclassification of some woodland or reserved timberland to timberland. Moreover, for comparative purposes 1978 survey data were reprocessed using current procedures. Thus, differences between 1978 and 1988 data should reflect resource changes and not data processing differences. Results from the reprocessed 1978 data are used for comparison to 1988 data in the Highlights that follow.

HIGHLIGHTS

Timberland Area

Timberland area in Arkansas' Ozark counties has increased 10 percent since the 1978 survey. With 5729.6 thousand acres of timberland, the area is now 58 percent forested. Five percent of this increase is due to the reclassification already mentioned, while the remainder is due to additions from pasture and cropland.

The vast majority of timberland in this unit is in private ownership. This ownership group showed an 11 percent increase up to 4417.1 thousand acres. Forest industry-owned land, including that under long term

Table II—Changes in volume and growth estimates due to inclusion of tree grade 5 in growing-stock inventory, Ozark Counties, Arkansas, 1988

	Tree grade 5		
	Excluded from growing stock	Included in growing stock	Percent change
----- Million cubic feet -----			
Softwood:			
Growing-stock volume	870.7	887.2	1.9
Rough and Rotten volume	42.6	26.1	-38.7
Growing-stock growth	34.2	36.2	5.8
Hardwood:			
Growing-stock volume	3630.9	3877.6	6.8
Rough and Rotten volume	770.8	524.1	-32.0
Growing-stock growth	127.9	157.9	23.5
----- Million board feet -----			
Softwood:			
Sawtimber volume	3038.1	3073.7	1.2
Sawtimber growth	137.0	141.0	2.9
Hardwood:			
Sawtimber volume	9599.8	10577.7	10.2
Sawtimber growth	442.9	563.2	27.2

lease, is up to 175.8 thousand acres from 115.7 thousand acres. This is a 52 percent increase over the 1978 level. Other ownership categories remained fairly constant although land in the other public ownership group is up slightly, increasing about 11 thousand acres.

All forest types show an increase in acreage over the previous survey. The loblolly-shortleaf type is up 16 percent to 502.9 thousand acres. Oak-pine forest lands increased from 632.6 thousand acres to 771.2 thousand acres or 22 percent. The dominant oak-hickory forest type now covers 4252.4 thousand acres in Northwest Arkansas, showing a 6 percent increase. The most dramatic jump however, is in the bottomland hardwood types up 66.2 thousand acres. Bottomland hardwoods now cover 203.1 thousand acres. Both oak-gum-cypress and elm-ash-cottonwood forest types are included in the bottomland hardwood type.

Changes in stand-size class acreage indicate a shift towards stands of larger trees. Sawtimber and poletimber stands are up 30

percent and 26 percent respectively. Sawtimber stands now cover 1705.5 thousand acres. Poletimber stands, accounting for 48 percent of timberland in Arkansas' Ozark region, are up 564.4 thousand acres to 2774.7 thousand acres. Sapling-seedling stands are down 29 percent to 1173.6 thousand acres despite a 74 percent increase in plantation acreage. Plantations now cover 156.8 thousand acres.

Number of Trees

The number of live trees has changed very little, up only .6 percent since the 1978 survey. A slight decrease in the number of live hardwood trees, down 1 percent, is offset by the 11 percent increase in live softwood trees. This decrease in live hardwood trees occurs entirely in the 2-inch and 4-inch diameter classes. The 2-inch class is down 5 percent and the 4-inch class is down 3 percent. All other diameter classes in hardwood live trees showed increases over 1978 numbers. The increase in softwood live trees is

spread across all diameter classes although it is more pronounced in the larger diameter trees.

The total number of growing-stock trees is down 35 percent from the previous survey. Most of this decrease is due to a 42 percent loss in hardwood growing stock. Again, only the 2-inch and 4-inch diameter classes showed any decrease with a 67 percent and 29 percent decrease respectively. As with all live trees, the total number of softwood growing-stock trees increased, but only 2 percent. However, here as with the hardwood growing-stock trees the smallest two classes showed decreases. Nevertheless, most of the total decline in growing-stock trees is due to a sharp decrease in small diameter hardwood growing-stock trees.

Timber Volume

Softwood volumes have increased since the previous inventory. The 1978 survey reflected a 20 percent rise in softwood growing-stock volume over past levels with 704.6 million cubic feet. Softwood growing-stock volume in the region has continued this trend up another 26 percent since 1978. The current inventory of softwood growing-stock volume is 887.2 million cubic feet. Softwood sawtimber volumes follow a similar pattern, up 25 percent between 1969 and 1978 and up another 32 percent for the current survey. The 1978 inventory of 2330.8 million board feet has increased to 3073.7 million board feet.

Similarly, hardwood volumes are up over 1978 levels. Hardwood growing-stock volume was 2785.4 million cubic feet but is now up to 3877.6 million cubic feet. This jump of 39 percent is contrary to the 6 percent drop occurring in the previous survey cycle. The same trend is seen for hardwood sawtimber volume. In 1978 hardwood sawtimber volume was 6869.6 million board feet, 54 percent less than the 10577.7 million board feet estimated for the current survey. Conversely, hardwood sawtimber volume in 1978 was down 5 percent from the 1969 inventory report.

Growth, Removals, and Mortality

Average net annual growth of growing stock is up 57 percent for the unit total. This increase, however, is due to hardwood growth since net annual growth of softwood growing stock decreased 8 percent from 39.2 million cubic feet to 36.2 million cubic feet. Hardwood net annual growth of growing stock showed a substantial increase from 84.8 million cubic feet to 157.9 million cubic feet.

A similar pattern is seen for net annual growth of sawtimber with a small decrease of less than 1 percent in softwood growth to 141.0 million board feet, and a jump of 350.1 million board feet in hardwood growth.

Softwood removals are down since the previous survey. Removals of softwood growing stock decreased slightly from 19.3 million cubic feet to 18.7 million cubic feet. Again, removals of softwood sawtimber decreased by 9 percent, a drop of 5.7 million board feet.

Removals from hardwood growing stock are down but removals from sawtimber showed a moderate increase. Hardwood growing stock removals decreased from 50.3 million cubic feet in 1978 to 43.6 million cubic feet currently. Hardwood sawtimber removals increased 15 percent to their current level of 131.0 million board feet.

Overall, net annual growth far exceeds average annual removals in both growing-stock volume and sawtimber volume for both softwoods and hardwoods.

Mortality totals for the Ozark region showed a sharp increase over 1978 figures. The current survey shows total mortality of growing stock to be 32.4 million cubic feet, which is a 91 percent increase over the 17.0 million cubic feet calculated for 1978. Sawtimber mortality is also up over 90 percent from 37.7 million board feet to 73.4 million board feet.

Tables 1-25 were developed to provide compatibility among Forest Inventory and Analysis Projects. Tables 26-36 are supplementary tables and may change from unit to unit or State to State to address specific resource issues.

DEFINITION OF TERMS

Average net annual growth.—Average net annual volume increase for the inter-survey period.

Average annual mortality.—Average annual sound-wood volume of growing-stock trees dying from natural causes.

Average annual removals.—Average net annual volume of growing-stock trees removed from the inventory by harvesting, cultural operations (such as timber-stand improvement), land clearing, or changes in land use.

Commercial species.—Tree species which normally develop into trees suitable for industrial wood products.

Forest type.—A classification of forest land based upon the species forming a plurality of live-tree stocking.

Growing-stock trees.—Live trees of commercial species. Rough and rotten trees are excluded.

Growing-stock volume.—The cubic-foot volume of sound wood in growing-stock trees at least 5.0 inches in diameter at breast height, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs.

Live trees.—Commercial and non-commercial tree species of sapling size or larger.

Natural stands.—Stands with no evidence of artificial regeneration. This includes those stands established by seed tree regeneration methods.

Noncommercial species.—Tree species of typically small size, poor form, or inferior quality which normally do not develop into trees suitable for industrial wood products.

Planted stands.—Stands with some evidence of planting or direct seeding.

Poletimber trees.—Growing-stock trees at least 5.0 inches in diameter at breast height, but smaller than sawtimber size.

Reserved timberland.—Productive public forest land withdrawn from timber utiliza-

tion through statute or administrative regulations.

Rotten trees.—Live trees of commercial species that do not contain at least one 12-foot log or two 8-foot logs in the saw-log portion, now or prospectively, primarily because of rot.

Rough trees.—Live trees of commercial species that do not contain at least one 12-foot log or two 8-foot logs in the saw-log portion, now or prospectively, primarily because of roughness or poor form. Also included are all live trees of noncommercial species.

Saplings.—Growing-stock trees at least 1.0 inches but less than 5.0 inches in diameter at breast height.

Sawtimber trees.—Live trees that contain at least one 12-foot log, or two 8-foot logs in the saw-log portion, and meet regional specifications for freedom from defect. Softwoods must be at least 9.0 inches in diameter at breast height and hardwoods at least 11.0 inches in diameter at breast height.

Sawtimber volume.—Sound-wood volume of the saw-log portion of growing-stock sawtimber trees in board feet, International 1/4-inch rule and in cubic feet.

Seedlings.—Growing-stock trees less than 1.0 inches in diameter at breast height and greater than one foot tall for hardwoods, greater than six inches tall for softwoods, and greater than one-half inch in diameter at ground level for longleaf pine.

Select white oaks.—A classification of several white oak species composed of: white, swamp chestnut, swamp white, chinkapin, Durand, and bur oaks.

Select red oaks.—A classification of several red oak species composed of: cherrybark, Shumard, and northern red oaks.

Site class.—A classification of forest land in terms of inherent capacity to grow crops of industrial wood.

Stand-size class.—A classification of forest land based on the diameter size class of growing-stock trees on the sampled area; that is, sawtimber, poletimber, or sapling and seedling.

Timberland.—Forest land that is producing, or is capable of producing, crops of industrial wood and not withdrawn from timber utilization. Timberland is synonymous with “commercial forest land” in prior reports.

Tree grade.—A classification of the volume of the saw-log portion of sawtimber trees

based on: 1) the log grade of the butt log, or 2) ability to produce at least one 12-foot log or two 8-foot logs in the upper-section of the saw-log portion.

Woodland.—Forest land incapable of yielding crops of industrial wood because of adverse site conditions.

Core Tables 1–25

Table 1—Area by county and land class, Ozark Counties, Arkansas, 1988

County	All land ¹	Forest land			Reserved timberland	Nonforest land
		Total	Timberland ²	Woodland ³		
----- Thousand acres -----						
Baxter	349.3	255.5	209.2	31.7	14.6	93.8
Benton	539.8	218.8	210.7	5.7	2.4	321.1
Boone	373.7	144.0	126.7	17.3	...	229.7
Carroll	405.7	205.6	183.3	22.2	...	200.2
Cleburne	352.3	226.5	226.5	...	...	125.8
Conway	357.4	163.9	163.9	...	...	193.5
Crawford	379.9	218.2	211.6	6.6	...	161.7
Faulkner	413.1	168.4	168.4	...	...	244.7
Franklin	389.6	231.2	231.2	...	...	158.3
Fulton	394.3	206.7	189.9	16.8	...	187.6
Independence	488.6	193.0	187.3	5.7	...	295.6
Izard	372.0	244.7	207.1	37.6	...	127.3
Johnson	432.4	290.9	285.2	...	5.7	141.4
Madison	536.0	382.3	376.2	6.2	...	153.6
Marion	375.8	263.3	196.5	41.7	25.2	112.4
Newton	526.7	450.2	377.3	5.6	67.3	76.5
Pope	524.8	365.1	353.7	...	11.4	159.7
Randolph	419.8	176.6	176.6	...	...	243.2
Searcy	427.5	314.9	285.5	5.8	23.6	112.6
Sharp	387.9	230.6	219.3	11.2	...	157.4
Stone	387.8	314.7	309.0	5.7	...	73.1
Van Buren	454.0	345.9	345.9	...	...	108.1
Washington	608.5	264.0	259.0	5.0	...	344.5
White	665.7	229.5	229.5	...	...	436.2
All counties	10562.6	6104.6	5729.6	224.8	150.2	4458.0

¹ From U.S. Bureau of the Census.

² Forest land (formerly termed commercial forest land) that is producing or capable of producing at least 20 cubic feet of industrial wood per acre per year. Includes areas which may be inaccessible or inoperable by current standards. Excludes reserved timberlands.

³ Forest land incapable of producing 20 cubic feet of industrial wood per acre per year under natural conditions because of adverse site conditions.

Table 2—Area of timberland by county and ownership class, Ozark Counties, Arkansas, 1988

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry ¹	Farmer	Corporate ²	Individual ²
----- Thousand acres -----									
Baxter	209.2	50.7	19.0	6.3	...	...	57.1	...	76.1
Benton	210.7	11.4	11.4	11.4	...	...	62.6	62.6	51.2
Boone	126.7	...	...	...	...	...	57.6	11.5	57.6
Carroll	183.3	...	...	...	...	...	61.1	22.2	100.0
Cleburne	226.5	...	...	...	...	35.2	45.3	10.1	135.9
Conway	163.9	...	...	7.1	...	14.2	42.7	7.1	92.6
Crawford	211.6	79.4	...	...	...	...	39.7	6.6	86.0
Faulkner	168.4	...	9.4	4.7	...	...	18.7	51.5	84.2
Franklin	231.2	85.9	6.6	...	...	...	66.1	6.6	66.1
Fulton	189.9	...	...	...	...	5.6	106.1	11.2	67.0
Independence	187.3	...	...	...	...	28.4	68.1	34.1	56.8
Izard	207.1	...	...	...	...	...	31.4	12.6	163.2
Johnson	285.2	173.2	5.1	...	...	...	20.4	...	86.6
Madison	376.2	37.0	...	6.2	...	...	154.2	6.2	172.7
Marion	196.5	...	...	...	...	...	95.3	6.0	95.3
Newton	377.3	152.0	...	5.6	...	...	61.9	5.6	152.0
Pope	353.7	202.1	...	5.6	...	11.2	44.9	5.6	84.2
Randolph	176.6	...	...	7.1	...	7.1	49.4	7.1	106.0
Searcy	285.5	40.8	...	5.8	...	...	116.5	5.8	116.5
Sharp	219.3	...	5.6	16.9	...	...	45.0	16.9	135.0
Stone	309.0	68.7	...	...	...	22.9	62.9	11.4	143.1
Van Buren	345.9	33.5	...	5.6	...	44.6	139.5	5.6	117.2
Washington	259.0	29.9	...	...	...	...	69.7	14.9	144.5
White	229.5	...	...	32.8	...	6.6	72.1	6.6	111.4
All counties	5729.6	964.5	57.1	115.1	...	175.8	1588.4	327.7	2501.0

¹ Includes land leased to forest industry.² Indian land will be classed as corporate or individual as defined by the Bureau of Indian Affairs.

Table 3—Area of timberland by county and forest type group, Ozark Counties, Arkansas, 1988

County	Total	Forest type group					
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum cypress	Elm-ash- cottonwood
		Planted	Natural				
----- Thousand acres -----							
Baxter	209.2	6.3	6.3	31.7	164.8	...	...
Benton	210.7	...	5.7	5.7	193.6	...	5.7
Boone	126.7	...	...	11.5	115.2	...	...
Carroll	183.3	...	...	27.8	155.6	...	...
Cleburne	226.5	10.1	35.2	55.4	120.8	5.0	...
Conway	163.9	...	21.4	42.7	78.4	21.4	...
Crawford	211.6	6.6	6.6	59.5	132.3	6.6	...
Faulkner	168.4	9.4	...	18.7	116.9	23.4	...
Franklin	231.2	...	33.0	33.0	158.6	6.6	...
Fulton	189.9	5.6	5.6	11.2	167.6	...	...
Independence	187.3	...	22.7	28.4	130.6	5.7	...
Izard	207.1	...	31.4	50.2	119.2	6.3	...
Johnson	285.2	15.3	40.7	45.8	183.3	...	...
Madison	376.2	...	6.2	30.8	339.2	...	...
Marion	196.5	...	11.9	6.0	172.6	6.0	...
Newton	377.3	...	16.9	33.8	326.6	...	...
Pope	353.7	5.6	61.8	67.4	207.7	11.2	...
Randolph	176.6	...	7.1	7.1	134.2	28.3	...
Searcy	285.5	...	5.8	17.5	256.4	5.8	...
Sharp	219.3	...	11.2	28.1	174.3	5.6	...
Stone	309.0	5.7	17.2	62.9	223.2	...	...
Van Buren	345.9	22.3	44.6	61.4	217.6	...	...
Washington	259.0	...	5.0	14.9	239.1	...	...
White	229.5	...	19.7	19.7	124.6	65.6	...
All counties	5729.6	86.9	416.0	771.2	4252.4	197.4	5.7

Table 4—Area of timberland by county and stand-size class,
Ozark Counties, Arkansas, 1988

County	All classes	Stand-size class		Sapling- seedling	Nonstocked ¹ areas
		Sawtimber	Poletimber		
-----Thousand acres-----					
Baxter	209.2	76.1	95.1	38.0	...
Benton	210.7	79.7	79.7	51.2	...
Boone	126.7	57.6	34.6	34.6	...
Carroll	183.3	77.8	72.2	33.3	...
Cleburne	226.5	60.4	105.7	60.4	...
Conway	163.9	42.7	71.2	49.9	...
Crawford	211.6	92.6	112.4	6.6	...
Faulkner	168.4	18.7	84.2	65.5	...
Franklin	231.2	66.1	105.7	39.6	19.8
Fulton	189.9	16.8	95.0	72.6	5.6
Independence	187.3	90.8	62.4	34.1	...
Izard	207.1	56.5	100.4	50.2	...
Johnson	285.2	112.0	137.5	35.7	...
Madison	376.2	123.3	154.2	92.5	6.2
Marion	196.5	59.5	71.4	59.5	6.0
Newton	377.3	123.9	208.3	39.4	5.6
Pope	353.7	129.1	179.7	39.3	5.6
Randolph	176.6	49.4	63.6	63.6	...
Searcy	285.5	75.7	163.2	40.8	5.8
Sharp	219.3	22.5	112.5	73.1	11.2
Stone	309.0	85.8	177.4	45.8	...
Van Buren	345.9	61.4	228.7	55.8	...
Washington	259.0	54.8	174.3	19.9	10.0
White	229.5	72.1	85.2	72.1	...
All counties	5729.6	1705.5	2774.7	1173.6	75.8

¹ Timberland less than 16.7 percent stocked.

Table 5—Area of timberland by county and site class,
Ozark Counties, Arkansas, 1988

County	All classes	Site class (cubic feet/acre/year)				
		>165	120-165	85-120	50-85	<50
		----- Thousand acres -----				
Baxter	209.2	...	6.3	...	95.1	107.8
Benton	210.7	...	11.4	5.7	136.6	56.9
Boone	126.7	...	...	...	69.1	57.6
Carroll	183.3	...	...	5.6	88.9	88.9
Cleburne	226.5	...	5.0	20.1	166.1	35.2
Conway	163.9	...	7.1	42.7	85.5	28.5
Crawford	211.6	...	...	13.2	125.7	72.7
Faulkner	168.4	...	18.7	14.0	70.2	65.5
Franklin	231.2	...	13.2	26.4	132.1	59.5
Fulton	189.9	...	...	11.2	72.6	106.1
Independence	187.3	...	...	5.7	130.6	51.1
Izard	207.1	...	...	43.9	100.4	62.8
Johnson	285.2	...	...	35.7	173.2	76.4
Madison	376.2	...	...	6.2	197.3	172.7
Marion	196.5	...	...	...	95.3	101.2
Newton	377.3	...	...	5.6	191.5	180.2
Pope	353.7	...	16.8	73.0	202.1	61.8
Randolph	176.6	7.1	7.1	14.1	63.6	84.8
Searcy	285.5	...	...	17.5	163.2	104.9
Sharp	219.3	...	...	16.9	95.6	106.9
Stone	309.0	...	...	17.2	228.9	62.9
Van Buren	345.9	...	...	22.3	223.1	100.4
Washington	259.0	...	...	...	124.5	134.5
White	229.5	...	26.2	52.4	98.3	52.4
All counties	5729.6	7.1	111.9	449.4	3129.5	2031.7

Table 6—Area of timberland by county and stocking classes of growing-stock trees, Ozark Counties, Arkansas, 1988

County	All classes	Stocking class (percent)				
		>130	100-130	60-100	16.7-60	<16.7
----- Thousand acres -----						
Baxter	209.2	6.3	12.7	126.8	63.4	...
Benton	210.7	...	17.1	113.9	79.7	...
Boone	126.7	...	...	74.9	51.8	...
Carroll	183.3	...	11.1	77.8	94.5	...
Cleburne	226.5	10.1	45.3	135.9	35.2	...
Conway	163.9	...	35.6	64.1	64.1	...
Crawford	211.6	...	13.2	132.3	66.1	...
Faulkner	168.4	...	18.7	88.9	60.8	...
Franklin	231.2	...	13.2	151.9	46.2	19.8
Fulton	189.9	5.6	11.2	83.8	83.8	5.6
Independence	187.3	...	5.7	141.9	39.7	...
Izard	207.1	12.6	6.3	144.3	43.9	...
Johnson	285.2	5.1	45.8	183.3	50.9	...
Madison	376.2	...	24.7	234.3	111.0	6.2
Marion	196.5	...	17.9	101.2	71.4	6.0
Newton	377.3	...	50.7	202.7	118.3	5.6
Pope	353.7	11.2	44.9	230.2	61.8	5.6
Randolph	176.6	...	...	77.7	98.9	...
Searcy	285.5	...	17.5	151.5	110.7	5.8
Sharp	219.3	...	16.9	101.2	90.0	11.2
Stone	309.0	...	40.1	188.8	80.1	...
Van Buren	345.9	...	16.7	251.0	78.1	...
Washington	259.0	...	14.9	114.6	119.5	10.0
White	229.5	13.1	13.1	157.3	45.9	...
All counties	5729.6	64.0	493.2	3330.5	1766.0	75.8

Table 7—Area of timberland by forest type and ownership class, Ozark Counties, Arkansas, 1988

Forest type ¹	All ownerships	National forest	Other public	Forest industry	Forest industry- leased	Other private
	----- Thousand acres -----					
Loblolly-shortleaf pine	502.9	122.8	17.8	60.0	...	302.3
Softwood total	502.9	122.8	17.8	60.0	...	302.3
Oak-pine	771.2	103.8	17.5	40.7	...	609.2
Oak-hickory	4252.4	737.9	86.7	75.1	...	3352.7
Oak-gum-cypress	197.4	...	44.5	...	...	152.9
Elm-ash-cottonwood	5.7	...	5.7	...	...	...
Hardwood total	5226.7	841.7	154.4	115.8	...	4114.8
All types	5729.6	964.5	172.1	175.8	...	4417.1

¹ Forest type is based on species plurality of all live trees. Mixed types that in combination contain a majority of hardwood stocking are hardwood types.

Table 8—Area of timberland by ownership and stocking classes of growing-stock trees, Ozark Counties, Arkansas, 1988

Ownership class	All classes	Stocking class (percent)				
		>130	100-130	60-100	16.7-60	<16.7
		----- Thousand acres -----				
National forest	964.5	10.7	132.6	676.5	144.6	...
Other public	172.1	...	...	113.3	52.2	6.6
Forest industry	175.8	5.0	22.2	113.2	35.4	...
Other private	4417.1	48.2	338.4	2427.5	1533.8	69.2
All ownerships	5729.6	64.0	493.2	3330.5	1766.0	75.8

Table 9—Area of timberland by forest type and stand-size class, Ozark Counties, Arkansas, 1988

Forest type ¹	All classes	Stand-size class			Nonstocked ² areas
		Sawtimber	Poletimber	Sapling- seedling	
----- Thousand acres -----					
Loblolly-shortleaf pine	502.9	234.2	160.6	108.1	...
Softwood total	502.9	234.2	160.6	108.1	...
Oak-pine	771.2	205.8	349.7	215.7	...
Oak-hickory	4252.4	1165.1	2193.5	830.2	63.6
Oak-gum-cypress	197.4	100.4	65.2	19.6	12.2
Elm-ash-cottonwood	5.7	...	5.7	...	...
Hardwood total	5226.7	1471.3	2614.1	1065.5	75.8
All types	5729.6	1705.5	2774.7	1173.6	75.8

¹ Forest type is based on species plurality of all live trees. Mixed types that in combination contain a majority of hardwood stocking are hardwood types.

² Timberland less than 16.7 percent stocked.

Table 10—Number of live trees on timberland by species and diameter class, Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Thousand trees-----													
Shortleaf-loblolly pine	256943	106749	62880	30425	25706	14082	9391	4693	1810	831	274	103	...
Cypress	1512	601	601	134	...	...	...	47	36	13	44	33	4
Other softwoods	255568	159191	59890	19577	11156	3303	1587	598	196	55	...	15	...
Total softwoods	514024	266541	123371	50135	36863	17384	10978	5338	2041	899	317	151	4
Select white oaks	324041	124165	74915	49039	32801	19355	10323	6819	3082	1717	906	870	48
Select red oaks	104386	41450	15939	13743	10709	7815	5583	3913	2302	1344	788	749	51
Other white oaks	274144	111260	74703	35623	22151	12953	7227	4344	2806	1321	746	993	17
Other red oaks	281990	142954	48578	27712	22298	13885	10226	6495	4359	2394	1418	1538	132
Hickory	561743	326744	113710	63789	29563	15012	6774	3635	1520	494	269	212	21
Hard maple	61497	39253	13906	2482	3117	1406	564	367	192	109	57	45	...
Soft maple	119916	91748	19136	5150	1608	1104	556	260	144	81	86	42	...
Beech	10776	7646	1500	535	186	109	191	111	141	120	94	145	...
Sweetgum	65131	27656	15434	10260	4696	2395	2003	1216	672	406	194	189	10
Tupelo-blackgum	147054	103255	22697	8021	5325	2311	1638	1214	1209	578	278	469	60
Ash	61918	40358	11061	4385	2290	1373	982	562	372	192	147	164	32
Cottonwood-aspen	42	...	...	...	...	...	...	...	18	...	12	12	...
Basswood	3840	2590	511	104	163	91	203	85	42	12	21	17	...
Yellow-poplar	46	...	...	...	...	...	27	19	...	...	...	...	...
Black walnut	8633	2125	2573	1309	1186	720	334	119	129	85	19	35	...
Other hardwoods	810322	634246	124897	29687	10787	5725	2074	1271	704	447	234	230	20
Total hardwoods	2835478	1695450	539560	251839	146879	84254	48706	30430	17692	9300	5267	5711	391
Noncommercial	287884	226856	38272	11744	5687	2549	1195	825	477	152	88	40	...
All species	3637386	2188847	701204	313718	189428	104187	60879	36593	20210	10351	5672	5902	394

Table 11—Number of growing-stock trees on timberland by species and diameter class, Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Thousand trees-----													
Shortleaf-loblolly pine	218747	79341	54235	29018	25426	13804	9302	4648	1793	819	274	88	...
Cypress	276	...	...	134	...	...	...	27	36	13	32	33	1
Other softwoods	200533	123328	46031	17208	9675	2340	1273	463	163	44	...	7	...
Total softwoods	419556	202669	100266	46360	35101	16144	10575	5138	1992	876	306	128	1
Select white oaks	204794	40981	52065	43901	30145	18199	8763	5688	2536	1265	671	550	29
Select red oaks	61729	9757	11725	12026	9355	6932	4608	3338	1829	1044	614	476	26
Other white oaks	145930	26354	46927	30345	19282	11129	5053	3076	1912	755	538	547	12
Other red oaks	185694	68359	35969	24587	21267	12936	8707	5705	3774	2047	1161	1105	76
Hickory	255483	88480	66874	51403	25673	12900	5197	2887	1252	415	230	151	21
Hard maple	24613	7952	9987	2030	2469	1266	389	283	126	60	24	28	...
Soft maple	27758	15925	6109	3536	919	669	253	177	56	40	55	19	...
Beech	5684	3048	1500	535	186	109	26	37	56	72	48	69	...
Sweetgum	38842	10425	8627	8958	4283	2306	1770	1095	659	392	174	142	10
Tupelo-blackgum	51602	23110	12485	6004	4332	2004	1153	728	827	410	178	323	48
Ash	16759	4181	5336	2893	1580	928	657	498	197	181	128	148	32
Cottonwood-aspen	42	...	...	...	...	...	...	...	18	...	12	12	...
Basswood	2089	992	511	...	163	91	181	85	28	12	9	17	...
Yellow-poplar	46	...	...	...	...	...	27	19	...	...	...	...	...
Black walnut	3726	521	522	838	959	457	197	60	97	61	9	5	...
Other hardwoods	193530	118370	45276	15082	7394	4075	1264	890	483	331	181	165	20
Total hardwoods	1218321	418455	303912	202138	128008	73998	38243	24567	13850	7084	4032	3759	275
All species	1637878	621125	404178	248498	163109	90142	48818	29704	15842	7960	4338	3888	276

Table 12—Volume of growing stock on timberland by species and diameter class, Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Million cubic feet-----											
Shortleaf-loblolly pine	759.6	63.4	143.0	150.7	158.7	116.6	65.7	40.3	15.0	6.2	...
Cypress	6.7	0.3	...	...	...	0.8	0.9	0.2	1.8	1.4	1.3
Other softwoods	120.9	35.8	39.6	18.2	15.2	7.4	3.2	1.1	...	0.3	...
Total softwoods	887.2	99.6	182.6	168.9	173.9	124.8	69.8	41.6	16.8	7.9	1.3
Select white oaks	902.8	114.8	173.7	181.8	134.5	119.7	71.6	45.5	29.4	29.3	2.6
Select red oaks	449.6	31.9	53.6	68.9	71.4	70.6	52.3	39.2	28.2	31.3	2.2
Other white oaks	453.7	61.8	84.4	86.0	61.4	49.9	41.3	21.2	18.5	27.7	1.4
Other red oaks	812.1	52.9	107.2	117.1	122.9	111.4	103.8	73.1	49.3	66.4	8.0
Hickory	533.9	96.3	110.7	110.8	74.3	62.2	35.4	18.1	12.2	10.7	3.3
Hard maple	49.2	4.6	12.5	12.3	5.2	5.9	4.1	1.9	1.1	1.6	...
Soft maple	33.9	9.1	4.6	5.7	3.6	3.9	1.7	2.2	2.2	0.9	...
Beech	16.9	1.2	0.8	1.5	0.3	1.1	1.8	3.7	2.1	4.5	...
Sweetgum	185.0	18.2	23.1	22.9	30.5	27.5	22.9	17.0	10.1	11.0	1.8
Tupelo-blackgum	153.2	12.9	21.2	18.1	16.4	16.3	22.2	15.5	7.4	18.6	4.7
Ash	70.5	6.1	8.2	8.2	8.1	9.4	5.4	6.8	4.7	9.4	4.2
Cottonwood-aspen	2.6	...	...	...	...	...	0.8	...	0.6	1.1	...
Basswood	11.5	...	0.7	1.0	2.9	2.0	1.1	0.7	0.6	2.5	...
Yellow-poplar	1.0	...	...	...	0.5	0.5	...	...	...	...	...
Black walnut	19.8	1.6	4.3	4.5	2.9	1.3	2.7	2.0	0.4	0.2	...
Other hardwoods	181.9	29.7	33.9	35.4	19.4	18.4	14.2	11.3	7.2	10.1	2.3
Total hardwoods	3877.6	441.1	638.9	674.0	554.6	500.2	381.2	258.1	173.9	225.2	30.6
All species	4764.8	540.6	821.4	842.9	728.5	625.0	451.0	299.7	190.7	233.1	31.9

Table 13—Volume of growing stock in the saw-log portion of sawtimber¹ trees on timberland by species and diameter class, Ozark Counties, Arkansas, 1988

Species	Diameter class (inches at breast height)								
	All classes	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
----- Million cubic feet -----									
Shortleaf-loblolly pine	483.3	124.2	140.2	102.9	59.8	37.0	13.3	5.9	...
Cypress	6.1	...	...	0.7	0.8	0.2	1.7	1.4	1.3
Other softwoods	38.0	14.7	13.1	6.5	2.5	1.0	...	0.2	...
Total softwoods	527.4	138.9	153.3	110.1	63.0	38.2	15.0	7.5	1.3
Select white oaks	358.8	...	103.4	100.8	61.3	40.1	26.2	24.6	2.4
Select red oaks	249.5	...	55.7	59.9	45.2	34.5	24.8	27.3	2.2
Other white oaks	188.8	...	49.9	42.7	35.8	18.2	16.2	24.6	1.4
Other red oaks	451.8	...	95.8	94.2	90.4	63.8	42.9	57.3	7.4
Hickory	180.3	...	58.2	52.9	29.8	16.2	10.7	9.4	3.2
Hard maple	16.0	...	4.1	4.5	3.6	1.6	0.9	1.2	...
Soft maple	11.8	...	2.6	3.3	1.3	1.9	1.9	0.8	...
Beech	11.7	...	0.2	0.9	1.7	3.1	1.7	4.0	...
Sweetgum	100.9	...	21.7	22.6	19.9	15.7	9.2	10.2	1.8
Tupelo-blackgum	88.3	...	11.9	13.5	20.2	14.0	6.9	17.3	4.5
Ash	40.8	...	6.2	7.8	4.6	6.0	4.2	8.5	3.6
Cottonwood-aspen	2.2	...	...	...	0.6	...	0.6	1.1	...
Basswood	8.6	...	2.4	1.7	1.1	0.6	0.5	2.3	...
Yellow-poplar	0.7	...	0.4	0.3	...	...	...	...	...
Black walnut	7.5	...	2.1	1.1	2.0	1.8	0.3	0.2	...
Other hardwoods	68.9	...	14.0	15.1	12.4	10.1	6.0	9.1	2.2
Total hardwoods	1786.7	...	428.6	421.2	329.8	227.4	153.0	198.0	28.8
All species	2314.1	138.9	581.9	531.3	392.8	265.7	168.0	205.5	30.1

¹ That part of the bole of sawtimber trees between a 1-foot stump and saw-log top, including the portion of the forks large enough to contain a saw log.

Table 14—Volume of sawtimber on timberland by species and diameter class,
Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Million board feet-----									
Shortleaf-loblolly pine	2845.3	656.1	797.8	629.4	384.7	248.2	89.5	39.5	...
Cypress	32.6	...	...	4.0	3.3	0.8	10.0	4.2	10.3
Other softwoods	195.7	71.4	66.9	35.6	14.8	5.6	...	1.5	...
Total softwoods	3073.7	727.5	864.7	669.0	402.8	254.7	99.4	45.2	10.3
Select white oaks	2116.6	...	566.3	586.0	375.7	252.1	165.3	158.4	13.0
Select red oaks	1512.1	...	308.5	349.3	275.2	219.9	158.6	177.7	22.8
Other white oaks	1105.4	...	264.1	243.3	210.7	113.2	105.8	160.4	7.9
Other red oaks	2660.2	...	512.5	530.4	540.3	394.1	270.1	364.5	48.3
Hickory	1080.6	...	322.2	312.4	182.6	106.0	71.9	63.0	22.4
Hard maple	99.7	...	23.0	27.1	23.3	10.9	6.2	9.1	...
Soft maple	71.6	...	15.7	19.7	8.0	12.5	11.2	4.4	...
Beech	79.4	...	1.3	5.3	10.6	20.9	13.2	28.0	...
Sweetgum	602.7	...	123.3	130.8	119.0	96.2	55.0	67.1	11.3
Tupelo-blackgum	507.9	...	63.3	77.9	116.6	83.9	44.1	100.7	21.5
Ash	227.9	...	32.9	43.6	27.1	36.6	22.9	43.9	20.8
Cottonwood-aspen	13.0	...	...	...	3.6	...	3.2	6.2	...
Basswood	54.1	...	14.2	9.9	6.9	3.8	3.1	16.2	...
Yellow-poplar	4.0	...	2.2	1.9	...	...	...	...	...
Black walnut	43.6	...	11.1	6.4	12.4	10.7	2.2	0.8	...
Other hardwoods	399.0	...	77.2	87.7	72.9	61.7	35.6	51.9	11.8
Total hardwoods	10577.7	...	2337.5	2431.8	1984.9	1422.7	968.5	1252.5	179.8
All species	13651.4	727.5	3202.2	3100.8	2387.7	1677.3	1068.0	1297.8	190.1

Table 15—Volume of growing stock and sawtimber on timberland by county and species group,
Ozark Counties, Arkansas, 1988

County	Growing stock						Sawtimber							
	All species	Softwood			Hardwood		All species	Softwood			Hardwood			
		Pine	Planted	Natural	Other	Soft ¹		Hard ²	Pine	Planted	Natural	Other	Soft ¹	Hard ²
----- Million cubic feet -----														
Baxter	171.7	12.1	8.9	6.4	10.2	134.0	554.1	38.8	36.7	12.8	23.1	442.6		
Benton	182.1	...	1.9	1.2	13.9	165.2	569.4	...	10.8	4.3	33.1	521.2		
Boone	93.5	...	0.9	1.4	1.7	89.6	275.1	...	4.3	1.3	1.7	267.9		
Carroll	122.3	...	9.4	1.5	4.0	107.5	364.8	...	36.9	...	10.2	317.7		
Cleburne	179.6	12.4	61.3	5.0	20.5	80.4	456.8	50.9	223.8	10.5	53.7	117.9		
Conway	116.7	1.2	30.7	8.3	30.6	46.0	325.6	...	94.2	27.2	103.8	100.4		
Crawford	230.9	4.9	26.7	10.6	38.7	150.0	730.0	...	144.4	22.6	122.6	440.4		
Faulkner	96.5	5.0	3.5	3.8	20.6	63.6	240.4	4.6	11.9	4.7	48.1	171.1		
Franklin	207.1	6.0	31.9	5.6	33.6	129.9	611.1	15.6	127.0	5.8	91.5	371.1		
Fulton	97.5	21.0	0.2	0.9	3.3	72.2	218.0	49.8	...	1.4	6.2	160.6		
Independence	150.1	...	29.0	3.8	16.9	100.5	439.3	...	78.3	5.2	55.2	300.7		
Izard	155.5	...	53.7	5.8	8.2	87.8	391.6	...	156.8	7.3	23.7	203.7		
Johnson	326.9	27.9	68.7	4.9	44.5	180.9	1121.6	151.7	269.9	15.0	156.2	528.8		
Madison	310.7	...	10.1	2.5	31.9	266.2	907.8	...	47.9	4.4	109.8	745.7		
Marion	118.4	...	7.9	7.0	3.0	100.5	357.3	...	32.5	3.9	11.4	309.4		
Newton	416.2	...	42.7	7.2	34.9	331.5	1140.9	...	163.9	9.9	127.6	839.4		
Pope	395.3	2.2	112.3	8.7	38.4	233.6	1254.6	5.7	471.4	15.4	143.2	619.0		
Randolph	96.1	...	...	2.0	15.2	78.9	313.5	...	...	5.2	45.5	262.8		
Searcy	242.5	...	20.0	2.3	29.9	190.3	641.5	...	84.9	3.4	80.2	473.1		
Sharp	105.2	1.3	3.5	6.5	4.1	89.8	193.6	...	7.1	4.1	3.4	179.1		
Stone	277.2	1.7	47.3	8.0	23.6	196.7	768.7	7.6	196.7	9.1	64.9	490.3		
Van Buren	273.8	1.9	66.0	8.6	20.2	177.2	661.2	...	238.5	8.7	58.0	355.9		
Washington	186.2	0.4	7.1	6.2	15.2	157.2	435.6	...	22.8	11.5	26.1	375.3		
White	212.6	...	18.2	9.3	58.2	126.9	678.8	...	59.6	34.6	186.2	398.4		
All counties	4764.8	97.9	661.7	127.6	521.4	3356.2	13651.4	324.9	2520.4	228.4	1585.3	8992.4		

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 16—Volume of timber on timberland by class of timber and species group,
Ozark Counties, Arkansas, 1988

Class of timber	All species	Softwood			Hardwood	
		Pine			Soft ¹	Hard ²
		Planted	Natural	Other		
----- Million cubic feet -----						
Sawtimber trees:						
Saw-log portion	2314.1	54.7	428.6	44.1	269.9	1516.8
Upper-stem portion	414.6	8.7	61.1	7.8	48.3	288.7
Total	2728.8	63.4	489.7	51.9	318.2	1805.5
Poletimber trees	2036.0	34.4	172.0	75.7	203.3	1550.7
All growing-stock trees	4764.8	97.9	661.7	127.6	521.4	3356.2
Rough trees:						
Sawtimber size	302.3	0.3	3.8	10.9	31.6	255.8
Poletimber size	234.4	0.4	3.0	7.7	31.0	192.3
Total	536.7	0.7	6.9	18.6	62.5	448.1
Rotten trees:						
Sawtimber size	91.2	...	...	...	17.7	73.5
Poletimber size	6.9	...	...	...	1.8	5.1
Total	98.1	...	...	...	19.5	78.6
Salvable dead trees:						
Sawtimber size	13.7	1.0	...	0.5	0.3	11.9
Poletimber size	23.5	1.3	1.7	1.5	1.2	17.8
Total	37.3	2.3	1.7	2.0	1.5	29.7
All classes	5436.8	100.8	670.3	148.1	605.0	3912.5

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 17—Volume of live trees and growing stock on timberland by ownership class and species group,
Ozark Counties, Arkansas, 1988

Ownership class	Live trees						Growing stock					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Other	Soft ¹	Hard ²		Pine		Other	Soft ¹	Hard ²
		Planted	Natural					Planted	Natural			
----- Million cubic feet -----												
National forest	1365.4	37.6	208.9	14.9	143.2	960.8	1264.3	37.6	208.2	14.4	126.0	878.1
Other public	214.7	13.4	12.1	7.3	47.5	134.4	195.0	13.4	12.1	5.9	40.7	123.0
Forest industry	104.0	3.3	45.5	0.8	3.9	50.5	99.0	3.3	45.4	0.8	3.6	45.9
Other private	3715.5	44.2	402.1	123.1	408.9	2737.2	3206.4	43.6	396.1	106.4	351.1	2309.2
All ownerships	5399.6	98.5	668.6	146.2	603.5	3882.8	4764.8	97.9	661.7	127.6	521.4	3356.2

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 18—Average net annual growth of growing stock and sawtimber on timberland by county and species group, Ozark Counties, Arkansas, 1988

County	Growing stock						Sawtimber							
	All species	Softwood			Hardwood		All species	Softwood			Hardwood			
		Pine	Planted	Natural	Other	Soft ¹		Hard ²	Pine	Planted	Natural	Other	Soft ¹	Hard ²
----- Million cubic feet -----						----- Million board feet -----								
Baxter	7.7	0.1	0.6	0.3	0.6	6.2	31.7	1.2	3.4	0.9	2.1	24.1		
Benton	8.6	...	0.1	...	0.7	7.8	30.0	...	0.5	0.2	2.1	27.3		
Boone	2.1	...	...	0.1	...	1.9	9.3	...	0.4	0.2	...	8.7		
Carroll	5.2	...	...	0.1	0.4	4.8	18.3	...	-1.0	...	0.7	18.7		
Cleburne	8.4	0.2	3.2	0.2	0.8	4.0	25.1	1.5	14.2	0.4	2.4	6.7		
Conway	5.9	...	2.0	0.4	1.0	2.5	18.6	...	7.2	1.8	3.7	5.9		
Crawford	9.6	...	1.2	0.5	1.8	6.0	35.7	...	6.0	0.7	7.1	21.9		
Faulkner	5.7	...	0.9	0.1	1.0	3.6	18.1	...	1.7	0.2	3.9	12.3		
Franklin	5.2	0.3	1.5	0.2	0.8	2.4	25.6	1.3	6.4	0.1	3.3	14.4		
Fulton	6.4	0.4	1.1	0.1	...	4.8	19.3	4.1	3.2	0.1	0.3	11.7		
Independence	6.4	...	1.1	0.2	0.5	4.5	19.4	...	2.7	0.3	1.8	14.6		
Izard	7.6	...	2.0	0.2	0.3	5.1	21.5	...	8.8	0.1	1.2	11.3		
Johnson	6.9	...	2.7	...	1.4	2.9	29.2	...	9.0	0.1	6.5	13.6		
Madison	11.9	...	0.4	0.2	1.9	9.4	54.8	...	3.7	0.5	7.5	43.1		
Marion	9.2	...	0.3	0.5	0.2	8.2	32.3	...	1.4	0.4	1.1	29.3		
Newton	18.2	...	2.3	0.4	1.6	13.9	64.5	...	9.0	0.7	6.8	48.0		
Pope	9.2	...	3.0	0.5	0.4	5.4	38.6	0.5	15.1	1.3	0.1	21.6		
Randolph	2.8	...	...	...	0.5	2.2	18.4	...	...	0.1	3.0	15.3		
Searcy	12.8	...	0.4	0.1	1.8	10.6	40.9	...	2.1	...	5.9	32.9		
Sharp	4.9	0.3	0.1	0.3	0.2	4.1	10.9	0.3	0.5	0.4	0.2	9.5		
Stone	9.9	...	1.5	0.4	1.1	7.0	40.1	...	7.1	0.8	3.0	29.1		
Van Buren	11.3	...	3.5	0.3	0.8	6.7	40.4	0.1	14.5	0.1	3.4	22.3		
Washington	6.2	...	0.4	0.3	0.6	4.9	21.3	...	0.9	0.4	1.4	18.6		
White	11.8	0.2	1.0	0.2	3.5	6.9	40.2	1.6	3.5	0.5	12.2	22.4		
All counties	194.0	1.6	29.2	5.5	22.1	135.8	704.2	10.5	120.2	10.3	79.8	483.4		

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 19—Average net annual removals of growing stock and sawtimber on timberland by county and species group, Ozark Counties, Arkansas, 1988

County	Growing stock						Sawtimber							
	All species	Softwood			Hardwood		All species	Softwood			Hardwood			
		Pine	Planted	Natural	Other	Soft ¹		Hard ²	Pine	Planted	Natural	Other	Soft ¹	Hard ²
-----Million cubic feet-----														
Baxter	0.1	...	...	...	...	0.1	0.5	...	...	...	...	...	0.5	
Benton	1.1	...	...	...	...	1.1	4.2	...	...	...	...	...	4.2	
Boone	1.0	...	...	0.1	0.2	0.7	3.1	...	...	0.2	0.6	2.3		
Carroll	1.8	...	0.3	...	...	1.4	5.2	...	...	...	0.1	5.1		
Cleburne	3.8	...	1.9	...	0.1	1.8	10.9	...	7.2	...	0.2	3.5		
Conway	1.6	...	...	0.2	0.7	0.7	2.8	...	...	...	2.6	0.1		
Crawford	2.5	...	0.9	0.3	0.4	0.8	5.8	...	4.4	...	0.8	0.5		
Faulkner	1.7	...	0.5	...	0.6	0.6	7.0	...	1.8	...	2.7	2.5		
Franklin	2.5	0.4	0.6	...	0.1	1.3	7.6	0.2	3.5	...	0.4	3.4		
Fulton	3.6	...	2.0	...	0.1	1.4	11.8	...	5.6	...	0.5	5.7		
Independence	2.8	...	0.4	...	0.1	2.3	9.8	...	1.4	...	...	8.4		
Izard	1.4	...	1.2	...	0.1	0.1	5.7	...	4.8	...	0.3	0.7		
Johnson	2.8	...	1.8	...	...	1.0	7.8	...	6.6	0.2	...	1.0		
Madison	3.1	...	0.4	0.1	0.1	2.4	9.7	...	1.5	0.2	0.5	7.4		
Marion	0.2	...	...	...	...	0.2	...	...	...	...	...	...		
Newton	6.0	...	0.2	...	0.6	5.1	18.8	...	0.5	...	2.4	15.9		
Pope	5.8	...	3.1	...	0.3	2.3	16.5	...	9.9	...	0.9	5.8		
Randolph	2.9	...	...	...	0.2	2.7	9.5	...	...	...	0.3	9.2		
Searcy	2.4	...	0.1	...	0.1	2.2	7.2	...	...	...	0.2	6.9		
Sharp	3.2	1.0	...	...	...	2.2	8.4	1.1	...	...	...	7.4		
Stone	3.0	...	0.9	...	0.1	1.9	9.6	...	3.0	...	0.4	6.3		
Van Buren	2.7	0.4	1.6	...	...	0.7	7.5	1.3	5.2	...	...	1.0		
Washington	3.7	...	...	...	0.2	3.4	11.7	...	...	0.2	1.0	10.6		
White	2.8	...	...	...	0.3	2.5	8.5	...	...	...	1.4	7.2		
All counties	62.3	1.8	16.0	0.9	4.4	39.2	189.7	2.6	55.3	0.7	15.3	115.7		

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 20—Average net annual growth and average annual removals of growing stock on timberland by species, Ozark Counties, Arkansas, 1988

Species	Growth	Removals
- - - - Million cubic feet - - - -		
Yellow pines	30.7	17.8
Other softwoods	5.5	0.9
Total softwoods	36.2	18.7
Select white-red oaks	52.7	13.7
Other white-red oaks	54.1	19.1
Hickory	18.9	5.0
Hard maple	2.1	0.1
Sweetgum	6.9	1.1
Ash-walnut-black cherry	5.4	0.8
Yellow-poplar	0.1	...
Other hardwoods	17.7	3.9
Total hardwoods	157.9	43.6
All species	194.0	62.3

Table 21—Average net annual growth and average annual removals of sawtimber on timberland by species, Ozark Counties, Arkansas, 1988

Species	Growth	Removals
- - - - Million board feet - - - -		
Yellow pines	130.7	57.9
Other softwoods	10.3	0.7
Total softwoods	141.0	58.7
Select white-red oaks	195.8	42.0
Other white-red oaks	202.5	59.0
Hickory	49.5	12.6
Hard maple	7.9	...
Sweetgum	25.2	3.7
Ash-walnut-black cherry	20.6	2.2
Yellow-poplar	0.5	...
Other hardwoods	61.2	11.6
Total hardwoods	563.2	131.0
All species	704.2	189.7

Table 22—Average annual mortality of growing stock and sawtimber on timberland by species, Ozark Counties, Arkansas, 1988

Species	Growing stock	Sawtimber
- - Million cubic feet - - Million board feet - -		
Yellow pines	2.5	4.9
Other softwoods	0.4	0.6
Total softwoods	2.8	5.5
Select white-red oaks	8.9	24.4
Other white-red oaks	10.2	19.5
Hickory	3.7	6.2
Hard maple	0.2	0.3
Sweetgum	2.0	7.7
Ash-walnut-black cherry	0.8	1.8
Other hardwoods	3.6	8.0
Total hardwoods	29.5	67.8
All species	32.4	73.4

Table 23—Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, Ozark Counties, Arkansas, 1988

Ownership class	Growth						Removals							
	All species	Softwood			Hardwood		All species	Softwood			Hardwood			
		Pine	Planted	Natural	Other	Soft ¹		Hard ²	Pine	Planted	Natural	Other	Soft ¹	Hard ²
----- Million cubic feet -----														
National forest	38.6	0.4	7.7	0.8	4.5	25.2	12.8	0.4	2.7	...	0.8	8.8		
Other public	8.9	0.3	0.3	0.1	1.7	2.4	1.9	1.0	...	...	...	0.8		
Forest industry	6.4	...	3.0	0.1	0.2	3.1	5.0	...	2.4	...	...	2.7		
Other private	140.2	0.8	18.1	4.4	15.7	101.2	42.6	0.4	10.9	0.9	3.6	26.9		
All ownerships	194.0	1.6	29.2	5.5	22.1	135.8	62.3	1.8	16.0	0.9	4.4	39.2		

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 24—Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species, Ozark Counties, Arkansas, 1988

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine			Soft ¹	Hard ²		Pine			Soft ¹	Hard ²
		Planted	Natural	Other				Planted	Natural	Other		
----- Million board feet -----												
National forest	174.5	2.0	36.7	0.9	20.8	114.0	40.9	0.2	12.2	...	2.2	26.3
Other public	41.0	1.5	1.9	0.3	6.7	30.6	4.6	1.1	0.2	...	...	3.4
Forest industry	16.8	...	9.5	...	0.4	6.9	13.3	...	7.9	...	...	5.4
Other private	471.9	7.0	72.1	9.1	51.9	331.8	130.9	1.3	35.0	0.7	13.1	80.7
All ownerships	704.2	10.5	120.2	10.3	79.8	483.4	189.7	2.6	55.3	0.7	15.3	115.7

¹ Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.

² Hardwood species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

**Table 25—Volume of sawtimber on timberland by species and tree grade,
Ozark Counties, Arkansas, 1988**

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
----- Million board feet -----						
Yellow pines	2845.3	540.4	427.0	1859.3	...	18.7
Cypress	32.6	...	16.3	12.7	...	3.6
Redcedar	195.7	182.5	...	...	...	13.3
Total softwoods	3073.7	722.8	443.3	1871.9	...	35.6
Select white-red oaks	3628.7	96.7	508.3	1930.9	847.1	245.7
Other white-red oaks	3765.5	94.4	499.1	1931.5	937.7	302.8
Hickory	1080.6	44.2	114.9	540.3	285.0	96.2
Hard maple	99.7	...	...	34.7	41.2	23.9
Sweetgum	602.7	43.2	111.1	270.2	132.1	46.1
Tupelo and blackgum	507.9	37.3	123.0	212.2	34.9	100.5
Ash-walnut-black cherry	314.0	40.0	81.5	120.6	11.5	60.4
Yellow-poplar	4.0	...	...	...	4.0	...
Other hardwoods	574.5	40.1	75.5	251.1	105.4	102.3
Total hardwoods	10577.7	395.9	1513.4	5291.5	2399.0	978.0
All species	13651.4	1118.7	1956.7	7163.4	2399.0	1013.6

Supplemental Tables 26–36

**Table 26—Area of timberland by stand age, forest type group and type of regeneration,
Ozark Counties, Arkansas, 1988**

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
----- Thousand acres -----						
1-10	32.5	5.6	5.0	5.6	5.7	64.7
11-20	10.3	...	...	12.3	...	...
21-30	...	10.8	6.6	...	...	6.6
31-40	6.3	7.1	...	...	...	...
41-50	5.6	...	...	...	...	...
>50	5.1	...	...	...	...	...
Mixed	27.1	392.5	22.9	718.8	29.7	4348.7
Total	86.9	416.0	34.5	736.7	35.4	4420.1

Table 27—*Volume of softwood growing stock on timberland by forest type, Ozark Counties, Arkansas, 1988*

County	Total	Forest type group				
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress
		Planted	Natural			
----- Million cubic feet -----						
Baxter	27.5	12.1	0.4	10.9	4.0	...
Benton	3.1	...	1.2	...	1.9	...
Boone	2.2	...	...	1.0	1.2	...
Carroll	10.9	...	...	6.7	4.2	...
Cleburne	78.8	11.3	32.7	25.0	9.7	...
Conway	40.2	...	17.5	16.5	6.2	...
Crawford	42.2	2.3	18.8	16.8	4.3	...
Faulkner	12.3	5.6	...	4.6	2.1	...
Franklin	43.5	...	29.6	11.9	2.0	...
Fulton	22.0	21.0	...	0.2	0.9	...
Independence	32.8	...	17.5	10.2	5.1	...
Izard	59.5	...	39.2	12.3	8.0	...
Johnson	101.4	27.9	49.2	19.8	4.6	...
Madison	12.5	...	0.2	12.1	0.2	...
Marion	14.9	...	7.2	1.9	5.9	...
Newton	49.8	...	23.7	15.6	10.6	...
Pope	123.3	...	75.6	35.6	11.7	0.3
Randolph	2.0	...	0.6	...	1.0	0.4
Searcy	22.3	...	9.4	2.2	10.7	...
Sharp	11.3	...	1.7	6.0	3.6	...
Stone	57.0	2.8	15.5	31.5	7.1	...
Van Buren	76.4	1.9	32.5	29.0	13.0	...
Washington	13.7	...	4.1	7.6	2.0	...
White	27.5	...	10.4	5.3	5.6	6.3
All counties	887.2	84.8	387.0	282.6	125.7	7.0

Table 28—Volume of hardwood growing stock on timberland by forest type,
Ozark Counties, Arkansas, 1988

County	Total	Forest type group					
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress	Elm-ash- cottonwood
		Planted	Natural				
----- Million cubic feet -----							
Baxter	144.2	2.6	...	13.5	128.2	...	...
Benton	179.1	...	...	0.4	175.1	...	3.5
Boone	91.3	...	...	6.1	85.2	...	...
Carroll	111.4	...	...	3.1	108.4	...	...
Cleburne	100.9	2.1	8.1	26.7	61.7	2.3	...
Conway	76.5	...	4.7	14.6	37.6	19.6	...
Crawford	188.7	1.3	...	29.4	154.8	3.2	...
Faulkner	84.2	0.3	...	4.2	50.8	28.9	...
Franklin	163.5	...	4.1	13.9	143.4	2.1	...
Fulton	75.5	0.8	...	1.0	73.8	...	...
Independence	117.4	...	3.1	14.5	94.4	5.3	...
Izard	96.0	...	7.3	14.4	69.0	5.3	...
Johnson	225.4	3.8	6.5	20.7	194.5	...	...
Madison	298.1	...	...	9.0	289.1	...	...
Marion	103.5	...	2.0	2.6	98.9	...	...
Newton	366.4	...	5.4	15.0	346.0	...	...
Pope	272.0	...	13.3	28.5	228.5	1.8	...
Randolph	94.1	...	0.4	1.9	62.1	29.6	...
Searcy	220.2	...	2.9	6.3	200.7	10.3	...
Sharp	94.0	...	1.1	6.2	80.2	6.4	...
Stone	220.3	0.9	3.1	31.9	184.4	...	...
Van Buren	197.4	...	3.4	25.4	168.5	...	...
Washington	172.4	...	...	6.0	166.4	...	...
White	185.1	...	5.9	4.4	75.5	99.3	...
All counties	3877.6	11.7	71.4	299.7	3277.0	214.2	3.5

Table 29—Volume of softwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, Ozark Counties, Arkansas, 1988

Forest type group		Million cubic feet				
County	Total	Loblolly-shortleaf pine		Natural	Oak-pine	Oak-hickory
		Oak-gum-cypress	Oak-hickory			
Baxter	15.9	7.2	...	7.2	1.5	...
Benton	2.5	...	0.8	...	1.6	...
Boone	1.1	...	...	...	1.1	...
Carroll	5.9	...	...	4.1	1.8	...
Cleburne	50.5	8.6	21.0	14.6	6.3	...
Conway	22.4	...	7.9	11.3	3.2	...
Crawford	27.6	...	17.7	7.9	2.0	...
Faulkner	4.0	0.9	...	2.0	1.1	...
Franklin	24.2	...	17.5	6.5	0.3	...
Fulton	9.4	9.1	...	...	0.3	...
Independence	16.3	...	10.6	3.4	2.3	...
Izard	29.8	...	18.5	5.7	5.7	...
Johnson	69.5	23.5	29.9	13.4	2.7	...
Madison	9.1	...	...	8.9	0.2	...
Marion	6.6	...	5.3	0.2	1.1	...
Newton	29.9	...	15.4	7.4	7.2	...
Pope	80.5	...	54.4	20.6	5.5	...
Randolph	1.4	...	0.3	...	0.6	0.4
Searcy	15.8	...	8.1	0.3	7.4	...
Sharp	2.1	...	...	1.1	1.0	...
Stone	35.6	1.7	7.2	23.0	3.7	...
Van Buren	44.2	...	18.7	19.0	6.6	...
Washington	6.3	...	1.9	3.9	0.4	...
White	16.8	...	4.7	4.0	2.4	5.6
All counties	527.4	51.0	239.7	164.6	66.0	6.1

----- Million cubic feet -----

Table 30—Volume of hardwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, Ozark Counties, Arkansas, 1988

County	Total	Forest type group					
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress	Elm-ash- cottonwood
		Planted	Natural				
----- Million cubic feet -----							
Baxter	78.0	1.8	...	5.9	70.3	...	...
Benton	93.6	...	...	0.4	92.8	...	0.4
Boone	46.8	...	...	3.3	43.5	...	...
Carroll	57.3	...	...	0.6	56.7	...	...
Cleburne	30.3	0.9	2.5	8.7	17.5	0.7	...
Conway	35.8	...	3.3	6.3	15.8	10.4	...
Crawford	92.2	...	...	12.4	79.5	0.4	...
Faulkner	37.5	0.1	...	0.7	18.8	17.9	...
Franklin	75.9	...	1.4	3.6	70.2	0.7	...
Fulton	28.2	0.2	...	0.7	27.3	...	...
Independence	62.6	...	0.6	7.3	50.0	4.7	...
Izard	40.7	...	1.6	5.7	29.8	3.5	...
Johnson	113.3	0.9	2.4	6.4	103.5	...	...
Madison	142.8	...	...	3.7	139.1	...	...
Marion	49.5	...	0.6	1.1	47.8	...	...
Newton	160.5	...	4.0	5.7	150.7	...	...
Pope	127.9	...	4.0	10.8	112.0	1.0	...
Randolph	51.6	...	...	1.2	29.3	21.1	...
Searcy	93.9	...	0.9	0.5	87.2	5.2	...
Sharp	32.7	...	0.6	1.4	26.1	4.7	...
Stone	95.0	0.2	0.5	19.0	75.3	...	...
Van Buren	70.9	...	0.3	9.8	60.8	...	...
Washington	69.7	...	...	3.3	66.3	...	...
White	100.3	...	1.2	1.2	29.9	67.9	...
All counties	1786.7	4.2	24.0	119.7	1500.1	138.3	0.4

Table 31—Volume of timber on timberland by county, class of timber and species group,
Ozark Counties, Arkansas, 1988

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
----- <i>Million cubic feet</i> -----							
Baxter	197.6	27.5	144.2	1.4	22.2	...	2.3
Benton	206.2	3.1	179.1	...	23.7	...	0.4
Boone	110.2	2.2	91.3	0.2	13.7	...	2.8
Carroll	152.8	10.9	111.4	0.8	25.0	...	4.7
Cleburne	189.3	78.8	100.9	0.9	7.4	...	1.4
Conway	129.9	40.2	76.5	2.9	9.2	...	1.1
Crawford	254.9	42.2	188.7	2.2	20.6	...	1.2
Faulkner	114.4	12.3	84.2	0.7	15.0	...	2.2
Franklin	237.7	43.5	163.5	0.8	23.5	...	6.4
Fulton	115.8	22.0	75.5	1.0	16.7	...	0.5
Independence	168.4	32.8	117.4	0.9	15.3	...	2.0
Izard	176.1	59.5	96.0	0.9	17.0	...	2.7
Johnson	355.4	101.4	225.4	1.6	23.0	...	4.0
Madison	353.3	12.5	298.1	0.9	31.3	...	10.5
Marion	141.2	14.9	103.5	0.8	17.9	...	4.1
Newton	482.4	49.8	366.4	0.6	48.8	...	16.8
Pope	420.4	123.3	272.0	1.0	20.2	...	4.0
Randolph	118.1	2.0	94.1	0.8	17.5	...	3.7
Searcy	276.9	22.3	220.2	0.6	23.5	...	10.2
Sharp	132.6	11.3	94.0	0.7	24.0	...	2.6
Stone	304.2	57.0	220.3	1.7	22.0	...	3.2
Van Buren	303.1	76.4	197.4	2.1	19.2	...	8.1
Washington	229.9	13.7	172.4	1.0	40.9	...	1.9
White	228.5	27.5	185.1	1.6	13.2	...	1.1
All counties	5399.6	887.2	3877.6	26.1	510.6	...	98.1

Table 32—Number of live trees on timberland by detailed species and diameter class, Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)											
		1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Thousand trees-----													
Shortleaf pine	243531	101159	59819	28499	24048	13266	9094	4636	1810	831	274	95	...
Loblolly pine	13412	5590	3061	1926	1658	815	297	57	...	...	...	8	...
Redcedar	255568	159191	59890	19577	11156	3303	1587	598	196	55	...	15	...
Cypress	1512	601	601	134	...	...	...	47	36	13	44	33	4
Total softwoods	514024	266541	123371	50135	36863	17384	10978	5338	2041	899	317	151	4
Select white oaks	324041	124165	74915	49039	32801	19355	10323	6819	3082	1717	906	870	48
Select red oaks	104386	41450	15939	13743	10709	7815	5583	3913	2302	1344	788	749	51
Other white oaks	274144	111260	74703	35623	22151	12953	7227	4344	2806	1321	746	993	17
Other red oaks	281990	142954	48578	27712	22298	13885	10226	6495	4359	2394	1418	1538	132
Sweet pecan	88	...	...	...	66	...	...	22	...	...	...	...	...
Water hickory	1272	653	...	141	308	...	70	...	37	28	22	9	4
Other hickories	560383	326091	113710	63648	29189	15012	6705	3613	1483	466	247	203	17
Persimmon	67606	55113	10443	1393	377	136	119	24	...	...	...	...	...
Hard maple	61497	39253	13906	2482	3117	1406	564	367	192	109	57	45	...
Soft maple	116754	90184	18602	4878	1371	852	405	221	71	52	86	33	...
Boxelder	3162	1564	534	272	237	252	151	39	73	30	...	10	...
Beech	10776	7646	1500	535	186	109	191	111	141	120	94	145	...
Sweetgum	65131	27656	15434	10260	4696	2395	2003	1216	672	406	194	189	10
Blackgum	145820	103255	22697	7767	4948	2141	1515	1114	1173	520	255	404	32
Other gums/tupelos	1234	...	...	254	377	170	123	100	36	58	22	65	28
White ash	50331	32206	10031	3346	1900	1166	830	380	258	90	44	60	21
Other ashes	11587	8152	1030	1040	389	207	153	182	114	102	103	104	11
Sycamore	5589	1489	1363	801	694	407	235	215	150	119	34	73	10
Cottonwood	42	...	...	...	...	...	...	...	18	...	12	12	...
Basswood	3840	2590	511	104	163	91	203	85	42	12	21	17	...
Yellow-poplar	46	...	...	...	...	...	27	19	...	...	...	...	...
Magnolia	464	...	...	175	66	122	55	...	15	23	9	...	...
Willow	1597	522	...	367	282	279	40	44	39	17	...	8	...
Black walnut	8633	2125	2573	1309	1186	720	334	119	129	85	19	35	...
Black cherry	25368	17779	3928	1669	862	646	140	229	36	27	30	22	...
American elm	25942	17564	3622	2302	1447	401	232	153	90	66	12	53	...
Other elms	240521	178399	44565	11000	4030	1544	468	211	159	36	61	47	...
River birch	372	...	...	180	...	40	28	...	32	40	33	9	10
Hackberry	12857	8833	1117	1208	799	407	192	178	36	58	13	17	...
Black locust	10271	3606	1946	2402	1018	709	367	82	94	36	11	...	...
Other locusts	5214	2601	1176	426	219	532	113	90	36	...	21	...	...
Sassafras	85036	75269	7307	2112	133	191	25	...	...	...	...	...	...
Dogwood	313696	263764	45231	3990	570	140	...	...	...	...	...	...	...
Holly	609	462	...	147	...	...	...	...	...	...	...	...	...
Other commercial	15180	8845	4200	1514	288	171	60	46	17	26	11	...	...
Total hardwoods	2835478	1695450	539560	251839	146879	84254	48706	30430	17692	9300	5267	5711	391
Noncommercial	287884	226856	38272	11744	5687	2549	1195	825	477	152	88	40	...
All species	3637386	2188847	701204	313718	189428	104187	60879	36593	20210	10351	5672	5902	394

Table 33—Number of growing-stock trees on timberland by detailed species and diameter class,
Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)									
		5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
-----Thousand trees-----											
Shortleaf pine	80522	27173	23767	12989	9037	4590	1793	819	274	80	...
Loblolly pine	4648	1845	1658	815	265	57	...	...	...	8	...
Redcedar	31174	17208	9675	2340	1273	463	163	44	...	7	...
Cypress	276	134	...	...	...	27	36	13	32	33	1
Total softwoods	116621	46360	35101	16144	10575	5138	1992	876	306	128	1
Select white oaks	111748	43901	30145	18199	8763	5688	2536	1265	671	550	29
Select red oaks	40247	12026	9355	6932	4608	3338	1829	1044	614	476	26
Other white oaks	72649	30345	19282	11129	5053	3076	1912	755	538	547	12
Other red oaks	81365	24587	21267	12936	8707	5705	3774	2047	1161	1105	76
Sweet pecan	88	...	66	...	...	22	...	...	...	...	...
Water hickory	522	141	211	...	70	...	37	28	22	9	4
Other hickories	99519	51262	25396	12900	5127	2865	1215	386	208	142	17
Persimmon	1575	1130	230	94	98	24	...	...	...	...	...
Hard maple	6674	2030	2469	1266	389	283	126	60	24	28	...
Soft maple	5250	3441	747	547	220	138	56	26	55	19	...
Boxelder	474	95	172	122	32	39	...	14	...	...	...
Beech	1136	535	186	109	26	37	56	72	48	69	...
Sweetgum	19790	8958	4283	2306	1770	1095	659	392	174	142	10
Blackgum	14986	5750	3955	1833	1153	679	827	352	156	258	22
Other gums/tupelos	1021	254	377	170	...	49	...	58	22	65	26
White ash	5540	2313	1285	750	565	316	131	90	25	44	21
Other ashes	1703	580	296	178	92	182	66	91	103	104	11
Sycamore	1948	405	479	334	209	174	135	96	34	73	10
Cottonwood	42	...	...	...	...	...	18	...	12	12	...
Basswood	586	...	163	91	181	85	28	12	9	17	...
Yellow-poplar	46	...	...	...	27	19	...	...	...	...	...
Magnolia	203	...	66	36	55	...	15	23	9	...	...
Willow	950	367	204	232	40	44	39	17	...	8	...
Black walnut	2684	838	959	457	197	60	97	61	9	5	...
Black cherry	2743	1044	801	559	59	188	36	13	30	14	...
American elm	3357	1596	1028	326	168	109	53	38	12	26	...
Other elms	12417	7095	3310	1361	335	115	107	36	39	18	...
River birch	167	70	...	...	...	...	32	13	33	9	10
Hackberry	2152	962	538	282	162	103	18	58	13	17	...
Black locust	1442	716	383	211	56	39	12	25	...	...	...
Other locusts	746	...	154	416	57	72	36	...	11	...	...
Sassafras	903	775	59	45	25	...	...	...	...	...	...
Dogwood	601	554	...	47	...	...	...	...	...	...	...
Holly	147	147	...	...	...	...	...	...	...	...	...
Other commercial	533	222	145	132	...	22	...	13	...	...	...
Total hardwoods	495954	202138	128008	73998	38243	24567	13850	7084	4032	3759	275
All species	612574	248498	163109	90142	48818	29704	15842	7960	4338	3888	276

Table 34—Volume of growing-stock trees on timberland by species and diameter class,
Ozark Counties, Arkansas, 1988

Species	Diameter class (inches at breast height)										
	All classes	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
----- Million cubic feet -----											
Shortleaf pine	728.8	60.2	132.8	140.0	154.0	115.4	65.7	40.3	15.0	5.5	...
Loblolly pine	30.8	3.2	10.2	10.7	4.7	1.3	...	...	...	0.7	...
Redcedar	120.9	35.8	39.6	18.2	15.2	7.4	3.2	1.1	...	0.3	...
Cypress	6.7	0.3	...	...	...	0.8	0.9	0.2	1.8	1.4	1.3
Total softwoods	887.2	99.6	182.6	168.9	173.9	124.8	69.8	41.6	16.8	7.9	1.3
Select white oaks	902.8	114.8	173.7	181.8	134.5	119.7	71.6	45.5	29.4	29.3	2.6
Select red oaks	449.6	31.9	53.6	68.9	71.4	70.6	52.3	39.2	28.2	31.3	2.2
Other white oaks	453.7	61.8	84.4	86.0	61.4	49.9	41.3	21.2	18.5	27.7	1.4
Other red oaks	812.1	52.9	107.2	117.1	122.9	111.4	103.8	73.1	49.3	66.4	8.0
Sweet pecan	0.7	...	0.3	...	...	0.4	...	...	...	...	...
Water hickory	8.5	0.3	1.2	...	1.1	...	0.9	1.7	1.5	0.8	0.9
Other hickories	524.7	95.9	109.2	110.8	73.2	61.8	34.4	16.4	10.8	9.9	2.4
Persimmon	6.2	2.1	1.5	0.9	1.3	0.4	...	...	...	...	...
Hard maple	49.2	4.6	12.5	12.3	5.2	5.9	4.1	1.9	1.1	1.6	...
Soft maple	29.7	8.7	3.8	4.7	3.1	3.1	1.7	1.5	2.2	0.9	...
Boxelder	4.2	0.4	0.8	1.0	0.5	0.8	...	0.7	...	...	...
Beech	16.9	1.2	0.8	1.5	0.3	1.1	1.8	3.7	2.1	4.5	...
Sweetgum	185.0	18.2	23.1	22.9	30.5	27.5	22.9	17.0	10.1	11.0	1.8
Blackgum	140.4	12.3	19.9	16.9	16.4	15.5	22.2	14.1	6.7	14.6	2.0
Other gums/tupelos	12.8	0.6	1.4	1.2	...	0.8	...	1.4	0.7	4.0	2.7
White ash	43.4	4.8	6.3	6.8	7.1	6.0	3.6	3.4	0.9	2.0	2.8
Other ashes	27.0	1.3	1.9	1.4	1.0	3.4	1.8	3.4	3.9	7.4	1.4
Sycamore	32.0	1.2	2.7	4.2	3.4	4.9	4.4	3.2	1.6	5.1	1.4
Cottonwood	2.6	...	...	...	...	...	0.8	...	0.6	1.1	...
Basswood	11.5	...	0.7	1.0	2.9	2.0	1.1	0.7	0.6	2.5	...
Yellow-poplar	1.0	...	...	...	0.5	0.5	...	...	...	...	...
Magnolia	3.9	...	0.5	0.3	0.9	...	0.6	1.2	0.5	...	...
Willow	6.7	0.9	0.6	2.0	0.4	0.6	1.2	0.5	...	0.5	...
Black walnut	19.8	1.6	4.3	4.5	2.9	1.3	2.7	2.0	0.4	0.2	...
Black cherry	19.8	2.6	3.7	4.6	1.1	4.3	1.1	0.4	1.1	0.9	...
American elm	19.5	3.0	5.1	2.7	2.3	2.1	1.6	1.3	0.4	1.1	...
Other elms	54.6	14.0	13.9	11.8	5.6	1.9	3.1	1.3	1.7	1.2	...
River birch	3.6	0.2	...	...	...	...	0.7	0.4	1.0	0.4	0.9
Hackberry	14.3	1.5	2.3	2.7	2.4	1.8	0.5	1.8	0.4	1.0	...
Black locust	7.2	1.1	1.8	1.8	0.7	0.7	0.3	0.7	...	...	...
Other locusts	7.9	...	0.9	3.1	1.1	1.5	0.9	...	0.5	...	...
Sassafras	2.6	1.6	0.4	0.4	0.2	...	...	...	...	...	...
Dogwood	1.1	0.8	...	0.3	...	...	...	...	...	...	...
Holly	0.2	0.2	...	...	...	...	...	...	...	...	...
Other commercial	2.4	0.4	0.6	0.7	...	0.3	...	0.4	...	...	...
Total hardwoods	3877.6	441.1	638.9	674.0	554.6	500.2	381.2	258.1	173.9	225.2	30.6
All species	4764.8	540.6	821.4	842.9	728.5	625.0	451.0	299.7	190.7	233.1	31.9

Table 35—Volume of growing stock in the saw-log portion of sawtimber trees on timberland by detailed species and diameter class, Ozark Counties, Arkansas, 1988

Species	All classes	Diameter class (inches at breast height)							
		9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
----- Million cubic feet -----									
Shortleaf pine	469.1	115.9	136.0	101.9	59.8	37.0	13.3	5.2	...
Loblolly pine	14.3	8.4	4.2	1.0	...	...	...	0.6	...
Redcedar	38.0	14.7	13.1	6.5	2.5	1.0	...	0.2	...
Cypress	6.1	...	...	0.7	0.8	0.2	1.7	1.4	1.3
Total softwoods	527.4	138.9	153.3	110.1	63.0	38.2	15.0	7.5	1.3
Select white oaks	358.8	...	103.4	100.8	61.3	40.1	26.2	24.6	2.4
Select red oaks	249.5	...	55.7	59.9	45.2	34.5	24.8	27.3	2.2
Other white oaks	188.8	...	49.9	42.7	35.8	18.2	16.2	24.6	1.4
Other red oaks	451.8	...	95.8	94.2	90.4	63.8	42.9	57.3	7.4
Sweet pecan	0.3	...	...	0.3	...	...	...	...	...
Water hickory	6.0	...	0.7	...	0.9	1.5	1.4	0.7	0.9
Other hickories	174.0	...	57.5	52.5	29.0	14.7	9.3	8.7	2.3
Persimmon	1.3	...	1.0	0.3	...	...	...	...	...
Hard maple	16.0	...	4.1	4.5	3.6	1.6	0.9	1.2	...
Soft maple	10.2	...	2.3	2.5	1.3	1.3	1.9	0.8	...
Boxelder	1.6	...	0.3	0.7	...	0.5	...	...	...
Beech	11.7	...	0.2	0.9	1.7	3.1	1.7	4.0	...
Sweetgum	100.9	...	21.7	22.6	19.9	15.7	9.2	10.2	1.8
Blackgum	79.9	...	11.9	13.1	20.2	12.9	6.3	13.6	1.9
Other gums/tupelos	8.4	...	...	0.5	...	1.0	0.6	3.8	2.6
White ash	21.3	...	5.5	5.0	3.0	3.1	0.8	1.8	2.2
Other ashes	19.4	...	0.7	2.8	1.6	2.9	3.4	6.7	1.4
Sycamore	20.2	...	2.2	3.8	4.0	2.9	1.5	4.6	1.3
Cottonwood	2.2	...	...	...	0.6	...	0.6	1.1	...
Basswood	8.6	...	2.4	1.7	1.1	0.6	0.5	2.3	...
Yellow-poplar	0.7	...	0.4	0.3	...	...	...	...	...
Magnolia	2.6	...	0.6	...	0.5	1.1	0.4	...	...
Willow	2.7	...	0.2	0.4	1.1	0.5	...	0.5	...
Black walnut	7.5	...	2.1	1.1	2.0	1.8	0.3	0.2	...
Black cherry	7.2	...	0.7	3.9	0.8	0.4	0.6	0.8	...
American elm	7.3	...	1.8	1.7	1.3	1.2	0.4	0.8	...
Other elms	12.6	...	4.5	1.6	2.7	1.2	1.5	1.1	...
River birch	3.2	...	...	...	0.7	0.4	0.9	0.4	0.9
Hackberry	6.1	...	1.6	1.3	0.4	1.5	0.3	1.0	...
Black locust	2.0	...	0.5	0.6	0.2	0.7	...	...	...
Other locusts	3.0	...	0.8	1.1	0.7	...	0.4	...	...
Sassafras	0.1	...	0.1	...	...	...	...	...	...
Other commercial	0.7	...	...	0.3	...	0.4	...	...	...
Total hardwoods	1786.7	...	428.6	421.2	329.8	227.4	153.0	198.0	28.8
All species	2314.1	138.9	581.9	531.3	392.8	265.7	168.0	205.5	30.1

Table 36—Volume of timber on timberland by species and class of timber,
Ozark Counties, Arkansas, 1988

Species	All live	Growing stock	Rough	Rotten
----- Million cubic feet -----				
Shortleaf pine	735.9	728.8	7.1	...
Loblolly pine	31.2	30.8	0.5	...
Redcedar	138.7	120.9	17.8	...
Cypress	7.5	6.7	0.8	...
Total softwoods	913.3	887.2	26.1	...
Select white oaks	990.0	902.8	77.2	10.0
Select red oaks	506.0	449.6	39.8	16.6
Other white oaks	542.4	453.7	72.9	15.8
Other red oaks	882.3	812.1	52.5	17.7
Sweet pecan	0.7	0.7	...	...
Water hickory	8.7	8.5	0.2	...
Other hickories	592.4	524.7	59.5	8.2
Persimmon	7.5	6.2	1.3	...
Hard maple	59.2	49.2	8.8	1.2
Soft maple	40.7	29.7	9.5	1.5
Boxelder	7.0	4.2	1.9	0.9
Beech	26.2	16.9	5.4	3.8
Sweetgum	193.8	185.0	5.5	3.3
Blackgum	172.4	140.4	19.1	12.9
Other gums/tupelos	15.8	12.8	2.9	0.1
White ash	55.6	43.4	11.4	0.8
Other ashes	29.6	27.0	2.5	0.1
Sycamore	35.4	32.0	3.2	0.3
Cottonwood	2.6	2.6	...	...
Basswood	12.5	11.5	0.6	0.4
Yellow-poplar	1.0	1.0	...	...
Magnolia	4.5	3.9	0.4	0.2
Willow	6.9	6.7	0.2	...
Black walnut	25.0	19.8	4.7	0.6
Black cherry	23.7	19.8	4.0	...
American elm	25.3	19.5	5.4	0.3
Other elms	68.6	54.6	13.5	0.6
River birch	4.8	3.6	1.2	...
Hackberry	17.3	14.3	2.9	0.1
Black locust	18.0	7.2	8.2	2.6
Other locusts	9.8	7.9	1.9	...
Sassafras	4.1	2.6	1.1	0.4
Dogwood	5.9	1.1	4.9	...
Holly	0.2	0.2	...	...
Other commercial	5.8	2.4	3.4	...
Total hardwoods	4401.7	3877.6	426.0	98.1
Noncommercial	84.6	...	84.6	...
All species	5399.6	4764.8	536.7	98.1

Graphics

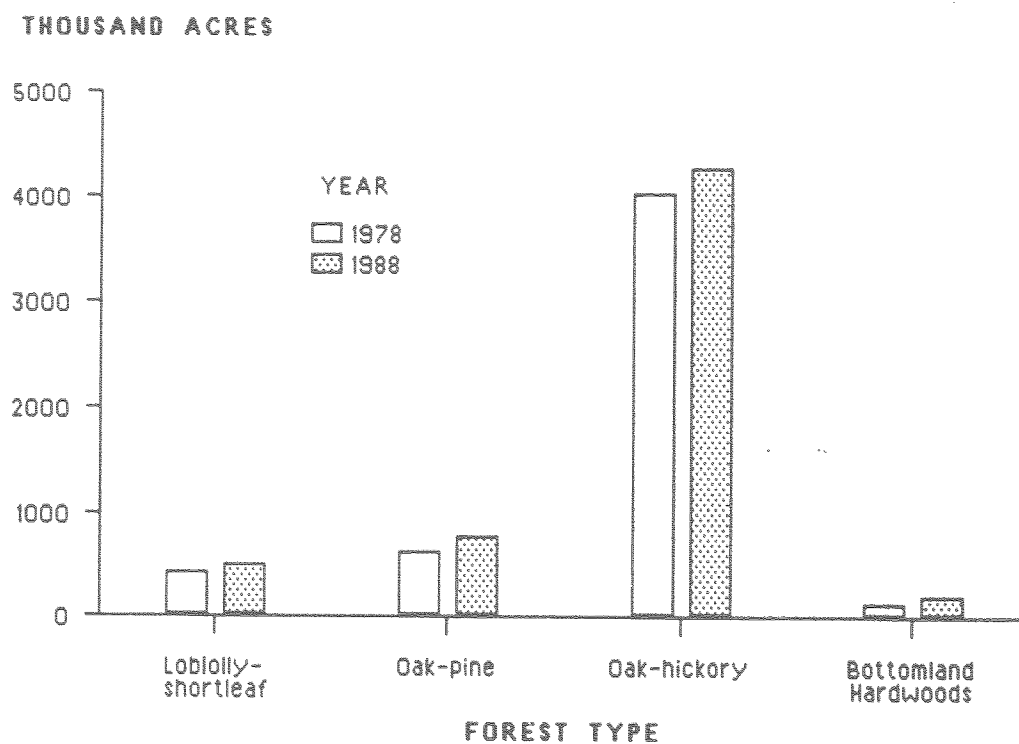


Figure 1.--Area of timberland by forest type, Ozark Counties, Arkansas, 1978 and 1988.

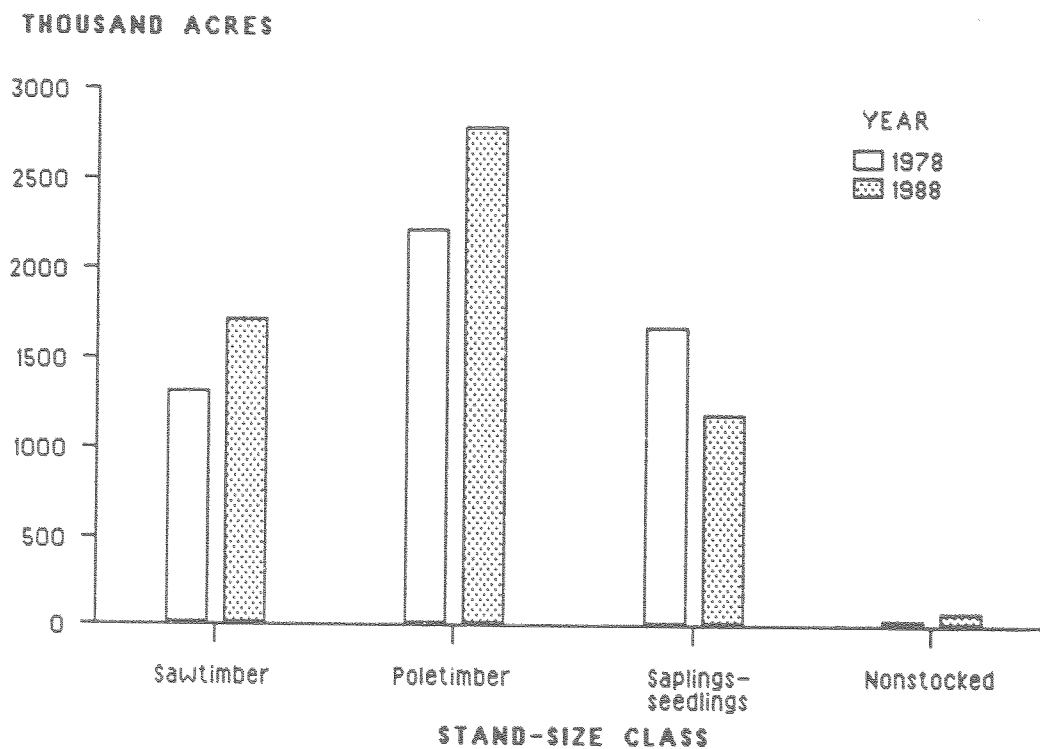


Figure 2.--Area of timberland by stand-size class, Ozark Counties, Arkansas, 1978 and 1988.

MILLION CUBIC FEET

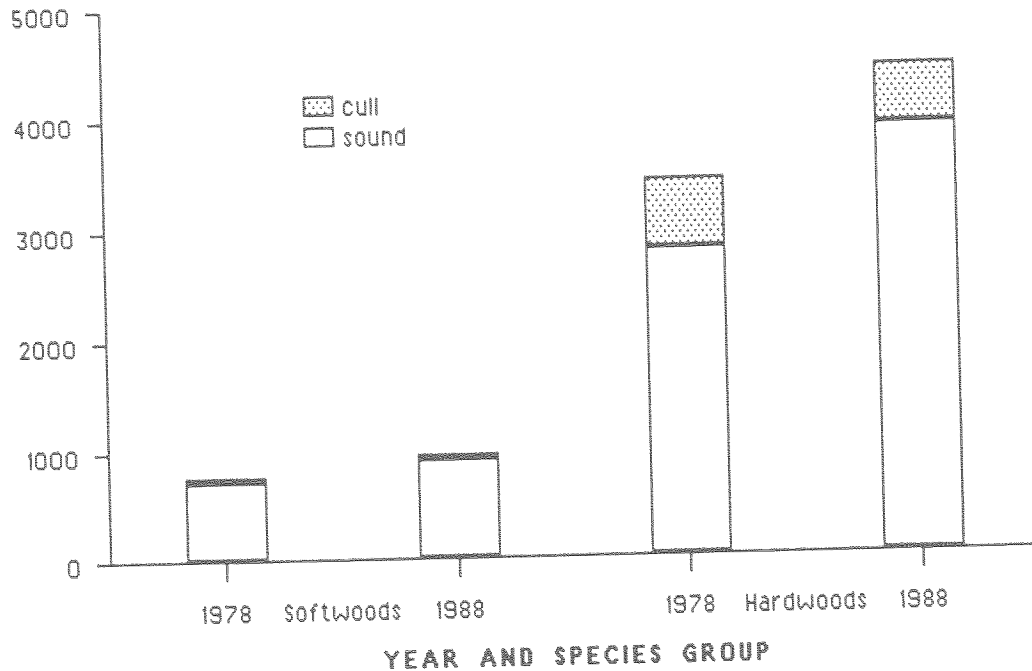


Figure 3.--Volume of timber on timberland by species group and class of timber, Ozark Counties, Arkansas, 1978 and 1988.

MILLION CUBIC FEET

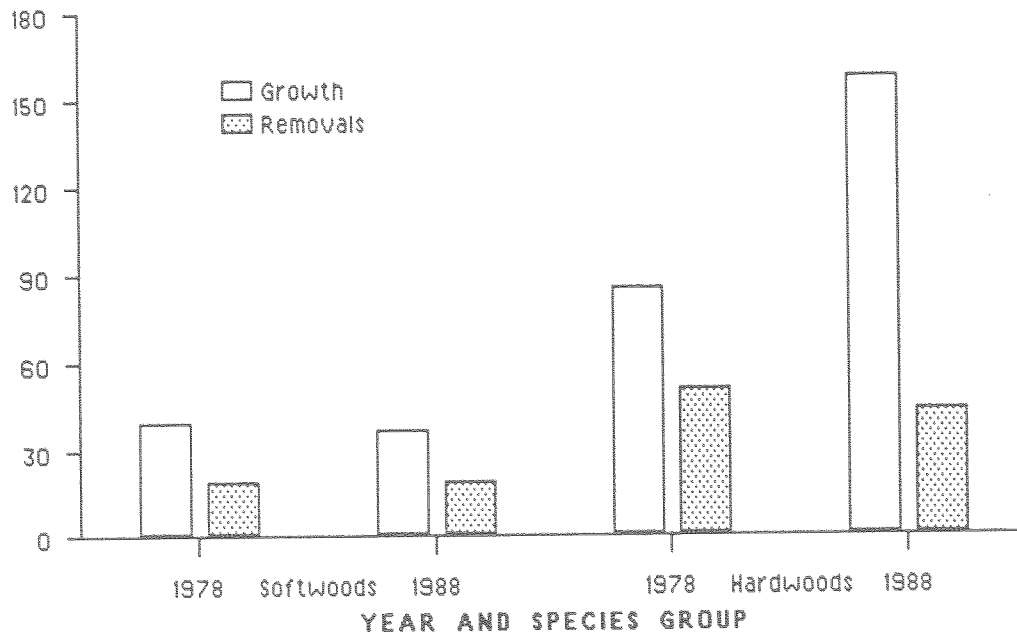


Figure 4.--Average net annual growth and average annual removals of growing stock on timberland by species group, Ozark Counties, Arkansas, 1978 and 1988.

MILLION CUBIC FEET

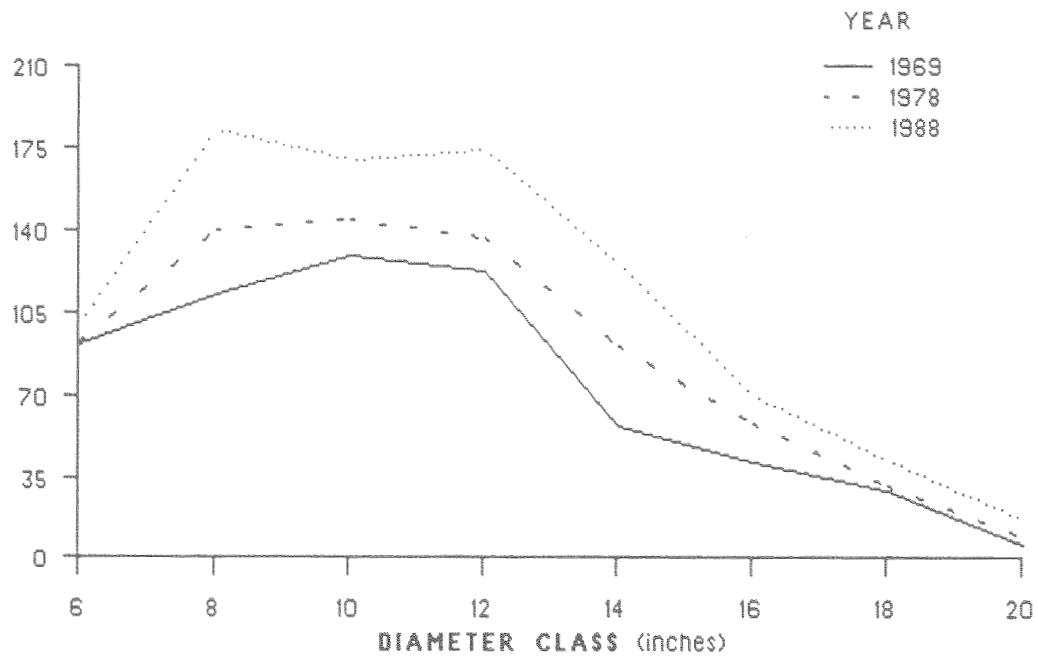


Figure 5.--Volume of softwood growing stock on timberland by diameter class, Ozark Counties, Arkansas, 1969, 1978, and 1988.

MILLION CUBIC FEET

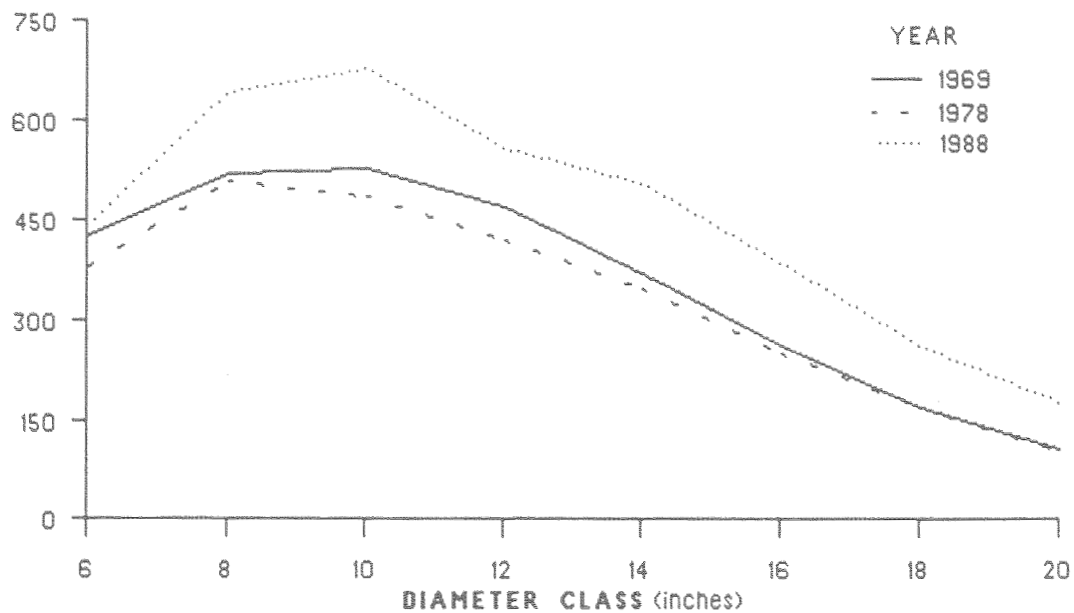


Figure 6.--Volume of hardwood growing stock on timberland by diameter class, Ozark Counties, Arkansas, 1969, 1978, and 1988.

MILLION TREES

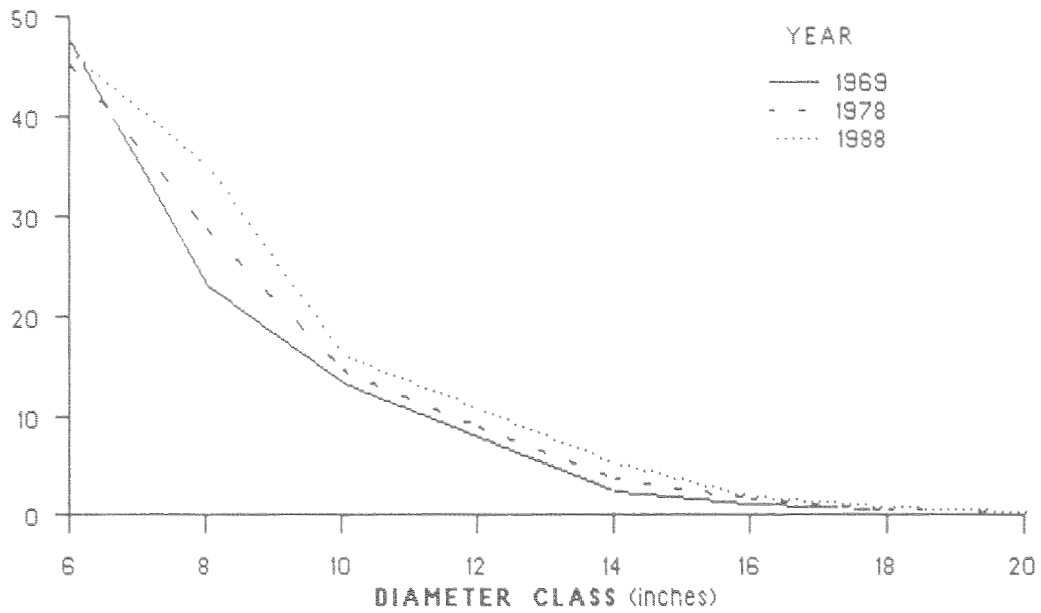


Figure 7.--Number of softwood growing-stock trees on timberland by diameter class, Ozark Counties, Arkansas, 1969, 1978, and 1988.

MILLION TREES

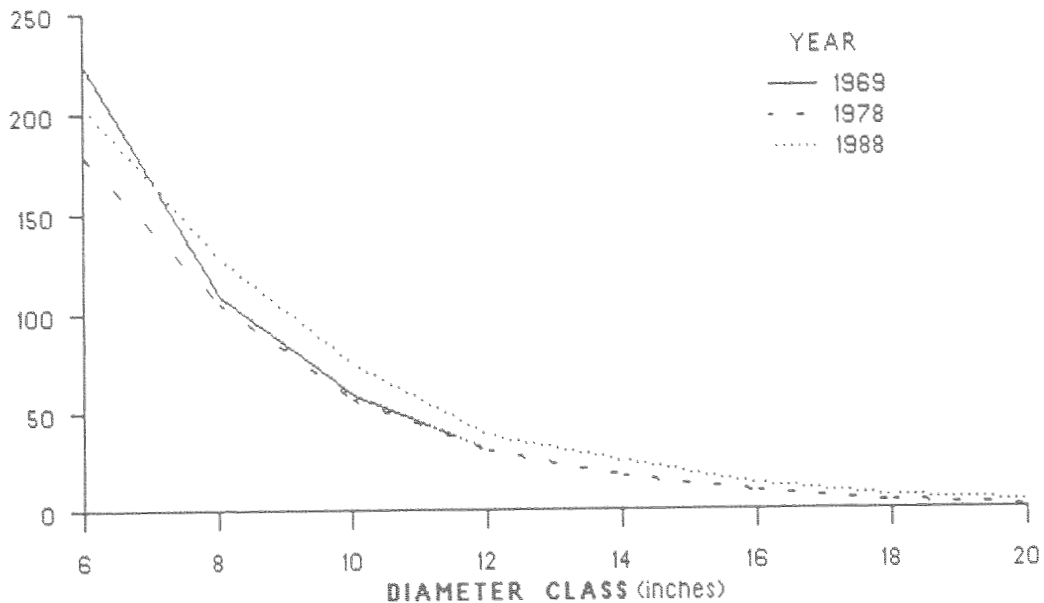


Figure 8.--Number of hardwood growing-stock trees on timberland by diameter class, Ozark Counties, Arkansas, 1969, 1978, and 1988.

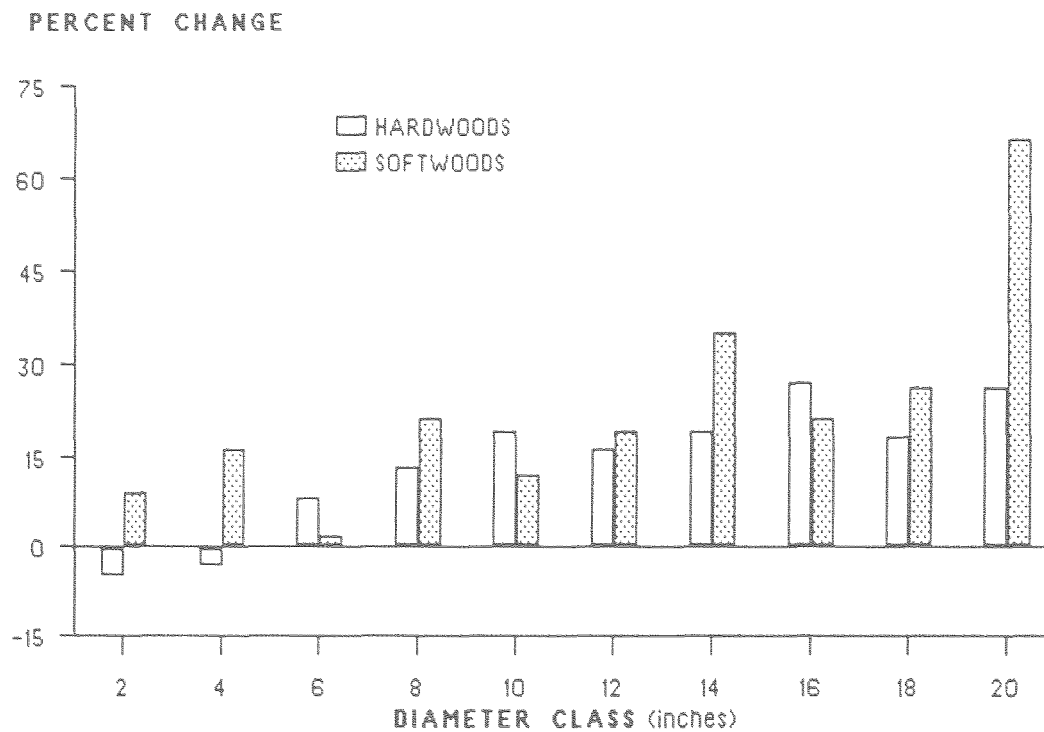


Figure 9.--Percent change in the number of live trees on timberland by species group and diameter class, Ozark Counties, Arkansas, 1978 and 1988.

Hines, F. Dee, Forest Statistics for Arkansas' Ozark Counties—1988. Resource Bull. SO-131. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station; 1988. 39 p.

Tabulates forest resource information from a new inventory of Arkansas' Ozark Unit.

Additional Keywords: Area, volume, forest type, stand size, ownership.

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