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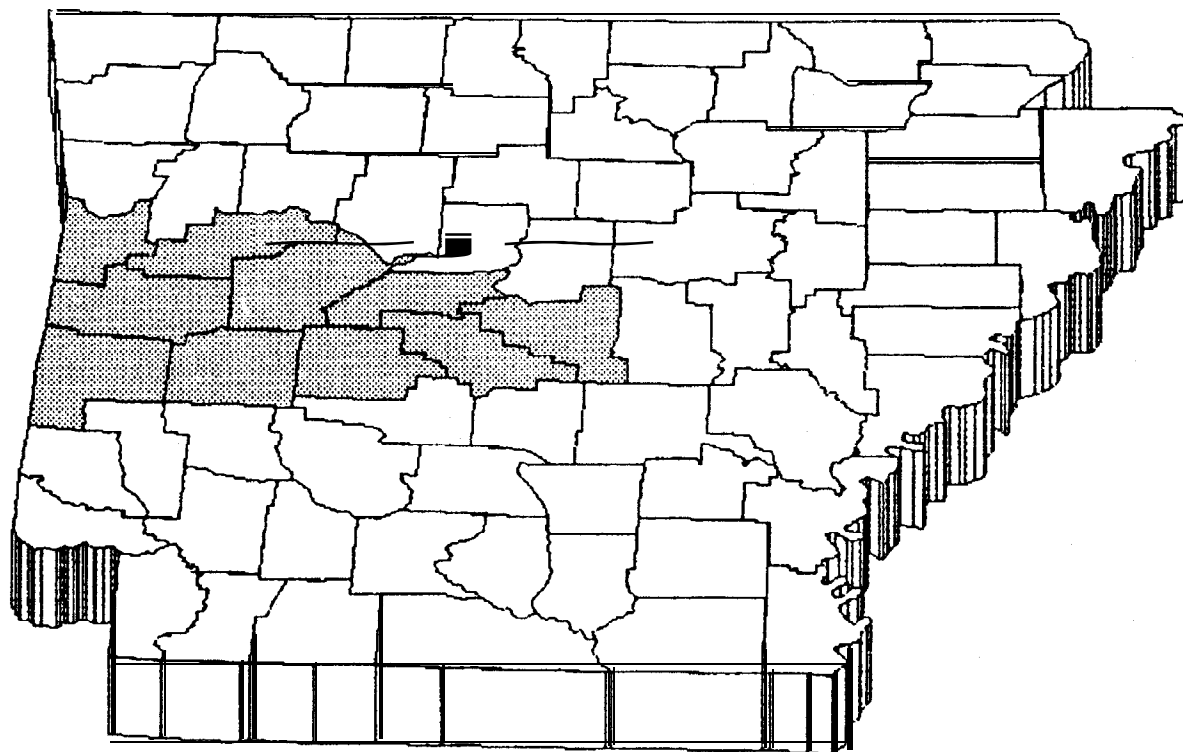
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Forest Statistics for Arkansas' Ouachita Counties - 1988

F. Dee Hines



SUMMARY

The 1988 survey of the Ouachita Unit of Arkansas shows some constants and some changes since the 1978 survey.

- Timberland area now covers 3172.2 thousand acres, about the same as it was in 1978.
- Ownership patterns are relatively unchanged except for other publicly owned timberland, which increased 21 percent.
- Area covered by the loblolly-shortleaf forest type declined 14 percent.
- Oak-pine forest types showed a 5-percent decrease in acreage.
- Oak-hickory forest types increased by 17 percent.
- Sawtimber and poletimber stands decreased by 6 percent each, sapling-seedling stands increased 9 percent.
- Plantation acreage is up 153 percent to 45 1.4 thousand acres.
- Softwood volumes have decreased; 1 percent for growing stock, 6 percent for sawtimber.
- Hardwood volumes have increased; 1 percent for growing stock, 38 percent for sawtimber.
- For softwoods, removals exceed growth for growing stock and sawtimber.
- Hardwood growth on growing stock and sawtimber is up.
- Removals of hardwood, both growing stock and sawtimber, have increased, but remain less than growth.
- Total mortality estimates are up over 10 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.

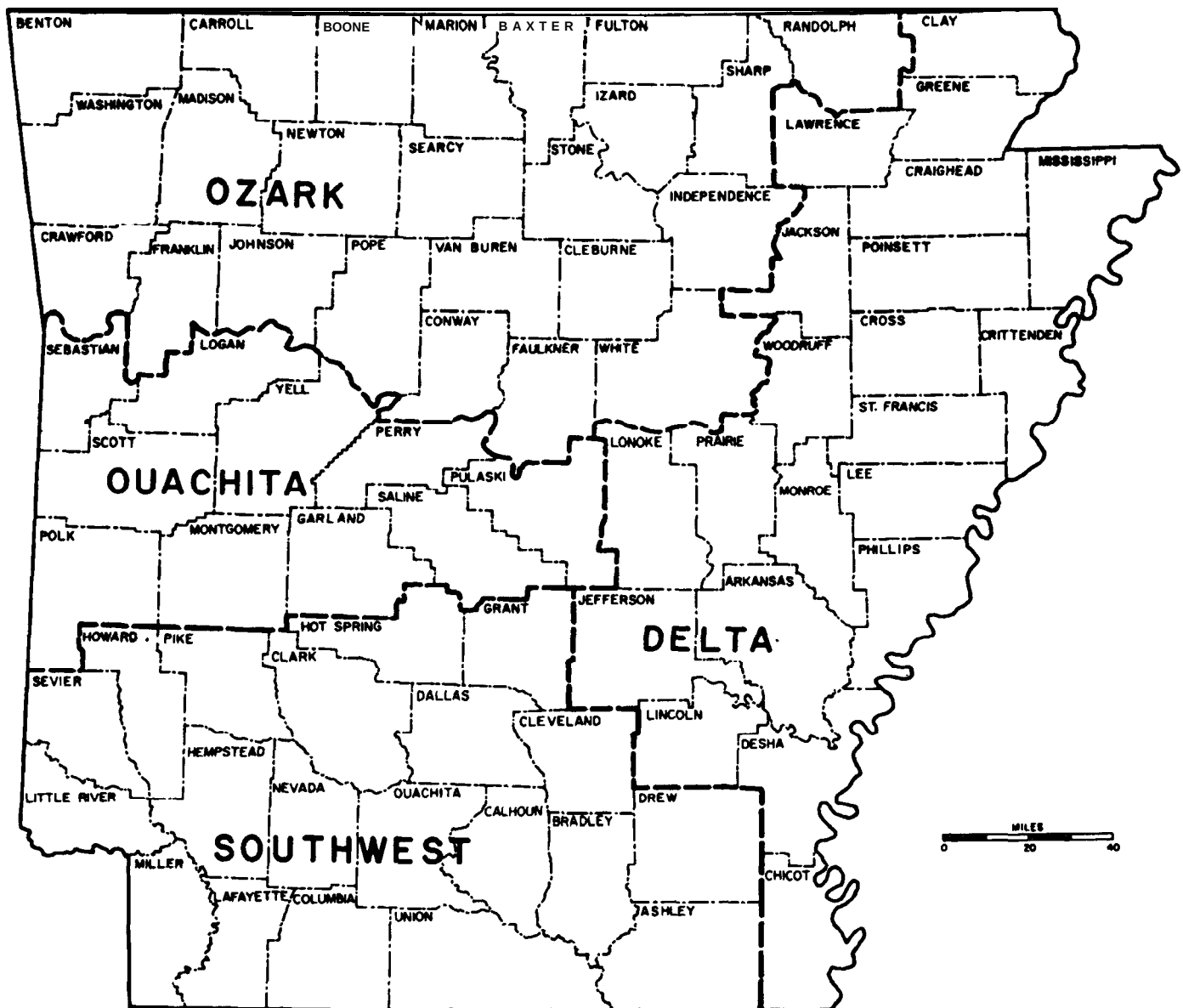


Figure I.-The forest survey regions of Arkansas.

Forest Statistics for Arkansas' Ouachita Counties-1988

F. Dee Hines

INTRODUCTION

Tabulated results were derived from data obtained during a recent inventory of 10 counties comprising the Ouachita 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 Ouachita region of Arkansas (with a sampling error of 3.2 percent) is

$$3,369.6 \pm 1.96(0.032 \times 3,369.6) = 3,369.6 \pm 211.3$$

where 1.96 is the number of standard deviations. This confidence interval indicates that the actual growing-stock volume lies in the range 3158.3 to 3580.9 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:

$$SE_t = \frac{SE_t \sqrt{X_t}}{\sqrt{X_0}}$$

where:

SE = standard error of estimate
(expressed as a percent)

Table I-Sampling errors¹ for timberland, growing stock, and sawtimber, Ouachita Counties, Arkansas, 1988

County	Timberland	Growing stock			Sawtimber
		Volume	Growth	Removals	Volume
----- <i>Percent</i> -----					
Garland	1.9	9.4	12.5	18.0	11.6
Logan	2.2	13.4	16.4	37.1	16.2
Montgomery	1.4	8.0	10.2	18.0	10.9
Perry	2.0	10.8	13.8	16.1	12.7
Polk	2.1	8.4	9.6	19.2	11.6
Pulaski	1.7	10.8	18.0	21.4	13.1
Saline	2.1	9.0	18.6	13.1	10.6
Scott	1.8	5.8	(2)	16.3	7.6
Sebastian	2.6	13.8		42.8	19.7
Yell	1.5	10.6	9.8	21.2	10.9
All counties	0.6	3.2	4.0	6.6	3.9

¹By random-sampling formula.

²Sampling error greater than 50.

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 Montgomery, Polk, and Scott counties is 4.6 percent. Thus, the 95 percent confidence interval for growing-stock volume is 1615.4 $\pm$ 145.6 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 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 Ouachita Unit of Arkansas is now 68-percent forested. Of this forest land, 3172.2 thousand acres are classified as timberland. This is a nonsignificant decline of 2 percent since the previous survey of 1978. Although land use changes have occurred, the timberland acreage base seems to have stabilized over this survey cycle.

Acreage estimates in the various ownership groups remained relatively unchanged since the previous survey. The National Forest System is the largest ownership category in this unit of Arkansas with 1308.7 thousand acres or 41 percent of the timberland total. Only other publicly owned land showed a significant change, up 21 percent to 173.9 thousand acres. Forest industry-owned land, including that under long-term lease, and other privately owned land did not change significantly.

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

	Tree grade 5		
	Excluded from growing stock	Included in growing stock	Percent change
<i>— Million cubic feet —</i>			
Softwood:			
Growing-stock volume	2040.9	2050.5	.5
Rough and rotten volume	51.8	42.2	-18.5
Growing-stock growth	62.8	63.7	1.4
Hardwood:			
Growing-stock volume	1270.8	1319.0	3.8
Rough and rotten volume	309.7	261.5	-15.6
Growing-stock growth	39.8	44.9	12.8
<i>----- Million board feet -----</i>			
Softwood:			
Sawtimber volume	8456.5	8488.2	.4
Sawtimber growth	350.4	353.5	.9
Hardwood:			
Sawtimber volume	2811.4	2998.6	6.7
Sawtimber growth	115.8	135.4	16.9

Changes in several forest types have occurred since the 1978 survey. The loblolly-shortleaf type decreased from 1204.1 to 1033.9 thousand acres. Oak-pine and bottomland hardwood forest types are both down 5 percent. The oak-pine type has 832.8 thousand acres while 191.9 thousand acres are classified as bottomland hardwood. The bottomland hardwood group includes oak-gum-cypress and elm-ash-cottonwood forest types. Only the oak-hickory forest type showed an increase in acreage. This group is up to 1113.6 thousand acres, a 17-percent increase.

Older sawtimber and poletimber stands are being replaced by younger sapling-seedling stands. Both sawtimber and poletimber stands decreased by 6 percent. Sawtimber stands now occupy 1233.0 thousand acres, while poletimber stands cover 1079.8 thousand acres. Sapling-seedling stands increased in area by 9 percent and now occupy 836.7 thousand acres. While these shifts are small, the trend is also seen by an increase in plantation acreage. Plantations now cover 451.4 thousand acres, up 153 percent from 178.3 thousand acres in 1978.

Number of Trees

The total number of live trees is down 16 percent in the Ouachita Unit. Softwood live tree total numbers are 14 percent below the 1978 estimate. All diameter classes show a decrease except the **20-inch** class where an increase is seen. The total number of live hardwood trees has also decreased, down 17 percent. However, with hardwood live trees, the lo-inch and all diameter classes over 14 inches show an increase in numbers.

An even greater decrease in total numbers is seen for growing-stock trees. Here, the total number of growing-stock trees is 39 percent lower than the previous estimate. The total number of softwood growing-stock trees has decreased by 21 percent. All softwood diameter classes below 20 inches suffered losses. Similarly, hardwood growing-stock trees dropped 49 percent over the survey period. This decrease was entirely below the **8-inch** diameter class. All other hardwood diameter classes showed an increase in total numbers.

Timber Volume

Softwood timber volumes have declined since the 1978 survey. The current estimate of softwood growing-stock volume is 13 percent less than the 2352.0 million cubic feet recorded during the previous survey. This is contrary to the 8-percent increase in growing-stock volume that occurred between 1969 and 1978. Similarly, softwood sawtimber volume increased 17 percent from 1969 to 1978, but has decreased 6 percent since 1978. The current estimate is 8488.2 million board feet.

Contrary to softwood volumes, hardwood volumes have shown an increase since the last survey. In 1978 hardwood growing-stock volume was estimated at 1105.5 million cubic feet, 16-percent greater than the 1969 survey figure. Today growing-stock volume of hardwood is 1319.0 million cubic feet, another **19-percent** increase. The same pattern is seen in sawtimber volume. The 1969 estimate of 1941.6 million board feet increased to 2172.2 million board feet in 1978. A 38-percent increase in sawtimber volume since the last survey yields the 1988 estimate of 2998.6 million board feet.

Growth, Removals, and Mortality

Total average net annual growth of growing stock decreased 22 percent. This decrease is due to a **35-percent** decline in softwood net annual growth. The current estimate of softwood growth is 63.7 million cubic feet. Conversely, hardwood net annual growth of growing stock has increased 6 percent to 44.9 million cubic feet.

Average net annual growth of sawtimber follows a similar pattern, decreasing by 5 percent. Softwood sawtimber growth is off 19 percent from the 1978 estimate. It is now estimated at 353.5 million board feet annually. However, net annual growth of hardwood sawtimber is 135.4 million board feet. This is a **70-percent** increase over the previous estimate of 79.8 million board feet.

Softwood average annual removals show a very large increase over previous levels. Removals of softwood growing stock are up 32 percent to 95.3 million cubic feet. Softwood sawtimber removals are currently estimated at 402.7 million board feet, or 46 percent greater than the 1978 figure.

As with softwood removals, average annual removals of hardwood are up, though to a lesser degree. Growing-stock removals are up 8 percent to 25.6 million cubic feet. Removals of hardwood sawtimber increased to 50.3 million board feet. However, this is only a 4-percent increase from the last survey.

The sharp decrease in average annual growth of softwoods combined with the increase in average annual removals of softwoods has created a situation of some concern. Total average annual removals exceed total average annual growth of growing stock. This could have serious implications upon future softwood supplies for the Ouachita area.

Ouachita mortality estimates have increased since 1978. Growing-stock mortality is currently estimated at 22.1 million cubic feet, a jump of 110 percent. The current survey also shows sawtimber mortality up 125 percent to 49.9 million board feet.

Tables 1-25 were developed to provide comparability 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 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 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.

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

Reserved timber land.—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.

Saw timber 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.

Saw timber 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 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 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, Ouachita Counties, Arkansas, 1988

County	All land ¹	Forest land				Nonforest land
		Total	Timberland ²	Woodland ³	Reserved timberland	
----- <i>Thousand acres</i> -----						
Garland	420.4	333.7	328.9	...	4.8	86.7
Logan	448.9	252.9	242.1	6.1	4.7	196.0
Montgomery	495.7	413.4	413.4	...	...	82.2
Perry	352.3	263.8	260.8	...	3.0	88.4
Polk	550.6	408.9	381.6	5.5	21.8	141.7
Pulaski	490.8	201.8	201.8	...	...	289.0
Saline	464.1	356.8	349.7	...	7.1	107.3
Scott	573.7	448.2	442.7	...	5.5	125.6
Sebastian	342.3	156.3	149.6	...	6.7	186.1
Yell	595.4	402.0	401.5	...	0.5	193.4
All counties	4734.2	3237.8	3172.2	11.5	54.1	1496.4

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.

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 timber land by county and land class, Ouachita Counties, Arkansas, 1988

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry ¹	Farmer	Corporate ²	Individual ³
----- Thousand acres -----									
Garland	328.9	97.1	5.4	...	5.4	118.6	...	16.2	86.3
Logan	242.1	90.8	24.2	...	...	12.1	24.2	6.1	84.7
Montgomery	413.4	307.1	5.9	...	...	53.2	11.8	5.9	29.5
Perry	260.8	70.6	...	5.4	..	135.8	21.7	5.4	21.7
Polk	381.6	158.1	...	5.5	16.4	81.8	27.3	5.5	87.2
Pulaski	201.8	...	25.9	...	...	41.4	25.9	51.7	56.9
Saline	349.7	27.8	...	...	5.6	172.1	16.7	27.8	99.9
Scott	442.7	356.4	..	...	...	5.7	5.7	11.5	63.2
Sebastian	149.6	...	45.5	...	6.5	...	32.5	6.5	58.5
Yell	401.5	200.8	11.2	11.2	...	78.1	50.2	...	50.2
All counties	3172.2	1308.7	118.1	22.0	33.8	698.8	216.0	136.5	638.3

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 timber land by county and forest type group, Ouachita Counties, Arkansas, 1988

County	Total	Forest type group					
		Loblolly-shortleaf pine		Oak- pine	Oak- hickory	Oak-gum- cypress	Elm-ash- cottonwood
		Planted	Natural				
----- <i>Thousand acres</i> -----							
Garland	328.9	70.1	64.7	43.1	151.0	...	..
Logan	242.1	.	60.5	90.8	84.7	6.1	...
Montgomery	413.4	11.8	135.8	106.3	159.5		...
Perry	260.8	27.2	92.4	76.1	54.3	10.9	.
Polk	381.6	32.7	43.6	141.7	163.6	...	...
Pulaski	201.8	5.2	25.9	51.7	88.0	25.9	5.2
Saline	349.7	44.4	66.6	94.4	105.5	38.9	...
Scott	442.7	23.0	189.7	92.0	138.0	..	...
Sebastian	149.6	...	6.5	19.5	91.1	19.5	13.0
Yell	401.5	27.9	106.0	117.1	78.1	72.5	...
All counties	3172.2	242.2	791.7	832.8	1113.6	173.7	18.2

Table 4—Area of timber land by county and stand-size class, Ouachita Counties, Arkansas, 1988

County	All classes	Stand-size class			Nonstocked ¹ areas
		Sawtimber	Poletimber	Sapling- seedling	
----- <i>Thousand acres</i> -----					
Garland	328.9	118.6	97.1	113.2	...
Logan	242.1	84.7	72.6	78.7	6.1
Montgomery	413.4	194.9	135.8	82.7	.
Perry	260.8	103.2	81.5	76.1	...
Polk	381.6	109.0	163.6	109.0	
Pulaski	201.8	82.8	82.8	36.2	.
Saline	349.7	116.6	105.5	122.1	5.6
Scott	442.7	224.2	149.5	69.0	...
Sebastian	149.6	26.0	52.0	71.5	...
Yell	401.5	172.9	139.4	78.1	11.2
All counties	3172.2	1233.0	1079.8	836.7	22.8

¹Timberland less than 16.7 percent stocked.

Table 5—Area of timber land by county and site class, Ouachita Counties, Arkansas, 1988

County	All classes	Site class (cubic feet/acre&ear)				
		> 165	120-165	85-120	50-85	< 50
----- <i>Thousand acres</i> -----						
Garland	328.9	5.4	...	59.3	237.2	27.0
Logan	242.1	...	6.1	6.1	115.0	115.0
Montgomery	413.4	...	17.7	94.5	242.2	59.1
Perry	260.8	...	...	27.2	206.5	27.2
Polk	381.6	...	...	109.0	223.5	49.1
Pulaski	201.8	...	5.2	46.6	113.8	36.2
Saline	349.7	5.6	16.7	99.9	183.2	44.4
Scott	442.7	5.7	11.5	86.2	270.2	69.0
Sebastian	149.6	...	...	6.5	65.0	78.0
Yell	401.5	11.2	16.7	66.9	251.0	55.8
All counties	3172.2	27.8	73.8	602.2	1907.6	560.7

Table 6--Area of timber land by county and stocking classes of growing-stock trees, Ouachita Counties, Arkansas, 1988

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>----- Thousand acres -----</i>						
Garland	328.9	16.2	75.5	172.5	64.7	...
Logan	242.1	...	30.3	127.1	78.7	6.1
Montgomery	413.4	11.8	124.0	200.8	76.8	...
Perry	260.8	16.3	48.9	168.5	27.2	...
Polk	381.6	10.9	76.3	196.3	98.1	...
Pulaski	201.8	...	15.5	93.1	93.1	...
Saline	349.7	16.7	94.4	172.1	61.1	5.6
Scott	442.7	11.5	132.2	247.2	51.7	...
Sebastian	149.6	...	13.0	65.0	71.5	...
Yell	401.5	5.6	61.3	217.5	106.0	11.2
All counties	3172.2	88.9	671.5	1660.1	728.9	22.8

Table 7--Area of timber land by forest type and ownership class, Ouachita Counties, 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	1034.0	579.8	22.0	301.7	...	130.5
Softwood total	1034.0	579.8	22.0	301.7	...	130.5
Oak-pine	832.8	335.7	22.7	220.6	...	253.8
Oak-hickory	1113.6	376.4	69.4	165.4	...	502.4
Oak-gum-cypress	173.7	16.7	46.8	11.1	...	99.0
Elm-ash-cottonwood	18.2	...	13.0	...	...	5.2
Hardwood total	2138.2	728.8	152.0	397.1	...	860.3
All types	3172.2	1308.7	173.9	698.8	...	990.8

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.

Table 8--Area of timber land by ownership and stocking classes of growing-stock trees, Ouachita Counties, Arkansas, 1988

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
----- <i>Thousand acres</i> -----						
National forest	1308.7	61.6	342.7	682.9	221.4	...
Other public	173.9	...	22.5	67.0	84.5	...
Forest industry	698.8	27.3	160.4	362.4	143.2	5.6
Other private	990.8	...	145.9	547.8	279.9	17.2
All ownerships	3172.2	88.9	671.5	1660.1	728.9	22.8

Table 9-Area of timber land by forest type and stand-size class, Ouachita Counties, Arkansas, 1988

Forest type ¹	All classes	Stand-size class			Nonstocked ² areas
		Sawtimber	Poletimber	Sapling- seedling	
<i>Thousand acres</i>					
Loblolly-shortleaf pine	1034.0	590.6	206.2	237.1	...
Softwood total	1034.0	590.6	206.2	237.1	...
Oak-pine	832.8	312.6	286.3	233.9	...
Oak-hickory	1113.6	235.0	525.0	342.0	11.6
Oak-gum-cypress	173.7	88.3	57.1	17.1	11.1
Elm-ashcottonwood	18.2	6.5	5.2	6.5	...
Hardwood total	2138.2	642.4	873.6	599.5	22.8
All types	3172.2	1233.0	1079.8	836.7	22.8

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.

Table 10-Number of live trees on timber land by species and diameter class, Ouachita Counties, 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
<i>Thousand trees</i>													
Shortleaf-loblolly pine	513678	215709	115400	62457	45872	32925	21467	12088	4879	1775	795	306	4
cypress	898	498	...	...	48	66	137	42	98	...	8	...	...
Other softwoods	53316	34598	10651	5125	1927	616	1%	150	17	25	12	...	...
Total softwoods	567893	250806	126051	67582	47847	33608	21800	12281	4994	1800	815	306	4
Select white oaks	157858	67203	36954	23795	15087	7215	2471	2102	1343	794	508	379	8
Select red oaks	56764	24840	13235	6899	4794	3168	1867	801	522	321	105	201	12
Other white oaks	157724	77620	36244	19980	10700	5907	2805	2501	1018	493	169	283	4
Other red oaks	100568	56093	19952	8999	6039	3531	2081	1430	1068	678	287	348	60
Hickory	241913	147457	56294	22797	8763	3848	1601	642	293	120	59	39	...
Hard maple	5572	3733	1500	278	62	...	...	...	...	...	...	...	...
Soft maple	63914	46312	12222	3257	1399	412	186	39	56	13	9	8	...
Beech	9	...	...	...	...	...	...	...	...	...	9	...	...
Sweetgum	96100	53112	21616	9318	4560	3339	1853	1339	549	229	107	69	7
Tupelo-blackgum	81981	63916	9742	3643	1784	974	616	620	391	100	99	92	4
Ash	30569	22691	3996	1309	1243	635	326	143	165	25	18	18	...
Cottonwood-aspen	20	...	...	...	...	...	...	...	20	...	...	...	...
Basswood	3276	1581	1003	366	68	174	56	21	...	...	...	7	...
Other hardwoods	317318	246907	50728	11341	4154	2351	814	517	194	144	41	122	5
Total hardwoods	1313587	811465	263486	111982	58653	31556	14676	10154	5619	2917	1411	1566	100
Noncommercial	186262	150103	27068	5821	1806	884	411	62	63	27	10	7	...
All species	2067742	1212374	416605	185385	108305	66048	36887	22497	10677	4744	2236	1879	105

Table 11- Number of growing-stock trees on timber land by species and diameter class, Ouachita 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
----- <i>Thousand trees</i> -----													
Shortleaf-loblolly pine	403233	145710	86337	54039	43641	32469	21324	12026	4849	1762	774	297	4
Cypress	400	...	...	...	48	66	137	42	98	...	8	...	...
Other softwoods	42651	26031	9628	4398	1870	376	144	150	17	25	12	...	...
Total softwoods	446284	171741	95966	58438	45559	32911	21605	12218	4963	1787	794	297	4
Select white oaks	101818	28073	27629	19600	14026	6656	2235	1560	989	536	301	204	8
Select red oaks	32603	6773	11172	5500	4017	2587	1286	506	336	209	77	134	8
Other white oaks	69856	21411	16222	14430	8541	4531	1828	1646	628	363	89	169	...
Other red oaks	67150	31121	15353	7468	5566	3055	1680	1140	819	475	228	212	35
Hickory	88927	31052	28715	16663	7259	3089	1172	542	248	108	39	39	...
Hard maple	839	...	500	278	62	...	...	...	.	...	...	...	...
Soft maple	15388	8630	3991	1557	958	154	24	39	27	...	9	...	...
Sweetgum	54005	19647	16068	7449	3723	3271	1748	1232	504	229	86	44	4
Tupelo-bald gum	25555	16187	3545	2767	1224	6%	356	362	241	76	71	32	4
Ash	10020	4805	2011	1081	994	546	326	85	119	25	18	8	...
Cottonwood-aspen	20	...	...	...	...	...	...	...	20	...	...	...	...
Basswood	1620	...	1003	366	...	174	56	21	...	...	.	...	...
Other hardwoods	79115	45592	21140	6558	2876	1765	590	257	118	109	31	74	2
Total hardwoods	546914	213290	147348	83715	49247	26518	11301	7390	4048	2130	949	917	61
All species	993199	385031	243314	142153	94806	59429	32906	19608	9011	3917	1743	1214	65

Table 12- Volume of growing stock on timber land by species and diameter class, Ouachita 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
----- <i>Million cubic feet</i> -----											
Shortleaf-loblolly pine	2017.9	140.4	303.0	430.3	433.2	349.7	193.4	92.9	49.2	25.5	0.5
Cypress	6.2	...	0.2	0.8	1.6	0.9	2.5	...	0.2	...	...
Other softwoods	26.4	10.0	8.1	3.0	1.8	2.1	0.4	0.7	0.5	...	...
Total softwoods	2050.5	150.3	311.3	434.0	436.6	352.6	196.2	93.6	49.9	25.5	0.5
Select white oaks	332.4	51.0	77.9	65.7	34.7	32.6	29.1	18.4	12.8	9.9	0.2
Select red oaks	124.9	15.9	23.4	24.8	19.8	11.0	8.7	8.2	3.5	8.8	0.9
Other white oaks	203.8	31.9	41.8	39.5	23.5	30.0	14.0	10.8	3.8	8.5	...
Other red oaks	193.6	17.8	29.9	28.5	26.3	24.7	23.3	16.8	10.2	12.7	3.3
Hickory	133.1	32.1	32.3	26.3	16.4	10.9	6.9	3.8	1.9	2.4	...
Hard maple	1.4	0.9	0.5	...	...	...	...	...	...	...	...
Soft maple	12.1	3.7	4.6	1.3	0.4	0.9	0.8	...	0.5	...	...
Sweetgum	170.5	15.5	21.6	36.9	31.2	30.2	16.0	10.5	5.2	3.0	0.4
Tupelo-bald gum	44.1	5.7	5.8	5.7	5.5	7.1	6.6	2.4	3.1	1.6	0.6
Ash	26.5	2.8	5.8	5.4	4.9	1.9	3.5	0.9	0.9	0.4	...
Cottonwood-aspen	05	...	...	...	...	...	0.5	...	...	.	...
Basswood	3.4	0.8	...	1.3	0.8	0.5	...	...	...	...	...
Other hardwoods	72.8	14.9	13.9	16.7	8.8	4.8	2.9	4.2	1.5	5.0	0.2
Total hardwoods	1319.0	192.9	257.7	252.1	172.2	154.6	112.2	76.1	43.5	52.3	5.6
All species	3369.6	343.2	568.9	686.1	608.8	507.2	308.4	169.6	93.4	77.8	6.0

Table 13—Volume of growing stock in the saw-log portion of saw timber trees on timber land by species and diameter class, Ouachita 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-loblolly pine	1376.9	362.5	382.6	312.7	171.1	83.0	42.7	22.0	0.4
Cypress	5.1	0.6	1.3	0.8	2.2	...	0.2	..	...
Other softwoods	7.4	2.3	1.7	1.9	0.4	0.7	0.5	...	...
Total softwoods	1389.4	365.5	385.6	315.4	173.6	83.7	43.4	22.0	0.4
Select white oaks	112.7	...	27.1	27.1	24.4	15.0	10.7	8.3	0.2
Select red oaks	50.8	...	15.4	9.3	7.7	6.9	3.2	7.6	0.8
Other white oaks	76.8	...	18.8	25.7	12.4	9.0	3.2	7.6	...
Other red oaks	99.1	...	19.9	20.9	20.3	14.7	8.7	11.6	2.9
Hickory	35.9	...	13.4	9.2	6.0	3.2	1.8	2.2	...
Soft maple	1.9	...	0.3	0.7	0.6	...	0.3	...	...
Sweetgum	77.8	...	21.3	25.3	13.7	9.5	4.9	2.8	0.3
Tupelo-blackgum	22.8	...	4.3	6.0	6.0	2.1	2.9	1.0	0.5
Ash	10.3	...	3.8	1.7	3.0	0.7	0.8	0.3	...
cottonwood-aspen	0.4	...	...	...	0.4	.	...	...	...
Basswood	1.2	...	...	...	...	...	...	...	...
Other hardwoods	22.8	...	0.7	0.9	2.6	3.7	1.3	4.4	0.2
Total hardwoods	512.4	...	131.6	130.3	97.1	64.9	37.7	45.8	4.9
All species	1901.9	365.5	517.1	445.7	270.7	148.6	81.1	67.7	5.3

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 saw timber on timber land by species and diameter class, Ouachita 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
----- <i>Million board feet</i> -----									
Shortleaf-loblolly pine	8428.4	2034.4	2298.5	1973.8	1114.4	560.2	290.0	154.4	2.7
Cypress	22.7	2.9	5.9	3.5	10.1	...	0.3	...	.
Other softwoods	37.1	11.2	8.3	9.2	1.8	3.8	2.9	...	...
Total softwoods	8488.2	2048.4	2312.7	1986.5	1126.3	564.0	293.2	154.4	2.7
Select white oaks	675.1	...	150.3	159.4	148.2	93.6	70.0	53.3	0.2
Select red oaks	302.8	...	87.4	54.5	45.7	42.5	20.8	47.6	4.3
Other white oaks	447.0	...	100.9	147.4	72.8	54.9	20.4	50.5	...
Other red oaks	573.5	...	107.8	118.8	119.1	88.3	54.0	70.2	15.3
Hickory	210.9	...	73.3	54.4	38.1	21.1	10.9	13.0	..
Soft maple	11.0	...	1.5	4.2	3.4	...	2.0	...	...
Sweetgum	449.1	...	117.1	144.9	80.3	58.1	29.2	17.7	2.0
Tupelo-blackgum	132.4	...	24.4	33.7	34.6	12.8	17.1	6.2	3.5
Ash	58.6	...	21.0	9.9	17.3	4.0	4.5	2.0	...
Cottonwood-aspen	2.2	...	...	...	2.2	.	...	...	...
Basswood	6.7	...	3.7	3.1	...	...	...	...	...
Other hardwoods	129.2	...	37.9	21.0	14.9	21.0	7.5	26.4	0.5
Total hardwoods	2998.6	...	725.4	751.3	576.6	396.3	236.3	287.0	25.8
All species	11486.8	2048.4	3038.1	2737.8	1702.9	960.2	529.5	441.3	28.5

Table 15—Volume of growing stock and saw timber on timber land by county and species group, Ouachita Counties, Arkansas, 1988

Arkansas, 1988												
County	Growing stock						Sawtimber					
	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 -----							----- Million board feet -----					
Garland	288.5	9.8	159.9	0.5	20.7	97.6	872.3	7.0	663.4	0.8	29.7	1715
Logan	208.1	...	115.8	5.3	16.2	70.9	705.0	...	445.4	7.3	46.6	205.7
Montgomery	625.8	35.3	398.5	0.3	26.2	165.5	2432.1	102.7	1903.8	...	50.8	374.8
Perry	238.9	3.6	160.2	1.1	15.6	58.4	848.9	..	671.1	0.8	60.1	116.8
Polk	359.7	4.1	178.7	2.9	30.7	143.3	1062.3	17.7	734.9	1.5	71.4	236.8
Pulaski	177.6	1.6	65.3	6.8	27.0	76.8	556.9	3.3	276.9	24.7	67.2	184.8
Saline	336.9	25.9	134.3	0.3	50.7	125.7	1111.8	79.9	553.3	...	136.2	342.4
Scott	629.9	36.1	420.7	7.6	30.1	135.4	2138.4	126.5	1675.3	125	81.2	242.8
Sebastian	51.4	...	6.7	2.2	10.9	31.7	117.1	...	16.1	7.1	12.9	81.0
Yell	452.8	6.0	255.7	5.5	65.2	120.5	1642.0	23.0	1128.1	5.0	169.1	316.8
All counties	3369.6	122.3	1895.7	32.6	293.2	1025.8	11486.8	360.1	8068.4	59.8	725.2	2273.5

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 16—Volume of timber on timber land by class of timber and species group, Ouachita Counties, Arkansas, 1988

Class of timber	All species	Softwood		Hardwood		
		Pine		Other	Soft ¹	Hard ²
		Planted	Natural			
----- <i>Million cubic feet</i> -----						
Sawtimber trees:						
Saw-log portion	1901.9	58.7	1318.3	12.5	125.7	386.7
Upper-stem portion	303.5	10.1	187.5	1.9	28.0	76.0
Total	2205.4	68.8	1505.8	14.4	153.7	462.7
Poletimber trees	1164.2	53.5	389.9	18.2	139.5	563.1
All growing-stock trees	3369.6	122.3	1895.7	32.6	293.2	1025.8
Rough trees:						
Sawtimber size	109.4	0.2	6.6	1.7	13.8	87.0
Poletimber size	150.3	8.2	23.9	1.2	24.8	92.3
Total	259.7	8.4	30.5	2.9	38.6	179.4
Rotten trees:						
Sawtimber size	39.6	...	0.2	0.1	10.9	28.3
Poletimber size	4.3	...	...	...	2.0	2.3
Total	43.9	...	0.2	0.1	12.9	30.6
Salvable dead trees:						
Sawtimber size	12.9	0.6	6.3	0.2	...	5.7
Poletimber size	9.9	1.1	4.2	0.7	1.1	2.8
Total	22.8	1.7	10.5	1.0	1.1	8.5
All classes	3696.0	132.4	1936.9	36.6	345.9	1244.2

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 timber land by ownership class and species group, Ouachita Counties, Arkansas, 1988

Ownership class	<i>Live</i> trees						Growing stock					
	All species	softwood			Hardwood		All species	softwood			Hardwwd	
		Pine			Soft ¹	Hard ²		Pine			Soft ¹	Hard ²
		Planted	Natural	Other				Planted	Natural	Other		
----- <i>Million cubic feet</i> -----												
National forest	2048.3	71.5	1318.4	9.0	107.5	541.9	1888.5	65.8	1295.1	8.6	86.0	432.9
Other public	175.7	1.6	35.6	2.4	47.9	88.2	157.6	1.6	35.2	2.4	41.9	765
Forest industry	503.2	28.1	2925	2.2	31.1	149.2	471.4	26.4	289.3	1.7	25.4	128.6
Other private-	946.0	29.4	279.8	22.1	158.2	456.4	852.0	28.4	276.0	19.9	139.8	387.8
All ownerships	3673.2	130.7	1926.3	35.7	344.7	1235.8	3369.6	122.3	1895.7	32.6	293.2	1025.8

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 18- Average net annual growth of growing stock and saw timber on timber land by county and species group, Ouachita Counties, 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		
<i>Millon cubic feet-----</i>						<i>-----Million board feet-----</i>						
Garland	9.6	...	5.1	...	0.5	4.1	33.5	0.4	24.7	0.1	0.6	7.7
Logan	5.7	...	3.8	0.3	0.5	1.0	28.3	...	20.2	0.7	2.8	4.5
Montgomery	17.8	0.1	10.7	...	1.1	5.8	97.9	0.6	75.6	...	3.6	18.2
Perry	8.2	0.2	4.8	0.1	0.8	2.3	39.8	2.0	28.5	0.1	3.2	5.9
Polk	12.6	0.1	5.7	0.1	1.3	5.5	45.8	1.0	28.3	0.1	3.9	12.6
Pulaski	8.3	...	3.0	...	1.8	3.5	32.7	...	16.0	...	5.4	11.4
Saline	135	0.6	5.5	...	1.2	6.2	56.1	2.2	30.1	...	4.1	19.6
Scott	19.2	0.2	14.2	0.6	1.1	3.1	81.9	1.2	70.5	1.1	3.4	5.8
Sebastian	0.4	...	0.3	0.1	-0.1	0.2	5.0	...	1.8	0.3	0.3	2.7
Yell	13.3	...	8.0	0.2	1.9	3.4	67.8	...	47.7	0.3	5.2	14.6
All counties	108.6	1.2	61.0	1.5	10.0	34.9	488.9	7.5	343.4	2.6	32.5	102.9

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 19—Average net annual removals of growing stock and saw timber on timber land by county and species group, Ouachita Counties, Arkansas, 1988

County	Growing stock						Sawtimber					
	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 ----- Million board feet -----												
Garland	16.0	...	11.7	...	0.3	4.0	62.2	...	54.2	...	0.9	7.1
Logan	5.9	...	5.2	...	0.1	0.6	26.0	...	24.7	...	...	1.4
Montgomery	18.8	1.5	13.0	...	0.7	3.6	69.6	8.0	56.6	...	0.7	4.3
Perry	8.9	0.9	5.8	...	0.4	1.8	34.8	4.4	27.4	...	1.2	1.9
Polk	16.8	0.1	14.9	...	0.2	1.5	72.1	OS	68.3	...	0.2	3.2
Pulaski	3.4	...	2.0	...	0.4	1.0	9.2	...	7.0	...	0.9	1.3
Saline	21.7	2.4	12.3	...	1.3	5.6	70.9	9.2	44.8	...	3.4	13.6
Scott	17.4	...	15.6	0.2	...	1.6	66.1	...	63.9	0.6	...	1.5
Sebastian	1.2	...	1.0	...	...	0.1	4.1	...	4.1	...	...	...
Yell	10.9	...	8.3	0.3	0.5	1.8	37.9	0.1	28.0	0.9	2.0	6.8
All counties	121.0	4.9	89.8	0.6	4.0	21.6	453.0	22.2	378.9	1.6	9.3	41.0

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 timber land by species, Ouachita Counties, Arkansas, 1988

Species	Growth	Removals
----- Million cubic feet -----		
Yellow pines	62.3	94.7
Other softwoods	1.5	0.6
Total softwoods	63.7	95.3
Select white-red oaks	16.9	8.4
Other white-red oaks	12.9	10.8
Hickory	4.0	2.0
Hard maple	...	...
Sweetgum	5.6	2.1
Ash-walnut-black cherry	1.0	0.3
Other hardwoods	4.4	2.1
Total hardwoods	44.9	25.6
All species	108.6	121.0

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

Species	Growth	Removals
----- Million board feet -----		
Yellow pines	350.9	401.1
Other softwoods	2.6	1.6
Total softwoods	353.5	402.7
Select white-red oaks	49.8	15.8
Other white-red oaks	43.3	23.1
Hickory	7.5	2.0
Sweetgum	19.1	5.0
Ash-walnut-black cherry	3.8	0.5
Other hardwoods	11.9	3.9
Total hardwoods	135.4	50.3
All species	488.9	453.0

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

Species	Growing stock	Sawtimber
----- Million cubic feet ----- Million board feet -----		
Yellow pines	9.4	23.9
Other softwoods	0.2	0.3
Total softwoods	9.6	24.2
Select white-red oaks	3.5	4.4
Other white-red oaks	4.4	11.4
Hickory	1.2	2.7
Sweetgum	1.7	4.7
Ash-walnut-black cherry	0.2	0.7
Other hardwoods	1.6	1.8
Total hardwoods	12.6	25.7
All species	22.1	49.9

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

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Planted	Natural	Other	Soft ¹	Hard ²		Planted	Natural	Other	Soft ¹	Hard ²
----- <i>Million cubic feet</i> -----												
National forest	495	0.4	32.1	0.3	3.2	13.4	38.7	0.1	33.0	...	0.4	5.1
Other public	4.9	...	1.4	...	1.3	2.2	1.5	...	0.9	...	0.2	0.3
Forest industry	21.0	0.3	14.1	0.1	0.9	5.6	50.6	3.0	37.9	0.1	1.6	8.0
Other private	33.3	0.5	13.5	1.0	4.6	13.7	30.3	1.8	17.9	0.5	1.9	8.2
All ownerships	108.6	1.2	61.0	15	10.0	34.9	121.0	4.9	89.8	0.6	4.0	21.6

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 saw timber on timberland by ownership class and species group, Ouachita Counties, Arkansas, 1988

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Other	Soft ¹	Hard ²		Pine		Other	Soft ¹	Hard ²
		Planted	Natural					Planted	Natural			
----- <i>Million board feet</i> -----												
National forest	251.4	2.9	204.1	0.4	11.5	32.4	143.8	...	140.1	...	0.2	3.5
Other public	21.0	...	5.4	0.4	4.8	10.5	5.5	...	4.3	...	0.9	0.3
Forest industry	89.6	1.9	71.4	0.1	2.5	13.7	201.2	13.7	169.7	...	3.8	14.1
Other private	126.9	2.6	62.4	1.8	13.8	46.3	102.5	a.5	64.8	1.6	4.4	23.2
All ownerships	488.9	7.5	343.4	2.6	32.5	102.9	453.0	22.2	378.9	1.6	9.3	41.0

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 saw timber on timberland by species and tree grade, Ouachita Counties, Arkansas, 1988

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
<i>----- Million board feet -----</i>						
Yellow pines	8428.4	2678.8	2686.2	3032.1	...	31.4
Cypress	22.7	22.4	...	...	...	0.3
Redcedar	37.1	37.1	...	...	...	...
Total softwoods	8488.2	2738.2	2686.2	3032.1	...	31.8
Select white-red oaks	977.8	31.1	150.1	461.5	293.7	41.5
Other white-red oaks	1020.5	27.2	123.3	429.4	385.2	55.5
Hickory	210.9	4.3	13.1	111.7	58.6	23.2
Sweetgum	449.1	45.5	81.9	215.9	84.4	21.5
Tupelo and blackgum	132.4	7.9	21.6	63.5	22.9	16.6
Ash-walnut-black cherry	82.5	4.1	8.8	59.7	1.9	8.1
Other hardwoods	125.3	7.6	17.0	58.4	21.4	20.9
Total hardwoods	2998.6	127.7	415.6	1400.2	867.9	187.2
All species	11486.8	2865.9	3101.8	4432.3	867.9	218.9

Supplemental Tables 26-36

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

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
<i>----- Thousand acres -----</i>						
1-10	109.8	22.0	78.7	22.1	61.9	56.3
11-20	92.9	5.6	...	5.6	5.4	...
21-30	...	11.3	...	5.2	...	...
31-40	5.9	...	...	...	...	5.6
41-50	5.7	5.4	...	...	...	...
> 50	5.7	49.6	...	21.7	...	...
Mixed	22.2	697.8	34.9	664.6	28.3	1147.9
Total	242.2	791.7	113.6	719.2	95.6	1209.8

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

County	Total	Forest type group				
		Loblolly-shortleaf pine		Oak - pine	Oak- hickory	Oak-gum- cypress
		Planted	Natural			
----- Million cubic feet -----						
Garland	170.1	8.0	108.6	21.4	32.2	...
Logan	121.1	...	79.7	34.5	6.9	...
Montgomery	434.0	25.4	318.3	64.0	26.4	...
Perry	164.9	3.2	115.7	41.3	4.0	0.7
Polk	185.7	1.3	73.6	88.4	22.4	...
Pulaski	73.7	1.6	24.9	32.9	8.1	6.2
Saline	160.5	25.5	71.7	50.9	11.2	1.1
Scott	464.4	36.1	345.1	56.2	27.1	...
Sebastian	8.9	...	3.7	2.1	3.1	...
Yell	267.2	2.3	175.1	80.2	6.3	3.4
All counties	2050.5	103.4	1316.4	471.7	147.7	11.4

Table 28-Volume of hardwood growing stock on timberland by forest type, Ouachita 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 -----							
Garland	118.4	0.6	23.0	9.7	85.1	...	...
Logan	87.1	...	9.4	21.6	40.6	15.4	...
Montgomery	191.7	1.2	41.8	56.0	92.6	...	...
Perry	74.0	0.2	13.4	17.2	26.1	17.2	...
Polk	173.9	0.7	15.3	65.2	92.7	...	...
Pulaski	103.8	0.9	2.6	25.3	54.8	18.3	1.8
Saline	176.5	3.9	12.0	51.5	72.8	36.3	...
Scott	165.5	2.0	26.4	40.2	96.9	...	...
Sebastian	42.5	...	...	2.8	23.0	14.3	2.4
Yell	185.6	...	18.4	42.0	35.3	90.0	...
All counties	1319.0	9.6	162.1	331.7	619.9	1915	4.3

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

County	Total	Forest type group				
		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress
		Planted	Natural			
----- Million cubic feet -----						
Garland	110.2	0.9	70.6	14.4	24.3	...
Logan	77.6	...	53.8	20.1	3.7	...
Montgomery	311.9	11.0	236.1	46.2	18.6	...
Perry	114.4	...	83.0	28.3	2.6	0.5
Polk	122.2	...	53.4	55.5	13.3	...
Pulaski	51.8	0.6	18.0	23.0	5.1	5.1
Saline	107.3	13.4	47.7	36.7	8.7	0.8
Scott	300.7	20.2	228.3	34.6	17.6	...
Sebastian	4.4	...	1.7	...	2.7	...
Yell	189.0	...	124.8	58.4	4.1	1.8
All counties	1389.4	46.2	917.5	317.1	100.5	8.2

Table 30—Volume of hardwood growing stock in the saw-log portion of saw timber trees on timberland by forest type, Ouachita 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 -----							
Garland	35.5	...	3.0	2.9	29.5	...	...
Logan	43.6	...	4.3	8.7	19.9	10.7	...
Montgomery	71.1	...	15.2	24.7	31.2	...	...
Perry	30.1	...	3.6	6.0	8.3	12.2	...
Polk	52.2	0.3	4.2	17.5	30.1	...	...
Pulaski	43.4	0.2	1.6	8.5	24.5	8.3	0.3
Saline	83.6	0.9	5.6	21.3	35.6	20.1	...
Scott	54.8	0.9	6.1	12.8	35.0	...	...
Sebastian	15.9	...	...	1.3	8.7	4.5	1.3
Yell	82.2	...	4.7	12.6	14.8	50.1	...
All counties	512.4	2.3	48.4	116.5	237.8	105.9	1.6

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

County	All classes	Growing stock		Rough		Rotten	
		softwood	Hardwood	Softwood	Hardwood	softwood	Hardwood
----- Million cubic feet -----							
Garland	306.4	170.1	118.4	0.6	13.7	...	3.5
Logan	234.4	121.1	87.1	3.0	22.0	...	1.3
Montgomery	675.7	434.0	191.7	13.1	32.0	0.1	4.7
Perry	254.6	164.9	74.0	4.3	8.9	...	2.4
Polk	403.8	185.7	173.9	4.4	28.8	...	10.9
Pulaski	190.2	73.7	103.8	0.3	10.6	...	1.8
Saline	355.0	160.5	176.5	1.0	13.1	...	3.9
Scott	692.2	464.4	165.5	10.7	42.2	0.2	9.3
Sebastian	71.5	8.9	42.5	0.7	17.5	...	1.9
Yell	489.4	267.2	185.6	3.6	29.1	.	3.9
All counties	3673.2	2050.5	1319.0	41.8	218.0	0.4	43.5

Table 32-Number of live trees on timberland by detailed species and diameter class, Ouachita 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	423223	175152	85270	50476	41634	31253	20628	11567	4651	1633	690	270	...
Loblolly pine	90455	40557	30130	11981	4237	1672	839	521	229	142	105	37	4
Redcedar	53316	34598	10651	5125	1927	616	196	150	17	25	12	...	...
Cypress	898	498	...	...	48	66	137	42	98	..	8	...	...
Total softwoods	567893	250806	126051	67582	47847	33608	21800	12281	4994	1800	815	306	4
Select white oaks	157858	67203	36954	23795	15087	7215	2471	2102	1343	794	508	379	8
Select red oaks	56764	24840	13235	6899	4794	3168	1867	801	522	321	105	201	12
Other white oaks	157724	77620	36244	19980	10700	5907	2805	2501	1018	493	169	283	4
Other red oaks	100568	56093	19952	8999	6039	3531	2081	1430	1068	678	287	348	60
Sweet pecan	28	...	...	...	...	...	...	...	...	...	28	...	...
Water hickory	8	...	...	...	..	...	...	...	...	...	...	8	...
Other hickories	241877	147457	56294	22797	8763	3848	1601	642	293	120	30	31	...
Persimmon	13646	13035	494	...	74	42	...	...	...	...	...	...	...
Hard maple	5572	3733	1500	278	62	...	...	...	...	...	...	...	...
Soft maple	63053	45837	12222	3163	1278	315	162	39	15	13	...	8	...
Boxelder	860	474	...	93	121	98	24	...	41	...	9	...	...
Beech	9	...	...	...	...	...	...	...	...	...	9	...	...
Sweetgum	96100	53112	21616	9318	4560	3339	1853	1339	549	229	107	69	7
Blackgum	81926	63916	9742	3643	1729	974	616	620	391	100	99	92	4
Other gums/nyrops	55	...	...	...	55	...	...	...	...	...	..	...	..
White ash	20157	16321	2973	337	239	105	79	61	32	...	9	...	...
Other ashes	10412	6370	1023	972	1004	529	247	82	134	25	9	18	...
Sycamore	819	...	511	...	59	75	25	20	48	24	10	41	5
Cottonwood	20	...	...	...	...	...	...	...	20	...	...	...	...
Basswood	3276	1581	1003	366	68	174	56	21	...	...	...	7	...
Willow	195	...	...	...	63	106	26	...	...	...	...	...	...
Black cherry	15675	9815	3643	89	708	310	165	75	31	38	...	...	...
American elm	18150	12426	3302	1129	431	432	174	132	42	22	20	39	...
Other elms	169574	131599	27309	6941	2295	1054	197	153	28	..	...	...	...
River birch	628	...	...	329	52	49	90	60	17	13	...	19	...
Hackberry	5851	3053	1050	1146	291	122	59	36	14	47	10	22	...
Black locust	702	542	...	160	...	...	...	...	...	...	...	...	...
Other locusts	393	...	...	189	68	69	52	...	14	...	...	...	...
Sassafras	6222	5403	596	132	45	46	...	...	...	...	...	...	...
Dogwood	78293	6539	12753	144	...	...	...	...	...	...	...	...	...
Holly	2020	1997	...	...	...	...	...	23	...	..	...	...	...
Other commercial	5150	3642	1069	282	68	45	26	19	...	...	...	...	...
Total hardwoods	1313587	811465	263486	111982	58653	31556	14676	10154	5619	2917	1411	1566	100
Noncommercial	186262	150103	27068	5821	1806	884	411	62	63	27	10	7	...
All species	2067742	1212374	416605	185385	108305	66048	36887	22497	10677	4744	2236	1879	105

Table 33- Number of growing-stock trees on timberland by detailed species and diameter class, Ouachita 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	153350	4371.5	39536	30921	20484	11524	4620	1621	669	260	...
Loblolly pine	17836	10325	4105	1548	839	502	229	142	105	37	4
Redcedar	6992	4398	1870	376	144	150	17	25	12	...	...
Cypress	400	...	48	66	137	42	98	...	8	...	...
Total softwoods	178577	58438	45559	32911	21605	12218	4963	1787	794	297	4
Select white oaks	46116	19600	14026	6656	2235	1560	989	536	301	204	8
Select red oaks	14659	5500	4017	2587	1286	506	336	209	77	134	8
Other white oaks	32223	14430	8541	4531	1828	1646	628	363	89	169	...
Other red oaks	28676	7468	5566	3055	1680	1140	819	475	228	212	35
Sweet pecan	9	...	...	...	...	...	...	...	9	...	...
Water hickory	8	...	...	...	...	...	...	...	...	8	...
Other hickories	29142	16663	7259	3089	1172	549	248	108	30	31	...
Persimmon	117	...	74	42	...	...	...	...	...	...	...
Hard maple	339	278	62	...	...	...	...	...	...	...	...
Soft maple	2552	1464	895	154	...	39	...	...	...	...	...
Boxelder	215	93	63	...	24	...	27	...	9	...	...
Sweetgum	18291	7449	3723	3271	1748	1232	504	229	86	44	4
Blackgum	5768	2767	1168	690	356	362	241	76	71	32	4
Other gums/tupelos	55	...	55	...	...	...	...	...	...	...	...
White ash	700	337	181	70	79	23	...	...	9	...	...
Other ashes	2504	743	813	477	247	62	119	25	9	8	...
Sycamore	257	...	59	75	25	20	...	24	10	41	2
Cottonwood	20	...	...	...	...	...	20	...	...	...	...
Basswood	617	366	...	174	56	21	...	...	...	...	...
Willow	165	...	63	75	26	...	...	...	...	...	...
Black cherry	1318	464	449	196	116	36	31	25	...	...	...
American elm	1650	964	166	344	80	42	29	...	10	14	...
Other elms	7493	4597	1822	837	169	41	28	...	...	...	...
River birch	457	206	52	...	90	60	17	13	...	19	...
Hackberry	736	327	190	81	31	36	14	47	10	...	...
Other buxus	121	...	...	69	52	...	...	...	...	...	...
Holly	23	...	...	...	...	23	...	...	...	...	...
Other commercial	45	...	...	45	...	...	...	...	...	...	...
Total hardwoods	186276	83715	49247	26518	11301	7390	4048	2130	949	917	61
All species	364853	142153	94806	59429	32986	19608	9011	3917	1743	1214	65

Table 34—Volume of growing-stock trees on timber land by species and diameter class, Ouachita 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
<i>----- Million cubic feet -----</i>											
Shortleaf pine	19 09.7	123.0	283.1	412.5	418.1	336.4	185.3	86.0	42.8	22.6	...
Loblolly pine	108.2	17.4	19.9	17.7	15.1	13.2	8.1	6.9	6.5	2.9	0.5
Redcedar	26.4	10.0	8.1	3.0	1.8	2.1	0.4	0.7	0.5	...	...
Cypress	6.2	...	0.2	0.8	1.6	0.9	2.5	...	0.2	...	...
Total softwoods	2050.5	150.3	311.3	434.0	436.6	352.6	196.2	93.6	49.9	25.5	0.5
Select white oaks	332.4	51.0	77.9	65.7	34.7	32.6	29.1	18.4	12.8	9.9	0.2
Select red oaks	124.9	15.9	23.4	24.8	19.8	11.0	8.7	8.2	3.5	8.8	0.9
Other white oaks	203.8	31.9	41.8	39.5	23.5	30.0	14.0	10.8	3.8	8.5	...
Other red oaks	193.6	17.8	29.9	28.5	26.3	24.7	23.3	16.8	10.2	12.7	3.3
Sweet pecan	0.4	...	...	...	...	...	...	...	0.4	...	...
Water hickory	0.5	...	...	...	...	...	...	...	...	0.5	...
Other hickories	132.2	32.1	32.3	26.3	16.4	10.9	6.9	3.8	1.6	1.8	...
Persimmon	0.7	...	0.3	0.4	...	...	...	...	...	...	...
Hard maple	1.4	0.9	0.5	...	...	...	...	...	...	...	...
Soft maple	10.1	3.5	4.4	1.3	...	0.9	...	...	...	...	...
Boxelder	2.0	0.2	0.2	...	0.4	...	0.8	...	...	...	...
Sweetgum	170.5	15.5	21.6	36.9	31.2	30.2	16.0	10.5	6.3	3.0	0.4
Blackgum	43.8	5.7	5.6	5.7	5.5	7.1	6.6	2.4	3.1	1.6	0.6
White ash	4.4	0.8	0.8	0.6	1.2	0.4	...	...	...	...	...
Other ashes	22.1	2.0	5.0	4.8	3.7	1.5	3.5	0.9	0.3	0.4	...
Sycamore	6.8	...	0.5	0.6	0.6	0.6	...	0.9	0.6	2.8	0.2
Cottonwood	0.5	...	...	...	...	...	0.5	...	...	...	...
Basswood	3.4	0.8	...	1.3	0.8	0.5	...	...	...	...	...
Willow	1.2	...	0.2	0.6	0.4	...	...	...	...	...	...
Black cherry	10.9	1.3	2.5	2.5	2.3	0.7	0.7	0.9	...	...	...
American elm	10.8	2.6	0.7	3.0	1.1	0.9	0.8	...	0.5	1.2	...
Other elms	29.7	9.6	8.5	8.2	2.0	0.7	0.8	...	...	...	...
River birch	5.6	0.6	0.5	...	1.6	1.0	0.3	0.6	...	1.0	...
Hackberry	5.2	0.7	0.7	0.5	0.2	0.6	0.3	1.7	0.5	...	...
Other bcusts	1.1	...	...	0.4	0.6	...	...	...	...	...	...
Holly	0.3	...	...	...	...	0.3	...	...	...	...	...
Other commercial	0.4	...	...	0.4	...	...	...	...	...	...	...
Total hardwoods	1319.0	192.9	257.7	252.1	172.2	154.6	112.2	76.1	43.5	52.3	5.6
All species	3369.6	343.2	568.9	686.1	608.8	507.2	308.4	169.6	93.4	77.8	6.0

Table 35—Volume of growing stock in the saw - log portion of saw timber trees on timber land by detailed species and diameter class, Ouachita 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 pine	1317.8	348.2	370.0	301.5	164.2	77.2	37.2	19.4	...
Loblolly pine	59.1	14.3	12.6	11.2	6.8	5.7	5.5	2.6	0.4
Redcedar	7.4	2.3	1.7	1.9	0.4	0.7	0.5	...	..
Cypress	5.1	0.6	1.3	0.8	2.2	...	0.2	...	...
Total softwoods	1389.4	365.5	385.6	315.4	173.6	83.7	43.4	22.0	0.4
Select white oaks	112.7	...	27.1	27.1	24.4	15.0	10.7	8.3	0.2
Select red oaks	50.8	...	15.4	9.3	7.7	6.9	3.2	7.6	0.8
Other white oaks	76.8	...	18.8	25.7	12.4	9.0	3.2	7.6	...
Other red oaks	99.1	...	19.9	20.9	20.3	14.7	8.7	11.6	2.9
Sweet pecan	0.4	...	...	...	...	...	0.4	...	...
Water hickory	0.5	...	...	...	...	...	...	0.5	...
Other hickories	35.0	...	13.4	9.2	6.0	3.2	1.5	1.7	...
Soft maple	0.7	...	...	0.7	...	..	...	...	...
Boxelder	1.1	...	0.3	...	0.6	...	0.3	...	...
Sweetgum	77.8	...	21.3	25.3	13.7	9.5	4.9	2.8	0.3
Blackgum	22.8	...	4.3	6.0	6.0	2.1	2.9	1.0	0.5
White ash	1.8	...	1.0	0.4	...	...	0.5	...	...
Other ashes	8.5	...	2.8	1.3	3.0	0.7	0.3	0.3	...
Sycamore	5.0	...	0.4	0.5	...	0.9	0.5	2.6	0.2
Cottonwood	0.4	...	...	...	0.4	...	...	...	...
Basswood	1.2	...	0.7	0.5	...	...	...	...	...
Willow	0.3	...	0.3	...	...	...	...	...	...
Black cherry	4.0	...	1.8	0.5	0.7	0.9	...	...	...
American elm	3.8	...	0.8	0.9	0.7	...	0.3	1.2	...
Other elms	2.7	...	1.5	0.5	0.6	...	..	..	...
River birch	35	...	1.3	0.8	0.3	0.4	...	0.7	...
Hackberry	2.9	...	0.2	0.5	0.2	1.5	0.5	...	...
Other bcusts	0.4	...	0.4	...	...	...	...	...	...
Holly	0.2	...	...	0.2	...	...	...	...	...
Total hardwoods	512.4	...	131.6	130.3	97.1	64.9	37.7	45.8	4.9
All species	1901.9	36.55	517.1	445.7	270.7	148.6	81.1	67.7	5.3

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

Species	All live	Growing stock	Rough	Rotten
----- Million cubic feet -----				
Shortleaf pine	1946.1	1909.7	36.2	0.2
Loblolly pine	110.9	108.2	2.7	...
Redcedar	29.5	26.4	2.9	0.1
Cypress	6.2	6.2	...	...
Total softwoods	2092.7	2050.5	41.8	0.4
Select white oaks	377.8	332.4	35.3	10.1
Select red oaks	147.8	124.9	18.3	4.6
Other white oaks	255.1	203.8	45.0	6.3
Other red oaks	225.8	193.6	26.1	6.1
Sweet pecan	0.8	0.4	0.4	...
Water hickory	0.5	0.5	...	...
Other hickories	154.8	132.2	20.3	2.3
Persimmon	0.7	0.7	...	...
Hard maple	1.4	1.4	...	...
Soft maple	18.1	10.1	7.5	0.5
Boxelder	2.7	2.0	0.6	0.1
Beech	0.2	...	...	0.2
Sweetgum	184.8	170.5	11.4	2.9
Blackgum	57.4	43.8	6.8	6.9
Other gums/tupelos	0.3	0.3	...	...
White ash	5.5	4.4	0.7	0.3
Other ashes	24.4	22.1	2.2	0.2
Sycamore	7.9	6.8	0.6	0.5
Cottonwood	0.5	0.5	...	...
Basswood	3.9	3.4	0.2	0.3
Willow	1.2	1.2	...	...
Black cherry	15.4	10.9	4.1	0.4
American elm	15.1	10.8	2.9	1.4
Other elms	37.4	29.7	7.3	0.4
River birch	6.1	5.6	0.5	...
Hackberry	7.8	5.2	2.6	...
Black locust	0.2	...	0.2	...
Other locusts	1.8	1.1	0.7	...
Sassafras	0.7	...	0.7	...
Dogwood	0.1	...	0.1	...
Holly	0.3	0.3	...	...
Other commercial	1.6	0.4	1.2	...
Total hardwoods	1558.1	1319.0	195.6	43.5
Noncommercial	22.4	...	22.4	...
All species	3673.2	3369.6	259.7	43.9

Graphics

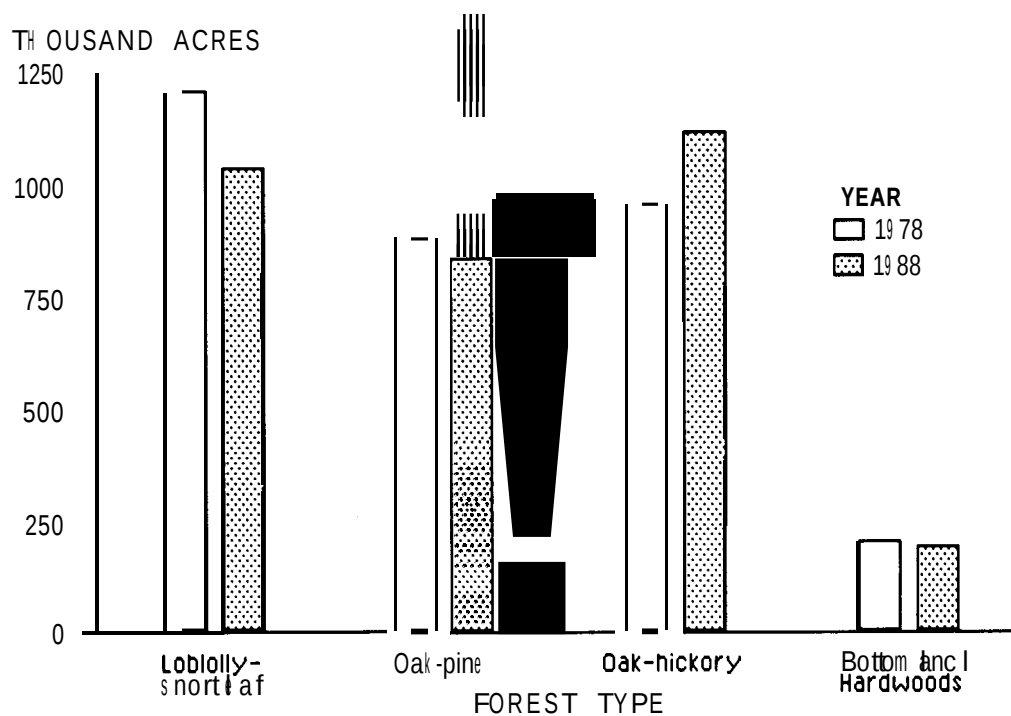


Figure 1.--Area of timberland by forest type, Ouachita Counties, Arkansas, 1978 and 1988.

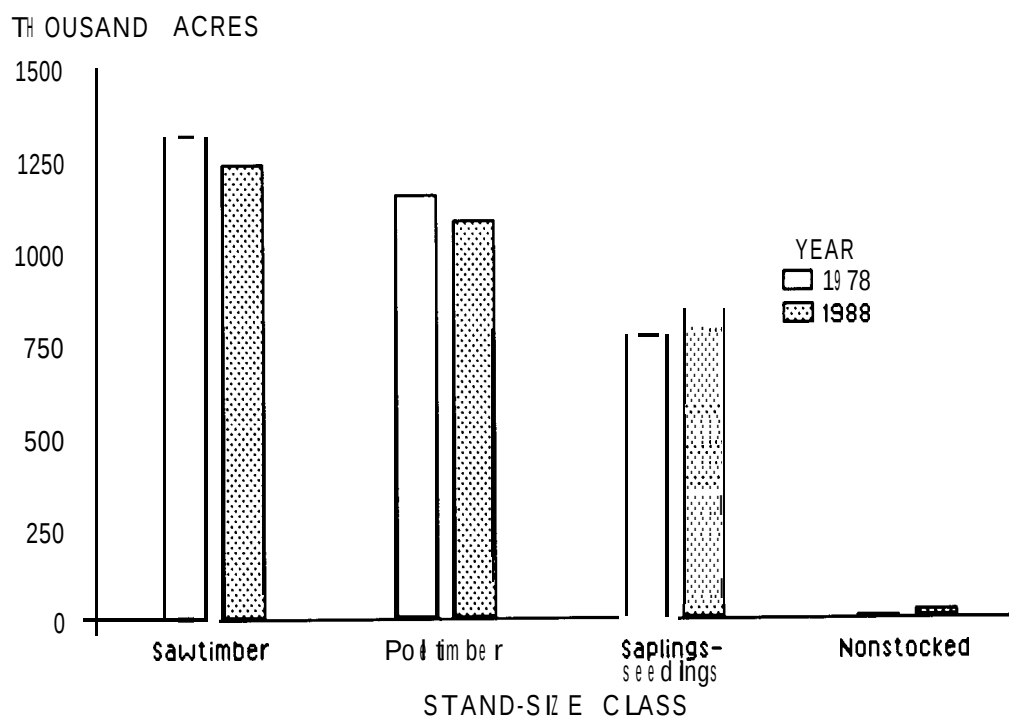


Figure 2.--Area of timberland by stand-size class, Ouachita Counties, Arkansas, 1978 and 1988.

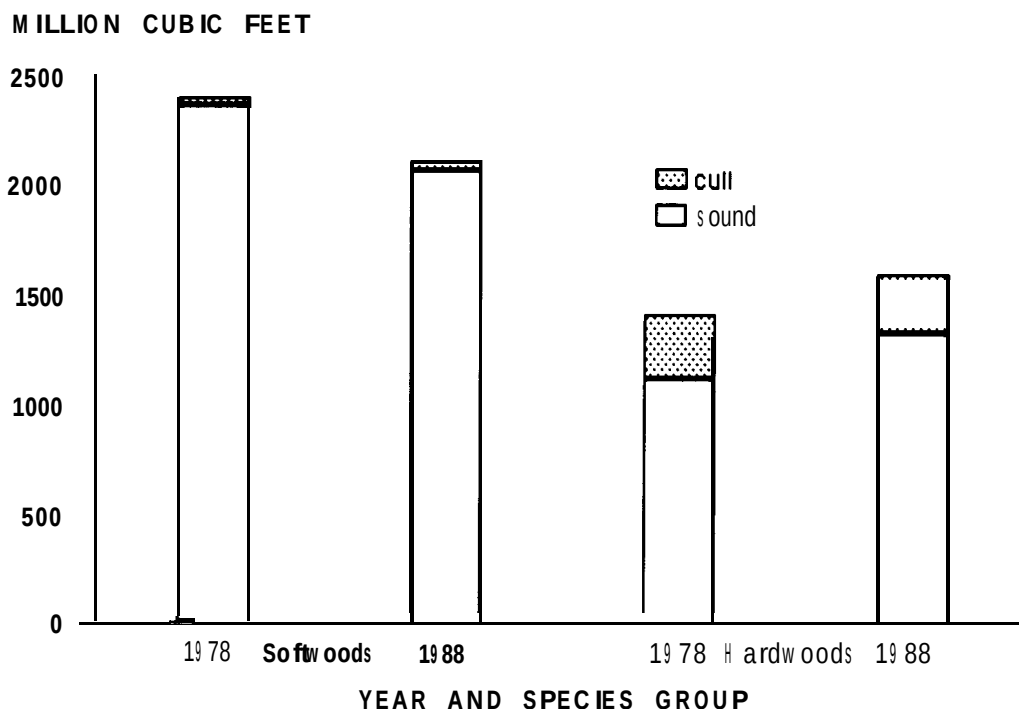


Figure 3.-- volume of timber on timberland by species group and class of timber, Ouachita Counties, Arkansas, 1978 and 1988.

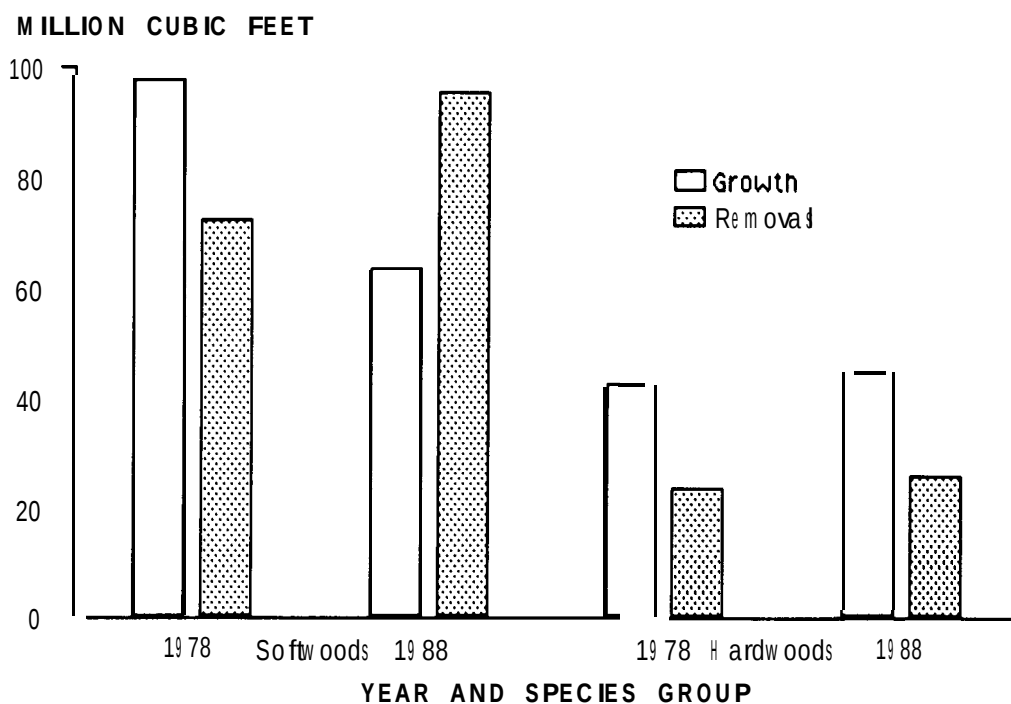


Figure 4.--Average net annual growth and average annual removal of growing stock on timberland by Species group, Ouachita Counties, Arkansas, 1978 and 1988.

MILLION CUBIC FEET

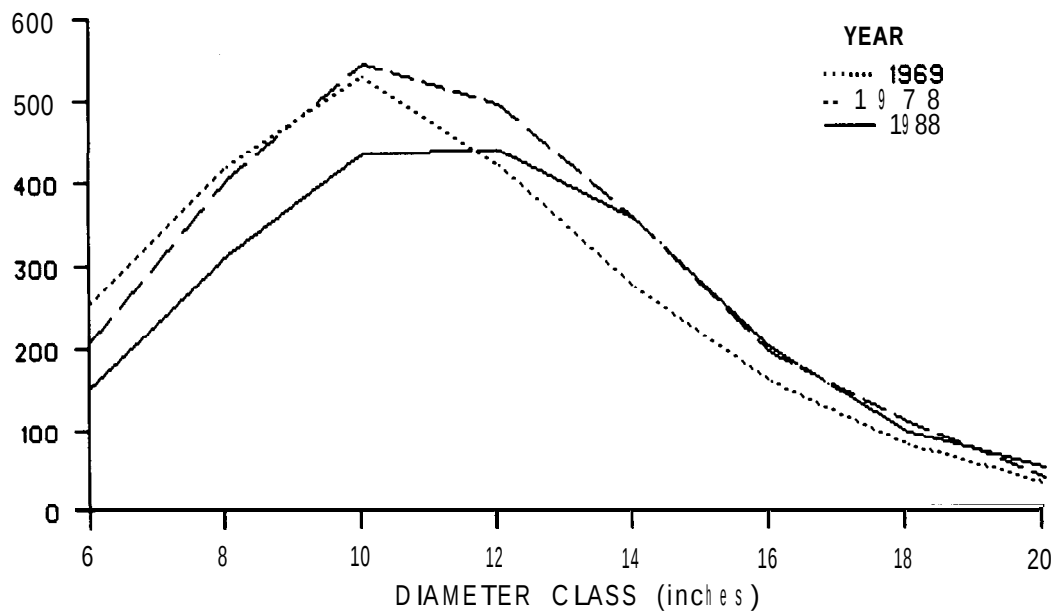


Figure 5.-- Volume of softwood growing stock on timberland by diameter class, Ouachita Counties, Arkansas, 1969, 1978, and 1988.

MILLION CUBIC FEET

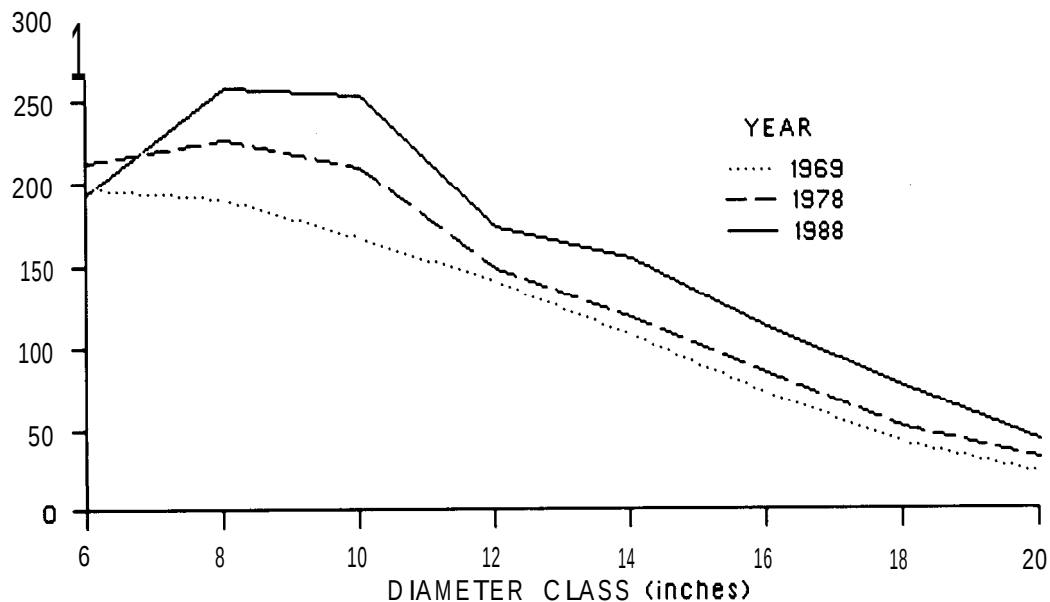


Figure 6.-- Volume of hardwood growing stock on timberland by diameter class, Ouachita Counties, Arkansas, 1969, 1978, and 1988.

MILLION TREES

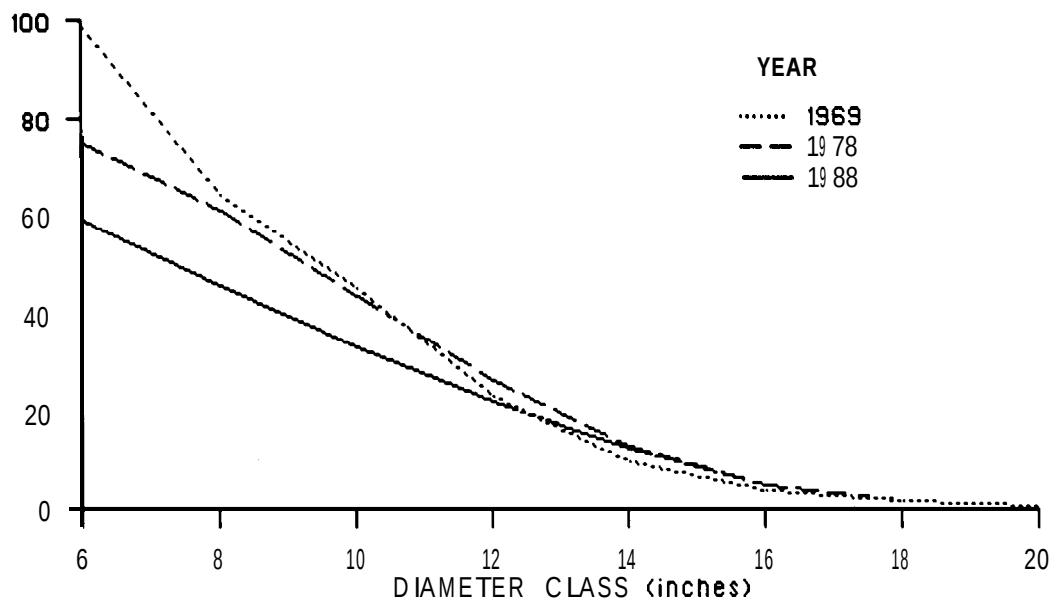


Figure 7.--Number of softwood growing-stock trees on timberland by diameter class, Ouachita Counties, Arkansas, 1969, 1978, and 1988.

MILLION TREES

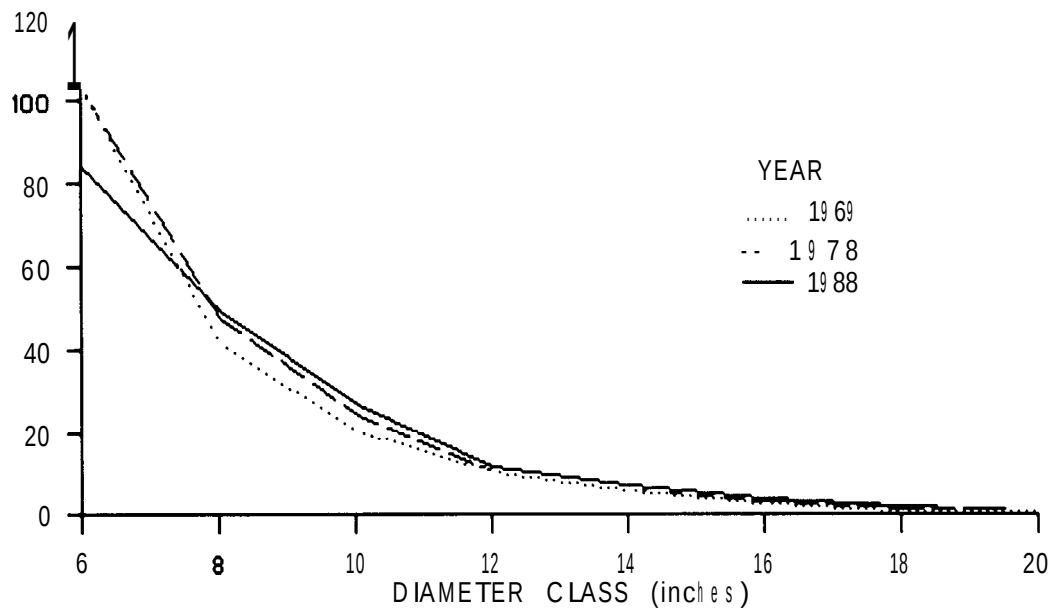


Figure 8.--Number of hardwood growing-stock trees on timberland by diameter class, Ouachita Counties, Arkansas, 1969, 1978, and 1988.

PERCENT CHANGE

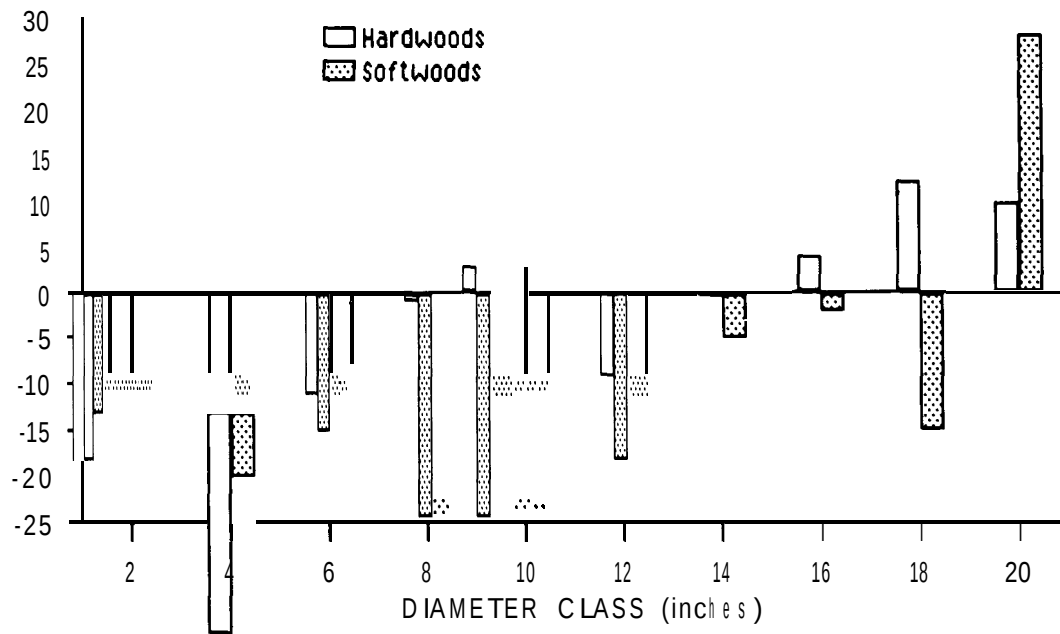


Figure 9.--Percent change in the number of live trees on timberland by species group and diameter class, Ouachita Counties, Arkansas, 1978 and 1988.

Hines, F. Dee, Forest Statistics for Arkansas' Ouachita Counties--1988. Resource Bull. SO-137. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station; 1988. 28 p.

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

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

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