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

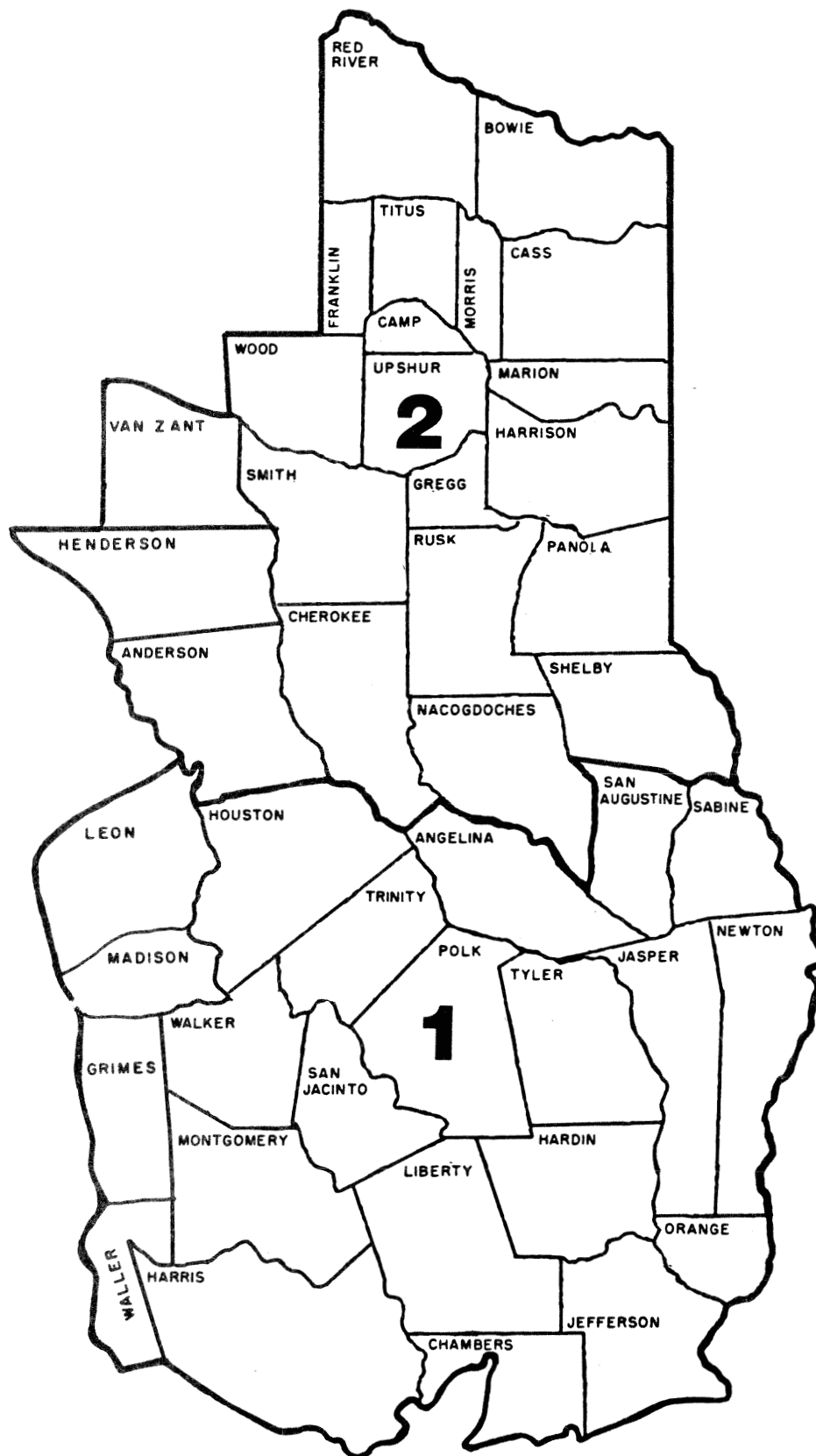


Figure 1.--The forest survey regions of Texas.

Forest Statistics for Southeast Texas Counties - 1986

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INTRODUCTION

These tables were derived from data obtained during a 1986 inventory of 22 counties comprising the Southeast Unit of Texas (fig. 1). Grimes, Leon, Madison, and Waller counties have been added to the Southeastern Unit since the previous inventory of 1975. All comparisons of the 1975 and 1986 forest statistics made in this Bulletin account for this change. The data on forest acreage and timber volume were secured by a systematic sampling method involving a forest-nonforest classification on aerial photographs and on-the-ground measurement of trees at sample locations. The sample locations were at the intersections of a grid of lines spaced 3 miles apart. At each forest location, per acre estimates were obtained from 10 BA 37.5 point samples.

The sampling methods were developed to provide suitable estimates for East Texas. Estimates for smaller areas are presented, but sampling error increases as the area considered decreases. Sampling errors given in Table I are based on one standard deviation or a probability of two chances out of three. To estimate the sampling error for a combination of counties, one can use the following:

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

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

Table I--Sampling errors¹ for timberland, growing stock, and sawtimber, Southeast Texas, 1986

County	Timberland	Growing stock			Sawtimber
		Volume	Growth	Removals	
----- Percent -----					
Angelina	1.9	9.2	8.9	16.6	10.6
Grimes	2.3	15.6	18.3	32.1	19.6
Hardin	1.6	9.1	12.9	8.6	11.0
Harris	1.6	12.7	28.9	26.4	13.9
Houston	1.7	10.5	8.9	11.0	12.2
Jasper	2.0	8.3	8.0	12.3	9.5
Jefferson ²	0.9	19.0	31.7	47.2	20.4
Leon	3.6	13.2	22.8	34.6	15.7
Liberty	1.3	10.1	17.4	13.8	11.5
Madison	1.2	23.1	46.9	...	24.3
Montgomery	2.2	7.1	10.2	8.5	8.4
Newton	1.8	7.6	7.2	10.4	8.7
Orange	2.6	13.6	15.8	34.0	14.8
Polk	1.5	8.2	8.0	8.6	9.6
Sabine	1.9	11.1	8.3	16.1	12.6
San Augustine	1.9	11.9	14.5	14.8	14.7
San Jacinto	1.9	10.3	12.8	13.9	11.7
Trinity	1.5	12.6	8.2	11.0	14.3
Tyler	0.9	9.1	7.2	10.8	10.2
Walker	1.8	10.3	9.3	15.8	12.1
Waller	2.1	19.1	20.8	(3)	21.1
All counties	0.4	2.4	2.6	3.3	2.8

¹ By random-sampling formula.

² Chambers included in Jefferson.

³ Sampling error greater than 50.

HIGHLIGHTS

Timberland Area

The Southeastern Unit of Texas is 56 percent forested. Ninety-seven percent of the 6,869.4 thousand acres of forest land is classified as timberland capable of growing commercial crops of timber. The area of timberland decreased by 2 percent from 6,806.5 thousand acres in 1975 to 6,666.5 thousand acres in 1986.

Forest industry timberland, including land under long-term lease, decreased by 2 percent to 3,074.0 thousand acres and accounts for 46 percent of the total timberland base. Nonindustrial private timberland showed no significant change and currently totals 3,017.1 thousand acres (45 percent of the total timberland base).

Decreases occurred in both the area of pine type timberland (-9 percent) and oak-pine timberland (-11 percent). The area of oak-hickory stands increased by 46 percent. Bottomland hardwood forests decreased by 16 percent.

The area of pine stands of artificial origin more than doubled since 1975, from 437.5 thousand acres to 935.5 thousand acres. An additional 388.1 thousand acres were regenerated artificially, but are classified according to actual stocking as oak-pine and hardwood forest types until pines outgrow hardwood competition.

Number of Trees

Stand tables show significant declines in the number of live softwood trees for the 6-inch through the 20-inch class. Increases occurred in the 2- and 4-inch classes. The hardwood stand table shows declines in all but the 20-inch class.

Volume

The volume of softwood growing stock decreased by 9 percent to 5,243.4 million cubic feet. This contrasts a 14 percent increase that occurred between 1965 and 1975 (excluding Grimes, Leon, Madison, and Waller counties). Softwood sawtimber volume decreased by 4 percent to 24,696.9 million board feet, compared to an 18 percent increase in 1975 (excluding

Grimes, Leon, Madison, and Waller counties).

The volume of hardwood growing stock expanded by 3 percent and totaled 2,352.5 million cubic feet, while hardwood sawtimber volume increased by 14 percent to 7,501.6 million board feet.

The sound-wood volume of cull trees (rough and rotten trees) increased by 6 percent. Softwood cull volume represents 2 percent of the total all live softwood timber volume, while hardwood cull volume is 27 percent of the live hardwood timber volume.

Growth, Removals and Mortality

Average annual gross growth of softwood growing stock increased by 4 percent since 1975, from 312.0 to 323.6 million cubic feet. Average net annual growth of softwoods (average annual gross growth minus average annual mortality) decreased by 4 percent. Average annual mortality more than doubled for softwoods, going from 21.6 to 43.6 million cubic feet. Average annual removals of softwood growing stock totaled 314.3 million cubic feet, an increase of 37 percent.

Average annual gross growth of hardwood growing stock decreased by 1 percent from 101.5 to 100.8 million cubic feet. Average annual mortality increased by roughly 2 1/2 times, going from 9.1 to 23.0 million cubic feet. Average annual removals of hardwood growing stock totaled 69.5 million cubic feet, an increase of 16 percent.

Tables 1-25 were developed to provide compatibility among Forest Inventory and Analysis Projects. Tables 26-35 are supplementary tables and may change from unit to unit or state to state to address specific resource issues.

DEFINITION OF TERMS

Average annual gross growth. — Average annual net growth plus average annual mortality.

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

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

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

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.

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.

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

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

Reserved timberland. — Productive public forest land withdrawn from timber utilization through statute or administrative regulations.

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

Sawtimber trees. — Live trees that are of commercial species, contain at least a 12-foot saw log, 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 live sawtimber trees in board feet, International 1/4-inch rule and in cubic feet.

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 size class of growing-stock trees on the sampled area; that is, sawtimber, poletimber, or sapling and seedling.

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

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, Southeast Texas, 1986

County	All land ¹	Forest land				Nonforest land
		Total	Timberland ²	Woodland ³	Reserved timberland	
----- Thousand acres -----						
Angelina	553.6	387.1	376.6	...	10.5	166.5
Chambers ⁴	...	...	...	...	...	...
Grimes	512.2	168.6	168.6	...	...	343.6
Hardin	575.0	476.5	430.0	...	46.5	98.5
Harris	1137.3	197.6	190.3	7.3	...	939.8
Houston	791.6	422.8	419.7	...	3.1	368.8
Jasper	620.6	508.2	500.2	...	8.0	112.5
Jefferson ⁴	1044.8	73.1	72.1	...	1.0	971.7
Leon	690.9	309.4	233.5	75.9	...	381.5
Liberty	753.3	462.9	461.6	...	1.3	290.4
Madison	302.5	79.0	79.0	...	...	223.5
Montgomery	688.7	444.9	441.2	...	3.7	243.9
Newton	601.1	549.2	549.2	...	...	51.9
Orange	242.8	125.2	124.5	...	0.7	117.7
Polk	708.5	556.3	539.8	...	16.5	152.1
Sabine	369.6	264.1	253.4	...	10.7	105.5
San Augustine	378.4	288.3	283.0	...	5.3	90.1
San Jacinto	402.0	290.9	290.9	...	...	111.1
Trinity	456.6	347.2	347.2	...	...	109.4
Tyler	600.0	530.6	518.2	...	12.4	69.5
Walker	512.9	305.6	305.6	...	...	207.2
Waller	332.4	82.1	82.1	...	...	250.3
All counties	12274.9	6869.4	6666.5	83.2	119.7	5405.4

¹ From U.S. Bureau of the Census.

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

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

⁴ Chambers included in Jefferson.

Table 2--Area of timberland by county and ownership class, Southeast Texas, 1986

County	All ownerships	National forest	Misc. federal	State	County and municipal	Forest industry ¹	Farmer	Corporate ²	Individual ²
----- Thousand acres -----									
Angelina	376.6	34.2	...	...	...	184.9	61.6	13.7	82.2
Grimes	168.6	...	...	...	...	22.0	102.6	...	44.0
Hardin	430.0	...	...	...	...	324.0	5.9	35.3	64.8
Harris	190.3	...	...	...	...	14.6	...	58.5	117.1
Houston	419.7	87.7	...	...	...	68.9	43.8	12.5	206.7
Jasper	500.2	24.4	...	6.1	...	347.7	6.1	12.2	103.7
Jefferson ³	72.1	...	...	...	...	...	26.2	6.6	39.3
Leon	233.5	...	...	...	...	...	122.6	...	110.9
Liberty	461.6	...	5.9	...	...	189.4	...	23.7	242.6
Madison	79.0	...	...	...	...	7.9	47.4	15.8	7.9
Montgomery	441.2	31.1	...	5.2	...	10.4	10.4	140.1	244.0
Newton	549.2	...	...	5.5	...	439.4	11.0	11.0	82.4
Orange	124.5	...	...	...	...	56.6	...	5.7	62.2
Polk	539.8	...	...	...	...	425.0	5.7	5.7	103.4
Sabine	253.4	63.4	...	...	...	126.7	5.3	5.3	52.8
San Augustine	283.0	61.5	6.2	...	...	147.7	12.3	...	55.4
San Jacinto	290.9	65.3	...	...	5.9	89.1	17.8	23.7	89.1
Trinity	347.2	102.9	...	...	...	199.3	...	...	45.0
Tyler	518.2	...	...	...	...	393.1	6.0	23.8	95.3
Walker	305.6	60.1	...	10.0	...	20.0	20.0	10.0	185.4
Waller	82.1	...	...	...	...	7.5	22.4	14.9	37.3
All counties	6666.5	530.7	12.1	26.8	5.9	3074.0	527.1	418.7	2071.3

¹ Includes land leased to forest industry.

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

³ Chambers included in Jefferson.

Table 3--Area of timberland by county and forest type group, Southeast Texas, 1986

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				
----- Thousand acres -----									
Angelina	376.6	6.8	...	54.8	178.0	68.5	41.1	27.4	...
Grimes	168.6	...	...	7.3	51.3	29.3	51.3	29.3	...
Hardin	430.0	29.5	5.9	58.9	82.5	100.1	111.9	41.2	...
Harris	190.3	...	...	7.3	58.5	36.6	65.9	22.0	...
Houston	419.7	6.3	...	31.3	144.1	81.4	94.0	62.6	...
Jasper	500.2	42.7	12.2	30.5	134.2	146.4	73.2	61.0	...
Jefferson ¹	72.1	...	...	...	19.7	6.6	13.1	32.8	...
Leon	233.5	...	...	...	11.7	5.8	169.3	40.9	5.8
Liberty	461.6	...	...	29.6	41.4	47.3	147.9	195.3	...
Madison	79.0	...	...	...	7.9	7.9	55.3	7.9	...
Montgomery	441.2	...	...	26.0	186.9	129.8	72.7	26.0	...
Newton	549.2	76.9	16.5	98.9	93.4	76.9	137.3	49.4	...
Orange	124.5	5.7	...	...	22.6	39.6	17.0	39.6	...
Polk	539.8	...	11.5	132.1	201.0	97.6	51.7	45.9	...
Sabine	253.4	5.3	...	21.1	121.4	47.5	58.1	...	...
San Augustine	283.0	...	...	67.7	92.3	49.2	30.8	43.1	...
San Jacinto	290.9	...	...	23.7	106.9	71.2	77.2	11.9	...
Trinity	347.2	...	6.4	70.7	141.5	64.3	45.0	19.3	...
Tyler	518.2	11.9	17.9	65.5	95.3	172.7	113.2	41.7	...
Walker	305.6	...	...	25.1	160.3	40.1	65.1	15.0	...
Waller	82.1	...	...	...	44.8	14.9	7.5	14.9	...
All counties	6666.5	185.0	70.3	750.5	1995.5	1333.9	1498.3	827.1	5.8

¹ Chambers included in Jefferson.

Table 4--Area of timberland by county and stand-size class, Southeast Texas, 1986

County	All classes	Stand-size class			Nonstocked ¹ areas
		Sawtimber	Poletimber	Sapling- seedling	

----- Thousand acres -----					
Angelina	376.6	226.0	75.3	75.3	...
Crimes	168.6	95.3	44.0	22.0	7.3
Hardin	430.0	153.2	70.7	164.9	41.2
Harris	190.3	102.4	29.3	43.9	14.6
Houston	419.7	256.8	75.2	81.4	6.3
Jasper	500.2	292.8	109.8	97.6	...
Jefferson ²	72.1	59.0	...	6.6	6.6
Leon	233.5	75.9	110.9	29.2	17.5
Liberty	461.6	248.5	118.4	88.8	5.9
Madison	79.0	39.5	31.6	...	7.9
Montgomery	441.2	311.4	83.0	41.5	5.2
Newton	549.2	230.7	137.3	181.2	...
Orange	124.5	84.9	17.0	17.0	5.7
Polk	539.8	229.7	74.7	224.0	11.5
Sabine	253.4	158.4	31.7	63.4	...
San Augustine	283.0	141.5	36.9	104.6	...
San Jacinto	290.9	166.2	47.5	77.2	...
Trinity	347.2	173.6	64.3	109.3	...
Tyler	518.2	244.2	95.3	166.8	11.9
Walker	305.6	200.4	60.1	45.1	...
Waller	82.1	59.7	14.9	7.5	...

All counties	6666.5	3550.0	1327.8	1647.1	141.6
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¹ Timberland less than 16.7 percent stocked.

² Chambers included in Jefferson.

Table 5--Area of timberland by county and site class, Southeast Texas, 1986

County	All classes	Site class (cubic feet/acre/year)				
		> 165	120-165	85-120	50-85	< 50
----- Thousand acres -----						
Angelina	376.6	27.4	102.7	184.9	61.6	...
Grimes	168.6	...	14.7	51.3	87.9	14.7
Hardin	430.0	5.9	117.8	206.2	82.5	17.7
Harris	190.3	7.3	36.6	109.8	29.3	7.3
Houston	419.7	31.3	175.4	137.8	75.2	...
Jasper	500.2	73.2	146.4	183.0	97.6	...
Jefferson ¹	72.1	6.6	6.6	45.9	13.1	...
Leon	233.5	11.7	5.8	29.2	75.9	110.9
Liberty	461.6	29.6	100.6	112.4	183.4	35.5
Madison	79.0	15.8	15.8	15.8	23.7	7.9
Montgomery	441.2	36.3	114.2	155.7	124.6	10.4
Newton	549.2	98.9	186.7	203.2	54.9	5.5
Orange	124.5	11.3	56.6	45.3	11.3	...
Polk	539.8	...	109.1	298.6	132.1	...
Sabine	253.4	73.9	110.9	52.8	15.8	...
San Augustine	283.0	55.4	86.1	129.2	12.3	...
San Jacinto	290.9	11.9	83.1	142.5	47.5	5.9
Trinity	347.2	25.7	102.9	147.9	64.3	6.4
Tyler	518.2	47.6	226.3	202.5	41.7	...
Walker	305.6	5.0	55.1	145.3	85.2	15.0
Waller	82.1	14.9	22.4	22.4	22.4	...
All counties	6666.5	589.7	1875.8	2621.5	1342.3	237.2

¹ Chambers included in Jefferson.

Table 6--Area of timberland, by county and stocking classes of growing-stock trees, Southeast Texas, 1986

County	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
----- Thousand acres -----						
Angelina	376.6	20.5	137.0	157.5	61.6	...
Grimes	168.6	...	7.3	14.7	139.2	7.3
Hardin	430.0	23.6	35.3	235.6	94.2	41.2
Harris	190.3	...	14.6	109.8	51.2	14.6
Houston	419.7	12.5	87.7	194.2	119.0	6.3
Jasper	500.2	12.2	79.3	268.4	140.3	...
Jefferson ¹	72.1	13.1	...	26.2	26.2	6.6
Leon	233.5	...	...	81.7	134.3	17.5
Liberty	461.6	...	23.7	224.9	207.1	5.9
Madison	79.0	...	...	23.7	47.4	7.9
Montgomery	441.2	...	77.9	275.1	83.0	5.2
Newton	549.2	16.5	98.9	263.6	170.3	...
Orange	124.5	...	...	73.5	45.3	5.7
Polk	539.8	17.2	178.0	235.4	97.6	11.5
Sabine	253.4	26.4	79.2	132.0	15.8	...
San Augustine	283.0	18.5	110.7	116.9	36.9	...
San Jacinto	290.9	5.9	59.4	148.4	77.2	...
Trinity	347.2	6.4	90.0	205.7	45.0	...
Tyler	518.2	11.9	59.6	303.7	131.0	11.9
Walker	305.6	15.0	65.1	145.3	80.2	...
Waller	82.1	...	7.5	52.2	22.4	...
All counties	6666.5	199.8	1211.1	3288.7	1825.3	141.6

¹ Chambers included in Jefferson.

Table 7--Area of timberland by forest type and ownership class, Southeast Texas, 1986

Forest type ¹	All ownerships	National forest	Other public	Forest industry	Forest industry- leased	Other private
----- Thousand acres -----						
Longleaf-slash pine	255.3	11.4	...	220.7	...	23.3
Loblolly-shortleaf pine	2746.0	386.6	26.6	1209.1	...	1123.7
Softwood total	3001.4	398.0	26.6	1429.7	...	1147.0
Oak-pine	1333.9	52.4	6.1	666.0	...	609.3
Oak-hickory	1498.3	56.6	...	607.1	19.3	815.3
Oak-gum-cypress	827.1	23.7	12.1	345.8	5.9	439.6
Elm-ash-cottonwood	5.8	...	...	...	...	5.8
Hardwood total	3665.1	132.7	18.2	1619.0	25.2	1870.1
All types	6666.5	530.7	44.8	3048.7	25.2	3017.1

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

Table 8--Area of timberland, by ownership and stocking classes of growing-stock trees, Southeast Texas, 1986

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
----- Thousand acres -----						
National forest	530.7	28.6	216.9	252.5	32.6	...
Other public	44.8	...	11.2	22.2	11.4	...
Forest industry	3048.7	129.5	525.9	1547.4	781.0	65.0
Forest industry-leased	25.2	...	...	11.4	13.8	...
Other private	3017.1	41.7	457.2	1455.1	986.5	76.6
All ownerships	6666.5	199.8	1211.1	3288.7	1825.3	141.6

Table 9--Area of timberland by forest type and stand-size class,
Southeast Texas, 1986

Forest type ¹	All classes	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling- seedling	
----- Thousand acres -----					
Longleaf-slash pine	255.3	77.5	127.2	50.6	...
Loblolly-shortleaf pine	2746.0	1706.9	427.9	605.3	6.0
Softwood total	3001.4	1784.4	555.1	655.9	6.0
Oak-pine	1333.9	694.7	252.7	375.1	11.4
Oak-hickory	1498.3	520.4	378.3	513.4	86.2
Oak-gum-cypress	827.1	544.8	141.5	102.8	38.0
Elm-ash-cottonwood	5.8	5.8	...	...	...
Hardwood total	3665.2	1765.7	772.6	991.2	135.6
All types	6666.5	3550.0	1327.8	1647.1	141.6

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

Table 10--Number of live trees on timberland by species and diameter class, Southeast Texas, 1986

Species	Diameter class (inches at breast height)												
	All classes	1.0- 2.9	3.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0 & larger
----- Thousand trees -----													
Loblolly-shortleaf pine	108233	38621	30025	17526	12295	5036	2634	1318	552	140	49	38	...
Loblolly-shortleaf pine	1080350	503115	232788	131206	74392	45721	34124	23881	16521	8708	4957	4758	177
Cypress	4156	...	601	1285	1100	224	255	200	173	127	70	111	8
Other softwoods	10122	5807	1781	414	1049	431	225	231	96	58	12	17	...
Total softwoods	1202861	547544	265195	150431	88836	51411	37238	25630	17343	9034	5089	4925	185
Select white oaks	48094	24241	8501	5383	3263	2176	1165	1211	890	465	266	492	41
Select red oaks	55455	38929	6410	3837	1808	1364	812	780	294	335	334	441	111
Other white oaks	150171	68971	27784	21378	12181	8670	4424	2754	1811	957	587	577	77
Other red oaks	343621	215978	45631	24652	18655	12891	8700	6017	4302	2763	1610	2117	306
Hickory	60656	34646	11280	4431	3660	3125	1587	985	457	237	94	146	8
Hard maple	365	...	...	158	53	39	87	...	...	27	...	...	...
Soft maple	82374	61154	10952	5382	2950	1027	470	185	99	100	11	45	...
Beech	5028	1472	1030	...	272	472	444	456	360	213	107	184	19
Sweetgum	453129	296998	77512	36925	18930	10726	5938	2707	1513	717	604	498	61
Tupelo-blackgum	190436	134224	30363	11577	5923	2525	1869	1696	1095	478	286	353	46
Ash	67793	52381	6040	4011	1580	1271	891	696	391	308	100	111	14
Cottonwood-aspen	1113	543	543	...	...	...	...	23	...	...	...	5	...
Basswood	3426	1092	2183	...	...	70	...	69	12	...	...	...	...
Black walnut	1922	1698	...	88	...	89	28	16	...	...	...	...	3
Other hardwoods	509480	373422	83546	25918	12148	6441	3540	1926	1046	671	326	452	45
Total hardwoods	1973063	1305748	311774	143739	81424	50885	29957	19520	12272	7270	4323	5421	731
Noncommercial	351486	266380	57056	18568	6374	1830	681	346	179	35	8	29	...
All species	3527411	2119672	634025	312738	176634	104126	67876	45495	29794	16338	9421	10375	916

Table 11--Number of growing-stock trees on timberland by species and diameter class, Southeast Texas, 1986

Species	Diameter class (inches at breast height)												
	All classes	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
----- Thousand trees -----													
Longleaf-slash pines	94134	32200	24701	16104	11920	4544	2605	1294	552	127	49	38	...
Shortleaf-loblolly pine	884470	369123	186041	121721	70913	44464	33778	23737	16438	8558	4897	4634	165
Cypress	3226	...	...	1285	857	181	255	180	173	127	70	89	8
Other softwoods	8091	4772	1781	291	591	281	102	159	77	13	12	9	...
Total softwoods	989921	406095	212523	139402	84281	49471	36740	25371	17241	8825	5029	4769	173
Select white oaks	25678	8164	5200	3802	2862	2008	1023	1022	673	366	225	305	27
Select red oaks	31550	19699	3649	3148	1360	1125	676	678	219	296	255	363	82
Other white oaks	52579	10030	8107	12624	8713	6298	2897	1613	1131	576	259	317	13
Other red oaks	138901	59507	20252	17694	14080	10306	5888	4318	2874	1862	987	1038	96
Hickory	23030	9846	5226	1948	1854	2019	915	660	308	82	64	107	...
Hard maple	228	...	...	158	...	39	31	...	...	...	...	...	...
Soft maple	22987	13306	4131	2615	2102	492	233	39	34	27	...	8	...
Beech	1802	484	...	...	128	237	271	298	206	97	48	32	...
Sweetgum	202759	108202	36099	24600	15660	8532	4962	2195	1127	550	476	317	39
Tupelo-blackgum	49685	22107	11115	6371	4545	1841	1212	1109	733	314	196	142	...
Ash	22497	14633	2193	2232	1068	809	602	477	263	172	20	26	4
Cottonwood-aspen	571	543	...	...	...	...	...	23	...	...	...	5	...
Basswood	1114	...	1092	...	...	...	...	22	...	...	...	...	...
Black walnut	80	...	...	...	...	52	28	...	...	...	...	...	...
Other hardwoods	136482	76402	31550	13150	7013	3921	1971	1152	557	380	173	207	8
Total hardwoods	709942	342923	128614	88341	59384	37678	20709	13605	8125	4722	2705	2868	268
All species	1699863	749018	341137	227743	143666	87149	57449	38975	25366	13548	7734	7637	441

Table 12--Volume of growing stock on timberland by species and diameter class, Southeast Texas, 1986

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-slash pines	305.6	45.0	75.5	59.4	54.8	36.5	21.3	6.8	3.3	3.0	...
Shortleaf-loblolly pine	4882.3	316.7	457.8	599.6	735.5	748.2	705.4	470.1	344.1	474.3	30.5
Cypress	43.7	2.3	4.1	2.3	4.2	4.6	6.7	6.0	3.9	8.0	1.5
Other softwoods	11.8	0.6	2.2	2.3	1.4	2.3	2.0	0.4	0.3	0.3	...
Total softwoods	5243.4	364.6	539.6	663.6	796.0	791.6	735.4	483.3	351.6	485.6	32.1
Select white oaks	164.3	10.2	15.7	20.8	18.8	23.9	21.7	15.7	11.2	22.5	3.8
Select red oaks	136.3	8.0	7.6	12.3	11.3	17.3	6.8	12.9	14.2	32.2	13.8
Other white oaks	251.3	27.8	41.0	50.2	37.3	27.1	26.0	16.3	8.8	15.4	1.3
Other red oaks	719.4	48.6	77.4	106.3	94.1	97.8	85.8	76.5	49.4	71.2	12.1
Hickory	80.2	4.3	9.2	16.6	13.2	13.5	8.4	3.5	3.4	8.0	...
Hard maple	1.5	0.3	...	0.5	0.7	...	...	...	...	...	...
Soft maple	32.1	8.4	11.4	5.0	3.8	1.1	0.9	1.2	...	0.3	...
Beech	29.8	...	0.6	2.7	3.6	7.3	6.2	4.5	2.9	2.0	...
Sweetgum	508.0	60.9	89.0	90.1	86.2	58.6	40.1	25.7	25.8	26.0	5.6
Tupelo-blackgum	156.8	14.6	22.6	18.9	19.4	26.0	22.4	13.0	9.7	10.2	...
Ash	55.9	5.4	6.0	8.4	9.5	10.4	7.8	6.1	0.7	1.2	0.3
Cottonwood-aspen	1.1	...	...	...	...	0.6	...	...	...	0.5	...
Basswood	0.3	...	...	...	...	0.3	...	...	...	...	...
Black walnut	0.5	...	...	0.3	0.2	...	...	...	...	...	...
Other hardwoods	214.8	31.2	37.0	36.2	29.1	24.2	16.6	13.5	8.2	17.1	1.6
Total hardwoods	2352.5	219.8	317.5	368.3	327.3	308.2	242.9	188.9	134.3	206.8	38.5
All species	7595.9	584.4	857.1	1031.9	1123.3	1099.8	978.4	672.2	485.9	692.4	70.6

Table 13--Volume of growing stock in the saw-log portion of sawtimber¹ trees on timberland by species and diameter class, Southeast Texas, 1986

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	164.7	47.8	49.6	34.3	20.3	6.5	3.2	2.9	...
Shortleaf-loblolly pine	3814.5	487.2	668.8	706.8	675.6	453.3	332.8	460.3	29.7
Cypress	34.6	1.7	3.5	4.1	6.2	5.9	3.8	7.8	1.5
Other softwoods	7.6	1.7	1.2	2.1	1.8	0.4	0.3	0.3	...
Total softwoods	4021.4	538.4	723.1	747.3	703.9	466.0	340.0	471.3	31.3
Select white oaks	102.1	...	15.1	20.4	19.0	14.2	9.9	19.7	3.8
Select red oaks	94.9	...	7.6	15.1	6.2	11.7	12.8	28.9	12.6
Other white oaks	119.3	...	32.1	25.0	23.5	15.0	8.4	14.1	1.2
Other red oaks	422.4	...	72.0	84.2	77.0	67.5	43.8	66.5	11.3
Hickory	44.5	...	11.3	11.5	7.8	3.4	3.1	7.4	...
Hard maple	0.6	...	0.6	...	...	...	...	...	...
Soft maple	5.7	...	2.9	0.7	0.8	1.0	...	0.3	...
Beech	24.2	...	2.9	6.6	5.9	4.3	2.6	1.8	...
Sweetgum	224.7	...	60.8	49.5	36.9	24.0	23.5	24.6	5.3
Tupelo-blackgum	87.6	...	14.4	22.3	20.1	11.7	9.4	9.7	...
Ash	29.6	...	7.4	8.4	6.7	5.3	0.5	1.1	0.2
Cottonwood-aspen	1.0	...	...	0.6	...	...	...	0.5	...
Basswood	0.3	...	...	0.3	...	...	...	...	...
Black walnut	0.2	...	0.2	...	...	...	...	...	...
Other hardwoods	95.2	...	22.9	21.1	13.9	11.5	7.8	16.3	1.6
Total hardwoods	1252.2	...	250.3	265.7	217.9	169.5	122.0	190.8	36.0
All species	5273.6	538.4	973.4	1013.0	921.8	635.6	462.0	662.2	67.2

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

Table 14--Volume of sawtimber on timberland by species and diameter class, Southeast Texas, 1986

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	968.5	261.4	299.8	205.4	122.5	41.6	19.6	18.2	...
Shortleaf-loblolly pine	23491.3	2710.9	4035.6	4369.3	4237.0	2845.3	2121.3	2968.9	203.1
Cypress	197.8	8.3	17.6	23.1	36.2	34.5	20.8	47.0	10.2
Other softwoods	39.3	8.5	6.0	10.4	10.5	1.8	1.0	1.1	...
Total softwoods	24696.9	2989.2	4358.9	4608.3	4406.2	2923.2	2162.6	3035.2	213.3
Select white oaks	627.0	...	87.9	118.0	117.0	92.7	61.8	126.9	22.8
Select red oaks	590.3	...	40.3	87.0	35.6	72.1	79.7	191.3	84.4
Other white oaks	705.3	...	176.5	143.8	138.9	91.7	53.5	92.8	8.1
Other red oaks	2546.1	...	394.6	483.2	462.7	420.3	276.8	434.2	74.3
Hickory	269.9	...	64.4	67.7	49.9	21.2	20.3	46.4	...
Hard maple	3.7	...	3.7	...	...	...	...	...	...
Soft maple	33.1	...	15.9	4.6	4.3	6.2	...	2.2	...
Beech	148.8	...	16.5	39.3	35.7	28.0	17.8	11.5	...
Sweetgum	1322.6	...	332.9	287.1	219.4	146.0	144.3	156.8	36.0
Tupelo-blackgum	498.7	...	75.1	124.6	113.5	68.7	56.0	60.9	...
Ash	168.9	...	39.8	45.7	39.9	31.5	3.3	7.4	1.3
Cottonwood-aspen	6.7	...	...	3.3	...	...	...	3.4	...
Basswood	1.4	...	...	1.4	...	...	...	...	...
Black walnut	1.0	...	1.0	...	...	...	...	...	...
Other hardwoods	578.0	...	127.5	124.7	85.5	74.1	48.6	105.5	12.2
Total hardwoods	7501.6	...	1376.1	1530.2	1302.4	1052.5	761.9	1239.3	239.1
All species	32198.5	2989.2	5734.9	6138.6	5708.6	3975.7	2924.6	4274.5	452.5

Table 15--Volume of growing stock and sawtimber on timberland by county and species group, Southeast Texas, 1986

County	Growing stock						Sawtimber																		
	All species	Softwood			Hardwood		All species	Softwood			Hardwood														
		Pine		Other	Soft ¹	Hard ²		Pine		Other	Soft ¹	Hard ²													
		Planted	Natural					Planted	Natural																
----- Million cubic feet -----													----- Million board feet -----												
Angelina	553.0	64.2	390.0	0.4	34.1	64.3	2252.5	178.8	1794.4	...	86.3	193.0													
Grimes	94.6	4.0	42.8	5.2	5.8	36.7	312.0	12.4	138.4	15.0	9.8	136.4													
Hardin	316.3	40.2	159.1	2.0	33.7	81.4	1154.5	90.5	687.5	6.1	67.2	303.3													
Harris	203.9	6.5	133.0	0.9	32.4	31.1	884.8	22.9	632.9	5.1	109.4	114.5													
Houston	561.4	33.4	358.5	3.2	65.6	100.6	2581.0	147.2	1904.1	14.1	169.6	345.9													
Jasper	641.7	75.3	354.2	5.2	71.4	135.6	2617.9	130.3	1792.3	20.2	165.6	509.5													
Jefferson ³	107.5	...	56.3	6.2	24.2	20.8	489.7	...	305.6	24.2	82.9	77.0													
Leon	138.7	...	26.1	1.5	25.6	85.6	441.5	...	126.8	6.6	77.0	231.1													
Liberty	444.6	16.0	144.5	8.3	126.2	149.6	1737.3	22.7	766.9	35.8	380.7	531.2													
Madison	53.3	...	10.3	0.9	15.5	26.6	170.4	...	42.7	1.0	33.6	93.2													
Montgomery	647.1	18.7	475.9	...	52.0	100.4	2879.9	35.1	2400.1	...	116.5	328.1													
Newton	540.9	104.6	247.1	4.6	73.1	111.4	2066.8	292.2	1156.4	22.2	223.9	372.2													
Orange	149.7	9.8	76.7	2.9	14.2	46.1	689.6	45.5	414.9	11.2	40.8	177.2													
Polk	570.7	26.1	422.6	2.0	44.8	75.2	2469.0	28.9	2050.6	9.1	137.4	243.0													
Sabine	440.6	26.1	321.5	...	24.3	68.6	2134.1	145.2	1669.0	...	70.8	249.1													
San Augustine	312.3	45.0	179.8	...	34.2	53.2	1298.7	150.9	921.1	...	72.1	154.7													
San Jacinto	366.6	13.5	244.0	9.9	51.1	48.1	1554.9	30.2	1194.9	54.4	129.4	145.9													
Trinity	454.0	22.9	346.2	...	30.5	54.4	2202.4	10.6	1868.9	...	104.4	218.4													
Tyler	504.2	27.2	279.4	2.0	71.4	124.2	2113.9	26.9	1417.6	10.8	214.9	443.8													
Walker	382.9	14.4	290.8	0.3	23.6	53.9	1667.6	17.6	1406.3	1.4	68.2	174.2													
Waller	111.9	...	81.0	...	8.1	22.8	480.0	...	380.6	...	28.4	70.9													
All counties	7595.9	548.1	4639.9	55.5	861.9	1490.6	32198.5	1387.9	23071.9	237.1	2389.1	5112.5													

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

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

³ Chambers included in Jefferson.

Table 16--Volume of timber on timberland by class of timber and species group,
Southeast Texas, 1986

Class of timber	All species	Softwood			Hardwood	
		Pine Planted	Natural	Other	Soft ¹	Hard ²
		----- Million cubic feet -----				
Sawtimber trees:						
Saw-log portion	5273.6	237.0	3742.1	42.2	405.5	846.7
Upper-stem portion	512.5	27.9	285.9	4.1	71.2	123.5
Total	5786.1	264.9	4028.0	46.3	476.7	970.2
Poletimber trees	1809.8	283.2	611.8	9.2	385.2	520.4
All growing-stock trees	7595.9	548.1	4639.9	55.5	861.9	1490.6
Rough trees:						
Sawtimber size	430.2	6.8	31.3	6.0	103.6	282.5
Poletimber size	364.4	11.1	30.8	3.0	113.7	205.8
Total	794.6	17.8	62.1	9.0	217.3	488.3
Rotten trees:						
Sawtimber size	149.9	...	5.2	1.3	43.4	100.0
Poletimber size	12.7	...	0.2	0.2	4.2	8.0
Total	162.6	...	5.4	1.5	47.6	108.0
Salvable dead trees:						
Sawtimber size	132.9	2.5	97.2	...	4.1	29.0
Poletimber size	38.5	5.3	19.1	0.2	3.5	10.3
Total	171.3	7.8	116.3	0.2	7.6	39.3
All classes	8724.4	573.7	4823.8	66.2	1134.4	2126.3

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

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

Table 17--Volume of live trees and growing stock on timberland by ownership class and species group, Southeast Texas, 1986

Ownership class	Live trees						Growing stock					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine Planted	Natural	Other	Soft ¹	Hard ²		Pine Planted	Natural	Other	Soft ¹	Hard ²
----- Million cubic feet -----												
ational forest	1276.2	48.4	1030.3	...	71.6	125.9	1222.3	47.8	1018.1	...	56.4	100.0
ther public	81.4	11.4	42.6	...	8.2	19.2	75.3	11.4	41.9	...	6.8	15.3
orest industry	2996.4	401.5	1393.5	37.0	421.4	743.0	2650.1	390.5	1376.9	33.1	318.3	531.2
rest industry-leased	23.2	...	0.2	0.7	1.1	21.1	19.3	...	0.2	0.6	1.1	17.3
ther private	4175.8	104.6	2240.7	28.3	624.4	1177.7	3628.8	98.3	2202.6	21.7	479.3	826.8
11 ownerships	8553.1	565.9	4707.4	66.0	1126.8	2086.9	7595.9	548.1	4639.9	55.5	861.9	1490.6

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

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, Southeast Texas, 1986

County	Growing stock						Sawtimber																		
	All species	Softwood			Hardwood		All species	Softwood			Hardwood														
		Pine Planted	Natural	Other	Soft ¹	Hard ²		Pine Planted	Natural	Other	Soft ¹	Hard ²													
----- Million cubic feet -----													----- Million board feet -----												
Angelina	27.7	5.8	18.2	...	1.4	2.2	119.4	20.2	87.1	...	3.7	8.4													
Crimes	7.9	1.4	5.1	0.1	0.3	1.1	32.4	6.0	21.2	0.2	0.9	4.1													
Hardin	16.5	5.5	8.3	...	0.8	1.8	67.5	16.7	37.8	0.2	1.5	11.4													
Harris	7.1	...	6.3	...	0.6	0.2	41.3	...	37.8	...	2.7	0.8													
Houston	26.4	3.6	16.0	0.1	1.5	5.2	148.9	18.1	103.1	0.9	4.1	22.6													
Jasper	32.7	7.0	17.3	...	3.0	5.4	141.2	13.6	96.0	0.5	7.5	23.7													
Jefferson ³	3.2	...	2.7	0.2	0.3	0.1	23.3	...	17.2	1.2	2.2	2.7													
Leon	6.8	...	2.9	...	0.3	3.6	37.8	...	16.4	0.5	2.0	19.0													
Liberty	13.8	1.3	4.1	0.2	4.0	4.3	66.4	2.1	29.2	0.6	14.6	19.8													
Madison	1.1	...	0.9	...	0.2	...	1.1	...	3.5	...	-0.9	-1.5													
Montgomery	23.6	1.7	17.4	...	2.0	2.5	130.2	3.7	108.2	...	6.6	11.6													
Newton	29.9	10.1	12.5	0.1	1.9	5.3	121.8	28.7	67.7	0.7	5.5	19.1													
Orange	6.1	1.4	3.7	0.1	0.3	0.7	37.7	7.7	22.7	0.1	1.5	5.7													
Polk	35.5	6.1	23.5	0.1	1.9	3.9	158.8	16.1	124.8	0.4	4.9	12.6													
Sabine	17.4	1.3	12.6	...	0.9	2.7	100.9	7.0	79.0	...	2.8	12.2													
San Augustine	14.8	4.1	7.2	...	1.4	2.1	64.9	11.5	43.7	...	2.5	7.1													
San Jacinto	17.9	3.2	10.9	...	1.8	1.9	90.3	9.2	68.5	1.3	5.0	6.3													
Trinity	22.8	4.6	16.4	...	0.9	1.0	121.9	13.2	99.5	...	4.0	5.3													
Tyler	23.6	4.9	12.0	0.1	1.8	4.8	105.7	10.8	70.8	0.6	5.8	17.7													
Walker	17.7	1.9	13.5	...	1.0	1.2	81.6	2.8	72.3	...	2.2	4.3													
Waller	5.2	...	3.8	...	0.4	1.1	28.1	...	23.1	...	2.1	3.0													
All counties	357.7	63.8	215.1	1.1	26.7	51.0	1721.2	187.5	1229.5	7.3	81.0	215.9													

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

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

³ Chambers included in Jefferson.

Table 19--Average annual removals of growing stock and sawtimber by county and species group, Southeast Texas, 1986

County	Growing stock						Sawtimber																		
	All species	Softwood			Hardwood		All species	Softwood			Hardwood														
		Pine		Other	Soft ¹	Hard ²		Pine		Other	Soft ¹	Hard ²													
		Planted	Natural					Planted	Natural																
----- Million cubic feet -----													----- Million board feet -----												
Angelina	19.2	8.1	6.6	...	0.9	3.5	91.0	46.6	31.8	...	1.7	10.9													
Grimes	10.7	4.1	6.2	...	...	0.4	48.0	18.0	28.9	...	...	1.1													
Hardin	33.5	13.5	9.0	...	2.1	8.8	120.0	52.5	40.1	...	4.4	23.0													
Harris	9.2	...	6.7	...	0.6	2.0	40.5	...	33.5	...	0.9	6.0													
Houston	16.2	6.3	7.8	...	0.4	1.7	69.8	29.4	36.5	...	0.6	3.2													
Jasper	24.8	3.8	16.6	...	1.4	2.9	87.5	7.6	68.4	...	3.8	7.6													
Jefferson ³	2.6	...	1.9	...	0.2	0.5	11.4	...	7.7	...	1.0	2.7													
Leon	3.0	...	1.9	...	0.2	0.9	12.4	...	9.2	...	0.8	2.4													
Liberty	8.6	0.3	3.6	...	1.4	3.3	37.4	1.8	19.5	...	4.6	11.6													
Madison	...	...	...	...	...	...	...	...	...	...	...	...													
Montgomery	25.1	0.8	21.5	...	0.6	2.2	109.7	3.8	99.1	...	1.1	5.7													
Newton	37.9	14.6	14.1	...	1.6	7.6	160.7	63.8	69.8	...	4.2	22.9													
Orange	3.8	2.1	1.3	...	0.2	0.2	16.7	8.7	6.6	...	0.6	0.9													
Polk	51.8	18.9	26.6	0.1	1.7	4.5	216.2	85.8	116.4	...	2.5	11.6													
Sabine	15.4	4.0	8.0	...	1.0	2.4	64.5	18.1	37.9	...	2.3	6.2													
San Augustine	16.3	6.9	6.0	...	0.9	2.4	57.8	23.0	25.4	...	1.6	7.9													
San Jacinto	24.9	8.2	14.2	...	1.0	1.5	114.1	34.5	71.7	...	2.9	5.0													
Trinity	21.4	7.3	13.5	...	0.3	0.2	94.6	31.1	62.8	...	0.2	0.6													
Tyler	38.0	12.9	16.8	...	2.5	5.9	169.7	57.1	90.4	...	5.5	16.7													
Walker	18.1	3.5	13.3	...	0.4	0.9	84.1	16.6	64.3	...	1.6	1.6													
Waller	3.4	...	3.4	...	...	...	15.6	...	15.6	...	...	...													
All counties	383.8	115.3	199.0	0.1	17.5	52.0	1621.6	498.3	935.5	...	40.2	147.5													

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

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

³ Chambers included in Jefferson.

Table 20--Average net annual growth and average annual removals of growing stock on timberland, Southeast Texas, 1986

Species	Growth	Removals
----- Million cubic feet -----		
Yellow pines	278.9	314.2
Other softwoods	1.1	0.1
Total softwoods	280.0	314.3
Select white-red oaks	11.6	10.9
Other white-red oaks	32.9	34.8
Hickory	1.8	3.1
Hard maple	...	...
Sweetgum	17.8	11.1
Ash-walnut-black cherry	2.0	1.2
Other hardwoods	11.6	8.3
Total hardwoods	77.8	69.5
All species	357.7	383.8

Table 21--Average net annual growth and average annual removals of sawtimber on timberland, Southeast Texas, 1986

Species	Growth	Removals
----- Million board feet -----		
Yellow pines	1417.0	1433.9
Other softwoods	7.3	...
Total softwoods	1424.3	1433.9
Select white-red oaks	50.9	35.9
Other white-red oaks	142.7	96.0
Hickory	7.6	7.1
Sweetgum	51.3	26.0
Ash-walnut-black cherry	6.6	4.7
Other hardwoods	37.8	18.0
Total hardwoods	297.0	187.7
All species	1721.2	1621.6

Table 22--Average annual mortality of growing stock and sawtimber on timberland by species, Southeast Texas, 1986

Species	Growing stock	Sawtimber
- Million cubic feet - - Million board feet -		
Yellow pines	43.5	158.4
Other softwoods	0.1	0.4
Total softwoods	43.6	158.7
Select white-red oaks	2.1	7.4
Other white-red oaks	12.5	42.3
Hickory	1.0	3.3
Sweetgum	2.9	6.5
Ash-walnut-black cherry	0.6	1.9
Other hardwoods	3.9	11.9
Total hardwoods	23.0	73.5
All species	66.6	232.2

Table 23--Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, Southeast Texas, 1986

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine Planted	Natural	Other	Soft ¹	Hard ²		Pine Planted	Natural	Other	Soft ¹	Hard ²
----- Million cubic feet -----												
National forest	37.4	5.6	27.3	...	1.6	2.9	26.7	11.6	13.2	...	0.4	1.5
Other public	3.0	0.4	1.5	...	0.5	0.6	1.0	0.1	0.9	...	...	...
Forest industry	163.0	50.9	78.1	0.6	11.0	22.4	253.3	99.9	106.1	0.1	11.7	35.6
Forest industry-leased	0.5	...	...	...	...	0.4	1.2	...	0.2	...	...	1.0
Other private	153.9	6.9	108.2	0.5	13.6	24.7	101.5	3.6	78.7	...	5.4	13.9
All ownerships	357.7	63.8	215.1	1.1	26.7	51.0	383.8	115.3	199.0	0.1	17.5	52.0

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

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

Table 24--Average net annual growth and average annual removals of sawtimber on timberland by ownership class and species group, Southeast Texas, 1986

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine Planted	Natural	Other	Soft ¹	Hard ²		Pine Planted	Natural	Other	Soft ¹	Hard ²
----- Million board feet -----												
National forest	229.5	13.7	197.5	...	6.6	11.7	124.9	49.9	68.7	...	0.9	5.3
Other public	14.7	3.2	8.2	...	1.2	2.1	5.0	0.8	4.2	...	...	...
Forest industry	681.9	144.0	411.7	4.1	35.3	86.8	1064.7	433.3	506.5	...	25.0	99.9
Forest industry-leased	2.0	...	0.1	...	...	1.9	4.0	...	1.0	...	...	3.0
Other private	793.1	26.6	612.0	3.2	37.9	113.5	423.1	14.4	355.1	...	14.3	39.3
All ownerships	1721.2	187.5	1229.5	7.3	81.0	215.9	1621.6	498.3	935.5	...	40.2	147.5

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

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

Table 25-Volume of sawtimber on timberland by species and tree grade, Southeast Texas, 1986

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4
----- Million board feet -----					
Yellow pines	24459.8	4792.6	5965.0	13702.2	...
Cypress	197.8	101.8	36.3	59.7	...
Redcedar	39.3	39.3	...	...	...
Total softwoods	24696.9	4933.7	6001.3	13761.9	...
Select white-red oaks	1217.3	170.5	262.8	482.0	302.0
Other white-red oaks	3251.4	89.9	346.3	1350.2	1465.0
Hickory	269.9	21.2	43.1	131.2	74.3
Hard maple	3.7	...	...	...	3.7
Sweetgum	1322.6	148.3	222.1	669.2	283.0
Tupelo and blackgum	498.7	67.2	170.0	183.7	77.8
Ash-walnut-black cherry	173.1	15.3	56.2	89.3	12.3
Other hardwoods	764.9	46.9	108.9	336.1	273.0
Total hardwoods	7501.6	559.3	1209.5	3241.7	2491.2
All species	32198.5	5493.0	7210.8	17003.5	2491.2

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Table 26-Volume of softwood growing stock on timberland by forest type, Southeast Texas, 1986

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 -----								
Angelina	454.6	19.0	...	44.7	331.2	47.6	7.5	4.7
Grimes	52.1	...	...	4.0	37.8	8.4	1.8	...
Hardin	201.2	33.4	5.8	6.4	95.2	45.3	5.1	10.1
Harris	140.4	...	...	6.5	103.6	17.8	8.4	4.0
Houston	395.1	2.2	...	29.6	283.2	66.7	12.8	0.6
Jasper	434.7	55.8	22.8	15.4	212.4	102.6	11.1	14.5
Jefferson ¹	62.5	...	...	...	47.5	6.8	2.1	6.2
Leon	27.5	...	...	...	19.5	3.3	4.6	...
Liberty	168.8	...	...	16.6	52.2	41.5	44.2	14.4
Madison	11.2	...	...	...	8.7	1.6	0.9	...
Montgomery	494.7	...	...	18.7	351.9	102.2	17.8	4.0
Newton	356.3	37.9	22.0	57.3	164.5	45.8	23.6	5.2
Orange	89.4	4.9	...	...	32.6	33.5	...	18.3
Polk	450.7	...	20.2	22.9	345.5	56.0	1.2	4.8
Sabine	347.7	12.9	...	12.5	258.4	46.6	17.3	...
San Augustine	224.9	...	...	43.8	154.8	18.0	7.2	1.1
San Jacinto	267.4	...	...	8.8	185.7	51.2	12.2	9.5
Trinity	369.1	...	10.7	21.8	291.4	40.5	3.2	1.6
Tyler	308.6	10.5	22.3	12.8	124.9	112.0	24.3	1.9
Walker	305.5	...	...	14.4	252.3	32.1	6.6	...
Waller	81.0	...	...	...	69.3	11.7	...	...
All counties	5243.4	176.7	103.8	336.3	3422.6	891.3	211.9	101.0

¹ Chambers included in Jefferson.

Table 27--Volume of hardwood growing stock on timberland by forest type, Southeast Texas, 1986

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				
----- Million cubic feet -----									
Angelina	98.4	...	...	3.7	39.6	28.8	9.7	16.5	...
Grimes	42.5	...	...	...	1.5	3.5	19.1	18.4	...
Hardin	115.1	0.5	...	0.4	9.6	28.2	33.0	43.5	...
Harris	63.5	...	...	1.7	5.8	8.0	40.2	7.8	...
Houston	166.2	0.4	...	0.9	39.0	39.9	26.6	59.6	...
Jasper	207.0	2.1	1.1	0.8	26.4	73.6	33.4	69.6	...
Jefferson ¹	45.0	...	...	...	5.0	7.5	4.3	28.1	...
Leon	111.2	...	...	...	1.2	0.4	75.4	30.6	3.7
Liberty	275.8	...	...	...	4.5	34.1	93.3	143.9	...
Madison	42.1	...	...	...	0.7	1.7	28.9	10.9	...
Montgomery	152.4	...	...	0.3	42.7	62.3	32.5	14.5	...
Newton	184.6	1.5	1.7	4.5	27.7	27.5	73.9	47.8	...
Orange	60.3	...	...	...	9.0	14.5	9.9	26.9	...
Polk	120.0	...	...	2.3	32.6	30.6	25.5	29.0	...
Sabine	92.9	...	...	0.3	29.8	29.3	33.5	...	...
San Augustine	87.4	...	...	1.7	25.8	5.9	4.7	49.3	...
San Jacinto	99.2	...	...	0.3	23.4	24.4	34.3	16.8	...
Trinity	84.8	...	0.3	1.0	22.2	14.3	18.8	28.3	...
Tyler	195.6	...	2.8	3.9	15.7	67.0	46.0	60.3	...
Walker	77.4	...	...	1.8	22.3	13.8	23.4	16.2	...
Waller	30.9	...	...	...	11.0	3.9	8.7	7.3	...
All counties	2352.5	4.4	5.9	23.5	395.4	519.3	675.2	725.1	3.7

¹ Chambers included in Jefferson.

Table 28--Volume of softwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, Southeast Texas, 1986

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 -----								
Angelina	335.6	14.6	...	16.3	255.2	38.4	6.9	4.1
Grimes	30.8	...	...	2.5	18.9	7.7	1.6	...
Hardin	129.8	14.1	2.3	2.2	62.4	38.4	2.7	7.7
Harris	113.0	...	...	4.1	84.9	13.6	7.5	2.8
Houston	315.7	2.0	...	21.2	231.9	53.1	7.5	...
Jasper	320.0	17.4	19.1	5.3	169.3	88.1	8.2	12.5
Jefferson ¹	53.0	...	...	...	40.7	6.7	1.3	4.4
Leon	22.7	...	...	...	16.4	2.3	3.9	...
Liberty	133.5	...	...	5.3	40.3	37.9	38.1	11.9
Madison	8.0	...	...	...	6.6	1.0	0.3	...
Montgomery	399.8	...	...	6.2	293.1	83.6	13.1	3.9
Newton	239.7	7.9	10.1	32.4	129.9	34.3	21.2	3.9
Orange	75.7	2.9	...	...	28.1	28.7	...	15.9
Polk	334.9	...	15.5	1.9	266.9	45.6	0.7	4.3
Sabine	295.4	12.1	...	10.6	216.5	41.6	14.6	...
San Augustine	174.1	...	...	25.2	127.8	14.6	5.9	0.5
San Jacinto	198.1	...	...	...	142.4	38.3	9.1	8.4
Trinity	299.2	...	6.9	2.3	256.8	29.2	2.9	1.2
Tyler	237.9	0.8	18.4	3.4	101.5	92.2	19.9	1.8
Walker	239.2	...	...	3.4	202.1	28.0	5.6	...
Waller	65.4	...	...	...	55.9	9.5	...	...
All counties	4021.4	71.9	72.3	142.4	2747.7	732.9	171.0	83.3

¹ Chambers included in Jefferson.

Table 29--Volume of hardwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, Southeast Texas, 1986

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				
----- Million cubic feet -----									
Angelina	48.3	...	...	1.9	14.9	16.7	4.0	10.8	...
Grimes	24.4	...	...	...	0.4	1.6	8.6	13.8	...
Hardin	61.3	...	...	0.3	1.1	10.9	20.0	29.1	...
Harris	38.4	...	...	1.1	3.9	1.5	27.5	4.4	...
Houston	84.1	0.3	...	0.4	14.8	18.3	10.8	39.5	...
Jasper	112.7	0.6	0.3	...	7.3	37.1	17.2	50.1	...
Jefferson ¹	26.9	...	...	...	2.0	3.8	3.0	18.2	...
Leon	52.0	...	...	...	0.3	0.4	32.2	16.0	3.1
Liberty	150.4	...	...	...	1.7	14.2	42.9	91.6	...
Madison	21.2	...	...	...	0.3	0.4	14.3	6.2	...
Montgomery	74.4	...	...	...	19.8	31.4	16.9	6.3	...
Newton	100.1	0.5	1.2	1.5	11.0	9.9	40.9	35.2	...
Orange	35.1	...	...	...	3.8	6.5	8.5	16.3	...
Polk	63.8	...	...	1.1	15.0	11.0	15.2	21.6	...
Sabine	53.7	...	...	...	14.2	18.8	20.7	...	...
San Augustine	39.5	...	...	0.6	8.2	2.1	1.6	27.0	...
San Jacinto	47.4	...	...	...	8.8	6.5	20.7	11.3	...
Trinity	51.0	...	...	0.6	9.1	6.7	10.6	24.0	...
Tyler	109.7	...	1.0	1.5	5.8	28.0	29.0	44.3	...
Walker	41.1	...	...	1.4	8.9	7.8	12.8	10.4	...
Waller	16.8	...	...	...	2.8	1.8	7.5	4.8	...
All counties	1252.2	1.4	2.6	10.3	154.2	235.3	364.8	480.5	3.1

¹ Chambers included in Jefferson.

Table 30--Volume of timber on timberland by county, class of timber and species group, Southeast Texas, 1986

County	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
----- Million cubic feet -----							
Angelina	586.0	454.6	98.4	4.9	22.7	0.2	5.1
Grimes	118.3	52.1	42.5	2.0	20.1	...	1.7
Hardin	378.2	201.2	115.1	7.6	45.2	...	9.1
Harris	229.2	140.4	63.5	3.6	18.4	...	3.2
Houston	627.7	395.1	166.2	11.7	43.9	0.6	10.1
Jasper	708.4	434.7	207.0	4.4	45.7	1.5	15.1
Jefferson ¹	123.2	62.5	45.0	0.2	13.5	...	2.0
Leon	190.0	27.5	111.2	0.9	46.6	...	3.7
Liberty	548.0	168.8	275.8	3.5	88.5	...	11.5
Madison	69.1	11.2	42.1	0.1	13.5	...	2.1
Montgomery	717.8	494.7	152.4	7.1	45.4	3.3	14.9
Newton	624.7	356.3	184.6	7.6	59.6	...	16.6
Orange	184.1	89.4	60.3	5.4	22.1	0.4	6.6
Polk	623.9	450.7	120.0	5.5	40.5	...	7.3
Sabine	463.2	347.7	92.9	1.8	14.2	...	6.6
San Augustine	349.2	224.9	87.4	2.6	25.8	...	8.5
San Jacinto	409.7	267.4	99.2	4.8	28.9	0.7	8.6
Trinity	495.9	369.1	84.8	7.5	30.4	...	4.1
Tyler	567.3	308.6	195.6	4.8	46.2	...	12.1
Walker	413.6	305.5	77.4	2.9	22.8	0.3	4.8
Waller	125.7	81.0	30.9	...	11.8	...	2.0
All counties	8553.1	5243.4	2352.5	89.0	705.6	6.9	155.6

¹ Chambers included in Jefferson.

Table 31--Number of live trees on timberland by detailed species and diameter class, Southeast Texas, 1986

Species	Diameter class (inches at breast height)												
	All classes	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
Thousand trees													
Longleaf pine	18068	4340	6423	2115	1242	1243	1185	867	439	140	49	23	...
Slash pine	90165	34281	23602	15411	11052	3793	1448	450	113	...	...	14	...
Shortleaf pine	120177	38705	20942	16093	14813	10209	8327	5390	3546	1404	529	219	...
Loblolly pine	960172	464409	211846	115113	59580	35511	25797	16490	12975	7304	4428	4540	177
Redcedar	10122	5807	1781	414	1049	431	225	231	96	58	12	17	...
Cypress	4156	...	601	1285	1100	224	255	200	173	127	70	111	8
Total softwoods	1202860	547543	265195	150431	88836	51411	37238	25630	17343	9034	5089	4925	185
Select white oaks	48094	24241	8501	5383	3263	2176	1165	1211	890	465	266	492	41
Select red oaks	55455	38929	6410	3837	1808	1364	812	780	294	335	334	441	111
Other white oaks	150171	68971	27784	21378	12181	8670	4424	2754	1811	957	587	577	77
Other red oaks	343621	215978	45631	24652	18655	12891	8700	6017	4302	2763	1610	2117	306
Sweet pecan	608	...	...	210	56	184	33	48	15	28	...	34	...
Water hickory	12245	6573	2775	705	754	600	303	270	129	34	51	46	4
Other hickories	47804	28074	8504	3516	2850	2342	1250	667	313	174	43	65	4
Persimmon	14438	12011	1745	367	135	99	49	23	...	...	10	...	...
Hard maple	365	...	...	158	53	39	87	...	...	27	...	...	...
Soft maple	81810	60590	10952	5382	2950	1027	470	185	99	100	11	45	...
Boxelder	564	564	...	...	...	...	...	...	...	...	...	...	...
Beech	5028	1472	1030	...	272	472	444	456	360	213	107	184	19
Sweetgum	453129	296998	77512	36925	18930	10726	5938	2707	1513	717	604	498	61
Blackgum	179674	132560	25556	10315	5129	2156	1301	1163	771	242	179	260	42
Other gums/tupelos	10761	1663	4807	1263	793	369	568	533	325	236	107	93	4
White ash	28492	22478	2266	1673	344	694	358	323	188	126	10	31	...
Other ashes	39301	29903	3773	2337	1236	576	533	373	203	182	90	80	14
Sycamore	4651	2208	1069	230	296	329	118	84	82	17	40	159	19
Cottonwood	1113	543	543	...	...	...	...	23	...	...	...	5	...
Basswood	3426	1092	2183	...	...	70	...	69	12	...	...	...	...
Magnolia	10315	8036	1065	...	113	315	192	242	170	109	20	50	4
Sweetbay	41804	29170	8364	1753	1216	698	324	145	47	37	41	8	...
Willow	6891	5743	574	241	149	94	61	...	18	...	...	9	...
Black walnut	1922	1698	...	88	...	89	28	16	...	...	...	...	3
Black cherry	7383	5915	1028	109	318	...	...	...	12	...	...	...	...
American elm	15260	9179	3152	681	695	594	363	205	120	112	87	57	13
Other elms	167577	124167	23569	10221	4720	2470	1080	722	309	164	78	70	8
River birch	4912	3785	535	222	199	...	60	20	31	25	...	33	...
Hackberry	28652	10879	10525	3300	1587	795	761	377	178	143	40	66	...
Other locusts	3185	2293	...	325	205	128	148	44	17	25	...	...	...
Sassafras	20827	16730	2117	1415	344	170	26	24	...	...	...	...	...
Dogwood	63048	50413	10728	1632	274	...	...	...	...	...	...	...	...
Holly	77509	56642	14355	4132	1516	535	245	20	54	...	10	...	...
Other commercial	43029	36248	4719	1288	380	214	113	20	21	27	...	...	...
Total hardwoods	1973063	1305748	311774	143739	81424	50885	29957	19520	12272	7270	4323	5421	731
Noncommercial	351486	266380	57056	18568	6374	1830	681	346	179	35	8	29	...
All species	3527410	2119671	634025	312739	176634	104126	67876	45495	29794	16338	9421	10375	916

Table 3 2--Number of growing stock trees on timberland by detailed species and diameter class, Southeast Texas, 1986

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	7079	2015	1187	1208	1185	844	439	127	49	23	...
Slash pine	30154	14089	10732	3336	1419	450	113	...	...	14	...
Shortleaf pine	56894	13751	13769	10054	8327	5366	3527	1353	529	219	...
Loblolly pine	272412	107971	57144	34411	25451	18372	12912	7205	4368	4415	165
Redcedar	1537	291	591	281	102	159	77	13	12	9	...
Cypress	3226	1285	857	181	255	180	173	127	70	89	8
Total softwoods	371302	139402	84281	49471	36740	25371	17241	8825	5029	4769	173
Select white oaks	12314	3802	2862	2008	1023	1022	673	366	225	305	27
Select red oaks	8202	3148	1360	1125	676	678	219	296	255	363	82
Other white oaks	34442	12624	8713	6298	2897	1613	1131	576	259	317	13
Other red oaks	59142	17694	14080	10306	5888	4318	2874	1862	987	1038	96
Sweet pecan	367	96	56	126	...	48	15	...	...	26	...
Water hickory	1446	130	253	509	188	191	80	23	31	41	...
Other hickories	6145	1722	1546	1383	728	421	213	59	34	40	...
Persimmon	426	268	61	48	49	...	...	...	...	...	...
Hard maple	228	158	...	39	31	...	...	...	...	...	...
Soft maple	5551	2615	2102	492	233	39	34	27	...	8	...
Beech	1318	...	128	237	271	298	206	97	48	32	...
Sweetgum	58457	24600	15660	8532	4962	2195	1127	550	476	317	39
Blackgum	13956	5899	3844	1549	936	799	509	165	131	125	...
Other gums/tupelos	2508	472	701	292	276	311	224	149	65	17	...
White ash	2262	1002	227	405	250	184	132	50	...	11	...
Other ashes	3409	1229	840	403	352	292	131	121	20	15	4
Sycamore	1030	230	162	244	118	63	50	17	40	102	4
Cottonwood	28	...	...	...	...	23	...	...	...	5	...
Basswood	22	...	...	...	...	22	...	...	...	...	...
Magnolia	656	...	56	244	117	121	76	25	11	6	...
Sweetbay	2295	532	1066	416	216	41	16	...	...	8	...
Willow	504	241	88	94	61	...	18	...	...	...	...
Black walnut	80	...	...	52	28	...	...	...	...	...	...
Black cherry	251	...	239	...	...	...	...	12	...	...	...
American elm	1839	305	482	324	307	163	84	98	64	8	4
Other elms	13010	6616	3072	1722	671	523	194	128	39	44	...
River birch	372	133	148	...	...	20	31	25	...	15	...
Hackberry	2779	1294	446	376	312	157	87	63	19	24	...
Other locusts	541	325	81	79	...	44	...	12	...	...	...
Sassafras	1226	830	247	123	26	...	...	...	...	...	...
Dogwood	687	614	73	...	...	...	...	...	...	...	...
Holly	2735	1622	792	209	93	20	...	...	...	...	...
Other commercial	181	140	...	41	...	...	...	...	...	...	...
Total hardwoods	238405	88341	59384	37678	20709	13605	8125	4722	2705	2868	268
All species	609708	227743	143666	87149	57449	38975	25366	13548	7734	7637	441

Table 33--Volume of growing stock on timberland by species and diameter class, Southeast Texas, 1986

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	108.0	6.4	8.0	16.3	25.1	23.5	16.6	6.8	3.3	1.9	...
Slash pine	197.6	38.6	67.5	43.1	29.7	13.0	4.7	...	...	1.1	...
Shortleaf pine	986.6	47.1	107.8	151.8	196.7	181.4	165.3	77.4	39.5	19.5	...
Loblolly pine	3895.8	269.6	350.1	447.8	538.8	566.8	540.1	392.6	304.6	454.8	30.5
Redcedar	11.8	0.6	2.2	2.3	1.4	2.3	2.0	0.4	0.3	0.3	...
Cypress	43.7	2.3	4.1	2.3	4.2	4.6	6.7	6.0	3.9	8.0	1.5
Total softwoods	5243.4	364.6	539.6	663.6	796.0	791.6	735.4	483.3	351.6	485.6	32.1
Select white oaks	164.3	10.2	15.7	20.8	18.8	23.9	21.7	15.7	11.2	22.5	3.8
Select red oaks	136.3	8.0	7.6	12.3	11.3	17.3	6.8	12.9	14.2	32.2	13.8
Other white oaks	251.3	27.8	41.0	50.2	37.3	27.1	26.0	16.3	8.8	15.4	1.3
Other red oaks	719.4	48.6	77.4	106.3	94.1	97.8	85.8	76.5	49.4	71.2	12.1
Sweet pecan	4.7	0.3	0.3	1.0	...	1.0	0.3	...	...	1.8	...
Water hickory	22.3	0.3	1.8	5.1	3.1	4.1	2.3	1.2	1.4	2.9	...
Other hickories	53.2	3.7	7.0	10.4	10.1	8.4	5.9	2.4	2.0	3.3	...
Persimmon	2.1	0.6	0.4	0.3	0.7	...	...	...	...	...	...
Hard maple	1.5	0.3	...	0.5	0.7	...	...	...	...	...	...
Soft maple	32.1	8.4	11.4	5.0	3.8	1.1	0.9	1.2	...	0.3	...
Beech	29.8	...	0.6	2.7	3.6	7.3	6.2	4.5	2.9	2.0	...
Sweetgum	508.0	60.9	89.0	90.1	86.2	58.6	40.1	25.7	25.8	26.0	5.6
Blackgum	119.8	13.4	19.1	16.1	14.7	18.6	15.4	6.6	6.5	9.4	...
Other gums/tupelos	37.1	1.2	3.5	2.8	4.7	7.4	7.0	6.4	3.2	0.9	...
White ash	21.8	2.4	1.2	4.4	3.9	4.0	3.6	1.9	...	0.3	...
Other ashes	34.1	3.0	4.9	4.0	5.6	6.3	4.1	4.2	0.7	0.9	0.3
Sycamore	22.0	0.8	0.9	2.3	2.2	1.0	1.8	0.3	1.9	10.3	0.4
Cottonwood	1.1	...	...	...	...	0.6	...	...	...	0.5	...
Basswood	0.3	...	...	...	...	0.3	...	...	...	...	...
Magnolia	11.5	...	0.4	2.3	1.6	2.7	2.5	1.1	0.6	0.5	...
Sweetbay	17.4	2.0	6.5	3.5	3.3	1.0	0.5	...	...	0.7	...
Willow	3.2	0.7	0.3	0.6	1.0	...	0.6	...	...	...	...
Black walnut	0.5	...	...	0.3	0.2	...	...	...	...	...	...
Black cherry	2.1	...	1.6	...	...	...	...	0.5	...	...	...
American elm	24.1	0.7	2.5	2.7	4.2	3.9	2.2	3.1	2.8	0.8	1.2
Other elms	83.3	14.8	15.7	16.9	10.1	11.0	5.2	4.8	1.9	2.8	...
River birch	4.0	0.3	0.8	...	...	0.3	1.0	0.9	...	0.7	...
Hackberry	23.1	3.2	1.8	3.2	4.3	2.9	2.9	2.5	1.0	1.3	...
Other locusts	3.4	0.9	0.3	0.9	...	0.9	...	0.3	...	...	...
Sassafras	4.7	1.7	1.6	1.2	0.3	...	...	...	...	...	...
Dogwood	1.3	1.0	0.3	...	...	...	...	...	...	...	...
Holly	12.3	4.2	3.9	2.2	1.4	0.5	...	...	...	...	...
Other commercial	0.4	0.2	...	0.2	...	...	...	...	...	...	...
Total hardwoods	2352.5	219.8	317.5	368.3	327.3	308.2	242.9	188.9	134.3	206.8	38.5
All species	7595.9	584.4	857.1	1031.9	1123.3	1099.8	978.4	672.2	485.9	692.4	70.6

Table 34--Volume of growing stock in the saw-log portion of sawtimber trees on timberland by detailed species and diameter class, Southeast Texas, 1986

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	85.6	13.1	22.7	22.2	16.0	6.5	3.2	1.9	...
Slash pine	79.1	34.7	26.9	12.1	4.3	...	...	1.0	...
Shortleaf pine	767.5	124.9	180.1	172.5	158.1	74.7	38.3	18.9	...
Loblolly pine	3047.0	362.3	488.7	534.3	517.5	378.6	294.5	441.4	29.7
Redcedar	7.6	1.7	1.2	2.1	1.8	0.4	0.3	0.3	...
Cypress	34.6	1.7	3.5	4.1	6.2	5.9	3.8	7.8	1.5
Total softwoods	4021.4	538.4	723.1	747.3	703.9	466.0	340.0	471.3	31.3
Select white oaks	102.1	...	15.1	20.4	19.0	14.2	9.9	19.7	3.8
Select red oaks	94.9	...	7.6	15.1	6.2	11.7	12.8	28.9	12.6
Other white oaks	119.3	...	32.1	25.0	23.5	15.0	8.4	14.1	1.2
Other red oaks	422.4	...	72.0	84.2	77.0	67.5	43.8	66.5	11.3
Sweet pecan	2.8	...	...	0.8	0.2	...	...	1.8	...
Water hickory	13.5	...	2.8	3.4	2.2	1.2	1.3	2.7	...
Other hickories	28.2	...	8.5	7.3	5.5	2.2	1.8	2.9	...
Persimmon	0.5	...	0.5	...	...	...	...	...	...
Hard maple	0.6	...	0.6	...	...	...	...	...	...
Soft maple	5.7	...	2.9	0.7	0.8	1.0	...	0.3	...
Beech	24.2	...	2.9	6.6	5.9	4.3	2.6	1.8	...
Sweetgum	224.7	...	60.8	49.5	36.9	24.0	23.5	24.6	5.3
Blackgum	62.4	...	11.2	16.1	14.0	6.0	6.3	8.8	...
Other gums/tupelos	25.3	...	3.2	6.2	6.1	5.7	3.1	0.9	...
White ash	12.0	...	3.3	3.4	3.2	1.8	...	0.3	...
Other ashes	17.6	...	4.1	5.0	3.5	3.5	0.5	0.8	0.2
Sycamore	16.6	...	1.5	0.9	1.7	0.2	1.9	10.1	0.4
Cottonwood	1.0	...	...	0.6	...	...	...	0.5	...
Basswood	0.3	...	...	0.3	...	...	...	...	...
Magnolia	7.9	...	1.2	2.5	2.0	1.1	0.6	0.5	...
Sweetbay	4.4	...	2.6	0.8	0.4	...	...	0.5	...
Willow	1.1	...	0.7	...	0.4	...	...	...	...
Black walnut	0.2	...	0.2	...	...	...	...	...	...
Black cherry	0.5	...	...	...	...	0.5	...	...	...
American elm	15.6	...	3.5	3.5	1.6	2.5	2.5	0.8	1.2
Other elms	30.6	...	8.0	9.5	4.6	4.3	1.9	2.4	...
River birch	2.4	...	...	0.3	0.8	0.6	...	0.7	...
Hackberry	12.6	...	3.5	2.3	2.4	2.0	1.0	1.3	...
Other locusts	1.2	...	...	0.9	...	0.3	...	...	...
Sassafras	0.3	...	0.3	...	...	...	...	...	...
Holly	1.6	...	1.2	0.4	...	...	...	...	...
Total hardwoods	1252.2	...	250.3	265.7	217.9	169.5	122.0	190.8	36.0
All species	5273.6	538.4	973.4	1013.0	921.8	635.6	462.0	662.2	67.2

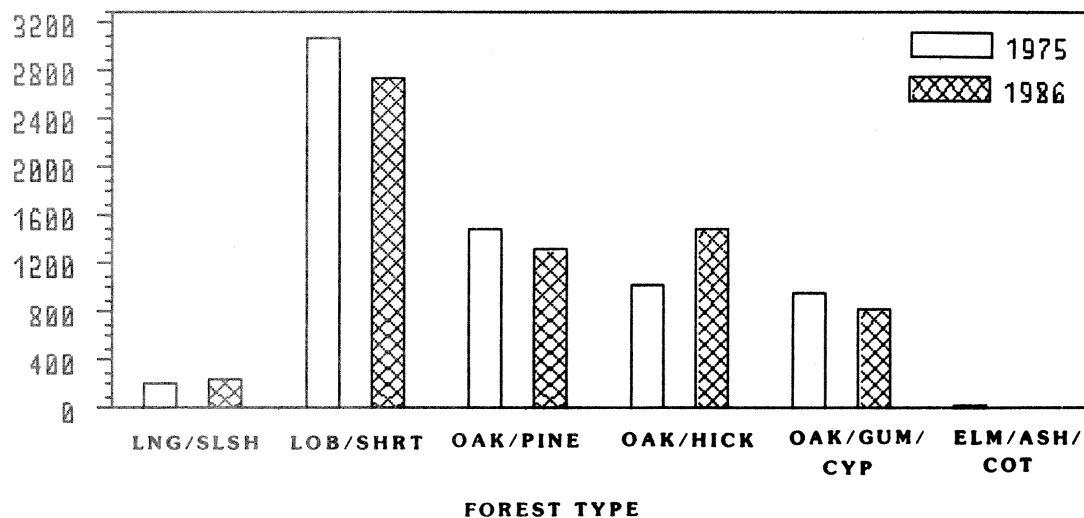
Table 35--Volume of timber on timberland by species and class of timber, Southeast Texas, 1986

Species	All live	Growing stock	Rough	Rotten
----- Million cubic feet -----				
Longleaf pine	110.2	108.0	2.3	...
Slash pine	207.9	197.6	10.3	...
Shortleaf pine	1003.1	986.6	15.7	0.9
Loblolly pine	3952.1	3895.8	51.8	4.6
Redcedar	18.2	11.8	6.3	...
Cypress	47.9	43.7	2.6	1.5
Total softwoods	5339.3	5243.4	89.0	6.9
Select white oaks	196.7	164.3	25.6	6.7
Select red oaks	158.5	136.3	16.9	5.3
Other white oaks	350.7	251.3	86.1	13.3
Other red oaks	959.8	719.4	188.9	51.6
Sweet pecan	6.9	4.7	2.2	...
Water hickory	30.8	22.3	7.8	0.7
Other hickories	78.7	53.2	20.3	5.2
Persimmon	3.5	2.1	0.7	0.6
Hard maple	2.8	1.5	0.6	0.7
Soft maple	52.0	32.1	15.4	4.5
Beech	51.6	29.8	10.3	11.4
Sweetgum	615.5	508.0	89.7	17.8
Blackgum	162.3	119.8	32.2	10.3
Other gums/tupelos	56.2	37.1	12.7	6.3
White ash	29.7	21.8	5.4	2.5
Other ashes	48.4	34.1	10.5	3.7
Sycamore	28.6	22.0	5.9	0.7
Cottonwood	1.1	1.1	...	...
Basswood	2.1	0.3	0.6	1.1
Magnolia	20.5	11.5	4.0	4.9
Sweetbay	27.6	17.4	8.0	2.2
Willow	3.6	3.2	0.4	...
Black walnut	1.3	0.5	0.7	0.1
Black cherry	2.6	2.1	0.5	...
American elm	34.1	24.1	9.6	0.4
Other elms	111.2	83.3	26.9	1.0
River birch	5.7	4.0	1.7	...
Hackberry	47.1	23.1	21.3	2.7
Other locusts	6.4	3.4	2.9	...
Sassafras	6.2	4.7	1.4	...
Dogwood	3.3	1.3	2.1	...
Holly	22.0	12.3	8.4	1.3
Other commercial	4.0	0.4	3.3	0.3
Total hardwoods	3131.3	2352.5	623.2	155.6
Noncommercial	82.4	...	82.4	...
All species	8553.1	7595.9	794.6	162.6

GRAPHICS

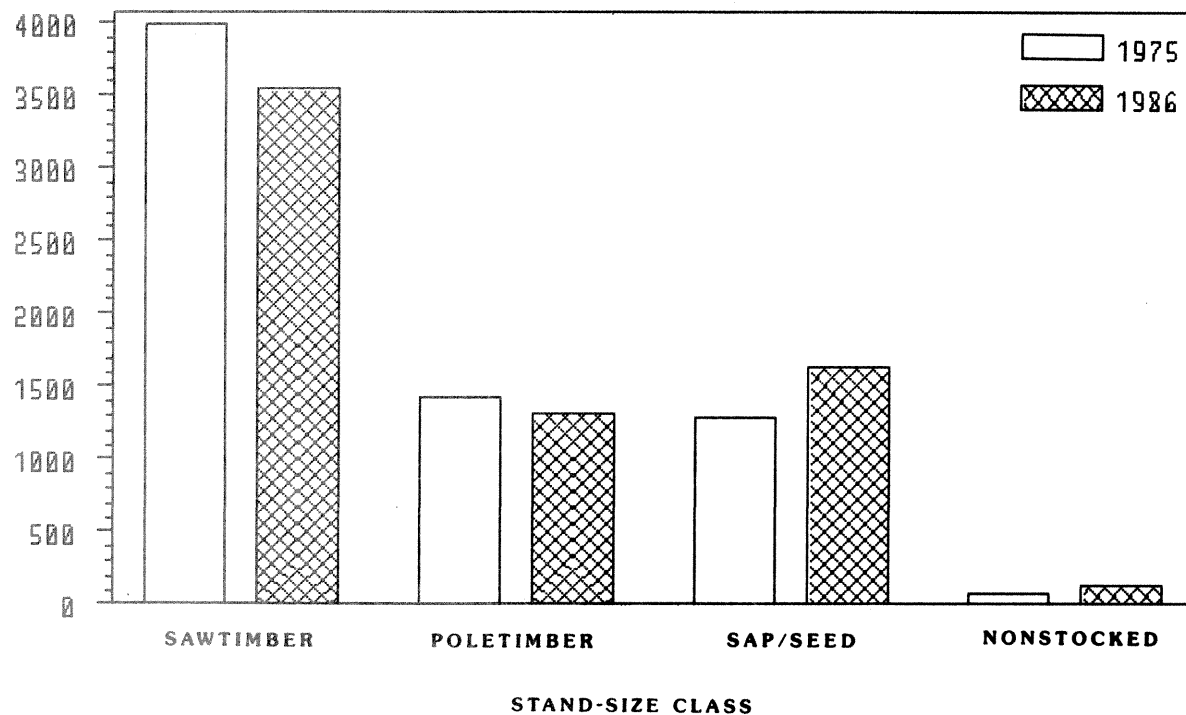
AREA OF TIMBERLAND BY FOREST TYPE SOUTHEAST TEXAS 1975 AND 1986

THOUSAND ACRES



AREA OF TIMBERLAND BY STAND-SIZE CLASS SOUTHEAST TEXAS 1975 AND 1986

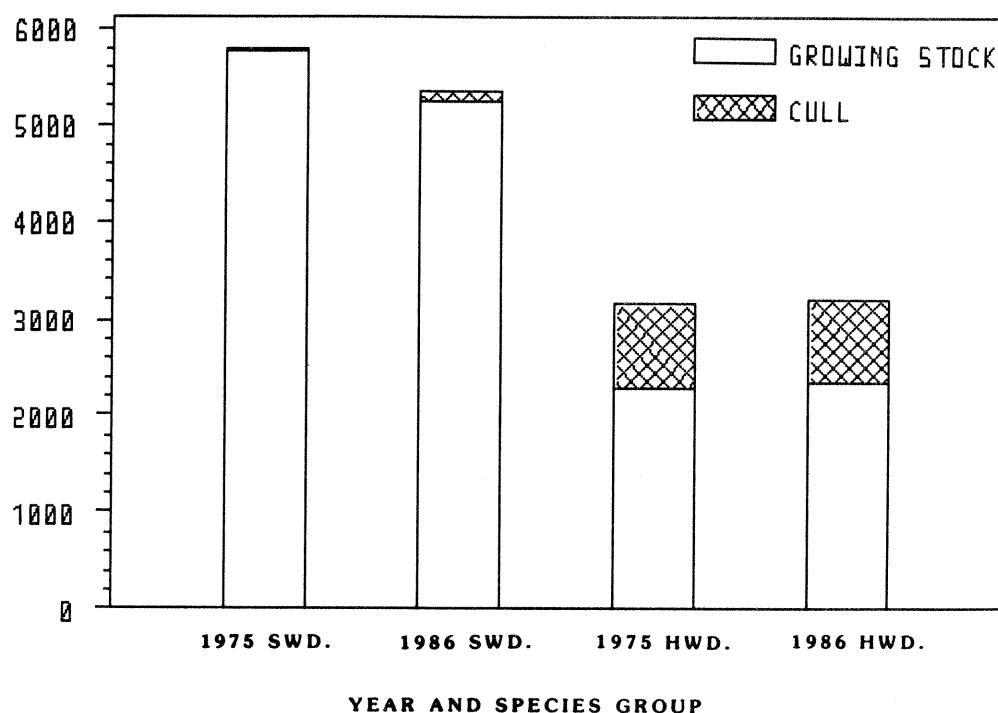
THOUSAND ACRES



TIMBER VOLUME BY TREE CLASS AND SPECIES

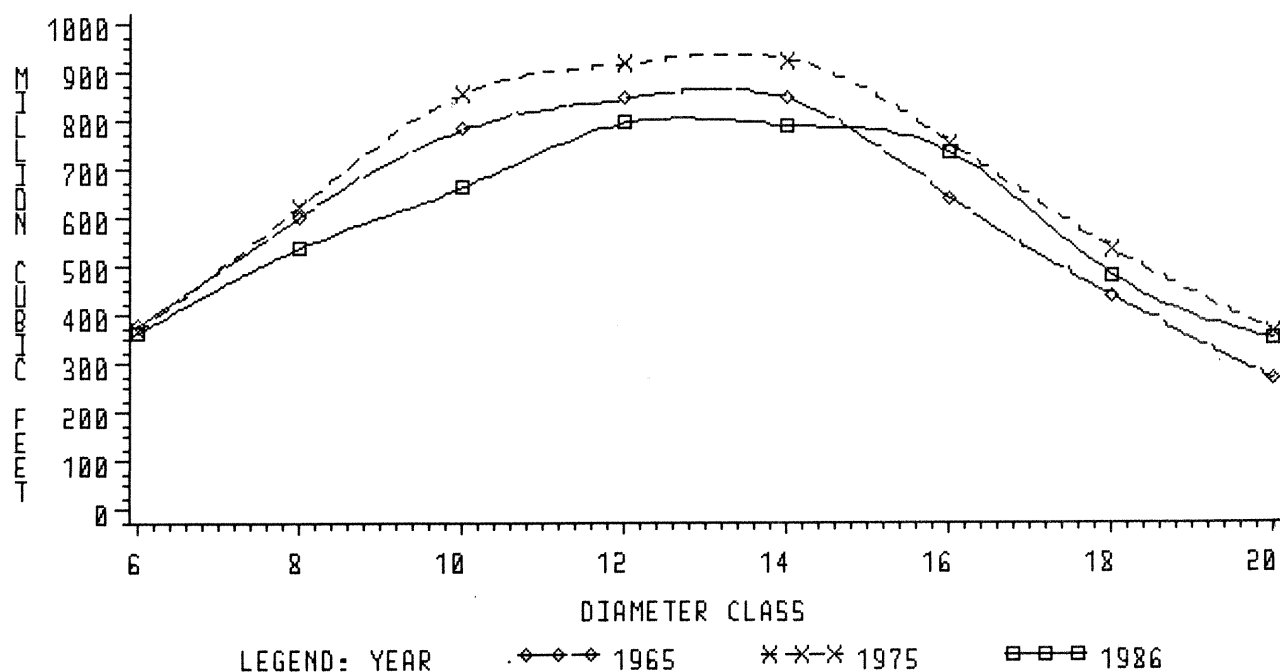
SOUTHEAST TEXAS 1975 AND 1986

MILLION CUBIC FEET



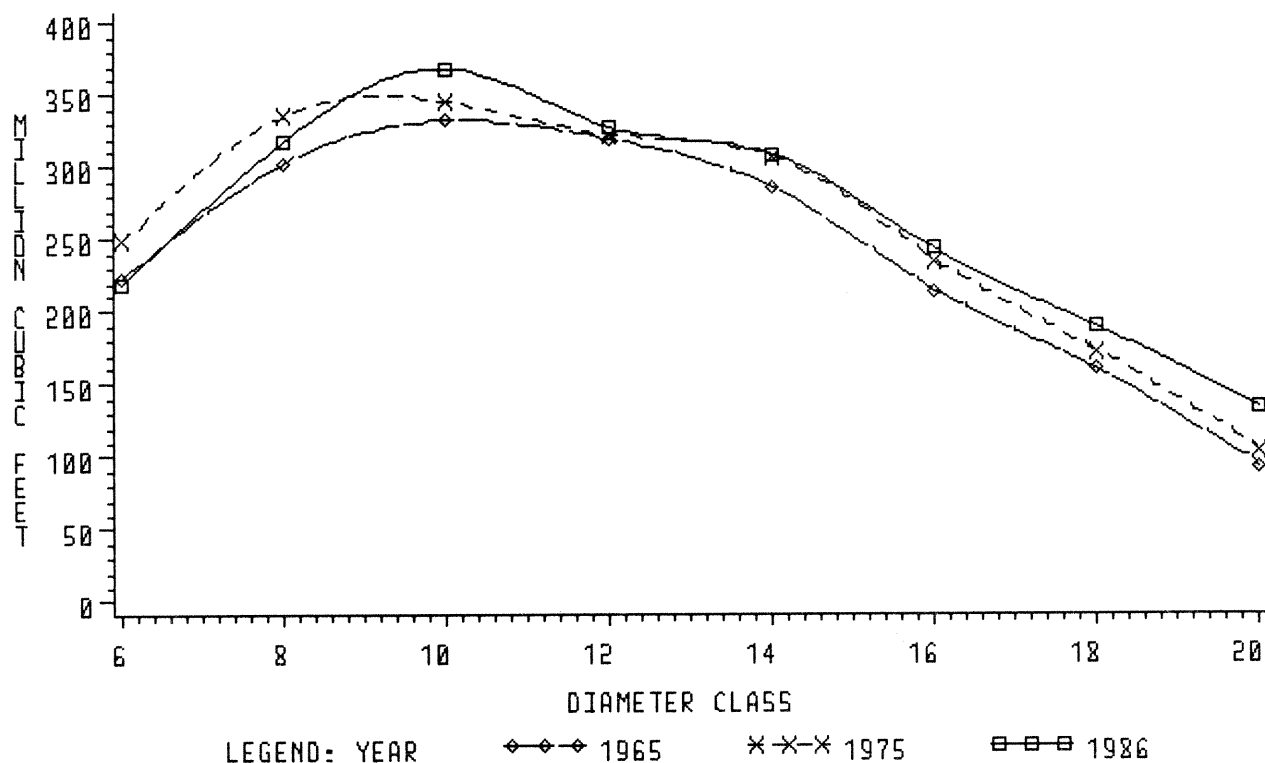
SOFTWOOD GROWING-STOCK VOLUME BY DBH CLASS

SOUTHEAST TEXAS 1965, 1975 AND 1986



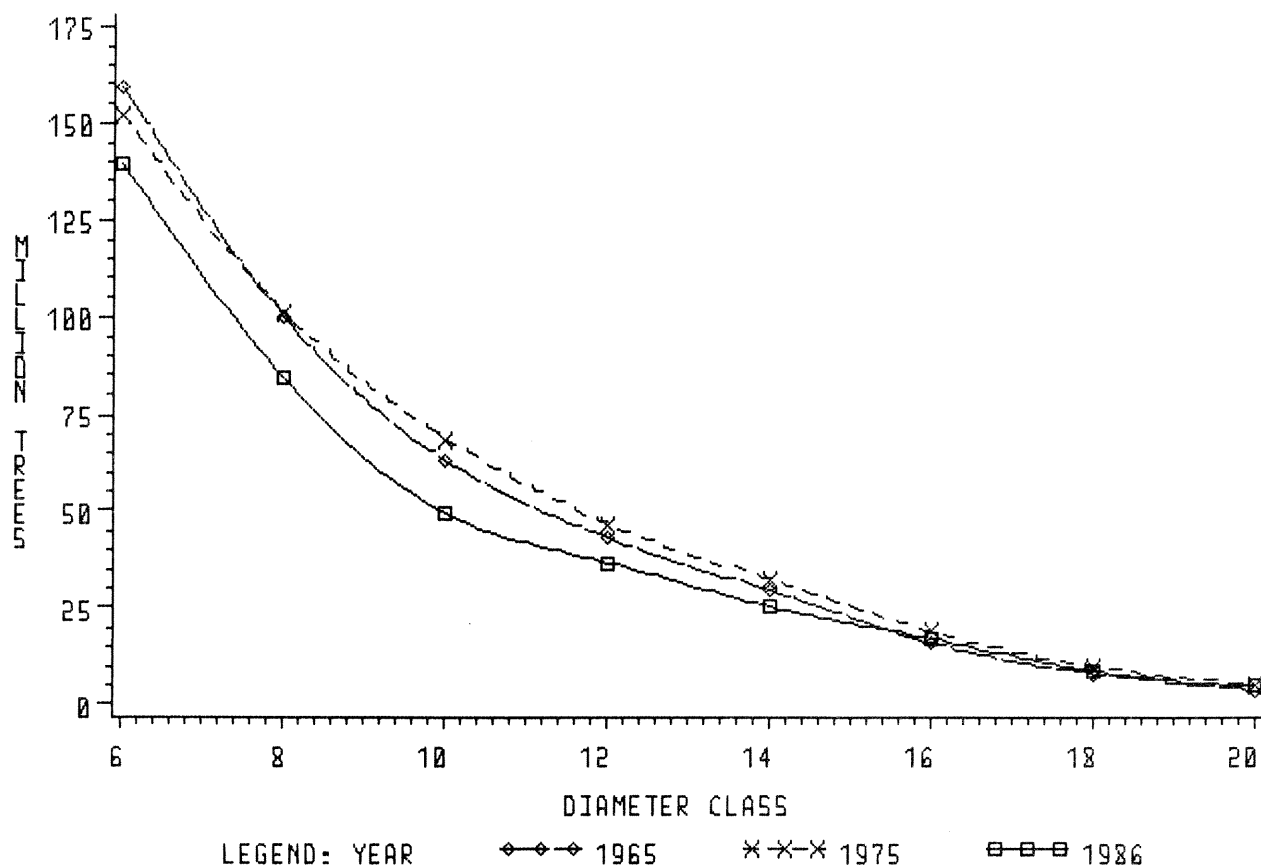
HARDWOOD GROWING-STOCK VOLUME BY DBH CLASS

SOUTHEAST TEXAS 1965, 1975, AND 1986

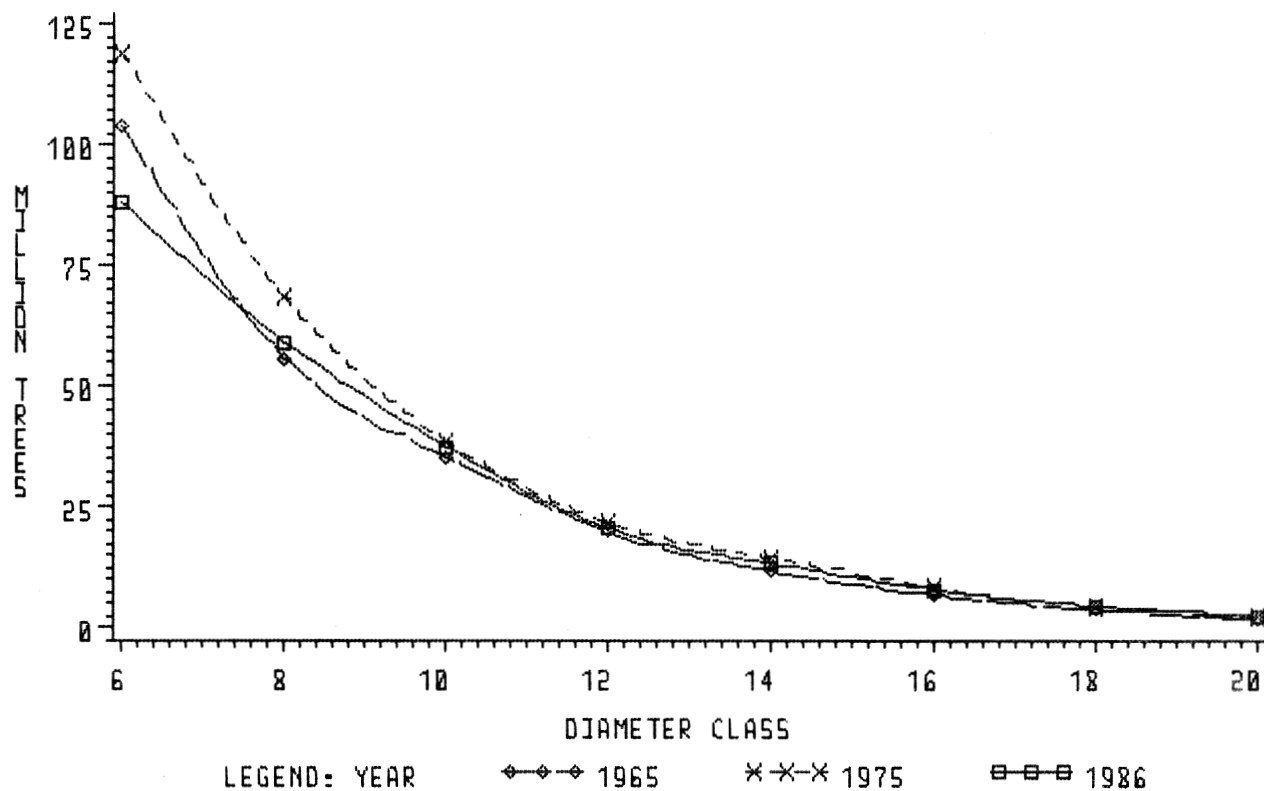


NUMBER OF SOFTWOOD GROWING-STOCK TREES BY DBH CLASS

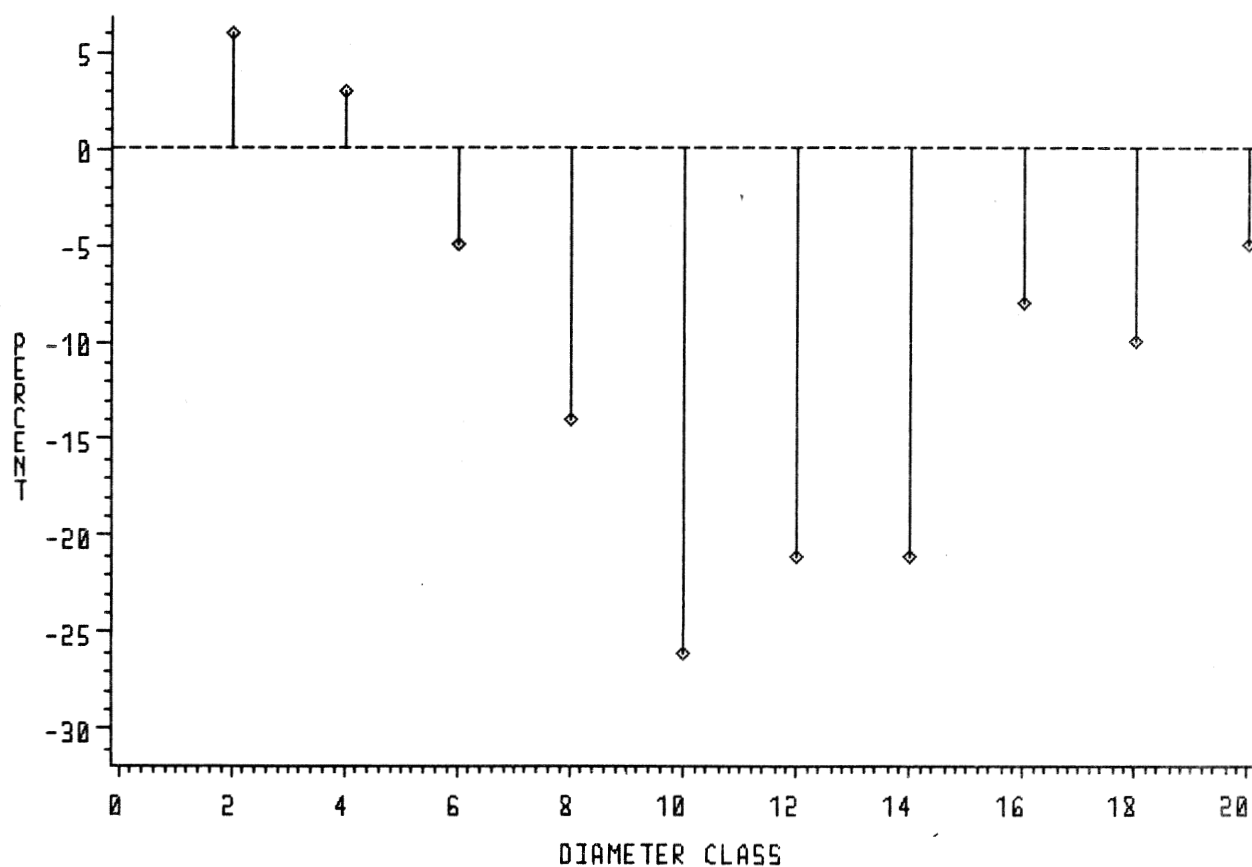
SOUTHEAST TEXAS 1965, 1975, AND 1986



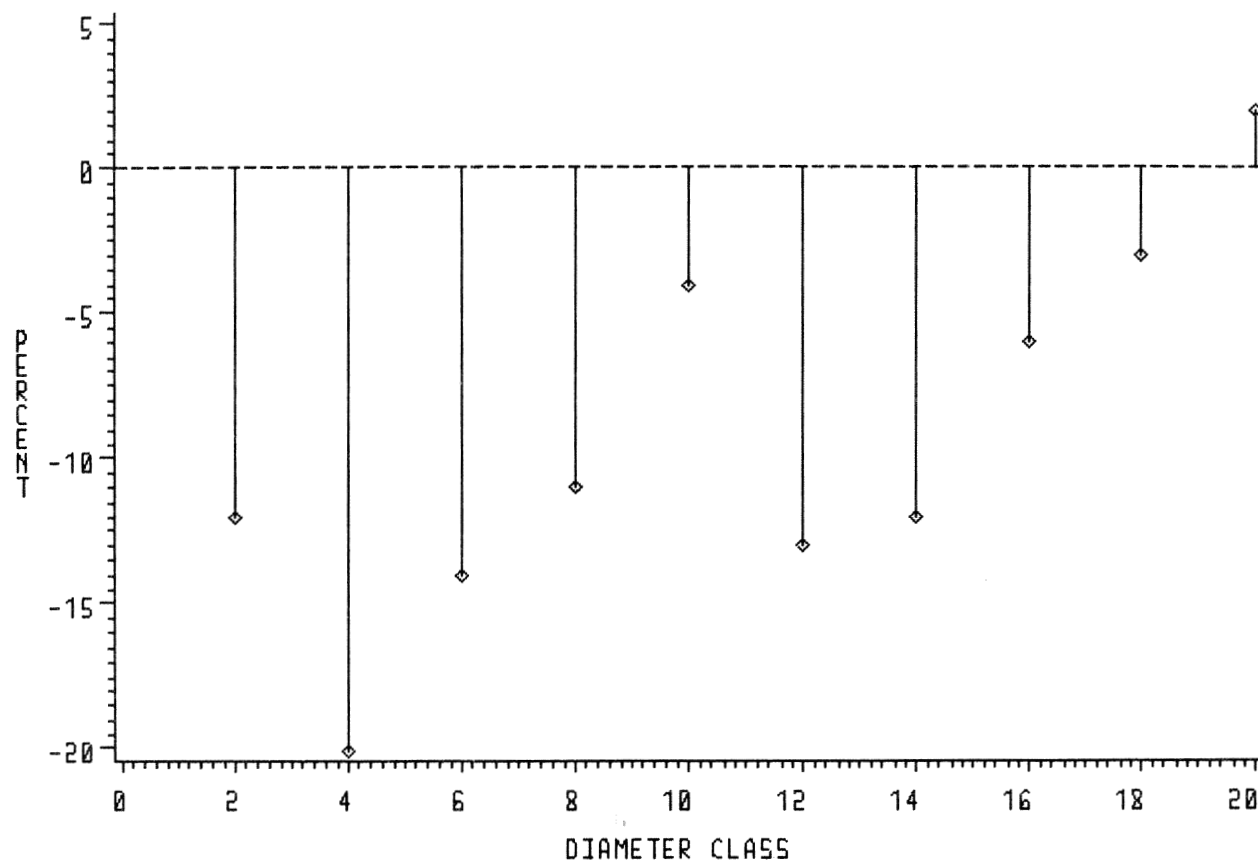
NUMBER OF HARDWOOD GROWING-STOCK TREES BY DBH CLASS SOUTHEAST TEXAS 1965, 1975, AND 1986



CHANGE IN NUMBER OF LIVE SOFTWOOD TREES SOUTHEAST TEXAS 1975 TO 1986

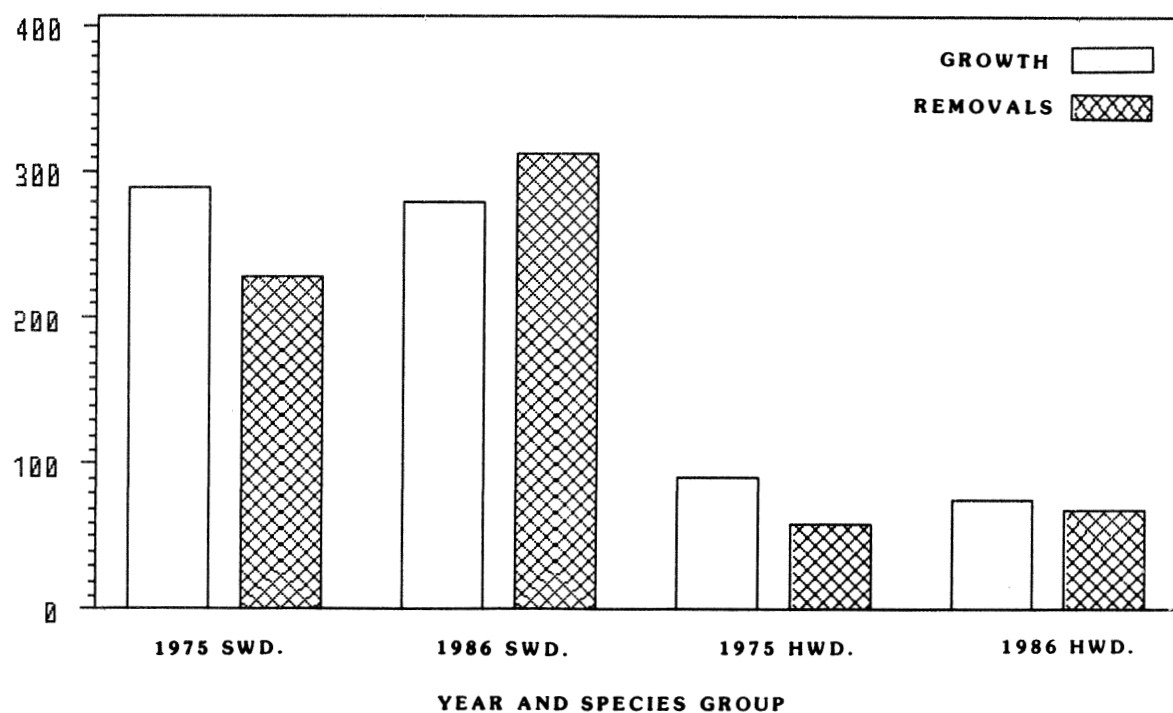


CHANGE IN NUMBER OF LIVE HARDWOOD TREES SOUTHEAST TEXAS 1975 TO 1986



GROWTH AND REMOVALS BY SPECIES GROUP SOUTHEAST TEXAS 1975 AND 1986

MILLION CUBIC FEET



McWilliams, William H. and Bertelson, Daniel F., Forest statistics for Southeast Texas counties - 1986.

Resourc. Bull. SO- 114 . New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station; 1986. 29 p.

Tabulates forest resource information from a new inventory of the Southeast Unit of Texas.

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