



United States
Department of
Agriculture

Forest Service

Southern Forest
Experiment Station

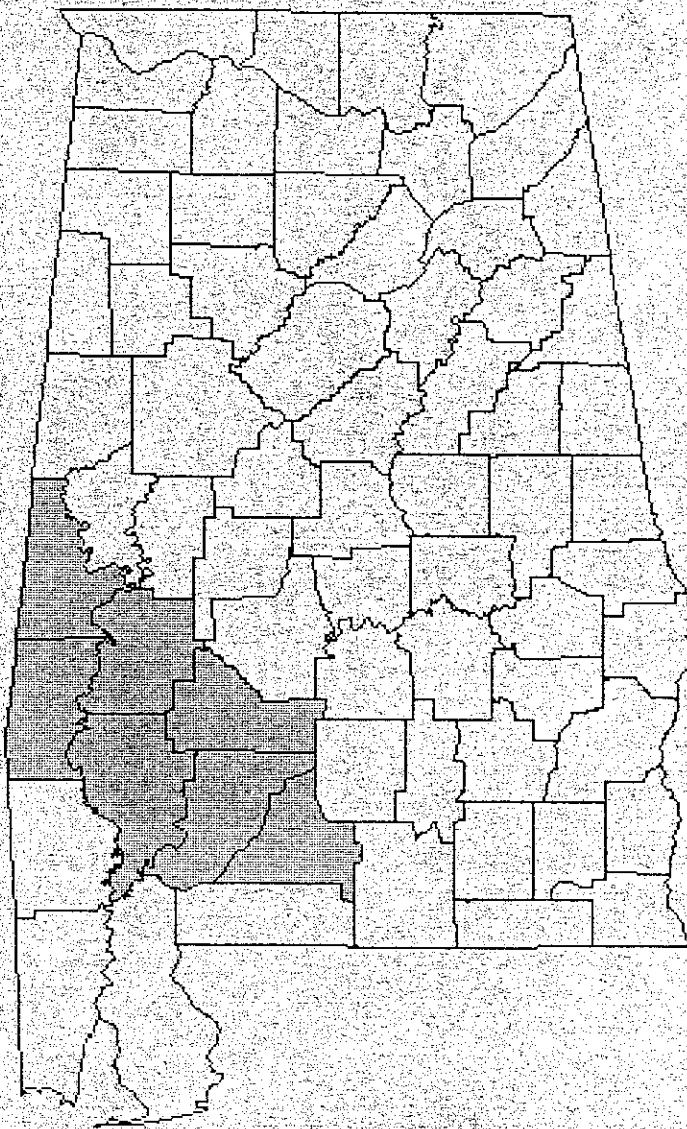
New Orleans,
Louisiana

Resource Bulletin
SO-153



Forest Statistics for Southwest-North Alabama Counties — 1990

William H. McWilliams, Patrick E. Miller, and
John S. Vissage



SUMMARY

The 1990 forest inventory of Southwest-North Alabama revealed the following:

- Timberland area is 3,463.4 thousand acres, an increase of 2 percent.
- The region is the most heavily forested and has the largest concentration of high-site timberland of all the forest survey regions in Alabama.
- The area of pine-type timberland increased by 22 percent. The area of oak-pine and hardwood forest types decreased by 9 percent.
- The area of planted pine stands more than doubled. Half of the pine-type timberland is of artificial origin, compared to 29 percent in 1982.
- Live-tree inventory volume totals 4,607.6 million cubic feet, an increase of 5 percent. The volume of live softwoods increased by 9 percent. The volume of live hardwoods showed no significant change.
- Sawtimber inventory volume increased by 19 percent for both softwoods and hardwoods.
- Average net growth of live trees increased by 16 percent since the previous inventory. The net growth of softwoods increased by 9 percent. The net growth of hardwoods increased by 28 percent.
- The removals of live trees increased by 12 percent due to a 44 percent increase in hardwood removals. Softwood removals decreased slightly, by 3 percent.
- The growth-to-removals ratio is 1.1:1.0 for both softwoods and hardwoods. The softwood ratio is 1.1:1.0, compared to 1.0:1.0 for the period from 1972-1981. The hardwood ratio is 1.1:1.0, compared to 1.2:1.0 previously.

FOREWORD

The USDA-Forest Service, Southern Forest Experiment Station, Forest Inventory and Analysis unit (SO-FIA), conducts forest inventories covering the States of Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas, and the island of Puerto Rico.

The SO-FIA forest inventories are part of a nationwide effort originally authorized by the McSweeney-McNary Act of 1928. More recent legislation pertinent to the SO-FIA mission includes the Forest and Rangeland Renewable Resources Planning Act of 1974 and the Forest and Rangeland Renewable Resources Research Act of 1978. The SO-FIA mission is to develop, analyze, and maintain forest resource information that is essential for formulation of forest policies and programs.

ACKNOWLEDGMENTS

The SO-FIA gratefully acknowledges the cooperation and excellent assistance provided by the Alabama Forestry Commission in collecting field data. Appreciation is also expressed for the cooperation of other public agencies and private landowners in providing access to measurement plots.

The following members of the SO-FIA field staff completed the field measurements:

Leif Anderson

Thomas Carr

Robert Clement

Patrick Coddington

Susan Crouch

John Davis

Tim Eling

James Flue

Tony Holland

Todd Hoopes

Mike Ladd

Robert Lewis

Larry Mahler

Patti Mitschke

Steve Overton

Mike Pond

Randy Prewitt

Jeff Seefeldt

Gary Sullivan

CONTENTS

INTRODUCTION.....	1
METHODS.....	1
SAMPLING ERROR.....	1
RESULTS	1
Area	1
Inventory	2
Components of Change	3
CONCLUSIONS.....	3
DEFINITION OF TERMS.....	4
CORE TABLES (1-25) ¹	5
SUPPLEMENTAL TABLES (26-43).....	15
FIGURES (1-8)	27

¹Core 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.

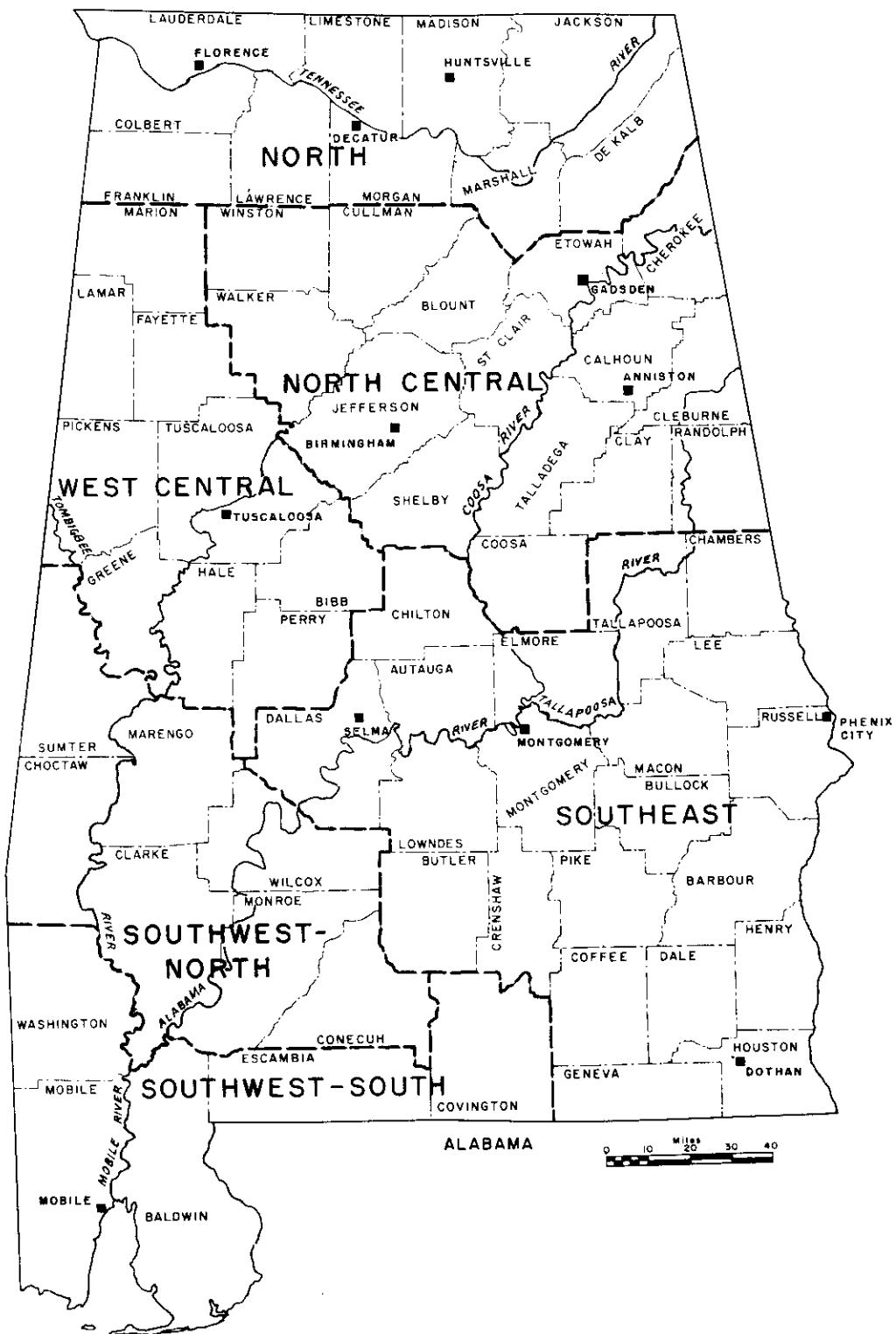


Figure I.—Forest survey regions in Alabama.

Forest Statistics for Southwest-North Alabama Counties – 1990

William H. McWilliams, Patrick E. Miller, and John S. Vissage

INTRODUCTION

Tabulated results were derived from data obtained during a recent forest inventory of Southwest-North Alabama (fig. I). Core tables (1 to 25) are compatible among Forest Inventory and Analysis units in the Eastern U.S. Other tables (26 to 43) supplement the information contained in the core tables. Comparisons are made between results of the 1990 inventory and previous inventories conducted in 1982 and 1972.

METHODS

The SO-FIA uses a two-phase sample of temporary aerial-photo points and a systematic grid of permanent ground plots. The area of forested land was determined by photointerpretation of temporary points and field checks of permanent plots. Field measurements were conducted on a subset of permanent plots spaced 3 miles apart. Tree data were collected on measurement plots that were forested at the time of the current inventory, or were forested at the time of the previous inventory.

Each measurement plot consisted of 10 satellite points spread over an acre of forest. At each point, trees 5.0 inches in diameter at breast height and larger were selected for measurement on a variable-radius plot defined by a 37.5 BAF prism. Trees from 1.0 to 4.9 inches in diameter were tallied on 1/275 acre fixed plots at the first three points and at any remaining points where fewer than two trees 5.0 inches in diameter or larger were tallied. If no trees greater than 1.0 inch were tallied at a point, then seedlings were tallied. Several plot-level measurements relating to timber and non-timber assessment were also collected.

Tree data were used to estimate volumes, basal area, number of trees, and other per-acre variables. Ownership information was obtained for each measurement plot using tax records and other sources. Per acre estimates were expanded using county-level factors derived as part of the forest area determination. Thus, estimates at the county level may not match exactly with known totals for a particular variable.

In order to achieve greater compatibility among Forest Inventory and Analysis units, a modified tree classification system has been in effect since the 1988 inventory of Arkansas. Tree grade 5 is used to designate trees capable of producing at least one 12-foot log or two 8-foot logs in the saw-log portion, but not capable of producing a gradable 12-foot log in the butt 16-foot section. These trees - formerly classed as rough or rotten - are now included in growing stock. Any comparisons with previous estimates of growing stock are based on data that has been reprocessed to account for the change in definition. Because of the revised

definition, and to better assess changes in whole-forest conditions; analysis of trends in inventory volume, growth, removals, and mortality will focus on live trees.

SAMPLING ERROR

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 compute confidence intervals for population estimates. For example, at the 95 percent confidence level, the confidence interval for live-tree volume (in million cubic feet) is:

$$4,607.6 \pm 1.96 (0.034 \times 4,607.6) = 4,607.6 \pm 307.1$$

where 1.96 is the number of standard deviations. This confidence interval indicates a 0.95 probability that the range, 4,300.5 to 4,914.7 million cubic feet, will cover the true live-tree inventory volume.

The results are reported for individual counties so that users may combine counties as desired. It is not recommended that individual county data be used in isolation. The user should combine data for as many counties as possible. Sampling error for a combination of counties may be estimated using 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 estimate of sampling error for live-tree volume in Clarke, Conecuh, Marengo, Monroe, and Wilcox counties is 4.0 percent. The 95 percent confidence interval for live-tree volume is $3,328.5 \pm 261.0$ million cubic feet.

RESULTS

Area

The topography of Southwest-North Alabama ranges from hills to rolling uplands that are common to the East Gulf

Table I—*Sampling errors¹ for timberland, live trees, growing stock, and sawtimber, Southwest-North Alabama Counties, 1990*

County	Timberland	Live trees			Growing stock			Sawtimber volume
		Volume	Growth	Removals	Volume	Growth	Removals	
<i>Percent</i>								
Choctaw	0.9	8.3	7.5	19.0	8.4	8.0	19.0	10.6
Clarke	1.1	6.3	6.5	15.6	6.4	6.5	15.5	8.3
Conecuh	1.9	11.1	13.4	22.8	11.5	13.4	23.0	18.2
Marengo	1.3	9.8	9.9	18.2	9.9	9.6	18.3	11.7
Monroe	1.5	8.1	7.1	15.3	8.3	7.4	15.3	10.9
Sumter	1.5	11.4	11.9	24.0	11.6	12.3	24.0	15.4
Wilcox	2.1	9.7	9.9	18.9	10.0	10.3	19.1	13.1
All counties	0.6	3.4	3.4	7.2	3.4	3.5	7.2	4.5

¹By random-sampling formula.

Coastal Plain. The Tombigbee and Alabama River systems flow through the area, along with many creeks and streams. Forests cover 3.5 million acres or 80 percent of the land area, making this the most heavily forested survey region in Alabama. All of the forest land is classified as timberland capable of producing industrial wood products. The area of timberland increased slightly, by 2 percent.

The region is characterized by a large concentration of highly productive timberland. Eighty-six percent of the timberland is capable of growing 85 cubic feet of wood (roughly a cord) or more per acre annually. Nearly half of the timberland is capable of growing 120 cubic feet or more annually.

Private owners dominate timberland ownership with 99 percent of the region's timberland. Nonindustrial private owners control 61 percent of the timberland. Nonindustrial timberland is divided among miscellaneous individuals (58 percent), farmers (35 percent), and miscellaneous corporations (other than forest industry)(7 percent). Farmer-owned timberland was the only ownership class to show a decrease since 1982 (by 19 percent). Forest industry owns a large share of the timberland with 38 percent. The estimate of forest industry timberland includes 180.2 thousand acres under long-term lease from nonindustrial private owners.

Pine forests account for most of the timberland (43 percent of the total area). The area of pine forest, 1.5 million acres, increased by 22 percent. Most of the pine-type timberland (93 percent) is made up of loblolly-shortleaf stands, of which, nearly all are stands dominated by loblolly pine. The most significant trend pertaining to pine forests was a more than doubling of the area of planted pine stands. The increase in planted stands is a continuation of a trend that began during the 1970's. Between 1972 and 1982, the area of planted pine stands increased by 130 percent. However, the net increase in planted pine acreage was much less than the more recent increase. Additions of planted pine acreage averaged 19.7 thousand acres per year between 1972 and 1982. This compares with an average of 49.3 thousand acres per year between 1982 and 1990. Planted pine stands now make up half of the pine-type timberland, or 742.3 thousand acres. There are an additional 165.0 thousand acres with evidence of planting or direct seeding

that are classified as oak-pine and hardwood forest types due to hardwood stocking.

Oak-pine forests are defined as stands where the majority of stocking is in hardwood species, but are at least 25 percent stocked with pines. The area of oak-pine forests decreased by 6 percent, totaling 642.6 thousand acres (18 percent of total timberland).

Hardwood forests occur on 39 percent of the timberland, or 1.3 million acres. Hardwood-type timberland decreased by 10 percent. Sixty-one percent of the hardwood forest is comprised of oak-hickory stands. The other 38 percent consists of oak-gum-cypress forests.

The distribution of timberland by stocking class gives an indication of overall forest vigor. Stocking is assessed by comparing existing stand density to a standard that represents full stocking or 100 percent (based on number of trees per acre). The optimal range of stocking is between 60 and 100 percent of the standard. Fifty-one percent of the timberland is in the optimal stocking class, an increase of 17 percent. The area of fully-stocked stands (from 100 to 130 percent stocked) increased by 15 percent. The area with low stocking (less than 60 percent stocked) decreased by 37 percent.

Inventory

The volume of live trees increased by 5 percent, totaling 4.6 billion cubic feet. The volume of live trees includes the merchantable sound-wood volume of growing-stock trees, rough trees, and rotten trees that are at least 5.0 inches in diameter at breast height. The growing-stock component of live-tree volume - the volume of trees with good management potential - comprises 94 percent of the live-tree volume.

Softwood volume represents 54 percent of the live-tree inventory, or 2.5 billion cubic feet. The volume of softwoods increased by 9 percent. Loblolly pine is the most abundant species, with 66 percent of the softwood inventory. Shortleaf pine is second with 17 percent, followed by several less prevalent softwood species that include spruce pine (6 percent), slash pine (4 percent), and longleaf pine (3 percent).

Changes in the distribution of live-tree volume by diameter class, or the stock table, provide insight into the nature of inventory change. Most of the changes in the

Table II—*Components of average annual change in the volume of live trees by inventory period and species group, Southwest-North Alabama Counties, 1990*

Inventory period and species group	Gross Growth			Removals
	Net growth	Mortality	-Million cubic feet-	
<hr/>				
1972 to 1981:				
Softwoods	132.1	15.6		130.1
Hardwoods	73.1	28.0		59.7
Total	205.2	43.6		189.8
<hr/>				
1982 to 1989:				
Softwoods	144.5	18.0		126.5
Hardwoods	93.4	19.7		85.7
Total	237.9	37.7		212.2

softwood stock table have taken place in the 6- through 12-inch classes. Over the past two inventory periods, there have been net increases in the 6- and 8-inch classes. The 10- and 12-inch classes have undergone erratic changes due to the impact of multiple factors, such as ingrowth and removals. With the exception of the 14-inch class, which has shown little change, increases occurred in the larger diameter classes.

Hardwood volume is 46 percent of the live-tree volume, or 2.1 billion cubic feet. The volume of hardwoods is essentially unchanged since 1982. The most abundant hardwood species are red oaks (27 percent of the hardwood volume), sweetgum (20 percent), white oaks (11 percent), gums (7 percent), hickories (6 percent), and yellow poplar (6 percent).

Changes in the hardwood stock table were minor, except for a sharp decrease in the 10-inch class between 1972 and 1982. The 10-inch class now totals about the same as it did in 1972. Some increases occurred in the larger diameter classes.

The volume of sawtimber, 16.3 billion board feet (International 1/4-inch rule), increased by 19 percent for both softwoods and hardwoods. The sawtimber inventory is 64 percent softwood and 36 percent hardwood.

Components of Change

Changes in the volume of live trees depend on three components: gross growth, mortality, and removals. Annual estimates of change are based on the period from the year of the previous inventory through the year prior to the present inventory. Gross growth of live trees was 275.6 million cubic feet for the period prior to 1990, an 11 percent increase over the period from 1972 to 1981 (table II).

Net growth - equal to gross growth minus mortality - increased by 16 percent. Softwoods contributed 61 percent of the total net growth and hardwoods contributed 39 percent. The net growth of softwoods increased by 9 percent and the net growth of hardwoods increased by 28 percent.

Removals of live trees, 212.2 million cubic feet, was 12 percent higher than the period prior to 1982. Removals

were 60 percent softwood and 40 percent hardwood. Softwood removals decreased by 3 percent. Hardwood removals increased by 44 percent.

The ratio of net growth-to-removals is one measure of a forest's capacity to expand in volume. A ratio greater than 1.0:1.0 usually indicates increases in inventory volume. For the current inventory period, the growth-to-removals ratio was 1.1:1.0; remaining constant since the previous inventory period. The ratio was 1.1:1.0 for both softwoods and hardwoods. The softwood ratio increased from 1.0:1.0 for the previous period. The hardwood ratio tightened slightly, mainly due to the increase in hardwood removals. The hardwood ratio was 1.2:1.0 for the previous period.

CONCLUSIONS

Southwest-North Alabama remains as the State's eminent timber-producing region, as well as a major source of other forest-related resources. Forest management activity has intensified substantially over the past two decades, particularly the management of pine stands. This trend is illustrated by a two-fold increase in the area of artificially-regenerated pine stands and an improvement in general stocking characteristics.

The region continues to satisfy a high demand for timber. The softwood growth-to-removals relationship is tight, but has improved since the previous inventory period. Further improvement is probable in light of the finding that at least one-fourth of the region's pine-type timberland is less than 10 years old. Ingrowth from this population of young stands will provide a boost to softwood growth over the next decade. Ingrowth from earlier establishment of pine stands has already caused expansion of volume in the 6- and 8-inch diameter classes. However, future prospects for the softwood resource will also depend on future harvest levels and continued emphasis on management.

The margin of hardwood growth over removals has narrowed over the past eight years due to a 44 percent increase in removals. A decrease in the area of hardwood-type timberland and a decrease in the volume of pole-sized hardwoods suggest the need for close monitoring

of the hardwood resource in the future. So far, recent resource developments have not had a negative impact on the hardwood sawtimber resource. The outlook for hardwoods will depend on future harvest levels, the establishment of young stands containing hardwoods, and management of existing stands. The increased demand for hardwoods could provide economic incentive for the needed intensification of hardwood management.

DEFINITION OF TERMS

Average net annual growth.—Average net annual volume increase for the inventory period.

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

Average annual removals.—Average net annual volume of 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 land.—Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover, and not currently developed for nonforest use.

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.

Live-tree volume.—The cubic-foot volume of sound wood in live 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.

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 evidence of planting or direct seeding.

Poletimber trees.—Live 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 live trees of noncommercial species.

Saplings.—Live 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.—Live trees less than 1.0 inch 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 live 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 1-25

Table 1—*Area by county and land class, Southwest-North Alabama Counties, 1990*

County	All land ¹	Forest land				Nonforest land
		Total	Timberland ²	Woodland ³	Reserved timberland	
<i>Thousand acres</i>						
Choctaw	582.0	508.7	508.7	...	...	73.4
Clarke	787.3	723.5	723.5	...	...	63.8
Conecuh	546.5	458.5	458.5	...	...	88.1
Marengo	628.4	402.4	402.4	...	...	226.0
Monroe	652.3	527.3	527.3	...	...	125.0
Sumter	580.6	401.6	401.6	...	...	179.0
Wilcox	565.2	441.5	441.5	...	...	123.7
All counties	4342.4	3463.4	3463.4	...	...	878.9

¹From U.S. Bureau of the Census.

²Forest 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 timberland.

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-North Alabama Counties, 1990*

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry ¹	Farmer	Corporate ²	Individual ²
<i>Thousand acres</i>									
Choctaw	508.7	...	...	...	...	167.6	57.8	46.2	237.0
Clarke	723.5	...	...	5.4	5.4	375.4	27.2	21.8	288.3
Conecuh	458.5	...	...	...	...	187.0	150.8	...	120.7
Marengo	402.4	...	...	...	...	121.9	85.4	18.3	176.8
Monroe	527.3	...	5.2	5.2	...	198.4	130.5	20.9	167.1
Sumter	401.6	...	6.3	...	...	112.9	100.4	37.6	144.3
Wilcox	441.5	...	5.7	5.7	5.7	149.1	183.5	11.5	80.3
All counties	3463.4	...	17.2	16.4	11.2	1312.4	735.6	156.3	1214.4

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-North Alabama Counties, 1990*

County	Total	Forest type group							
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
		Planted	Natural	Planted	Natural				
<i>Thousand acres</i>									
Choctaw	508.7	...	...	104.0	121.4	98.3	109.8	75.1	...
Clarke	723.5	16.3	5.4	114.2	168.6	152.3	136.0	130.6	...
Conecuh	458.5	12.1	18.1	120.7	54.3	72.4	126.7	54.3	...
Marengo	402.4	...	...	48.8	109.7	67.1	103.6	73.2	...
Monroe	527.3	31.3	15.7	99.2	78.3	99.2	135.7	67.9	...
Sumter	401.6	...	...	75.3	100.4	50.2	106.7	62.7	6.3
Wilcox	441.5	...	5.7	120.4	63.1	103.2	97.5	51.6	...
All counties	3463.4	59.7	44.9	682.6	695.8	642.6	816.0	515.4	6.3

Table 4—*Area of timberland by county and stand-size class, Southwest-North Alabama Counties, 1990*

County	All classes	Stand-size class		
		Sawtimber	Poletimber	Sapling-seedling
Choctaw	508.7	219.7	127.2	161.8
Clarke	723.5	353.6	163.2	206.7
Conecuh	458.5	108.6	120.7	229.2
Marengo	402.4	176.8	61.0	164.6
Monroe	527.3	229.7	83.5	214.0
Sumter	401.6	156.9	100.4	144.3
Wilcox	441.5	160.6	86.0	195.0
All counties	3463.4	1405.8	741.9	1315.7

Table 5—*Area of timberland by county and site class, Southwest-North Alabama Counties, 1990*

County	All classes	Site class (cubic feet/acre/year)				
		> 165	120-165	85-120	50-85	< 50
<i>Thousand acres</i>						
Choctaw	508.7	98.3	161.8	213.9	28.9	5.8
Clarke	723.5	141.4	288.3	190.4	103.4	...
Conecuh	458.5	66.4	168.9	187.0	36.2	...
Marengo	402.4	6.1	97.5	237.8	54.9	6.1
Monroe	527.3	52.2	182.7	172.3	99.2	20.9
Sumter	401.6	37.6	138.0	182.0	37.6	6.3
Wilcox	441.5	34.4	131.9	172.0	97.5	5.7
All counties	3463.4	436.4	1169.3	1355.3	457.6	44.8

Table 6—*Area of timberland by county and stocking classes of growing-stock trees, Southwest-North Alabama Counties, 1990*

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>Thousand acres</i>						
Choctaw	508.7	28.9	132.9	300.6	46.2	...
Clarke	723.5	43.5	195.8	408.0	70.7	5.4
Conecuh	458.5	24.1	199.1	205.1	30.2	...
Marengo	402.4	30.5	158.5	182.9	30.5	...
Monroe	527.3	20.9	187.9	261.0	57.4	...
Sumter	401.6	6.3	112.9	207.1	69.0	6.3
Wilcox	441.5	17.2	189.2	206.4	28.7	...
All counties	3463.4	171.4	1176.5	1771.1	332.7	11.7

Table 7—*Area of timberland by forest type and ownership class, Southwest-North Alabama Counties, 1990*

Forest type ¹	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private	Forest industry-leased
							> 130
Longleaf-slash pine	104.6	...	...	72.3	5.2	27.1	
Loblolly-shortleaf pine	1378.5	...	11.2	498.9	74.3	794.1	
Softwood total	1483.1	...	11.2	571.2	79.6	821.2	
Oak-pine	642.6	...	10.7	241.8	28.8	361.4	
Oak-hickory	816.0	...	5.7	171.8	27.7	610.7	
Oak-gum-cypress	515.4	...	17.2	141.1	44.1	313.0	
Elm-ash-cottonwood	6.3	...	...	6.3	...	...
Hardwood total	1980.3	...	33.6	561.0	100.6	1285.1	
All types	3463.4	...	44.8	1132.2	180.2	2106.3	

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 timberland by ownership class and stocking classes of growing-stock trees, Southwest-North Alabama Counties, 1990*

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
<i>Thousand acres</i>						
Other public	44.8	5.7	16.4	12.0	10.7	...
Forest industry	1132.2	62.4	432.9	546.6	90.3	...
Forest industry-leased	180.2	17.6	67.6	83.5	11.5	...
Other private	2106.3	85.7	659.7	1129.0	220.2	11.7
All ownerships	3463.4	171.4	1176.5	1771.1	332.7	11.7

Table 9—*Area of timberland by forest type and stand-size class, Southwest-North Alabama Counties, 1990*

Forest type ¹	All classes	Stand-size class		
		Sawtimber	Poletimber	Sapling-seedling
Longleaf-slash pine	104.6	27.9	55.8	20.9
Loblolly-shortleaf pine	1378.5	569.4	329.9	479.2
Softwood total	1483.1	597.4	385.7	500.0
Oak-pine	642.6	243.5	126.7	272.5
Oak-hickory	816.0	234.8	131.0	450.2
Oak-gum-cypress	515.4	323.9	98.5	93.0
Elm-ash-cottonwood	6.3	6.3	...	...
Hardwood total	1980.3	808.4	356.2	815.7
All types	3463.4	1405.8	741.9	1315.7

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 10—*Number of live trees on timberland by species and diameter class, Southwest-North Alabama Counties, 1990*

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>													
Longleaf-slash pines	47071	7295	16065	13092	6209	1841	1049	838	327	197	78	80	...
Shortleaf-loblolly pines	531993	210527	132758	80259	50777	22578	14766	9566	5584	2796	1397	965	18
Other yellow pines	13256	4612	2528	1151	1457	1034	821	519	345	366	184	239	...
Cypress	2822	977	499	...	187	147	176	200	90	222	134	165	25
Other softwoods	26400	15336	6651	2224	1107	726	148	117	65	...	21	5	...
Total softwoods	621541	238747	158501	96725	59737	26325	16961	11240	6411	3581	1815	1455	43
Select white oaks	39799	24655	3697	4868	2578	1265	1033	624	407	263	165	213	30
Select red oaks	9631	4508	1054	1545	225	601	543	284	233	296	69	209	64
Other white oaks	34857	17452	7939	3856	2072	1328	975	579	254	125	90	138	49
Other red oaks	374628	280250	53163	14707	10126	5777	3926	2636	1490	1001	616	813	122
Hickory	66249	51063	5712	3566	2006	1027	1090	810	387	274	148	149	16
Hard maple	8156	5252	2602	...	71	46	118	43	14	...	9	...	...
Soft maple	140406	107962	22771	5319	2673	997	372	172	46	36	10	43	4
Beech	15840	11992	1029	912	529	337	130	287	61	238	71	216	40
Sweetgum	473563	342094	77204	28472	13388	6435	2493	1632	930	368	346	188	12
Tupelo-blackgum	89081	66002	8463	5447	3037	2423	1492	1219	518	284	79	106	12
Ash	32559	19242	7825	1878	1001	989	702	224	368	183	61	75	11
Cottonwood-aspen	583	559	...	...	...	...	...	...	14	...	10	...	...
Basswood	6393	5514	479	...	110	64	138	21	34	24	9	...	...
Yellow-poplar	42696	28952	6663	1876	1815	775	875	580	498	240	164	221	37
Black walnut	608	...	526	...	63	...	20	...	...	...	...	...	...
Other hardwoods	453334	346853	70676	20864	7167	3418	1829	1038	626	354	271	218	20
Total hardwoods	1788382	1312351	269802	93310	46860	25483	15717	10169	5880	3684	2110	2598	418
Noncommercial	261343	213021	33957	8046	4122	1438	532	155	63	...	10	...	...
All species	2671267	1764119	462260	198082	110718	53246	33210	21563	12355	7265	3934	4053	461

Table 11—Number of growing-stock trees on timberland by species and diameter class, Southwest-North Alabama Counties, 1990

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
<i>Thousand trees</i>												
Longleaf-slash pines	45374	5859	16065	12860	6209	1841	1020	838	327	197	78	80
Shortleaf-loblolly pines	496998	187973	125733	77420	49816	21839	14326	9384	5451	2721	1387	929
Other yellow pines	9968	1955	1975	1151	1457	990	786	519	345	366	184	239
Cypress	2668	977	499	...	106	107	151	200	90	222	134	157
Other softwoods	21040	11687	5593	1767	1107	603	148	92	32	...	10	...
Total softwoods	576046	208452	149865	93198	58695	25380	16431	11033	6244	3506	1794	1405
Select white oaks	27601	14922	2113	4280	2514	1231	921	601	393	252	165	189
Select red oaks	8208	3357	1054	1418	166	601	513	284	233	258	69	200
Other white oaks	21441	8761	4747	3245	1617	1237	731	536	222	96	79	129
Other red oaks	281755	199728	46303	11853	9075	5294	3427	2464	1447	864	545	680
Hickory	43932	30633	4660	3105	1928	947	1005	748	374	274	129	121
Hard maple	3471	3194	...	...	71	46	118	18	14	...	9	...
Soft maple	89362	67441	14275	4663	1817	759	204	106	32	36	10	18
Beech	11213	8376	530	821	529	292	130	220	61	92	30	117
Sweetgum	339093	228769	61755	24444	12339	6306	2275	1545	852	330	315	151
Tupelo-blackgum	49189	32188	5757	3177	2720	2205	1155	1115	420	261	79	101
Ash	19643	10421	4691	1351	899	989	530	224	276	157	52	49
Cottonwood-aspen	569	559	...	...	...	...	...	...	...	10	...	...
Basswood	5846	4988	479	...	110	64	138	...	34	24	9	...
Yellow-poplar	38354	25335	6184	1876	1689	741	875	580	498	180	164	202
Black walnut	608	...	526	...	63	...	20	...	...	...	...	...
Other hardwoods	285361	213035	46446	14065	5392	2831	1640	776	550	279	180	153
Total hardwoods	1225649	851709	199520	74298	40929	23542	13662	9236	5407	3103	1836	2119
All species	1801695	1060161	349385	167496	99624	48922	30092	20269	11652	6608	3630	3525
												329

Table 12—Volume of growing stock on timberland by species and diameter class, Southwest-North Alabama Counties, 1990

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>												
Longleaf-slash pines	190.6	36.3	36.2	25.7	24.7	26.2	15.3	11.0	5.9	9.3	...	
Shortleaf-loblolly pines	2047.2	187.0	308.4	290.4	316.3	317.1	252.8	164.3	109.9	96.3	4.6	
Other yellow pines	139.5	3.3	10.1	13.9	16.7	17.3	14.7	22.5	14.8	26.1	...	
Cypress	56.5	...	0.5	1.2	3.1	5.8	3.3	11.3	9.1	15.2	7.0	
Other softwoods	19.4	3.7	5.5	5.6	1.8	1.7	0.9	...	0.3	...	...
Total softwoods	2453.1	230.4	360.6	336.7	362.7	368.1	287.0	209.1	140.0	146.9	11.6	
Select white oaks	130.4	10.8	15.2	13.3	17.4	17.5	15.2	11.5	9.5	17.0	2.9	
Select red oaks	80.9	3.1	1.3	6.7	9.8	8.8	9.1	11.9	5.3	16.6	8.4	
Other white oaks	82.2	7.1	8.8	12.1	11.1	12.9	7.6	3.7	3.9	9.8	5.2	
Other red oaks	457.1	30.9	54.6	60.7	61.4	64.6	49.9	39.9	31.5	53.1	10.5	
Hickory	118.2	7.8	11.7	10.2	19.5	21.1	13.4	14.4	8.1	11.3	0.8	
Hard maple	4.3	...	0.6	0.3	1.9	0.4	0.6	...	...	0.4	...
Soft maple	40.2	12.9	11.3	7.3	3.5	1.7	0.9	1.1	0.5	1.1	...	
Beech	34.0	1.9	3.2	3.8	2.3	5.9	2.3	3.7	0.9	8.1	1.8	
Sweetgum	410.6	60.8	78.3	81.7	48.8	49.0	37.1	17.4	20.8	14.7	1.9	
Tupelo-blackgum	133.8	8.4	17.0	24.3	21.1	27.4	13.5	10.3	3.5	6.9	1.2	
Ash	58.9	3.6	5.4	10.9	10.0	5.6	9.4	7.3	2.8	3.3	0.5	
Cottonwood-aspen	0.5	...	...	...	...	...	...	...	0.5	...	...
Basswood	7.9	...	0.8	0.8	2.8	...	1.4	1.4	0.7	...	...
Yellow-poplar	128.2	4.6	11.9	9.6	19.5	18.4	19.9	9.5	11.4	19.3	4.0	
Black walnut	0.8	...	0.3	...	...	0.5	...	...	...	...	...
Other hardwoods	197.7	35.0	28.4	31.4	31.3	19.1	17.3	11.3	10.2	12.4	1.3	
Total hardwoods	1885.7	186.9	248.9	273.2	260.5	252.8	197.7	143.5	109.6	174.0	38.5	
All species	4338.8	417.3	609.6	609.9	623.2	620.9	484.7	352.6	249.6	321.0	50.1	

Table 13—Volume of growing stock in the saw-log portion of sawtimber¹ trees on timberland by species and diameter class, Southwest-North Alabama Counties, 1990

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>									
Longleaf-slash pines	106.0	20.7	22.3	23.6	14.3	10.2	5.7	9.2	...
Shortleaf-loblolly pines	1377.9	231.8	279.5	289.1	231.2	151.5	100.6	89.7	4.5
Other yellow pines	112.4	11.3	14.6	16.0	12.9	20.8	13.2	23.5	...
Cypress	51.1	1.0	2.8	4.7	3.0	10.5	8.5	14.0	6.6
Other softwoods	8.5	4.4	1.6	1.5	0.8	...	0.2	...	...
Total softwoods	1655.8	269.1	320.7	334.8	262.3	193.0	128.3	136.5	11.2
Select white oaks	76.7	...	13.5	15.0	13.0	9.8	8.0	14.9	2.5
Select red oaks	59.2	...	7.0	7.4	7.7	10.5	4.6	14.3	7.7
Other white oaks	46.0	...	8.5	10.8	6.7	3.4	3.6	8.5	4.7
Other red oaks	261.1	...	46.5	53.8	42.8	34.0	27.4	47.1	9.5
Hickory	73.6	...	14.7	17.5	11.5	12.7	6.8	9.6	0.8
Hard maple	2.5	...	1.5	0.4	0.4	...	...	0.3	...
Soft maple	6.7	...	2.4	1.4	0.7	1.0	0.4	0.9	...
Beech	22.4	...	1.7	5.3	2.0	3.5	0.8	7.4	1.7
Sweetgum	157.3	...	33.5	41.5	33.3	15.4	18.4	13.4	1.8
Tupelo-blackgum	66.8	...	14.6	21.0	11.5	9.4	3.1	6.3	0.9
Ash	32.1	...	6.8	4.4	8.6	6.2	2.6	3.0	0.5
Cottonwood-aspen	0.4	...	...	...	...	...	0.4	...	...
Basswood	4.9	...	2.2	...	0.9	1.1	0.7	...	...
Yellow-poplar	88.1	...	14.8	16.0	17.5	8.2	10.1	17.6	3.9
Black walnut	0.4	...	...	0.4	...	...	...	...	...
Other hardwoods	84.4	...	23.2	15.4	14.8	9.7	8.9	11.4	1.1
Total hardwoods	982.7	...	190.9	210.2	171.2	124.9	95.7	154.7	35.2
All species	2638.6	269.1	511.6	545.1	433.4	317.9	224.0	291.1	46.3

¹That part of the bole of sawtimber trees between a 1-foot stump and saw-log top.

Table 14—Volume of sawtimber on timberland by species and diameter class, Southwest-North Alabama Counties, 1990

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>									
Longleaf-slash pines	657.2	115.9	141.1	149.0	95.0	65.3	34.5	56.4	...
Shortleaf-loblolly pines	8773.0	1266.8	1704.7	1890.0	1543.5	1027.7	696.6	615.6	28.1
Other yellow pines	713.4	62.3	85.5	99.4	82.2	136.2	85.7	162.2	...
Cypress	288.6	4.5	15.6	24.9	16.0	59.8	48.1	84.3	35.3
Other softwoods	42.3	21.4	7.8	7.7	4.2	...	1.1	...	...
Total softwoods	10474.4	1470.9	1954.7	2171.0	1740.9	1289.0	866.0	918.5	63.5
Select white oaks	475.4	...	75.1	87.9	81.0	62.8	52.0	98.2	18.3
Select red oaks	362.2	...	38.0	45.2	46.3	65.1	30.6	88.3	48.7
Other white oaks	265.7	...	45.6	60.7	39.3	18.7	19.8	52.2	29.4
Other red oaks	1548.7	...	258.4	312.1	255.5	207.5	171.6	284.6	59.1
Hickory	449.2	...	84.7	105.3	71.5	80.1	43.8	60.4	3.4
Hard maple	15.1	...	8.6	2.9	2.4	...	...	1.2	...
Soft maple	36.5	...	13.6	7.7	3.5	5.4	2.1	4.1	...
Beech	138.6	...	9.5	32.6	12.9	23.6	6.0	43.9	10.1
Sweetgum	950.0	...	190.7	251.7	206.4	93.3	115.8	82.0	10.0
Tupelo-blackgum	351.4	...	76.6	111.2	59.4	50.4	15.9	32.8	5.0
Ash	178.6	...	37.3	25.1	48.5	37.1	14.4	13.8	2.4
Cottonwood-aspen	2.6	...	...	...	...	...	2.6	...	...
Basswood	31.5	...	13.0	...	5.8	7.7	5.0	...	...
Yellow-poplar	538.4	...	87.9	97.5	107.4	50.8	65.2	110.9	18.7
Black walnut	2.3	...	...	2.3	...	...	...	...	...
Other hardwoods	495.4	...	130.1	90.0	86.3	58.8	56.0	68.5	5.7
Total hardwoods	5841.7	...	1069.3	1232.2	1026.2	761.4	600.9	940.9	210.8
All species	16316.1	1470.9	3023.9	3403.2	2767.1	2050.4	1466.9	1859.3	274.3

Table 15—*Volume of growing stock and sawtimber on timberland by county and species group, Southwest-North Alabama Counties, 1990*

County	All species	Growing stock					Sawtimber				
		Softwood			Hardwood		All species	Softwood			Hardwood
		Pine		Planted	Natural	Other		Planted	Natural	Other	Soft ¹
<i>Million cubic feet</i>											
Choctaw	697.2	99.6	308.1	11.5	147.9	130.2	2659.0	240.7	1518.5	52.4	370.1
Clarke	1062.3	88.0	496.2	33.3	235.9	208.9	4137.0	181.4	2447.6	168.9	649.2
Conecuh	466.4	91.3	171.8	1.1	98.6	103.7	1567.0	118.2	827.3	4.6	293.0
Marengo	420.0	54.8	152.5	9.3	92.1	111.2	1427.0	129.6	609.7	32.2	270.5
Monroe	657.1	131.4	233.5	9.9	131.6	150.8	2549.3	417.6	1128.5	49.4	401.0
Sumter	493.2	43.8	180.1	8.7	108.6	151.9	1968.1	170.7	932.8	17.4	275.6
Wilcox	542.6	102.0	224.1	2.2	81.7	132.7	2008.9	315.6	1105.4	5.9	137.5
All counties	4338.8	611.0	1766.2	75.9	896.3	989.4	16316.1	1573.7	8569.9	330.8	2396.9
											3444.8

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 16—*Volume of timber on timberland by class of timber and species group, Southwest- North Alabama Counties, 1990*

Class of timber	All species	Softwood			Hardwood		
		Pine			Soft ¹	Hard ²	
		Planted	Natural	Other			
<i>Million cubic feet</i>							
Sawtimber trees:							
Saw-log portion	2638.6	266.5	1329.8	59.6	407.2	575.6	
Upper-stem portion	400.2	45.3	154.2	6.7	85.5	108.4	
Total	3038.8	311.8	1484.1	66.2	492.7	684.0	
Poletimber trees	1300.0	299.2	282.2	9.7	403.6	305.4	
All growing-stock trees	4338.8	611.0	1766.2	75.9	896.3	989.4	
Rough trees:							
Sawtimber size	97.1	4.5	20.4	3.2	21.8	47.2	
Poletimber size	116.6	4.9	5.0	0.6	29.5	76.7	
Total	213.7	9.4	25.4	3.8	51.3	123.9	
Rotten trees:							
Sawtimber size	48.7	...	1.3	...	18.0	29.4	
Poletimber size	6.3	...	...	0.3	4.2	1.8	
Total	55.1	...	1.3	0.3	22.2	31.2	
Salvable dead trees:							
Sawtimber size	4.3	0.4	3.5	...	...	0.4	
Poletimber size	4.9	0.8	3.0	0.2	...	0.8	
Total	9.2	1.3	6.5	0.2	...	1.2	
All classes	4616.8	621.6	1799.5	80.2	969.8	1145.7	

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-North Alabama Counties, 1990

Ownership class	All species	Live trees					Growing stock					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Planted	Natural	Other		Planted	Natural	Other	Soft ¹	Hard ²
<i>Million cubic feet</i>												
Other public	115.8	5.3	46.1	...	16.4	48.0	109.3	5.3	45.4	...	14.3	44.4
Forest industry	1558.4	284.1	665.9	14.8	270.8	322.8	1480.5	279.7	660.3	14.0	250.0	276.5
Forest industry-leased	259.6	44.8	91.1	2.7	58.2	62.7	243.2	44.8	91.1	2.7	54.4	50.1
Other private	2673.8	286.1	989.8	62.5	624.4	710.9	2505.8	281.1	969.4	59.3	577.6	618.5
All ownerships	4607.6	620.4	1793.0	80.0	969.8	1144.5	4338.8	611.0	1766.2	75.9	896.3	989.4

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 18—Average net annual growth of growing stock and sawtimber on timberland by county and species group, Southwest-North Alabama Counties, 1990

County	All species	Growing stock					Sawtimber					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Planted	Natural	Other		Planted	Natural	Other	Soft ¹	Hard ²
<i>Million cubic feet</i>												
Choctaw	39.1	11.4	14.5	0.2	6.6	6.4	142.9	20.1	79.5	0.9	16.4	25.9
Clarke	49.4	8.1	20.0	0.5	11.2	9.6	211.6	22.0	108.3	3.6	37.7	40.0
Conecuh	25.9	6.3	11.9	...	3.0	4.8	84.0	6.0	57.6	...	5.9	14.4
Marengo	26.4	4.9	11.4	0.5	4.0	5.7	124.2	18.7	64.5	1.5	17.1	22.4
Monroe	38.7	10.6	12.6	0.6	5.9	9.0	156.1	29.5	70.0	2.8	21.6	32.2
Sumter	24.4	2.0	9.2	0.5	3.6	9.1	107.3	0.9	58.4	1.1	10.0	36.9
Wilcox	35.4	7.8	15.6	...	5.6	6.5	141.6	21.4	85.1	0.4	13.3	21.4
All counties	239.4	51.0	95.2	2.3	39.9	51.0	967.6	118.6	523.4	10.3	121.9	193.4

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 19—Average annual removals of growing stock and sawtimber on timberland by county and species group, Southwest-North Alabama Counties, 1990

County	All species	Growing stock					Sawtimber					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Planted	Natural	Other		Planted	Natural	Other	Soft ¹	Hard ²
<i>Million cubic feet</i>												
Choctaw	30.8	0.5	19.3	...	5.5	5.6	118.7	0.8	88.1	...	12.6	17.1
Clarke	36.1	1.3	19.8	0.1	6.5	8.4	150.7	4.5	93.8	0.6	22.4	29.4
Conecuh	14.9	...	5.3	...	5.1	4.6	47.3	...	26.4	...	6.4	14.5
Marengo	33.1	1.2	21.5	0.3	3.1	7.0	137.1	6.4	95.1	1.7	7.5	26.4
Monroe	31.7	5.1	13.9	...	4.1	8.5	110.0	6.9	64.9	...	10.9	27.2
Sumter	23.6	2.2	13.0	...	3.6	4.9	95.8	9.4	63.0	...	8.8	14.5
Wilcox	38.4	1.7	20.8	...	6.4	9.5	163.6	9.5	96.3	...	20.9	36.9
All counties	208.7	11.9	113.5	0.5	34.3	48.4	823.2	37.6	527.6	2.3	89.6	166.1

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-North Alabama Counties, 1990*

Species	Growth	Removals
- - - Million cubic feet - - -		
Yellow pines	146.3	125.4
Other softwoods	2.3	0.5
Total softwoods	148.5	125.9
Select white-red oaks	8.3	7.4
Other white-red oaks	33.5	30.3
Hickory	4.2	4.5
Hard maple	0.2	0.4
Sweetgum	17.0	18.1
Ash-walnut-black cherry	2.2	2.5
Yellow-poplar	5.8	4.0
Other hardwoods	19.6	15.6
Total hardwoods	90.8	82.7
All species	239.4	208.7

Table 21—*Average net annual growth and average annual removals of sawtimber on timberland by species, Southwest-North Alabama Counties, 1990*

Species	Growth	Removals
- - - Million board feet - - -		
Yellow pines	642.0	565.2
Other softwoods	10.3	2.3
Total softwoods	652.2	567.5
Select white-red oaks	35.8	26.4
Other white-red oaks	122.0	103.3
Hickory	19.9	14.4
Hard maple	0.6	1.8
Sweetgum	45.1	39.3
Ash-walnut-black cherry	7.7	9.9
Yellow-poplar	24.1	16.3
Other hardwoods	60.2	44.2
Total hardwoods	315.4	255.7
All species	967.6	823.2

Table 22—*Average annual mortality of growing stock and sawtimber on timberland by species, Southwest-North Alabama Counties, 1990*

Species	Growing stock	Sawtimber
- - - Million cubic feet - - - Million board feet - - -		
Yellow pines	14.3	36.4
Other softwoods	0.2	0.2
Total softwoods	14.5	36.6
Select white-red oaks	0.7	3.6
Other white-red oaks	2.7	5.0
Hickory	0.9	2.6
Hard maple	0.1	...
Sweetgum	3.1	5.9
Ash-walnut-black cherry	1.5	2.9
Yellow-poplar	0.5	3.1
Other hardwoods	4.1	7.5
Total hardwoods	13.6	30.7
All species	28.1	67.3

Table 23—*Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, Southwest-North Alabama Counties, 1990*

Ownership class	All species	Growth					Removals					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Planted	Natural	Other		Soft ¹	Hard ²	Planted	Natural	Other
<i>----- Million cubic feet -----</i>												
Other public	3.8	1.1	...	...	0.5	2.1	1.4	...	1.3	...	0.1	...
Forest industry	82.4	26.9	30.1	...	11.4	14.1	71.5	7.2	38.5	...	11.7	14.1
Forest industry-leased	16.8	5.3	5.5	0.1	2.4	3.6	10.2	1.0	5.1	...	0.1	4.0
Other private	136.4	17.8	59.6	2.2	25.6	31.2	125.6	3.7	68.6	0.5	22.4	30.4
All ownerships	239.4	51.0	95.2	2.3	39.9	51.0	208.7	11.9	113.5	0.5	34.3	48.4

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 24—*Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, Southwest-North Alabama Counties, 1990*

Ownership class	All species	Growth					Removals					
		Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Planted	Natural	Other		Soft ¹	Hard ²	Planted	Natural	Other
<i>----- Million board feet -----</i>												
Other public	16.6	0.3	4.8	...	2.6	9.0	7.8	...	7.6	...	0.3	...
Forest industry	319.6	53.3	174.0	0.1	39.4	52.8	277.4	25.3	172.4	...	32.8	46.9
Forest industry-leased	67.0	12.2	31.4	0.3	9.4	13.6	44.0	...	25.2	...	0.5	18.3
Other private	564.4	52.7	313.2	9.9	70.6	118.0	493.9	12.3	322.5	2.3	56.0	100.8
All ownerships	967.6	118.6	523.4	10.3	121.9	193.4	823.2	37.6	527.6	2.3	89.6	166.1

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-North Alabama Counties, 1990*

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
<i>----- Million board feet -----</i>						
Yellow pines	10143.6	2548.5	2261.5	5082.9	...	250.7
Cypress	288.6	135.4	62.4	76.2	...	14.5
Redcedar	42.3	42.3	...	...	...	...
Total softwoods	10474.4	2726.2	2323.9	5159.1	...	265.2
Select white-red oaks	837.5	148.1	209.1	270.0	156.1	54.3
Other white-red oaks	1814.4	89.4	271.4	519.9	785.7	148.0
Hickory	449.2	45.2	79.8	163.5	119.2	41.6
Hard maple	15.1	...	...	6.8	7.1	1.2
Sweetgum	950.0	87.3	310.8	306.7	168.6	76.5
Tupelo and blackgum	351.4	41.6	135.5	142.8	11.8	19.8
Ash-walnut-black cherry	185.6	16.7	36.1	87.2	11.2	34.4
Yellow-poplar	538.4	88.6	89.9	158.5	155.1	46.4
Other hardwoods	699.9	42.5	84.9	261.6	233.7	77.1
Total hardwoods	5841.7	559.5	1217.7	1916.9	1648.4	499.3
All species	16316.1	3285.6	3541.5	7076.0	1648.4	764.5

Supplemental Tables 26-43

Table 26—*Area of timberland by stand age, forest type group and stand origin, Southwest-North Alabama Counties, 1990*

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
<i>-Thousand acres-</i>						
1-10	373.1	41.8	62.4	11.0	11.8	63.5
11-20	210.5	22.5	17.7	6.0	5.4	5.4
21-30	72.8	10.7	11.0	12.2	5.4	5.2
31-40	16.5	5.8	...	...	...	...
41-50	...	22.1	...	5.2	...	...
>50	6.3	17.2	5.8	...	...	...
Mixed	63.2	620.8	27.9	483.4	17.5	1223.3
Total	742.3	740.8	124.8	517.8	40.2	1297.5

Table 27—*Volume of softwood growing stock on timberland by county and forest type group, Southwest-North Alabama Counties, 1990*

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
<i>-Million cubic feet-</i>							
Choctaw	419.2	...	...	94.7	194.5	78.4	27.1
Clarke	617.5	11.8	8.1	71.3	315.3	149.9	28.7
Conecuh	264.1	17.1	30.9	70.2	70.0	40.7	26.7
Marengo	216.6	...	...	54.8	89.2	46.9	20.4
Monroe	374.7	35.9	16.6	83.6	112.9	77.8	35.8
Sumter	232.7	...	...	41.5	131.7	42.0	15.5
Wilcox	328.2	...	4.8	89.5	130.2	70.3	23.5
All counties	2453.1	64.8	60.4	505.6	1043.8	506.0	177.7
							94.7

Table 28—*Volume of hardwood growing stock on timberland by county and forest type group, Southwest-North Alabama Counties, 1990*

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
<i>-Million cubic feet-</i>							
Choctaw	278.1	...	...	8.9	37.4	47.2	80.5
Clarke	444.8	0.2	0.9	4.8	60.2	93.9	68.5
Conecuh	202.3	...	9.3	9.1	14.7	21.4	71.6
Marengo	203.4	...	...	7.4	12.4	20.8	73.5
Monroe	282.3	0.2	2.7	9.6	16.7	54.8	107.7
Sumter	260.5	...	...	13.0	24.5	35.0	83.5
Wilcox	214.4	...	0.5	10.5	26.7	41.9	65.3
All counties	1885.7	0.4	13.3	63.3	192.7	315.1	550.5
							742.9
							7.5

Table 29—Volume of softwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type group, Southwest-North Alabama Counties, 1990

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
<i>- Million cubic feet -</i>							
Choctaw	279.2	...	...	36.6	134.6	63.2	22.9
Clarke	439.5	2.0	5.5	28.9	236.7	116.0	20.9
Conecuh	150.5	1.0	19.7	20.6	52.0	27.8	22.0
Marengo	130.4	...	...	27.0	54.0	32.7	12.2
Monroe	255.6	12.9	11.7	52.0	81.1	59.2	28.5
Sumter	170.1	...	...	25.0	99.0	31.7	12.7
Wilcox	230.6	...	1.2	44.6	104.4	51.0	20.3
All counties	1655.8	15.9	38.1	234.7	761.9	381.5	139.5
							84.2

Table 30—Volume of hardwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type group, Southwest-North Alabama Counties, 1990

County	Total	Forest type group					
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory
		Planted	Natural	Planted	Natural		
<i>- Million cubic feet -</i>							
Choctaw	137.1	...	...	2.3	13.3	23.3	48.2
Clarke	233.2	...	0.3	1.6	23.0	40.7	28.5
Conecuh	105.4	...	5.8	2.3	10.2	6.5	39.4
Marengo	110.1	...	...	2.3	5.0	9.3	34.7
Monroe	159.6	...	0.9	4.6	6.6	28.9	62.1
Sumter	139.6	...	...	6.0	7.9	19.1	47.6
Wilcox	97.8	...	...	3.2	10.4	12.8	33.9
All counties	982.7	...	7.0	22.3	76.4	140.5	294.5
							435.9
							6.2

Table 31—Volume of timber on timberland by county, class of timber and species group, Southwest-North Alabama Counties, 1990

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
<i>- Million cubic feet -</i>							
Choctaw	753.7	419.2	278.1	13.6	32.4	0.3	10.1
Clarke	1119.9	617.5	444.8	7.0	43.9	...	6.7
Conecuh	494.4	264.1	202.3	3.1	18.7	0.6	5.6
Marengo	446.7	216.6	203.4	4.0	17.5	0.7	4.6
Monroe	701.4	374.7	282.3	1.4	29.4	...	13.5
Sumter	525.5	232.7	260.5	7.2	20.2	...	4.9
Wilcox	566.1	328.2	214.4	2.4	13.1	...	8.0
All counties	4607.6	2453.1	1885.7	38.6	175.2	1.6	53.4

Table 32—Number of live trees on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990

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>													
Longleaf pine	12137	2488	3351	2367	1050	1228	762	565	201	107	10	8	...
Slash pine	34934	4807	12715	10725	5159	613	288	273	126	90	68	72	...
Shortleaf pine	39131	6604	6255	7648	6089	4148	4055	2933	770	417	179	33	...
Loblolly pine	492862	203924	126502	72611	44688	18430	10711	6633	4815	2380	1219	932	18
Virginia pine	593	499	...	...	51	44	...	...	...	...	...	...	...
Spruce pine	12645	4113	2528	1151	1407	990	821	519	327	366	184	239	...
Other s. pines	18	...	...	...	...	...	...	...	18	...	...	...	...
Redcedar	26400	15336	6651	2224	1107	726	148	117	65	...	21	5	...
Cypress	2822	977	499	...	187	147	176	200	90	222	134	165	25
Total softwoods	621541	238747	158501	96725	59737	26325	16961	11240	6411	3581	1815	1455	43
Select white oaks	39799	24655	3697	4868	2578	1265	1033	624	407	263	165	213	30
Select red oaks	9631	4508	1054	1545	225	601	543	284	233	296	69	209	64
Other white oaks	34857	17452	7939	3856	2072	1328	975	579	254	125	90	138	49
Other red oaks	374628	280250	53163	14707	10126	5777	3926	2636	1490	1001	616	813	122
Sweet pecan	590	...	553	...	...	37	...	...	...	...	...	...	...
Water hickory	2063	998	499	392	57	...	22	58	14	...	9	15	...
Other hickories	63596	50066	4660	3175	1949	990	1068	752	373	274	139	134	16
Persimmon	19366	16440	1633	1027	205	37	24	...	...	...	...	...	...
Hard maple	8156	5252	2602	...	71	46	118	43	14	...	...	9	...
Soft maple	138543	106285	22771	5319	2558	956	341	172	46	36	10	43	4
Boxelder	1863	1677	...	...	114	41	31	...	...	...	...	...	...
Beech	15840	11992	1029	912	529	337	130	287	61	238	71	216	40
Sweetgum	473563	342094	77204	28472	13388	6435	2493	1632	930	368	346	188	12
Blackgum	84809	66002	8463	4618	2339	1659	870	462	216	116	21	37	4
Other gums/tupelos	4272	...	...	828	697	764	622	757	302	168	58	68	8
White ash	13638	10812	2053	144	123	209	132	45	67	40	...	8	5
Other ashes	18921	8431	5772	1735	877	779	571	179	301	142	61	67	6
Sycamore	1914	...	998	185	137	118	109	58	125	38	39	96	11
Cottonwood	583	559	...	...	...	...	...	...	14	...	10	...	...
Basswood	6393	5514	479	...	110	64	138	21	34	24	9	...	...
Yellow-poplar	42696	28952	6663	1876	1815	775	875	580	498	240	164	221	37
Magnolia	27417	20401	4878	1341	358	181	102	44	32	12	43	20	4
Sweetbay	57779	46655	6758	1545	998	743	480	320	135	46	51	48	...
Willow	3784	2709	575	291	66	78	24	...	33	...	...	8	...
Black walnut	608	...	526	...	63	...	...	20	...	...	...	...	...
Black cherry	32625	22844	8441	761	438	72	59	...	...	...	9	...	...
American elm	8411	6429	575	569	189	165	195	105	51	76	52	...	5
Other elms	40421	30577	5165	2283	1547	338	329	95	29	34	9	14	...
River birch	1915	499	1085	113	...	90	...	44	32	23	30	...	...
Hackberry	8058	2959	575	1570	736	1130	445	283	190	99	39	32	...
Black locust	526	526	...	...	...	...	...	...	...	...	...	...	...
Other locusts	60	...	...	...	60	...	...	...	...	...	...	...	...
Sassafras	10816	10048	...	710	58	...	...	...	...	...	...	...	...
Dogwood	170626	132244	30111	7026	1103	141	...	...	...	...	...	...	...
Holly	60243	50338	6782	2301	574	159	28	48	...	14	...	...	...
Other commercial	9374	4183	3100	1143	697	165	34	40	...	12	...	...	...
Total hardwoods	1788382	1312351	269802	93310	46860	25483	15717	10169	5880	3684	2110	2598	418
Noncommercial	261343	213021	33957	8046	4122	1438	532	155	63	...	10	...	...
All species	2671267	1764119	462260	198082	110718	53246	33210	21563	12355	7265	3934	4053	461

Table 33—Number of growing-stock trees on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990

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>Thousand trees</i>											
Longleaf pine	6175	2273	1050	1228	732	565	201	107	10	8	...
Slash pine	17275	10588	5159	613	288	273	126	90	68	72	...
Shortleaf pine	25681	7264	5974	4148	3975	2933	770	405	179	33	...
Loblolly pine	157611	70156	43842	17691	10350	6451	4681	2316	1208	896	18
Virginia pine	94	...	51	44	...	...	...	...	...	...	...
Spruce pine	5925	1151	1407	947	786	519	327	366	184	239	...
Other s. pines	18	...	...	...	...	...	18	...	...	...	...
Redcedar	3759	1767	1107	603	148	92	32	...	10	...	...
Cypress	1192	...	106	107	151	200	90	222	134	157	25
Total softwoods	217730	93198	58695	25380	16431	11033	6244	3506	1794	1405	43
Select white oaks	10566	4280	2514	1231	921	601	393	252	165	189	21
Select red oaks	3796	1418	166	601	513	284	233	258	69	200	53
Other white oaks	7933	3245	1617	1237	731	536	222	96	79	129	39
Other red oaks	35724	11853	9075	5294	3427	2464	1447	864	545	680	76
Sweet pecan	37	...	...	37	...	...	...	...	...	...	...
Water hickory	545	392	57	...	...	58	14	...	9	15	...
Other hickories	8057	2714	1871	910	1005	690	360	274	120	106	8
Persimmon	938	748	129	37	24	...	...	...	...	...	...
Hard maple	277	...	71	46	118	18	14	...	...	9	...
Soft maple	7615	4663	1817	759	173	106	32	36	10	18	...
Boxelder	31	...	...	31	...	...	...	...	...	...	...
Beech	2307	821	529	292	130	220	61	92	30	117	16
Sweetgum	48569	24444	12339	6306	2275	1545	852	330	315	151	12
Blackgum	8027	2900	2093	1540	791	418	134	92	21	32	4
Other gums/tupelos	3217	277	627	664	364	697	286	168	58	68	8
White ash	680	144	123	209	74	45	49	26	...	8	...
Other ashes	3851	1207	775	779	456	179	227	130	52	41	4
Sycamore	902	185	137	118	109	58	125	23	39	96	11
Cottonwood	10	...	...	...	...	...	...	...	10	...	...
Basswood	380	...	110	64	138	...	34	24	9	...	...
Yellow-poplar	6835	1876	1689	741	875	580	498	180	164	202	29
Magnolia	1532	980	205	181	51	44	32	12	20	6	...
Sweetbay	3519	1215	883	662	395	193	105	23	21	22	...
Willow	398	197	66	78	24	...	33	...	...	...	...
Black walnut	83	...	63	...	...	20	...	...	...	...	...
Black cherry	1074	652	327	35	59	...	...	...	...	...	...
American elm	1242	466	189	113	195	105	51	76	42	...	5
Other elms	3918	1838	1336	294	276	95	29	34	9	6	...
River birch	292	113	...	90	...	24	32	12	20	...	...
Hackberry	4163	1570	613	1018	445	237	144	87	28	22	...
Other locusts	60	...	60	...	...	...	...	...	...	...	...
Sassafras	621	563	58	...	...	...	...	...	...	...	...
Dogwood	3331	2927	404	...	...	...	...	...	...	...	...
Holly	2609	1997	461	123	28	...	...	...	...	...	...
Other commercial	1283	612	523	83	34	19	...	12	...	...	...
Total hardwoods	174420	74298	40929	23542	13662	9236	5407	3103	1836	2119	286
All species	392149	167496	99624	48922	30092	20269	11652	6608	3630	3525	329

Table 34—Volume of growing stock on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990

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>											
Longleaf pine	84.6	7.0	7.3	18.2	17.9	18.1	8.8	5.9	0.7	0.7	...
Slash pine	106.0	29.3	28.9	7.5	6.7	8.1	6.5	5.0	5.2	8.6	...
Shortleaf pine	427.7	23.2	56.4	65.6	97.1	106.4	37.8	24.4	13.3	3.4	...
Loblolly pine	1619.4	163.8	251.9	224.8	219.2	210.8	215.0	139.9	96.6	92.9	4.6
Virginia pine	1.0	...	0.2	0.8	...	...	...	...	...	...	...
Spruce pine	138.0	3.3	9.8	13.1	16.7	17.3	14.3	22.5	14.8	26.1	...
Other s. pines	0.4	...	...	...	...	...	0.4	...	...	...	...
Redcedar	19.4	3.7	5.5	5.6	1.8	1.7	0.9	...	0.3	...	...
Cypress	56.5	...	0.5	1.2	3.1	5.8	3.3	11.3	9.1	15.2	7.0
Total softwoods	2453.1	230.4	360.6	336.7	362.7	368.1	287.0	209.1	140.0	146.9	11.6
Select white oaks	130.4	10.8	15.2	13.3	17.4	17.5	15.2	11.5	9.5	17.0	2.9
Select red oaks	80.9	3.1	1.3	6.7	9.8	8.8	9.1	11.9	5.3	16.6	8.4
Other white oaks	82.2	7.1	8.8	12.1	11.1	12.9	7.6	3.7	3.9	9.8	5.2
Other red oaks	457.1	30.9	54.6	60.7	61.4	64.6	49.9	39.9	31.5	53.1	10.5
Sweet pecan	0.4	...	...	0.4	...	...	...	...	...	...	...
Water hickory	6.0	1.0	0.4	...	...	2.0	0.6	...	0.8	1.2	...
Other hickories	111.9	6.8	11.3	9.8	19.5	19.1	12.8	14.4	7.3	10.0	0.8
Persimmon	3.6	1.6	0.8	0.6	0.6	...	...	...	...	...	...
Hard maple	4.3	...	0.6	0.3	1.9	0.4	0.6	...	...	0.4	...
Soft maple	39.9	12.9	11.3	7.3	3.1	1.7	0.9	1.1	0.5	1.1	...
Boxelder	0.4	...	...	...	0.4	...	...	...	...	...	...
Beech	34.0	1.9	3.2	3.8	2.3	5.9	2.3	3.7	0.9	8.1	1.8
Sweetgum	410.6	60.8	78.3	81.7	48.8	49.0	37.1	17.4	20.8	14.7	1.9
Blackgum	75.2	7.7	13.3	17.3	15.1	10.2	4.8	3.8	1.2	1.7	0.2
Other gums/tupelos	58.6	0.7	3.8	7.0	6.1	17.3	8.7	6.5	2.3	5.2	1.0
White ash	10.1	0.3	0.9	2.5	1.8	0.9	1.7	1.4	...	0.6	...
Other ashes	48.8	3.3	4.5	8.4	8.2	4.7	7.6	6.0	2.8	2.7	0.5
Sycamore	25.4	0.9	1.2	1.7	2.8	1.5	4.7	1.2	2.3	8.2	1.0
Cottonwood	0.5	...	...	...	...	...	...	...	0.5	...	...
Basswood	7.9	...	0.8	0.8	2.8	...	1.4	1.4	0.7	...	...
Yellow-poplar	128.2	4.6	11.9	9.6	19.5	18.4	19.9	9.5	11.4	19.3	4.0
Magnolia	10.5	2.3	0.9	2.1	1.0	0.9	1.2	0.2	1.3	0.6	...
Sweetbay	31.5	4.1	4.5	6.6	6.5	4.0	2.8	0.8	0.8	1.4	...
Willow	2.8	0.5	0.4	0.6	0.5	...	0.9	...	...	...	...
Black walnut	0.8	...	0.3	...	...	0.5	...	...	...	...	...
Black cherry	5.1	2.1	1.5	0.4	1.1	...	...	...	...	...	...
American elm	17.9	1.3	1.3	1.4	3.3	2.9	1.4	2.9	3.0	...	0.3
Other elms	27.3	4.8	6.9	3.5	5.8	2.7	0.7	1.9	0.6	0.4	...
River birch	3.3	0.5	...	0.6	...	0.4	0.8	0.3	0.7	...	...
Hackberry	45.9	4.0	3.7	12.1	8.5	6.0	4.8	3.4	1.4	1.9	...
Other locusts	0.5	...	0.5	...	...	...	...	...	...	...	...
Sassafras	1.3	1.1	0.2	...	...	...	...	...	...	...	...
Dogwood	7.3	5.7	1.7	...	...	...	...	...	...	...	...
Holly	8.5	4.6	2.2	1.2	0.5	...	...	...	...	...	...
Other commercial	6.7	1.5	2.8	0.7	0.6	0.5	...	0.5	...	...	...
Total hardwoods	1885.7	186.9	248.9	273.2	260.5	252.8	197.7	143.5	109.6	174.0	38.5
All species	4338.8	417.3	609.6	609.9	623.2	620.9	484.7	352.6	249.6	321.0	50.1

Table 35—Volume of growing stock in the saw-log portion of sawtimber trees on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990

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>									
Longleaf pine	61.5	14.8	16.0	16.1	8.0	5.3	0.6	0.7	...
Slash pine	44.5	5.9	6.2	7.5	6.3	4.9	5.2	8.6	...
Shortleaf pine	309.4	54.3	86.2	96.8	34.3	22.8	11.7	3.3	...
Loblolly pine	1068.5	177.4	193.3	192.3	196.9	128.7	89.0	86.4	4.5
Virginia pine	0.7	0.7	...	...	...	...	...	...	...
Spruce pine	111.5	10.6	14.6	16.0	12.7	20.8	13.2	23.5	...
Other s. pines	0.3	...	...	...	0.3	...	...	...	...
Redcedar	8.5	4.4	1.6	1.5	0.8	...	0.2	...	...
Cypress	51.1	1.0	2.8	4.7	3.0	10.5	8.5	14.0	6.6
Total softwoods	1655.8	269.1	320.7	334.8	262.3	193.0	128.3	136.5	11.2
Select white oaks	76.7	...	13.5	15.0	13.0	9.8	8.0	14.9	2.5
Select red oaks	59.2	...	7.0	7.4	7.7	10.5	4.6	14.3	7.7
Other white oaks	46.0	...	8.5	10.8	6.7	3.4	3.6	8.5	4.7
Other red oaks	261.1	...	46.5	53.8	42.8	34.0	27.4	47.1	9.5
Water hickory	4.1	...	...	1.6	0.6	...	0.8	1.2	...
Other hickories	69.5	...	14.7	16.0	10.9	12.7	6.0	8.4	0.8
Persimmon	0.5	...	0.5	...	...	...	...	...	...
Hard maple	2.5	...	1.5	0.4	0.4	...	...	0.3	...
Soft maple	6.5	...	2.1	1.4	0.7	1.0	0.4	0.9	...
Boxelder	0.3	...	0.3	...	...	...	...	...	...
Beech	22.4	...	1.7	5.3	2.0	3.5	0.8	7.4	1.7
Sweetgum	157.3	...	33.5	41.5	33.3	15.4	18.4	13.4	1.8
Blackgum	29.2	...	10.9	7.9	4.3	3.6	1.0	1.5	0.1
Other gums/tupelos	37.6	...	3.7	13.1	7.3	5.8	2.1	4.9	0.8
White ash	5.4	...	1.4	0.8	1.6	1.1	...	0.6	...
Other ashes	26.7	...	5.4	3.6	7.0	5.2	2.6	2.4	0.5
Sycamore	18.9	...	1.8	1.3	4.3	1.1	2.1	7.5	0.8
Cottonwood	0.4	...	...	...	...	...	0.4	...	...
Basswood	4.9	...	2.2	...	0.9	1.1	0.7	...	...
Yellow-poplar	88.1	...	14.8	16.0	17.5	8.2	10.1	17.6	3.9
Magnolia	4.4	...	0.6	0.8	1.1	0.2	0.9	0.6	...
Sweetbay	13.4	...	5.1	3.3	2.3	0.6	0.8	1.3	...
Willow	1.2	...	0.4	...	0.8	...	...	...	...
Black walnut	0.4	...	...	0.4	...	...	...	...	...
Black cherry	0.8	...	0.8	...	...	...	...	...	...
American elm	10.8	...	2.2	2.3	1.1	2.4	2.5	...	0.3
Other elms	10.0	...	4.7	2.3	0.6	1.6	0.6	0.3	...
River birch	1.9	...	...	0.3	0.6	0.3	0.7	...	...
Hackberry	20.7	...	6.3	4.6	3.9	3.1	1.3	1.6	...
Holly	0.4	...	0.4	...	...	...	...	...	...
Other commercial	1.4	...	0.4	0.5	...	0.5	...	...	...
Total hardwoods	982.7	...	190.9	210.2	171.2	124.9	95.7	154.7	35.2
All species	2638.6	269.1	511.6	545.1	433.4	317.9	224.0	291.1	46.3

Table 36—*Volume of timber on timberland by detailed species and class of timber,
Southwest-North Alabama Counties, 1990*

Species	All live	Growing stock	Rough	Rotten
<i>----- Million cubic feet -----</i>				
Longleaf pine	85.0	84.6	0.5	...
Slash pine	106.3	106.0	0.3	...
Shortleaf pine	431.9	427.7	4.2	...
Loblolly pine	1650.1	1619.4	29.3	1.3
Virginia pine	1.0	1.0	...	...
Spruce pine	138.6	138.0	0.6	...
Other s. pines	0.4	0.4	...	...
Redcedar	21.9	19.4	2.3	0.1
Cypress	58.1	56.5	1.4	0.2
Total softwoods	2493.3	2453.1	38.6	1.6
Select white oaks	135.8	130.4	3.6	1.8
Select red oaks	84.1	80.9	1.0	2.2
Other white oaks	91.3	82.2	7.9	1.2
Other red oaks	494.3	457.1	27.4	9.9
Sweet pecan	0.4	0.4	...	...
Water hickory	6.4	6.0	0.4	...
Other hickories	118.7	111.9	4.4	2.4
Persimmon	4.2	3.6	0.5	...
Hard maple	4.8	4.3	0.5	...
Soft maple	49.5	39.9	7.1	2.5
Boxelder	1.3	0.4	0.5	0.4
Beech	48.3	34.0	4.1	10.2
Sweetgum	432.1	410.6	14.1	7.4
Blackgum	82.6	75.2	5.6	1.8
Other gums/tupelos	65.8	58.6	6.9	0.3
White ash	11.6	10.1	1.4	0.1
Other ashes	57.1	48.8	5.2	3.0
Sycamore	25.6	25.4	...	0.2
Cottonwood	0.9	0.5	...	0.3
Basswood	8.4	7.9	0.4	...
Yellow-poplar	134.1	128.2	3.5	2.4
Magnolia	14.4	10.5	1.8	2.0
Sweetbay	37.5	31.5	3.2	2.8
Willow	3.0	2.8	...	0.2
Black walnut	0.8	0.8	...	...
Black cherry	6.1	5.1	0.9	...
American elm	18.6	17.9	0.5	0.2
Other elms	29.9	27.3	2.6	...
River birch	3.9	3.3	0.5	0.2
Hackberry	49.8	45.9	2.6	1.3
Other locusts	0.5	0.5	...	...
Sassafras	1.5	1.3	0.2	...
Dogwood	15.0	7.3	7.5	0.2
Holly	10.3	8.5	1.8	...
Other commercial	8.8	6.7	1.9	0.2
Total hardwoods	2057.2	1885.7	118.1	53.4
Noncommercial	57.0	...	57.0	...
All species	4607.6	4338.8	213.7	55.1

Table 37—Volume of sawtimber for tree grade 1 on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990

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
<i>Million board feet</i>								
Longleaf pine	103.5	17.6	42.3	10.7	16.3	13.0	3.7	...
Slash pine	96.1	3.4	17.8	13.5	19.3	12.5	8.5	21.1
Shortleaf pine	649.9	83.0	159.0	209.7	68.7	77.2	35.5	16.8
Loblolly pine	1619.7	70.0	129.8	248.8	317.4	304.5	253.3	282.5
Spruce pine	79.3	4.8	...	...	5.2	31.3	23.9	14.1
Redcedar	42.3	21.4	7.8	7.7	4.2	...	1.1	...
Cypress	135.4	...	1.6	5.6	2.0	30.9	32.4	62.7
Total softwoods	2726.2	200.3	358.4	495.9	433.1	469.3	358.4	397.2
Select white oaks	72.5	...	...	...	...	13.8	12.6	35.8
Select red oaks	75.6	...	...	...	...	13.1	5.6	26.7
Other white oaks	11.7	...	...	...	3.1	...	...	...
Other red oaks	77.7	...	...	...	7.3	11.6	18.4	24.0
Water hickory	8.3	...	...	...	3.4	...	4.9	...
Other hickories	36.9	...	...	...	5.9	10.4	13.9	6.7
Beech	4.3	...	...	...	4.3	...	...	...
Sweetgum	87.3	...	...	...	6.8	17.0	21.6	37.1
Blackgum	16.0	...	...	...	3.5	4.9	...	7.5
Other gums/tupelos	25.7	...	...	...	7.1	2.5	4.9	9.3
White ash	10.1	...	...	...	2.8	7.2	...	...
Other ashes	6.6	...	...	...	3.4	3.2	...	...
Sycamore	25.8	...	...	...	6.2	...	3.1	14.6
Yellow-poplar	88.6	...	...	...	...	31.6	17.0	40.0
American elm	8.1	...	...	...	...	2.9	5.2	...
Other elms	4.3	...	...	...	...	...	4.3	...
Total hardwoods	559.5	...	...	...	53.9	118.2	111.5	210.2
All species	3285.6	200.3	358.4	495.9	487.0	587.5	469.9	607.4
								79.1

Table 38—*Volume of sawtimber for tree grade 2 on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990*

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
<i>----- Million board feet -----</i>								
Longleaf pine	82.5	9.0	15.3	39.8	9.2	9.2	...	...
Slash pine	73.8	8.7	11.9	13.3	10.8	5.0	6.3	17.7
Shortleaf pine	494.8	71.2	133.0	176.1	74.9	33.3	6.3	...
Loblolly pine	1475.2	92.5	178.2	316.4	406.8	196.6	148.7	130.6
Spruce pine	135.2	2.9	5.9	24.2	14.9	29.5	25.2	32.7
Cypress	62.4	...	7.9	5.2	8.2	14.3	9.8	17.0
Total softwoods	2323.9	184.2	352.3	575.0	524.8	287.9	196.3	198.0
Select white oaks	116.9	...	...	18.7	36.1	11.5	11.9	34.4
Select red oaks	92.2	...	...	5.1	26.0	18.9	8.0	24.1
Other white oaks	37.0	...	...	11.6	5.6	5.9	6.3	2.0
Other red oaks	234.5	...	...	27.8	68.8	30.4	38.8	51.6
Water hickory	3.9	...	...	3.9	...	...	...	...
Other hickories	75.8	...	...	28.0	10.7	23.1	6.7	7.3
Sweetgum	310.8	...	...	115.7	102.0	34.2	42.6	16.3
Blackgum	43.0	...	...	14.2	18.5	8.0	2.3	...
Other gums/tupelos	92.5	...	...	44.1	15.5	20.8	1.8	10.3
White ash	2.1	...	...	...	...	...	...	2.1
Other ashes	31.7	...	...	2.4	9.3	12.4	3.4	4.3
Sycamore	16.6	...	...	4.2	5.3	...	...	7.1
Basswood	9.2	...	...	...	3.9	5.2	...	...
Yellow-poplar	89.9	...	...	19.2	24.5	2.2	5.7	29.5
Magnolia	3.3	...	...	...	3.3	...	...	...
Sweetbay	13.4	...	...	5.5	7.9	...	...	...
Black walnut	2.3	...	...	2.3	...	...	...	...
American elm	15.1	...	...	4.3	...	2.8	8.0	...
Other elms	6.8	...	...	3.0	...	3.8	...	...
River birch	7.4	...	...	1.6	1.7	1.9	2.3	...
Hackberry	13.2	...	...	1.3	...	5.3	2.2	4.3
Total hardwoods	1217.7	...	...	312.9	339.0	186.4	140.1	193.4
All species	3541.5	184.2	352.3	887.9	863.8	474.4	336.4	391.4
								45.7

Table 39—*Volume of sawtimber for tree grade 3 on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990*

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>									
Longleaf pine	187.3	54.8	41.1	48.1	27.4	11.9	...	4.0	...
Slash pine	82.3	17.1	7.1	15.2	6.4	8.6	14.3	13.6	...
Shortleaf pine	831.9	165.3	245.9	247.5	89.1	43.1	36.2	4.9	...
Loblolly pine	3485.0	771.1	812.9	646.5	530.3	347.2	209.1	158.7	9.2
Virginia pine	4.6	4.6	...	...	...	...	...	...	...
Spruce pine	490.4	50.0	79.6	72.8	60.6	75.4	36.6	115.4	...
Other s. pines	1.4	...	...	...	1.4	...	...	...	...
Cypress	76.2	4.5	4.4	14.0	5.8	11.6	5.9	1.6	28.4
Total softwoods	5159.1	1067.3	1190.9	1044.2	721.1	497.8	302.1	298.2	37.6
Select white oaks	183.5	...	54.2	43.6	27.8	26.9	9.8	18.4	2.8
Select red oaks	86.5	...	24.3	16.6	13.1	6.9	...	21.6	4.1
Other white oaks	122.1	...	28.7	18.5	20.0	6.7	4.6	27.3	16.4
Other red oaks	397.7	...	68.4	69.2	66.0	64.3	46.8	79.1	4.0
Water hickory	5.8	...	...	5.8	...	...	...	...	...
Other hickories	157.7	...	46.7	34.7	28.4	26.7	11.3	9.9	...
Persimmon	3.2	...	3.2	...	...	...	...	...	...
Hard maple	6.8	...	4.3	...	2.4	...	...	...	...
Soft maple	13.4	...	7.5	...	1.7	4.2	...	...	...
Beech	53.7	...	8.1	8.4	...	9.1	3.1	18.3	6.7
Sweetgum	306.7	...	120.8	69.8	42.3	20.1	29.4	24.2	...
Blackgum	87.5	...	54.3	23.3	...	5.6	3.6	...	0.7
Other gums/tupelos	55.3	...	16.7	17.8	8.5	2.9	2.3	4.6	2.5
White ash	13.4	...	5.7	4.4	3.3	...	...	...	...
Other ashes	69.1	...	21.6	16.3	20.2	3.1	6.3	1.6	...
Sycamore	18.1	...	10.3	...	2.5	...	2.8	2.5	...
Cottonwood	2.6	...	...	...	...	...	2.6	...	...
Basswood	14.8	...	7.3	...	...	2.5	5.0	...	...
Yellow-poplar	158.5	...	43.3	23.6	35.8	6.7	27.8	19.2	2.1
Magnolia	12.0	...	3.5	1.9	3.4	...	...	3.2	...
Sweetbay	38.2	...	14.9	8.7	4.0	1.7	4.8	4.2	...
Willow	2.2	...	2.2	...	...	...	...	...	...
Black cherry	4.7	...	4.7	...	...	...	...	...	...
American elm	26.4	...	8.5	9.8	4.3	3.9	...	...	...
Other elms	20.5	...	12.6	3.6	2.3	...	...	2.0	...
Hackberry	50.6	...	20.2	14.0	9.0	4.9	...	2.5	...
Holly	2.3	...	2.3	...	...	...	...	...	...
Other commercial	3.5	...	...	3.5	...	...	...	...	...
Total hardwoods	1916.9	...	594.3	393.6	295.0	196.1	160.1	238.5	39.2
All species	7076.0	1067.3	1785.2	1437.8	1016.1	693.9	462.2	536.7	76.9

Table 40—*Volume of sawtimber for tree grade 4 on timberland by detailed species and diameter class, Southwest-North Alabama Counties, 1990*

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>									
Select white oaks	76.9	...	15.9	21.1	12.0	4.9	13.5	9.6	...
Select red oaks	79.2	...	12.6	20.9	5.3	19.2	11.9	9.3	...
Other white oaks	77.7	...	13.8	24.3	9.1	6.1	5.5	12.5	6.4
Other red oaks	708.0	...	161.8	191.0	89.4	91.6	52.0	102.8	19.4
Water hickory	6.6	...	...	...	...	...	...	6.6	...
Other hickories	112.6	...	31.6	26.6	16.4	14.5	7.0	16.4	...
Hard maple	7.1	...	4.2	2.9	...	...	...	...	...
Soft maple	11.3	...	4.9	2.6	...	...	2.1	1.7	...
Boxelder	1.3	...	1.3	...	...	...	...	...	...
Beech	64.7	...	1.4	21.7	8.5	14.5	...	18.6	...
Sweetgum	168.6	...	60.1	51.9	35.2	15.2	6.2	...	...
Blackgum	8.5	...	2.8	5.1	0.6	...	...	...	...
Other gums/tupelos	3.3	...	...	...	1.2	2.1	...	...	...
White ash	4.0	...	...	...	4.0	...	...	...	...
Other ashes	7.2	...	4.9	...	...	...	2.3	...	...
Sycamore	35.2	...	...	2.3	8.3	1.7	...	23.0	...
Basswood	5.3	...	3.4	...	1.9	...	...	...	...
Yellow-poplar	155.1	...	41.8	48.3	37.3	10.3	8.3	9.2	...
Magnolia	8.1	...	...	2.9	...	1.3	3.9	...	...
Sweetbay	10.1	...	8.1	2.0	...	...	...	...	...
Willow	4.9	...	...	...	4.9	...	...	...	...
American elm	8.8	...	3.9	...	2.1	2.8	...	...	...
Other elms	28.8	...	14.8	7.5	...	6.4	...	...	...
Hackberry	52.9	...	14.3	10.2	13.6	6.1	5.6	3.1	...
Other commercial	2.4	...	2.4	...	...	...	...	...	...
Total hardwoods	1648.4	...	404.0	441.3	249.8	196.5	118.3	212.6	25.8
All species	1648.4	...	404.0	441.3	249.8	196.5	118.3	212.6	25.8

Table 41—*Volume of sawtimber on timberland by species and ownership class, Southwest-North Alabama Counties, 1990*

Species	All ownerships	National forest	Other public	Forest industry	Forest industry-leased		Other private
					
<i>Million board feet</i>							
Yellow pines	10143.6	...	269.9	3836.5	557.2	5480.0	
Cypress	288.6	...	...	65.9	9.0	213.7	
Redcedar	42.3	...	...	5.8	...	36.5	
Total softwoods	10474.4	...	269.9	3908.2	566.2	5730.2	
Select white-red oaks	837.5	...	77.4	243.1	33.8	483.2	
Other white-red oaks	1814.4	...	96.1	491.5	75.4	1151.4	
Hickory	449.2	...	12.6	105.6	42.9	288.1	
Hard maple	15.1	...	5.9	...	2.4	6.7	
Sweetgum	950.0	...	16.3	228.6	75.0	630.0	
Tupelo and blackgum	351.4	...	8.6	136.3	22.0	184.5	
Ash-walnut-black cherry	185.6	...	4.8	56.1	6.2	118.5	
Yellow-poplar	538.4	...	4.3	115.3	40.9	377.9	
Other hardwoods	699.9	...	19.3	216.7	64.2	399.7	
Total hardwoods	5841.7	...	245.5	1593.3	362.8	3640.1	
All species	16316.1	...	515.3	5501.5	929.0	9370.3	

Table 42—Average net annual growth, average annual removals, and average annual mortality of live trees¹ by county and species group, Southwest-North Alabama Counties, 1990

County	Growth			Removals			Mortality		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood	All species	Softwood	Hardwood
<i>Million cubic feet</i>									
Choctaw	40.5	26.7	13.8	31.1	19.7	11.4	4.0	2.2	1.8
Clarke	50.8	28.5	22.3	36.6	21.2	15.4	9.0	4.9	4.1
Conecuh	25.0	17.6	7.5	15.5	5.5	10.0	5.3	2.4	3.0
Marengo	26.5	16.8	9.7	33.1	23.0	10.1	5.4	2.5	2.9
Monroe	37.9	22.5	15.4	32.3	19.0	13.3	5.6	2.2	3.5
Sumter	24.4	11.7	12.6	23.6	15.1	8.5	4.4	1.6	2.7
Wilcox	32.7	20.6	12.1	39.9	22.9	17.0	3.9	2.2	1.7
All counties	237.9	144.5	93.4	212.2	126.5	85.7	37.7	18.0	19.7

¹Excludes trees less than 5.0 inches in diameter at breast height.

Table 43—Average net annual growth, average annual removals, and average annual mortality of live trees¹ by ownership class and species group, Southwest-North Alabama Counties, 1990

Ownership class	Growth			Removals			Mortality		
	All classes	Softwood	Hardwood	All species	Softwood	Hardwood	All Species	Softwood	Hardwood
<i>Million cubic feet</i>									
Other public	4.1	1.4	2.8	1.4	1.3	0.1	1.1	0.7	0.4
Forest industry	82.4	56.6	25.8	73.1	45.8	27.3	14.1	7.6	6.6
Forest industry-leased	15.0	9.4	5.7	10.2	6.1	4.1	1.0	0.3	0.7
Other private	136.3	77.1	59.2	127.6	73.3	54.3	21.4	9.4	12.0
All ownerships	237.9	144.5	93.4	212.2	126.5	85.7	37.7	18.0	19.7

¹Excludes trees less than 5.0 inches in diameter at breast height.

FIGURES

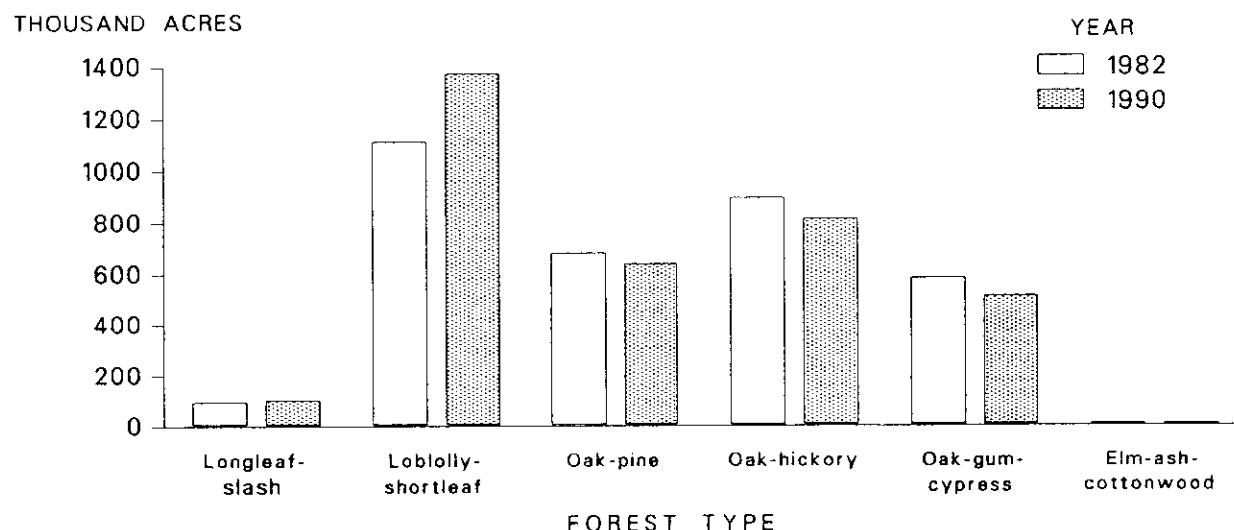


Figure 1.—*Area of timberland by forest type, Southwest-North Alabama, 1982 and 1990.*

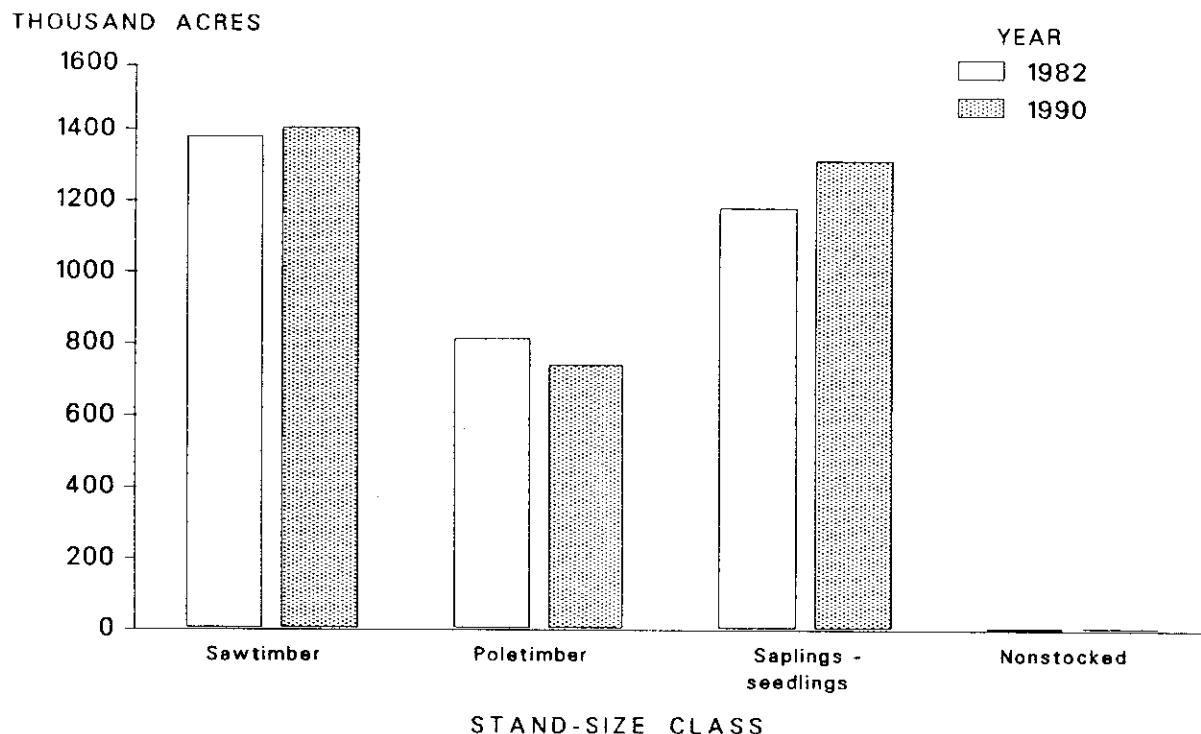


Figure 2.—*Area of timberland by stand-size class, Southwest-North Alabama, 1982 and 1990.*

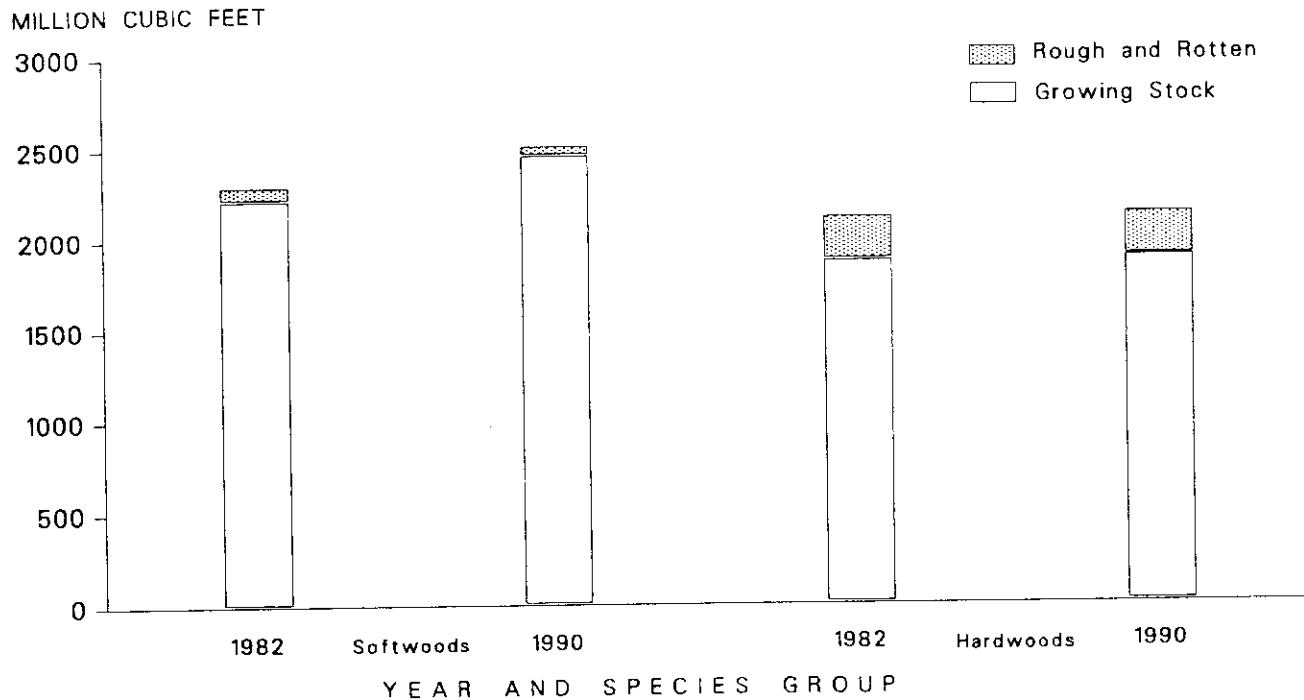


Figure 3.—*Volume of live trees on timberland by species group and class of timber, Southwest-North Alabama, 1982 and 1990.*



Figure 4.—*Average net annual growth and average annual removals of live trees on timberland by species group, Southwest-North Alabama, 1982 and 1990.*

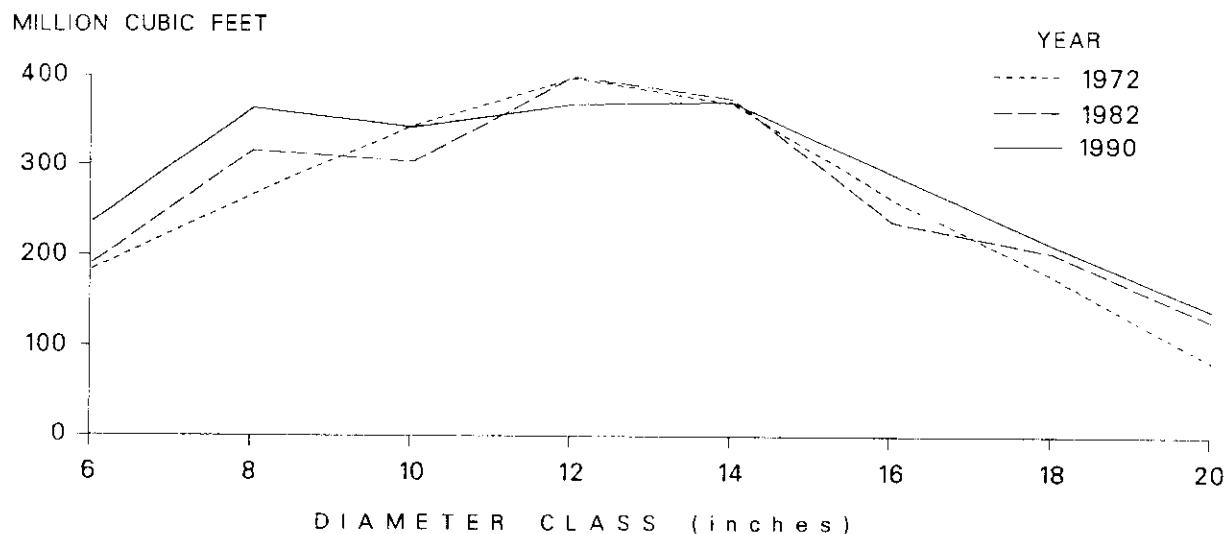


Figure 5.—*Volume of live softwood trees on timberland by diameter class, Southwest-North Alabama, 1972, 1982 and 1990.*

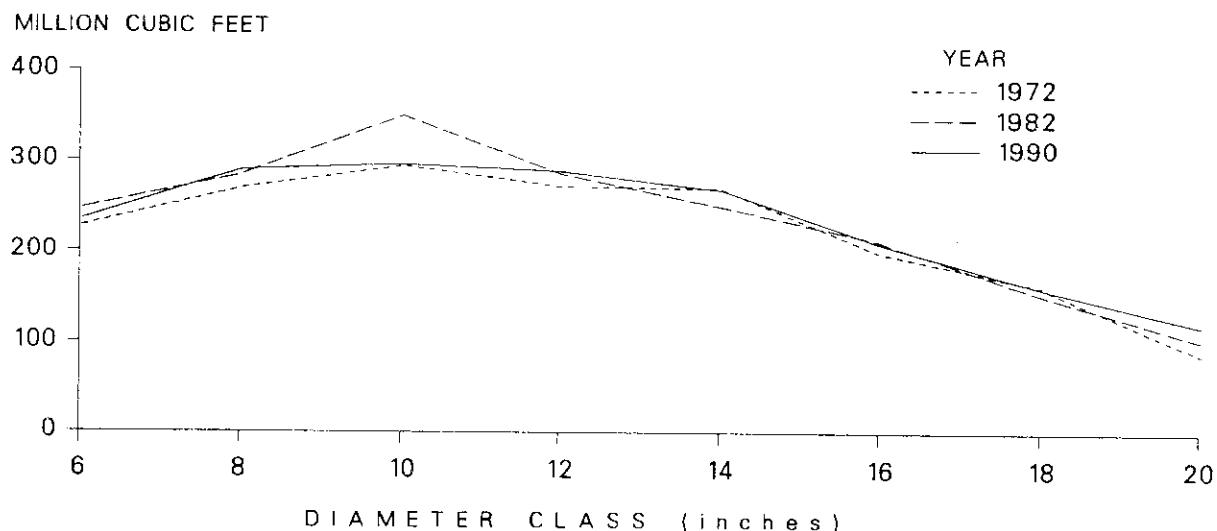


Figure 6.—*Volume of live hardwood trees on timberland by diameter class, Southwest-North Alabama, 1972, 1982 and 1990.*

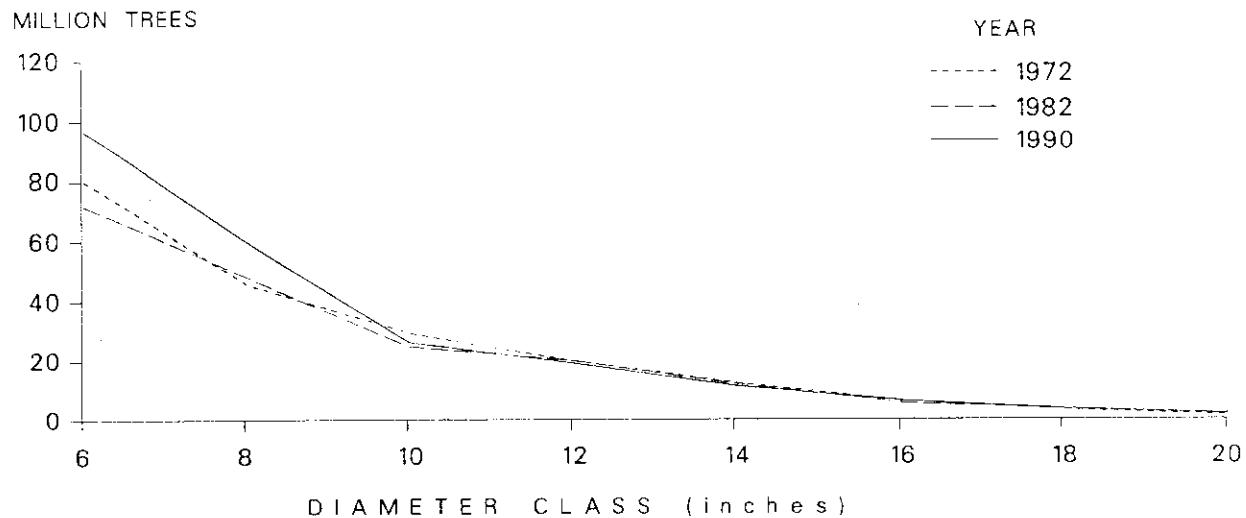


Figure 7.—Number of live softwood trees on timberland by diameter class, Southwest-North Alabama, 1972, 1982 and 1990.

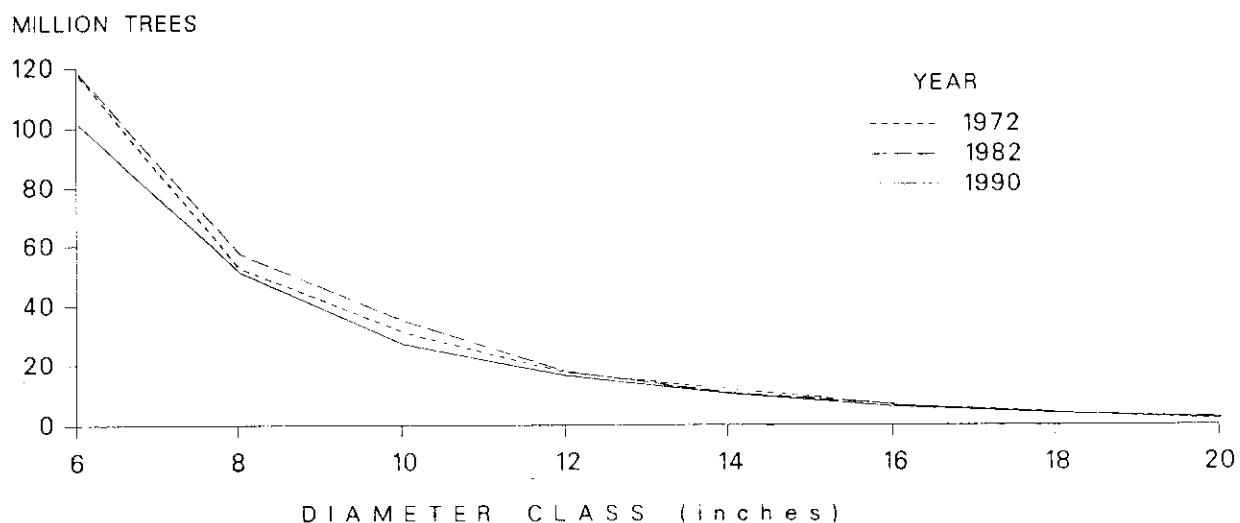


Figure 8.—Number of live hardwood trees on timberland by diameter class, Southwest-North Alabama, 1972, 1982 and 1990.

McWilliams, William H.; Miller, Patrick E.; Vissage, John S. 1990. Forest Statistics for Southwest-North Alabama Counties—1990. Resour. Bull. SO-153. New Orleans, LA: U. S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 30p.

Tabulates forest resource information from a new inventory of the Southwest-North Counties of Alabama.

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

Persons of any race, color, national origin, sex, age, religion, or with any handicapping condition are welcome to use and enjoy all facilities, programs, and services of the USDA. Discrimination in any form is strictly against agency policy, and should be reported to the Secretary of Agriculture, Washington, DC 20250.