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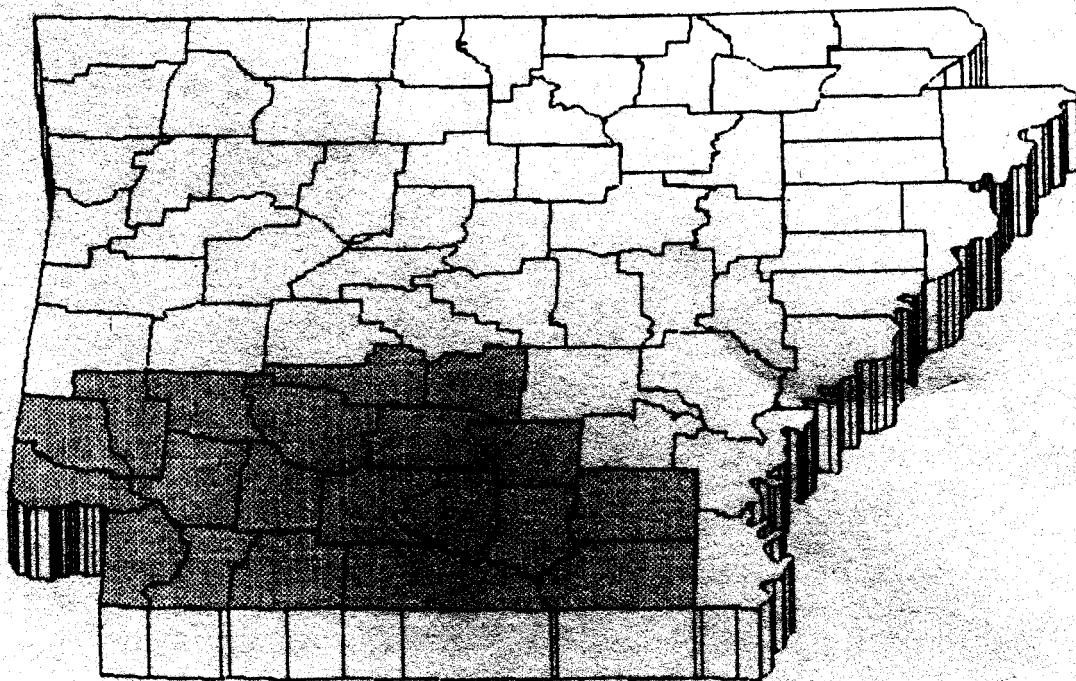
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Forest Statistics for Southwest Arkansas Counties - 1988

F. Dee Hines



SUMMARY

The 1988 survey of the Southwest Unit of Arkansas shows the following trends since the 1978 survey.

- Timberland area now covers **6445.8** thousand acres, about the same as it was in 1978.
- Forest industry owns or leases **51** percent of the timberland, 3260.9 thousand acres. This is a **4-percent** increase since 1978.
- Area covered by the **loblolly-shortleaf** and oak-pine forest types decreased by **1** and **2** percent respectively,
- Oak-hickory forest types showed a **22-**percent increase in acreage.
- Bottomland hardwood forest types decreased by **180.4** thousand acres, **15 percent**.
- Area in sawtimber stands remained relatively stable at 3330.5 thousand acres. Poletimber stands decreased- **12** percent, sapling-seedling stands increased **14** percent.

- Plantation acreage is up **90** percent to **1'147.0** thousand acres.
- Softwood volumes have decreased **5** percent for both growing stock and sawtimber.
- Hardwood volumes have increased; **5** percent for growing stock, **14** percent for **sawtimber**.
- Softwood growth decreased for growing stock and sawtimber.
- Softwood removals have increased and now exceed growth for both **growing stock** and sawtimber.
- Growth of hardwood growing stock decreased, while growth on hardwood sawtimber increased.
- Hardwood removals have increased for both growing stock and sawtimber.
- Mortality estimates are up.

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.

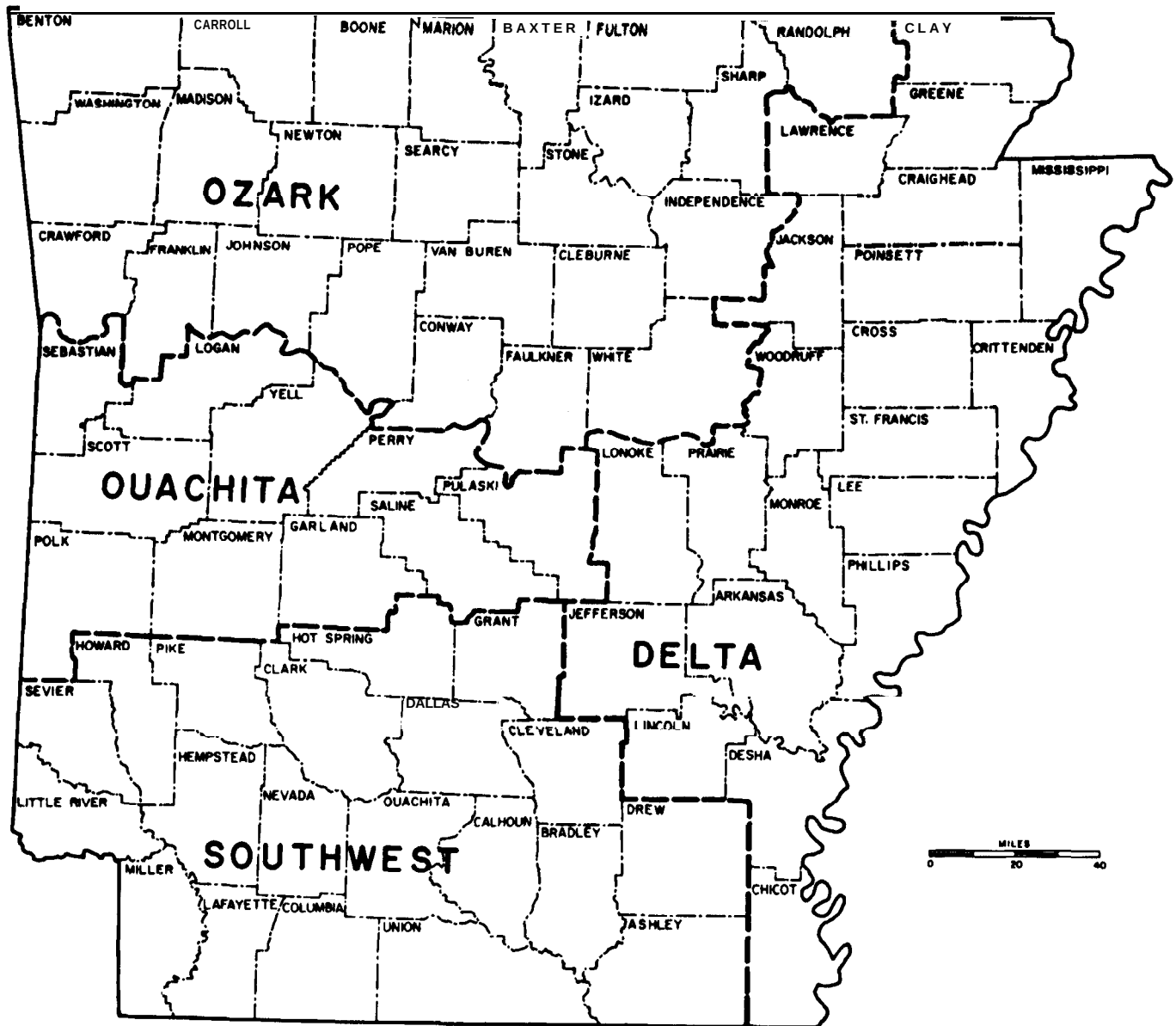


Figure I.-The forest survey regions of Arkansas.

Forest Statistics for Southwest Arkansas Counties – 1988

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INTRODUCTION

Tabulated results were derived from data obtained during a recent inventory of 20 counties comprising the Southwest 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 3840 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 Southwest Unit of Arkansas (with a sampling error of 2.3 percent) is

$$8321.8 \pm 1.96(0.023 \times 8321.8) = \\ 8321.8 \pm 375.1$$

where 1.96 is the number of standard deviations. This confidence interval indicates that the actual growing-stock volume lies in the range 7946.7 to 8696.9 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 Columbia and Union counties is 5.6 percent. Thus, the 95 percent confidence interval for growing-stock volume is 1397.6 ± 153.4 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 one 12-foot log or two 8-foot logs in the saw-log portion but not able to produce a 12-foot log in the butt 16 feet. These

Table I -Sampling errors' for timberland, growing stock and sawtimber, Southwest Arkansas, 1988

County	Growing stock				Sawtimber volume
	Timberland	Volume	Growth	Removals	
-----Percent-----					
Ashley	1.2	7.6	7.4	10.8	a.1
Bradley	1.2	7.1	7.3	11.3	8.6
Calhoun	1.7	9.4	8.9	15.7	10.9
Clark	1.8	8.3	9.5	10.8	9.7
Cleveland	0.8	11.1	10.2	11.3	9.4
Columbia	1.8	9.3	8.3	13.1	12.0
Dallas	2.0	8.5	6.5	12.6	10.6
Drew	2.4	6.9	7.6	8.6	8.3
Grant	0.9	11.4	9.1	13.4	13.7
Hempstead	2.0	11.1	13.9	20.9	14.2
Hot Spring	2.2	12.0	11.5	19.1	15.7
Howard	2.1	14.4	11.4	16.9	17.1
Lafayette	1.8	12.1	8.8	16.8	14.7
Little River	2.8	18.8	17.6	21.1	24.0
Miller	1.9	13.8	9.0	21.0	17.4
Nevada	1.4	9.1	8.0	14.2	11.2
Ouachita	1.7	8.2	7.7	13.2	10.0
Pike	1.9	12.8	12.6	15.7	15.1
Sevier	2.3	12.4	10.7	19.2	15.8
Union	1.0	6.4	6.2	10.1	7.7
All counties	0.4	2.3	2.1	3.2	2.7

¹By random-sampling formula.

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.

For comparative purposes 1978 survey data were reprocessed using current procedures. Therefore, 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

The Southwest Unit of Arkansas is the most heavily forested area in the State. Seventy-three percent of the area is forested. The total area of timberland, 6445.8 thousand acres, is essentially unchanged since the previous survey in 1978.

Forest industries have acquired 4 percent more timberland than they had in 1978 and now hold 3260.9 thousand acres. This acreage, 51 percent of the total, includes land under long-term lease. Other publicly owned land

jumped up 47 percent to 166.1 thousand acres, while other privately owned land lost 5 percent and is now at 3018.9 thousand acres.

Acreage covered by the various forest types has changed in southwest Arkansas since the previous survey. The largest change is the 22-percent increase in area covered by the oak-hickory forest type. Bottomland hardwood types, which include the oak-gum-cypress and elm-ash-cottonwood types, have dropped 180.4 thousand acres or about 15 percent. The loblolly-shortleaf and oak-pine forest types are relatively unchanged, down only 1 and 2 percent respectively.

The survey also shows some interesting differences in stand structure since 1978. Although the area of sawtimber stands remained relatively stable at 3330.5 thousand acres, area in poletimber stands decreased by 12 percent is now at 1473.0 thousand acres. Sapling-seedling stands increased by 14 percent. Much of the increase in sapling-seedling stand area can be accounted for by a 90-percent increase in plantation acreage. Plantations now cover 1147.0 thousand acres, almost 18 percent of the timberland in Southwest Arkansas.

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

		Tree grade 5		
		Excluded from growing stock	Included in growing stock	Percent change
..... Million cubic feet				
Softwood:				
Growing-stock	volume	4664.3	4695.1	.7
Rough and rotten	volume	118.0	87.3	-26.0
Growing-stock	growth	272.1	275.5	1.0
Hardwood:				
Growing-stock	volume	3436.2	3626.8	5.5
Rough and rotten	volume	585.0	394.5	-32.6
Growing-stock	growth	129.8	148.7	14.6
..... Million board feet				
Softwood:				
Sawtimber	volume	20768.7	20884.3	.6
Sawtimber	growth	1272.9	1282.7	.8
Hardwood:				
Sawtimber	volume	10295.6	11026.8	7.1
Sawtimber	growth	478.8	551.5	15.2

Number of Trees

The total number of live trees in the Southwest Unit of Arkansas has decreased by 17 percent. Both softwood and hardwood live tree numbers are down. Hardwood total live tree numbers are down 6 percent with all diameter classes below 18 inches showing losses. Similarly, diameter classes of softwood live trees below 18 inches also show decreases except for the 6-inch class where a small increase is seen. The total number of softwood trees decreased by 9 percent.

Growing-stock tree numbers have also decreased since the survey of 1978. The total is off by 31 percent. Softwood and hardwood totals are down by 19 and 38 percent respectively. In the softwoods, all diameter classes below 18 inches have decreased. Again, hardwood growing-stock trees have decreased in all diameter classes below 12 inches and in the 16-inch class. Most of the drop in growing-stock trees, both softwoods and hardwoods, was in the 4-inch class and below.

Timber Volume

Softwood volumes have decreased since the previous inventory. Softwood growing-stock volume decreased 5 percent and is now 4695.1 million cubic feet. This is different from the 17-percent increase between the 1968 and 1978 surveys. Sawtimber volume of softwoods shows the same pattern, decreasing 5 percent between 1978 and 1988 and increasing 22 percent between 1969 and 1978. Currently softwood sawtimber volume is 20884.3 million board feet.

Conversely, hardwood volumes show the opposite pattern for the current inventory. Both growing-stock and sawtimber volume have increased for the 1988 survey. Growing-stock volume is 3626.8 million cubic feet, a 5-percent increase. Similarly sawtimber is up 14 percent to 11026.8 million board feet. Total hardwood volumes were essentially the same-between the 1968 and 1978 inventories.

Growth, Removals, and Mortality

Average net annual growth of growing stock is down for both softwoods and hardwoods. Softwood growing-stock growth, now at 275.5 million cubic feet annually, has decreased 11 percent since the 1978 estimate. Net annual growth of hardwood growing-stock volume is 148.7 million cubic feet. This represents a 4-percent decline.

Average net annual growth of sawtimber has decreased for softwoods, while hardwoods show an increase. Sawtimber growth of softwood is currently estimated at 1282.7 million board feet annually. This 11-percent decrease is contrasted by the 22-percent increase seen for hardwoods. Hardwood net annual growth on sawtimber is 551.5 million board feet.

The 1988 survey shows all removals to be above 1978 levels. Net annual removals of growing stock are up 35 percent for softwood and 7 percent for hardwood. Similarly, net annual removals of sawtimber are up 37 percent for softwoods and 15 percent for hardwoods. Softwood growing-stock removals are now 300.7 million cubic feet while softwood sawtimber removals are 1381.0 million board feet. Removals from hardwood growing stock are estimated at 135.3 million cubic feet. Sawtimber removals of hardwood are 416.4 million board feet.

Attention should be drawn to the fact that removals exceed growth for softwood growing stock and sawtimber situation could have an impact on future supplies in this area. However, the large increase in plantation acreage is encouraging.

Although hardwood growth of growing stock has decreased, growth is still greater than removals. However, as Table II indicates, without the inclusion of tree grade 5 trees in growing stock, hardwood removals of growing stock would exceed growth as in softwood growing-stock growth. Hardwood sawtimber shows a favorable growth-to-removal ratio with or without tree grade 5 trees.

Mortality totals for the Southwest Unit of Arkansas have increased. The current survey shows total mortality of growing stock at 56.1 million cubic feet annually. This is a 41-percent

increase over the previous level. Total sawtimber mortality has increased 30 percent to 143.4 million board feet annually.

Tables 1-25 were developed to provide **compatibility** among Forest Inventory and Analysis Projects. Tables 26-35 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 removal. -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 noncommercial tree species of sapling size or larger.

Natural stands. -Stands with no evidence of artificial regeneration. This includes those 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 utilization 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 red oaks. -A classification of several red oak species composed of: cherrybark, Shumard, and northern red oaks.

Select white oaks. -A classification of several white oak species composed of: white, swamp chestnut, swamp white, chinkapin, Durand, and bur 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 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 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 I-25

Table I-Area by county and land class, Southwest Arkansas, 1988

County	All land ¹	Forest land				Nonforest land
		Total	Timberland ²	Woodland ³	Reserved timberland	
<i>Thousand acres</i>						
Ashley	597.5	377.4	377.4	...	...	220.1
Bradley	418.6	353.6	353.6	...	...	65.1
Calhoun	402.2	330.7	330.7	...	...	71.5
Clark	554.6	405.4	405.4	...	...	149.3
Cleveland	383.1	330.7	330.7	...	...	52.4
Columbia	490.9	381.5	381.5	...	...	109.5
Dallas	427.3	362.5	362.5	...	...	64.9
Drew	532.1	386.2	386.2	...	...	145.9
Grant	405.1	335.9	335.9	...	...	69.2
Hempstead	463.7	277.4	277.4	...	...	186.3
Hot Spring	393.6	276.9	276.9	...	...	116.7
Howard	367.1	250.7	250.7	...	...	116.4
Lafayette	331.3	224.4	224.4	...	...	106.8
Little River	330.1	166.9	166.9	...	...	163.3
Miller	396.2	170.1	170.1	...	...	226.1
Nevada	397.1	306.0	306.0	...	...	91.1
Ouachita	471.6	392.9	392.9	...	...	78.7
Pike	383.0	303.9	303.9	...	...	79.1
Sevier	358.5	227.9	227.9	...	...	130.7
Union	674.0	584.9	584.9	...	...	89.1
All counties	8777.9	6445.8	6445.8	...	...	2332.1

¹From 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.

³Forest 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, Southwest Arkansas, 1988

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry ¹	Farmer	Corporate ²	Individual ²
<i>Thousand acres</i>									
Ashley	377.4	.	10.9	...		273.5	21.9	5.5	65.6
Bradley	353.6	.	11.4	...		182.5	5.7	34.2	119.8
Calhoun	330.7	.	.	...		242.5	16.5	5.5	66.1
Clark	405.4	.	11.3	...		146.4	73.2	22.5	152.0
Cleveland	330.7	.	.	...		191.5	5.8	11.6	121.8
Columbia	381.5	.	.	.	.	90.8	12.1	24.2	254.3
Dallas	362.5	.	.	.	.	261.2	5.3	10.7	85.3
Drew	386.2	.	.	16.1	...	219.9	21.5	21.5	107.3
Grant	335.9	.	.	.	.	252.0	4.9	...	79.0
Hempstead	277.4	.	.	.	.	105.4	11.1	16.6	144.2
Hot Spring	276.9	.	.	...	...	163.6	...	6.3	107.0
Howard	250.7	.	5.2	...		161.9	62.7	...	20.9
Lafayette	224.4	.	.	.	...	82.7	29.5	...	112.2
Little River	166.9	.	.	.	.	73.0	52.1	5.2	36.5
Miller	170.1	.	.	17.0	.	28.4	39.7	5.7	79.4
Nevada	306.0	.	.	17.3	...	127.0	34.6	5.8	121.3
Ouachita	392.9	6.0	.	6.0	12.1	114.9	30.2	36.3	187.4
Pike	303.9	.	.	...	...	233.8	52.6	...	17.5
Sevier	227.9	.	.	9.7	...	111.5	33.9	14.5	58.2
Union	584.9	.	37.6	...	5.4	198.5	53.7	59.0	230.7
All counties	6445.8	.	92.1	56.5	17.5	3260.9	567.1	285.1	2166.6

¹Includes land leased to forest industry.

²Indian 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, Southwest Arkansas, 1988

County	Total	Forest type group						Nontyped ¹
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress	Elm-ash- cottonwood	
		Planted	Natural					
----- <i>Thousand acres</i> -----								
Ashley	377.4		213.3	65.6	43.8	54.7		...
Bradley	353.6	11.4	102.6	96.9	68.4	74.1		...
Calhoun	330.7	38.6	110.2	55.1	38.6	88.2		...
Clark	405.4	56.3	95.7	90.1	112.6	50.7	...	...
Cleveland	330.7	17.4	104.4	75.4	75.4	58.0	...	...
Columbia	381.5	24.2	127.2	84.8	84.8	60.6	...	...
Dallas	362.5	42.6	117.3	85.3	85.3	26.7		5.3
Drew	386.2	42.9	91.2	75.1	112.6	64.4		
Grant	335.9	69.2	54.3	64.2	84.0	64.2	...	
Ilempstead	277.4	66.6	27.7	77.7	66.6	38.8	...	...
Hot Spring	276.9	50.3	31.5	81.8	75.5	37.8	...	
Iowa rd	250.7	78.3	26.1	67.9	52.2	26.1	...	
Lafayette	224.4	17.7	76.8	35.4	47.2	47.2		
Little River	166.9	36.5	36.5	26.1	41.7	20.9	5.2	
Miller	170.1	11.3	39.7	22.7	62.4	34.0		
Nevada	306.0	28.9	86.6	63.5	75.1	52.0		...
Ouachita	392.9	36.3	133.0	66.5	60.4	96.7	...	
Pike	303.9	105.2	81.8	87.7	29.2			...
Sevier	227.9	29.1	33.9	33.9	87.3	43.6		
Union	584.9	64.4	144.9	144.9	123.4	107.3	...	
All counties	6445.8	827.3	1734.8	1400.6	1426.6	1046.0	5.2	5.3

¹Timberland with no current stocking.

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

County	All classes	Stand-size class		Sapling- seedling	Nonstocked ¹ areas
		Sawtimber	Poletimber		
<i>----- Thousand acres -----</i>					
Ashley	377.4	235.2	71.1	71.1	...
Bradley	353.6	256.6	57.0	34.2	5.7
Calhoun	330.7	176.4	66.1	88.2	.
Clark	405.4	185.8	112.6	101.3	5.6
Cleveland	330.7	237.9	52.2	40.6	...
Columbia	381.5	218.0	84.8	78.7	...
Dallas	362.5	186.6	69.3	95.9	10.7
Drew	386.2	209.2	69.7	101.9	5.4
Grant	335.9	138.3	108.7	84.0	4.9
Ilempstead	277.4	127.6	94.3	55.5	,
Hot Spring	276.9	81.8	75.5	119.6	,
Howard	250.7	47.0	83.6	120.1	,
Lafayette	224.4	100.4	82.7	41.3	...
Little River	166.9	78.2	52.1	31.3	5.2
Miller	170.1	73.7	73.7	22.7	...
Nevada	306.0	207.9	46.2	46.2	5.8
Ouachita	392.9	229.7	66.5	90.7	6.0
Pike	303.9	105.2	52.6	146.1	,
Sevier	227.9	97.0	63.0	67.9	,
Union	584.9	338.1	91.2	144.9	10.7
All counties	6445.8	3330.5	1473.0	1582.2	60.1

¹Timberland less than 16.7 percent stocked.

Table 5-Area of timberland by county and site class, Southwest Arkansas, 1988

County	All classes	Site class (cubic feet/acre&year)				
		> 165	120-165	85-120	50-85	< 50
.....<i>Thousand acres</i>.....						
Ashley	377.4	16.4	114.9	191.4	49.2	5.5
Bradley	353.6	11.4	74.1	205.3	62.7	...
Calhoun	330.7	5.5	60.6	181.9	82.7	...
Clark	405.4	22.5	101.3	208.3	73.2	..
Cleveland	330.7	11.6	81.2	226.3	11.6	...
Columbia	381.5	48.4	78.7	181.7	72.7	...
Dallas	362.5	...	95.9	191.9	74.6	...
Drew	386.2	32.2	80.5	219.9	53.6	...
Grant	335.9	9.9	79.0	197.6	49.4	...
Hempstead	277.4	5.5	83.2	138.7	...	...
Hot Spring	276.9	6.3	31.5	88.1	89.8	69.2
Howard	250.7	...	20.9	151.5	...	...
Lafayette	224.4	...	23.6	118.1	65.0	17.7
Little River	166.9	5.2	41.7	83.4	31.3	5.2
Miller	170.1	...	45.4	79.4	39.7	5.7
Nevada	306.0	23.1	98.2	138.6	46.2	...
Ouachita	392.9	30.2	126.9	187.4	42.3	6.0
Pike	303.9	...	52.6	122.7	128.6	...
Sevier	227.9	33.9	67.9	67.9	53.3	4.8
Union	584.9	48.3	193.2	284.4	59.0	...
All counties	6445.8	310.6	1551.4	3264.5	1205.2	114.2

Table 6-Area of timberland by county and stocking classes of growing-stock trees, South west Arkansas, 1988

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.760	< 16.7
..... <i>Thousand acres</i>						
Ashley	377.4	10.9	54.7	235.2	76.6	...
Bradley	353.6	...	57.0	199.6	91.2	5.7
Calhoun	330.7	22.0	110.2	148.8	49.6	...
Clark	405.4	22.5	123.9	168.9	84.5	5.6
Cleveland	330.7	11.6	69.6	191.5	58.0	...
Columbia	381.5	24.2	115.1	181.7	60.6	...
Dallas	362.5	...	111.9	197.2	42.6	10.7
Drew	386.2	...	96.5	166.3	118.0	5.4
Grant	335.9	39.5	69.2	153.1	69.2	4.9
Hempstead	277.4	22.2	44.4	160.9	49.9	...
Hot Spring	276.9	6.3	62.9	163.6	44.1	...
Howard	250.7	5.2	57.4	135.8	52.2	...
Lafayette	224.4	5.9	94.5	94.5	29.5	...
Little River	166.9	10.4	10.4	93.9	46.9	5.2
Miller	170.1	...	22.7	113.4	34.0	...
Nevada	306.0	11.5	86.6	144.4	57.7	5.8
Ouachita	392.9	6.0	114.9	223.7	42.3	6.0
Pike	303.9	11.7	46.8	192.9	52.6	...
Sevier	227.9	4.8	33.9	121.2	67.9	...
Union	584.9	26.8	193.2	279.0	75.1	10.7
All counties	6445.8	241.9	1575.9	3365.4	1202.6	60.1

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

Forest type ¹	All ownerships	National forest	Other public	Forest industry	Forest industry- leased	Other private
<i>.....Thousand acres.....</i>						
Loblolly-shortleaf pine	2562.1	...	32.5	1539.4	6.1	984.1
Softwood total	2562.1	...	32.5	1539.4	6.1	984.1
Oak-pine	1400.6	...	22.9	676.7	...	701.0
Oak-hickory	1426.6	...	17.0	547.5	...	862.0
Oak-gum-cypress	1046.0	...	93.6	479.8	6.1	466.5
Elm-ash-cottonwood	5.2	...	...	...	...	5.2
Hardwood total	3878.4	...	133.6	1704.0	6.1	2034.8
Nontyped²	5.3	...	...	5.3	...	...
All types	6445.8	...	166.1	3248.8	12.1	3018.9

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

²Timberland with no current stocking.

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

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>.....Thousand acres.....</i>						
Other public	166.1	...	38.4	99.5	28.2	...
Forest industry	3248.8	134.6	824.5	1647.1	621.5	21.1
Forest industry-leased	12.1	...	...	12.1	...	...
Other private	3018.9	107.2	713.0	1606.8	552.9	38.9
All ownerships	6445.8	241.9	1575.9	3365.4	1202.6	60.1

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

Forest type ¹	All classes	Stand-size class			Nonstocked ² areas
		Sawtimber	Poletimber	Sapling-seedling	
-----Thousand acres-----					
Loblolly-shortleaf pine	2562.1	1354.7	565.5	641.8	...
Softwood total	2562.1	1354.7	565.5	641.8	...
Oak-pine	1400.6	709.9	279.9	405.1	5.7
Oak-hickory	1426.6	554.7	425.2	429.9	16.7
Oak-gum-cypress	1046.0	711.1	197.2	105.3	32.3
Elm-ash-cottonwood	5.2	...	5.2	...	...
Hardwood total	3878.4	1975.7	907.5	940.4	54.7
Nontyped ³	5.3	...	...	...	5.3
All types	6445.8	3330.5	1473.0	1582.2	60.1

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

²Timberland less than 16.7 percent stocked.

³Timberland with no current stocking.

Table 10-Number of live trees on timberland by species and diameter class, Southwest Arkansas, 1988

Species	Diameter class (inches at breast height)												
	All classes	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	1178346	531337	275363	142900	88754	48787	35483	25133	14281	8250	4309	3661	86
Cypress	7730	2472	984	1094	1011	561	401	461	274	199	68	175	30
Other softwoods	21636	15398	3927	1390	72.5	143	54	...	...	...	...	...	...
Total softwoods	1207713	549208	280274	145385	90489	49491	35938	25594	14556	8449	4377	3835	117
Select white oaks	182651	106390	40430	11760	9193	5802	3417	2531	1167	798	566	560	38
Select red oaks	55423	29924	11429	3636	3356	2067	1680	868	757	475	449	685	96
Other white oaks	117477	52705	26325	14056	9174	6619	3454	2138	1202	747	379	589	90
Other red oaks	346510	215512	52031	24209	17005	13480	8562	5753	3894	2446	1569	1865	184
Hickory	181125	120421	27890	14243	7962	3646	3066	1785	945	641	230	283	13
Hard maple	1761	1064	444	93	147	...	...	...	...	13	...	...	...
Soft maple	278254	229531	32691	9114	3887	1672	565	377	265	68	29	46	9
Beech	7691	3540	210s	108	341	436	225	234	101	201	106	210	83
Sweetgum	725059	489554	125367	52352	25597	14441	7533	4744	2733	1449	723	526	40
Tupelo-blackgum	196115	146280	29627	10158	3506	2861	1615	931	519	253	183	164	17
Ash	94667	67330	14616	6559	2827	1621	814	383	291	98	41	88	...
Cottonwood-aspen	1253	478	492	77	...	32	...	67	41	11	9	41	4
Basswood	613	516	...	...	...	37	2.5	15	...	...	...	20	...
Black walnut	1255	953	...	204	...	97	...	...	...	...	...	...	...
Other hardwoods	633190	494882	93607	23033	10262	5500	2556	1685	576	435	34s	264	4s
Total hardwoods	2823045	1959081	457056	169602	93257	58310	33512	21510	12491	7636	4628	5341	620
Noncommercial	422961	339617	58526	18133	4554	1514	376	141	28	63	9	...	.
All species	4453718	2847906	795856	333120	188300	109315	69825	47245	27076	16148	9015	9177	736

Table 11—Number Of growing-stock trees on timberland by species and diameter class, Southwest Arkansas, 1988

Species	Diameter class (inches at breast height)													
	All classes	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	926325	348194	198124	24616	130808	84688	848491	350961	24990	24200	8206	4279	3604	86
Cypress	6362													
Other softwoods	16801						11561		442	230	187	68	129	19
			3395	1094	554	143	54							
Total softwoods	949628	361736	228995	132770	86203	47927	35546	25432	14430	8403	4347	3733	105	
Select white oaks	92548	36673	24641	9221	8412	5261	3116	2359	1088	760	496	497	24	
Select red oaks	31825	11878	7179	3122	3166	2020	1584	1547	806	724	464	420	616	80
Other white oaks	70037		16227	11862	8133	5929	2985	1786	1035	664	321	455	57	
Other red oaks	185898	79530	16227	11862	8133	5929	2985	1786	1035	664	321	455	57	
Hickory	82469	41255	36473	15567	19986	15289	12603	8394	7853	3054	89	3666	2264	1483
Hard maple	1252	555			93	147				822	491	135	220	13
Soft maple	72856	52068	444	12248	4771	2058	1104	263	133	107	35	29	31	9
Sweetgum	423045	252703	79977	40898	23556	13772	6949	45550	24574	131	79	143	28	
										1274	632	472	14	
Tupelo-blackgum	45834	20956	11696	5717	2638	2138	1298	646	361	147	134	90	13	
Ash	34576	19590	5641	4193	2505	1261	623	308	259	75	41	82		
Cottonwood-aspen	1175	478	492				32		67	41	11	9	41	4
Basswood	40							25	15					
Black walnut	1152		9.53		102		97							
Other hardwoods	187323	117673	40436	14276	6657	4134	1890	1153	317	302	268	191	27	
Total hardwoods	1234131	656260	248068	124711	78975	51758	29379	18789	10939	6633	3913	4319	388	
All species	2183759	1017996	477062	257482	165178	99685	64925	44221	25368	15036	8260	8052	493	

Table 12—Volume of growing stock on timberland by species and diameter class, Southwest 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
<i>----- Million cubic feet -----</i>											
Shortleaf-loblolly pine	4628.5	318.6	521.9	601.1	708.6	748.8	593.3	457.3	300.8	362.8	15.5
Cypress	58.9	1.6	3.2	3.0	6.2	9.9	8.1	9.1	3.7	11.7	2.4
Other softwoods	7.6	2.6	3.0	1.3	0.7						
Total softwoods	4695.1	322.8	528.2	605.3	715.5	758.6	601.5	466.3	304.5	374.5	17.9
Select white oaks	394.2	25.2	51.5	57.6	56.5	60.8	36.7	36.8	28.5	38.1	2.5
Select red oaks	235.3	7.9	18.5	22.0	29.0	21.9	26.0	21.0	24.1	54.2	10.8
Other white oaks	326.0	30.4	44.6	58.1	46.4	41.4	30.6	24.1	13.9	30.0	6.4
Other red oaks	983.2	51.6	95.3	139.5	143.1	133.7	122.4	100.1	72.2	111.0	14.3
Hickory	248.4	23.9	32.3	32.5	44.4	36.2	29.1	20.4	7.9	19.9	1.8
Hard maple	1.3	0.3	0.7					0.4			
Soft maple	51.8	13.1	11.2	11.4	4.5	2.5	3.1	1.1	1.6	2.3	1.0
Beech	36.9	0.5	1.3	3.7	2.7	3.8	2.7	5.5	2.7	9.8	4.1
Sweetgum	924.8	97.4	144.6	168.7	138.9	129.3	97.3	67.8	40.4	38.9	1.7
Tupelo-blackgum	117.7	12.8	15.1	22.0	22.4	15.2	11.7	5.9	6.3	4.9	1.5
Ash	76.8	10.6	17.4	13.3	10.5	7.0	8.5	3.1	1.9	4.6	
Cottonwood-aspen	8.2			0.1		1.9	1.5	0.4	0.6	3.2	0.5
Basswood	0.7				0.4	0.3					
Black walnut	1.3	0.2		1.2							
Other hardwoods	220.2	33.5	37.5	42.9	28.8	27.6	9.4	12.2	13.4	12.5	2.4
Total hardwoods	3626.8	307.2	470.0	572.9	527.5	481.7	378.9	298.7	213.4	329.4	47.0
All species	8321.8	630.1	998.2	1178.3	1242.9	1240.3	980.4	765.0	517.9	703.9	64.9

Table 13—Volume of growing stock in the saw-logportion of sawtimber¹ trees on timberland by species and diameter class, Southwest 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
<i>----- Million cubic feet -----</i>									
Shortleaf-loblolly pine	3301.0	481.9	613.3	665.3	528.8	408.4	269.1	320.6	13.6
Cypress	46.6	2.2	4.6	8.6	7.0	8.1	3.3	10.6	2.2
Other softwoods	1.6	1.0	0.6	...	...	...	...	...	...
Total softwoods	3349.2	485.1	618.4	673.9	535.8	416.5	272.4	331.2	15.8
Select white oaks	209.9	...	40.4	49.9	30.1	30.0	24.4	32.7	2.4
Select red oaks	155.8	...	20.2	17.9	22.1	18.4	21.1	46.5	9.5
Other white oaks	160.1	...	34.4	34.9	26.2	20.5	12.6	26.2	5.4
Other red oaks	576.1	...	103.9	110.5	105.0	86.4	62.3	95.7	12.4
Hickory	129.3	...	33.1	29.6	24.5	17.5	6.8	16.3	1.5
Hard maple	0.3	...	...	...	...	0.3	...	...	...
Soft maple	12.5	...	3.4	1.8	2.4	0.9	1.4	1.9	0.8
Beech	26.6	...	1.9	3.1	2.4	5.0	2.3	8.5	3.3
Sweetgum	418.0	...	94.9	105.0	85.7	60.4	35.6	34.8	1.6
Tupelo-blackgum	54.7	...	16.6	12.4	9.8	5.0	5.2	4.2	1.5
Ash	29.1	...	7.7	5.8	7.0	2.7	1.8	4.1	...
Cottonwood-aspen	6.7	...	...	1.5	1.1	0.3	0.3	3.0	0.5
Basswood	...	...	...	...	...	...	...	...	...
Other hardwoods	80.5	...	20.3	20.4	8.4	10.4	11.0	10.3	1.8
Total hardwoods	1864.1	...	378.0	394.1	324.7	257.7	184.8	284.2	40.8
All species	5213.4	485.1	996.4	1067.9	860.5	674.2	457.2	615.4	56.6

¹That 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, Southwest Arkansas, 1988

		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
----- <i>Million board feet</i> -----									
Shortleaf-loblolly pine	20620.0	2639.8	3629.9	4134.1	3418.6	2702.3	1804.7	2197.7	92.8
Cypress	256.4	10.0	22.5	42.2	39.0	47.0	18.6	63.2	14.0
Other softwoods	7.9	5.1	2.8	...	...	.	...	...	..
Total softwoods	20884.3	2654.8	3655.2	4176.3	3457.7	2749.2	1823.3	2260.9	106.9
Select white oaks	1261.4	...	221.0	288.8	180.4	190.0	157.4	208.3	15.6
Select red oaks	940.3	.	110.5	101.6	130.2	112.3	130.0	300.8	54.9
Other white oaks	947.5		184.6	199.7	155.3	121.3	79.1	169.5	38.0
Other red oaks	3390.9	...	568.9	623.2	614.1	524.3	381.5	605.1	73.7
Hickory	779.3	...	184.6	171.3	151.4	110.4	44.8	106.6	10.2
Hard maple	1.8	...		...	...	1.8	...		...
Soft maple			19.3	9.9	13.0	4.1	8.2	11.1	5.3
Beech	171.0	...	10.4	18.1	14.4	32.3	13.5	50.9	23.1
Sweetgum	2466.6	...	530.6	610.0	515.0	369.8	218.5	217.0	5.7
Tupelo-blackgum	303.7	...	89.6	68.2	55.0	28.5	29.0	24.7	8.7
Ash	163.6	...	40.4	30.7	41.5	16.3	10.4	24.3	...
Cottonwood-aspen	41.6	...		9.1	6.6	1.7	2.3	18.8	3.0
Basswood	2.0	...	1.3	0.7	...	...	...	...	...
Other hardwoods	494.4	...	119.2	124.9	50.5	62.3	66.2	62.6	8.8
Total hardwoods	11026.8	...	2080.3	2256.4	1927.4	1575.0	1141.1	1799.7	247.0
All species	31911.1	2654.8	5735.6	6432.6	5385.0	4324.2	2964.3	4060.6	353.9

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

County	Growing stock						Sawtimber					
	softwood			Hardwood			softwood			Hardwood		
	Pine						Pine					
	All species	Planted	Natural	Other	Soft ¹	Hard ²	All species	Planted	Natural	Other	Soft ¹	Hard ²
..... <i>Million cubic feet</i> <i>Million board feet</i>												
Ashley	487.8	...	359.8	3.1	21.5	103.3	2169.7	...	1723.6	13.1	63.4	369.6
Bradley	515.1	20.4	250.3	3.8	72.0	168.5	2110.9	87.2	1159.5	19.4	245.5	599.2
Calhoun	410.5	22.1	206.4	13.8	61.5	106.7	1512.0	26.2	873.8	69.0	181.9	361.1
Clark	503.2	42.0	242.3	4.1	61.4	153.3	1907.2	120.1	1148.1	15.8	143.8	479.4
Cleveland	563.8	28.9	260.5	0.5	114.1	159.7	2264.3	121.3	1203.2	1.6	314.9	623.4
Columbia	544.9	12.4	305.6	1.9	75.3	149.7	2003.5	15.0	1333.9	4.7	190.3	459.5
Dallas	474.6	27.6	263.1	0.4	63.4	120.2	1828.3	74.3	1222.3	...	168.5	363.2
Drew	448.4	54.3	195.2	9.7	69.5	119.7	1808.0	232.6	942.1	31.1	180.8	421.4
Grant	474.3	63.5	152.9	5.9	102.2	149.8	1542.5	86.2	617.2	27.7	295.2	516.3
Hempstead	385.4	109.2	112.9	0.6	54.4	108.3	1462.8	527.6	497.3	2.7	123.1	312.1
Hot Spring	229.4	20.8	88.7	...	30.1	89.8	690.0	37.7	367.3	...	44.5	240.5
Howard	206.1	33.6	81.6	0.4	34.0	56.6	672.1	69.1	407.7	...	78.0	117.3
Lafayette	318.9	18.9	172.0	0.6	47.8	79.7	1096.1	38.3	732.2	3.0	88.7	233.9
Little River	206.2	10.6	108.4	...	23.2	64.0	824.4	5.3	602.8	...	31.5	184.9
Miller	180.4	8.4	72.4	6.8	28.3	64.5	589.0	18.7	322.5	24.7	64.1	159.0
Nevada	432.8	43.1	203.2	1.8	67.3	117.4	1675.1	160.7	931.0	8.4	162.9	412.1
Ouachita	563.2	19.4	270.6	1.5	109.7	162.0	2198.0	97.0	1286.1	7.2	315.4	492.3
Pike	276.1	57.0	152.3	...	13.5	53.3	1119.2	217.5	716.9	...	40.5	144.4
Sevier	248.2	2.7	73.3	5.3	63.8	103.0	915.2	1.6	377.4	9.6	197.1	329.4
Union	852.7	57.2	404.7	6.4	132.6	251.8	3523.0	177.8	2041.0	26.3	348.5	929.4
All counties	8321.8	652.2	3976.4	66.5	1245.5	2381.3	31911.1	2114.3	18505.7	264.3	3278.4	7748.4

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

²Hardwood 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, Southwest Arkansas, 1988

Class of timber	All species	Softwood		Hardwood		
		Pine		Other	Soft ¹	Hard ²
		Planted	Natural			
----- Million cubic feet -----						
Sawtimber trees:						
Saw-log portion	5213.4	350.1	2950.9	48.2	559.1	1305.0
Upper-stem portion	907.3	60.7	426.4	7.8	130.7	281.7
Total	6120.6	410.8	3377.3	55.9	689.9	1586.7
Poletimber trees	2201.2	241.3	599.1	10.6	555.6	794.6
All growing-stock trees	8321.8	652.2	3976.4	66.5	1245.5	2381.3
Rough trees:						
Sawtimber size	175.4	2.2	19.9	3.2	47.1	103.0
Poletimber size	279.3	7.6	45.3	2.1	65.8	158.5
Total	454.8	9.7	65.3	5.4	112.9	261.5
Rotten trees:						
Sawtimber size	82.4	0.2	0.9	5.8	22.5	53.0
Poletimber size	8.4	...			3.7	4.7
Total	90.8	0.2	0.9	5.8	26.2	57.7
Salvable dead trees:						
Sawtimber size	18.5	1.4	7.4	...	3.3	6.4
Poletimber size	12.4	1.4	4.8	0.3	1.0	5.0
Total	30.9	2.7	12.2	0.3	4.3	11.4
All classes	8898.3	664.9	4054.8	78.0	1388.8	2711.9

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

²Hardwood 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, Southwest Arkansas, 1988

Ownership class	Live trees							Growing stock					
	Softwood				Hardwood			Softwood			Hardwood		
	All species	Pine		Other	Sort'	Hard ²	All species	Pine		Other	Soft ¹	Hard ²	
		Planted	Natural					Planted	Natural				
----- Million cubic feet -----													
Other public	260.8	6.0	79.3	11.7	43.6	120.1	236.3	5.8	79.3	10.8	39.5	100.9	
Forest industry	4145.4	395.8	1954.8	45.1	585.6	1164.1	3897.9	389.5	1920.5	37.9	527.2	1022.8	
Forest industry-leased	17.3	...	5.5	1.3	0.6	9.9	15.8	...	5.5	1.3	0.4	8.5	
Other private	4443.9	260.4	2003.0	19.5	754.6	1406.4	4171.8	256.9	1971.0	16.5	678.3	1249.1	
All ownerships	8867.4	662.1	4042.6	77.7	1384.5	2700.5	8321.8	652.2	3976.4	--	66.5	1245.5	2381.3

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

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

Table 1 & Average net annual growth of growing stock and sawtimber on timberland by county and species group, Southwest Arkansas, 1988

county	Growing stock						Sawtimber									
	All species	softwood			Hardwood		All species	softwood			Hardwood					
		Planted	Natural	Other	Soft ¹	Hard ²		Planted	Natural	Other	Soft ¹	Hard ²				
													Pine		Pine	
----- Million cubic feet ----- Million board feet -----																
Ashley	27.5	0.3	21.3	0.1	1.0	4.8	124.1	1.7	100.6	0.7	2.7	18.4				
Bradley	28.5	0.7	17.4	0.1	2.8	7.4	132.9	4.7	84.2	0.6	12.9	36.3				
Calhoun	26.8	0.7	16.9	0.1	2.1	6.5	97.0	0.8	64.1	...	9.0	22.9				
Clark	23.0	0.1	15.3	0.1	2.1	5.5	114.2	0.4	74.0	-0.3	9.1	30.9				
Cleveland	23.9	0.5	14.2	...	3.4	5.7	103.3	3.0	66.8	0.2	9.1	24.3				
Columbia	30.0	1.0	19.9	0.1	2.3	6.7	120.2	...	89.0	-0.1	6.8	24.5				
Dallas	27.1	1.0	16.0	...	2.9	7.1	112.4	5.2	72.8	...	8.7	25.6				
Drew	25.3	1.1	15.9	0.1	2.4	5.8	112.2	8.2	77.4	0.1	5.7	20.7				
Grant	23.5	...	15.2	...	1.8	6.5	75.7	-1.0	50.2	0.4	4.8	21.3				
Hempstead	14.7	1.4	8.7	...	1.0	3.5	73.6	14.3	40.3	...	2.9	16.2				
I lot Spring	10.3	0.7	4.6	...	0.7	4.1	41.1	4.2	17.7	...	3.2	16.0				
Howard	12.4	0.6	7.9	-0.1	1.0	3.1	51.1	3.6	36.3	-0.1	3.9	7.4				
Lafayette	21.4	0.1	14.2	...	1.9	5.1	76.7	1.3	56.4	-0.1	2.8	16.2				
Little River	9.9	...	6.0	...	1.0	2.9	45.3	...	31.8	...	1.9	11.6				
Miller	11.0	0.1	5.6	...	1.4	3.9	43.0	0.4	26.2	0.3	3.3	12.9				
Nevada	18.1	0.9	11.0	0.1	1.2	4.8	91.7	5.5	56.0	0.5	6.5	23.2				
Ouachita	26.6	0.6	14.0	...	3.4	8.5	119.0	1.5	71.6	-0.1	13.8	32.2				
Pike	14.5	1.6	10.9	...	0.5	1.5	70.4	12.4	51.3	...	1.8	4.9				
Sevier	11.0	...	3.8	0.3	1.6	5.3	44.7	0.1	18.9	0.4	5.1	20.2				
Union	38.8	0.7	23.3	0.2	3.2	11.4	185.6	4.6	122.3	1.1	10.4	47.2				
All counties	424.1	12.1	262.2	1.2	38.5	110.2	1834.1	71.1	1208.1	3.5	124.4	427.0				

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

²Hardwood 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, Southwest Arkansas, 1988

County	Growing stock						Sawtimber					
	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 cubic feet ----- Million board feet												
Ashley	25.9	0.5	18.9	...	1.9	4.7	116.4	1.3	98.1	...	2.4	14.7
Bradley	21.9	2.9	15.5	...	1.0	2.6	100.4	7.9	79.3	...	2.4	10.8
Calhoun	15.9	0.6	11.5	...	0.5	3.2	54.0	0.4	43.5	...	1.3	8.8
Clark	32.8	...	19.5	0.1	2.8	10.5	128.5	...	85.7	0.3	9.7	32.8
Cleveland	19.5	0.6	12.1	...	1.7	5.0	79.2	0.2	53.3	...	5.7	20.0
Columbia	21.8	1.5	16.6	...	0.8	2.9	77.2	...	66.2	...	2.2	8.8
Dallas	19.2	0.8	12.1	...	1.2	5.0	79.5	2.7	60.2	...	1.4	15.1
Drew	30.1	2.0	17.4	0.5	2.0	8.2	128.4	5.2	90.2	1.6	4.6	26.8
Grant	23.5	...	10.9	...	3.0	9.5	103.5	...	53.1	...	12.0	38.4
Hempstead	16.0	2.5	9.4	...	1.1	3.0	56.6	6.8	36.3	...	3.3	10.1
Hot Spring	15.0	2.7	7.2	...	0.8	4.3	62.8	14.5	35.5	...	1.2	11.5
Howard	28.7	1.4	20.8	...	1.9	4.6	141.0	5.1	118.1	...	4.0	13.9
Lafayette	12.1	...	10.2	...	0.2	1.7	40.7	...	35.2	...	0.1	5.4
Little River	10.3	...	8.1	...	0.4	1.9	36.3	...	32.6	...	0.2	3.5
Miller	7.5	...	4.1	...	1.0	2.3	24.9	...	16.9	...	2.8	5.2
Nevada	20.1	1.4	10.1	...	2.5	6.1	76.7	5.1	46.2	...	7.2	18.2
Ouachita	29.5	1.6	12.2	...	6.0	9.7	118.6	5.7	57.7	...	25.7	29.5
Pike	23.9	2.8	17.3	0.1	1.0	2.8	102.0	8.0	87.8	0.2	1.6	4.4
Sevier	18.5	0.1	12.9	...	1.7	3.8	77.1	0.2	63.9	...	3.2	9.8
Union	43.7	1.2	30.4	...	3.6	8.4	193.7	5.0	150.8	0.2	8.0	29.6
All counties	436.0	22.6	277.3	0.8	35.0	100.3	1797.3	68.1	1310.6	2.3	98.9	317.5

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

²Hardwood 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, Southwest Arkansas, 1988

Species	Growth	Removals
..... Million cubic feet		
Yellow pines	274.3	299.9
Other softwoods	1.2	0.8
Total softwoods	275.5	300.7
Select white-red oaks	30.7	29.0
Other white-red oaks	62.7	60.9
Hickory	7.8	6.9
Hard maple	0.1	...
Sweetgum	29.0	27.4
Ash-walnut-black cherry	2.7	1.2
Other hardwoods	15.7	9.8
Total hardwoods	148.7	135.3
All species	424.1	436.0

Table 21-Average net annual growth and average annual removals of sawtimber on timberland by species, Southwest Arkansas, 1988

Species	Growth	Removals
..... Million board feet		
Yellow pines	1279.2	1378.7
Other softwoods	3.5	2.3
Total softwoods	1282.7	1381.0
Select white-red oaks	121.3	103.5
Other white-red oaks	250.7	186.6
Hickory	30.0	20.9
Hard maple	...	...
Sweetgum	95.2	83.6
Ash-walnut-black cherry	8.6	1.8
Other hardwoods	45.7	19.9
Total hardwoods	551.5	416.4
All species	1834.1	1797.3

Table 22-Average annual mortality of growing stock and sawtimber on timberland by species, Southwest Arkansas, 1988

Species	Growing stock	Sawtimber
----- Million cubic feet ----- Million board feet		
Yellow pines	28.1	71.9
Other softwoods	0.6	1.3
Total softwoods	28.7	73.2
Select white-red oaks	2.6	8.1
Other white-red oaks	10.6	26.9
Hickory	2.0	5.6
Sweetgum	7.0	18.2
Ash-walnut-black cherry	0.9	1.1
Other hardwoods	4.3	10.3
Total hardwoods	27.4	70.3
All species	56.1	143.4

Table 23-Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, South west Arkansas, 1988

Ownership class		Growth							Removals				
		softwood			Hardwood				Softwood			Hardwood	
		Pine		Other	Soft ¹	Hard ²	Pine		Other	Soft ¹	Hard ²		
		Planted	Natural				Planted	Natural					
												All species	All species
----- Million cubic feet -----													
Other public	6.1	...	2.8	0.2	0.7	2.4	4.8	0.7	3.1	...	0.2	0.8	
Forest industry	217.9	3.9	147.9	0.7	16.1	49.3	258.4	7.0	178.4	0.2	20.5	52.4	
Forest industry-leased	1.1	...	0.5	0.1	...	0.5	0.7	...	0.7	...	...	...	
Other private	199.0	8.1	111.0	0.3	21.8	57.9	172.0	14.9	95.1	0.6	14.3	47.0	
All ownerships	424.1	12.1	262.2	1.2	38.5	110.2	436.0	22.6	277.3	0.8	35.0	100.3	

¹Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.
²Hardwood 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 group, Southwest Arkansas, 1988

Ownership class	species	Growth						Removals					
		Softwood			Hardwood			Softwood			Hardwood		
		Pine		Other	Soft ¹	Hard ²	Pine		Other	Soft ¹	Hard ²		
		Planted	Natural				Planted	Natural					
----- Million board feet -----													
Other public	29.6	0.1	15.7	0.9	1.9	11.0	20.3	4.0	14.4	...	0.5	1.4	
Forest industry	910.2	24.5	639.8	1.6	58.7	185.7	1136.7	24.2	881.5	0.5	66.2	164.4	
Forest industry-leased	5.2	...	2.9	...	0.1	2.2	3.8	...	3.8	...	...	...	
Other private	889.2	46.5	549.8	1.0	63.8	228.1	636.6	39.8	411.0	1.8	32.2	151.7	
All ownerships	1834.1	71.1	1208.1	3.5	124.4	427.0	1797.3	68.1	1310.6	2.3	98.9	317.5	

¹Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.
²Hardwood 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, Southwest Arkansas, 1988

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
<i>..... Million board feet</i>						
Yellow pines	20620.0	4871.6	4239.6	11399.1	...	109.8
Cypress	256.4	108.9	79.8	61.9	...	5.9
Redcedar	7.9	7.9	...	...	...	...
Total softwoods	20884.3	4988.3	4319.3	11461.0	...	115.6
Select white-red oaks	2201.8	330.5	458.4	904.1	418.3	90.4
Other white-red oaks	4338.5	213.3	595.1	1723.9	1530.8	275.5
Hickory	779.3	48.7	118.1	372.7	186.3	53.5
Hard maple	1.8	...	...	...	1.8	...
Sweetgum	2466.6	303.1	579.2	1030.3	400.0	154.1
Tupelo and blackgum	303.7	26.1	56.3	161.1	36.2	24.0
Ash-walnut-black cherry	186.4	22.3	44.5	93.7	13.1	12.9
Other hardwoods	748.7	40.5	96.7	246.2	244.4	121.0
Total hardwoods	11026.8	984.5	1948.2	4532.0	2830.9	731.2
All species	31911.1	5972.8	6267.6	15993.0	2830.9	846.9

Supplemental Tables 26-36

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

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
<i>..... Thousand acres</i>						
1-10	320.0	54.3	123.9	44.1	92.0	101.9
11-20	263.3	38.5	38.4	5.7	.	4.9
21-30	72.2	42.8	...	10.3	...	..
31-40	55.0	61.0	5.4	16.2	...	...
41-50	21.8	32.1	...	...	...	.
> 50	...	21.7	5.8	...	...	...
Mixed	95.0	1484.4	32.4	1118.4	21.8	2257.1
Total	827.3	1734.8	205.9	1194.8	113.8	2364.0

Table 27-Volume of softwood growing stock on timberland by forest type, Southwest Arkansas, 1988

County	Total	Forest type group				
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress
		Planted	Natural			
..... Million cubic feet						
Ashley	363.0	...	297.0	47.6	10.0	8.4
Bradley	274.5	19.1	155.1	73.2	15.2	12.0
Calhoun	242.3	22.1	146.6	46.2	6.3	21.0
Clark	288.5	40.1	135.6	86.1	21.2	5.4
Cleveland	289.9	28.9	169.7	62.7	26.8	1.7
Columbia	319.9	12.4	214.0	79.3	11.9	2.3
Dallas	291.1	26.5	162.1	75.8	24.6	2.1
Drew	259.2	44.8	129.7	54.6	17.3	12.8
Grant	222.4	56.8	90.1	52.8	16.7	5.9
Hempstead	222.7	109.2	48.7	56.1	8.1	0.6
Hot Spring	109.5	19.2	21.0	45.1	21.5	2.8
Howard	115.6	31.1	37.7	40.6	2.5	3.8
Lafayette	191.5	18.9	121.5	27.0	12.8	11.3
Little River	119.0	10.6	64.0	42.3	1.4	0.7
Miller	87.6	8.4	53.1	10.4	9.0	6.8
Nevada	248.1	25.3	136.0	60.5	13.0	13.2
Ouachita	291.4	19.4	189.0	60.7	12.5	9.8
Pike	209.3	52.2	100.8	51.0	5.3	...
Sevier	81.4	2.7	51.1	16.9	10.1	0.5
Union	468.3	52.1	257.5	117.5	30.8	10.3
All counties	4695.1	599.8	2580.4	1106.3	277.0	131.5

Table 28-Volume of hardwood growing stock on timberland by forest type, Southwest 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							
Ashley	124.8	...	19.2	13.1	35.3	57.3	...
Bradley	240.5	...	4.9	45.8	56.6	133.3	...
Calhoun	168.2		12.1	17.8	23.1	115.2	
Clark	214.7	3.3	15.3	50.5	75.1	70.5	...
Cleveland	273.8	0.5	27.1	32.6	109.9	103.8	..
Columbia	225.0	1.1	30.0	52.9	60.8	80.1	...
Dallas	183.6	8.6	27.0	29.2	71.6	47.1	
Drew	189.2	0.5	17.1	24.1	79.0	68.5	...
Grant	252.0	3.0	12.2	36.5	79.5	120.7	...
Hempstead	162.7	6.9	10.3	40.1	51.0	54.3	...
Hot Spring	119.9	4.8	7.3	27.2	42.9	37.7	
Howard	90.6	1.0	3.4	26.8	24.2	35.1	...
Lafayette	127.4	1.4	17.4	27.3	31.2	50.2	...
Little River	87.2	...	12.1	26.6	24.2	22.8	1.5
Miller	92.9	1.9	17.2	7.5	42.8	23.5	...
Nevada	184.7	1.9	16.8	45.7	57.8	62.5	...
Ouachita	271.8	4.9	26.5	36.9	48.5	154.9	...
Pike	66.8	9.6	13.1	33.2	11.0	...	...
Sevier	166.8	1.2	7.5	18.0	60.1	80.0	
Union	384.4	6.0	53.8	68.6	118.6	137.4	
All counties	3626.8	56.6	350.4	660.2	1103.1	1454.9	1.5

Table 29—Volume of softwood growing stock in the saw-logportion of sawtimber trees on timberland by forest type, Southwest Arkansas, 1988

County	Total	Forest type group				
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress
		Planted	Natural			
..... Million cubic feet						
Ashley	273.1	...	218.9	39.7	7.3	7.2
Bradley	196.6	13.6	107.4	54.0	11.5	10.2
Calhoun	162.0	5.2	98.7	36.9	3.8	17.4
Clark	208.6	19.7	99.5	72.4	13.2	3.8
Cleveland	212.3	19.6	118.8	50.0	22.8	1.2
Columbia	220.8	2.6	144.6	64.6	7.1	1.9
Dallas	205.0	13.0	115.7	55.7	19.1	1.6
Drew	188.4	30.8	95.1	41.0	13.4	8.2
Grant	114.8	9.4	54.5	34.8	11.2	4.8
Hempstead	167.5	86.0	35.6	39.8	5.6	0.5
Hot Spring	67.3	6.4	11.5	30.1	16.5	2.6
Howard	74.1	10.8	31.5	27.1	1.6	3.0
Lafayette	130.6	7.2	86.3	20.4	6.6	10.1
Little River	92.3	1.1	54.5	35.3	0.7	0.6
Miller	60.8	3.2	41.4	5.5	5.5	5.1
Nevada	185.4	19.3	99.6	43.3	10.7	12.5
Ouachita	227.7	14.6	141.1	52.0	10.7	9.3
Pike	144.3	31.1	70.4	38.8	4.0	...
Sevier	60.2	0.3	39.4	12.7	7.2	0.5
Union	357.5	28.9	201.2	91.5	26.5	9.4
All counties	3349.2	323.0	1865.7	845.6	205.0	110.0

Table 30—Volume of hardwood growing stock in the saw-logportion of sawtimber trees on timberland by forest type, Southwest Arkansas, 1988

County	Total	Forest type group					
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress	Elm-ash- cottonwood
		Planted	Natural				
..... <i>Million cubic feet</i>							
Ashley	73.1	...	6.8	6.0	22.7	37.7	...
Bradley	137.8	...	1.2	18.3	29.1	89.2	...
Calhoun	91.6		2.0	8.3	10.9	70.3	...
Clark	107.1	0.6	5.1	18.3	36.4	46.6	...
Cleveland	156.5	...	9.7	13.3	59.1	74.4	...
Columbia	112.0	...	9.4	23.5	29.4	49.7	...
Dallas	90.6	4.6	11.1	11.2	34.5	29.1	...
Drew	98.9	0.2	4.0	5.2	47.9	41.7	...
Grant	133.5	0.6	5.7	11.9	35.5	79.8	...
Hempstead	75.4	1.4	6.6	14.6	24.9	28.0	...
Hot Spring	50.5		3.4	15.4	17.0	14.7	...
Howard	33.1	0.4	2.2	9.5	7.9	13.2	...
Lafayette	56.9	0.2	5.6	12.6	10.3	28.2	...
Little River	37.3		6.5	11.0	8.8	10.6	0.5
Miller	38.4		8.1	4.0	16.7	9.5	...
Nevada	96.0	0.5	6.7	17.0	29.3	42.4	...
Ouachita	141.6	2.5	7.6	14.6	17.9	99.1	...
Pike	31.2	4.3	3.2	17.7	5.9		...
Sevier	88.2	0.4	2.1	5.9	30.7	49.2	...
Union	214.3	2.4	19.3	32.6	66.9	93.1	...
All counties	1864.1	18.1	126.3	270.8	541.7	906.7	0.5

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

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	softwood	Hardwood	softwood	Hardwood
----- Million cubic feet -----							
Ashley	509.5	363.0	124.8	2.4	16.5	...	2.8
Bradley	540.4	274.5	240.5	1.1	18.8	...	5.4
Calhoun	434.2	242.3	168.2	3.2	15.5	0.9	4.0
Clark	537.2	288.5	214.7	6.8	25.5	...	1.8
Cleveland	592.3	289.9	273.8	5.5	15.2	2.2	5.8
Columbia	579.4	319.9	225.0	6.1	23.9	...	4.6
Dallas	499.4	291.1	183.6	1.0	14.5	1.7	7.7
Drew	505.1	259.2	189.2	9.8	37.9	0.7	8.3
Grant	501.0	222.4	252.0	3.5	19.8	0.6	2.8
Hempstead	404.7	222.7	162.7	1.2	14.5	...	3.6
Hot Spring	246.6	109.5	119.9	2.7	11.4	...	3.1
Howard	218.2	115.6	90.6	1.0	9.5	...	1.5
Lafayette	331.7	191.5	127.4	0.6	9.0	...	3.2
Little River	225.2	119.0	87.2	3.7	12.9	...	2.5
Miller	205.2	87.6	92.9	2.5	16.2	0.3	5.7
Nevada	462.3	248.1	184.7	2.5	22.8	0.6	3.7
Ouachita	595.5	291.4	271.8	3.7	23.2	.	5.4
Pike	305.7	209.3	66.8	16.5	12.0	...	1.1
Sevier	268.1	81.4	166.8	0.3	18.5	...	1.2
Union	905.8	468.3	384.4	6.1	37.2	...	9.8
All counties	8867.4	4695.1	3626.8	80.4	374.4	6.9	83.9

Table 32-Number of live trees on timberland by detailed species and diameter class, Southwest Arkansas, 1988

Diameter class (inches at breast height)													
Species	All classes	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	196905	105777	34535	15353	13295	9442	7497	5978	3059	1333	375	262	...
Loblolly pine	981441	425560	240829	127547	75459	39345	27987	19155	11223	6917	3935	3398	86
Redcedar	21636	15398	3927	1390	725	143	54	...	...	...	...	...	...
Cypress	7730	2472	984	1094	1011	561	401	461	274	199	68	175	30
Total softwoods	1207713	549208	280274	145385	90489	49491	35938	25594	14556	8449	4377	3835	117
Select white oaks	182651	106390	40430	11760	9193	5802	3417	2531	1167	798	566	560	38
Select red oaks	55423	29924	11429	3636	3356	2067	1680	868	757	475	449	685	96
Other white oaks	117477	52705	26325	14056	9174	6619	3454	2138	1202	747	379	589	90
Other red oaks	346510	215512	52031	24209	17005	13480	8562	5753	3894	2446	1569	1865	184
Sweet pecan	300	...	...	1%	59	...	...	...	14	...	...	31	...
Water hickory	6657	1500	2510	808	884	322	183	141	121	131	38	19	...
Other hickories	174168	118921	25381	13239	7019	3324	2882	1643	810	510	192	233	13
Persimmon	33826	29466	3023	678	442	161	56	...	...	...	...	...	...
Hard maple	1761	1064	444	93	147	...	...	...	...	13	...	...	...
Soft maple	271409	225372	30752	8887	3635	1474	539	377	236	68	19	40	9
Boxelder	6845	4159	1939	228	252	198	26	...	29	...	9	6	..1
Beech	7691	3540	2105	108	341	436	225	234	101	201	106	210	83
Sweetgum	725059	489554	125367	52352	25597	14441	7533	4744	2733	1449	723	526	40
Blackgum	191400	144162	28152	9852	3252	2720	1517	834	464	207	126	101	13
Other gums/tupelos	4715	2118	1476	307	254	141	98	96	56	46	56	63	4
White ash	42246	31183	5750	2449	1143	745	501	256	138	49	10	21	...
Other ashes	52421	36146	8866	4110	1684	876	313	127	152	49	31	67	...
Sycamore	3504	1537	1028	374	123	114	78	86	46	47	40	22	9
Cottonwood	1253	478	492	77	...	32	...	67	41	11	9	41	4
Basswood	613	516	...	...	...	37	25	15	...	...	...	20	...
Magnolia	43	...	...	...	...	43	...	...	...	...	...	...	...
Sweetbay	23814	14202	7271	975	363	430	261	118	80	38	28	49	..
Willow	3229	2461	...	242	251	39	...	108	15	25	30	38	21
Black walnut	1255	953	...	204	...	97	...	...	...	...	...	...	...
Black cherry	32048	23577	6604	865	699	79	107	61	32	...	18	6	...
American elm	24197	15649	3104	2010	1447	944	397	357	97	110	56	26	...
Other elms	187761	151307	24284	7263	2361	1580	571	270	14	57	49	6	...
River birch	3100	1778	...	487	253	248	174	69	28	11	19	32	...
Hackberry	23904	13007	6123	2115	1149	519	239	305	146	113	93	79	15
Other locusts	1773	...	1040	355	55	106	130	57	31	...	...	...	...
Sassafras	29088	24640	3605	433	334	...	26	21	17	12	...	...	...
Dogwood	140344	123064	15044	2056	181	...	...	...	...	...	...	...	...
Holly	111952	83092	20508	4316	2181	1077	461	211	72	24	10	...	...
Other commercial	14607	11101	1973	865	424	158	56	23	...	...	...	7	...
Total hardwoods	2823045	1959081	457056	169602	93257	58310	33512	21510	12491	7636	4628	5341	620
Noncommercial	422961	339617	58526	18133	4554	1514	376	141	28	63	9	...	...
All species	4453718	2847906	795856	333120	188300	109315	69825	47245	27076	16148	9015	9177	736

Table 33-Number of growing-stock trees on timberland by detailed species and diameter class, Southwest 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
----- Thousand trees -----											
Shortleaf pine	52716	12889	12231	9191	7435	5957	3042	1333	37.5	262	...
Loblolly pine	300739	117919	72457	38300	27657	19033	11157	6883	3904	3342	86
Redcedar	1845	1094	554	143	54	...	...	...	...	...	...
Cypress	3598	868	961	293	401	442	230	187	68	129	19
Total softwoods	358897	132770	86203	47927	35546	25432	14430	8403	4347	3733	105
Select white oaks	31234	9221	8412	5261	3116	2359	1088	760	4%	497	24
Select red oaks	12967	3122	3166	2020	1547	806	724	464	420	616	80
Other white oaks	33226	11862	8133	5929	2985	1786	1035	664	321	455	57
Other red oaks	69894	19986	15288	12603	7853	5289	3661	2264	1351	1481	119
Sweet pecan	286	1%	59	...	...	...	...	...	...	31	...
Water hickory	2173	572	817	244	183	98	121	107	21	11	...
Other hickories	23188	9603	5518	2810	2483	1384	700	384	114	178	13
Persimmon	917	479	250	161	28	...	...	...	...	...	...
Hard maple	252	93	147	...	...	...	...	13	...	...	...
Soft maple	7933	4544	1850	1003	237	133	78	35	19	25	9
Boxelder	607	228	209	100	26	...	29	...	9	6	...
Beech	1521	108	220	352	1%	190	74	131	79	143	28
Sweetgum	94335	40890	23356	13772	6919	4555	2451	1274	632	472	14
Blackgum	12564	5519	2519	2037	1298	610	305	124	86	53	13
Other gums/tupelos	618	198	120	101	...	36	56	23	47	37	...
White ash	3753	1483	943	552	394	201	124	26	10	21	...
Other ashes	5593	2710	1562	709	229	107	136	49	31	61	...
Sycamore	882	374	123	114	78	63	31	47	30	22	...
Cottonwood	206	...	...	32	...	67	41	11	9	41	4
Basswood	40	...	...	...	25	15	...	...	...	...	...
Sweetbay	1562	626	230	313	208	81	49	13	19	23	...
Willow	486	146	134	...	...	89	15	25	30	33	15
Black walnut	199	102	...	97	...	...	...	...	...	...	...
Black cherry	988	493	306	39	54	41	32	...	18	6	...
American elm	3965	1466	928	739	287	338	64	79	46	18	...
Other elms	9233	5070	2035	1392	493	171	...	34	38	...	...
River birch	1017	368	189	248	125	31	...	11	19	25	...
Hackberry	3490	1467	949	470	154	183	41	82	68	64	12
Other locusts	467	251	...	73	73	57	14	...	...	...	...
Sassafras	421	128	281	...	...	...	...	12	...	...	...
Dogwood	931	871	61	...	...	...	...	...	...	...	...
Holly	4546	2376	1052	585	362	100	72	...	...	...	...
Other commercial	308	161	118	...	29	...	...	...	...	...	...
Total hardwoods	329804	124711	78975	51758	29379	18789	10939	6633	3913	4319	388
All species	688701	257482	165178	99685	64925	44221	25368	15036	8260	8052	493

Table 34—*Volume of growing-stock trees on timberland by detailed species and diameter class, Southwest Arkansas, 1988*

Diameter class (inches at breast height)											
Species	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	895.8	37.5	87.6	133.1	167.6	194.3	137.3	78.8	30.8	28.7	...
Loblolly pine	3732.8	281.1	434.2	468.0	540.9	554.5	456.0	378.5	270.0	334.1	15.5
Redcedar	7.6	2.6	3.0	1.3	0.7	...	...	...	...	...	...
Cypress	58.9	1.6	3.2	3.0	6.2	9.9	8.1	9.1	3.7	11.7	2.4
Total softwoods	4695.1	322.8	528.2	605.3	715.5	758.6	601.5	466.3	304.5	374.5	17.9
Select white oaks	394.2	25.2	51.5	57.6	56.5	60.8	36.7	36.8	28.5	38.1	2.5
Select red oaks	235.3	7.9	18.5	22.0	29.0	21.9	26.0	21.0	24.1	54.2	10.8
Other white oaks	326.0	30.4	44.6	58.1	46.4	41.4	30.6	24.1	13.9	30.0	6.4
Other red oaks	983.2	51.6	95.3	139.5	143.1	133.7	122.4	100.1	72.2	111.0	14.3
Sweet pecan	3.5	0.5	0.2	...	...	...	...	...	...	2.8	...
Water hickory	23.5	2.0	4.1	2.5	2.9	1.9	4.0	3.9	1.1	1.2	...
Other hickories	221.4	21.3	28.0	30.0	41.5	34.4	25.1	16.5	6.8	16.0	1.8
Persimmon	4.5	1.3	1.3	1.6	0.4	...	...	...	...	...	...
Hard maple	1.3	0.3	0.7	...	...	...	...	0.4	...	...	...
Soft maple	46.7	12.5	10.1	10.2	4.1	2.5	2.2	1.1	1.3	1.7	1.0
Boxelder	5.1	0.6	1.1	1.2	0.4	...	0.9	...	0.3	0.5	...
Beech	36.9	0.5	1.3	3.7	2.7	3.8	2.7	5.5	2.7	9.8	4.1
Sweetgum	924.8	97.4	144.6	168.7	138.9	129.3	97.3	67.8	40.4	38.9	1.7
Blackym	109.4	12.4	14.7	20.9	22.4	14.6	10.2	5.2	4.7	2.9	1.5
Other gums/tupelos	8.3	0.3	0.4	1.2	...	0.6	1.5	0.7	1.6	1.9	...
White ash	33.4	3.4	6.6	6.0	6.3	4.6	4.0	1.0	0.5	0.8	...
Other ashes	43.4	7.1	10.8	7.3	4.1	2.4	4.4	2.1	1.4	3.8	...
Sycamore	13.1	1.2	0.9	1.4	1.2	1.9	0.9	2.1	1.7	1.8	...
Cottonwood	8.2	...	...	0.1	...	1.9	1.5	0.4	0.6	3.2	0.5
Basswood	0.7	...	...	...	0.4	0.3	...	...	...	...	...
Sweetbay	16.4	2.0	1.9	3.4	3.7	1.7	1.3	0.5	0.8	1.1	...
Willow	8.7	0.3	0.4	...	...	2.4	0.4	0.7	1.4	2.0	1.1
Black walnut	1.3	0.2	...	1.2	...	...	...	...	...	...	...
Black cherry	8.7	1.7	2.2	0.5	0.9	1.0	1.1	...	0.9	0.5	...
American elm	37.5	3.4	5.6	7.5	4.0	7.8	1.9	3.3	2.5	1.5	...
Other elms	53.9	11.9	11.3	15.0	7.8	4.3	...	1.7	1.9	...	...
River birch	12.6	1.4	1.8	3.3	2.4	1.1	...	0.4	1.0	1.2	...
Hackberry	32.9	3.2	4.8	4.4	1.9	4.5	2.0	3.1	3.3	4.4	1.3
Other locusts	3.8	0.6	...	0.6	1.5	1.0	0.1	...	...	...	...
Sassafras	1.8	0.3	1.2	...	...	...	...	0.3	...	...	...
Dogwood	1.8	1.6	0.2	...	...	...	...	...	...	...	...
Holly	23.1	4.1	5.3	5.2	4.7	2.1	1.8	...	...	...	...
Other commercial	1.4	0.4	0.7	...	0.3	...	...	...	...	...	...
Total hardwoods	3626.8	307.2	470.0	572.9	527.5	481.7	378.9	298.7	213.4	329.4	47.0
All species	8321.8	630.1	998.2	1178.3	1242.9	1240.3	980.4	765.0	517.9	703.9	64.9

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

		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
Species		<i>..... Million cubic feet</i>								
Shortleaf pine		683.9	111.2	148.8	176.3	123.8	70.8	27.5	25.5	...
Loblolly pine		2617.1	370.8	464.4	489.0	405.0	337.6	241.7	295.1	13.6
Redcedar		1.6	1.0	0.6	...	...	...	...	...	...
Cypress		46.6	2.2	4.6	8.6	7.0	8.1	3.3	10.6	2.2
Total softwoods		3349.2	485.1	618.4	673.9	535.8	416.5	272.4	331.2	15.8
Select white oaks		209.9	...	40.4	49.9	30.1	30.0	24.4	32.7	2.4
Select red oaks		155.8	...	20.2	17.9	22.1	18.4	21.1	46.5	9.5
Other white oaks		160.1	...	34.4	34.9	26.2	20.5	12.6	26.2	5.4
Other red oaks		576.1	...	103.9	110.5	105.0	86.4	62.3	95.7	12.4
Sweet pecan		2.4	...	...	...	...	...	...	2.4	...
Water hickory		12.5	...	2.4	1.6	3.6	3.3	0.9	0.7	...
Other hickories		114.3	...	30.6	28.0	20.9	14.2	5.8	13.2	1.5
Persimmon		0.2	...	0.2	...	...	...	...	...	...
Hard maple		0.3	...	...	...	...	0.3	...	...	...
Soft maple		11.0	...	3.2	1.8	1.7	0.9	1.2	1.4	0.8
Boxelder		1.5	...	0.2	...	0.7	...	0.2	0.5	...
Beech		26.6	...	1.9	3.1	2.4	5.0	2.3	8.5	3.3
Sweetgum		418.0	...	94.9	105.0	85.7	60.4	35.6	34.8	1.6
Blackgum		49.5	...	16.6	11.9	8.5	4.5	4.0	2.6	1.5
Other gums/tupelos		5.2	...	...	0.5	1.3	0.5	1.3	1.6	...
White ash		13.8	...	4.6	3.9	3.3	0.8	0.4	0.7	...
Other ashes		15.3	...	3.1	1.9	3.7	1.8	1.3	3.4	...
Sycamore		8.0	...	1.0	1.5	0.8	1.8	1.5	1.4	...
Cottonwood		6.7	...	...	1.5	1.1	0.3	0.3	3.0	0.5
Basswood		0.5	...	0.3	0.2	...	...	...	...	...
Sweetbay		7.2	...	2.5	1.3	1.3	0.4	0.7	0.9	...
Willow		6.5	...	...	1.9	0.4	0.6	1.1	1.6	0.9
Black cherry		3.8	...	0.8	0.7	1.1	...	0.8	0.5	...
American elm		16.4	...	3.1	5.5	1.6	2.9	2.2	1.1	...
Other elms		12.2	...	5.9	3.6	...	1.5	1.3	...	...
River birch		5.0	...	1.8	1.0	...	0.4	0.8	1.1	...
Hackberty		16.5	...	1.3	3.7	1.8	2.6	2.6	3.6	0.9
Other locusts		2.0	...	1.3	0.7	...	...	...	...	...
Sassafras		0.3	...	...	...	...	0.3	...	...	...
Holly		6.3	...	3.4	1.5	1.4	...	...	...	...
Other commercial		0.2	...	0.2	...	...	...	...	...	...
Total hardwoods		1864.1	...	378.0	394.1	324.7	257.7	184.8	284.2	40.8
All species		5213.4	485.1	996.4	1067.9	860.5	674.2	457.2	615.4	56.6

**Table 36—Volume of timber on timberland by species and class of timber,
Southwest Arkansas, 1988**

Species	All live	Growing stock	Rough	Rotten
<i>..... Million cubic feet</i>				
Shortleaf pine	916.0	895.8	20.0	0.3
Loblolly pine	3788.7	3732.8	55.1	0.8
Redcedar	9.3	7.6	1.6	...
Cypress	68.4	58.9	3.7	5.8
Total softwoods	4782.4	4695.1	80.4	6.9
Select white oaks	421.7	394.2	24.0	3.5
Select red oaks	245.9	235.3	7.4	3.2
Other white oaks	362.8	326.0	29.1	7.8
Other red oaks	1057.4	983.2	54.0	20.2
Sweet pecan	4.0	3.5	0.5	...
Water hickory	27.2	23.5	2.6	1.1
Other hickories	253.6	221.4	24.6	7.7
Persimmon	6.2	4.5	1.7	...
Hard maple	1.3	1.3	...	...
Soft maple	72.9	46.7	22.3	3.8
Boxelder	5.8	5.1	0.7	...
Beech	48.1	36.9	3.5	7.6
Sweetgum	991.5	924.8	54.1	12.5
Blackgum	133.6	109.4	17.4	6.7
Other gums/tupelos	12.8	8.3	3.3	1.2
White ash	39.5	33.4	5.0	1.1
Other ashes	50.3	43.4	6.1	0.8
Sycamore	13.8	13.1	0.5	0.2
Cottonwood	8.3	8.2	0.1	...
Basswood	2.1	0.7	1.0	0.4
Magnolia	0.4	...	0.4	...
Sweetbay	21.5	16.4	2.8	2.3
Willow	10.0	8.7	1.1	0.1
Black walnut	1.5	1.3	0.2	...
Black cherry	11.9	8.7	2.7	0.5
American elm	44.8	37.5	7.0	0.2
Other elms	63.4	53.9	8.6	0.9
River birch	15.0	12.6	2.2	0.2
Hackberry	42.6	32.9	8.9	0.8
Other locusts	5.1	3.8	1.4	...
Sassafras	2.9	1.8	1.1	...
Dogwood	3.4	1.8	1.6	...
Holly	36.2	23.1	12.1	0.9
Other commercial	4.0	1.4	2.6	...
Total hardwoods	4021.2	3626.8	310.6	83.9
Noncommercial	63.8	...	63.8	...
All species	8867.4	8321.8	454.8	99.8

Graphics

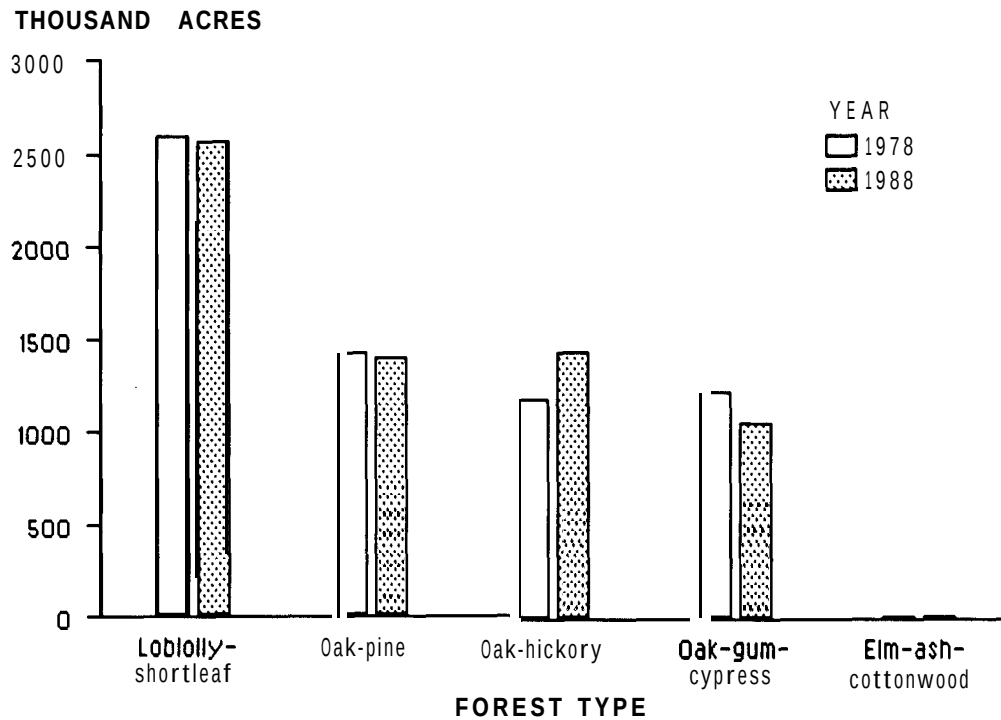


Figure 1.--Area of timberland by forest type, Southwest Arkansas, 1978 and 1988.

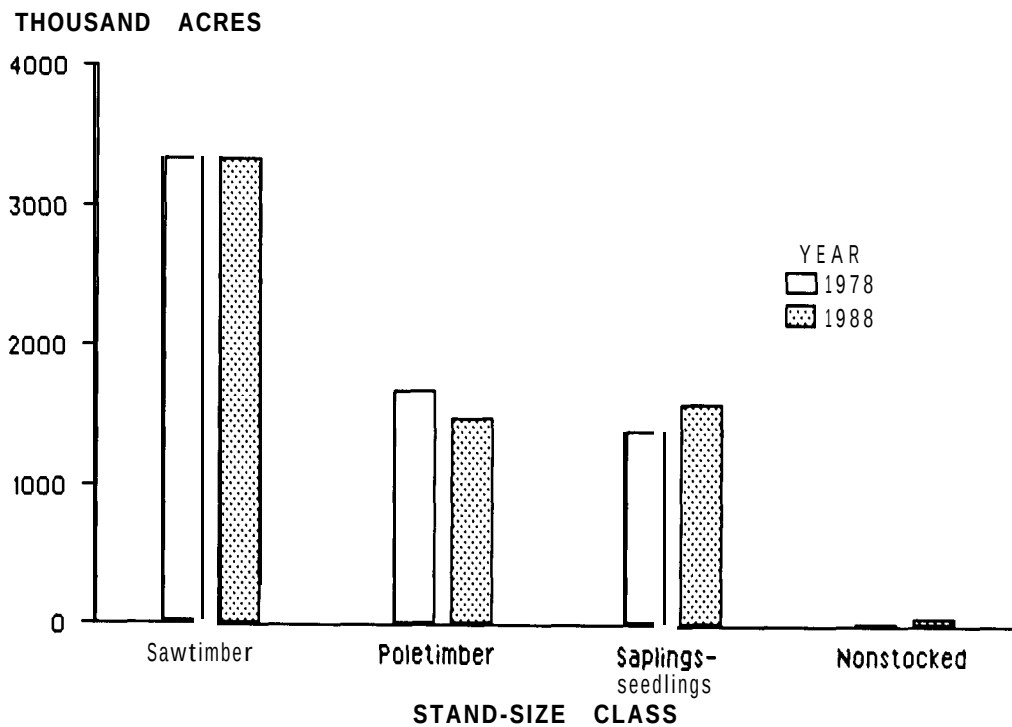


Figure 2.--Area of timberland by stand-size class, Southwest Arkansas, 1978 and 1988.

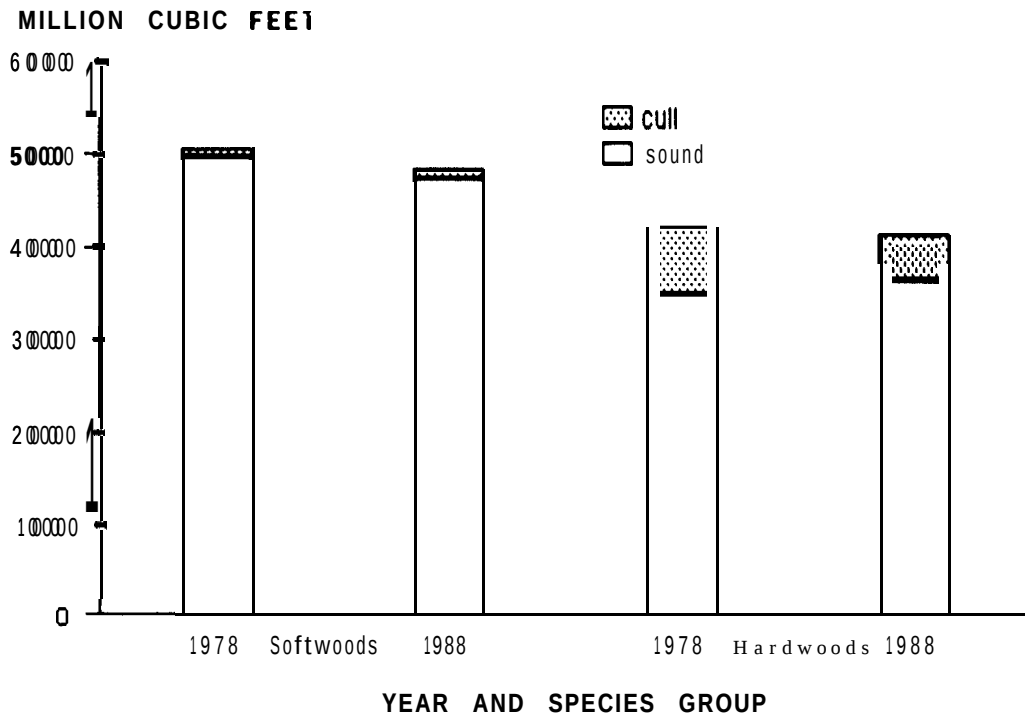


Figure 3.--Volume of timber on timberland by species group and class of timber, Southwest Arkansas, 1978 and 1988.

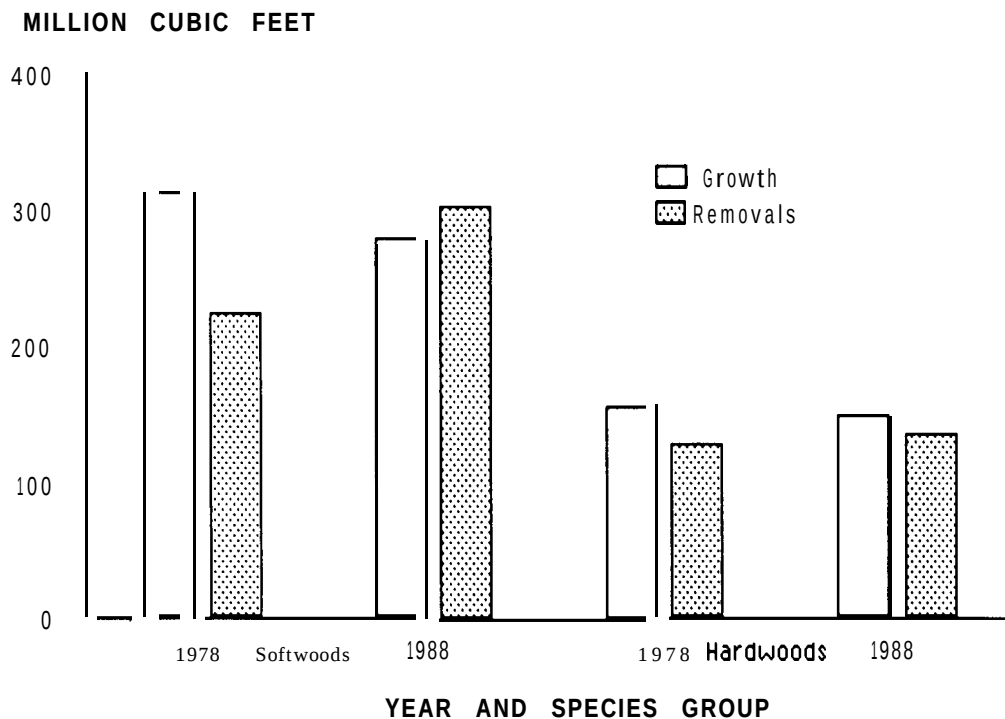


Figure 4.--Average net annual growth and average annual removals of growing stock on timberland by species group, Southwest Arkansas, 1978 and 1988.

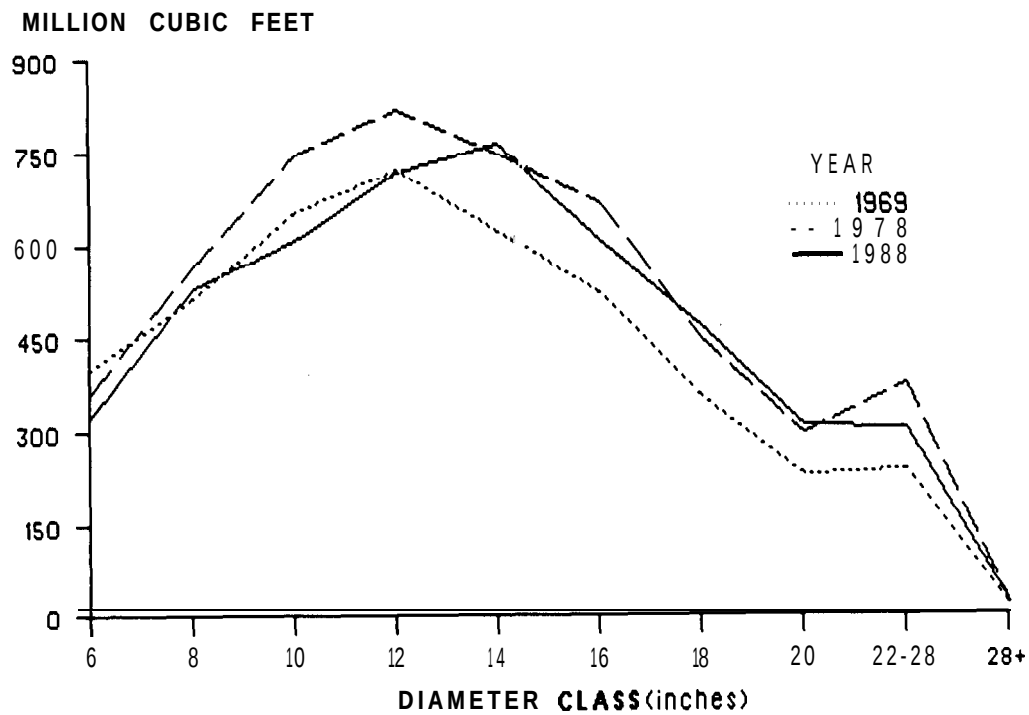


Figure 5.--Volume of softwood growing stock on timberland by diameter class, Southwest Arkansas, 1969, 1978, and 1988.

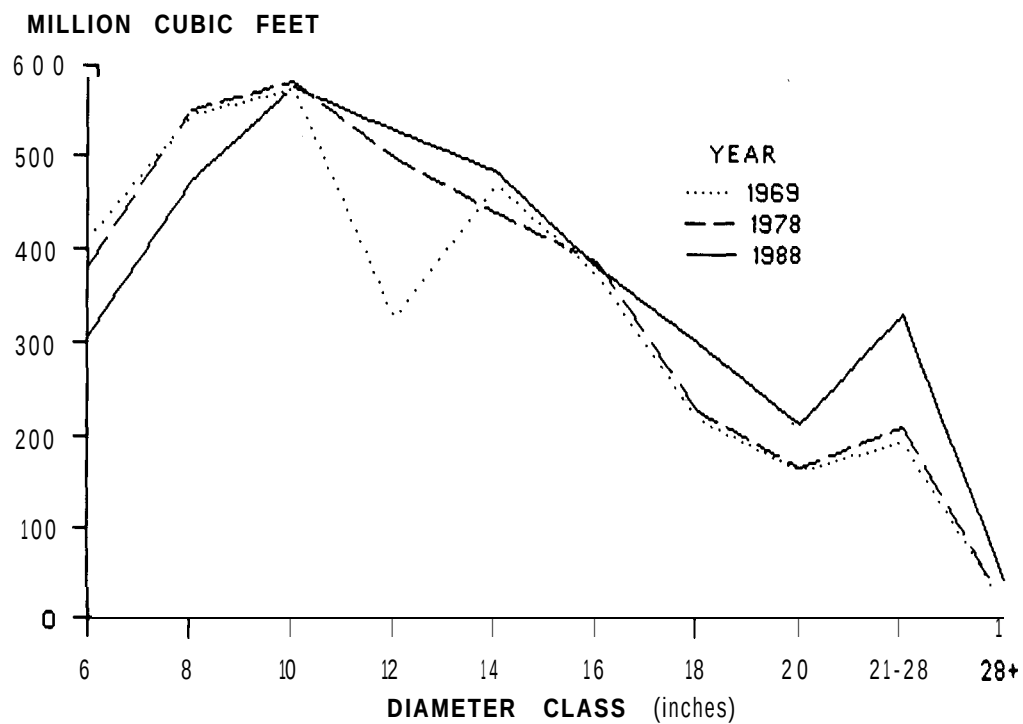


Figure 6.--Volume of hardwood growing stock on timberland by diameter class, Southwest Arkansas, 1969, 1978, and 1988.

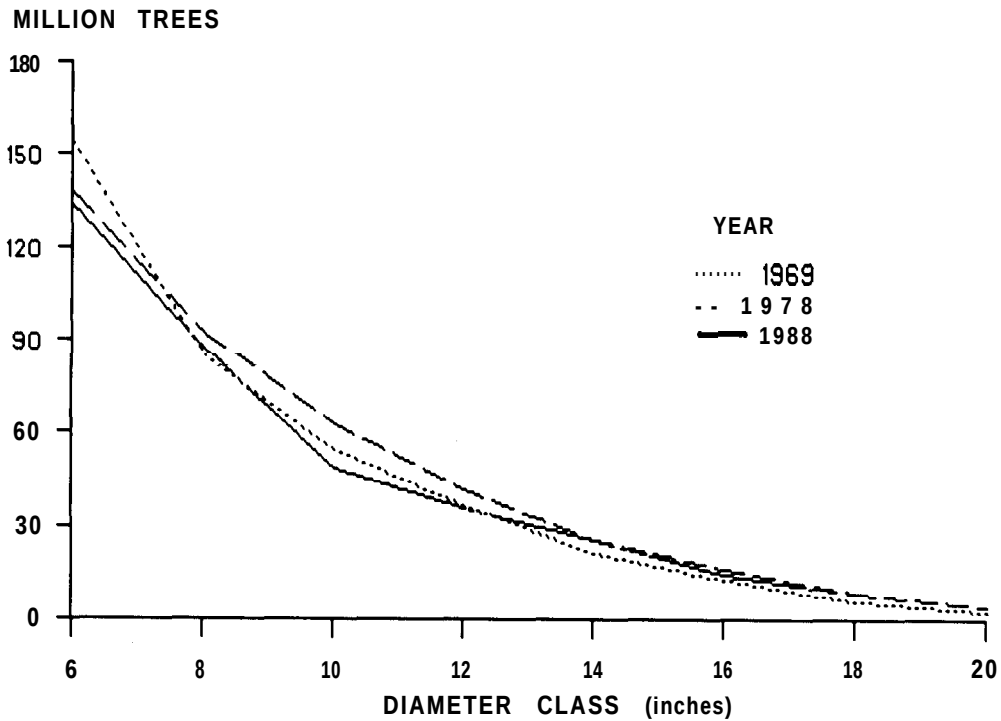


Figure 7.--Number of softwood growing-stock trees on timberland by diameter class, Southwest Arkansas, 1969, 1978, and 1988.

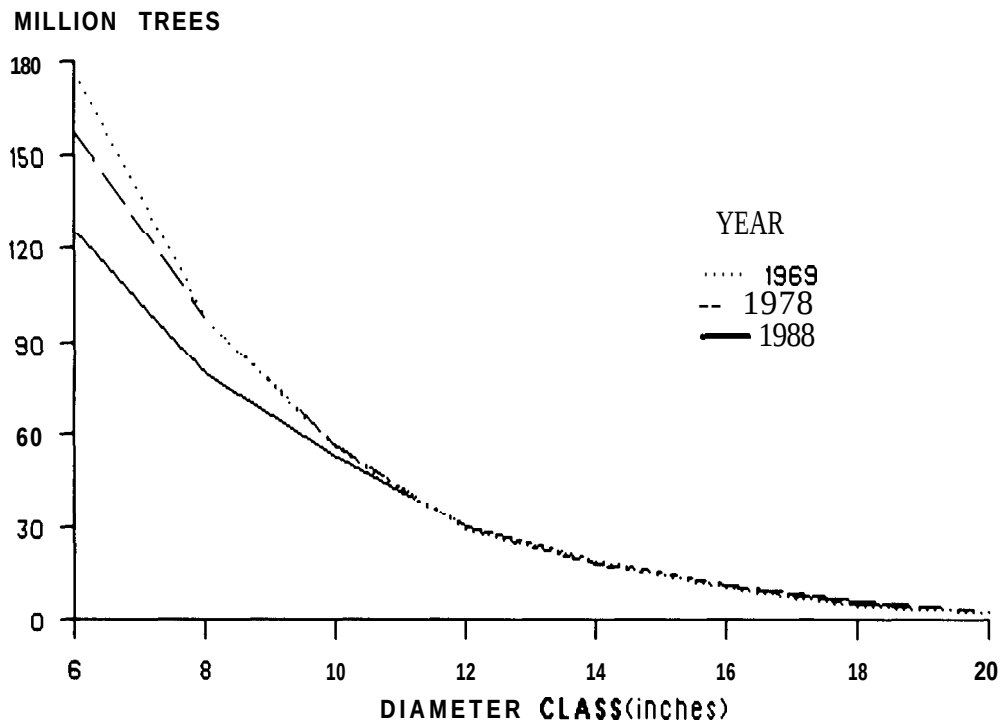


Figure 8.--Number of hardwood growing-stock trees on timberland by diameter class, Southwest Arkansas, 1969, 1978, and 1988.

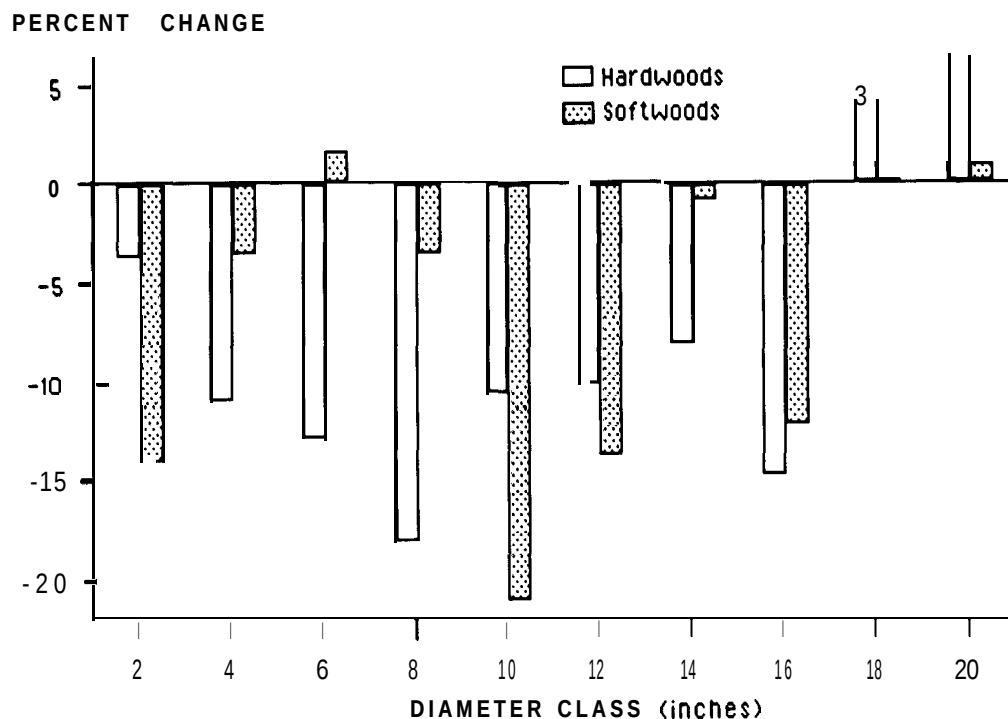


Figure 9.--Percent change in the number of live trees on **timberland** by species group and diameter class, Southwest Arkansas, 1978 and 1988.

Hines, F. Dee. Forest Statistics for Southwest Arkansas Counties — 1988. Resource Bull. SO- 140 . New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station; 1988. 32 p.

Tabulates forest resource information from a new inventory of Southwest Arkansas.

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

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