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Forest Statistics for Southeast Louisiana Parishes – 1991

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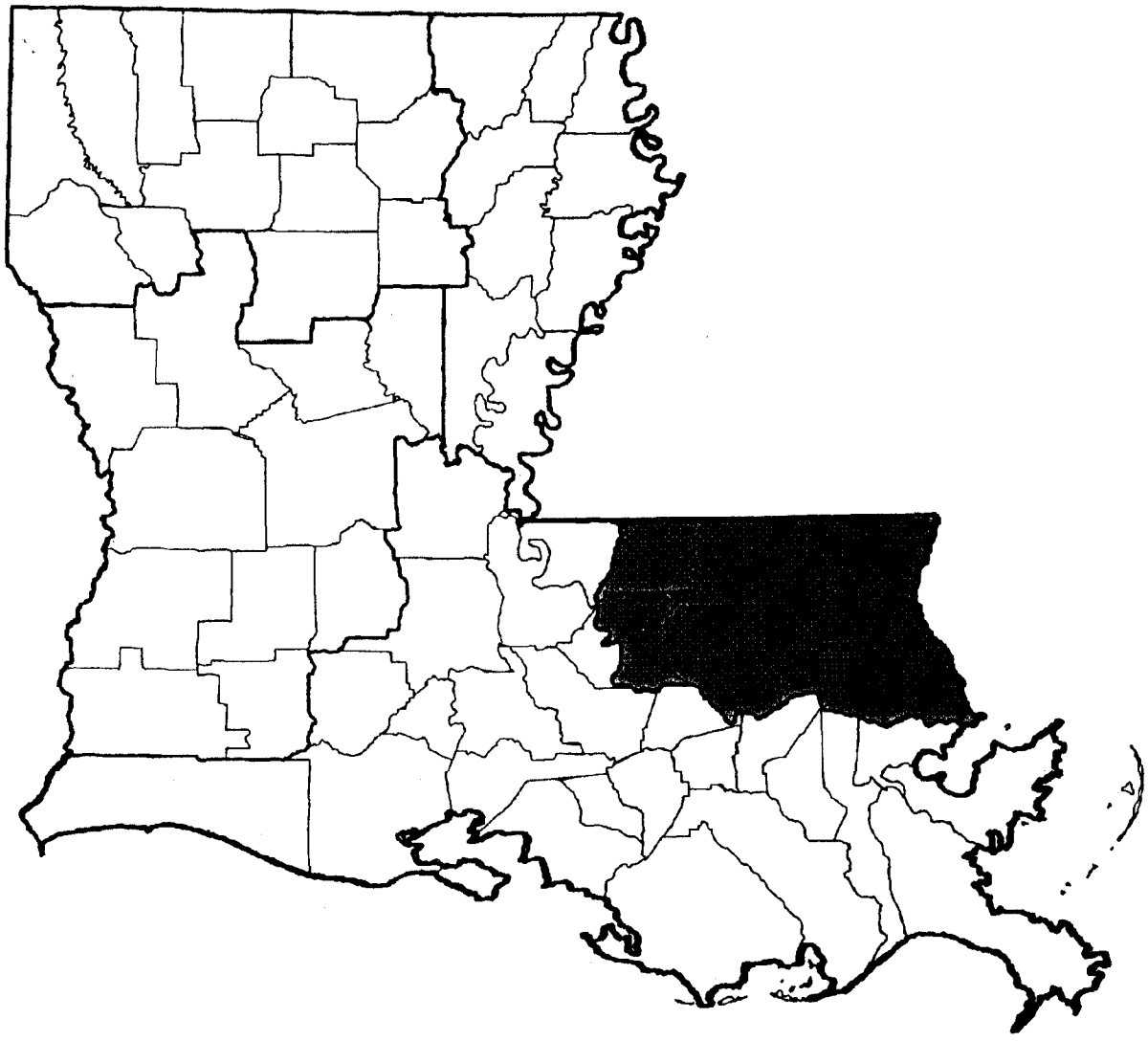

FOREWORD

The USDA-Forest Service, Southern Forest Experiment Station, Forest Inventory and Analysis unit (SOFIA), conducts forest inventories covering the States of Alabama, Arkansas, Louisiana, Mississippi, East Oklahoma, Tennessee, and East 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

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[1]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.

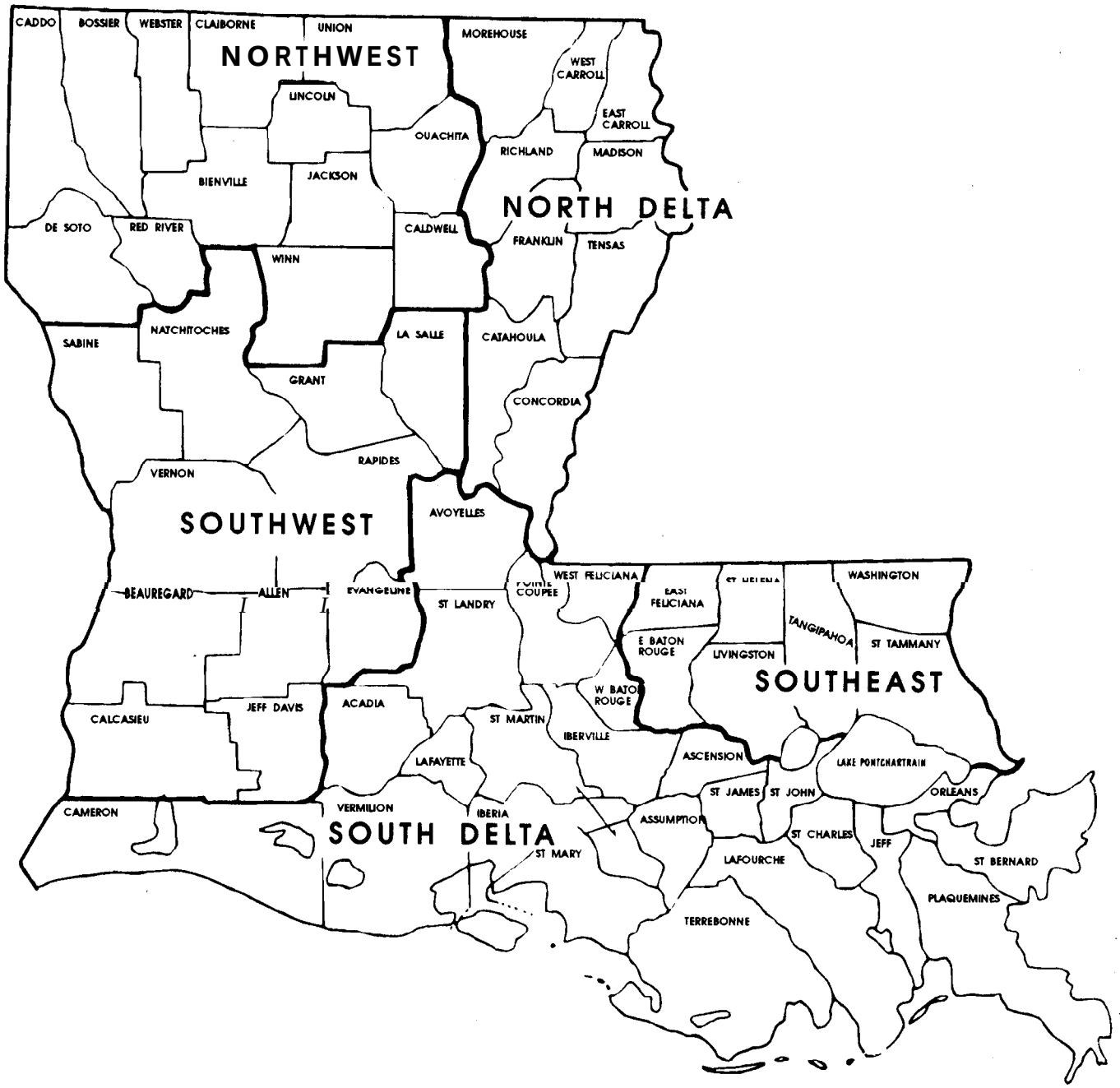

Figure *I. – Forest survey regions in Louisiana*

Forest Statistics for Southeast Louisiana Parishes — 1991

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INTRODUCTION

Tabulated results were derived from data obtained from a 1991 continuous forest inventory of Southeast Louisiana parishes (fig.1). Core tables (1 to 25) are compatible among Forest Inventory and Analysis units in the Eastern U.S. Supplemental tables (26 to 43) provide information beyond that provided by the core tables. All comparisons between the 1991 and 1984 surveys are based upon reprocessed 1984 data.

METHODS

The estimates of timberland area, volume, growth, removals, and mortality for the Southeast Louisiana parishes are based upon the latest and most up-to-date inventory techniques available. There are important differences in the methods used between the 1984 and 1991 inventories. In many cases, improvements in methodology for deriving current estimates can raise concerns about trends between survey periods. Because these differences might appear to cloud the comparisons between 1984 and 1991 results, the major differences in procedures are documented below.

First, the 1984 inventory used 5 satellite points per plot, the 1991 inventory used 10 points. This should affect comparisons of the Southeast Louisiana unit totals very little, but caution should be used when analyzing smaller aggregations of data.

Second, the 1984 survey used regression equations to estimate volume. The coefficients were based upon deterministic tree measurements from a small number of sample plots. Volumes for the 1991 survey were derived from deterministic measurements made on all trees ≥5.0 inches diameter at breast height (d.b.h.) on all plots.

Third, the classification of trees into growing-stock, rough, or rotten classes has been modified in two ways to ensure compatibility among the eastern Forest Inventory and Analysis units. (1) Currently, any tree that contains or is capable of producing one 12-foot or two 8-foot logs anywhere in the sawlog portion of the tree is classified as growing stock. The 1984 survey classified growing-stock trees as those that had or were capable of producing a 12-foot log only in the butt 16-foot section. (2) The 1984 survey required that over one-half of the sawlog volume (or prospective volume) had to be utilizable. The current standard is that one-third of the sawlogvolume in the sawlog portion of the tree has to be utilizable in order for the tree to be classed as growing stock.

Using 5 or 10 satellite points per plot has little effect on volume totals for the unit because of the large sample size (296 plots in Southeast Louisiana). Test runs comparing the results of volume equations and deterministic measurements have also demonstrated very little difference between methods. Here again, a large sample size enhances precision (5,358 sample trees ≥ 5.0 inches d.b.h. in Southeast Louisiana).

The first change in the growing-stock definition (log position) did affect direct comparisons between 1984 and 1991 estimates. To compensate for this definition change, the 1984 inventory data were reprocessed to be compatible with the 1991 growing-stock standard. The total number of trees affected by the definition change is small, and mostly hardwoods because of growth habit. It was not possible to classify all trees by the new growing-stock definition in the 1984 or 1991 data. Some trees died or were cut between measurement periods. Since these trees are gone, cruisers had no way of determining what the classification of these trees would be under the new standard. Therefore, the tree class previously assigned was maintained throughout the compilation process on mortality trees, on rough trees that were cut and not used, and on rotten trees that were cut. All rough trees that were cut and used were reclassified as growing stock.

The second growing-stock definition modification (changing from one-half to one-third sound) had virtually no impact. Only 37 trees out of 3,442 sawlog-sized trees had sound volume in the range of ≥ 33 percent but < 50 percent. Of these, 31 were reprocessed to resolve log position differences stated earlier. Only 6 trees (0.17 percent of all sample trees) affected by this definition change remain, a very minor component having little effect on growing-stock trends.

Users interested in trend analysis of growing-stock volume, growth, removals, and mortality between the 1984 and 1991 surveys should be aware of the impact of the growing-stock definition change. The incompatibility arises from trees that were cut or died, impacting growth, removals, and mortality estimates, The magnitude is, most likely, small but not possible to define with certainty.

Growing-stock comparisons between the 1984 reprocessed data and the 1991 data are valid for most general applications. However, in a more rigorous analysis it is important to make sure the changes are real and not due to

Table I—*Sampling errors*[1] *for timberland, live trees, growing stock, and sawtimber, Southeast Louisiana Parishes, 1991*

Parish	Timberland	Live trees			Growing stock			Sawtimber volume
		Volume	Growth	Removals	Volume	Growth	Removals	
	Percent							
East Baton Rouge	3.3	12.8	13.9	(2)	14.6	19.2	(2)	17.4
East Feliciana	3.7	14.3	17.4	34.2	15.2	19.8	34.2	18.0
Livingston	1.5	7.9	13.1	28.9	8.2	11.7	30.1	11.8
St. Helena	3.5	14.8	12.7	30.7	15.0	14.0	31.8	19.3
St. Tammany	2.0	9.6	14.8	27.4	9.8	13.6	27.7	12.7
Tangipahoa	2.7	14.5	13.7	22.1	15.6	13.2	22.8	19.9
Washington	2.1	13.6	14.8	29.7	14.0	13.5	29.1	21.0
All parishes	1.0	4.6	5.6	11.8	4.8	5.5	12.1	6.4

[1]By random-sampling formula.
[2]Sampling error greater than 50.

definition changes. In such instances the comparisons between surveys should be done using all live trees. This procedure eliminates any uncertainties caused by the growing-stock definition changes. Finally, to further enhance trend analysis, a slight improvement in precision was made in the 1984 volume estimates by using all the deterministic measurements from the 1991 survey to develop new volume coefficients. Therefore, because of the change in the growing-stock standard and the improved volume coefficients, estimates for the reprocessed 1984 data may differ slightly from those previously published.

STATISTICAL RELIABILITY

The sampling methods were designed to give reliable estimates of area andvolume at the State level in accordance with acceptable sampling error standards. Subsequently, the sampling error of the estimates increases as the area or volume under consideration decreases. The sampling errors presented in table I are equal to one standard deviation for the sample data.

Results are reported by individual parishes, thereby allowing computation of statistical confidence for any combination of parishes. Sampling error may be estimated by using the following formula:

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

where:

SE = standard error of estimate (expressed as a percentage)
X = variable of interest (area or volume)
g = group of parishes to be combined
t = total for the unit.

For example, statistics for growing-stock volume in Livingston, St. Tammany, and Tangipahoa parishes are derived as follows:

$$SE_g = \frac{4.8 \sqrt{2,313.0}}{\sqrt{1,337.2}} = \frac{4.8 \times 48.09}{36.57} = 6.3 \text{ percent}$$

The 95-percent confidence interval is:

$1,337.2 \pm 1.96$ (0.063x1,337.2) = $1,337.2 \pm 165.1$

The sampling error for growing-stock volume for the three parishes is 6.3 percent. The 95-percent confidence interval is 1,172.1 to 1,502.3 million cubic feet. This interval covers the true growing-stock inventory volume for these three parishes unless a 1 in 20 chance of a random event has occurred.

HIGHLIGHTS

Timberland Area

Currently, the estimate for timberland area is 1,763.7 thousand acres. This is only a slight increase from the 1984 estimate of 1,751.2 thousand acres.

Forest Type

The predominant forest type in the Southeast Louisiana unit is loblolly-shortleaf pine at 566.7 thousand acres. The oak-gum-cypress type is next in amount of acreage occupied, 492.9 thousand acres. These two types comprise 60 percent of the unit's timberland acreage, 32 and 28 percent respectively.

Ownership

Forest industry acreage has continued its downward trend from the 1974 to 1984 survey. Current acreage is 545.6 thousand acres. This estimate includes private land leased to forest industries. Nonindustrial, privately owned timberland increased slightly to 1,164.9 thousand acres.

Table II-Components *of annual change in the volume* of *live trees by inventory period and species group, Southeast Louisiana Parishes, 1991*

Inventory period and species group	Net growth	Gross growth: Mortality	Gross growth: Removals
	Million cubic feet		
1974 to 1983:			
Softwoods	76.5	8.6	60.8
Hardwoods	27.8	21.0	15.8
Total	104.3	29.6	76.6
1984 to 1991:			
Softwoods	77.3	10.3	97.6
Hardwoods	40.2	17.4	17.8
Total	117.5	27.7	115.4

Stand Size

Sawtimber stands account for 53 percent of the unit's timberland acreage, a slight increase since 1984. The acreage of sapling-seedling stands also decreased slightly to 425.6 thousand acres.

Artificial Regeneration

There are 251.5 thousand acres of softwood forest types that originated from artificial regeneration, an 87.5-thousand-acre increase since the 1984 inventory.

Softwood volume

Softwood live-tree volume is currently 1,270.6 million cubic feet, a 148.9-million-cubic-foot decline (10 percent) from that reported in 1984. Sawtimber volume is 5,657.3 million board feet.

Hardwood Volume

Hardwood live-tree volume is 1,286.4 million cubic feet, a 14-percent increase over that reported in 1984 (1,134.5 million cubic feet), Sawtimber volume is 3,537.6 million board feet.

Growth

Softwood live-tree gross growth averaged 87.6 million cubic feet per year, a very slight increase over that reported for the previous survey period (85.1 million cubic feet per year). Current growth equals 50 cubic feet per acre per year averaged over all timberland in the Southeast Louisiana unit (table II).

Hardwood live-tree gross growth averaged 57.6 million cubic feet per year, an 8.8-million-cubic-foot increase (18 percent) over that of the previous survey period. Current growth averages 33 cubic feet per acre per year for all timberland (table II).

Removals

Softwood live-tree removals have increased markedly from those reported in the last survey. Currently, 97.6 million cubic feet per year are being removed for the survey period. The previous survey reported only 60.8 million cubic feet per year as removals (table II).

Hardwood live-tree removals have increased only slightly, from 15.8 to 17.8 million cubic feet per year (table II).

Mortality

Softwood live-tree mortality has increased only slightly, from 8.6 to 10.3 million cubic feet. In contrast, hardwood mortality has decreased, from 21.0 to 17.4 million cubic feet (table II).

Stand Structure

The average basal area of live trees in the unit's forests has decreased from 87.9 square feet per acre to 82.1 square feet per acre. Most of this decrease can be accounted for in the softwood portion of sawtimber-sized stands.

The number of live trees has changed only slightly between the survey periods. Total number of live trees decreased by 7 percent with most of the decrease in the 2- and 4-inch diameter softwoods. No substantial shifts in stand structure by diameter class were evident.

APPENDIX

Definition of Terms

Forest Land Classes

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 uses. Minimum area considered for classification is one acre. Forest land is divided into a commercial category: timberland; and two

noncommercial categories reserved timberland or woodland.

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.

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

Woodland- Forest land incapable of yielding crops of industrial wood because of adverse site conditions.

Ownership Classes

National Forest land-Federal lands that have been legally designated as National Forests or purchase units and other lands under the administration of the Forest Service, including experimental areas.

Other federal land-Federal lands other than National Forests.

State, county, and municipal lands-Lands owned by States, counties and local public agencies or municipalities, or lands leased to these governmental units for 50 years or more.

Forest industry land -Lands owned by companies or individuals operating wood-using plants (either primary or secondary).

Farmer-owned land -Lands operated as a unit of 10 acres or more and from which the sale of agricultural products totals $1,000 or more annually.

Nonindustrial private land (individual) – Lands privately owned by individuals other than forest industries, farmers, or miscellaneous private corporations.

Nonindustrial ***private land (corporate)*** – Lands privately owned by private corporations other than forest industries and incorporated farms.

Forest Types

Longleaf-slash pine – Forests in which longleaf or slash pine, singly or in combination, comprise a plurality of the stocking. Common associates include other southern pines, oaks, and gums.

Loblolly-shortleaf ***pine*** – Forests in which pines (except longleaf or slash pine) and eastern redcedar singly or in combination, comprise a plurality of the stocking. Common associates include oaks, hickories, and gums.

Oak-pine-Forests in which hardwoods (usually upland oaks) comprise a plurality of the stocking, but in which softwoods, except cypress, comprise 25-49 percent of the stocking. Common associates include gums, hickories, and yellow-poplar.

Oak-hickory – Forests in which upland oaks or hickories, singly or in combination, comprise a plurality of the stocking except where pines comprise 25-50 percent in which case the stand would be classified oak-pine. Common associates include yellow-poplar, elms, maples, and black walnut.

Oak-gum-cypress – Bottomland forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, comprise a plurality of the stocking except where pines comprise 25-50 percent, in which case the stand would be classified oak-pine. Common associates include cottonwood, willow, ashes, elms, hackberries, and maples.

Elm-ash-cottonwood-Forests in which elms, ashes, or cottonwood, singly or in combination, comprise a plurality of the stocking. Common associates include willow, sycamore, beech, and maples.

Nontyped – Timberland currently unoccupied with any live trees or seedlings, e.g., very recent clearcut areas.

Tree Classes

Commercial species-Tree species currently or potentially suitable for industrial wood products. Excluded are noncommercial species.

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.

Growing-stock trees-Living trees of commercial species. Trees must have one 12-foot or two S-foot logs currently or potentially to be classed as growing stock. The log(s) must meet dimension and merchantability standards to qualify. Trees must also have, currently or potentially (if too small to qualify), one-third of the gross board-foot volume in sound wood.

Rough trees – Live trees of commercial species that are unmerchantable for sawlogs currently or potentially because of roughness or poor form in the sawlog section. Also included are all live trees of noncommercial species. See growing-stock definition.

Rotten ***trees-Live*** trees of commercial species that are unmerchantable for sawlogs currently or potentially because of rot deduction in the sawlog section. See growing-stock definition.

Cull trees-Rough or rotten trees.

Hardwoods – Dicotyledonous trees, usually broad leaved and deciduous.

Softwoods – Coniferous trees, usually evergreen, having needle or scalelike leaves.

Live trees – All trees alive. Included are all size classes (≥ 1.0 inch d.b.h.), all tree classes, and both commercial and noncommercial species.

Salvable dead trees -Standing or downed dead trees that were formerly growing stock and are considered merchantable. Trees must be ≥ 5.0 inches d.b.h. to qualify.

Dimension Classes of Trees

Sawtimber trees -Trees 9.0 inches and larger in d.b.h. for softwoods, and 11.0 inches and larger for hardwoods.

Poletimbertrees — 5.0 to 8.9 inches in d.b.h. for softwoods and 5.0 to 10.9 inches d.b.h. for hardwoods.

Saplings -Trees 1.0 inch to 4.9 inches in d.b.h.

Seedlings-Trees which are less than 1.0 inch in d.b.h. and greater than 1 foot tall for hardwoods, greater than 6 inches tall for softwoods, and greater than 1/2 inch in diameter at ground level for longleaf pine.

Rough, rotten, and salvable dead trees — See "tree classes."

Stand-Size Classes

Sawtimber stands -Stands at least 16.7 percent stocked with live trees, half or more of this stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands -Stands at least 16.7 percent stocked with live trees, half or more of this stocking in sawtimber or poletimber trees, and with poletimber stocking exceeding that of sawtimber stocking.

Sapling-seedling start&-Stands at least 16.7 percent stocked with live trees, **more** than half of this stocking in saplings or seedlings.

Nonstocked stands — Stands less than 16.7 percent stocked with live trees.

Stocking

Stocking is a measure of the extent to which the growth potential of the site is utilized by trees or preempted by vegetative cover. Stocking is determined by comparing the stand density in terms of number of trees or basal area with a specified standard. Therefore, full stocking is 100 percent of the stocking standard.

The following tabulation by size class shows the density standard in terms of trees required per acre, for full stocking:

D.b.h. (inches)	Number of trees	D.b.h. (inches)	Number of trees
Seedlings	600	16	72
2	560	18	60
4	460	20	51
6	340	22	42
8	240	24	36
10	155	26	31
12	115	28	27
14	90	30	24

Volume

Volume of cull-Volume of sound wood in the bole of rough and rotten trees.

Volume of growing stock — Volume of sound wood in the bole of growing-stock trees from a l-foot stump to a minimum 4.0-inch top outside bark or to the point where the central stem breaks into limbs. Rough, rotten, and noncommercial trees are excluded. By definition, trees must be ≥ 5.0 inches d.b.h.

Volume of sawtimber- Net volume of the sawlog portion of live sawtimber trees in board feet of the International 1/4-inch rule. Net volume equals gross volume less deductions for rot, sweep, and other defects that affect use for lumber to the point where the central stem breaks into limbs. Rough, rotten, and noncommercial trees are excluded.

Volume of live trees -The volume of sound wood in the bole of growing stock, rough, and rotten trees ≥ 5.0 inches d.b.h. from a l-foot stump to a minimum 4.0-inch top diameter outside bark or to the point where the central stem breaks into limbs.

Growth Classes

Gross growth -Total increase in stand volume computed on growing-stock trees or live trees ≥ 5.0 inches d.b.h. Gross growth equals survivor growth plus ingrowth plus growth on removals plus growth on mortality plus cull increment plus mortality.

Net *growth* -Increase in stand volume, computed on growing-stock trees or live trees ≥ 5.0 inches d.b.h. Net growth is equal to gross growth minus mortality.

Net change — Increase or decrease in stand volume, computed on growing-stock trees or live trees ≥ 5.0 inches d.b.h. Net change is equal to net growth minus removals.

Miscellaneous Definitions

Basal area — The area in square feet of the cross section at breast height of a single tree or of all the trees in a stand, usually expressed in square feet per acre.

D.b.h. (diameter at breast height)-Tree diameter in inches, outside bark, measured at 4 1/2 feet above ground.

Diameter classes- The 2-inch diameter classes extend from 1.0 inch below to 0.9 inches above the stated midpoint. Thus, the 12-inch class includes trees 11.0 inches through 12.9 inches d.b.h.

D.o.b. (diameter outside bark) -Stem diameter including bark.

Mortality — Number or sound-wood volume of live trees dying from natural causes during a specified period.

Plantations — Stands evidenced by regeneration from planting or artificial seeding.

Sawlog portion -That part of the bole of a sawtimber tree between a l-foot stump and the sawlog top.

Sawlog top-The point on the bole of a sawtimber tree above which a sawlog cannot be produced. The minimum sawlog top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

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 classes - A classification of forest land in terms of potential capacity to grow crops of industrial wood.

Timber *removals* -The net volume of growing-stock trees removed from the inventory by harvesting or cultural operations such as timber-stand improvement, land clearing, or change in land use.

Tree grade-The grade classification assigned to a sawtimber tree, which is based upon: (1) the log grade of the butt log portion (the best 12 feet of first 16 feet), or (2) the presence of at least one 12-foot or two 8-foot logs in the upper sawlog portion when no butt log is present.

Upper-stem portion -That part of the main stem or fork of a sawtimber tree above the sawlog top to a diameter outside bark of 4.0 inches or to the point where the main stem or fork breaks into limbs.

Table 1 *-Area by parish and land class, Southeast Louisiana Parishes, 1991*

Parish	All land'	Forest land				Nonforest land
		Total	Timberland'	Woodland'	Reserved timberland	
	Thousand acres					
East Baton Rouge	293.4	134.2	134.2	...	.	159.2
East Feliciana	291.4	168.5	168.5	...	...	122.9
Livingston	422.9	327.2	327.2	.	.	95.7
St. Helena	262.0	181.0	181.0	...	...	81.0
St. Tammany	559.0	361.4	361.4	...	...	197.6
Tangipahoa	501.4	307.0	307.0	. . . . .		194.4
Washington	4325	284.4	284.4	. . . . .		148.0
All parishes	2762.6	1763.7	1763.7	...	...	998.9

'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 conditions.

Table *2-Area of timberland by parish and ownership class, Southeast Louisiana Parishes, 1991*

Parish	All ownerships	National forest	Misc. federal	State	Parish and municipal	Forest industry[1]	Farmer	Corporate[2]	Individual[2]
	Thousand acres								
East Baton Rouge	134.2	...	...	...	...	...	20.1	13.4	100.6
East Feliciana	168.5	...	...	...	...	5.8	46.5	5.8	110.4
Livingston	327.2	...	...	...	5.6	174.9	5.6	50.8	90.3
St. Helena	181.0	...	...	...	...	114.0	20.1	...	46.9
St. Tammany	361.4	...	6.5	19.4	...	71.0	...	96.8	167.8
Tangipahoa	307.0	...	5.2	10.4	...	46.8	26.0	31.2	187.3
Washington	284.4	...	...	6.1	...	133.1	48.4	...	96.8
All parishes	1763.7	...	11.7	35.8	5.6	545.6	166.8	198.0	800.1

*Includes land leased to forest industry.

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

Table *3 -Area of timberland by parish and forest type group, Southeast Louisiana Parishes, 1991*

Parish	Total	Forest type group: Longleaf-slash pine, Planted	Longleaf-slash pine, Natural	Loblolly-shortleaf pine, Planted	Loblolly-shortleaf pine, Natural	Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood	Nontyped[1]
	Thousand acres									
East Baton Rouge	134.2	…	…	…	6.7	…	13.4	107.3	6.7	…
East Feliciana	168.5	…	…	23.2	23.2	34.9	63.9	23.2	…	…
Livingston	327.2	…	…	28.2	95.9	33.8	67.7	101.5	…	…
St. Helena	181.0	…	6.7	40.2	67.0	26.8	40.2	…	…	…
St. Tammany	361.4	45.2	45.2	6.5	77.4	2.5.8	32.3	129.1	…	…
Tangipahoa	307.0	10.4	10.4	31.2	52.0	36.4	72.8	83.3	…	10.4
Washington	284.4	…	6.1	66.6	48.4	30.3	84.7	48.4	…	…
All parishes	1763.7	55.6	68.3	195.9	370.8	188.0	375.1	492.9	6.7	10.4

[1] Timberland with no current stocking.

Table *4—Area of timberland by parish and stand-size class, Southeast Louisiana Parishes, 1991*

Parish	All classes	Stand-size class: Sawtimber	Poletimber	Sapling-seedling	Nonstocked[1] areas
	Thousand acres				
East Baton Rouge	134.2	93.9	26.8	13.4	…
East Feliciana	168.5	104.6	17.4	40.7	5.8
Livingston	327.2	197.4	90.3	39.5	…
St. Helena	181.0	93.9	53.6	33.5	…
St. Tammany	361.4	213.0	51.6	96.8	…
Tangipahoa	307.0	140.5	41.6	98.9	26.0
Washington	284.4	96.8	84.7	102.9	…
All parishes	1763.7	940.1	366.1	425.6	31.8

[1] Timberland less than 16.7 percent stocked.

Table *5 -Area of timberland by parish and site class, Southeast Louisiana Parishes, 1991*

Parish	All classes	Site class (cubic feet/acre/year): >165	120-165	85-120	50-85	<50
	Thousand acres					
East Baton Rouge	134.2	53.7	26.8	40.3	13.4	…
East Feliciana	168.5	52.3	93.0	17.4	…	5.8
Livingston	327.2	112.8	84.6	79.0	50.8	…
St. Helena	181.0	53.6	87.2	26.8	13.4	…
St. Tammany	361.4	12.9	122.6	103.3	96.8	25.8
Tangipahoa	307.0	36.4	67.6	109.3	67.6	26.0
Washington	284.4	66.6	72.6	84.7	60.5	…
All parishes	1763.7	388.3	554.4	460.7	302.6	57.6

Table 6 -Area of timberland by parish and stocking classes of growing-stock trees, Southeast Louisiana Parishes, 1991

Parish	All classes	Stocking class (percent)				
		>130	100-130	60-100	16.7-60	< 16.7
	Thousand acres					
East Baton Rouge	134.2	...	20.1	53.7	60.4	...
East Feliciana	168.5	5.8	17.4	87.1	52.3	5.8
Livingston	327.2	33.8	112.8	129.7	50.8	...
St. Helena	181.0	6.7	73.7	93.9	6.7	...
St. Tammany	361.4	12.9	90.4	174.3	83.9	...
Tangipahoa	307.0	10.4	46.8	109.3	78.0	62.4
Washington	284.4	36.3	90.8	121.0	30.3	6.1
All parishes	1763.7	106.0	452.1	769.0	362.3	74.3

Table 7 -Area of timberland by forest type and ownership class, Southeast Louisiana Parishes, 1991

Forest type'	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private
	Thousand acres					
Longleaf-slash pine	123.9	...	6.5	6.7	32.3	78.5
Loblolly-shortleaf pine	566.7		12.5	269.5	18.1	266.5
Softwood total	690.6	...	19.0	276.2	50.4	345.0
Oak-pine	188.0	.	...	37.2	17.3	133.5
Oak-hickory	375.1	..	6.5	94.2	...	274.4
Oak-gum-cypress	492.9	...	27.7	63.8	6.5	394.9
Elm-ash-cottonwood	6.7	...	...	...	...	6.7
Hardwood total	1062.7	...	34.2	195.2	23.8	809.5
Nontyped[2]	10.4		. .		...	10.4
All types	1763.7		53.1	471.5	74.1	1165.0

'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.

[2]Timberland with no current stocking.

Table 8 -Area of timberland by ownership class and stocking classes of growing-stock trees, Southeast Louisiana Parishes, 1991

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
	Thousand acres					
Other public	53.1	6.5	11.3	12. I	18.1	5.2
Forest industry	471.5	53.2	170.8	203.5	38.8	5.2
Forest industry-leased	74.1		23.8	32.3	18.1	
Other private	1165.0	46.3	246.3	521.1	287.3	63.9
All ownerships	1763.7	106.0	452.1	769.0	362.3	74.3

Table 9—*Area of timberland by forest type and stand-size class, Southeast Louisiana Parishes, 1991*

Forest type[1]	All classes	Stand-size class			Nonstocked[2] areas
		Sawtimber	Poletimber	Sapling-seedling	
	Thousand acres				
Longleaf-slash pine	123.9	435	26.1	54.3	…
Loblolly-shortleaf pine	566.7	276.9	147.8	136.2	5.8
Softwood total	690.6	320.4	173.9	1905	5.8
Oak-pine	188.0	127.0	6.7	54.3	…
Oak-hickory	375.1	192.2	49.7	122.8	10.4
Oak-gum-cypress	492.9	293.8	135.8	58.0	5.2
Elm-ash-cottonwood	6.7	6.7	…	…	
Hardwood total	1062.7	619.7	192.2	235.1	15.6
Nontyped[3]	10.4	…	…	…	10.4
All types	1763.7	940.1	366.1	425.6	31.8

[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.
[2]Timberland less than 16.7 percent stocked.
[3]Timberland with no current stocking.

Table 10 -*Number of live trees on timberland by species and diameter class, Southeast Louisiana Parishes, 1991*

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-slash pines	32620	11967	8343	3712	2677	2727	1881	757	342	152	53	8	..
Shortleaf-loblolly pines	193476	75165	46264	30249	17629	9813	5342	3331	2574	1466	627	978	39
Other yellow pines	5674	1642	1109	429	433	533	412	328	267	207	141	166	9
Cypress	22024	6442	5965	3124	2245	1511	976	620	463	325	132	207	13
Total softwoods	253794	95216	61682	37513	22985	14584	8611	5035	3646	2150	953	1359	60
Select white oaks	9051	2137	3345	1316	469	604	278	161	217	176	70	226	52
Select red oaks	1564	...	…	...	331	192	177	190	230	115	105	165	59
Other white oaks	8298	2796	2615	788	777	472	307	112	158	154	57	53	9
Other red oaks	95251	63005	12415	6429	3127	2657	1956	1610	12%	680	615	1161	299
Hickory	13186	7267	2946	978	568	521	253	199	204	115	73	60	…
Soft maple	60984	47867	8127	1859	1735	509	342			41		16	...
Beech	4355	3249	…	166	…	148	119	202	183	81	43	257	68
Sweetgum	101484	66423	16522	8273	3120	2718	1409	1401	746	421	181	267	5
Tupelo-blackgum	117432	50259	35288	11620	9044	5725	2230	1489	758	452	271	278	17
Ash	14760	12246	517	823	385	284	145	105	66	93	61	34	…
Cottonwood-aspen	53	…	…	…	…	42	…	…	…	…	11	..	…
Yellow-poplar	5463	1986	1170	548	1%	402	303	215	243	117	99	159	25
Black walnut	139	…	…	…	139	…	…	…	…	…	…	…	…
Other hardwoods	124544	96131	12357	8032	26%	2099	1211		507	244	151	208	24
Total hardwoods	556564	353368	95301	40833	22587	16372	8731	882 6724	4734	2690	1781	2884	559
Noncommercial	105425	74833	15221	8523	4468	1324	610	1%	83	56	41	55	14
All species	915783	523417	172204	86870	50040	32280	17952	11955	8463	48%	2775	4298	633

Table 11 -*Number* of *growing-stock* trees *on timberland by species and diameter class, Southeast Louisiana Parishes, 1991*

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-slash pines	30072	10458	7752	3460	2533	2675	1881	757	342	152	53	8	...
Shortleaf-loblolly pines	181297	66397	44600	29248	17299	9547	5312	3287	2559	1429	616	963	39
Other yellow pines	4450	1050	592	429	377	533	353	328	267	207	141	166	9
Cypress	16898	3350	5011	2132	2245	1511	976	562	449	309	132	207	13
Total softwoods	232718	81256	57955	35269	22454	14267	8523	4933	3616	2098	942	1344	60
Select white oaks	6432	1072	2197	1173	469	564	159	161	189	165	70	193	21
Select red oaks	1383	...	...	...	331	143	140	143	194	11s	105	152	59
Other white oaks	4965	1110	1546	558	695	366	248	112	94	128	47	53	9
Other red oaks	61097	36926	7425	5236	2912	2326	1379	1360	1172	572	594	982	213
Hickory	8021	3841	2355	340	270	449	193	162	284	113	53	40	...
Soft maple	21715	14941	3173	1335	1367	381	198	178	76	54	34	10	...
Beech	1876	1229	...	166	...	92	...	78			36	131	13
Sweetgum	68476	43810	9867	6229	2.514	2366	980	1311	633	385	137	239	5
Tupelo-blackgum	63274	16784	20875	92%	7738	4727	1251	1230	682	319	229	135	9
Ash	3885	2.586	...	343	330	208	60	105	66	93	61	34	...
Cottonwood-aspen	11	...	...	...	...	...	...	...	...	...	11	...	...
Yellow-poplar	4238	1509	615	464	1%	402	214	215	243	117	99	151	12
Black walnut	72	.	...	...	72	...	..	...	...	...	..	...	.,,
Other hardwoods	70434	51492	7261	5793	2072	1534	888	662	277	189	119	146	...
Total hardwoods	315880	175300	55313	30932	1896.5	13558	5711	5717	3915	2263	1595	2267	341
All species	548598	256556	113268	66202	41420	27825	14234	10651	7532	4361	2537	3611	401

Table 12 — *Volume* of *growing stock on timberland by species and diameter class, Southeast Louisiana Parishes, 1991*

Species	All classes	Diameter class finches 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
	Million cubic feet										
Longleaf-slash pines	150.4	9.5	18.4	35.4	39.2	23.9	12.6	7.2	3.5	0.7	
Shortleaf-loblolly pines	891.8	73.3	109.9	128.8	114.9	108.9	110.6	85.8	46.0	104.4	9.0
Other yellow pines	89.7	1.0	2.6	7.5	8.5	11.6	12.8	13.6	12.0	18.4	1.8
Cypress	123.9	5.6	13.8	15.4	16.7	14.6	15.7	14.4	8.7	16.1	2.8
Total softwoods	1255.9	89.4	144.7	187.1	179.2	159.1	151.8	121.1	70.2	139.7	13.6
Select white oaks	47.6	2.1	2.6	6.0	3.0	4.4	5.4	6.6	3.2	12.6	1.8
Select red oaks	51.4	...	2.1	1.5	2.3	4.5	7.9	5.3	6.0	13.0	9.0
Other white oaks	27.3	0.9	3.7	3.1	3.7	2.5	2.5	4.6	1.7	3.6	1.0
Other red oaks	304.0	14.7	17.5	23.2	24.3	34.5	36.9	23.2	31.5	71.1	26.9
Hickory	31.0	0.7	1.5	3.1	3.6	4.1	2.1	5.2	2.3	2.5	...
Soft maple	27.6	3.9	8.6	0.8	3.4	3.4	2.4	0.4	1.9	0.7	...
Beech	19.5	0.4	...	...		1.8		1.9	1.7	8.9	1.5
Sweetgum	166.6	14.3	13.6	24.7	17.4	33.3	21.1	17.1	7.1	17.3	0.6
Tupelo-blackgum	212.2	23.7	42.9	46.3	20.8	28.1	20.6	12.1	10.2	6.7	0.9
Ash	18.4	0.7	2.0	2.3	0.8	2.8	2.1	3.5	2.9	1.3	...
Cottonwood-aspen	0.5	...							0.5	...	.
Yellow-poplar	49.3	1.3	1.2	4.5	3.4	4.8	8.0	5.9	6.3	12.6	1.4
Black walnut	0.3	14.5.	10.3	15.4.	...	14.1..	9.1.	7.1.	5.9.	8.9.	...
Other hardwoods	101.4				13.9						...
Total hardwoods	1057.2	77.3	108.4	135.5	96.6	138.4	124.7	92.7	81.2	159.2	43.1
All species	2313.0	166.7	2.53.1	322.6	275.8	297.5	276.5	213.8	151.4	298.9	56.6

Table 13 — *Volume of growing stock in the sawlog portion of sawtimber[1] trees on timberland by species and diameter class, Southeast Louisiana Parishes, 1991*

Species	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
	Million cubic feet								
Longleaf-slash pines	108.9	28.4	35.6	22.5	12.2	6.4	3.3	0.5	…
Shortleaf-loblolly pine	679.4	1[illegible]5.7	1[illegible]7.9	101.0	102.2	81.0	43.6	98.3	8.3
Other yellow pines	91.5	10.5	13.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cypress									
Total softwoods	917.8	146.8	158.6	147.6	140.8	114.2	66.2	130.8	12.7
	30.7					5.4	2.7		
Select white oaks	40.5	…	2.3	3.5	[illegible]	4.6	5.1	[illegible]	1.6
Select red oaks			1.5	3.6			[illegible]		7.7
Other white oaks	16.2	…	3.1	2.1	2.0	3.7	1.4	3.1	0.8
Other red oaks	209.0	…	12.7	23.3	30.7	19.1	26.2	62.4	24:o
Hickory	20.0	…	2.5	2.7	5.3	4.3	2.1	2.2	
Soft maple	9.8	…			1.8	0.4	1.9	0.6	…
Beech	15.4	…	…	1.5	2.2	1.5	1.3	7.6	1.2
Sweetgum	93.4	…	12.3	26.3	17.2	15.1	9.5	15.7	0.6
Tupelo-blackgum	83.0	…	14.2	22.8	18.1	11.3	2.5	6.3	0.9
Ash	11.0	…	0.6	2.3	1.5	3.2	[illegible]	1.1	…
Cottonwood-aspen	35.0	…	…	3.6	…	…	5.4	…	
Yellow-poplar	48.4	…	[illegible]	11.1	[illegible]	[illegible]	4.7	[illegible]	1.2
Other hardwoods									…
Total hardwoods	613.0	…	70.1	111.3	104.1	79.8	69.6	140.1	38.0
All species	1530.8	146.8	228.7	258.9	244.9	194.0	135.8	270.9	50.7

[1]That part of the bole of sawtimber trees between a l-foot stump and sawlog top.

Table 14 — *Volume of sawtimber on timberland by species and diameter class, Southeast Louisiana Parishes, 1991*

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-slash pines	639.8	153.3	210.4	139.0	73.1	40.3	20.3	3.5	…
Shortleaf-loblolly pine	4013.8	568.3	615.3	643.4	652.8	528.3	286.5	661.5	57.7
Other yellow pines	510.5	31.6	48.1	69.3	76.9	87.3	74.3	110.9	12.2
Cypress	493.2	48.6	71.2	69.6	81.3	76.6	44.9	87.3	13.7
Total softwoods	5657.3	801.8	944.9	921.2	884.1	732.5	426.0	863.2	83.6
Select white oaks	183.0	…	12.9	20.6	23.6				8.5
Select red oaks	246.9	…	8.2	22.0	40.5	32.9	32.0	60.0	46.5
Other white oaks	97.0	…	16.7	12.7	12.2	22.4	9.2	18.7	5.2
Other red oaks	1240.6	…	99.3	163.7	181.0	112.0	159.0	379.9	145.9
Hickory	1185	…	15.1	18.1	33.0	27.2	13.2	11.9	…
Soft maple	53.5	…	13.9	14.0	8.6	2.5	10.6	4.0	…
Beech	94.8	…	…	8.9	13.4	9.1	7.6	47.5	
Sweetgum	527.3	…	65.8	145.3	97.8	86.8	38.5		8.3
Tupelo-blackgum	431.2	…	69.8	117.4	97.7	59.2	49.9	[illegible]	4.3
Ash	61.9	…	2.8	13.4	8:0	17.8	15.1	4.8	…
Cottonwood-aspen		…	…	…	…		2.4	…	…
Yellow-poplar	2[illegible]%	…	11.3	195	36.9	32.5.	33.9	67.6	7.4
Other hardwoods	271.5	…	59.9	60.4	46.6	32.4	27.6	445	…
Total hardwoods	3537.6	…	375.6	616.1	599.2	462.5	415.2	839.7	229.3
All species	9194.8	801.8	1320.5	1537.3	1483.3	1195.0	841.1	1702.9	312.9

Table 15— *Volume of growing stock and sawtimber on timberland by parish and species group, Southeast Louisiana Parishes, 1991*

Parish	Growing stock						Sawtimber					
		Softwood			Hardwood			Softwood			Hardwood	
		Pine						Pine				
	All species	Planted	Natural	Other	Soft[1]	Hard[2]	All species	Planted	Natural	Other	Soft[1]	Hard[2]
	Million cubic feet						*Million board feet*					
East Baton Rouge	176.3	...	18.2	15.6	76.0	66.5	692.9	...	79.6	78.8	254.9	279.6
East Feliciana	218.0	11.3	105.1	...	37.9	63.7	952.2	18.0	548.2	...	125.3	260.6
Livingston	545.1	76.6	196.9	36.2	134.6	100.8	2044.8	345.0	784.2	136.0	313.7	465.8
St. Helena	293.5	20.8	195.1	...	26.4	51.3	1286.9	23.9	1036.8	...	56.8	169.4
St. Tammany	490.1	27.6	206.0	32.4	132.5	91.7	1987.5	60.6	1002.2	159.7	381.2	383.8
Tangipahoa	302.0	12.7	127.4	34.4	68.9	58.6	1236.9	32.1	706.5	94.1	172.1	232.1
Washington	287.9	41.0	93.3	5.4	74.6	73.7	993.8	48.6	478.6	2h.5	186.2	255.9
All parishes	2313.0	189.9	942.0	123.9	550.9	506.3	9194.8	528.1	4636.0	493.2	1490.3	2047.3

'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 16 — *Volume ojtimber on timberland by class of timber and species group, Southeast Louisiana Parishes, 1991*

Class of timber	All species	Softwood			Hardwood	
		Pine				
		Planted	Natural	Other	Soft[1]	Hard[2]
	Million cubic feet					
Sawtimber trees:						
Sawlog portion	1530.8	87.2	739.1	91.5	269.2	343.7
Upper-stem portion	226.9	12.2	78.7	13.0	56.9	66.1
Total	1757.7	99.4	817.8	104.5	326.1	409.8
Poletimber trees	555.3	90.5	124.2	19.4	224.8	96.5
All growing-stock trees	2313.0	189.9	942.0	123.9	550.9	506.3
Rough trees:						
Sawtimber size	119.8	2.2	4.6	0.4	50.7	62.0
Poletimber size	93.1	2.1	2.4	1.7	31.5	55.4
Total	212.9	4.3	7.0	2.1	82.1	117.4
Rotten trees:						
Sawtimber size	28.2	...	0.8	0.5	12.1	14.8
Poletimber size	2.7	...	...	...	2.0	0.8
Total	31.0	...	0.8	0.5	14.1	15.5
Salvable dead trees:						
Sawtimber size	3.7	0.5	2.4	...	...	0.8
Poletimber size	0.8	...	0.4	...	0.4	...
Total	4.5	0 . 5	2.8	...	0.4	0.8
All classes	2561.4	194.7	952.6	126.6	647.6	639.9

'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 Louisiana Parishes, 1991*

Ownership class	Live trees						Growing stock					
		Softwood			Hardwood			Softwood			Hardwood	
		Pine						Pine				
	All species	Planted	Natural	Other	Soft[1]	Hard[2]	All species	Planted	Natural	Other	Soft[1]	Hard[2]
	Million cubic feet											
Other public	80.1	…	41.6	19.0	9.4	10.0	72.9	…	41.6	18.8	6.2	6.3
Forest industry	611.3	102.8	241.1	13.3	109.3	144.7	572.1	101.8	239.8	13.1	93.5	123.9
Forest industry-leased	77.2	20.1	28.3	0.8	8.6	19.5	71.0	20.1	28.0	0.8	7.3	14.8
Other private	1788.3	71.3	638.7	93.5	519.9	465.0	1597.0	68.0	632.7	91.2	443.9	361.3
All ownerships	2556.9	194.2	949.8	126.6	647.2	639.2	2313.0	189.9	‘942.0	123.9	550.9	506.3

‘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 18 *-Average net annual growth of growing stock and sawtimber on timberland by parish and species group, Southeast Louisiana Parishes, 1991*

Parish	Growing stock						Sawtimber					
		Softwood			Hardwood			Softwood			Hardwood	
		Pine						Pine				
	All species	Planted	Natural	Other	Soft[1]	Hard[2]	All species	Planted	Natural	Other	Soft[1]	Hard[2]
	-Million cubic feet						*Million board feet*					
East Baton Rouge	7.4	…	0.9	0.4	3.6	2.6	28.6	…	4.7	1.8	11.3	10.7
East Feliciana	12.5	2.8	5.3	…	1.8	2.6	64.5	9.9	32.9	…	7.8	13.9
Livingston	26.8	2.5	15.2	0.7	3.7	4.7	122.3	15.5	68.1	2.9	15.9	20.0
St. Helena	15.7	3.2	8.1	…	0.7	3.8	57.3	5.3	41.1	…	1.5	9.4
St. Tammany	20.1	1.9	10.0	0.5	4.6	3.0	99.1	5.7	64.0	1.8	13.9	13.7
Tangipahoa	17.7	3.5	8.6	0.8	2.2	2.5	95.3	22.5	48.4	4.8	7.9	11.8
Washington	21.2	5.5	7.5	0.2	4.6	3.4	73.9	7.0	42.4	0.7	13.4	10.4
All parishes	121.4	19.4	55.5	2.5	21.2	22.7	541.1	65.9	301.7	11.9	71.7	89.9

‘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 19 *-Average annual removals of growing stock and sawtimber on timberland by parish and species group, Southeast Louisiana Parishes, 1991*

Parish	Growing stock						Sawtimber					
		Softwood			Hardwood			Softwood			Hardwood	
		Pine						Pine				
	All species	Planted	Natural	Other	Soft[1]	Hard[2]	All species	Planted	Natural	Other	Soft[1]	Hard[2]
	-Million cubic feet						*-Million board feet*					
East Baton Rouge	0.8	…	…	…	0.6	0.2	3.7	…	…	…	2.6	1.0
East Feliciana	17.3	4.8	11.1	…	0.6	0.8	92.5	26.0	61.7	…	1.0	3.8
Livingston	22.2	0.8	18.3	0.3	1.9	1.0	113.5	1.5	99.5	1.4	7.6	3.6
St. Helena	10.3	1.9	6.6	…	1.0	0.8	33.8	7.0	23.8	…	1.9	1.1
St. Tammany	13.8	1.1	12.1	…	0.5	0.2	55.5	…	53.2	…	2.3	…
Tangipahoa	25.8	7.2	14.5	…	1.8	2.3	119.7	31.0	73.1	…	6.1	9.5
Washington	19.7	4.0	13.3	…	1.0	1.5	80.8	5.3	70.3	…	1.8	3.5
All parishes	110.0	19.7	75.9	0.3	7.4	6.7	499.7	70.8	381.6	1.4	23.4	22.5

‘Hardwood species with an average specific gravity of 0.50 or less such as gums, yellow-poplar, cottonwood, red maple, basswood, aspen, and willow.
[2]**Hardwood** species with an average specific gravity greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

Table 20 *-Average net annual growth and average annual removals of growing stock on timberland by species, Southeast Louisiana Parishes, 1991*

Species	Growth	Removals
	Million cubic feet	
Yellow pines	74.9	95.6
Other softwoods	2.5	0.3
Total softwoods	77.4	95.9
Select white-red oaks	4.5	0.9
Other white-red oaks	15.6	4.8
Hickory	1.2	0.2
Sweetgum	6.6	2.9
Ash-walnut-black cherry	1.1	0.5
Yellow-poplar	3.0	1.4
Other hardwoods	12.0	3.5
Total hardwoods	43.9	14.1
All species	121.4	110.0

Table *21 -Average net annualgrowth and average annual removals of sawtimber on timberland by species, Southeast Louisiana Parishes, 1991*

Species	Growth	Removals
	Million board feet	
Yellow pines	3675	452.4
Other softwoods	11.9	1.4
Total softwoods	379.5	453.8
Select white-red oaks	21.3	3.7
Other white-red oaks	58.2	16.4
Hickory	6.7	0.9
Sweetgum	25.8	8.0
Ash-walnut-black cherry	1.9	...
Yellow-poplar	15.2	5.8
Other hardwoods	32.5	11.0
Total hardwoods	161.6	45.9
All species	541.1	499.7

Table *22-Average annual mortality of growing stock and sawtimber on timberland by species, Southeast Louisiana Parishes, 1991*

Species	Growing stock	Sawtimber
	Million cubic feet	*Million board feet*
Yellow pines	8.1	39.8
Total sofhvoods	8.1	30.8
Other white-red oaks	3.0	12.1
Hickory	0.3	1.3
Sweetgum	1.4	1.3
Ash-walnut-black cherry	0.7	0.4
Yellow-poplar	0.4	0.7
Other hardwoods	2.1	7.6
Total hardwoods	7.9	23.4
All species	16.0	54.3

Table *23 -Average net annualgrowth and average annual removals of growing stock on timberland by ownership class and species group, Southeast Louisiana Parishes, 1991*

Ownership class	Growth						Removals					
	All species	softwood			Hardwood		All species	softwood			Hardwood	
		Pine		Other	Soft[1]	Hard[2]		Pine		Other	Soft[1]	Hard[2]
		Planted	Natural					Planted	Natural			
	Million cubic feet											
Other public	2.3	...	1.1	0.6	0.2	0.4	3.8	...	3.4	...	0.4	...
Forest industry	44.7	12.0	20.2	0.2	4.8	7.5	23.8	6.5	13.9	...	1.1	2.3
Forest industry-leased	4.6	1.6	2.4	...	...	0.6	4.8	1.1	3.7	...	...	...
Other private	69.8	5.8	31.9	1.8	16.2	14.1	77.6	12.1	54.9	0.3	5.9	4.5
All ownerships	121.4	19.4	55.5	2.5	21.2	22.7	110.0	19.7	75.9	0.3	7.4	6.7

[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 annualgrowth and average annual removals of sawtimber on timberland by ownership class and species group, Southeast Louisiana Parishes, 1991*

Ownership class	Growth						Removals					
	All species	softwood			Hardwood		All species	softwood			Hardwood	
		Pine		Other	Soft[1]	Hard[2]		Pine		Other	Soft[1]	Hard[2]
		Planted	Natural					Planted	Natural			
	Million board feet											
Other public	13.1	...	8.4	2.3	0.7	1.7	17.4	...	15.7	...	1.8	...
Forest industry	155.4	27.4	84.6	1.0	16.5	25.9	84.6	12.7	61.9	...	3.0	7.1
Forest industry-leased	20.4	5.3	12.8	...	0.1	2.2	11.4	...	11.4	...	...	...
Other private	352.1	33.2	195.8	8.6	54.4	60.2	386.2	58.1	292.6	1.4	18.7	15.4
All ownerships	541.1	65.9	301.7	11.9	71.7	89.9	499.7	70.8	381.6	1.4	23.4	22.5

[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 Louisiana Parishes, 1991*

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
	Million board feet					
Yellow pines	5164.1	941.6	1018.6	3044.7	...	159.3
Cypress	493.2	90.3	148.0	223.2	...	31.6
Total softwoods	5657.3	1031.9	1166.6	3267.9	...	190.9
Select white-red oaks	429.9	115.9	104.6	136.1	47.4	25.9
Other white-red oaks	1337.7	147.1	131.5	583.1	354.2	121.8
Hickory	118.5	7.0	21.8	56.0	25.5	8.2
Sweetgum	527.3	27.8	152.2	235.7	55.9	55.6
Tupelo and blackgum	431.2	38.0	122.2	207.4	33.8	29.8
Ash-walnut-black cherry	74.7	8.7	28.4	31.4	3.6	2.5
Yellow-poplar	209.0	42.4	28.7	103.6	19.2	15.1
Other hardwoods	409.3	60.7	40.3	192.0	60.6	55.8
Total hardwoods	3537.6	447.6	629.7	1545.3	600.3	314.7
All species	9194.8	1479.4	1796.3	4813.2	600.3	505.7

Table 26 -*Area of timberland by stand age, forest type group and stand origin, Southeast Louisiana Parishes, 1991*

Stand age class	Pine		Oak-pine		Other hardwood types	
	Artificial	Natural	Artificial	Natural	Artificial	Natural
	-Thousand acres-					
l-10	88.8	34.0	18.3	11.3	12.1	24.0
11-20	67.0	11.3	...	...	6.1	...
21-30	46.5	34.2	...	...	...	6.5
31-40	25.3	31.8	...	...	...	...
4150	...	19.9	...	...	...	...
>50	5.6	24.2	...	...	...	5.6
Mixed	18.3	283.8	...	158.4	6.1	814.3
Total	251.5	439.1	18.3	169.7	24.2	850.4

Table 27 – *Volume of softwood growing stock on timberland by parish and forest type group, Southeast Louisiana Parishes, 1991*

Parish	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-								
East Baton Rouge	33.8	...	...	...	11.4	...	1.7	18.3	2.4
East Feliciana	116.4			10.7	43.0	35.7	27.0	...	...
Livingston	309.7	...	...	76.6	137.5	38.7	11.4	45.6	...
St. Helena	215.9	...	8.7	20.8	136.4	39.2	10.7	...	...
St. Tammany	266.0	26.7	61.4	1.0	123.2	9.0	3.6	41.1	...
Tangipahoa	174.5	2.3	9.8	10.3	89.5	24.1	4.1	34.4	...
Washington	139.6	...	6.0	36.0	50.3	13.8	20.4	13.1	...
All parishes	1255.9	29.0	85.9	155.4	591.3	160.5	79.0	152.4	2.4

Table 28 – *Volume of hardwood growing stock on timberland by parish and forest type group, Southeast Louisiana Parishes, 1991*

Parish	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								
East Baton Rouge	142.6	...	...	...	3.0	...	8.8	127.2	3.6
East Feliciana	101.6	...	...	0.3	4.0	23.6	57.4	16.3	...
Livingston	235.4	...	...	5.1	23.6	32.1	47.3	127.3	...
St. Helena	77.6	...		0.8	23.0	30.4	23.4	...	...
St. Tammany	224.1	0.3	2.6	...	18.6	3.9	20.5	178.2	...
Tangipahoa	127.5		0.8	1.0	13.5	24.7	40.1	47.5	...
Washington	148.3	...	1.1	0.3	14.1	8.7	67.6	56.6	...
All parishes	1057.2	0.3	4.5	7.6	99.8	123.3	264.9	553.1	3.6

Table 29 — *Volume-of softwood growing stock in the sawlog portion of sawtimber trees on timberland by forest type group, Southeast Louisiana Parishes, 1991*

Parish	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								
East Baton Rouge	26.8	…	…	…	7.7	…	0.9	16.2	1.9
East Feliciana	84.6	…	…	3.0	28.6	30.7	22.2	…	…
Livingston	210.4	…	…	53.6	80.7	34.1	9.3	32.8	…
St. Helena	168.5	…	5.6	45	116.4	34.0	8.1	…	…
St. Tammany	203.4	10.9	47.9	…	98.4	7.5	3.3	35.5	…
Tangipahoa	132.9	2.1	7.2	3.7	79.2	19.5	2.4	18.7	…
Washington	91.2	…	4.0	8.2	41.0	11.6	14.6	11.8	…
All parishes	917.8	13.0	64.7	73.0	452.1	137.4	60.9	115.0	1.9

Table *30* — *Volume of hardwood growing stock in the sawlog portion of sawtimber trees on timberland by forest type group, Southeast Louisiana Parishes, 1991*

Parish	Total	Forest type group							
		Longleaf-slash pine		Loblollyahortleaf pine		Oak-pine	Oak-hickory	Oak-gum-cypress	Elm-ash-cottonwood
		Planted	Natural	Planted	Natural				
	Million cubic feet								
Fast Baton Rouge	91.2	…	…	…	1.1	…	4.1	83.2	2.8
East Feliciana	64.3	…	…	…	1.8	15.4	365	10.6	…
Livingston	134.2	…	…	2.0	12.3	22.6	31.2	66.1	…
St. Helena	38.9	…	…	…	12.4	15.3	11.2	…	…
St. Tammany	134.2	…	0.9	…	9.6	2.2	9.3	112.2	…
Tangipahoa	71.1	…	0.3	…	7.3	16.3	27.1	20.1	…
Washington	79.0	…	0.9	…	6.8	3.9	355	31.9	…
All parishes	613.0	…	2.0	2.0	51.4	75.7	154.9	324.0	2.8

Table 31— *Volume of timber on timberland by parish, class of timber and species group, Southeast Louisiana Parishes, 1991*

Parish	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Million cubic feet						
East Baton Rouge	213.3	33.8	142.6	…	30.4	…	6.6
East Feliciana	260.4	116.4	101.6	2.0	34.1	…	6.3
Livingston	583.0	309.7	235.4	3.7	30.5	…	3.6
St. Helena	306.1	215.9	77.6	0.8	8.9	0.8	2.2
St. Tammany	534.1	266.0	224.1	3.1	34.6	0.5	5.7
Tangipahoa	344.7	174.5	127.5	3.6	36.2	…	3.0
Washington	315.3	139.6	148.3	0.2	24.9	…	2.3
All parishes	2556.9	1255.9	1057.2	13.4	199.5	1.3	29.7

Table 32 -Number of live trees on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991

Species	All classes	Diameter class (inches at breast height) 1.0-2.9	3.0-4.9	5.0-6.9	7.0-a.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-la.9	19.0-20.9	21.0-28.9	29.0 & larger
	Thousand trees												
Longleaf pine	10548	6679	1908	549	136	340	383	176	233	95	42	8	...
Slash pine	22071	5289	6435	3163	2542	2387	1498	580	108	58	11	...	...
Shortleaf pine	2736	1170	...	96	321	431	422	162	118	...	11	7	...
Loblolly pine	190740	73996	46264	30153	17308	9382	4920	3169	2456	1466	616	971	39
Spruce pine	5674	1642	1109	429	433	533	412	328	267	207	141	166	9
Cypress	22024	6442	5965	3124	224.5	1511	976	620	463	325	132	207	13
Total softwoods	253794	95216	61682	37513	22985	14584	a611	5035	3646	2150	953	1359	60
Select white oaks	9051	2137	3345	1316	469	604	278	161	217	176	70	226	52
Select red oaks	1564	...	...	...	331	192	177	190	230	115	105	165	59
Other white oaks	8298	2796	2615	788	777	472	307	112	158	154	57	53	9
Other red oaks	95251	63005	12415	6429	3127	2657	1956	1610	12%	680	615	1161	299
Sweet pecan	974	615	...	la5	a7	...	32	...	16	...	20	20	...
Water hickory	1886	...	592	356	437	254	60	23	55	55	23	31	...
Other hickories	10326	6652	2355	438	45	267	161	176	134	60	30	a	...
Persimmon	7640	6881	517	206	...	36		...	...	...	...	...	...
Soft maple	60863	47867	al27	la59	1666	509	313	239	183	41	43	16	...
Boxelder	121	...	...	...	69	...	29	23	...	...	...	...	...
Beech	4355	3249	...	166	...	148	119	97	125	al	44	257	68
Sweetgum	101484	66423	16522	8273	3120	2718	1409	1401	746	421	la l	267	5
Blackgum	79510	42180	21809	7200	4568	1832	796	485	247	171	116	105	...
Other gums/tupelos	37922	8079	13479	4421	4476	3892	1434	1004	511	280	155	174	17
White ash	67	...	...	...	67	...		...	...	...	...	...	...
Other ashes	14692	12246	517	823	317	284	145	105	66	93	61	34	...
Sycamore	404	...	...		69	96	59	68	15	58	12	26	...
Cottonwood	53	...	...	...	...	42		...	...	...	11	...	...
Yellow-poplar	5463	1986	1170	548	1%	402	303	215	243	117	99	159	25
Magnolia	8648	6289	1147	262	113	88	148	2.58	169	2.5	41	a4	24
Sweetbay	28230	21418	2844	2129	495	509	279	257	la7	40	31	42	...
Willow	1176	517	...	210	157	63	61	91	16	15	35	10	...
Black walnut	139	...	...	...	139	...		...	...	...	...	...	...
Black cherry	9592	6115	2257	531	302	224	91.	24	32	15	...	...	...
American elm	7618	4586	615	1561	188	286	277	2.5	...	27	13	39	...
Other elms	11700	9802	517	488	341	358	94	26	50	13	11	...	...
River birch	564	...	...	286	219	...	...	41	18	...	...	...	...
Hackberry	1441	1132	...	143	60	88	...	...	...	11	...	6	...
Other locusts	965	...	615	103	119	53	32	22	21	...	...	...	...
Sassafras	2434	2219	...	al	64	...	31	17	...	11	9	...	...
Dogwood	33335	296a0	2257	1071	280	...	48	...	...	...	...	...	...
Holly	7400	5193	1110	691	202	157	32	...	...	15	...	...	...
Other commercial	3397	2298	477	269	88	141	60	51	...	13	...	...	...
Total hardwoods	556564	353368	95301	40833	22587	16372	8731	6724	4734	2690	1781	2884	559
Noncommercial	105425	74833	15221	a523	4468	1324	610	1%	83	56	41	55	14
All species	915783	523417	172204	86870	50040	32280	17952	11955	a463	48%	2775	4298	633

Table *33 -Number of growing-stock trees on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

Species	All classes	Diameter class (inches at breast height) 5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
	Thousand trees										
Longleaf pine	1962	549	136	340	383	176	233	95	42	8	
Slash pine	9901	2911	2398	2335	1498	580	108	58	11	...	:::
Shortleaf pine	1567	%	321	431	422	162	118	...	11	7	...
Loblolly pine	68733	29152	16977	9117	4890	3125	2441	1429	606	956	39
Spruce pine	2809	429	377	533	353	328	267	207	141	166	9
Cypress	8537	2132	2245	1511	976	562	449	309	132	207	13
Total softwoods	93507	35269	22454	14267	8523	4933	3616	2098	942	1344	60
Select white oaks	3163	1173	469	564	159	161	189	16.5	70	193	21
Select red oaks	1383	...	331	143	140	143	194	115	105	152	59
Other white oaks	2310	558	695	366	248	112	94	128	47	53	9
Other red oaks	16746	5236	2912	2326	1379	1360	1172	572	594	982	213
Sweet pecan	113	...	87	...	...	...	16	...	11	...	...
Water hickory	592	...	139	217	60	23	55	55	12	31	...
Other hickories	1121	340	45	233	132	139	134	60	30	8	...
Persimmon	137	102	...	36	...	...	...	...	...	...	...
Soft maple	3532	1335	1298	381	198	178	84	13	34	10	.
Boxelder	69	...	69	...	...	..	...	...	...	...	...
Beech	647	166	...	92	...	78	76	54	36	131	13
Sweetgum	14799	6229	2514	2366	980	1311	633	385	137	239	5
Blackgum	12389	5526	3928	1471	523	420	232	118	105	66	...
Other gums/tupelos	13226	3769	3809	3256	729	810	450	201	124	69	9
White ash	67	...	67	...	...	...	...	...	...	...	...
Other ashes	1232	343	262	208	60	105	66	93	61	34	...
Sycamore	404	...	69	%	59	68	15	58	12	26	...
Cottonwood	11	...	...	...	...	...	...	...	11	..	...
Yellow-poplar	2115	464	1%	402	214	215	243	117	99	151	12
Magnolia	984	262	113	46	148	213	119	11	32	41	...
Sweetbay	3277	2034	351	378	154	217	72	40	8	23.	...
Willow	524	210	157	33	33	46	...	...	35	10	...
Black walnut	72	...	72	...	...	...	...	...	...	...	...
Black cherry	810	292	172	224	91	...	17	15	...	...	
American elm	1914	1211	188	174	250	25	...	14	13	39	...
Other elms	971	248	341	235	63	26	36	13	11	...	...
River birch	542	286	219	...	...	19	18	...	...	...	...
Hackberry	165	...	60	88	...	...	...	11	...	6	...
Other locusts	270	103	60	53	32	22	...	...	...	...	...
Sassafras	197	81	64	...	31	...	...	11	9	...	...
Dogwood	384	306	78	...	...	...	...	...	...	...	...
Holly	829	531	202	81	...	...	...	15	...	...	...
Other commercial	272	127	...	91	28	26	...	...	...	...	...
Total hardwoods	85267	30932	18965	13558	5711	5717	3915	2263	1595	2267	341
All species	178774	66202	41420	27825	14234	10651	7532	4361	2537	3611	401

Table 34 — *Volume of growing stock on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

Species	All classes	Diameter class (inches at breast height) x 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	38.0	1.1	1.4	4.7	8.6	5.6	8.8	4.2	2.8	0.7	…
Slash pine	1125	a.4	17.0	30.7	30.5	18.2	3.8	3.0	0.8	…	…
Shortleaf pine	33.1	0.9	3.2	7.3	9.9	5.6	5.3	…	0.6	0.4	…
Loblolly pine	858.6	72.5	106.7	121.5	105.0	103.4	105.3	85.8	45.4	104.1	9.0
Spruce pine	89.7	1:0	2.6	7.5	8.5	11.6	12.8	13.6	12.0	18.4	1.8
Cypress	123.9	5.6	13.8	15.4	16.7	14.6	15.7	14.4	a.7	16.1	2.8
Total softwoods	1255.9	89.4	144.7	187.1	179.2	159.1	151.8	121.1	70.2	139.7	13.6
Select white oaks	47.6	2.1	2.6	6.0	3.0	4.4	5.4	6.6	3.2	12.6	1.8
Select red oaks	51.4	…	2.1	1.5	2.3	4.5	7.9	5.3	6.0	13.0	9.0
Other white oaks	27.3	0.9	3.7	3.1	3.7	2.5	2.5	4.6	1.7	3.6	1.0
Other red oaks	304.0	14.7	17.5	23.2	24.3	34.5	36.9	23.2	31.5	71.1	26.9
Sweet pecan	1.0	…	0.3	…	…	…	0.4	…	0.3	…	. .
Water hickory	12.5	…	0.8	2.7	1.2	0.7	2.1	2.4	0.7	1.9	…
Other hickories	17.5	0.7	0.4	1.9	2.4	3.4	4.1	2.7	1.3	0.6	…
Persimmon	0.8	0.3	…	0.5	…	…	…	…	…	…	…
Soft maple	27.3	3.9	8.2	3.1	3.4	3.4	2.1	0.4	1.9	0.7	…
Boxelder	0.3	…	0.3	…	…	…	…	…	…	…	
Beech	19.5	0.4	…	0.8	…	1.8	2.4	1.9	1.7	8.9	1.5
Sweetgum	166.6	14.3	13.6	24.7	17.4	33.3	21.1	17.1	7.1	17.3	0.6
Blackgum	88.8	13.6	21.3	13.8	8.8	10.3	7.4	5.1	4.9	3.5	…
Other gums/tupelos	123.4	10.1	21.6	32.6	11.9	17.8	13.2	6.9	5.3	3.2	0 . 9
White ash	0.5	…	0.5	…	…	…	…	…	…	…	…
Other ashes	17.9	0.7	1.5	2.3	0.8	2.8	2.1	3.5	2.9	1.3	…
Sycamore	10.0	…	0.4	1.3	1.0	1.6	0.8	2.8	0.6	1.6	…
Cottonwood	0.5	…	…	…	…	…	…	…	0.5	…	…
Yellow-poplar	49.3	1.3	1.2	4.5	3.4	4.8	8.0	5.9	6.3	12.6	1.4
Magnolia	17.9	0.5	0.9	0.5	2.5	4.3	4.0	0.4	2.0	2.9	…
Sweetbay	23.2	5.7	2.0	3.9	2.1	4.7	1.8	1.2	0.5	1.4	…
Willow	4.5	0.4	0.6	0.3	0.3	1.0	…	…	1.5	0.4	…
Black walnut	0.3	…	0.3	…	…	…	…	…	…	…	…
Black cherry	7.0	0.6	1.3	2.3	1.5	…	0.8	0.5	…	…	…
American elm	13.9	2.6	1.6	1.6	4.2	0.5	…	0.6	0.4	2.3	…
Other elms	8.8	0.6	1.9	2.4	1.2	0.7	1.2	0.4	0.4	…	…
River birch	3.1	0.8	1.1	…	…	0.5	0.7	…	…	…	…
Hackberry	2.3	…	0.5	0.9	…	…	…	0.4	…	0.4	…
Other locusts	2.0	0.4	0.5	0.3	0.3	0.5	…	…	…	…	…
Sassafras	2.2	0.4	0.5	…	0.4	. .	…	0.5	0.4	…	…
Dogwood	0.8	0.5	0.3	…	…	...	…	…	…	…	…
Holly	3.2	1.4	0.9	0.6	…	…		0.2	…		…
Other commercial	1.7	0.4	…	0.6	0.4	0.3	…	…	…	…	…
Total hardwoods	1057.2	77.3	108.4	135.5	96.6	138.4	124.7	92.7	81.2	159.2	43.1
All species	2313.0	166.7	253.1	322.6	275.8	297.5	276.5	213.8	151.4	298.9	56.6

Table 35 — *Volume of growing stock in the sawlog portion of sawtimber trees on timberland by &tailed species and diameter class, Southeast Louisiana Parishes, 1991*

Species	All classes	Diameter class (inches at breast height) 9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
	Million cubic feet								
Longleaf pine	32.8	4.1	8.0				2.5		
Slash pine		24.3	27.5	5.4	8.5	3.7	0.8	0.5	…
Shortleaf pine	26.2	6:1	9.2	5.2	5.1	…		…	…
Loblolly pine	611.7	%.1	92.3	95.8	97.1	2.7	0.5	0.3	…
Spruce pine	79.4	5.7	7.9	10.9	11.7	81.0	43.1	98.0	8.3
Cypress	91.5	10.5	13.7	13.2	14.8	13.0	11.5	17.0	1.7
Total softwoods	917.8	146.8	158.6	147.6	140.8	13.8	7.8	15.0	2.7
						114.2	66.2	130.8	12.7
Select white oaks	30.7	…	2.3	3.5	4.1	5.4	2.7	11.1	1.6
Select red oaks	40.5	…	1.5	3.6	6.7	4.6	5.1	11.2	7.7
Other white oaks	16.2	…	3.1	2.1	2.0	3.7	1.4	3.1	0.8
Other red oaks	209.0		18.1	28.6	30.7	19.1	26.2	62.4	24:o
Sweet pecan	0.6		…	…	0.3	…	0.3	…	…
Water hickory	8.3	:::	1.1	0.6	1.9	2.2	0.6	1.8	…
Other hickories	11.1	…	1.7	2.7	3.1	2.1	1.2	0.4	…
Soft maple	9.8	…	2.5	2.7	1.8	0.4	1.9	0.6	…
Beech	15.4	…	…	1.5	2.2	1.5	1.3	7.6	1.2
Sweetgum	93.4	…	12.3	26.3	17.2	15.1	6.3	15.7	0.6
Blackgum	34.1	…	6.2	8.6	6.5	4.8	4.6	3.4	…
Other gums/tupelos	49.0	…	8.0	14.2	11.6	6.4	4.9	2.9	0.9
Other ashes	11.0	…	0.6	2.3	1.5	3.2	2.5	1.1	…
Sycamore	7.1	…	1.0	1.2	0.7	2.4	0.3	1.5	…
Cottonwood	0.4		…	…	…	…	0.4	…	…
Yellow-poplar	35.0	:::	2.2	3.6	6.6	5.2	5.4	10.9	1.2
Magnolia	13.5	…	1.9	3.4	3.4	0.4	1.9	2.6	…
Sweetbay	9.6	…	1.7	3.8	1.4	1.1	0.3	1.3	…
Willow		…	0.3	0.8	…	…	1.1	0.2	…
Black cherry	3::	…	1.1	…	0.7	0.3	…	…	…
American elm	6.2	…	2.9	0.4	…	0.4	0.4	2.1	…
Other elms	3.2	…	1.0	0.5	1.0	0.4	0.3	…	…
River birch	1.1	…	…	0.5	0.6	…	…	…	…
Hackberry	0.7	…	…	…	…	0.4	…	0.4	…
Other locusts	0.7	…	0.3	0.4	…	…	…	…	…
Sassafras	1.1	…	0.3	…	…	0.4	0.4	…	…
Holly	0.2	…	…	…	…	0.2	…	…	…
Other commercial	0.5	…	0.3	0.2	…	…	…	…	…
Total hardwoods	613.0	…	70.1	111.3	104.1	79.8	69.6	140.1	38.0
All species	1530.8	146.8	228.7	258.9	244.9	194.0	135.8	270.9	50.7

Table 36 — *Volume of timber on timberland by detailed species and class of timber, Southeast Louisiana Parishes. 1991*

Species	All live	Growing stock	Rough	Rotten
		Million cubic feet		
Longleaf pine	38.0	38.0	…	…
Slash pine	114.0	112.5	1.5	…
Shortleaf pine	33.1	33.1	…	…
Loblolly pine	868.7	858.6	9.3	0.8
Spruce pine	90.2	89.7	0.5	..
Cypress	126.6	123.9	2.1	0.5
Total softwoods	1270.6	1255.9	13.4	1.3
Select white oaks	54.3	47.6	3.4	3.3
Select red oaks	55.3	51.4	3.7	0.3
Other white oaks	31.0	27.3	3.5	0.2
Other red oaks	342.0	304.0	31.2	6.7
Sweet pecan	2.7	1.0	1.6	0.1
Water hickory	16.2	12.5	3.7	…
Other hickories	19.0	17.5	1.5	…
Persimmon	0.9	0.8	0.1	…
Soft maple	36.5	27.3	8.5	0.7
Boxelder	0.9	0.3	0.4	0.2
Beech	32.5	19.5	9.0	4.1
Sweetgum	190.2	166.6	21.2	2.3
Blackgum	104.2	88.8	13.1	2.3
Other Sums/tupelos	147.0	123.4	21.2	2.4
White ash	0.5	0.5	…	…
Other ashes	20.8	17.9	2.5	0.4
Sycamore	10.0	10.0	…	…
Cottonwood	0.8	0.5	0.3	…
Yellow-poplar	51.9	49.3	1.9	0.6
Magnolia	22.8	17.9	2.6	2.2
Sweetbay	36.5	23.2	4.7	2.5
Willow	0.6	[illegible]	[illegible]	…
Black walnut	[illegible]			
Black cherry	8.6	7.0	1.5	0.2
American elm	15.5	13.9	1.7	…
Other elms	10.7	8.8	1.9	…
River birch	2.5	3.1	0.6	…
Hackberry	2.5	[illegible]	[illegible]	…
Other locusts				..
sassafras	2.3	2.2	…	0.1
Dogwood	2.9	0.8	2.0	…
Holly	3.7	3.2	0.2	0.4
Other commercial	3.4	1.7	1.3	0.4
Total hardwoods	1233.1	1057.2	146.3	29.7
Noncommercial	53.2	…	53.2	…
All species	2556.9	2313.0	212.9	31.0

Table 37— *Volume of sawtimber for tree grade 1 on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

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	26.9	5.9	…	7.4	6.2	3.0	4.4	…	…
Slash pine	18.1	4.3	4.1	6.6	3.1	.	…	…	…
Shortleaf pine	57.9	1.9	12.0	19.7	20.9		3.5		…
Loblolly pine	802.1	38.9	51.1	76.2	131.7	161.8	47.5	252.9	42.0
Spruce pine	36.5	…	3.7	…	2.6	3.2	6.2	8.6	12.2
Cypress	90.3	8.2	12.5	14.4	3.4	22.1	12.0	17.6	
Total softwoods	1031.9	59.3	83.3	124.3	167.9	190.1	73.6	279.2	54.2
Select white oaks	20.7	…	…	…	…	2.8	6.7	11.1	…
Select red oaks	95.3			…	…	14.0	17.2	43.7	20.4
Other white oaks	7.3	…	…	…		4.7	…	2.6	…
Other red oaks	139.8	…	…	…	3.6	9.6	28.2	63.8	34.6
Water hickory	2.6	…	…	…		…		2.6	
Other hickories	4.3		…	…	…	…	4.3	…	…
Soft maple	3.4	…	…	…	…	…	3.4	…	…
Beech	27.1	…	…	…	3.6		2.3	18.0	3.2
Sweetgum	27.8		…	…	2.6	6.1	9.9	9.2	…
Blackgum	11.9	…	…	…	…	7.4	2.3	2.3	…
Other gums/tupelos	26.1	.	…	…	3.0	2.6	9.4	6.9	4.3
Other ashes	8.7	…	…	…	…	5.9	2.8	…	…
Yellow-poplar	47.3	…	…	…	3.2	10.8	6.6	16.4	5.4
Magnolia	9.5	…	.	…	.	…	3.4	6.0	
Sweetbay	2.9	…	…	…		2.9	…	…	
American elm	8.2	…		…	…		…	8.2	…
Hackberry	2.2	…	…	…	…	…	…	2.2	…
Total hardwoods	447.6	…	…	…	16.0	74.1	96.7	193.0	67.8
All species	1479.4	59.3	83.3	124.3	183.9	264.1	170.3	472.2	122.0

Table 38 — *Volume of sawtimberfor tree grade 2 on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

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	83.0	10.0	21.3	18.4	23.5	5.2	4.6	...	...
Slash pine	28.6	10.0	15.3	...	...	3.3	...	...	...
Shortleaf pine	41.3	18.0	10.0	3.9	9.3	...	78.0	...	...
Loblolly pine	749.4	43.4	67.2	116.2	108.8	143.9	20.2	184.2	7.7
Spruce pine	116.3	11.9	19.5	27.2	10.5	3.9		23.1	...
Cypress	148.0	10.8	19.6	22.2	31.0	22.8	7.6	30.7	3.2
Total softwoods	1166.6	104.0	153.1	187.9	183.2	179.1	110.4	238.0	10.8
Select white oaks	49.1			1.6	11.3	10.3	4.6	20.0	1.3
Select red oaks	55.5	...	...	10.8	25.0	...	2.7	2.0	15.0
Other white oaks	11.2			...	2.7		4.1	4.4	...
Other red oaks	120.3	...	...	13.4	13.9	14.9	26.4	42.5	9.3
Sweet pecan	2.3		...	...	...	...	2.3		...
Water hickory	3.1	...	...	...	...	3.1	...	...	...
Other hickories	16.3	...		8.2	5.2	...	2.9	...	
Soft maple	9.9	...		1.6	...	...	4.2	4.0	:::
Beech	2.4	...		...	...	...	...		2.4
Sweetgum	152.2	...	...	43.5	37.7	24.1	17.2	29.9	
Blackgum	50.6	...		11.3	10.9	6.8	15.3	6.3	
Other gums/tupelos	71.6	...	...	25.1	31.9	8.3	5.2	1.1	:::
Other ashes	24.1	.		8.6	6.3				
Sycamore	8.3	...	...	5.0	...	...	9.3	3.2	:::
Yellow-poplar	28.7			5.1	...	9.6	6.2	7.7	...
Magnolia	4.6			...	2.1	...	...	2.5	...
Sweetbay	9.1			3.0	2.8	...	...	3.3	...
Black cherry	4.3	...	...	...	4.3	...	...	...	...
Other elms	3.5	...	...	...	3.5				
River birch	2.5	...	...	2.5	...	...	...	...	
Total hardwoods	629.7	...		139.6	157.6	77.1	100.6	126.9	28.0
All species	1796.3	104.0	153.1	327.5	340.8	256.2	211.0	364.9	38.8

Table *39 — Volume of sawtimberfor tree grade 3 on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

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	85.3	7.3	26.7	7.3	21.3	13.0	6.2	3.5	…
Slash pine	373.0	113.1	135.5	89.2	16.0	14.2	5.0	…	…
Shortleaf pine									…
Loblolly pine	2169.5	437.6	426.4	392.7	352.8	203.2	143.1	210.3	8.0
Spruce pine	350.7	19.7	24.9	42.1	63.8	80.2	43.5	76.6	…
Cypress	223.2	28.0	39.1	33.0	46.0	27.0	22.6	25.0	2.5
Total **softwoods**	3267.9	623.7	683.9	574.5	501.8	337.7	220.4	315.4	10.5
Select white oaks	74.3	…	6.1	12.9	10.0	15.5	0.6	24.1	5.2
Select red oaks	61.8	.	4.8	7.5	13.7	8.3	6.4	13.9	7.1
Other white oaks	53.7	…	9.2	10.9	7.7	11.0	1.6	8.1	5.2
Other red oaks	529.4	…	52.2	80.5	91.6	57.6	65.3	144.8	37.4
Sweet pecan	1.7	…	…	…	1.7	…	…	…	
Water hickory	26.6	…	6.3	4.0	9.4	3.8	…	3.1	…
Other hickories	27.7	…	4.1	3.6	9.1	8.3	…	2.7	…
Soft maple									…
Beech	32.6	…	6.0	10.1	6.3	2.3	3.0	13.4	2.7
Sweetgum	235.7	.	44.0	75.1	39.9	35.4	6.7	31.2	3.3
Blackgum	88.3	…	27.7	32.1	12.7	4.2	3.9	7.8	…
Other gums/tupelos	119.1	…	35.6	37.6	22.2	13.2	9.0	1.5	…
Other ashes	24.4	…	2.8	1.2	1.7	11.9	3.0	3.8	…
Sycamore	16.6	…	6.1	…	4.7	2.8	…	3.1	…
Cottonwood	2.4	…	…	…	…	…	2.4	…	
Yellow-poplar	103.6	…	11.3	11.1	19.9	12.1	21.0	28.2	…
Magnolia	43.0	…	10.4	11.6	12.5	…	3.5	4.9	…
Sweetbay	27.2		5.8	13.8	4.1	1.4	2.2	…	…
Willow	10.4	…	1.5	2.2	…	…	6.7	…	…
Black cherry	7.0	…	5.0	…	…	2.0	…	…	
American elm	21.4	…	16.2	2.1	…	…	1.5	1.6	…
Other elms	12.5	…	6.0	2.7	…	1.6	2.1	…	…
Sassafras	3.8	…	1.5	…	…	…	2.3	…	…
Other commercial	1.2	…	1.2	…	…	…	…	…	…
Total hardwoods	1545.3	…	263.6	321.2	274.8	191.5	141.0	292.3	60.9
All species	4813.2	623.7	947.5	895.6	776.7	529.2	361.5	607.7	71.4

Table 40 — *Volume of sawtimber for tree grade 4 on timberland by detailed species and diameter class, Southeast Louisiana Parishes, 1991*

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	27.6	...	6.8	6.1	2.3	4.3	...	8.1	...
Select red oaks	19.8	...	...	3.7	...	5.4	4.4	6.3	...
Other white oaks	20.7	...	7.5	1.8	1.9	3.0	35	3.0	...
Other red oaks	3335	...	44.4	62.8	58.6	25.8	27.5	81.2	33.3
Water hickory	13.6	...	...	...	3.0	7.0	3.6	...	...
Other hickories	12.0	...	3.1	1.7	3.7	3.5	...	...	...
Soft maple	10.8	...	7.9	...	...	...	2.9	...	...
Beech	24.6	...	...	6.9	2.3	2.4	...	13.1	...
Sweetgum	55.9	...	20.3	16.7	3.6	11.7	...	3.6	...
Blackgum	13.8	...	2.4	...	6.5	2.6	...	2.4	...
Other gums/tupelos	20.0	...	0.9	7.6	3.6	5.5	...	2.3	...
Other ashes	3.6	...	...	3.6	...	...	...	...	...
Sycamore	1.7	...	...	...	...	...	1.7	...	...
Yellow-poplar	19.2	...	...	2.4	10.1	...	...	6.8	...
Magnolia	9.6	...	...	1.4	4.0	...	4.2	...	...
Sweetbay	3.9	...	1.4	2.5	...	...	...	...	...
Willow	3.6	...	...	2.1	...	...	...	1.5	...
American elm	2.8	...	...	...	...	2.8	...	...	...
Hackberry	2.0	...	...	...	...	2.0	...	...	...
Other locusts	1.5	...	1.5	...	...	...	...	...	...
Total hardwoods	600.3	...	96.2	119.3	99.6	75.9	47.9	128.2	33.3
All species	600.3	...	96.2	119.3	99.6	75.9	47.9	128.2	33.3

Table 41 — *Volume of sawtimber on timberland by species and ownership class, Southeast Louisiana Parishes, 1991*

Species	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private
	Million board feet					
Yellow pines	5164.1	...	263.5	1165.0	174.9	3560.8
Cypress	493.2	...	31.1	60.8	4.4	**396.9**
Total softwoods	5657.3	...	294.6	1225.8	179.2	3957.6
Select white-red oaks	429.9	...	10.4	52.5	14.1	353.0
Other white-red oaks	1337.7	...	16.9	387.1	29.9	903.8
Hickory	118.5	...	...	3.7	8.7	106.0
Sweetgum	527.3	...	7.8	126.8	8.5	384.2
Tupelo and **blackgum**	431.2	...	12.9	55.9	8.9	353.5
Ash-walnut-black cherry	74.7	...	...	15.8	4.4	54.5
Yellow-poplar	209.0	...	4.7	19.3	...	185.1
Other hardwoods	409.3	...	0.7	69.9	4.6	334.1
Total hardwoods	3537.6	...	53.4	731.1	79.0	2674.1
All species	9194.8	...	348.0	1956.8	258.2	6631.8

Table 42—*Average net annual growth, average annual removals, and average annual mortality of live trees' by parish and species group, Southeast Louisiana Parishes, 1991*

Parish	Net growth			Removals			Mortality		
	All species	softwood	Hardwood	All species	Softwood	Hardwood	All species	softwood	Hardwood
	Million cubic feet								
East Baton Rouge	8.3	1.2	7.1	0.8	…	0.8	2.1	…	2.1
East Feliciana	13.4	7.7	5.7	17.3	16.0	1.4	3.8	2.4	1.4
Livingston	24.2	18.2	6.0	23.9	19.5	4.3	6.2	1.9	4.3
St. Helena	16.4	11.8	4.6	11.3	9.1	2.2	2.5	1.7	0.8
St. Tammany	18.7	12.7	6.0	14.9	13.4	1.5	4.6	1.4	3.2
Tangipahoa	17.3	12.9	4.3	26.7	21.8	4.8	3.2	0.6	2.6
Washington	19.3	12.8	6.5	205	17.7	2.8	5.3	2.3	3.0
All parishes	117.5	77.3	40.2	115.4	97.6	17.8	27.7	10.3	17.4

'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' by ownership class and species group, Southeast Louisiana Parishes, 1991*

Ownership class	Net growth			Removals			Mortality		
	All classes	softwood	Hardwood	All species	softwood	Hardwood	All species	softwood	Hardwood
	Million cubic feet								
Other public	2.5	1.7	0.9	4.2	3.4	0.8	1.1	0.9	0.3
Forest industry	42.4	32.7	9.7	25.3	21.2	4.1	6.3	2.5	3.7
Forest industry-leased	4.5	4.1	0.4	4.9	4.9	…	0.9	0.3	0.6
Other private	68.1	38.9	29.3	81.1	68.1	13.0	19.4	6.6	12.8
All ownerships	1175	77.3	40.2	115.4	97.6	17.8	27.7	10.3	17.4

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

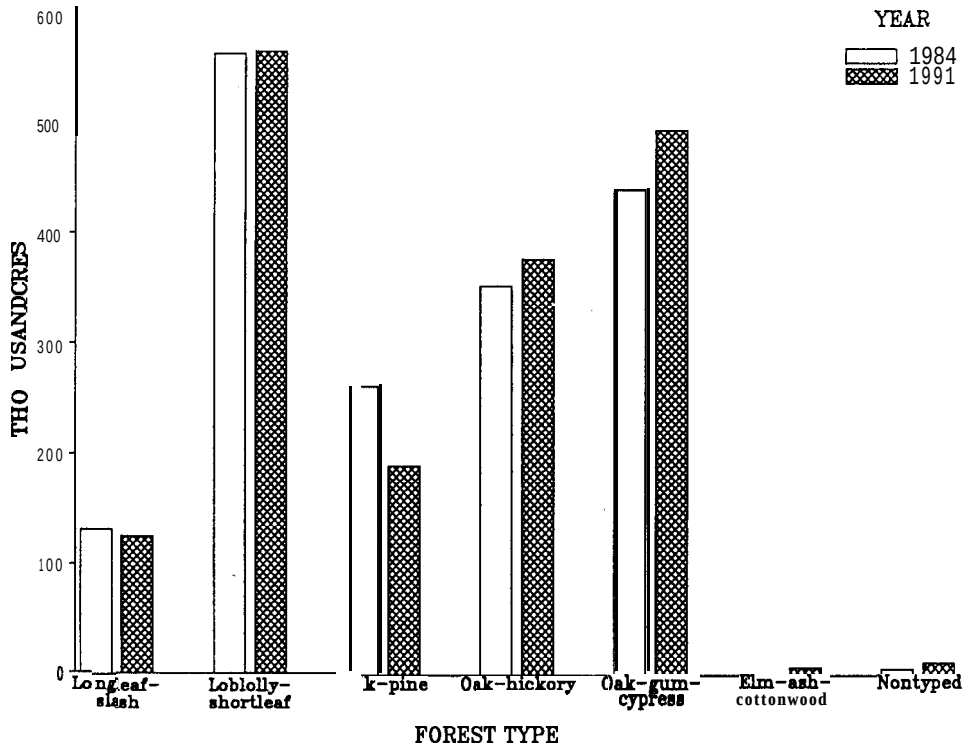

Figure 1. ***-Area of timberland by forest type, Southeast Louisiana, 1984 and 1991.***

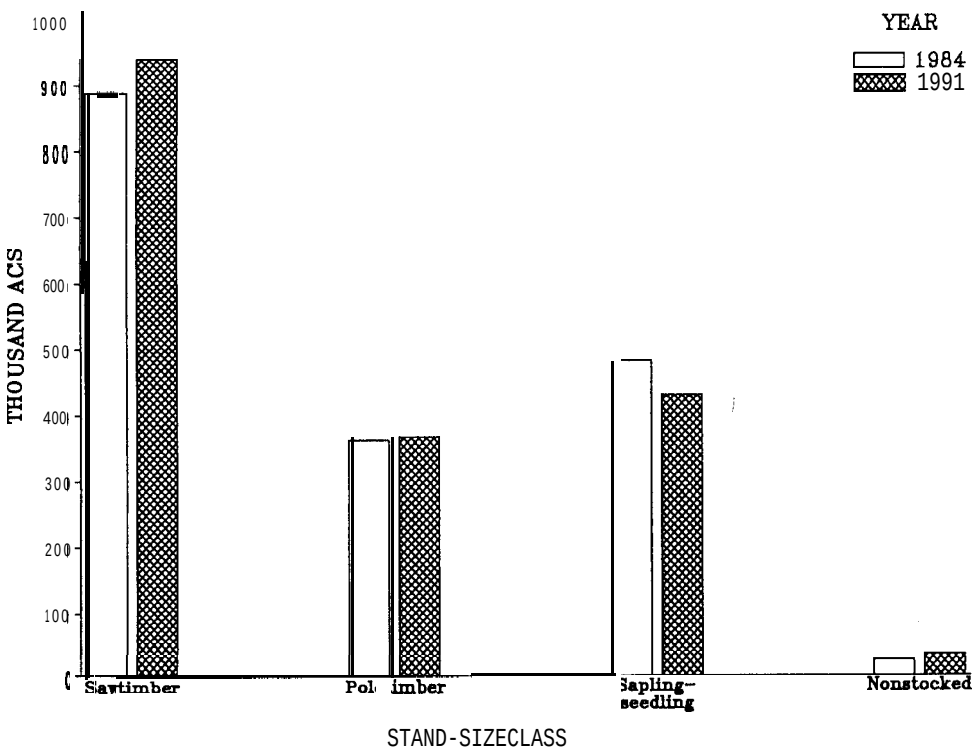

Figure ***2. -Area of timberland by stand-size class, Southeast Louisiana, 1984 and 1991.***

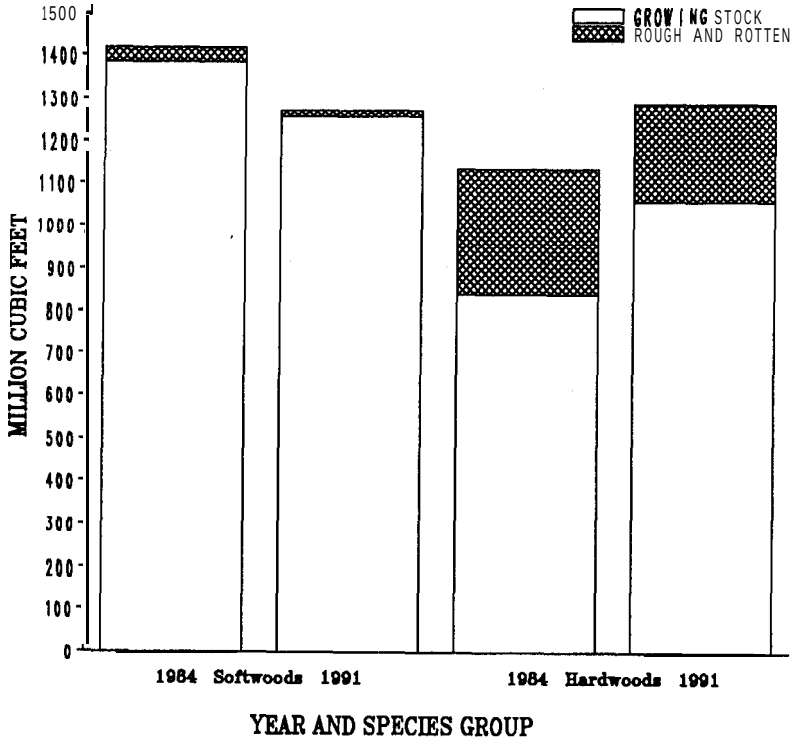

Figure *3.* — *Volume of live trees on timberland by species group and class of timber, Southeast Louisiana, 1984 and 1991.*

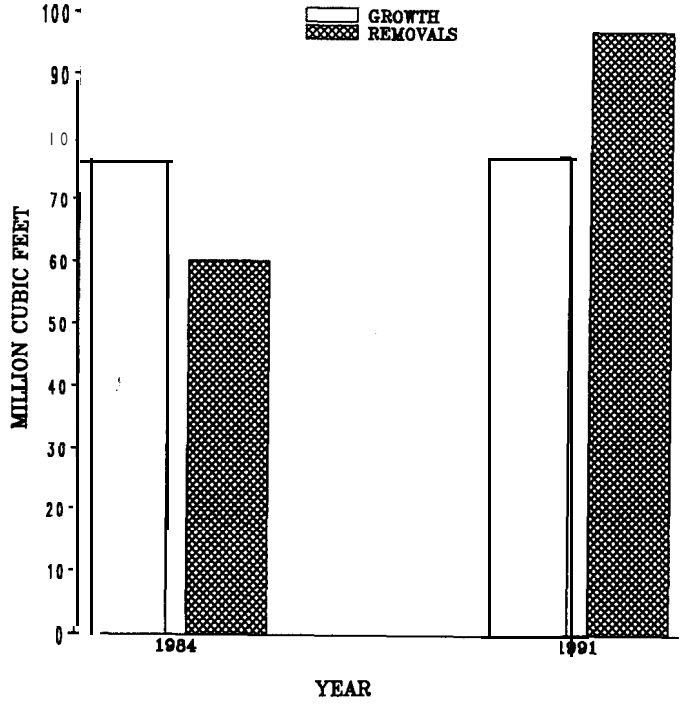

Figure 4. *-Average net annualgrowth and average annual removals of live softwood trees on timberland, Southeast Louisiana, 1984 and 1991.*

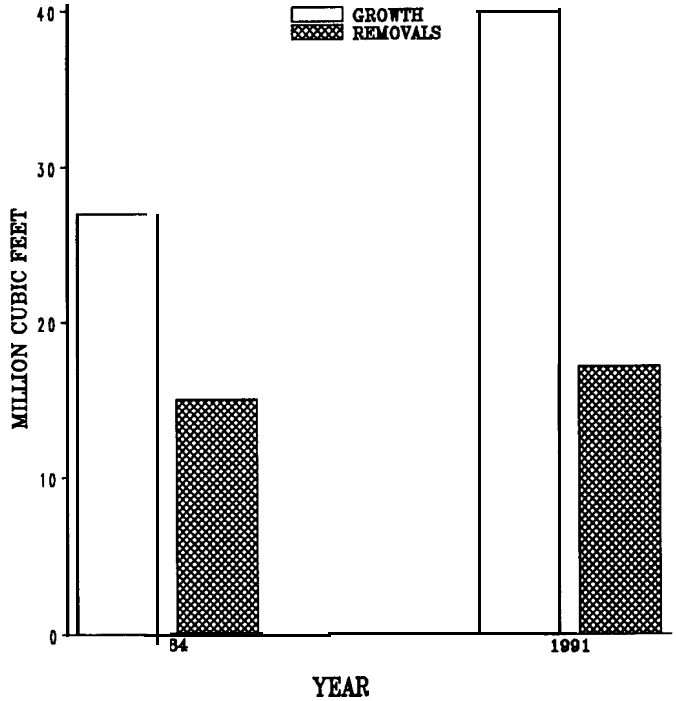

Figure *5. -Average net annual growth and average annual removals of live hardwood trees on timberland, Southeast Louisiana, 1984 and 1991.*

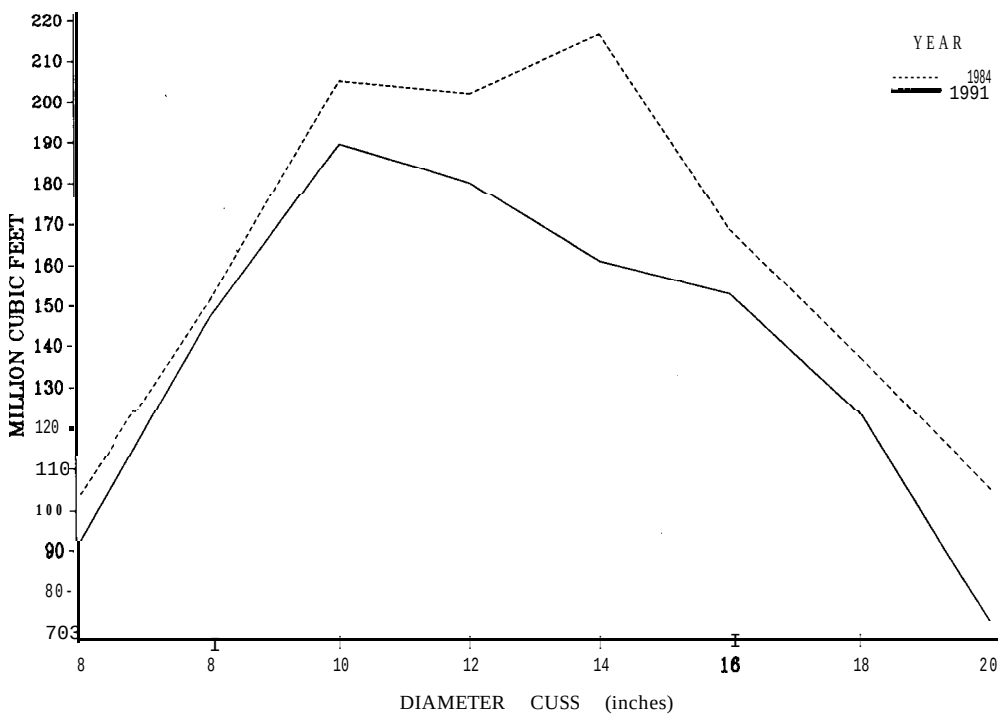

Figure *6. — Volume of live softwood trees on timberland by diameter class, Southeast Louisiana, 1984 and 1991.*

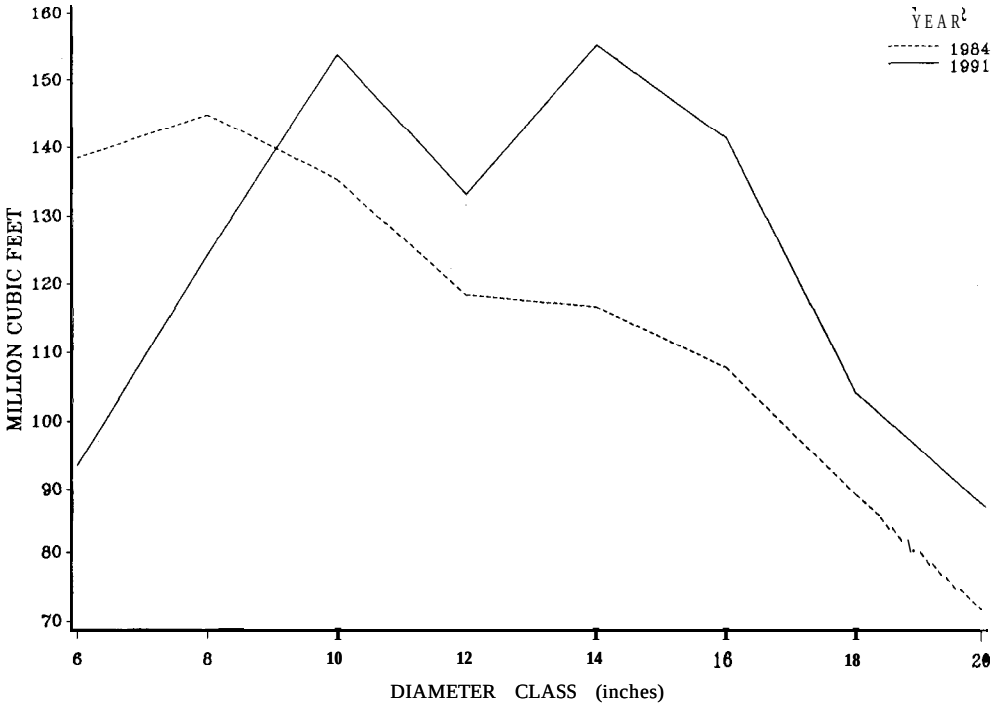

Figure 7. ***-Volume of live hardwood trees on timberland by diameter class, Southeast Louisiana, 1984 and 1991.***

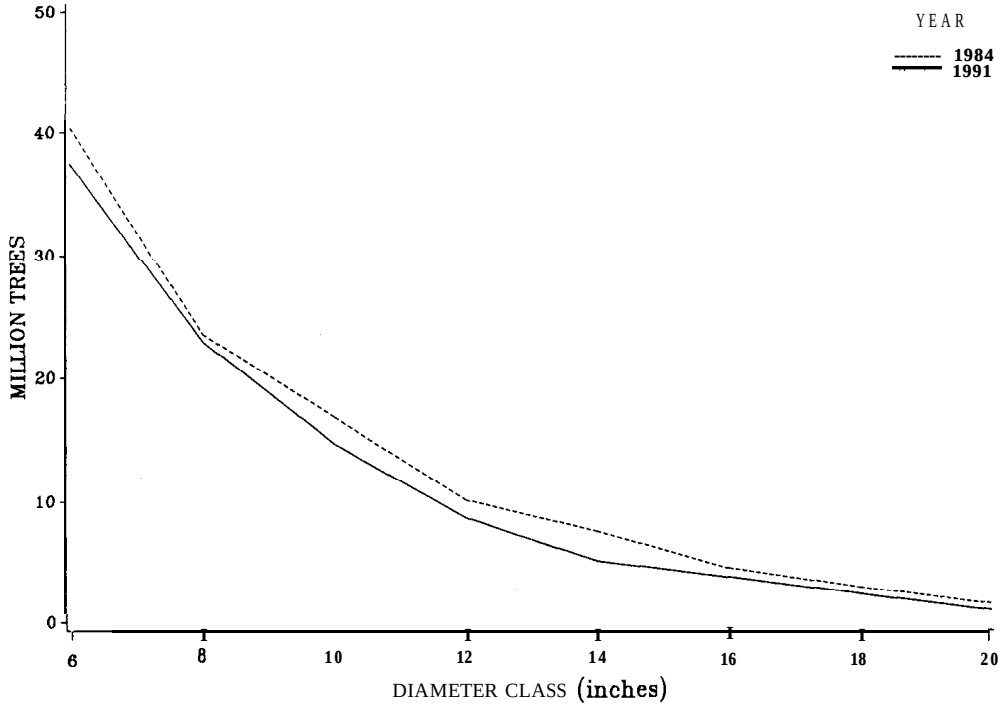

Figure ***8. -Number of live softwood trees on timberland by diameter class, Southeast Louisiana, 1984 and 1991.***

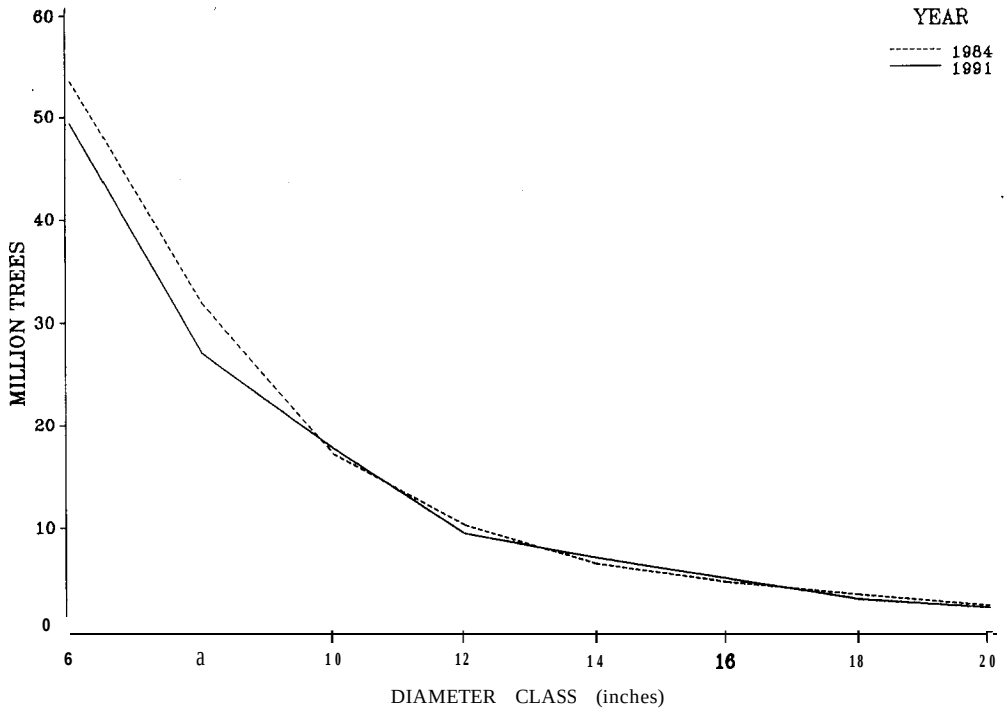

Figure *9. -Number of live hardwood trees on timberland by diameter class, Southeast Louisiana, 1984 and 1991.*

Rosson, James F., Jr.; Miller, Patrick E.; **Vissage,** John S. 1991. Forest statistics for Southeast Louisiana parishes — 1991. Resour. Bull. SO- 162 . New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. **33** p.

Tabulates forest resource information from a new inventory of the Southeast parishes of Louisiana.

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

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