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Forest Statistics for North Delta Louisiana Parishes

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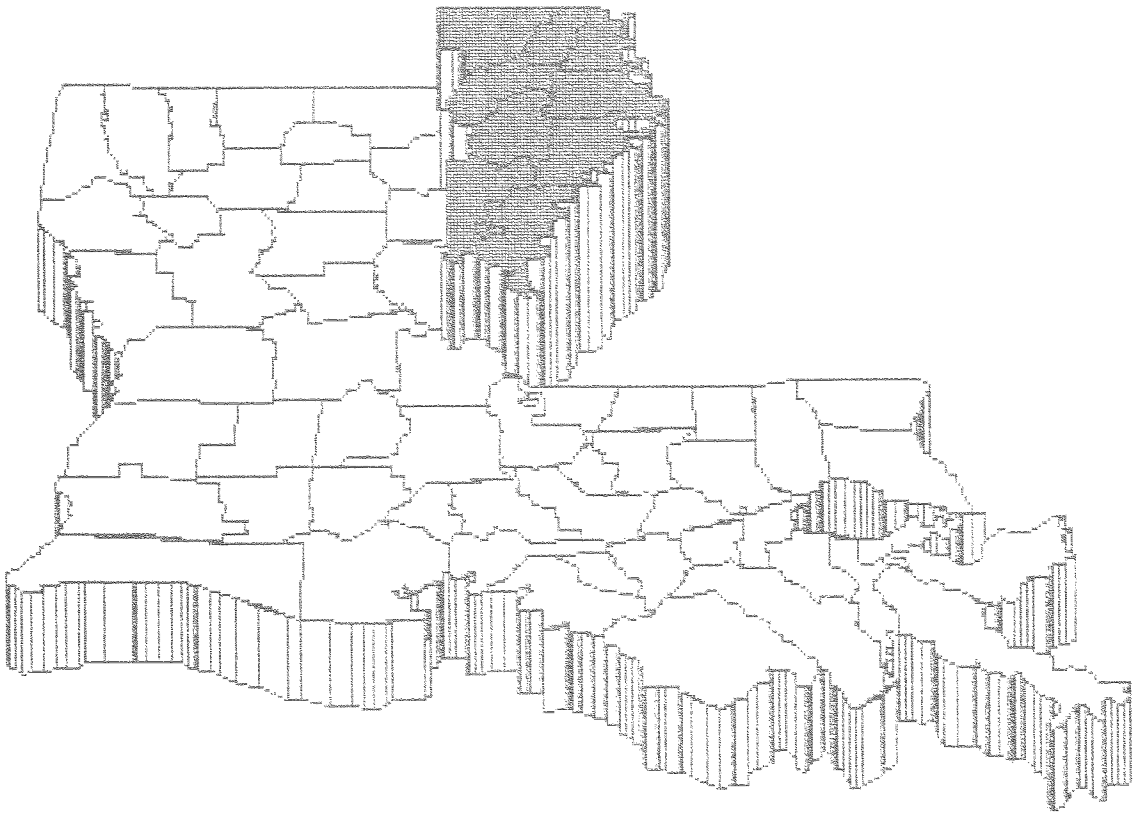

SUMMARY

The Southern Forest Survey, an activity of the Southern Forest Experiment Station Forest Inventory and Analysis work unit (FIA), covers the states of Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas and the island of Puerto Rico.

This survey is part of the nationwide Forest Survey originally authorized by the McSweeney-McNary Act of 1928. More recent legislation pertinent to the survey mission includes the Forest and Rangeland Renewable Resources Planning Act of 1974 and the Forest Rangeland Renewable Resources Research Act of 1978. The survey mission is to develop, analyze, and maintain renewable forest resource information. This information is essential for formulation of forest policies and programs.

ACKNOWLEDGMENTS

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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.

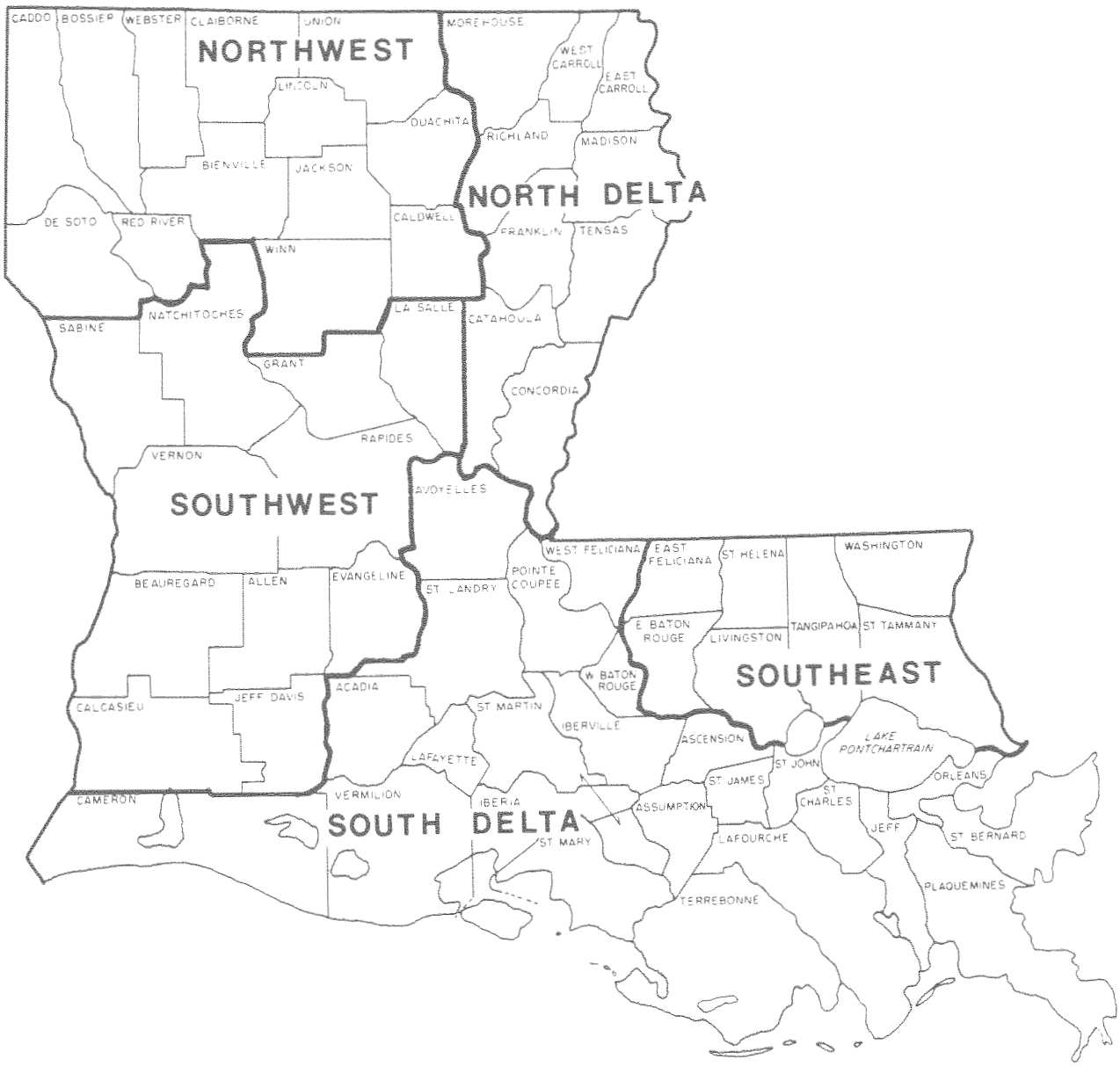

Figure 1-The Forest Survey regions of Louisiana.

Forest Statistics for North Delta Louisiana Parishes

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HIGHLIGHTS

These tables were derived from data obtained during a 1984 inventory of nine parishes comprising the North Delta Unit of Louisiana (fig. 1). 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 measurements 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 5 BA 37.5 point samples.

The sampling methods were developed to provide suitable State estimates. 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 parishes one can use the following:

$$SEG = \frac{SET \sqrt{XT}}{\sqrt{XG}}$$

where:

SE = standard error of estimate (%)

X = variable of interest (area, volume)

G = group of parishes to be combined

T = total for the unit

Timberland Area

Timberland acreage declined 264,900 acres since 1974 to 913,500 acres. This 22-percent drop is attributable to continued conversion of bottomland hardwoods to agricultural land.

Table I--Sampling errors[1] for timberland, growing stock, and sawtimber, North Delta Louisiana, 1984

Parish	Timberland	Growing stock			Sawtimber volume
		Volume	Growth	Removals	
	Percent				
Catahoula	2.5	26.0	22.2	28.3	30.7
Concordia	2.9	13.1	14.5	12.1	14.5
East Carroll[2]	1.3	28.4	22.3	25.1	28.9
Madison	2.8	16.9	24.8	21.0	19.3
Morehouse	2.3	13.1	16.6	24.6	14.4
Tensas	3.4	23.0	18.6	23.9	25.1
All parishes	0.9	7.9	7.8	9.2	8.4

[1] By random-sampling formula.

[2] Franklin, Richland, and West Carroll included in East Carroll.

Ownership

Forest industry and nonindustrial private owners decreased their holdings of timberland acreage in the North Delta unit. Forest industry timberland declined 114,300 acres (24 percent) to 364,800 acres and nonindustrial private timberland acreage fell 284,900 acres (43 percent) to 380,500 acres. For comparison between the 1974 and 1984 surveys, nonindustrial private timberland that was leased to forest industry is reported in forest industry acreage.

Forest Type

Forest type acreage has remained relatively stable with the exception of the oak-gum-cypress forest type. That type has lost 307,200 acres since 1974, a 35-percent decline. Continued conversion of timberland to agricultural land is the contributing factor to this decline. The oak-gum-cypress forest type remains the dominant type in the North Delta unit, occupying 61 percent of total timberland.

Stand Size

Acreage of sawtimber, poletimber, and sapling-seedling stands have all declined. Losses are 77,900, 121,400, and 97,300 acres for sawtimber, poletimber, and sapling-seedling stands, respectively. Sawtimber stands now occupy 566,000 acres, a 12 percent drop. Poletimber stands fell from 304,200 acres in 1974 to 183,000 acres in 1984. Sapling-seedling stands dropped from 212,300 acres to 115,100 acres.

Softwood Volume

Softwood growing-stock volume is only 19 percent of the total growing-stock volume in the unit. There was a slight increase from 1974 to a current 232 million cubic feet. Softwood sawtimber volume was 1,070 board feet at the end of the 1984 survey period.

Hardwood Volume

Hardwood growing-stock volume decreased to 1,020 million cubic feet. Likewise, hardwood sawtimber volume decreased to 3,819 million board feet. Clearing of bottomland hardwoods is the principal cause of decline.

Gross Growth

Growing-stock gross growth for softwood increased to 16 cubic feet per acre per year from 11 cubic feet per acre per year in 1974. Hardwood gross growth is 50 cubic feet per acre per year, no change since the 1974 survey.

Both softwood and hardwood sawtimber gross growth have increased since the 1974 survey. Softwood increased from 50 board feet per acre to a current 75 board feet per acre per year. Hardwood gross growth increased slightly from 200 board feet per acre to 215 board feet per acre.

Removals

Annual removals for softwood and hardwood growing stock averaged 11 and 36 million cubic feet, respectively, for the 1984 survey period Softwood removals are down from the 1974 survey period when removals exceeded growth.

Number of Trees

The number of live softwood trees has increased in the North Delta unit. Saplings have increased by 13 percent and trees larger than 5.0 inches have increased by 13 percent.

However, because of land clearing of bottomland hardwood areas, hardwood tree numbers show large declines. Hardwood saplings fell by 47 percent while hardwoods larger than 5 inches declined by 22 percent. Future inventory volume for bottomland hardwoods will clearly be on the decline in the North Delta unit.

Net Inventory Change

Softwood growing stock increased 3 million cubic feet annually, an improvement over the 1974 survey period when removals exceeded net annual growth.

Hardwood growing stock increased only 2 million cubic feet annually.

This is a decline from the 13 million cubic foot annual increase that was reported for the 1974 survey period.

Mortality

Average annual mortality is 2 million cubic feet for softwood growing stock and 8 million cubic feet for hardwood growing stock. There was no appreciable change between the 1974 and 1984 survey periods.

Cull Volume

There has been no appreciable change in cull volume since 1974. Softwood cull volume is 10 million cubic feet. Hardwood cull volume is 230 million cubic feet. Softwood cull volume is only 4 percent of total live tree softwood volume. Eighteen percent of total live tree hardwood volume is in cull trees.

Tables 1-25 were developed to provide compatibility among Forest Inventory and Analysis Projects. Tables 26-36 are supplementary tables and may change from unit to unit or State to State to address specific issues.

DEFINITION OF TERMS

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.

Average net annual growth.--Average annual net volume increase for the intersurvey period.

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.--Net volume in cubic feet of 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.

Physiographic site.--A classification of forest land according to the availability of moisture for tree growth. Xeric-low or deficient in moisture. Mesic-a moderate amount of moisture. Hydric-an abundance or over abundance of moisture.

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.

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. (Includes 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.

Sawtimber volume.--Net volume of the saw-log portion of live sawtimber 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 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.

Table 1--Area by parish and land class, North Delta Louisiana, 1984

Parish	All land[1]	Forest land				Nonforest land
		Total	Timberland[2]	Woodland[3]	Reserved timberland	
	Thousand acres					
Catahoula	473.6	177.0	177.0	...	...	296.5
Concordia	479.7	151.0	151.0	...	...	328.7
East Carroll[4]	1283.5	178.3	178.3	...	...	1105.2
Franklin[4]	...	...	...	...	...	...
Madison	416.3	104.6	104.6	...	...	311.7
Morehouse	516.3	188.7	188.7	...	...	327.6
Richland[4]	...	...	...	...	...	...
Tensas	411.1	114.0	114.0	...	...	297.2
West Carroll[4]	...	...	...	...	...	...
All parishes	3580.5	913.5	913.5	...	...	2667.0

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 Franklin, Richland, and West Carroll included in East Carroll.

Table 2--Area of timberland by parish and ownership class, North Delta Louisiana, 1984

Parish	All ownerships	National forest	Misc. federal	State	Parish and municipal	Forest industry[1]	Farmer	Corporate[2]	Individual[2]
	Thousand acres								
Catahoula	177.0	...	...	18.6	...	102.5	9.3	28.0	18.6
Concordia	151.0	...	10.4	36.4	10.4	20.8	15.6	20.8	36.4
East Carroll[3]	178.3	...	...	16.2	16.2	72.9	48.6	...	24.3
Madison	104.6	...	18.5	...	...	43.1	36.9	6.2	...
Morehouse	188.7	...	...	...	24.3	91.3	...	18.3	54.8
Tensas	114.0	...	11.4	5.7	...	34.2	22.8	5.7	34.2
All parishes	913.5	...	40.3	77.0	51.0	364.8	133.3	78.9	168.3

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 Franklin, Richland, and West Carroll included in East Carroll.

Table 3--Area of timberland by parish and forest type group, North Delta Louisiana, 1984

Parish	Total	Forest type group								Nontyped[1]
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum cypress	Elm-ash-cottonwood	
		Planted	Natural	Planted	Natural					
	Thousand acres									
Catahoula	177.0	...	...	9.3	28.0	46.6	37.3	55.9	...	...
Concordia	151.0	...	...	...	...	...	...	124.9	26.0	...
East Carroll[2]	178.3	...	...	...	...	16.2	...	105.3	48.6	8.1
Madison	104.6	...	...	...	...	...	...	98.4	6.2	...
Morehouse	188.7	6.1	...	6.1	54.8	18.3	18.3	85.2	...	...
Tensas	114.0	...	...	...	...	...	...	91.2	22.8	...
All parishes	913.5	6.1	...	15.4	82.7	81.1	55.5	561.0	103.6	8.1

[1] Timberland with no current stocking.

[2] Franklin, Richland, and West Carroll included in East Carroll.

Table 4--Area of timberland by parish and stand-size class, North Delta Louisiana, 1984

Parish	All classes	Stand-size class			Nonstocked[1] areas
		Sawtimber	Poletimber	Sapling-seedling	
	Thousand acres				
Catahoula	177.0	74.5	28.0	74.5	...
Concordia	151.0	114.5	20.8	10.4	5.2
East Carroll[2]	178.3	113.4	32.4	...	32.4
Madison	104.6	73.8	24.6	6.2	...
Morehouse	188.7	115.6	48.7	18.3	6.1
Tensas	114.0	74.1	28.5	5.7	5.7
All parishes	913.5	566.0	183.0	115.1	49.4

[1] Timberland less than 16.7 percent stocked.

[2] Franklin, Richland, and West Carroll included in East Carroll.

Table 5--Area of timberland by parish and site class, North Delta Louisiana, 1984

Parish	All classes	Site class (cubic feet/acre/year)				
		> 165	120-165	85-120	50-85	< 50
	Thousand acres					
Catahoula	177.0	37.3	28.0	46.6	65.2	...
Concordia	151.0	72.9	10.4	31.2	31.2	5.2
East Carroll[1]	178.3	72.9	32.4	64.8	8.1	...
Madison	104.6	43.1	43.1	12.3	6.2	...
Morehouse	188.7	12.2	73.0	85.2	18.3	...
Tensas	114.0	68.4	17.1	22.8	5.7	...
All parishes	913.5	306.7	204.0	262.9	134.7	5.2

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 6--Area of timberland, by parish and stocking classes of growing-stock trees, North Delta Louisiana, 1984

Parish	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
	Thousand acres					
Catahoula	177.0	18.6	37.3	83.9	37.3	...
Concordia	151.0	...	31.2	78.1	36.4	5.2
East Carroll[1]	178.3	...	32.4	40.5	72.9	32.4
Madison	104.6	...	...	55.4	49.2	...
Morehouse	188.7	6.1	60.9	54.8	60.9	6.1
Tensas	114.0	5.7	17.1	57.0	28.5	5.7
All parishes	913.5	30.4	178.9	369.6	285.2	49.4

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 7--Area of timberland by forest type and ownership class, North Delta Louisiana, 1984

Forest type[1]	All ownerships	National forest	Other public	Forest industry	Forest industry-leased	Other private
	Thousand acres					
Longleaf-slash pine	6.1	...	...	...	...	6.1
Loblolly-shortleaf pine	98.1	...	...	61.2	...	36.9
Softwood total	104.2	...	...	61.2	...	43.0
Oak-pine	81.1	...	9.3	71.7	...	...
Oak-hickory	55.5	...	...	43.4	...	12.2
Oak-gum-cypress	561.0	...	132.3	133.8	5.2	289.7
Elm-ash-cottonwood	103.6	...	26.6	41.4	...	35.6
Hardwood total	801.2	...	168.2	290.2	5.2	337.5
Nontyped[2]	8.1	...	...	8.1	...	...
All types	913.5	...	168.2	359.6	5.2	380.5

[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 with no current stocking.

Table 8--Area of timberland, by ownership and stocking classes of growing-stock trees, North Delta Louisiana, 1984

Ownership class	All classes	Stocking class (percent)				
		> 130	100-130	60-100	16.7-60	< 16.7
	Thousand acres					
Other public	168.2	...	24.2	85.4	45.3	13.3
Forest industry	359.6	15.0	82.7	125.0	115.0	21.9
Forest industry-leased	5.2	...	5.2	...	...	...
Other private	380.5	15.4	66.8	159.2	124.9	14.2
All ownerships	913.5	30.4	178.9	369.6	285.2	49.4

Table 9--Area of timberland by forest type and stand-size class, North Delta Louisiana, 1984

Forest type[1]	All classes	Stand-size class			Nonstocked areas
		Sawtimber	Poletimber	Sapling-seedling	
	Thousand acres				
Longleaf-slash pine	6.1	6.1	...	...	...
Loblolly-shortleaf pine	98.1	48.7	18.6	30.8	...
Softwood total	104.2	54.8	18.6	30.8	...
Oak-pine	81.1	45.0	17.4	18.6	...
Oak-hickory	55.5	18.6	12.2	18.6	6.1
Oak-gum-cypress	561.0	391.1	114.8	47.0	8.1
Elm-ash-cottonwood	103.6	56.5	20.0	...	27.1
Hardwood total	801.2	511.3	164.3	84.3	41.3
Nontyped[2]	8.1	...	...	...	8.1
All types	913.5	566.0	183.0	115.1	49.4

[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.

[2] Timberland with no current stocking.

Table 10--Number of live trees on timberland by species and diameter class, North Delta Louisiana, 1984

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	1061	...	...	225	247	590	...	...	...	...	...	...	...
Shortleaf-loblolly pine	61515	27095	17133	7029	3637	2888	1128	675	985	522	229	176	19
Cypress	3756	2825	...	281	...	103	240	...	92	58	37	60	61
Other softwoods	222	...	...	...	222	...	...	...	...	...	...	...	...
Total softwoods	66554	29920	17133	7535	4106	3580	1367	675	1077	580	266	236	79
Select white oaks	5907	4160	...	777	286	209	99	196	35	38	53	35	19
Select red oaks	6776	4499	1116	181	332	352	52	43	50	27	22	103	...
Other white oaks	15841	7313	2689	1576	680	1141	809	425	299	371	142	315	81
Other red oaks	43014	19322	7974	5398	3852	1687	1673	567	535	672	323	821	191
Hickory	27292	15175	5586	1979	1018	1135	837	629	225	252	158	222	75
Hard maple	522	522	...	...	...	...	...	...	...	...	...	...	...
Soft maple	9598	5242	2540	453	403	332	107	159	186	133	42	...	...
Beech	1351	...	854	...	...	266	...	...	49	40	32	95	15
Sweetgum	51413	27963	7256	3896	5118	2920	1576	1009	675	417	376	207	...
Tupelo-blackgum	5146	3417	854	285	208	73	106	114	30	22	23	14	...
Ash	28727	18820	4128	2109	1146	916	674	232	257	158	129	156	...
Cottonwood-aspen	4849	564	564	373	1683	749	407	70	115	96	19	159	48
Yellow-poplar	71	...	...	...	...	...	...	71	...	...	...	...	...
Other hardwoods	121512	74424	19995	10397	5188	3541	2531	1852	1179	932	545	783	144
Total hardwoods	322020	181421	53557	27425	19916	13322	8870	5368	3635	3159	1865	2910	573
Noncommercial	47054	39917	4166	1858	909	...	164	40	...	...	...	...	...
All species	435628	251259	74855	36818	24931	16902	10401	6083	4712	3738	2131	3146	652

Table 11--Number of growing-stock trees on timberland by species and diameter class, North Delta Louisiana, 1984

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	1061	...	...	225	247	590	...	...	...	...	...	...	...
Shortleaf-loblolly pine	49971	18098	14901	7029	3637	2729	972	675	985	522	229	176	19
Cypress	3422	2825	...	...	...	103	240	...	92	58	17	51	37
Total softwoods	54455	20923	14901	7254	3884	3422	1211	675	1077	580	246	227	55
Select white oaks	3104	1709	...	579	286	209	99	75	35	38	53	22	...
Select red oaks	5632	3383	1116	181	332	352	52	43	50	27	22	75	...
Other white oaks	6316	1709	558	713	572	864	629	425	257	242	104	212	30
Other red oaks	23685	5197	4952	4421	3718	1361	1445	525	464	597	323	580	101
Hickory	10793	3679	1890	1383	912	976	697	509	193	144	141	196	75
Soft maple	3771	2267	854	...	150	168	107	38	84	80	23	...	...
Beech	1248	...	854	...	...	266	...	...	49	...	32	47	...
Sweetgum	26081	12375	1301	2598	3940	2377	1260	785	580	358	346	160	...
Tupelo-blackgum	4141	2563	854	285	106	73	56	114	30	22	23	14	...
Ash	16636	9958	3273	1085	512	670	492	190	193	77	106	79	...
Cottonwood-aspen	3391	...	...	169	1683	663	407	70	115	96	19	137	31
Yellow-poplar	71	...	...	...	...	...	...	71	...	...	...	...	...
Other hardwoods	39833	11545	10150	6131	4068	2437	1815	1353	693	708	315	525	94
Total hardwoods	144702	54383	25803	17546	16280	10416	7060	4199	2741	2388	1508	2047	330
All species	199157	75306	40704	24800	20164	13838	8271	4874	3819	2968	1754	2273	386

Table 12--Volume of growing stock on timberland by species and diameter class, North Delta Louisiana, 1984

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	10.4	0.6	2.1	7.6	...	...	...	...	...	...	...
Shortleaf-loblolly pine	202.4	14.7	20.7	26.1	17.0	20.0	39.9	28.2	17.0	15.6	3.2
Cypress	19.1	...	...	1.3	3.5	...	2.9	2.5	1.2	3.9	3.8
Total softwoods	231.9	15.3	22.8	35.0	20.5	20.0	42.8	30.7	18.2	19.5	7.0
Select white oaks	18.3	1.6	2.8	2.0	1.6	2.1	1.4	1.8	3.1	2.0	...
Select red oaks	20.9	0.8	1.4	4.8	0.8	1.7	2.2	1.9	1.9	5.3	...
Other white oaks	77.1	1.6	3.7	9.4	10.9	9.2	8.2	11.0	5.9	13.4	3.8
Other red oaks	222.8	10.1	22.1	16.0	26.0	12.5	14.8	30.1	17.6	53.9	19.9
Hickory	84.6	3.1	4.4	8.9	10.7	11.9	4.2	5.2	6.4	18.3	11.5
Soft maple	9.7	...	1.0	1.0	1.3	1.0	2.3	2.1	1.0	...	...
Beech	8.5	...	...	2.2	...	...	1.8	...	1.5	3.1	...
Sweetgum	177.9	6.5	23.1	24.9	21.1	21.9	24.2	19.2	23.9	13.2	...
Tupelo-blackgum	9.4	1.0	0.6	0.4	0.7	3.5	0.7	0.8	0.9	0.8	...
Ash	46.7	2.4	3.5	6.8	7.1	4.8	7.1	3.5	5.9	5.7	...
Cottonwood-aspen	78.9	1.1	10.8	8.1	7.2	2.9	4.9	6.4	1.9	22.5	13.3
Yellow-poplar	1.5	...	...	...	...	1.5	...	...	...	...	...
Other hardwoods	263.8	11.7	22.1	20.4	29.3	33.9	23.5	32.4	22.9	51.8	16.0
Total hardwoods	1020.2	39.8	95.5	104.8	116.6	106.8	95.2	114.2	92.8	189.9	64.4
All species	1252.1	55.1	118.3	139.9	137.1	126.8	138.0	145.0	111.1	209.4	71.5

Table 11--Number of growing-stock trees on timberland by species and diameter class, North Delta Louisiana, 1984

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	1061	...	...	225	247	590	...	...	...	...	...	...	...
Shortleaf-loblolly pine	49971	18098	14901	7029	3637	2729	972	675	985	522	229	176	19
Cypress	3422	2825	...	...	...	103	240	...	92	58	17	51	37
Total softwoods	54455	20923	14901	7254	3884	3422	1211	675	1077	580	246	227	55
Select white oaks	3104	1709	...	579	286	209	99	75	35	38	53	22	...
Select red oaks	5632	3383	1116	181	332	352	52	43	50	27	22	75	...
Other white oaks	6316	1709	558	713	572	864	629	425	257	242	104	212	30
Other red oaks	23685	5197	4952	4421	3718	1361	1445	525	464	597	323	580	101
Hickory	10793	3679	1890	1383	912	976	697	509	193	144	141	196	75
Soft maple	3771	2267	854	...	150	168	107	38	84	80	23	...	...
Beech	1248	...	854	...	...	266	...	...	49	...	32	47	...
Sweetgum	26081	12375	1301	2598	3940	2377	1260	785	580	358	346	160	...
Tupelo-blackgum	4141	2563	854	285	106	73	56	114	30	22	23	14	...
Ash	16636	9958	3273	1085	512	670	492	190	193	77	106	79	...
Cottonwood-aspen	3391	...	...	169	1683	663	407	70	115	96	19	137	31
Yellow-poplar	71	...	...	...	...	...	...	71	...	...	...	...	...
Other hardwoods	39833	11545	10150	6131	4068	2437	1815	1353	693	708	315	525	94
Total hardwoods	144702	54383	25803	17546	16280	10416	7060	4199	2741	2388	1508	2047	330
All species	199157	75306	40704	24800	20164	13838	8271	4874	3819	2968	1754	2273	386

Table 12--Volume of growing stock on timberland by species and diameter class, North Delta Louisiana, 1984

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	10.4	0.6	2.1	7.6	...	...	...	...	...	...	...
Shortleaf-loblolly pine	202.4	14.7	20.7	26.1	17.0	20.0	39.9	28.2	17.0	15.6	3.2
Cypress	19.1	...	...	1.3	3.5	...	2.9	2.5	1.2	3.9	3.8
Total softwoods	231.9	15.3	22.8	35.0	20.5	20.0	42.8	30.7	18.2	19.5	7.0
Select white oaks	18.3	1.6	2.8	2.0	1.6	2.1	1.4	1.8	3.1	2.0	...
Select red oaks	20.9	0.8	1.4	4.8	0.8	1.7	2.2	1.9	1.9	5.3	...
Other white oaks	77.1	1.6	3.7	9.4	10.9	9.2	8.2	11.0	5.9	13.4	3.8
Other red oaks	222.8	10.1	22.1	16.0	26.0	12.5	14.8	30.1	17.6	53.9	19.9
Hickory	84.6	3.1	4.4	8.9	10.7	11.9	4.2	5.2	6.4	18.3	11.5
Soft maple	9.7	...	1.0	1.0	1.3	1.0	2.3	2.1	1.0	...	...
Beech	8.5	...	...	2.2	...	...	1.8	...	1.5	3.1	...
Sweetgum	177.9	6.5	23.1	24.9	21.1	21.9	24.2	19.2	23.9	13.2	...
Tupelo-blackgum	9.4	1.0	0.6	0.4	0.7	3.5	0.7	0.8	0.9	0.8	...
Ash	46.7	2.4	3.5	6.8	7.1	4.8	7.1	3.5	5.9	5.7	...
Cottonwood-aspen	78.9	1.1	10.8	8.1	7.2	2.9	4.9	6.4	1.9	22.5	13.3
Yellow-poplar	1.5	...	...	...	...	1.5	...	...	...	...	...
Other hardwoods	263.8	11.7	22.1	20.4	29.3	33.9	23.5	32.4	22.9	51.8	16.0
Total hardwoods	1020.2	39.8	95.5	104.8	116.6	106.8	95.2	114.2	92.8	189.9	64.4
All species	1252.1	55.1	118.3	139.9	137.1	126.8	138.0	145.0	111.1	209.4	71.5

Table 13--Volume of growing stock in the saw-log portion of sawtimber[1] trees on timberland by species and diameter class, North Delta Louisiana, 1984

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	6.4	6.4	...	...	...	...	...	...	...
Shortleaf-loblolly pine	153.6	22.2	14.8	18.0	36.8	26.8	16.5	15.3	3.2
Cypress	16.7	0.4	2.8	...	2.5	2.3	1.1	3.8	3.8
Total softwoods	176.8	29.0	17.6	18.0	39.3	29.1	17.7	19.1	7.0
Select white oaks	9.9	...	1.2	1.6	1.1	1.5	2.7	1.7	...
Select red oaks	11.7	...	0.7	1.4	1.9	1.6	1.6	4.6	...
Other white oaks	52.2	...	8.6	7.4	6.8	9.2	5.0	11.7	3.5
Other red oaks	148.6	...	20.7	10.0	12.1	25.4	14.9	47.6	18.0
Hickory	56.9	...	7.7	9.0	3.3	4.3	5.5	16.1	10.9
Soft maple	6.1	...	1.0	0.8	1.9	1.7	0.8	...	...
Beech	5.2	...	...	...	1.4	...	1.2	2.6	...
Sweetgum	123.4	...	21.1	21.9	24.2	19.2	23.9	13.2	...
Tupelo-blackgum	6.8	...	0.5	3.2	0.6	0.8	0.9	0.8	...
Ash	26.9	...	5.0	3.6	5.5	2.9	4.9	5.0	...
Cottonwood-aspen	50.6	...	5.0	2.2	3.9	5.1	1.6	19.9	13.1
Yellow-poplar	1.5	...	...	1.5	...	...	...	...	...
Other hardwoods	172.2	...	21.2	26.0	18.8	26.3	19.2	45.6	15.1
Total hardwoods	672.1	...	92.6	88.5	81.5	97.8	82.2	168.9	60.6
All species	848.9	29.0	110.1	106.5	120.8	126.9	99.9	188.0	67.6

[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, North Delta Louisiana, 1984

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	31.2	31.2	...	...	...	...	...	...	...
Shortleaf-loblolly pine	949.8	107.2	78.8	105.2	229.2	177.5	114.2	112.1	25.7
Cypress	86.9	1.9	11.3	...	11.8	11.2	5.8	21.2	23.6
Total softwoods	1067.9	140.3	90.1	105.2	241.1	188.7	120.0	133.3	49.3
Select white oaks	66.9	...	6.9	9.9	7.4	10.3	19.4	13.0	...
Select red oaks	81.5	...	4.4	8.8	12.1	11.0	11.2	34.1	...
Other white oaks	355.6	...	51.4	46.3	45.0	62.5	35.5	87.1	27.8
Other red oaks	1041.0	...	123.2	63.3	78.7	172.4	105.0	354.3	144.1
Hickory	297.8	...	31.5	39.9	15.4	21.4	28.9	91.6	69.1
Soft maple	28.9	...	4.0	3.4	9.0	8.3	4.1	...	...
Beech	26.3	...	...	...	6.6	...	5.9	13.8	...
Sweetgum	602.9	...	76.1	96.4	115.6	99.6	134.4	80.8	...
Tupelo-blackgum	32.1	...	2.0	14.1	2.8	3.7	4.9	4.5	...
Ash	129.0	...	19.6	15.7	26.1	14.2	25.3	28.1	...
Cottonwood-aspen	280.8	...	20.4	9.8	18.6	24.8	8.4	112.9	86.1
Yellow-poplar	6.2	...	...	6.2	...	...	...	...	...
Other hardwoods	870.3	...	86.8	116.0	87.7	131.4	99.5	253.3	95.5
Total hardwoods	3819.2	...	426.3	429.8	424.9	559.8	482.5	1073.4	422.5
All species	4887.1	140.3	516.4	534.9	666.0	748.5	602.5	1206.8	471.8

a b l e 1 5--Volume of growing stock and sawtimber on timberland by parish and species group, North Delta Louisiana, 1984

Parish	Growing stock						Sawtimber					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Other				Pine		Other		
		Planted	Natural		Soft[1]	Hard[2]		Planted	Natural		Soft[1]	Hard[2]
	Million cubic feet						Million board feet					
atahoula	173.3	2.8	64.5	3.9	31.8	70.3	653.1	...	266.4	16.3	94.6	275.8
oncordia	255.1	...	...	8.4	148.6	98.1	1021.6	...	...	48.1	515.6	457.9
ast Carroll[3]	219.8	14.3	...	6.8	134.7	63.9	830.9	65.9	...	22.5	466.1	276.5
adison	140.8	...	...	...	71.4	69.5	531.7	...	...	...	218.1	313.6
orehouse	269.2	25.2	105.9	...	28.4	109.8	1154.1	89.5	559.3	...	99.9	405.5
ensas	193.8	...	...	...	103.9	89.9	695.7	...	...	...	358.9	336.8
ll parishes	1252.1	42.4	170.4	19.1	518.8	501.4	4887.1	155.4	825.7	86.9	1753.2	2066.0

[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 volume greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

[3] Franklin, Richland, and West Carroll included in East Carroll.

Table 16--Volume of timber on timberland by class of timber and species group, North Delta Louisiana, 1984

Class of timber	All species	Softwood			Hardwood	
		Pine		Other	Soft[1]	Hard[2]
		Planted	Natural			
	Million cubic feet					
Sawtimber trees:						
Saw-log portion	848.9	27.6	132.5	16.7	347.1	325.0
Upper-stem portion	124.9	3.3	11.3	2.4	44.7	63.2
Total	973.8	30.8	143.8	19.1	391.9	388.2
Poletimber trees	278.3	11.5	26.6	...	127.0	113.2
All growing-stock trees	1252.1	42.4	170.4	19.1	518.8	501.4
Rough trees:						
Sawtimber size	115.0	0.6	2.1	0.9	58.4	52.9
Poletimber size	40.8	...	...	1.1	21.6	18.1
Total	155.7	0.6	2.1	2.0	80.0	71.0
Rotten trees:						
Sawtimber size	81.2	...	...	5.4	24.9	50.9
Poletimber size	3.7	...	...	...	2.3	1.4
Total	84.9	...	...	5.4	27.2	52.3
Salvable dead trees:						
Sawtimber size	6.7	...	...	...	2.9	3.8
Poletimber size	...	...	...	...	...	...
Total	6.7	...	...	...	2.9	3.8
All classes	1499.4	43.0	172.5	26.6	628.9	628.5

[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 volume 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, North Delta Louisiana, 1984

Ownership class	Live trees						Growing Stock					
	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	271.8	...	10.2	7.4	125.8	128.5	228.8	...	10.2	3.8	102.1	112.7
Forest industry	509.2	32.7	112.5	7.6	169.4	187.1	457.3	32.0	111.0	4.6	147.5	162.2
Forest industry-leased	14.7	...	...	...	14.7	...	13.8	...	...	...	13.8	...
Other private	697.0	10.4	49.7	11.6	316.3	309.0	552.3	10.4	49.2	10.7	255.5	226.5
All ownerships	1492.7	43.0	172.5	26.6	626.0	624.6	1252.1	42.4	170.4	19.1	518.8	501.4

[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 volume 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, North Delta Louisiana, 1984

Parish	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					
Catahoula	7.5	0.5	3.8	...	0.9	2.3	31.7	0.7	19.5	0.3	2.6	8.6
Concordia	10.8	...	...	0.5	6.3	4.1	55.0	...	...	3.0	29.9	22.2
East Carroll[3]	8.5	1.4	...	...	4.5	2.5	41.9	5.9	0.1	0.5	21.9	13.5
Madison	4.2	...	...	...	1.8	2.3	18.8	...	...	...	5.7	13.1
Morehouse	12.3	2.6	4.9	...	0.8	4.1	53.8	7.5	29.7	...	3.6	13.1
Tensas	7.9	...	...	...	4.6	3.3	32.3	...	...	...	14.7	17.7
All parishes	51.2	4.5	8.7	0.5	18.9	18.6	233.6	14.0	49.3	3.8	78.3	88.1

[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 volume greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

[3] Franklin, Richland, and West Carroll included in East Carroll.

Table 19--Average annual removals of growing stock and sawtimber by parish and species group, North Delta Louisiana, 1984

Parish	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					
Catahoula	7.2	0.6	1.9	0.1	1.2	3.4	30.9	2.5	13.4	0.3	2.8	11.9
Concordia	9.9	...	...	...	4.0	5.9	33.8	...	...	...	13.4	20.4
East Carroll[3]	7.1	0.6	0.2	...	2.2	4.1	29.2	3.8	0.8	...	8.6	16.0
Madison	7.8	...	...	...	4.6	3.2	27.1	...	...	...	14.7	12.5
Morehouse	10.1	4.0	3.7	...	0.6	1.8	28.6	0.9	21.9	...	0.8	5.0
Tensas	4.9	...	...	...	2.9	2.0	19.3	...	...	...	10.7	8.5
All parishes	47.1	5.2	5.9	0.1	15.5	20.4	168.8	7.1	36.1	0.3	50.9	74.4

[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 volume greater than 0.50 such as oaks, hard maple, hickories, and green and white ash.

[3] Franklin, Richland, and West Carroll included in East Carroll.

Table 20--Average net annual growth and average annual removals of growing stock on timberland, North Delta Louisiana, 1984

Species	Growth	Removals
	Million cubic feet	
Yellow pines	13.2	11.0
Other softwoods	0.5	0.1
Total softwoods	13.7	11.1
Select white-red oaks	2.1	0.7
Other white-red oaks	12.9	11.3
Hickory	2.0	5.1
Sweetgum	7.2	6.9
Ash-walnut-black cherry	1.4	2.5
Yellow-poplar	0.1	...
Other hardwoods	11.8	9.5
Total hardwoods	37.5	36.0
All species	51.2	47.1

Table 21--Average net annual growth and average annual removals of sawtimber on timberland, North Delta Louisiana, 1984

Species	Growth	Removals
	Million board feet	
Yellow pines	63.3	43.2
Other softwoods	3.8	0.3
Total softwoods	67.1	43.5
Select white-red oaks	7.5	4.0
Other white-red oaks	67.0	43.9
Hickory	9.1	16.2
Sweetgum	30.8	24.0
Ash-walnut-black cherry	4.0	6.6
Yellow-poplar	0.6	...
Other hardwoods	47.6	30.5
Total hardwoods	166.5	125.3
All species	233.6	168.8

Table 22--Average annual mortality of growing stock and sawtimber on timberland by species, North Delta Louisiana, 1984

Species	Growing stock	Sawtimber
	Million cubic feet	Million board feet
Yellow pines	0.9	...
Total softwoods	0.9	...
Other white-red oaks	1.6	6.8
Hickory	0.6	1.8
Sweetgum	0.7	2.8
Ash-walnut-black cherry	0.5	1.9
Other hardwoods	4.9	17.2
Total hardwoods	8.3	30.5
All species	9.2	30.5

Table 23--Average net annual growth and average annual removals of growing stock on timberland by ownership class and species group, North Delta Louisiana, 1984

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Other				Pine		Other		
		Planted	Natural		Soft[1]	Hard[2]		Planted	Natural		Soft[1]	Hard[2]
	Million cubic feet											
Other public	9.4	...	0.4	0.4	4.3	4.3	2.6	...	...	...	0.7	2.0
Forest industry	22.1	3.4	6.5	0.1	4.9	7.1	19.5	2.7	5.2	...	5.5	6.0
Forest industry-leased	0.3	...	...	...	0.3	...	0.3	...	...	...	0.3	...
Other private	19.4	1.1	1.8	0.1	9.3	7.2	24.6	2.4	0.7	0.1	9.0	12.4
All ownerships	51.2	4.5	8.7	0.5	18.9	18.6	47.1	5.2	5.9	0.1	15.5	20.4

[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 volume 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, North Delta Louisiana, 1984

Ownership class	Growth						Removals					
	All species	Softwood			Hardwood		All species	Softwood			Hardwood	
		Pine		Other				Pine		Other		
		Planted	Natural		Soft[1]	Hard[2]		Planted	Natural		Soft[1]	Hard[2]
	Million board feet											
Other public	46.1	...	3.1	2.3	21.3	19.5	9.5	...	...	...	2.2	7.3
Forest industry	101.0	11.1	35.8	0.7	22.1	31.4	81.2	7.1	31.6	...	20.3	22.1
Forest industry-leased	2.5	...	...	...	2.5	...	1.2	...	...	...	1.2	...
Other private	84.0	2.9	10.4	0.8	32.6	37.3	77.0	...	4.4	0.3	27.2	45.1
All ownerships	233.6	14.0	49.3	3.8	78.3	88.1	168.8	7.1	36.1	0.3	50.9	74.4

[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 volume 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, North Delta Louisiana, 1984

Species	All grades	Grade 1	Grade 2	Grade 3	Grade 4
	Million board feet				
Yellow pines	981.0	166.2	229.4	585.5	...
Cypress	86.9	13.2	21.3	52.4	...
Total softwoods	1067.9	179.4	250.7	637.9	...
Select white-red oaks	148.5	12.4	65.7	49.2	21.2
Other white-red oaks	1396.5	149.7	285.6	660.5	300.8
Hickory	297.8	84.6	75.5	111.4	26.4
Sweetgum	602.9	110.6	174.8	273.3	44.2
Tupelo and blackgum	32.1	...	21.4	10.7	...
Ash-walnut-black cherry	129.0	25.6	29.7	73.7	...
Yellow-poplar	6.2	...	6.2	...	...
Other hardwoods	1206.4	313.4	175.6	555.3	162.1
Total hardwoods	3819.2	696.2	834.3	1734.0	554.6
All species	4887.1	875.6	1085.0	2371.9	554.6

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Table 26--Area of timberland by stand age, forest type group, and type of regeneration, North Delta Louisiana, 1984

Stand Age Class	Pine		Oak-pine		Other hardwood types	
	Artifical	Natural	Artifical	Natural	Artifical	Natural
	Thousand acres					
1-10	9.3	...	...	...	5.7	5.2
11-20	...	30.8	...	...	25.5	14.3
21-30	12.2	...	14.2	6.1	...	47.2
31-40	...	9.3	...	...	...	98.8
41-50	...	...	...	...	...	5.7
>50	...	6.1	...	...	...	31.6
Mixed	...	36.5	17.4	43.4	...	486.1
Total	21.5	82.7	31.6	49.4	31.2	688.9

Table 27--Volume of softwood growing stock on timberland by forest type, North Delta Louisiana, 1984

Parish	Total	Forest type group						
		Longleaf-slash pine		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum cypress
		Planted	Natural	Planted	Natural			
	Million cubic feet							
Catahoula	71.3	...	...	...	23.7	40.8	2.8	3.9
Concordia	8.4	...	...	...	...	...	...	8.4
East Carroll[1]	21.2	...	...	...	...	14.3	...	6.8
Madison	...	...	...	...	...	...	...	...
Morehouse	131.1	10.4	...	11.8	94.4	10.9	0.7	2.8
Tensas	...	...	...	...	...	...	...	...
All parishes	231.9	10.4	...	11.8	118.2	66.0	3.6	21.9

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 28--Volume of hardwood growing stock on timberland by forest type, North Delta Louisiana, 1984

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								
Catahoula	102.1	...	...	...	8.6	26.9	17.7	48.9	...
Concordia	246.7	...	...	...	...	...	...	178.7	67.9
East Carroll[1]	198.6	...	...	...	...	8.1	...	106.8	83.7
Madison	140.8	...	...	...	...	...	...	135.0	5.9
Morehouse	138.2	0.3	...	...	12.9	3.1	7.4	114.5	...
Tensas	193.8	...	...	...	...	...	...	127.6	66.2
All parishes	1020.2	0.3	...	...	21.5	38.1	25.1	711.4	223.7

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 29--Volume of softwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, North Delta Louisiana, 1984

Parish	Total	Forest type group					
		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum cypress	Elm-ash cottonwood
		Planted	Natural				
	Million cubic feet						
Catahoula	48.0	...	...	...	8.7	35.9	3.4
Concordia	8.3	...	...	...	...	...	8.3
East Carroll[1]	16.0	...	...	...	...	10.9	5.0
Madison	...	...	...	...	...	...	...
Morehouse	104.6	6.4	...	7.5	78.4	9.6	2.7
Tensas	...	...	...	...	...	...	...
All parishes	176.8	6.4	...	7.5	87.1	56.4	19.4

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 30--Volume of hardwood growing stock in the saw-log portion of sawtimber trees on timberland by forest type, North Delta Louisiana, 1984

Parish	Total	Forest type group					
		Loblolly-shortleaf pine		Oak-pine	Oak-hickory	Oak-gum cypress	Elm-ash cottonwood
		Planted	Natural				
	Million cubic feet						
Catahoula	63.7	...	1.3	14.7	12.1	35.6	...
Concordia	177.2	...	...	...	...	126.7	50.5
East Carroll[1]	129.0	...	...	2.3	...	71.3	55.4
Madison	95.1	...	...	...	...	93.1	2.0
Morehouse	81.9	...	4.7	1.3	4.0	71.8	...
Tensas	125.1	...	...	...	...	80.1	45.0
All parishes	672.1	...	6.0	18.4	16.2	478.6	152.9

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 31--Volume of timber on timberland by parish, class of timber and species group, North Delta Louisiana, 1984

Parish	All classes	Growing stock		Rough		Rotten	
		Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
	Million cubic feet						
Catahoula	200.3	71.3	102.1	0.2	13.9	...	12.9
Concordia	314.5	8.4	246.7	0.9	41.6	3.5	13.3
East Carroll[1]	263.2	21.2	198.6	1.6	34.7	...	7.0
Madison	180.6	...	140.8	...	19.5	...	20.2
Morehouse	307.4	131.1	138.2	2.1	19.3	1.8	15.0
Tensas	226.7	...	193.8	...	22.0	...	11.0
All parishes	1492.7	231.9	1020.2	4.7	151.0	5.4	79.5

[1] Franklin, Richland, and West Carroll included in East Carroll.

Table 32--Number of live trees on timberland by detailed species and diameter class, North Delta Louisiana, 1964

Species	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
	Diameter class (inches at breast height)												
	Thousand trees												
Slash pine	1061	...	...	225	247	590	...	...	...	...	...	...	...
Shortleaf pine	721	...	...	181	372	...	79	47	...	27	...	14	...
Loblolly pine	60794	27095	17133	6848	3265	2888	1048	628	985	494	229	162	19
Redcedar	222	...	...	...	222	...	...	...	...	...	...	...	...
Cypress	3756	2825	...	281	...	103	240	...	92	58	37	60	61
Total softwoods	66554	29920	17133	7535	4106	3580	1367	675	1077	580	266	236	79
Select white oaks	5907	4160	...	777	286	209	99	196	35	38	53	35	19
Select red oaks	6776	4499	1116	181	332	352	52	43	50	27	22	103	...
Other white oaks	15841	7313	2689	1576	680	1141	809	425	299	371	142	315	81
Other red oaks	43014	19322	7974	5398	3852	1687	1673	567	535	672	323	821	191
Sweet pecan	1966	1418	...	...	...	...	196	132	66	52	28	57	16
Water hickory	17877	9335	3431	1624	881	933	545	497	158	141	130	144	59
Other hickories	7449	4422	2155	355	138	202	95	...	...	59	...	22	...
Persimmon	8028	3098	3186	1582	...	101	...	41	...	...	19	...	...
Hard maple	522	522	...	...	...	...	...	...	...	...	...	...	...
Soft maple	6235	4499	1412	260	...	...	...	41	...	...	23	...	...
Boxelder	3363	743	1128	192	403	332	107	118	186	133	19	...	...
Beech	1351	...	854	...	...	266	...	...	49	40	32	95	15
Sweetgum	51413	27963	7256	3896	5118	2920	1576	1009	675	417	376	207	...
Blackgum	4626	3417	854	285	...	...	...	46	...	...	23	...	...
Other gums/tupelos	520	...	...	...	208	73	106	68	30	22	...	14	...
White ash	4265	3283	...	260	238	246	...	196	32	...	...	11	...
Other ashes	24462	15537	4128	1849	909	671	674	36	225	158	129	146	...
Sycamore	4968	1486	477	797	1242	247	403	51	64	51	99	46	5
Cottonwood	4849	564	564	373	1683	749	407	70	115	96	19	159	48
Yellow-poplar	71	...	...	...	...	...	...	71	...	...	...	...	...
Magnolia	956	854	...	...	...	...	102	...	...	...	...	...	...
Willow	4640	1486	...	...	587	179	362	546	313	400	230	469	66
Black cherry	2790	2232	558	...	...	...	...	...	...	...	...	...	...
American elm	12126	4258	2906	2893	733	677	311	81	115	111	16	22	...
Other elms	44477	36753	4098	548	698	760	631	439	184	187	66	94	19
Hackberry	36425	21839	5729	4029	1700	1291	549	550	407	182	54	73	22
Other locusts	3163	1041	477	549	228	286	173	145	95	...	61	77	31
Sassafras	854	854	...	...	...	...	...	...	...	...	...	...	...
Dogwood	2563	...	2563	...	...	...	...	...	...	...	...	...	...
Other commercial	522	522	...	...	...	...	...	...	...	...	...	...	...
Total hardwoods	322020	181421	53557	27425	19916	13322	8870	5368	3635	3159	1865	2910	573
Noncommercial	47054	39917	4166	1858	909	...	164	40	...	...	...	...	...
All species	435628	251259	74855	36818	24931	16902	10401	6083	4712	3738	2131	3146	652

Table 33--Number of growing stock-stock trees on timberland by detailed species and diameter class, North Delta Louisiana, 1984

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										
Slash pine	1061	225	247	590	...	...	...	...	...	...	...
Shortleaf pine	721	181	372	...	79	47	...	27	...	14	...
Loblolly pine	16251	6848	3265	2729	892	628	985	494	229	162	19
Cypress	597	...	...	103	240	...	92	58	17	51	37
Total softwoods	18631	7254	3884	3422	1211	675	1077	580	246	227	55
Select white oaks	1396	579	286	209	99	75	35	38	53	22	...
Select red oaks	1134	181	332	352	52	43	50	27	22	75	...
Other white oaks	4049	713	572	864	629	425	257	242	104	212	30
Other red oaks	13535	4421	3718	1361	1445	525	464	597	323	580	101
Sweet pecan	276	...	...	...	56	71	34	27	28	43	16
Water hickory	4571	1383	775	853	545	438	158	117	113	131	59
Other hickories	378	...	138	123	95	...	...	...	...	22	...
Persimmon	855	754	...	101	...	...	...	...	...	...	...
Soft maple	23	...	...	...	...	...	...	...	23	...	...
Boxelder	627	...	150	168	107	38	84	80	...	...	...
Beech	394	...	...	266	...	...	49	...	32	47	...
Sweetgum	12405	2598	3940	2377	1260	785	580	358	346	160	...
Blackgum	355	285	...	...	...	46	...	...	23	...	...
Other gums/tupelos	369	...	106	73	56	68	30	22	...	14	...
White ash	691	260	...	246	...	154	32	...	...	...	...
Other ashes	2713	825	512	425	492	36	161	77	106	79	...
Sycamore	2619	797	857	247	403	51	64	51	99	46	5
Cottonwood	3391	169	1683	663	407	70	115	96	19	137	31
Yellow-poplar	71	...	...	...	...	71	...	...	...	...	...
Willow	2228	...	478	108	143	474	214	278	140	331	61
American elm	3286	1607	733	521	193	38	72	82	16	22	...
Other elms	2308	...	442	584	631	210	154	187	23	66	10
Hackberry	5526	2424	1330	787	273	467	94	109	18	23	...
Other locusts	1316	549	228	89	173	112	95	...	18	35	18
Total hardwoods	64516	17546	16280	10416	7060	4199	2741	2388	1508	2047	330
All species	83147	24800	20164	13838	8271	4874	3819	2968	1754	2273	386

ɜ b l e 3 4--Volume of growing stock on timberland by species and diameter class, North Delta Louisiana, 1984

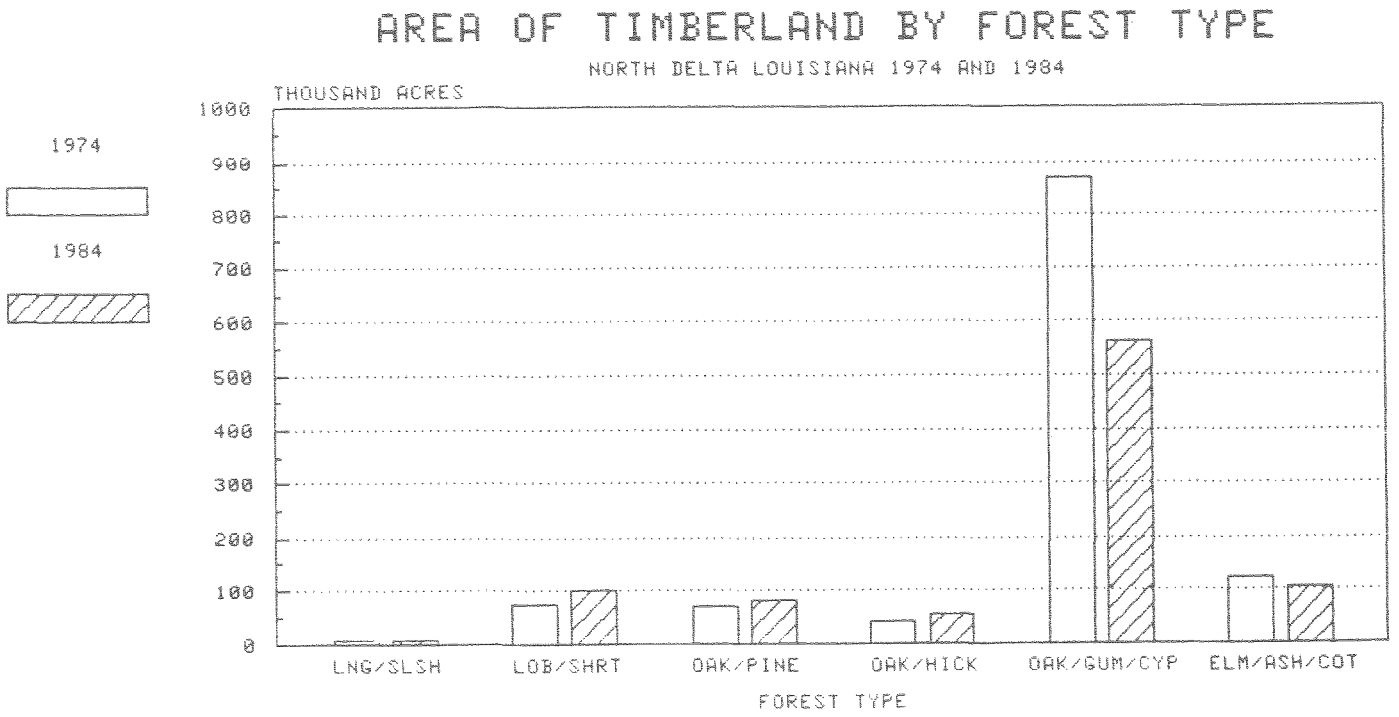
Species	All classes	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
	Diameter class (inches at breast height)										
	Million cubic feet										
ash pine	10.4	0.6	2.1	7.6	...	...	...	...	...	...	...
ortleaf pine	9.7	0.4	2.9	...	2.0	1.6	...	1.3	...	1.5	...
blolly pine	192.7	14.3	17.8	26.1	15.0	18.3	39.9	26.9	17.0	14.1	3.2
press	19.1	...	...	1.3	3.5	...	2.9	2.5	1.2	3.9	3.8
ɪtal softwoods	231.9	15.3	22.8	35.0	20.5	20.0	42.8	30.7	18.2	19.5	7.0
ɪlect white oaks	18.3	1.6	2.8	2.0	1.6	2.1	1.4	1.8	3.1	2.0	...
ɪlect red oaks	20.9	0.8	1.4	4.8	0.8	1.7	2.2	1.9	1.9	5.3	...
ɪher white oaks	77.1	1.6	3.7	9.4	10.9	9.2	8.2	11.0	5.9	13.4	3.8
ɪher red oaks	222.8	10.1	22.1	16.0	26.0	12.5	14.8	30.1	17.6	53.9	19.9
ɪeet pecan	14.1	...	...	...	0.7	2.8	0.5	1.1	1.3	6.1	1.6
ɪter hickory	65.3	3.1	3.6	8.3	8.1	9.1	3.7	4.1	5.1	10.3	9.9
ɪher hickories	5.2	...	0.8	0.6	2.0	...	...	...	...	1.8	...
ɪersimmon	2.5	1.5	...	1.0	...	...	...	...	...	...	...
ɔft maple	1.0	...	...	...	...	...	...	...	1.0	...	...
ɔxelder	8.7	...	1.0	1.0	1.3	1.0	2.3	2.1	...	...	...
ɜech	8.5	...	...	2.2	...	...	1.8	...	1.5	3.1	...
ɪeetgum	177.9	6.5	23.1	24.9	21.1	21.9	24.2	19.2	23.9	13.2	...
lackgum	2.8	1.0	...	...	...	0.9	...	...	0.9	...	...
ther gums/tupelos	6.6	...	0.6	0.4	0.7	2.6	0.7	0.8	...	0.8	...
hite ash	7.8	0.7	...	2.4	...	3.6	1.1	...	...	...	...
ther ashes	38.9	1.7	3.5	4.3	7.1	1.2	6.0	3.5	5.9	5.7	...
ycamore	37.9	1.1	4.1	2.5	7.2	1.3	2.1	3.7	9.1	5.3	1.4
ottonwood	78.9	1.1	10.8	8.1	7.2	2.9	4.9	6.4	1.9	22.5	13.3
ellow-poplar	1.5	...	...	...	...	1.5	...	...	...	...	...
illow	102.6	...	4.4	1.3	3.9	15.3	9.6	13.1	10.1	35.3	9.6
merican elm	20.0	3.7	2.3	3.9	2.5	0.7	1.3	3.2	0.9	1.6	...
ther elms	45.6	...	3.6	5.2	9.6	5.3	4.9	8.5	0.9	5.4	2.2
lackberry	36.2	4.1	6.6	5.6	3.3	8.0	2.9	3.9	0.5	1.4	...
ther locusts	19.1	1.3	1.0	1.0	2.8	3.4	2.8	...	1.4	2.6	2.7
Total hardwoods	1020.2	39.8	95.5	104.8	116.6	106.8	95.2	114.2	92.8	189.9	64.4
ll species	1252.1	55.1	118.3	139.9	137.1	126.8	138.0	145.0	111.1	209.4	71.5

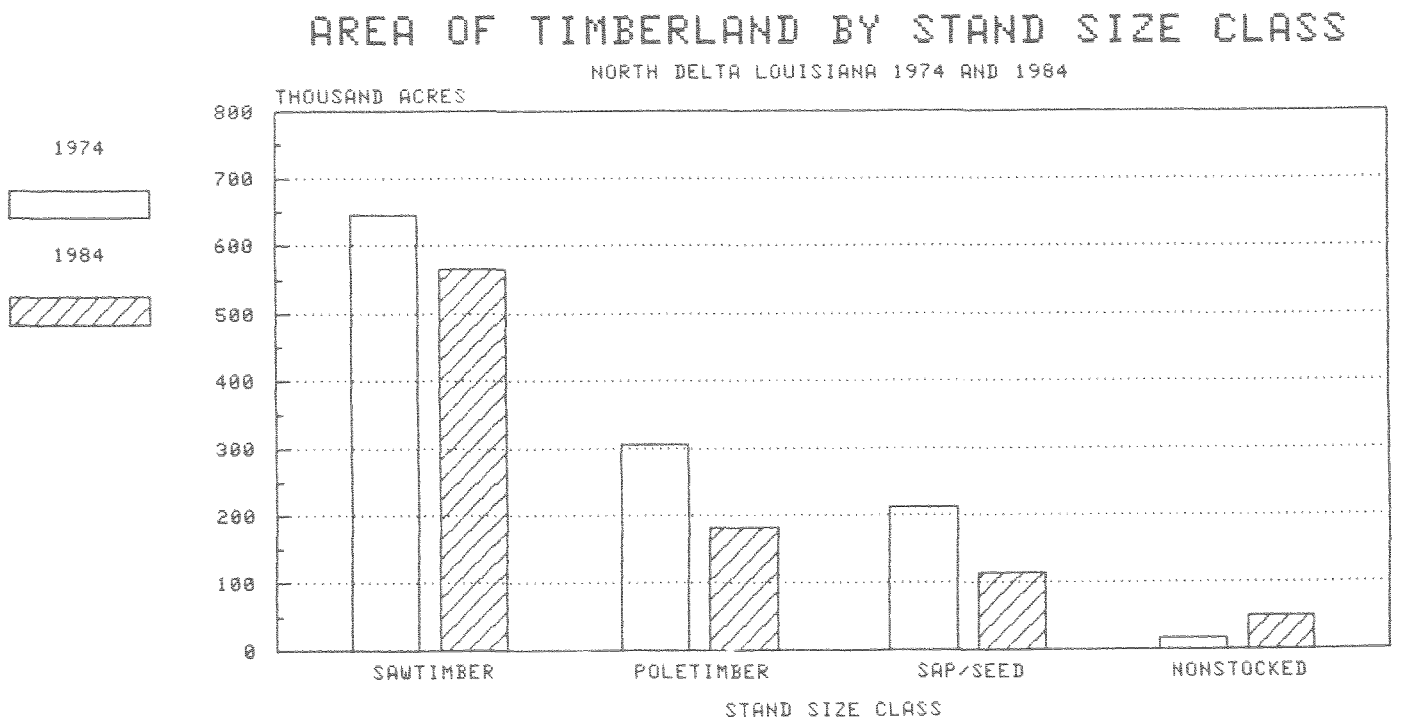
Table 35--Volume of growing stock in the saw-log portion of sawtimber trees on timberland by detailed species and diameter class, North Delta Louisiana, 1984

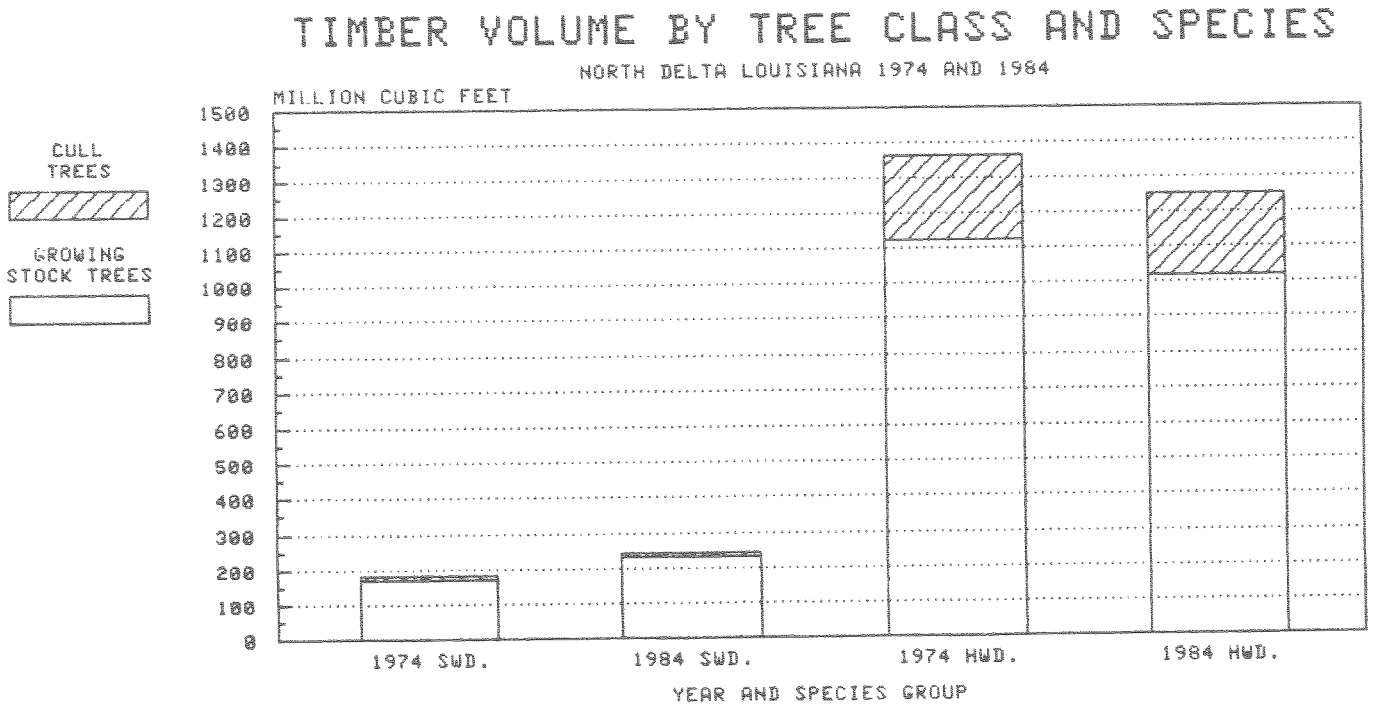
Species	Diameter class (inches at breast height)								
	All classes	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0 & larger
	Million cubic feet								
Slash pine	6.4	6.4	...	...	...	...	...	...	...
Shortleaf pine	5.9	...	1.7	1.4	...	1.2	...	1.5	...
Loblolly pine	147.7	22.2	13.0	16.6	36.8	25.6	16.5	13.8	3.2
Cypress	16.7	0.4	2.8	...	2.5	2.3	1.1	3.8	3.8
Total softwoods	176.8	29.0	17.6	18.0	39.3	29.1	17.7	19.1	7.0
Select white oaks	9.9	...	1.2	1.6	1.1	1.5	2.7	1.7	...
Select red oaks	11.7	...	0.7	1.4	1.9	1.6	1.6	4.6	...
Other white oaks	52.2	...	8.6	7.4	6.8	9.2	5.0	11.7	3.5
Other red oaks	148.6	...	20.7	10.0	12.1	25.4	14.9	47.6	18.0
Sweet pecan	12.3	...	0.6	2.2	0.4	0.9	1.2	5.5	1.6
Water hickory	41.6	...	5.7	6.9	2.9	3.4	4.4	9.1	9.4
Other hickories	2.9	...	1.4	...	...	...	...	1.6	...
Soft maple	0.8	...	...	...	...	...	0.8	...	...
Boxelder	5.3	...	1.0	0.8	1.9	1.7	...	...	...
Beech	5.2	...	...	...	1.4	...	1.2	2.6	...
Sweetgum	123.4	...	21.1	21.9	24.2	19.2	23.9	13.2	...
Blackgum	1.8	...	...	0.9	...	...	0.9	...	...
Other gums/tupelos	5.0	...	0.5	2.3	0.6	0.8	...	0.8	...
White ash	3.6	...	...	2.7	0.8	...	...	...	...
Other ashes	23.4	...	5.0	0.9	4.7	2.9	4.9	5.0	...
Sycamore	24.4	...	5.1	1.1	1.7	2.9	7.6	4.6	1.4
Cottonwood	50.6	...	5.0	2.2	3.9	5.1	1.6	19.9	13.1
Yellow-poplar	1.5	...	...	1.5	...	...	...	...	...
Willow	80.6	...	2.8	11.3	7.5	10.6	8.5	31.0	9.0
American elm	8.3	...	1.9	0.5	1.1	2.6	0.8	1.5	...
Other elms	30.1	...	7.1	4.1	3.9	7.0	0.7	5.0	2.2
Hackberry	16.1	...	2.4	6.4	2.4	3.2	0.5	1.3	...
Other locusts	12.8	...	2.1	2.6	2.1	...	1.2	2.3	2.5
Total hardwoods	672.1	...	92.6	88.5	81.5	97.8	82.2	168.9	60.6
All species	848.9	29.0	110.1	106.5	120.8	126.9	99.9	188.0	67.6

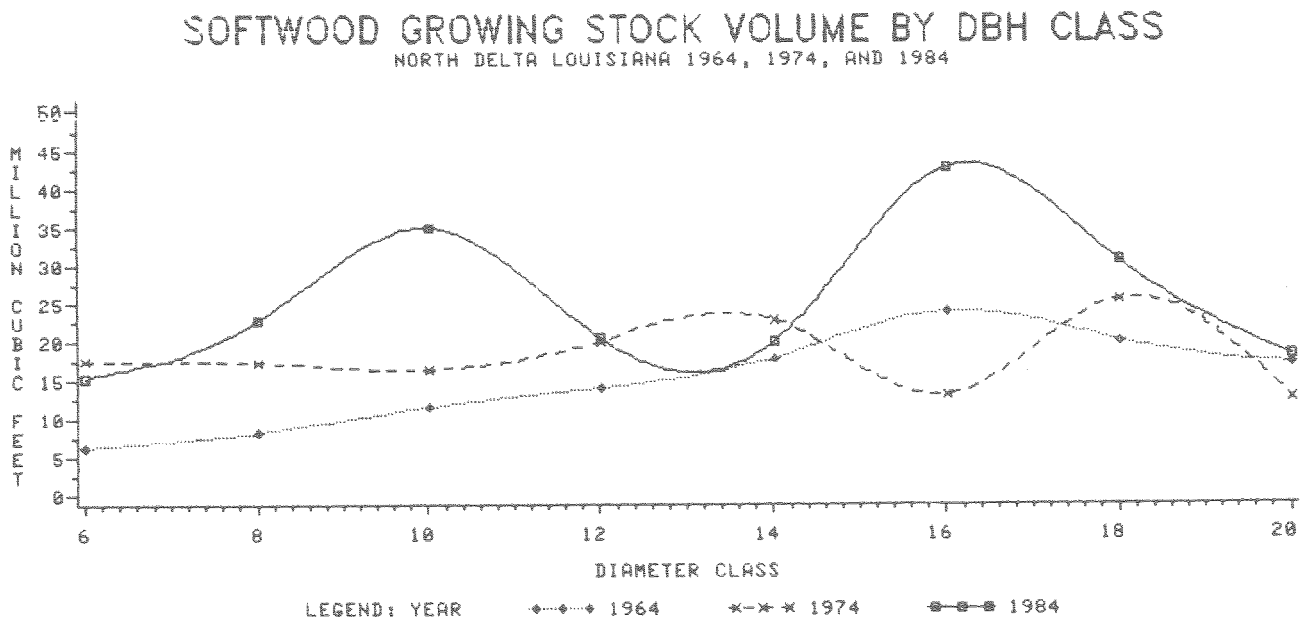
Table 36--Volume of timber on timberland by species and class of timber, North Delta Louisiana, 1984

Species	All live	Growing stock	Rough	Rotten
	Million cubic feet			
Slash pine	10.4	10.4	...	...
Shortleaf pine	9.7	9.7	...	...
Loblolly pine	195.4	192.7	2.7	...
Redcedar	0.2	...	0.2	...
Cypress	26.4	19.1	1.9	5.4
Total softwoods	242.0	231.9	4.7	5.4
Select white oaks	25.0	18.3	6.6	0.1
Select red oaks	24.2	20.9	...	3.3
Other white oaks	99.8	77.1	10.7	12.1
Other red oaks	264.5	222.8	24.9	16.7
Sweet pecan	21.0	14.1	5.4	1.4
Water hickory	70.1	65.3	4.3	0.5
Other hickories	7.1	5.2	1.3	0.6
Persimmon	3.8	2.5	1.3	...
Soft maple	1.6	1.0	0.4	0.3
Boxelder	17.2	8.7	8.2	0.3
Beech	12.5	8.5	...	4.0
Sweetgum	206.2	177.9	21.1	7.1
Blackgum	2.8	2.8	...	...
Other gums/tupelos	7.8	6.6	1.1	...
White ash	10.1	7.8	1.5	0.9
Other ashes	53.2	38.9	4.2	10.1
Sycamore	40.0	37.9	2.1	...
Cottonwood	82.4	78.9	3.0	0.4
Yellow-poplar	1.5	1.5	...	...
Magnolia	0.5	...	...	0.5
Willow	130.1	102.6	19.4	8.1
American elm	25.1	20.0	5.0	0.1
Other elms	52.6	45.6	4.0	2.9
Hackberry	59.9	36.2	16.0	7.7
Other locusts	27.2	19.1	5.9	2.2
Total hardwoods	1246.1	1020.2	146.4	79.5
Noncommercial	4.6	...	4.6	...
All species	1492.7	1252.1	155.7	84.9


AREA OF TIMBERLAND BY FOREST TYPE
NORTH DELTA LOUISIANA 1974 AND 1984
THOUSAND ACRES
1974
1984
1000
900
800
700
600
500
400
300
200
100
0
LNG/SLSH
LOB/SHRT
OAK/PINE
OAK/HICK
OAK/GUM/CYP
ELM/ASH/COT
FOREST TYPE

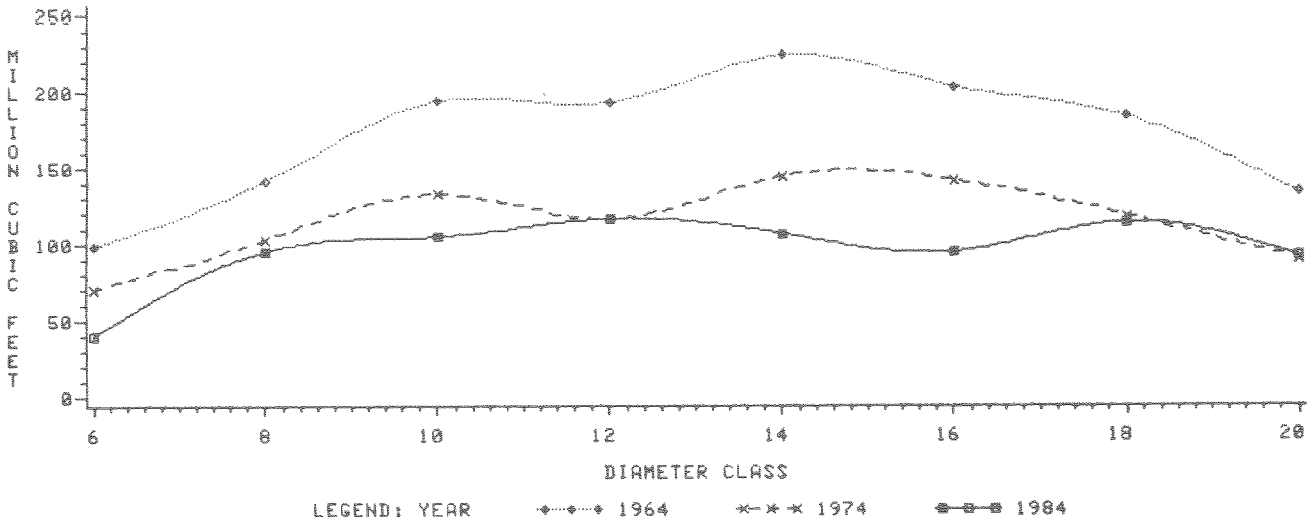

AREA OF TIMBERLAND BY STAND SIZE CLASS
NORTH DELTA LOUISIANA 1974 AND 1984
THOUSAND ACRES
1974
1984
800
700
600
500
400
300
200
100
0
SAWTIMBER
POLETIMBER
SAP/SEED
NONSTOCKED
STAND SIZE CLASS


TIMBER VOLUME BY TREE CLASS AND SPECIES
NORTH DELTA LOUISIANA 1974 AND 1984
MILLION CUBIC FEET
CULL TREES
GROWING STOCK TREES
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
1974 SWD.
1984 SWD.
1974 HWD.
1984 HWD.
YEAR AND SPECIES GROUP


SOFTWOOD GROWING STOCK VOLUME BY DBH CLASS
NORTH DELTA LOUISIANA 1964, 1974, AND 1984
MILLION CUBIC FEET
50
45
40
35
30
25
20
15
10
5
0
6
8
10
12
14
16
18
20
DIAMETER CLASS
LEGEND: YEAR
1964
1974
1984

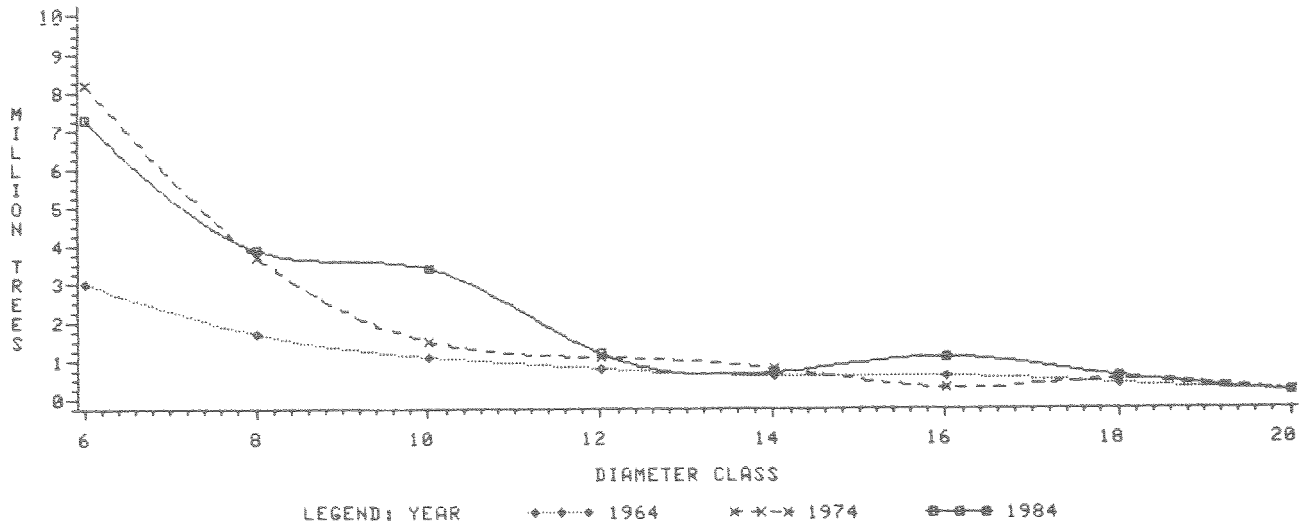
HARDWOOD GROWING STOCK VOLUME BY DBH CLASS

NORTH DELTA LOUISIANA 1964, 1974, AND 1984



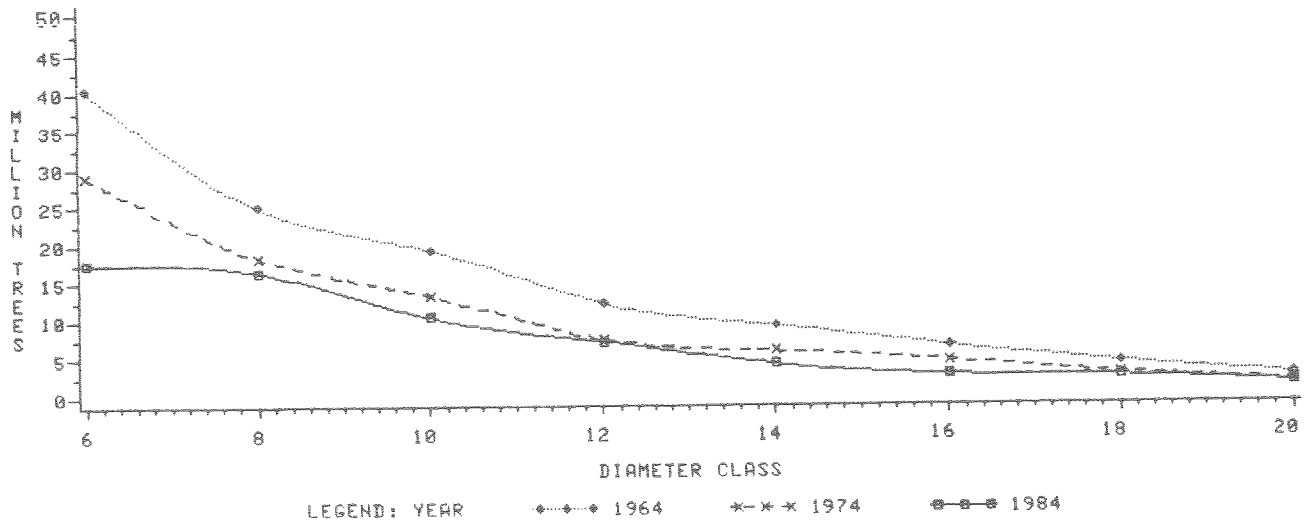
NUMBER OF SOFTWOOD GROWING STOCK TREES BY DBH CLASS

NORTH DELTA LOUISIANA 1964, 1974, AND 1984



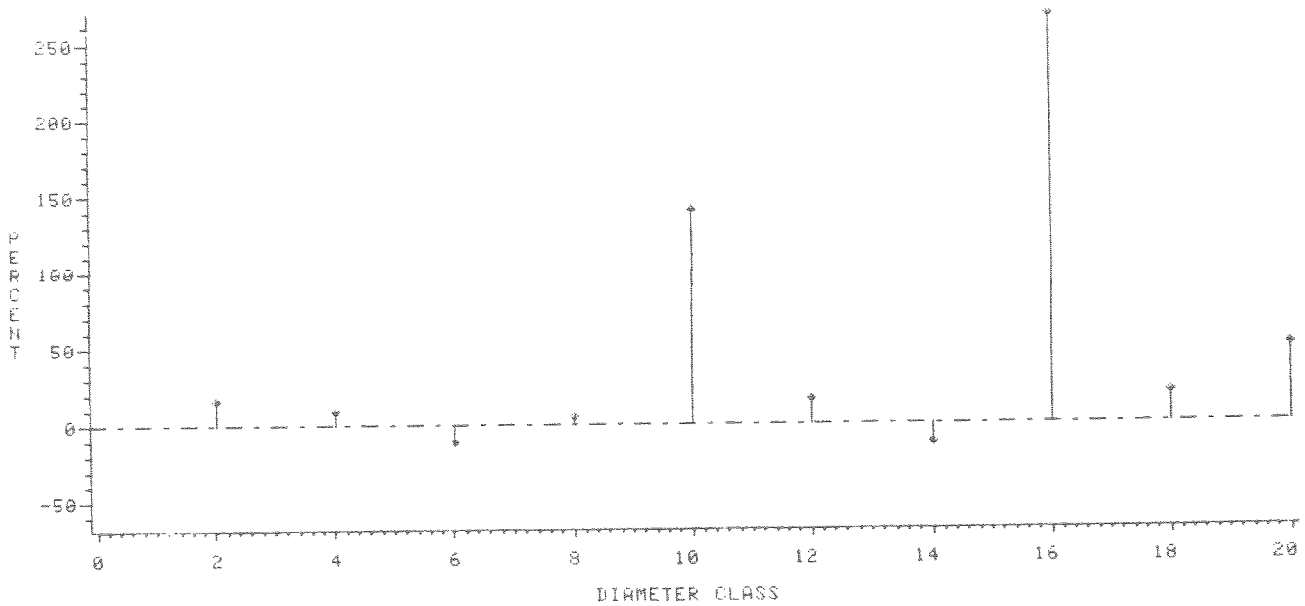
NUMBER OF HARDWOOD GROWING STOCK TREES BY DBH CLASS

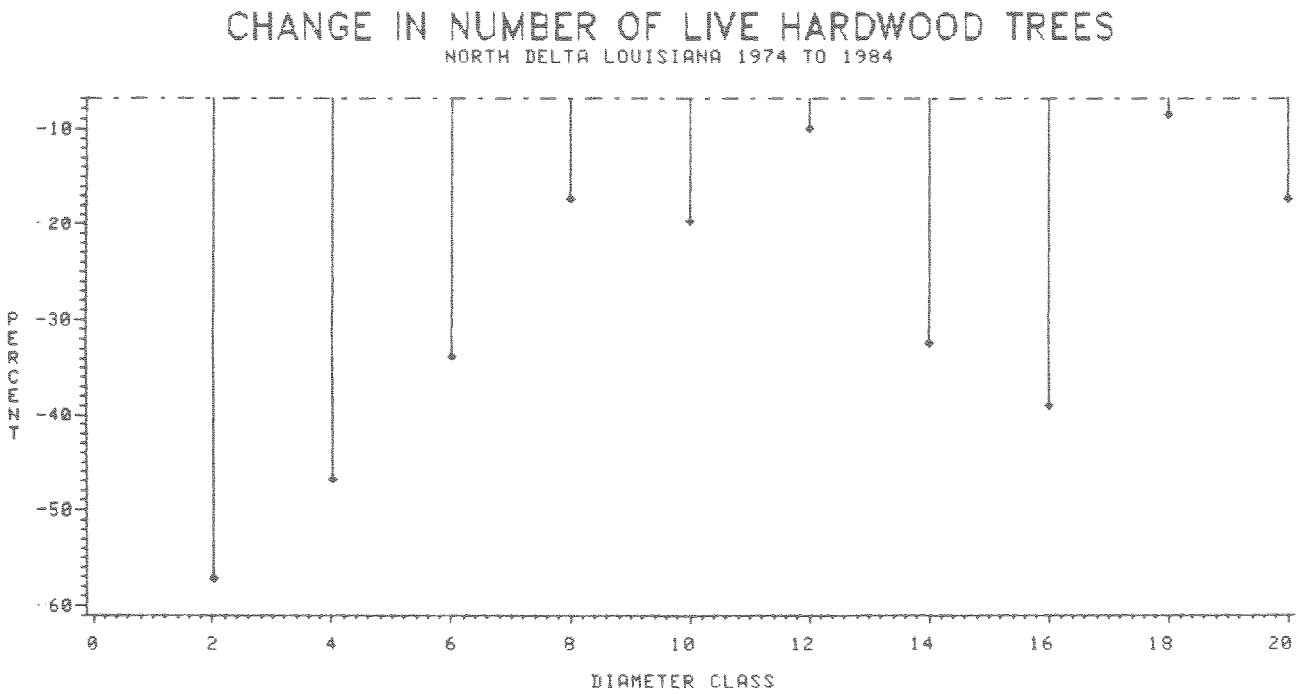
NORTH DELTA LOUISIANA 1964, 1974, AND 1984

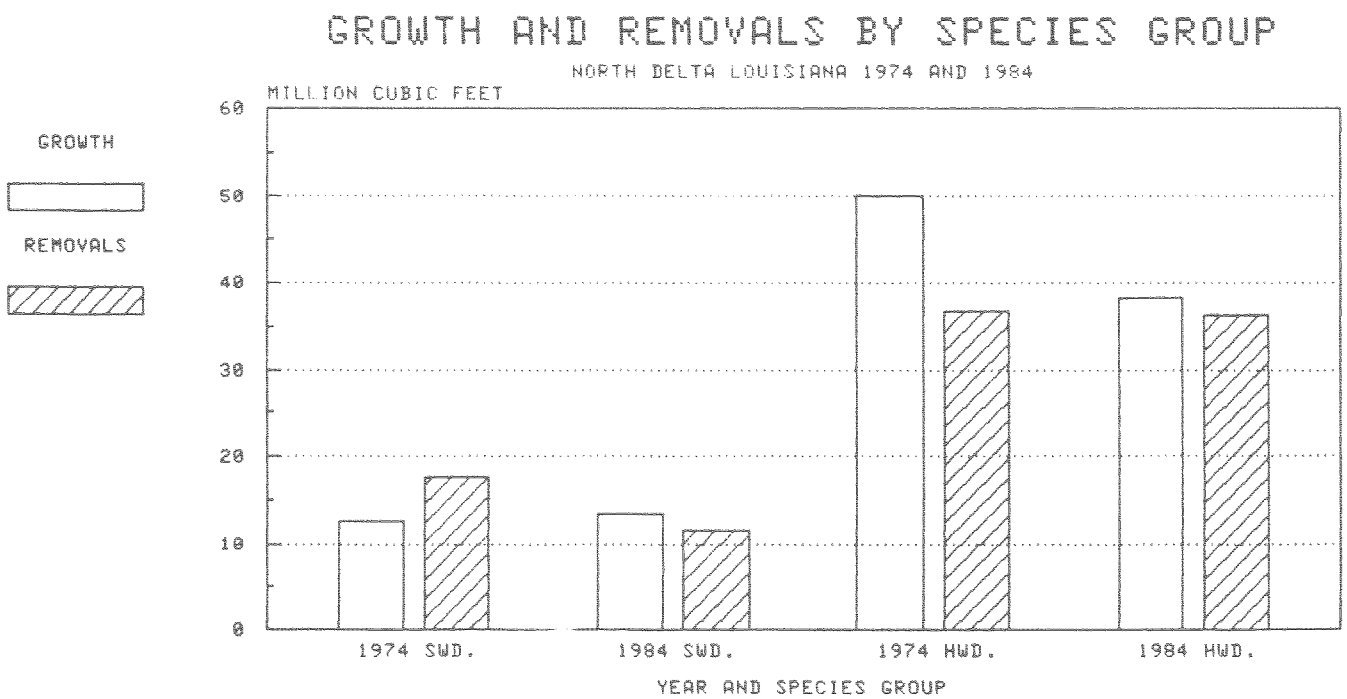


CHANGE IN NUMBER OF LIVE SOFTWOOD TREES

NORTH DELTA LOUISIANA 1974 TO 1984




CHANGE IN NUMBER OF LIVE HARDWOOD TREES
NORTH DELTA LOUISIANA 1974 TO 1984
PERCENT
-10
-20
-30
-40
-50
-60
0
2
4
6
8
10
12
14
16
18
20
DIAMETER CLASS


GROWTH AND REMOVALS BY SPECIES GROUP
NORTH DELTA LOUISIANA 1974 AND 1984
MILLION CUBIC FEET
GROWTH
REMOVALS
60
50
40
30
20
10
0
1974 SWD.
1984 SWD.
1974 HWD.
1984 HWD.
YEAR AND SPECIES GROUP

Rosson, Jr., James F. and Daniel F. Bertelson. Forest Statistics for North Delta Louisiana parishes. Resourc. Bull. SO-105 . New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station; 1986. 31 p.

Tabulates forest resource information from a new inventory of the North Delta Unit of Louisiana.

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

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