

4101



United States  
Department of  
Agriculture

Forest Service

Southern Forest  
Experiment Station

New Orleans,  
Louisiana

Resource Bulletin  
SO-155



# Forest Statistics for Southwest-South Alabama Counties – 1990

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



## SUMMARY

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

- Timberland area is 2,741.0 thousand acres, a decrease of 4 percent.
- The area of pine and oak-pine timberland decreased by 4 percent. The area of planted pine stands increased by 16 percent.
- The area of bottomland hardwood forest types decreased by 10 percent.

- Live-tree inventory volume totals 2,951.4 million cubic feet, a 6-percent increase over 1982. The volume of softwoods increased by 4 percent and hardwoods increased by 9 percent.
- Average net growth of live trees increased by 50 percent since the previous inventory period.
- The removals of live trees increased by 9 percent, primarily due to a 42 percent increase in hardwood removals.
- The growth-to-removals relationship improved for both hardwoods and softwoods.

## 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	Tim Eling	Robert Lewis
Thomas Carr	Mary Bergkamp-Hattis	Larry Mahler
Robert Clement	David Hattis	Lynn Rodrigue
Patrick Coddington	Todd Hoopes	Jeff Seefeldt
Susan Crouch	Mike Ladd	Tim Slone

# CONTENTS

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

<sup>1</sup>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.

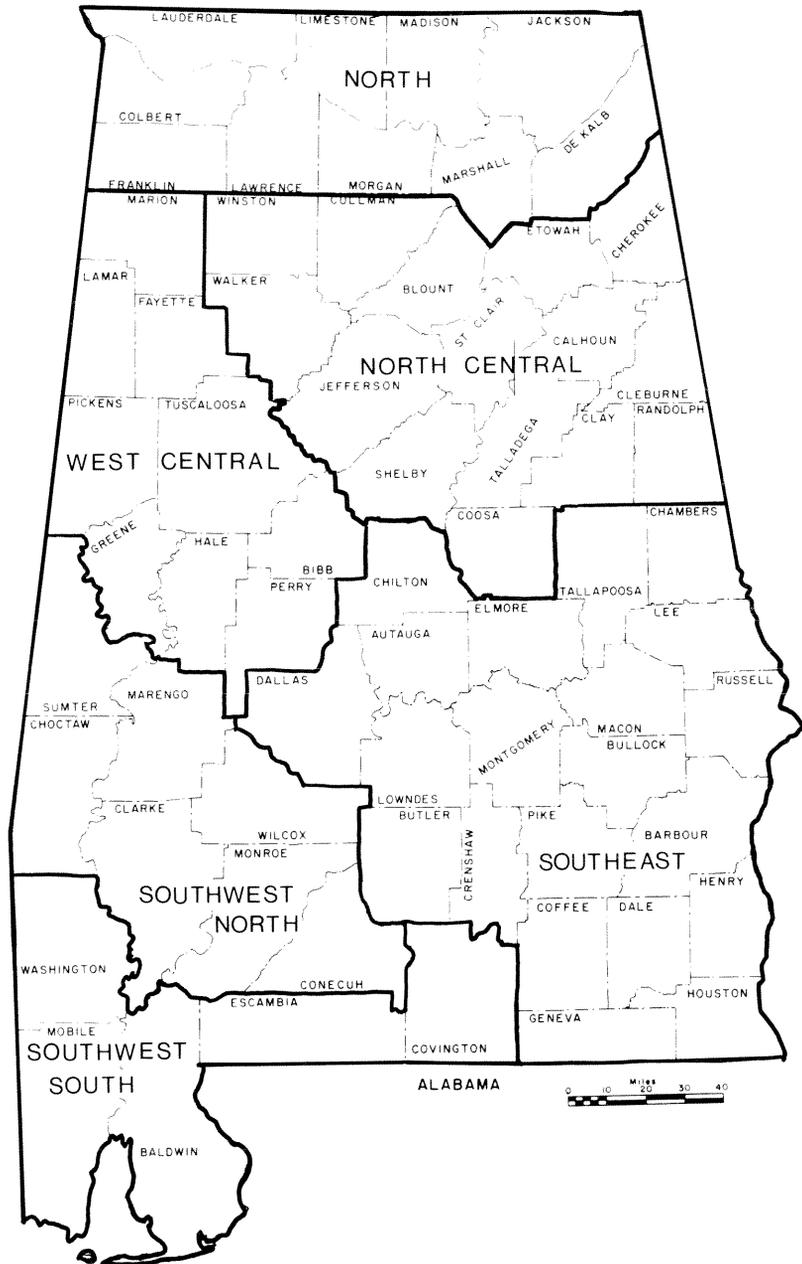


Figure I.—Forest survey regions in Alabama.

# Forest Statistics for Southwest-South 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-South Alabama (fig. 1). 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:

$$2,951.4 \pm 1.96 (0.04 \times 2,951.4) = 2,951.4 \pm 231.4$$

where 1.96 is the number of standard deviations. This confidence interval indicates a 0.95 probability that the range, 2,720.0 to 3,182.8 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 Baldwin, Escambia, Mobile, and Washington counties is 4.3 percent. The 95 percent confidence interval for live-tree volume is 2,520.0  $\pm$  212.4 million cubic feet.

## RESULTS

### Area

The topography of Southwest-South Alabama consists of flat to gently rolling uplands common to lower portions of the East Gulf Coastal Plain. Alluvial lowlands are found at

Table I—Sampling errors<sup>1</sup> for timberland, live trees, growing stock, and sawtimber, Southwest-South Alabama Counties, 1990

County	Live trees				Growing stock			Sawtimber volume
	Timberland	Volume	Growth	Removals	Volume	Growth	Removals	
	-----Percent-----							
Baldwin	1.6	8.5	8.8	18.2	8.4	8.3	18.4	10.0
Covington	2.1	8.4	10.1	23.5	8.6	10.4	23.6	10.6
Escambia	1.4	8.5	9.2	19.0	8.4	9.1	19.0	11.2
Mobile	1.4	11.8	12.8	21.0	12.1	13.0	21.0	14.5
Washington	1.0	7.4	7.7	18.2	7.5	7.9	17.8	9.9
All counties	0.7	4.0	4.3	9.1	4.0	4.3	9.1	5.1

<sup>1</sup>By random-sampling formula.

the confluence of the Tombigbee and Alabama Rivers, and southward along the Mobile River. The region is heavily forested. Forests cover 2.7 million acres or 73 percent of the land area. All of the forest land is classified as timberland capable of producing industrial wood products. The area of timberland decreased slightly, by 4 percent.

Ninety-five percent of the timberland is privately owned. Private timberland is divided among nonindustrial private owners and forest industries that own 59 percent and 36 percent of the region's timberland, respectively. Nonindustrial owners are a diverse group made up of miscellaneous individuals, farmers, and corporations (other than forest industry). The estimate of forest industry timberland includes 140.8 thousand acres of timberland under long-term lease from nonindustrial private owners. Public owners hold 5 percent of the timberland. Sixty percent of the public timberland, or 80.9 thousand acres, is located in the Conecuh National Forest of Escambia and Covington counties.

Longleaf-slash pine is the most prevalent forest type in the region (843.2 thousand acres or 31 percent of the timberland), despite a decrease in the area of the type. The longleaf-slash pine forest type is separated into longleaf pine stands (pine stands dominated by longleaf pine) and slash pine stands (pine stands dominated by slash pine). Longleaf pine stands total 379.0 thousand acres and slash pine stands total 464.2 thousand acres. Both the longleaf and slash pine cover types decreased in area since 1982; the longleaf type by 18 percent and the slash pine type by 13 percent. Concurrent with these decreases was a 34 percent increase in the area of loblolly-shortleaf pine stands (nearly all of which are loblolly pine stands) that now occupy 14 percent of the timberland base.

The area of pine forest types decreased by 4 percent. The area of planted pine stands increased by 16 percent and totals 481.6 thousand acres. Planted pine stands are 39 percent of the pine-type timberland. There are an additional 90.2 thousand acres with evidence of planting or direct seeding that are classified as oak-pine and hardwood forest types due to the stocking of hardwoods.

Oak-pine is the second most common forest type and includes stands that are dominated by hardwood species, but are at least 25 percent stocked with pines. The oak pine forest type occupies 599.7 thousand acres (22 percent of the timberland) and decreased by 4 percent.

Hardwood forests account for one third of the region's timberland (900.8 thousand acres) and are split equally between the oak-hickory and oak-gum-cypress forest types. The oak-hickory forest type increased by 6 percent and the oak-gum-cypress type decreased by 9 percent.

The distribution of acreage 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. The optimal range of stocking is between 60 and 100 percent of the standard. The area of timberland decreased in the understocked and overstocked classes, but increased by 21 percent in the optimal stocking class.

### Inventory

The volume of live trees increased by 6 percent, totaling 3.0 billion cubic feet. The volume of softwoods increased by 4 percent and the volume of hardwoods increased by 9 percent. 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.

The volume of live trees is 59 percent softwood and 41 percent hardwood. Three species contribute over 90 percent of the softwood inventory volume: slash pine (36 percent), longleaf pine (35 percent), and loblolly pine (20 percent). The most abundant hardwood species are gums (28 percent), red oaks (20 percent), sweetgum (7 percent), and yellow poplar (6 percent).

Shifts in the distribution of live-tree volume by diameter class clarify recent trends. For softwoods, decreases were apparent in most of the smaller diameter classes (the 8-inch class was an exception). The inventory increased in the 14-inch and larger classes. For hardwoods, decreases occurred in the 6- and 8-inch classes - a reversal of increases that took place in this range between 1972 and 1982. Increases occurred in the 10-inch and larger classes.

### 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

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

Inventory period and species group	Gross Growth		Removals
	Net growth	Mortality	
-----Million cubic feet-----			
1972 to 1981:			
Softwoods	70.2	14.7	75.4
Hardwoods	20.0	19.8	17.7
Total	90.2	34.5	93.1
1982 to 1989:			
Softwoods	89.0	10.0	76.9
Hardwoods	46.7	16.6	25.2
Total	135.7	26.6	102.1

the previous inventory through the year prior to the present inventory. Gross growth of live trees was 162.3 million cubic feet for the period prior to 1990, a 30 percent increase over the period from 1972 to 1981 (table II). Net growth - equal to gross growth minus mortality - increased by 50 percent. Softwoods contributed 66 percent of the total net growth and hardwoods contributed 34 percent. The net growth of softwoods increased by 27 percent and the net growth of hardwoods more than doubled.

Removals of live trees, 102.1 million cubic feet, was 10 percent higher than the period prior to 1982. Removals were 75 percent softwood and 25 percent hardwood. Softwood removals increased by a minor 2 percent. Hardwood removals increased by 42 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 1.3:1.0; increasing from 1.0:1.0 since the previous inventory period. An improvement in the growth-to-removals relationship was apparent for both species groups.

## CONCLUSIONS

The Southwest-South region of Alabama continues as a major source of forest-related resources in spite of a reduction in timberland area. An increase in both the area of optimally-stocked stands and the area of planted pine stands illustrate that intensification of forest management has continued in the 1980's. The region has supplied an increased volume of timber to the forest products industry due to an increase in hardwood removals. An improvement in the relationship between net growth and removals of both softwoods and hardwoods suggests an opportunity for further inventory expansion in the future.

## 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-South Alabama Counties, 1990

County	All land <sup>1</sup>	Forest land			Nonforest land	
		Total	Timberland <sup>2</sup>	Woodland <sup>3</sup>		Reserved timberland
----- <i>Thousand acres</i> -----						
Baldwin	1017.2	662.1	662.1	...	...	355.1
Covington	664.3	473.7	473.7	...	...	190.6
Escambia	608.5	471.9	471.9	...	...	136.6
Mobile	792.3	499.1	499.1	...	...	293.2
Washington	691.7	634.2	634.2	...	...	57.5
All counties	3774.1	2741.0	2741.0	...	...	1033.1

<sup>1</sup>From U.S. Bureau of the Census.

<sup>2</sup>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 timberland.

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

Table 2—Area of timberland by county and ownership class, Southwest-South Alabama Counties, 1990

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry <sup>1</sup>	Farmer	Corporate <sup>2</sup>	Individual <sup>2</sup>
----- <i>Thousand acres</i> -----									
Baldwin	662.1	...	5.1	10.3	...	272.0	56.5	123.2	195.0
Covington	473.7	53.9	...	...	...	164.5	164.5	5.7	85.1
Escambia	471.9	27.0	...	11.4	5.7	273.8	45.6	...	108.4
Mobile	499.1	...	...	5.4	16.1	64.4	48.3	91.2	273.7
Washington	634.2	...	...	...	...	205.2	99.5	49.7	279.8
All counties	2741.0	80.9	5.1	27.0	21.8	979.9	414.4	269.8	942.0

<sup>1</sup>Includes land leased to forest industry.

<sup>2</sup>Indian land will be classed as corporate or individual as defined by the Bureau of Indian Affairs.

Table 3—Area of timberland by county and forest type group, Southwest-South Alabama Counties, 1990

County	Total	Forest type group							
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress	Nonstocked <sup>1</sup>
		Planted	Natural	Planted	Natural				
----- Thousand acres -----									
Baldwin	662.1	71.9	148.8	20.5	41.1	123.2	112.9	143.7	...
Covington	473.7	44.8	60.8	79.4	51.1	88.1	107.2	42.3	...
Escambia	471.9	68.4	130.3	39.9	39.9	105.1	42.6	45.6	...
Mobile	499.1	16.1	134.2	16.1	10.7	134.2	96.6	85.9	5.4
Washington	634.2	74.6	93.3	49.7	43.5	149.2	99.5	124.4	...
All counties	2741.0	275.9	567.3	205.7	186.3	599.7	458.9	441.8	5.4

<sup>1</sup>Timberland with no current stocking.

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

County	All classes	Stand-size class			Nonstocked <sup>1</sup> areas
		Sawtimber	Poletimber	Sapling-seedling	
----- Thousand acres -----					
Baldwin	662.1	220.7	169.4	266.9	5.1
Covington	473.7	121.0	155.2	197.5	...
Escambia	471.9	198.7	114.1	159.1	...
Mobile	499.1	134.2	96.6	257.6	10.7
Washington	634.2	254.9	167.9	205.2	6.2
All counties	2741.0	929.6	703.1	1086.2	22.1

<sup>1</sup>Timberland less than 16.7 percent stocked.

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

County	All classes	Site class (cubic feet/acre/year)				
		> 165	120-165	85-120	50-85	< 50
----- Thousand acres -----						
Baldwin	662.1	5.1	51.3	292.5	246.4	66.7
Covington	473.7	28.4	67.5	229.9	142.2	5.7
Escambia	471.9	11.4	79.6	187.6	187.6	5.7
Mobile	499.1	5.4	32.2	187.8	220.0	53.7
Washington	634.2	31.1	99.5	329.5	161.7	12.4
All counties	2741.0	81.4	330.1	1227.4	957.9	144.2

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

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
----- <i>Thousand acres</i> -----						
Baldwin	662.1	20.5	189.9	297.7	128.3	25.7
Covington	473.7	34.0	121.2	251.0	61.9	5.7
Escambia	471.9	25.5	108.1	287.3	51.0	...
Mobile	499.1	21.5	69.8	279.0	102.0	26.8
Washington	634.2	37.3	143.0	422.8	24.9	6.2
All counties	2741.0	138.9	631.9	1537.8	368.0	64.4

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

Forest type <sup>1</sup>	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private
----- <i>Thousand acres</i> -----						
Longleaf-slash pine	843.2	36.8	16.4	315.2	92.2	382.6
Loblolly-shortleaf pine	392.0	...	5.1	151.0	23.8	212.1
Softwood total	1235.2	36.8	21.6	466.3	116.0	594.7
Oak-pine	599.7	33.8	21.9	116.3	...	427.7
Oak-hickory	458.9	7.8	5.4	92.7	6.2	346.8
Oak-gum-cypress	441.8	2.6	5.1	163.8	18.7	251.6
Hardwood total	1500.4	44.2	32.4	372.8	24.9	1026.2
Nontyped <sup>2</sup>	5.4	...	...	...	...	5.4
All types	2741.0	80.9	54.0	839.0	140.8	1626.2

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

<sup>2</sup>Timberland with no current stocking.

Table 8—Area of timberland by ownership class and stocking classes of growing-stock trees, Southwest-South Alabama Counties, 1990

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
----- <i>Thousand acres</i> -----						
National forest	80.9	2.7	13.1	54.6	10.5	...
Other public	54.0	...	10.5	16.4	16.8	10.3
Forest industry	839.0	66.8	249.8	437.3	74.9	10.3
Forest industry-leased	140.8	6.2	23.8	98.4	6.2	6.2
Other private	1626.2	63.1	334.7	931.1	259.6	37.6
All ownerships	2741.0	138.9	631.9	1537.8	368.0	64.4

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

Forest type <sup>1</sup>	All classes	Stand-size class			Nonstocked <sup>2</sup> areas
		Sawtimber	Poletimber	Sapling-seedling	
----- <i>Thousand acres</i> -----					
Longleaf-slash pine	843.2	328.1	264.7	239.9	10.5
Loblolly-shortleaf pine	392.0	130.9	94.9	166.2	...
Softwood total	1235.2	459.0	359.7	406.1	10.5
Oak-pine	599.7	200.9	116.8	282.0	...
Oak-hickory	458.9	60.6	83.4	308.6	6.2
Oak-gum-cypress	441.8	209.0	143.3	89.6	...
Hardwood total	1500.4	470.6	343.4	680.2	6.2
Nontyped <sup>3</sup>	5.4	...	...	...	5.4
All types	2741.0	929.6	703.1	1086.2	22.1

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

<sup>2</sup>Timberland less than 16.7 percent stocked.

<sup>3</sup>Timberland with no current stocking.

Table 10—*Number of live trees on timberland by species and diameter class, Southwest-South 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	305212	89344	91539	53871	31709	16109	10922	6593	3184	1343	422	176	...
Shortleaf-loblolly pines	148942	54067	45204	22658	14842	5776	2694	2113	756	495	223	106	9
Other yellow pines	1233	...	...	414	221	114	106	183	102	24	39	25	3
Cypress	9353	2439	2548	1343	953	651	543	307	276	115	27	142	9
Other softwoods	3303	1040	1040	540	208	156	177	115	...	11	10	5	...
Total softwoods	468043	146889	140331	78826	47932	22806	14442	9311	4318	1988	722	455	22
Select white oaks	7375	5721	471	329	261	233	89	101	95	52	9	14	...
Select red oaks	22	...	...	...	...	...	...	...	...	13	...	9	...
Other white oaks	50826	39257	6307	2298	1481	933	207	172	64	50	9	44	3
Other red oaks	258893	193555	35800	14567	6336	3017	2494	1193	855	399	229	354	93
Hickory	17150	9984	4130	1194	628	373	333	204	162	59	32	44	7
Hard maple	166	...	...	113	53	...	...	...	...	...	...	...	...
Soft maple	114848	86895	19010	5424	1721	1043	415	203	78	22	11	26	...
Beech	834	...	570	47	30	66	...	23	47	13	...	37	...
Sweetgum	88412	57188	21733	4460	2244	1235	562	418	245	94	110	115	10
Tupelo-blackgum	137243	74618	24881	17083	6937	5471	3155	1951	1466	855	376	443	6
Ash	7540	3928	1904	667	354	249	134	36	87	66	17	98	...
Cottonwood-aspen	1065	984	...	...	...	35	...	...	...	26	...	20	...
Basswood	582	570	...	...	...	...	...	...	...	12	...	...	...
Yellow-poplar	36048	25268	6131	1651	1055	449	465	324	295	122	145	124	19
Other hardwoods	317627	219766	57509	19312	10020	5562	2788	1517	534	297	155	159	8
Total hardwoods	1038631	717735	178446	67146	31120	18667	10642	6142	3929	2080	1093	1486	146
Noncommercial	139548	107755	18644	8702	2615	1240	292	140	73	10	28	22	27
All species	1646222	972379	337421	154674	81667	42714	25377	15593	8320	4078	1842	1963	195

Table 11—Number of growing-stock trees on timberland by species and diameter class, Southwest-South 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	279679	73807	84163	51703	31400	16068	10857	6573	3167	1343	422	176	...
Shortleaf-loblolly pines	137997	48020	41554	21745	14671	5650	2694	2094	756	484	212	106	9
Other yellow pines	1128	...	...	309	221	114	106	183	102	24	39	25	3
Cypress	9297	2439	2548	1343	953	608	543	307	276	115	27	134	4
Other softwoods	3191	1040	1040	427	208	156	177	115	...	11	10	5	...
Total softwoods	431291	125306	129304	75528	47453	22597	14378	9273	4301	1977	711	447	16
Select white oaks	6811	5201	471	329	261	233	57	101	95	40	9	14	...
Select red oaks	22	...	...	...	...	...	...	...	...	13	...	9	...
Other white oaks	23097	12981	5736	1888	1178	854	178	155	64	15	9	35	3
Other red oaks	216039	160014	30187	12859	5627	2618	2018	1041	734	378	196	309	60
Hickory	11152	5191	3087	1194	558	328	309	204	162	47	32	36	5
Hard maple	166	...	...	113	53	...	...	...	...	...	...	...	...
Soft maple	74386	54887	12662	4083	1358	852	322	117	64	11	11	20	...
Beech	762	...	570	47	30	66	...	...	31	...	...	17	...
Sweetgum	65617	41916	15154	3961	2039	1075	533	381	245	80	110	115	10
Tupelo-blackgum	87014	37446	18463	12672	6600	5306	2069	1523	1384	834	356	358	3
Ash	2864	1455	471	166	208	173	112	36	73	56	17	98	...
Cottonwood-aspen	573	492	...	...	...	35	...	...	...	26	...	20	...
Yellow-poplar	31482	22167	5088	1455	985	449	407	305	264	122	131	106	4
Other hardwoods	188424	120283	37093	14226	8242	4626	1869	1244	393	264	77	103	4
Total hardwoods	708409	462033	128981	52993	27140	16616	7874	5106	3510	1884	948	1238	88
All species	1139700	587339	258285	128521	74593	39213	22252	14379	7811	3860	1659	1685	104

Table 12—Volume of growing stock on timberland by species and diameter class, Southwest-South 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	1244.0	137.4	207.2	212.7	232.0	204.5	135.4	71.4	28.0	15.4	...
Shortleaf-loblolly pines	393.8	48.0	85.2	65.9	51.2	59.7	28.2	28.1	15.5	11.3	0.7
Other yellow pines	18.9	0.7	1.3	1.0	1.8	4.0	3.9	1.0	2.3	2.1	0.8
Cypress	69.9	2.8	6.7	8.0	11.3	8.2	10.2	6.1	2.0	13.8	0.7
Other softwoods	11.3	1.3	1.2	1.7	3.0	2.5	...	0.2	0.7	0.6	...
Total softwoods	1737.8	190.3	301.5	289.3	299.2	279.0	177.7	107.0	48.5	43.2	2.2
Select white oaks	14.3	1.0	1.7	2.3	0.9	2.5	3.0	1.4	0.5	0.9	...
Select red oaks	1.3	...	...	...	...	...	...	0.8	...	0.5	...
Other white oaks	27.6	3.9	4.9	7.0	2.2	3.5	2.0	0.5	0.4	2.5	0.7
Other red oaks	218.4	29.6	29.0	24.1	30.4	23.5	22.2	15.6	9.5	25.2	9.3
Hickory	33.4	2.7	3.3	2.5	5.3	5.3	5.7	2.4	2.1	3.6	0.5
Hard maple	0.4	0.2	0.2	...	...	...	...	...	...	...	...
Soft maple	38.7	11.1	8.5	8.2	4.7	2.5	1.4	0.5	0.5	1.2	...
Beech	3.7	0.2	0.2	0.6	...	...	0.9	...	...	1.8	...
Sweetgum	79.1	9.6	9.6	10.4	9.6	9.2	8.1	4.1	6.6	10.6	1.4
Tupelo-blackgum	306.8	33.3	38.0	55.3	33.2	34.1	40.6	32.7	16.7	22.7	0.1
Ash	20.9	0.7	1.5	1.8	2.3	0.9	2.8	2.5	0.8	7.7	...
Cottonwood-aspen	4.1	...	...	0.4	...	...	...	1.4	...	2.4	...
Yellow-poplar	61.2	3.8	5.7	4.7	6.9	8.0	9.2	5.3	7.3	10.1	0.3
Other hardwoods	231.8	36.9	48.1	48.8	32.0	30.8	13.2	11.3	3.3	6.9	0.4
Total hardwoods	1041.6	133.1	150.7	166.1	127.4	120.3	109.2	78.3	47.7	96.2	12.6
All species	2779.4	323.4	452.2	455.4	426.6	399.2	286.9	185.2	96.2	139.3	14.9

Table 13—Volume of growing stock in the saw-log portion of sawtimber<sup>1</sup> trees on timberland by species and diameter class, Southwest-South Alabama Counties, 1990

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 -----									
Longleaf-slash pines	796.9	166.7	205.2	189.4	127.0	67.7	26.3	14.6	...
Shortleaf-loblolly pines	230.4	51.4	45.2	54.8	26.3	26.5	14.6	11.0	0.6
Other yellow pines	15.4	0.8	1.5	3.6	3.6	1.0	2.2	1.9	0.8
Cypress	52.8	5.8	9.6	7.2	9.3	5.8	1.9	12.6	0.7
Other softwoods	7.5	1.2	2.6	2.2	...	0.2	0.7	0.6	...
<b>Total softwoods</b>	<b>1103.0</b>	<b>225.9</b>	<b>264.1</b>	<b>257.2</b>	<b>166.2</b>	<b>101.1</b>	<b>45.8</b>	<b>40.7</b>	<b>2.1</b>
Select white oaks	7.4	...	0.7	2.0	2.4	1.2	0.3	0.8	...
Select red oaks	1.2	...	...	...	...	0.7	...	0.5	...
Other white oaks	9.2	...	1.7	3.0	1.6	0.4	0.3	1.7	0.5
Other red oaks	112.8	...	22.7	19.1	18.9	13.4	8.4	22.2	8.2
Hickory	20.9	...	3.9	4.4	5.0	2.0	1.9	3.3	0.4
Soft maple	8.3	...	3.2	2.0	1.2	0.5	0.5	1.0	...
Beech	1.7	...	...	...	0.4	...	...	1.3	...
Sweetgum	41.8	...	6.6	7.2	7.1	3.6	6.1	10.0	1.3
Tupelo-blackgum	147.3	...	23.1	26.3	33.8	28.8	14.6	20.5	0.1
Ash	14.9	...	1.6	0.6	2.4	2.3	0.7	7.3	...
Cottonwood-aspen	3.4	...	...	...	...	1.3	...	2.1	...
Yellow-poplar	39.7	...	4.5	6.7	8.0	4.7	6.6	8.9	0.2
Other hardwoods	77.9	...	22.7	24.9	11.6	9.3	2.8	6.2	0.4
<b>Total hardwoods</b>	<b>486.6</b>	<b>...</b>	<b>90.6</b>	<b>96.1</b>	<b>92.4</b>	<b>68.4</b>	<b>42.3</b>	<b>85.7</b>	<b>11.2</b>
<b>All species</b>	<b>1589.6</b>	<b>225.9</b>	<b>354.7</b>	<b>353.3</b>	<b>258.5</b>	<b>169.4</b>	<b>88.1</b>	<b>126.4</b>	<b>13.2</b>

<sup>1</sup>That 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-South Alabama Counties, 1990

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 board feet -----									
Longleaf-slash pines	4755.7	903.0	1209.2	1163.1	797.1	424.3	165.2	93.7	...
Shortleaf-loblolly pines	1340.1	264.3	258.7	325.1	155.1	168.1	92.6	72.8	3.4
Other yellow pines	86.2	3.9	8.0	19.3	21.1	5.4	12.2	11.4	5.0
Cypress	286.3	28.0	49.2	38.6	49.9	32.8	11.1	72.7	4.2
Other softwoods	39.3	6.0	14.4	11.2	...	0.6	4.3	2.9	...
<b>Total softwoods</b>	<b>6507.5</b>	<b>1205.2</b>	<b>1539.5</b>	<b>1557.3</b>	<b>1023.2</b>	<b>631.1</b>	<b>285.4</b>	<b>253.4</b>	<b>12.5</b>
Select white oaks	42.5	...	3.5	11.2	14.1	6.5	2.1	5.1	...
Select red oaks	6.9	...	...	...	...	4.0	...	2.9	...
Other white oaks	53.2	...	8.3	16.8	9.4	2.5	2.0	11.0	3.3
Other red oaks	643.4	...	119.9	105.3	106.9	78.1	48.5	135.6	49.2
Hickory	122.7	...	21.9	25.5	28.6	11.4	11.9	21.1	2.1
Soft maple	43.9	...	16.9	10.9	6.1	2.2	2.7	5.2	...
Beech	9.3	...	...	...	2.1	...	...	7.2	...
Sweetgum	241.3	...	35.7	40.9	38.8	23.1	35.9	60.4	6.5
Tupelo-blackgum	760.0	...	116.1	135.1	172.3	152.6	75.4	107.9	0.5
Ash	83.3	...	8.6	2.9	15.1	12.2	3.2	41.3	...
Cottonwood-aspen	22.3	...	...	...	...	8.1	...	14.1	...
Yellow-poplar	229.6	...	24.1	36.5	45.2	26.7	38.4	57.5	1.1
Other hardwoods	432.7	...	119.2	137.9	67.1	55.5	16.4	33.8	2.7
<b>Total hardwoods</b>	<b>2691.0</b>	<b>...</b>	<b>474.1</b>	<b>523.2</b>	<b>505.8</b>	<b>383.1</b>	<b>236.4</b>	<b>502.9</b>	<b>65.5</b>
<b>All species</b>	<b>9198.6</b>	<b>1205.2</b>	<b>2013.6</b>	<b>2080.5</b>	<b>1529.0</b>	<b>1014.2</b>	<b>521.8</b>	<b>756.3</b>	<b>78.0</b>

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

County	Growing stock						Sawtimber					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>
		Planted	Natural	Other				Planted	Natural	Other		
----- Million cubic feet -----						----- Million board feet -----						
Baldwin	671.1	46.1	303.9	37.6	197.1	86.4	2257.8	50.6	1215.1	157.3	531.6	303.2
Covington	411.8	113.2	150.0	1.4	86.8	60.4	1211.3	262.7	641.1	6.2	195.4	105.8
Escambia	538.9	96.5	312.9	0.6	84.2	44.6	1939.1	116.0	1472.0	1.6	207.6	141.9
Mobile	416.1	17.1	216.6	29.2	129.2	24.0	1297.0	45.9	805.8	115.1	290.7	39.5
Washington	741.5	108.0	292.4	12.3	215.7	113.0	2493.4	350.8	1222.0	45.4	502.1	373.1
All counties	2779.4	380.9	1275.8	81.1	713.1	328.5	9198.6	825.9	5356.0	325.6	1727.4	963.7

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

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

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

Class of timber	All species	Softwood			Hardwood	
		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>
		Planted	Natural	Other		
----- Million cubic feet -----						
Sawtimber trees:						
Saw-log portion	1589.6	144.2	898.4	60.3	318.0	168.6
Upper-stem portion	248.1	21.6	112.6	8.8	70.8	34.3
Total	1837.7	165.9	1011.0	69.1	388.8	202.9
Poletimber trees	941.7	215.1	264.7	12.0	324.3	125.6
All growing-stock trees	2779.4	380.9	1275.8	81.1	713.1	328.5
Rough trees:						
Sawtimber size	74.7	0.2	3.8	0.5	42.7	27.4
Poletimber size	80.8	2.7	3.1	0.3	29.3	45.4
Total	155.5	2.9	7.0	0.8	72.0	72.8
Rotten trees:						
Sawtimber size	14.4	...	0.3	1.0	9.8	3.3
Poletimber size	2.1	...	...	...	1.1	1.0
Total	16.5	...	0.3	1.0	10.9	4.3
Salvable dead trees:						
Sawtimber size	5.2	1.4	2.1	...	1.6	0.2
Poletimber size	1.6	0.3	0.6	0.1	...	0.6
Total	6.8	1.6	2.7	0.1	1.6	0.8
All classes	2958.2	385.5	1285.7	82.9	797.6	406.4

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

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

Table 17—Volume of live trees and growing stock on timberland by ownership class and species group, Southwest-South Alabama Counties, 1990

Ownership class	Live trees						Growing stock					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>
		Planted	Natural	Other				Planted	Natural	Other		
----- Million cubic feet -----												
National forest	116.8	4.2	85.1	1.4	9.5	16.6	110.2	4.2	85.0	1.4	8.4	11.2
Other public	31.0	...	19.0	0.4	6.4	5.1	29.8	...	18.7	0.4	6.0	4.7
Forest industry	996.6	208.5	358.6	25.5	300.6	103.4	941.8	206.7	357.6	24.8	265.3	87.5
Forest industry-leased	121.2	47.2	41.4	...	25.8	6.8	117.2	46.8	41.4	...	23.5	5.5
Other private	1685.8	124.0	779.0	55.5	453.6	273.7	1580.4	123.2	773.1	54.5	409.9	219.6
All ownerships	2951.4	383.8	1283.1	82.9	796.0	405.6	2779.4	380.9	1275.8	81.1	713.1	328.5

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

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

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

County	Growing stock						Sawtimber					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>
		Planted	Natural	Other				Planted	Natural	Other		
----- Million cubic feet -----      ----- Million board feet -----												
Baldwin	30.4	6.0	14.0	0.7	6.0	3.8	100.5	5.5	63.5	3.4	18.9	9.2
Covington	24.3	8.2	8.2	...	4.8	3.2	77.0	16.6	35.5	...	12.6	12.3
Escambia	23.7	8.2	9.9	...	3.2	2.4	83.6	9.0	59.2	...	8.9	6.5
Mobile	20.2	2.8	9.9	0.9	4.4	2.2	71.7	3.4	45.3	4.8	12.8	5.4
Washington	38.4	7.3	13.5	0.4	11.0	6.1	131.5	21.7	60.8	1.5	28.2	19.3
All counties	137.0	32.4	55.4	2.0	29.4	17.7	464.2	56.2	264.3	9.7	81.4	52.7

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

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

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

County	Growing stock						Sawtimber					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>		Pine			Soft <sup>1</sup>	Hard <sup>2</sup>
		Planted	Natural	Other				Planted	Natural	Other		
----- Million cubic feet -----      ----- Million board feet -----												
Baldwin	25.9	5.0	17.1	...	1.8	1.9	74.5	2.5	64.8	...	4.1	3.0
Covington	21.2	1.5	15.8	...	2.3	1.7	87.2	5.7	73.1	...	2.5	6.0
Escambia	18.8	2.0	11.5	...	2.7	2.6	71.4	5.7	49.5	...	8.4	7.8
Mobile	10.4	3.4	4.9	...	0.5	1.7	27.8	6.6	15.0	...	2.0	4.2
Washington	24.5	4.4	11.3	0.2	4.7	4.0	87.4	11.2	50.1	0.7	13.3	12.0
All counties	100.8	16.2	60.5	0.2	12.0	11.9	348.2	31.7	252.5	0.7	30.2	33.1

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

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

Table 20—Average net annual growth and average annual removals of growing stock on timberland by species, Southwest-South Alabama Counties, 1990

Species	Growth	Removals
----- Million cubic feet -----		
Yellow pines	87.8	76.7
Other softwoods	2.0	0.2
Total softwoods	89.8	76.9
Select white-red oaks	1.1	0.9
Other white-red oaks	15.1	9.2
Hickory	1.0	0.4
Hard maple	...	...
Sweetgum	3.8	4.1
Ash-walnut-black cherry	0.1	0.6
Yellow-poplar	2.1	1.0
Other hardwoods	23.8	7.8
Total hardwoods	47.1	23.9
All species	137.0	100.8

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

Species	Growth	Removals
----- Million board feet -----		
Yellow pines	320.5	284.1
Other softwoods	9.7	0.7
Total softwoods	330.1	284.9
Select white-red oaks	3.6	3.1
Other white-red oaks	45.7	24.5
Hickory	3.9	1.7
Sweetgum	10.6	7.7
Ash-walnut-black cherry	-0.5	3.2
Yellow-poplar	8.2	3.5
Other hardwoods	62.7	19.7
Total hardwoods	134.1	63.4
All species	464.2	348.2

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

Species	Growing stock	Sawtimber
----- Million cubic feet ----- Million board feet -----		
Yellow pines	7.6	23.3
Other softwoods	1.0	2.0
Total softwoods	8.7	25.3
Select white-red oaks	0.1	...
Other white-red oaks	2.1	4.2
Hickory	0.1	0.6
Sweetgum	0.3	...
Ash-walnut-black cherry	1.0	4.3
Yellow-poplar	1.1	1.9
Other hardwoods	4.3	9.6
Total hardwoods	9.0	20.7
All species	17.7	45.9

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

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>
----- Million cubic feet -----												
National forest	2.6	0.3	1.6	...	0.2	0.4	3.1	0.6	2.4	...	...	0.1
Other public	1.5	0.3	0.6	...	0.3	0.4	1.1	0.6	0.5	...	...	...
Forest industry	48.5	17.7	15.9	0.4	10.6	3.9	37.1	8.3	20.9	...	3.3	4.6
Forest industry-leased	10.7	5.1	3.1	...	2.2	0.3	7.5	3.4	1.7	...	1.5	0.9
Other private	73.6	9.0	34.2	1.6	16.1	12.7	52.0	3.3	35.0	0.2	7.3	6.3
All ownerships	137.0	32.4	55.4	2.0	29.4	17.7	100.8	16.2	60.5	0.2	12.0	11.9

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

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

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

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>		Planted	Natural	Other	Soft <sup>1</sup>	Hard <sup>2</sup>
----- Million board feet -----												
National forest	11.2	1.2	8.8	...	0.1	1.1	14.7	2.9	11.5	...	...	0.3
Other public	4.4	1.2	1.0	...	0.7	1.4	3.2	1.2	2.0	...	...	...
Forest industry	153.2	24.0	77.1	2.9	38.4	10.8	125.3	13.4	89.5	...	7.5	14.8
Forest industry-leased	24.8	11.1	8.5	...	4.2	0.9	24.4	8.8	5.5	...	6.8	3.2
Other private	270.6	18.6	168.8	6.8	38.0	38.4	180.7	5.4	143.8	0.7	15.9	14.8
All ownerships	464.2	56.2	264.3	9.7	81.4	52.7	348.2	31.7	252.5	0.7	30.2	33.1

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

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

Table 25—Volume of sawtimber on timberland by species and tree grade, Southwest-South Alabama Counties, 1990

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
----- Million board feet -----						
Yellow pines	6181.9	2084.5	926.0	3075.2	...	96.1
Cypress	286.3	199.8	51.1	33.4	...	1.9
Other softwoods	39.3	19.4	4.3	10.5	...	5.1
Total softwoods	6507.5	2303.8	981.4	3119.2	...	103.2
Select white-red oaks	49.4	6.9	...	25.7	12.9	3.8
Other white-red oaks	696.6	33.1	67.9	145.9	374.8	74.8
Hickory	122.7	18.5	17.3	44.8	27.3	14.8
Sweetgum	241.3	55.4	48.2	63.7	56.3	17.6
Tupelo and blackgum	760.0	153.2	201.6	278.1	96.1	31.0
Ash-walnut-black cherry	85.0	25.4	35.2	15.8	4.2	4.4
Yellow-poplar	229.6	25.2	15.1	65.2	108.4	15.6
Other hardwoods	506.5	63.7	66.3	177.5	161.1	38.0
Total hardwoods	2691.0	381.4	451.7	816.7	841.2	200.1
All species	9198.6	2685.1	1433.0	3935.9	841.2	303.2

Supplemental Tables 26-43

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

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
----- <i>Thousand acres</i> -----						
1-10	143.5	37.2	21.3	18.1	27.6	18.7
11-20	151.7	10.7	16.2	5.3	...	10.7
21-30	62.0	27.0	5.1	5.4	...	...
31-40	13.9	21.6	...	...	...	...
41-50	5.4	27.2	...	...	...	...
> 50	...	34.1	...	...	...	5.7
Mixed	105.1	595.8	6.2	522.0	13.7	824.2
Total	481.6	753.6	48.9	550.8	41.3	859.4

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

County	Total	Forest type group						
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress
		Planted	Natural	Planted	Natural			
----- <i>Million cubic feet</i> -----								
Baldwin	387.6	31.5	146.2	11.6	49.7	76.2	18.0	54.4
Covington	264.5	43.8	67.9	69.1	17.0	51.7	8.2	6.8
Escambia	410.0	61.6	201.1	33.6	41.6	60.2	5.0	7.0
Mobile	262.9	9.2	97.7	5.2	19.5	86.7	14.2	30.3
Washington	412.8	85.2	90.9	18.6	57.9	99.6	30.6	29.8
All counties	1737.8	231.4	603.9	138.1	185.6	374.4	75.9	128.4

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

County	Total	Forest type group						
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress
		Planted	Natural	Planted	Natural			
----- <i>Million cubic feet</i> -----								
Baldwin	283.5	1.0	11.2	0.2	2.9	25.6	17.4	225.2
Covington	147.2	2.2	6.1	2.3	7.4	25.8	58.0	45.4
Escambia	128.9	2.0	16.6	1.7	3.6	29.2	19.6	56.1
Mobile	153.3	0.6	2.8	0.9	1.5	33.5	26.3	87.7
Washington	328.8	4.2	13.4	8.2	6.4	60.8	74.3	161.5
All counties	1041.6	10.0	50.1	13.3	21.7	174.9	195.7	575.9

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

County	Total	Forest type group						
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress
		Planted	Natural	Planted	Natural			
----- Million cubic feet -----								
Baldwin	244.8	4.9	88.3	4.7	33.8	54.7	14.4	44.1
Covington	156.4	20.9	52.7	24.7	9.9	38.1	5.0	5.0
Escambia	262.0	13.9	150.6	6.3	32.6	49.6	4.8	4.1
Mobile	165.1	2.5	51.1	3.3	14.2	62.7	8.5	22.8
Washington	274.6	44.7	54.6	13.6	40.3	73.9	24.0	23.6
All counties	1103.0	87.0	397.3	52.6	130.7	279.1	56.8	99.6

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

County	Total	Forest type group						
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress
		Planted	Natural	Planted	Natural			
----- Million cubic feet -----								
Baldwin	154.6	0.4	3.4	...	1.5	10.4	6.9	132.0
Covington	54.6	0.7	1.9	1.0	2.3	6.2	24.0	18.4
Escambia	61.2	0.7	8.6	...	1.2	14.9	8.6	27.2
Mobile	63.1	...	...	0.3	...	12.1	7.0	43.8
Washington	153.0	1.0	1.8	5.3	2.1	18.3	41.7	82.7
All counties	486.6	2.9	15.8	6.6	7.1	61.8	88.2	304.1

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

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
		----- Million cubic feet -----					
Baldwin	731.6	387.6	283.5	2.4	52.2	0.5	5.4
Covington	431.4	264.5	147.2	0.8	18.4	...	0.4
Escambia	555.6	410.0	128.9	3.4	10.7	...	2.7
Mobile	448.3	262.9	153.3	0.4	29.4	...	2.4
Washington	784.5	412.8	328.8	3.7	34.2	0.8	4.3
All counties	2951.4	1737.8	1041.6	10.7	144.8	1.3	15.2

Table 32—Number of live trees on timberland by detailed species and diameter class, Southwest-South 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
----- Thousand trees -----													
Longleaf pine	122771	43430	31795	15005	11828	7876	6607	3688	1637	666	202	38	...
Slash pine	182440	45914	59745	38866	19881	8233	4314	2906	1547	677	220	138	...
Shortleaf pine	7527	1140	2722	1748	494	565	403	325	110	...	19	...	...
Loblolly pine	141415	52927	42481	20910	14348	5211	2291	1788	646	495	203	106	9
Spruce pine	888	...	...	204	119	82	106	183	102	24	39	25	3
Pitch pine	344	...	...	210	103	32	...	...	...	...	...	...	...
Redcedar	2341	1040	1040	261	...	...	...	...	...	...	...	...	...
Hemlock-spruce	962	...	...	279	208	156	177	115	...	11	10	5	...
Cypress	9353	2439	2548	1343	953	651	543	307	276	115	27	142	9
<b>Total softwoods</b>	<b>468043</b>	<b>146889</b>	<b>140331</b>	<b>78826</b>	<b>47932</b>	<b>22806</b>	<b>14442</b>	<b>9311</b>	<b>4318</b>	<b>1988</b>	<b>722</b>	<b>455</b>	<b>22</b>
Select white oaks	7375	5721	471	329	261	233	89	101	95	52	9	14	...
Select red oaks	22	...	...	...	...	...	...	...	...	13	...	9	...
Other white oaks	50826	39257	6307	2298	1481	933	207	172	64	50	9	44	3
Other red oaks	258893	193555	35800	14567	6336	3017	2494	1193	855	399	229	354	93
Sweet pecan	620	471	...	...	34	87	...	16	...	...	...	5	7
Water hickory	2624	1041	570	542	218	...	78	42	74	34	10	17	...
Other hickories	13905	8473	3560	652	376	286	255	147	89	26	22	22	...
Persimmon	15706	13986	1511	109	68	33	...	...	...	...	...	...	...
Hard maple	166	...	...	113	53	...	...	...	...	...	...	...	...
Soft maple	114848	86895	19010	5424	1721	1043	415	203	78	22	11	26	...
Beech	834	...	570	47	30	66	...	23	47	13	...	37	...
Sweetgum	88412	57188	21733	4460	2244	1235	562	418	245	94	110	115	10
Blackgum	90486	57398	14090	10266	3575	2399	1368	700	381	143	83	78	3
Other gums/tupelos	46757	17220	10791	6817	3362	3071	1787	1251	1085	712	293	365	3
Other ashes	7540	3928	1904	667	354	249	134	36	87	66	17	98	...
Sycamore	343	...	...	89	55	115	26	18	32	...	...	8	...
Cottonwood	1065	984	...	...	...	35	...	...	...	26	...	20	...
Basswood	582	570	...	...	...	...	...	...	...	12	...	...	...
Yellow-poplar	36048	25268	6131	1651	1055	449	465	324	295	122	145	124	19
Magnolia	4817	3171	1090	122	156	177	59	23	14	...	...	5	...
Sweetbay	135930	85006	23845	11586	7343	4056	2209	1123	346	185	107	117	8
Willow	860	520	...	261	...	79	...	...	...	...	...	...	...
Black cherry	11464	9938	963	392	111	51	...	...	...	...	10	...	...
American elm	1679	...	1046	290	126	40	44	73	40	11	9	...	...
Other elms	5141	3294	1041	324	187	87	48	57	61	25	9	9	...
Hackberry	3281	1062	...	581	439	496	347	214	41	63	19	19	...
Sassafras	2439	1582	570	287	...	...	...	...	...	...	...	...	...
Dogwood	87081	63817	18339	3715	993	159	57	...	...	...	...	...	...
Holly	35761	27048	6981	1307	200	225	...	...	...	...	...	...	...
Other commercial	13126	10341	2124	252	342	45	...	9	...	12	...	...	...
<b>Total hardwoods</b>	<b>1038631</b>	<b>717735</b>	<b>178446</b>	<b>67146</b>	<b>31120</b>	<b>18667</b>	<b>10642</b>	<b>6142</b>	<b>3929</b>	<b>2080</b>	<b>1093</b>	<b>1486</b>	<b>146</b>
Noncommercial	139548	107755	18644	8702	2615	1240	292	140	73	10	28	22	27
<b>All species</b>	<b>1646222</b>	<b>972379</b>	<b>337421</b>	<b>154674</b>	<b>81667</b>	<b>42714</b>	<b>25377</b>	<b>15593</b>	<b>8320</b>	<b>4078</b>	<b>1842</b>	<b>1963</b>	<b>195</b>

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

Species	Diameter class (inches at breast height)										
	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
----- Thousand trees -----											
Longleaf pine	46791	14298	11828	7876	6575	3688	1620	666	202	38	...
Slash pine	74918	37405	19572	8193	4282	2886	1547	677	220	138	...
Shortleaf pine	3665	1748	494	565	403	325	110	...	19	...	...
Loblolly pine	44758	19998	14177	5085	2291	1770	646	484	193	106	9
Spruce pine	888	204	119	82	106	183	102	24	39	25	3
Pitch pine	239	105	103	32	...	...	...	...	...	...	...
Redcedar	261	261	...	...	...	...	...	...	...	...	...
Hemlock-spruce	849	166	208	156	177	115	...	11	10	5	...
Cypress	4311	1343	953	608	543	307	276	115	27	134	4
<b>Total softwoods</b>	<b>176681</b>	<b>75528</b>	<b>47453</b>	<b>22597</b>	<b>14378</b>	<b>9273</b>	<b>4301</b>	<b>1977</b>	<b>711</b>	<b>447</b>	<b>16</b>
Select white oaks	1139	329	261	233	57	101	95	40	9	14	...
Select red oaks	22	...	...	...	...	...	...	13	...	9	...
Other white oaks	4380	1888	1178	854	178	155	64	15	9	35	3
Other red oaks	25839	12859	5627	2618	2018	1041	734	378	196	309	60
Sweet pecan	147	...	34	87	...	16	...	...	...	5	5
Water hickory	1014	542	218	...	78	42	74	34	10	17	...
Other hickories	1713	652	306	240	230	147	89	13	22	14	...
Persimmon	101	...	68	33	...	...	...	...	...	...	...
Hard maple	166	113	53	...	...	...	...	...	...	...	...
Soft maple	6838	4083	1358	852	322	117	64	11	11	20	...
Beech	192	47	30	66	...	...	31	...	...	17	...
Sweetgum	8548	3961	2039	1075	533	381	245	80	110	115	10
Blackgum	14940	6970	3431	2320	1079	554	340	122	73	50	...
Other gums/tupelos	16165	5701	3169	2986	990	969	1044	712	283	308	3
Other ashes	939	166	208	173	112	36	73	56	17	98	...
Sycamore	211	...	55	72	26	18	32	...	...	8	...
Cottonwood	81	...	...	35	...	...	...	26	...	20	...
Yellow-poplar	4227	1455	985	449	407	305	264	122	131	106	4
Magnolia	421	122	80	177	...	23	14	...	...	5	...
Sweetbay	22546	9831	6373	3443	1538	849	233	153	49	74	4
Willow	168	126	...	43	...	...	...	...	...	...	...
Black cherry	377	206	111	51	...	...	...	...	10	...	...
American elm	611	290	126	40	22	73	40	11	9	...	...
Other elms	551	104	187	87	48	57	33	25	...	9	...
Hackberry	2043	581	439	453	237	214	41	63	9	6	...
Sassafras	287	287	...	...	...	...	...	...	...	...	...
Dogwood	1876	1490	386	...	...	...	...	...	...	...	...
Holly	1433	1050	200	183	...	...	...	...	...	...	...
Other commercial	423	139	217	45	...	9	...	12	...	...	...
<b>Total hardwoods</b>	<b>117395</b>	<b>52993</b>	<b>27140</b>	<b>16616</b>	<b>7874</b>	<b>5106</b>	<b>3510</b>	<b>1884</b>	<b>948</b>	<b>1238</b>	<b>88</b>
<b>All species</b>	<b>294076</b>	<b>128521</b>	<b>74593</b>	<b>39213</b>	<b>22252</b>	<b>14379</b>	<b>7811</b>	<b>3860</b>	<b>1659</b>	<b>1685</b>	<b>104</b>

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

Species	Diameter class (inches at breast height)										
	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
-----Million cubic feet-----											
Longleaf pine	617.1	43.7	85.2	109.8	142.3	115.9	68.6	35.0	13.3	3.3	...
Slash pine	626.9	93.7	121.9	102.9	89.7	88.6	66.8	36.5	14.7	12.1	...
Shortleaf pine	42.0	4.3	3.8	7.5	9.2	11.4	4.6	...	1.3	...	...
Loblolly pine	351.8	43.7	81.4	58.4	42.0	48.3	23.7	28.1	14.2	11.3	0.7
Spruce pine	17.9	0.5	0.8	0.7	1.8	4.0	3.9	1.0	2.3	2.1	0.8
Pitch pine	1.0	0.2	0.5	0.3	...	...	...	...	...	...	...
Redcedar	0.6	0.6	...	...	...	...	...	...	...	...	...
Hemlock-spruce	10.6	0.7	1.2	1.7	3.0	2.5	...	0.2	0.7	0.6	...
Cypress	69.9	2.8	6.7	8.0	11.3	8.2	10.2	6.1	2.0	13.8	0.7
<b>Total softwoods</b>	<b>1737.8</b>	<b>190.3</b>	<b>301.5</b>	<b>289.3</b>	<b>299.2</b>	<b>279.0</b>	<b>177.7</b>	<b>107.0</b>	<b>48.5</b>	<b>43.2</b>	<b>2.2</b>
Select white oaks	14.3	1.0	1.7	2.3	0.9	2.5	3.0	1.4	0.5	0.9	...
Select red oaks	1.3	...	...	...	...	...	...	0.8	...	0.5	...
Other white oaks	27.6	3.9	4.9	7.0	2.2	3.5	2.0	0.5	0.4	2.5	0.7
Other red oaks	218.4	29.6	29.0	24.1	30.4	23.5	22.2	15.6	9.5	25.2	9.3
Sweet pecan	2.0	...	0.2	0.8	...	0.3	...	...	...	0.3	0.5
Water hickory	13.7	1.6	1.6	...	1.6	1.4	3.2	1.9	0.6	1.9	...
Other hickories	17.6	1.1	1.6	1.7	3.7	3.6	2.6	0.4	1.6	1.4	...
Persimmon	0.6	...	0.2	0.3	...	...	...	...	...	...	...
Hard maple	0.4	0.2	0.2	...	...	...	...	...	...	...	...
Soft maple	38.7	11.1	8.5	8.2	4.7	2.5	1.4	0.5	0.5	1.2	...
Beech	3.7	0.2	0.2	0.6	...	...	0.9	...	...	1.8	...
Sweetgum	79.1	9.6	9.6	10.4	9.6	9.2	8.1	4.1	6.6	10.6	1.4
Blackgum	108.0	17.2	19.4	22.8	16.6	11.7	9.7	4.1	3.2	3.3	...
Other gums/tupelos	198.8	16.1	18.6	32.5	16.6	22.4	30.9	28.6	13.6	19.4	0.1
Other ashes	20.9	0.7	1.5	1.8	2.3	0.9	2.8	2.5	0.8	7.7	...
Sycamore	5.1	...	0.4	1.4	0.5	0.5	1.6	...	...	0.6	...
Cottonwood	4.1	...	...	0.4	...	...	...	1.4	...	2.4	...
Yellow-poplar	61.2	3.8	5.7	4.7	6.9	8.0	9.2	5.3	7.3	10.1	0.3
Magnolia	3.5	0.2	0.4	1.4	...	0.6	0.5	...	...	0.4	...
Sweetbay	170.8	27.7	38.4	36.8	25.9	21.0	7.4	6.3	2.1	4.9	0.4
Willow	0.5	0.2	...	0.3	...	...	...	...	...	...	...
Black cherry	1.8	0.5	0.6	0.4	...	...	...	...	0.4	...	...
American elm	6.1	1.0	0.7	0.3	0.3	1.9	1.2	0.3	0.4	...	...
Other elms	8.3	0.4	1.4	1.2	0.9	1.4	1.0	1.3	...	0.7	...
Hackberry	24.2	1.5	2.9	5.0	4.4	5.2	1.6	2.9	0.5	0.4	...
Sassafras	0.5	0.5	...	...	...	...	...	...	...	...	...
Dogwood	3.1	2.1	1.0	...	...	...	...	...	...	...	...
Holly	4.4	2.2	0.9	1.3	...	...	...	...	...	...	...
Other commercial	2.8	0.5	1.2	0.4	...	0.2	...	0.4	...	...	...
<b>Total hardwoods</b>	<b>1041.6</b>	<b>133.1</b>	<b>150.7</b>	<b>166.1</b>	<b>127.4</b>	<b>120.3</b>	<b>109.2</b>	<b>78.3</b>	<b>47.7</b>	<b>96.2</b>	<b>12.6</b>
<b>All species</b>	<b>2779.4</b>	<b>323.4</b>	<b>452.2</b>	<b>455.4</b>	<b>426.6</b>	<b>399.2</b>	<b>286.9</b>	<b>185.2</b>	<b>96.2</b>	<b>139.3</b>	<b>14.9</b>

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

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 -----									
Longleaf pine	432.7	88.3	125.6	106.9	63.8	32.8	12.2	3.0	...
Slash pine	364.1	78.4	79.6	82.5	63.2	34.9	14.1	11.6	...
Shortleaf pine	29.1	5.9	7.9	10.3	3.9	...	1.0	...	...
Loblolly pine	201.3	45.5	37.3	44.5	22.3	26.5	13.6	11.0	0.6
Spruce pine	15.2	0.6	1.5	3.6	3.6	1.0	2.2	1.9	0.8
Pitch pine	0.2	0.2	...	...	...	...	...	...	...
Hemlock-spruce	7.5	1.2	2.6	2.2	...	0.2	0.7	0.6	...
Cypress	52.8	5.8	9.6	7.2	9.3	5.8	1.9	12.6	0.7
<b>Total softwoods</b>	<b>1103.0</b>	<b>225.9</b>	<b>264.1</b>	<b>257.2</b>	<b>166.2</b>	<b>101.1</b>	<b>45.8</b>	<b>40.7</b>	<b>2.1</b>
Select white oaks	7.4	...	0.7	2.0	2.4	1.2	0.3	0.8	...
Select red oaks	1.2	...	...	...	...	0.7	...	0.5	...
Other white oaks	9.2	...	1.7	3.0	1.6	0.4	0.3	1.7	0.5
Other red oaks	112.8	...	22.7	19.1	18.9	13.4	8.4	22.2	8.2
Sweet pecan	1.0	...	...	0.3	...	...	...	0.2	0.4
Water hickory	9.0	...	1.2	1.2	2.7	1.6	0.5	1.7	...
Other hickories	10.9	...	2.7	2.8	2.2	0.4	1.4	1.4	...
Soft maple	8.3	...	3.2	2.0	1.2	0.5	0.5	1.0	...
Beech	1.7	...	...	...	0.4	...	...	1.3	...
Sweetgum	41.8	...	6.6	7.2	7.1	3.6	6.1	10.0	1.3
Blackgum	38.3	...	11.3	9.5	8.2	3.5	2.7	2.9	...
Other gums/tupelos	109.0	...	11.7	16.8	25.6	25.3	11.9	17.6	0.1
Other ashes	14.9	...	1.6	0.6	2.4	2.3	0.7	7.3	...
Sycamore	2.8	...	0.4	0.4	1.4	...	...	0.6	...
Cottonwood	3.4	...	...	...	...	1.3	...	2.1	...
Yellow-poplar	39.7	...	4.5	6.7	8.0	4.7	6.6	8.9	0.2
Magnolia	1.2	...	...	0.4	0.5	...	...	0.4	...
Sweetbay	53.8	...	18.3	17.5	6.5	5.1	1.8	4.2	0.4
Black cherry	0.3	...	...	...	...	...	0.3	...	...
American elm	3.2	...	0.2	1.4	1.0	0.2	0.4	...	...
Other elms	4.4	...	0.6	1.2	0.8	1.1	...	0.7	...
Hackberry	11.5	...	3.0	3.9	1.4	2.5	0.4	0.4	...
Other commercial	0.6	...	...	0.2	...	0.4	...	...	...
<b>Total hardwoods</b>	<b>486.6</b>	<b>...</b>	<b>90.6</b>	<b>96.1</b>	<b>92.4</b>	<b>68.4</b>	<b>42.3</b>	<b>85.7</b>	<b>11.2</b>
<b>All species</b>	<b>1589.6</b>	<b>225.9</b>	<b>354.7</b>	<b>353.3</b>	<b>258.5</b>	<b>169.4</b>	<b>88.1</b>	<b>126.4</b>	<b>13.2</b>

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

Species	All live	Growing stock	Rough	Rotten
----- Million cubic feet -----				
Longleaf pine	619.1	617.1	2.0	...
Slash pine	631.9	626.9	5.0	...
Shortleaf pine	42.0	42.0	...	...
Loblolly pine	355.0	351.8	2.8	0.3
Spruce pine	17.9	17.9	...	...
Pitch pine	1.0	1.0	0.1	...
Redcedar	0.6	0.6	...	...
Hemlock-spruce	10.9	10.6	0.3	...
Cypress	71.3	69.9	0.5	1.0
<b>Total softwoods</b>	<b>1749.8</b>	<b>1737.8</b>	<b>10.7</b>	<b>1.3</b>
Select white oaks	14.9	14.3	0.6	...
Select red oaks	1.3	1.3	...	...
Other white oaks	30.1	27.6	2.3	0.2
Other red oaks	238.3	218.4	16.1	3.9
Sweet pecan	2.1	2.0	0.1	...
Water hickory	13.7	13.7	...	...
Other hickories	19.0	17.6	1.4	...
Persimmon	0.8	0.6	0.2	...
Hard maple	0.4	0.4	...	...
Soft maple	45.4	38.7	5.8	1.0
Beech	5.9	3.7	2.2	...
Sweetgum	83.2	79.1	3.9	0.3
Blackgum	121.2	108.0	12.0	1.2
Other gums/tupelos	218.4	198.8	17.4	2.2
Other ashes	23.2	20.9	2.1	0.2
Sycamore	5.8	5.1	0.8	...
Cottonwood	4.1	4.1	...	...
Basswood	0.2	...	0.2	...
Yellow-poplar	66.3	61.2	3.5	1.6
Magnolia	4.4	3.5	0.9	...
Sweetbay	198.4	170.8	23.5	4.1
Willow	0.8	0.5	0.3	...
Black cherry	2.4	1.8	0.6	...
American elm	6.3	6.1	0.3	...
Other elms	8.8	8.3	0.4	...
Hackberry	26.7	24.2	1.9	0.5
Sassafras	0.5	0.5	...	...
Dogwood	7.6	3.1	4.4	0.1
Holly	5.1	4.4	0.6	...
Other commercial	3.4	2.8	0.6	...
<b>Total hardwoods</b>	<b>1158.9</b>	<b>1041.6</b>	<b>102.1</b>	<b>15.2</b>
Noncommercial	42.8	...	42.8	...
<b>All species</b>	<b>2951.4</b>	<b>2779.4</b>	<b>155.5</b>	<b>16.5</b>

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

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 board feet -----									
Longleaf pine	495.6	79.9	144.7	145.4	65.6	39.1	12.4	8.6	...
Slash pine	1132.0	154.6	236.6	294.8	223.6	119.0	61.7	41.6	...
Shortleaf pine	92.1	12.4	24.5	38.8	16.4	...	...	...	...
Loblolly pine	361.7	27.2	43.9	83.4	31.3	82.1	43.8	50.0	...
Spruce pine	3.2	...	...	...	...	...	3.2	...	...
Hemlock-spruce	19.4	6.0	5.2	5.3	...	...	...	2.9	...
Cypress	199.8	17.9	32.3	20.0	31.1	23.4	11.1	59.8	4.2
<b>Total softwoods</b>	<b>2303.8</b>	<b>298.0</b>	<b>487.2</b>	<b>587.6</b>	<b>368.1</b>	<b>263.6</b>	<b>132.1</b>	<b>162.9</b>	<b>4.2</b>
Select red oaks	6.9	...	...	...	...	4.0	...	2.9	...
Other white oaks	5.5	...	...	...	...	...	...	2.2	3.3
Other red oaks	27.6	...	...	...	2.5	...	...	13.4	11.7
Water hickory	8.2	...	...	...	...	3.2	...	5.0	...
Other hickories	10.2	...	...	...	...	...	5.4	4.9	...
Soft maple	2.7	...	...	...	...	...	2.7	...	...
Sweetgum	55.4	...	...	...	5.3	8.9	8.1	28.2	5.0
Blackgum	25.2	...	...	...	2.0	6.5	9.8	6.9	...
Other gums/tupelos	127.9	...	...	...	21.2	46.1	30.4	30.2	...
Other ashes	25.4	...	...	...	2.5	2.6	...	20.3	...
Sycamore	3.0	...	...	...	...	...	...	3.0	...
Cottonwood	22.3	...	...	...	...	8.1	...	14.1	...
Yellow-poplar	25.2	...	...	...	...	3.9	2.9	18.3	...
Sweetbay	27.9	...	...	...	8.0	6.2	4.3	9.4	...
Other elms	7.8	...	...	...	...	3.8	...	4.0	...
<b>Total hardwoods</b>	<b>381.4</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>41.5</b>	<b>93.5</b>	<b>63.6</b>	<b>162.8</b>	<b>20.0</b>
<b>All species</b>	<b>2685.1</b>	<b>298.0</b>	<b>487.2</b>	<b>587.6</b>	<b>409.6</b>	<b>357.2</b>	<b>195.7</b>	<b>325.7</b>	<b>24.1</b>

Table 38—Volume of sawtimber for tree grade 2 on timberland by detailed species and diameter class, Southwest-South 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
----- Million board feet -----									
Longleaf pine	433.2	56.8	106.8	138.1	83.9	26.8	18.5	2.3	...
Slash pine	311.7	52.7	65.9	80.4	70.3	24.0	9.3	9.3	...
Shortleaf pine	28.6	7.5	5.6	12.4	...	...	3.2	...	...
Loblolly pine	141.2	25.4	21.8	39.0	18.6	15.2	21.2	...	...
Spruce pine	10.3	...	...	...	...	...	4.8	5.5	...
Pitch pine	1.0	1.0	...	...	...	...	...	...	...
Hemlock-spruce	4.3	...	...	...	...	...	4.3	...	...
Cypress	51.1	3.6	11.4	12.6	12.4	2.5	...	8.5	...
<b>Total softwoods</b>	<b>981.4</b>	<b>147.0</b>	<b>211.4</b>	<b>282.4</b>	<b>185.2</b>	<b>68.5</b>	<b>61.2</b>	<b>25.6</b>	<b>...</b>
Other red oaks	67.9	...	...	4.9	1.9	11.8	3.8	33.2	12.3
Water hickory	15.0	...	...	...	11.3	...	...	3.8	...
Other hickories	2.3	...	...	2.3	...	...	...	...	...
Soft maple	2.6	...	...	2.6	...	...	...	...	...
Sweetgum	48.2	...	...	19.9	7.8	4.7	7.4	8.3	...
Blackgum	24.9	...	...	13.7	7.3	3.9	...	...	...
Other gums/tupelos	176.8	...	...	37.3	46.8	42.0	17.5	33.2	...
Other ashes	35.2	...	...	1.5	11.5	9.6	3.2	9.3	...
Yellow-poplar	15.1	...	...	...	3.9	3.0	...	8.2	...
Sweetbay	39.4	...	...	29.5	5.8	4.0	...	...	...
American elm	9.9	...	...	2.4	3.7	1.5	2.4	...	...
Other elms	6.9	...	...	4.3	2.7	...	...	...	...
Hackberry	7.4	...	...	2.8	4.6	...	...	...	...
<b>Total hardwoods</b>	<b>451.7</b>	<b>...</b>	<b>...</b>	<b>121.1</b>	<b>107.4</b>	<b>80.6</b>	<b>34.3</b>	<b>96.0</b>	<b>12.3</b>
<b>All species</b>	<b>1433.0</b>	<b>147.0</b>	<b>211.4</b>	<b>403.5</b>	<b>292.6</b>	<b>149.1</b>	<b>95.5</b>	<b>121.7</b>	<b>12.3</b>

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

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 board feet -----									
Longleaf pine	1636.6	349.4	488.1	370.9	249.1	131.1	42.9	5.0	...
Slash pine	667.4	201.1	160.5	119.2	89.5	69.1	14.9	13.2	...
Shortleaf pine	55.2	11.9	16.8	14.3	8.5	...	3.7	...	...
Loblolly pine	648.4	178.9	144.7	131.4	77.4	70.7	20.8	22.8	1.8
Spruce pine	67.6	2.9	6.5	19.3	18.4	5.4	4.2	5.8	5.0
Hemlock-spruce	10.5	...	4.0	5.9	...	0.6	...	...	...
Cypress	33.4	6.4	5.4	5.9	6.3	6.9	...	2.4	...
<b>Total softwoods</b>	<b>3119.2</b>	<b>750.7</b>	<b>826.1</b>	<b>667.0</b>	<b>449.2</b>	<b>283.8</b>	<b>86.5</b>	<b>49.2</b>	<b>6.8</b>
Select white oaks	25.7	...	...	5.6	11.3	3.1	2.1	3.7	...
Other white oaks	21.0	...	3.8	10.9	2.0	...	2.0	2.3	...
Other red oaks	124.9	...	27.0	19.8	18.5	24.5	9.8	25.5	...
Water hickory	24.7	...	7.4	7.4	2.3	4.2	...	3.5	...
Other hickories	20.1	...	7.0	7.0	2.7	...	3.4	...	...
Soft maple	17.8	...	11.7	0.6	1.6	2.2	...	1.6	...
Beech	1.8	...	...	...	...	...	...	1.8	...
Sweetgum	63.7	...	15.3	15.1	10.6	...	10.9	11.7	...
Blackgum	89.5	...	41.3	18.3	23.9	...	...	6.0	...
Other gums/tupelos	188.6	...	44.2	40.6	42.0	37.3	8.2	16.4	...
Other ashes	15.8	...	8.6	1.4	1.1	...	...	4.6	...
Sycamore	13.5	...	2.2	2.5	8.8	...	...	...	...
Yellow-poplar	65.2	...	13.4	11.7	16.8	6.8	3.1	13.4	...
Magnolia	2.6	...	...	2.6	...	...	...	...	...
Sweetbay	95.3	...	54.7	21.2	4.8	7.5	...	4.4	2.7
American elm	6.9	...	1.2	3.4	2.4	...	...	...	...
Other elms	6.8	...	3.6	...	...	3.2	...	...	...
Hackberry	32.8	...	8.1	10.9	3.6	7.8	2.4	...	...
<b>Total hardwoods</b>	<b>816.7</b>	<b>...</b>	<b>249.3</b>	<b>179.0</b>	<b>152.3</b>	<b>96.5</b>	<b>42.0</b>	<b>94.9</b>	<b>2.7</b>
<b>All species</b>	<b>3935.9</b>	<b>750.7</b>	<b>1075.5</b>	<b>846.0</b>	<b>601.5</b>	<b>380.3</b>	<b>128.4</b>	<b>144.1</b>	<b>9.5</b>

Table 40—Volume of sawtimber for tree grade 4 on timberland by detailed species and diameter class, Southwest-South 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
----- Million board feet -----									
Select white oaks	12.9	...	3.5	5.6	1.6	2.3	...	...	...
Other white oaks	19.8	...	1.4	4.5	7.4	...	...	6.5	...
Other red oaks	355.0	...	80.7	74.9	73.5	31.4	30.4	51.3	12.8
Sweet pecan	1.7	...	...	1.7	...	...	...	...	...
Other hickories	25.6	...	7.6	7.2	8.8	2.0	...	...	...
Soft maple	12.9	...	1.5	6.5	3.3	...	...	1.7	...
Beech	7.1	...	...	...	1.8	...	...	5.4	...
Sweetgum	56.3	...	19.9	5.9	9.0	9.4	2.8	9.3	...
Blackgum	57.8	...	14.2	15.9	7.5	9.7	7.1	3.3	...
Other gums/tupelos	38.4	...	8.0	3.9	13.4	4.3	...	8.7	...
Other ashes	4.2	...	...	...	...	...	...	4.2	...
Yellow-poplar	108.4	...	9.6	24.9	21.6	13.0	27.2	12.2	...
Magnolia	2.4	...	...	...	2.4	...	...	...	...
Sweetbay	113.5	...	35.9	42.2	16.7	9.9	3.8	5.1	...
Other elms	4.6	...	...	2.4	2.2	...	...	...	...
Hackberry	18.2	...	8.5	3.0	...	6.6	...	...	...
Other commercial	2.4	...	...	...	...	2.4	...	...	...
Total hardwoods	841.2	...	190.6	198.6	169.3	91.0	71.3	107.6	12.8
All species	841.2	...	190.6	198.6	169.3	91.0	71.3	107.6	12.8

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

Species	All ownerships	National forest	Other public	Forest industry	Forest industry-	
					leased	Other private
----- Million board feet -----						
Yellow pines	6181.9	431.3	64.8	1990.9	191.1	3503.8
Cypress	286.3	6.2	1.9	75.2	...	202.9
Other softwoods	39.3	...	...	24.5	...	14.8
Total softwoods	6507.5	437.5	66.7	2090.7	191.1	3721.5
Select white-red oaks	49.4	...	...	10.3	...	39.1
Other white-red oaks	696.6	14.2	6.5	235.7	8.4	431.8
Hickory	122.7	1.3	...	25.2	4.2	92.0
Sweetgum	241.3	...	1.7	84.8	7.5	147.3
Tupelo and blackgum	760.0	15.8	4.6	357.6	20.0	362.0
Ash-walnut-black cherry	85.0	...	6.3	52.8	1.7	24.2
Yellow-poplar	229.6	2.4	...	54.5	...	172.7
Other hardwoods	506.5	2.1	12.4	217.5	17.3	257.1
Total hardwoods	2691.0	35.9	31.6	1038.5	59.0	1526.1
All species	9198.6	473.3	98.3	3129.2	250.2	5247.6

Table 42—Average net annual growth, average annual removals, and average annual mortality of live trees<sup>1</sup> by county and species group, Southwest-South Alabama Counties, 1990

County	Growth			Removals			Mortality		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood	All species	Softwood	Hardwood
----- Million cubic feet -----									
Baldwin	32.0	20.7	11.3	26.2	22.2	4.0	8.7	2.9	5.9
Covington	22.4	15.2	7.1	21.4	17.2	4.1	2.7	1.1	1.7
Escambia	23.9	18.4	5.4	18.9	13.5	5.5	3.3	1.8	1.6
Mobile	19.5	13.4	6.1	10.6	8.3	2.3	5.2	1.5	3.7
Washington	38.0	21.3	16.7	25.1	15.8	9.3	6.6	2.9	3.8
All counties	135.7	89.0	46.7	102.1	76.9	25.2	26.6	10.0	16.6

<sup>1</sup>Excludes 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 trees<sup>1</sup> by ownership class and species group, Southwest-South Alabama Counties, 1990

Ownership class	Growth			Removals			Mortality		
	All classes	Softwood	Hardwood	All species	Softwood	Hardwood	All Species	Softwood	Hardwood
----- Million cubic feet -----									
National forest	2.9	1.7	1.2	3.1	3.0	0.1	0.7	0.4	0.3
Other public	1.4	0.9	0.5	1.3	1.1	0.2	0.3	0.1	0.2
Forest industry	48.1	33.8	14.3	37.1	29.2	7.9	7.1	2.5	4.6
Forest industry-leased	10.9	8.2	2.7	7.7	5.1	2.6	0.8	0.4	0.4
Other private	72.3	44.4	27.9	52.8	38.5	14.3	17.8	6.7	11.1
All ownerships	135.7	89.0	46.7	102.1	76.9	25.2	26.6	10.0	16.6

<sup>1</sup>Excludes trees less than 5.0 inches in diameter at breast height.

# FIGURES

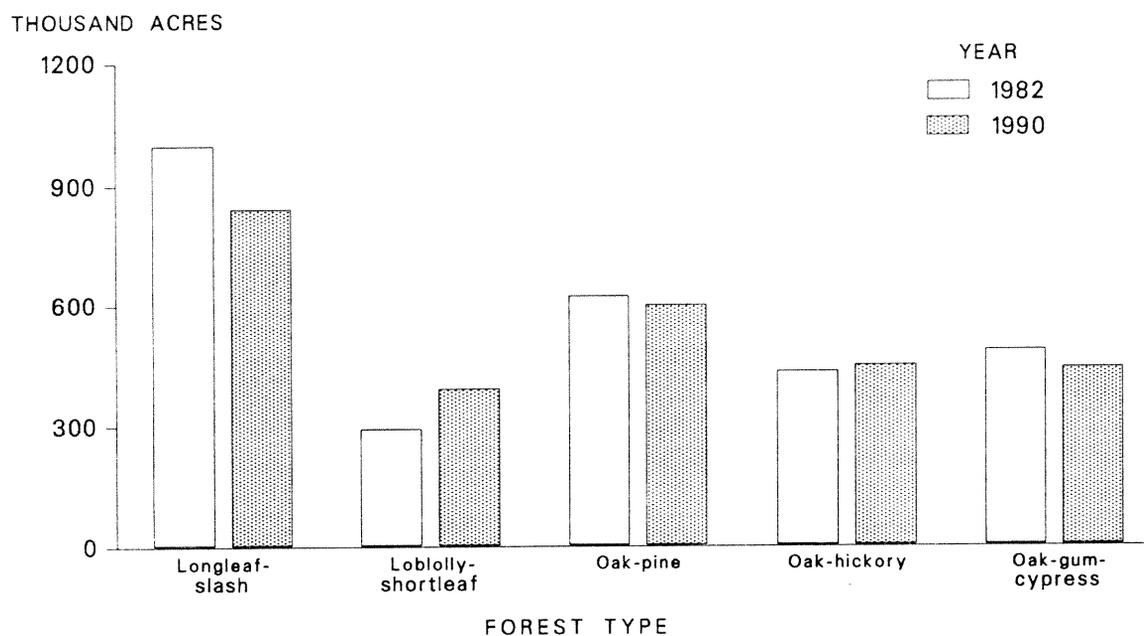


Figure 1.—Area of timberland by forest type, Southwest-South Alabama, 1982 and 1990.

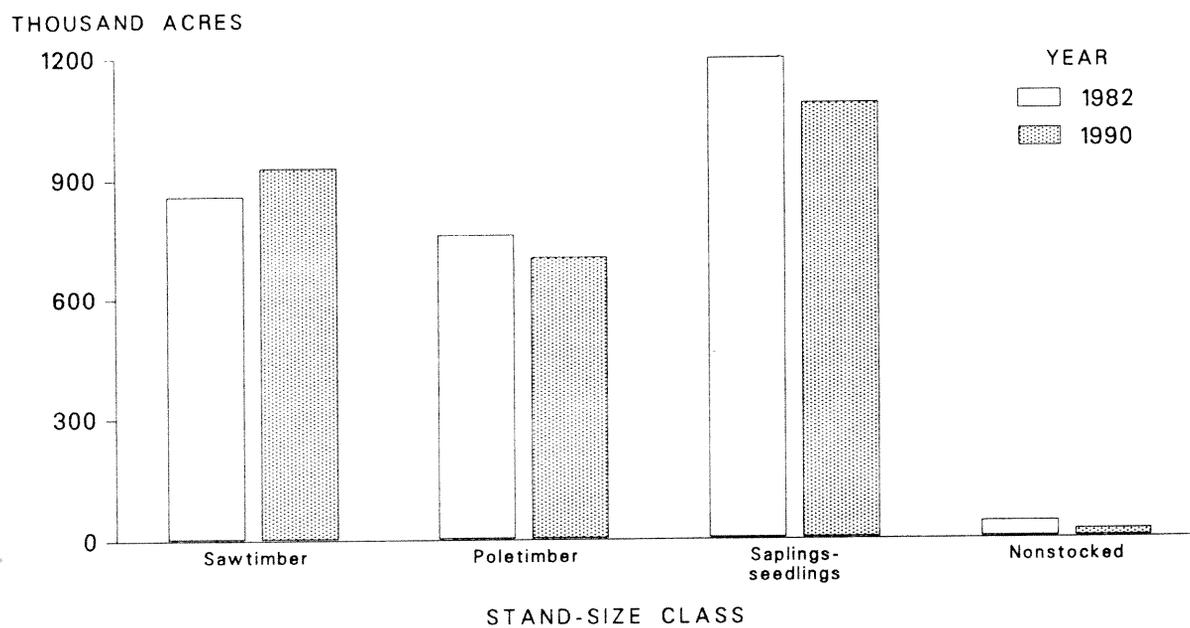


Figure 2.—Area of timberland by stand-size class, Southwest-South Alabama, 1982 and 1990.

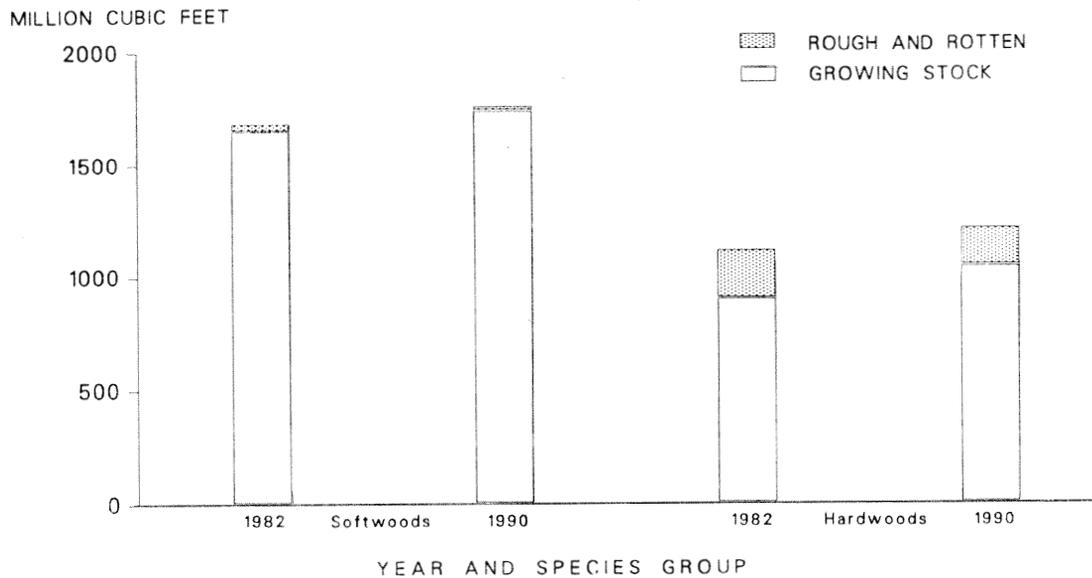


Figure 3.—Volume of live trees on timberland by species group and class of timber, Southwest-South Alabama, 1982 and 1990.



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

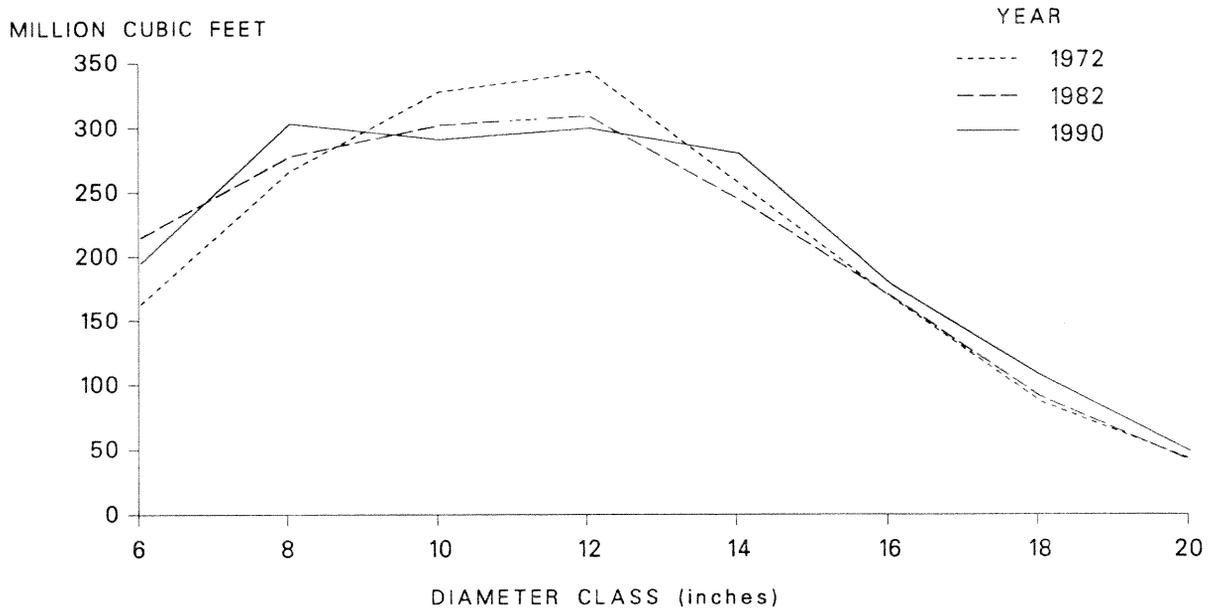


Figure 5.—Volume of live softwood trees on timberland by diameter class, Southwest-South Alabama, 1972, 1982 and 1990.

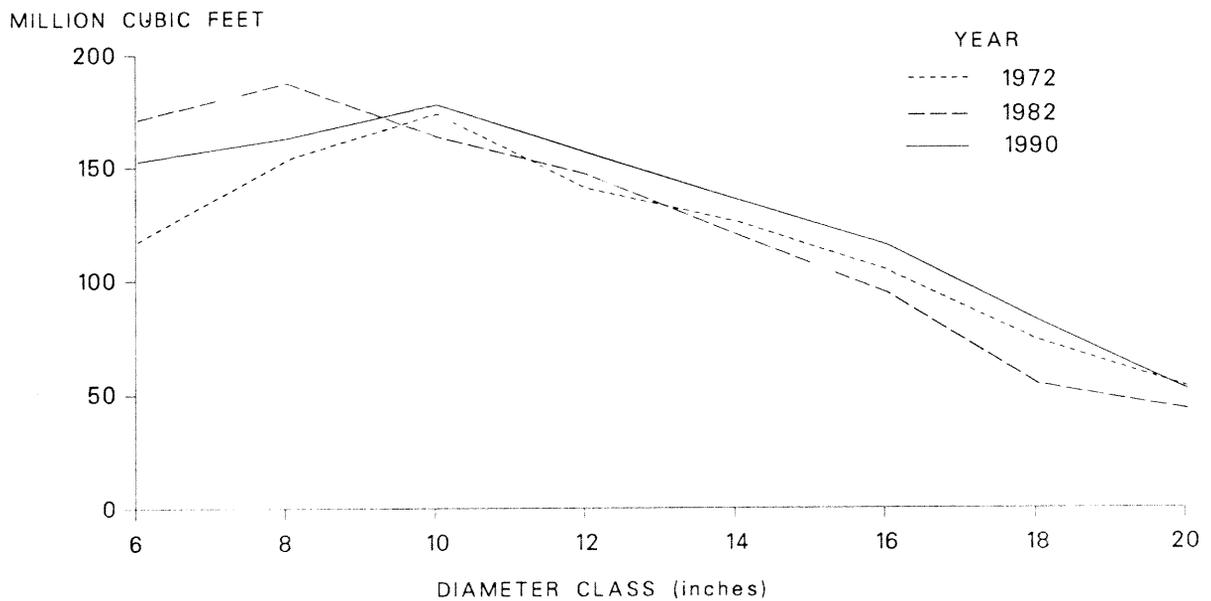


Figure 6.—Volume of live hardwood trees on timberland by diameter class, Southwest-South Alabama, 1972, 1982 and 1990.

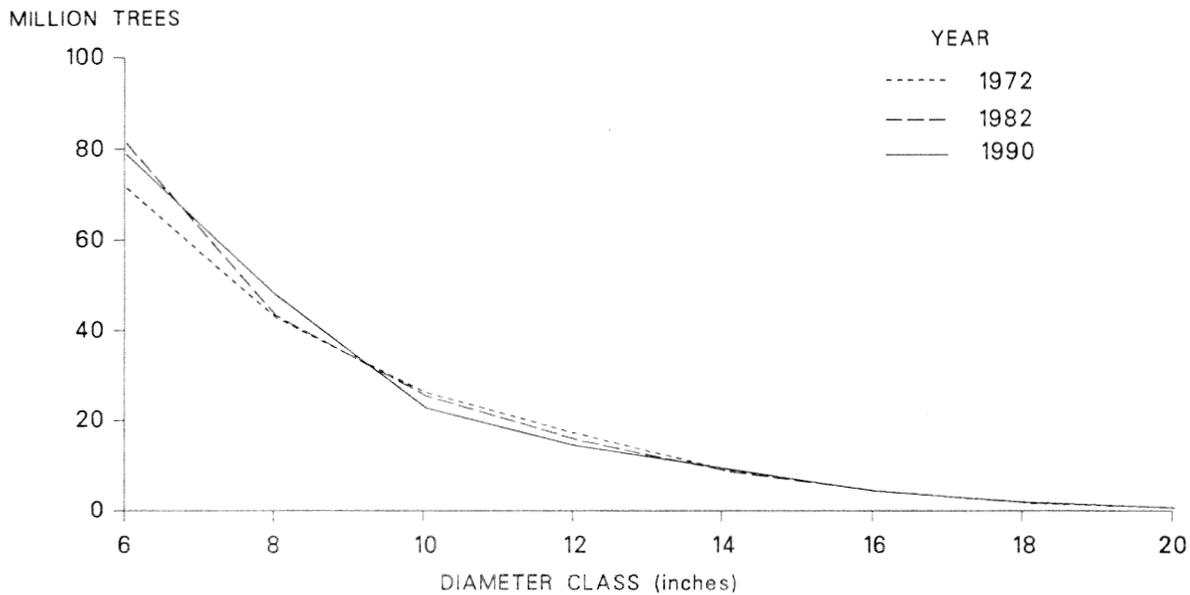


Figure 7.—Number of live softwood trees on timberland by diameter class, Southwest-South Alabama, 1972, 1982 and 1990.

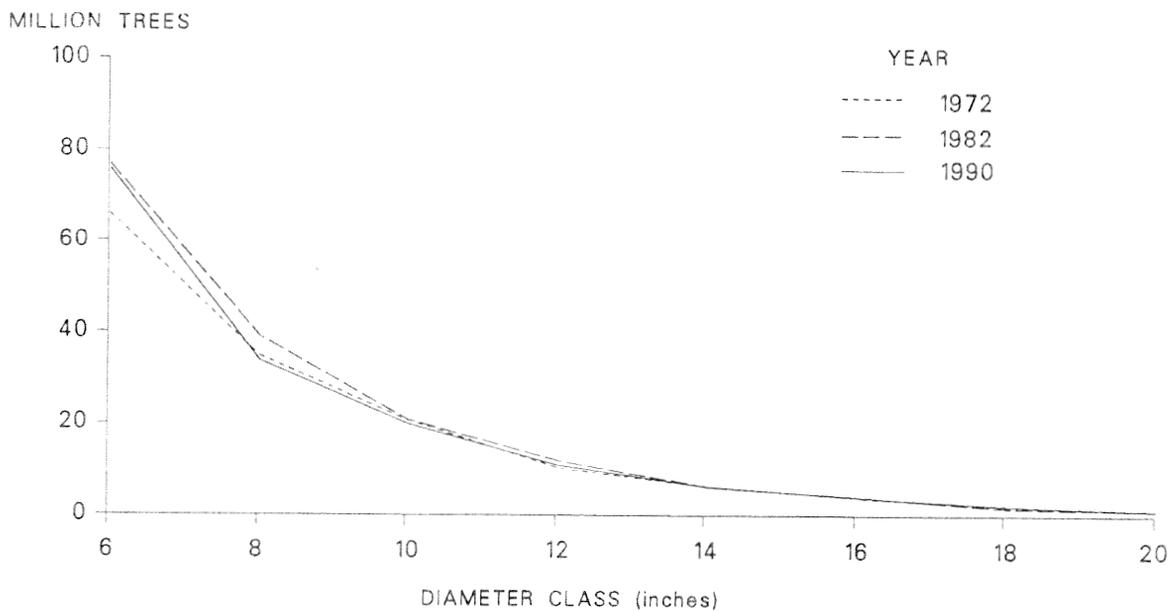


Figure 8.—Number of live hardwood trees on timberland by diameter class, Southwest-South Alabama, 1972, 1982 and 1990.

McWilliams, William H.; Miller, Patrick E.; Vissage, John S. 1990. Forest Statistics for Southwest-South Alabama Counties—1990. Resour. Bull. SO-155. New Orleans, LA: U. S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 30 p.

Tabulates forest resource information from a new inventory of the Southwest-South 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.





