Forest Inventory & Analysis Factsheet
Louisiana 2005

November 2006

Forest Land Area

Louisiana's forest land covers 14.2 million acres or 51% of the State. Relatively little change has occurred since the previous forest inventory. Ninety-nine percent of the forest land is considered available for timber production. The remaining forest land area is unproductive forest land or reserved forest land where timber removals are prohibited by law.

Area by land class (million acres)

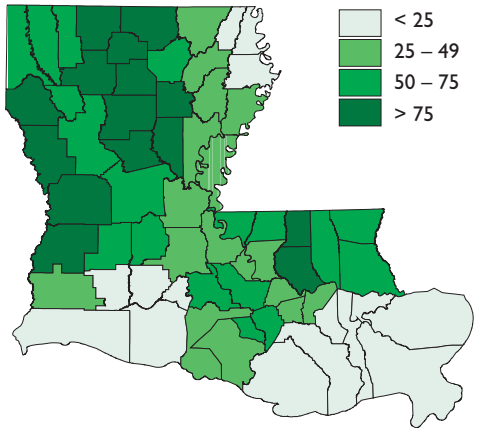
Land class	1936	1954	1964	1974	1984	1991	2005
Timberland	13.2	16.0	16.0	14.5	13.9	13.8	14.1
Other/reserved	0.2	0.1	0.0	0.0	0.0	0.0	0.1
Total forest land	13.3	16.1	16.1	14.5	13.9	13.8	14.2
Percent forested	46%	56%	56%	47%	49%	53%	51%

Totals may not sum due to rounding.

Forest Distribution

The highest concentrations of forest lie in the northwestern portion of the State. The parishes with the least amount of forest cover lie along the gulf coastal parishes and in the Mississippi Delta region where agriculture dominates the landscape. Almost one-half of the State's parishes are at least 50% forested.

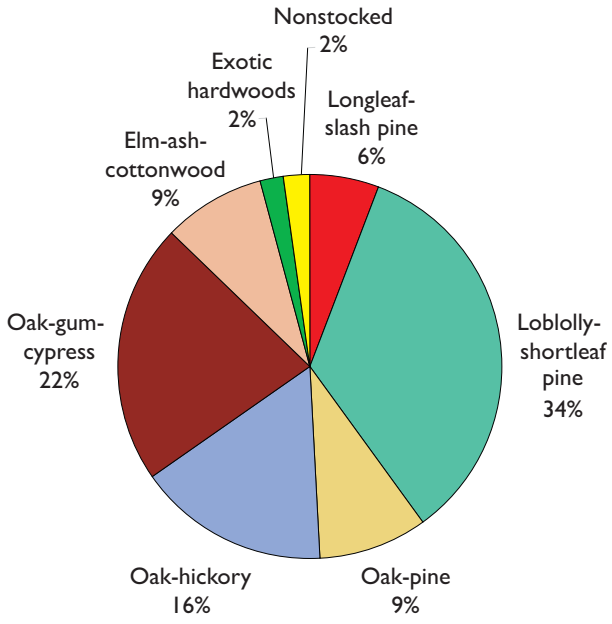
Percentage of land in forest by parish



Forest-Type Composition

Loblolly-shortleaf pine is the predominant forest type in the State, covering 4.8 million acres (34% of the timberland).

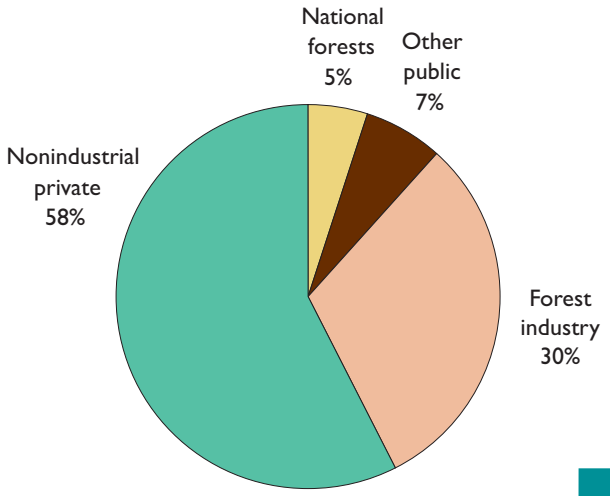
Area of timberland by forest-type group



Ownership of the Forest

Nonindustrial private forest land (NIPF) owners control 58% of the timberland in Louisiana. Seven percent is public land administered by local, State, or federal agencies. The U.S. Forest Service controls almost 5% of the State's forests. Forest industry owns > 30% of the timberland. However, most of this information was collected prior to recent divestitures of landholdings by publicly traded forest industry and this ownership is currently expected to be <30%.

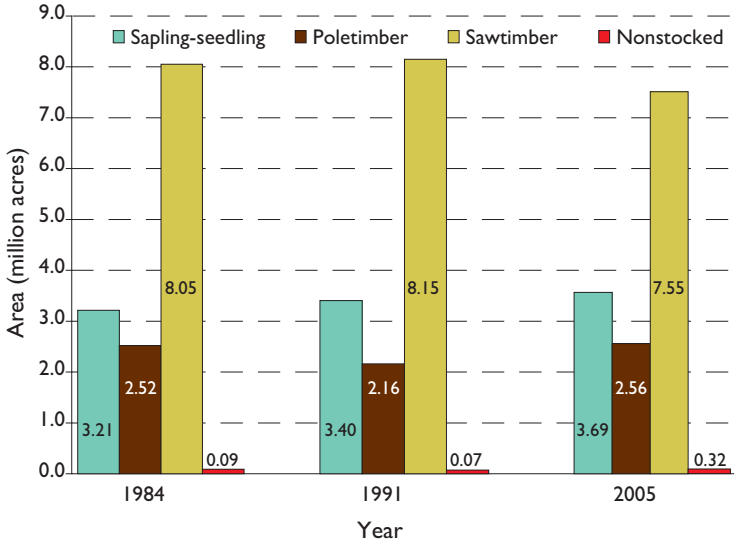
Ownership of timberland



Stand-Size Distribution

Over one-half (53%) of all timberland is classified as sawtimber. The area of sawtimber stands has decreased slightly since the prior survey, while those categorized as poletimber have risen. The area in sapling-seedling stands has risen slightly.

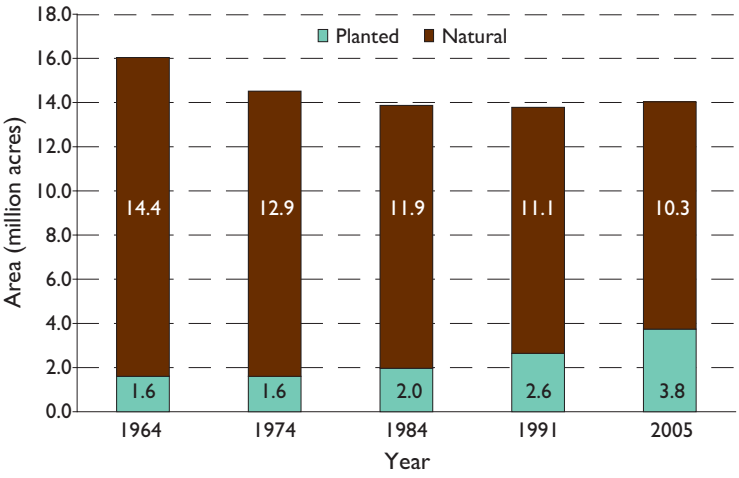
Area of timberland by stand size



Stand Origin

While total timberland area has remained fairly steady since 1974, the area of planted stands has increased significantly. Planted stands did not start playing a major role in Louisiana's forests until the 1964 survey, when 1.6 million acres of plantations were inventoried. Today, planted stands account for 3.8 million acres, over 27%, of the State's timberlands.

Area of timberland by stand origin



Tree Volume

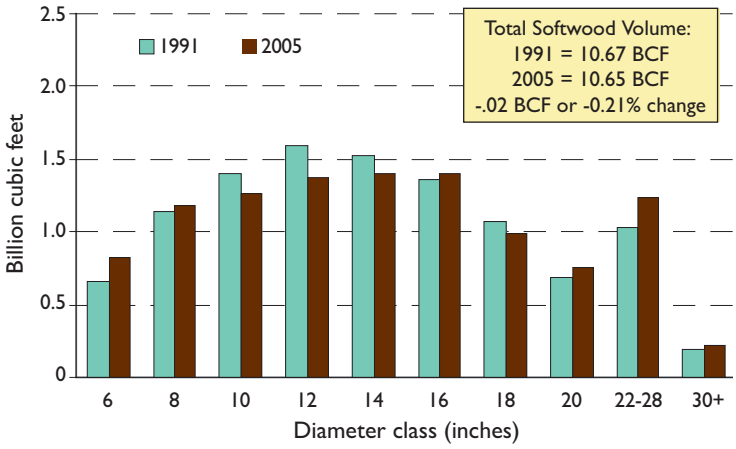
The FIA program has experienced various changes to develop a nationally consistent program. For consistent analysis, one of the changes resulted in the 1991 tree volume being reprocessed with the same volume equations as the 2005. Live tree data offers the best comparison.

Softwood—accounted for 48% of the total tree volume in Louisiana, and has experienced little change since 1991. Most of the softwood decrease occurred in the 10-14 inch diameter classes. Loblolly pine dominated the softwood volume with 68%, or 7.2 billion cubic feet. Planted pine forest types made up 34%, or 3.6 billion cubic feet, of the total softwood volume.

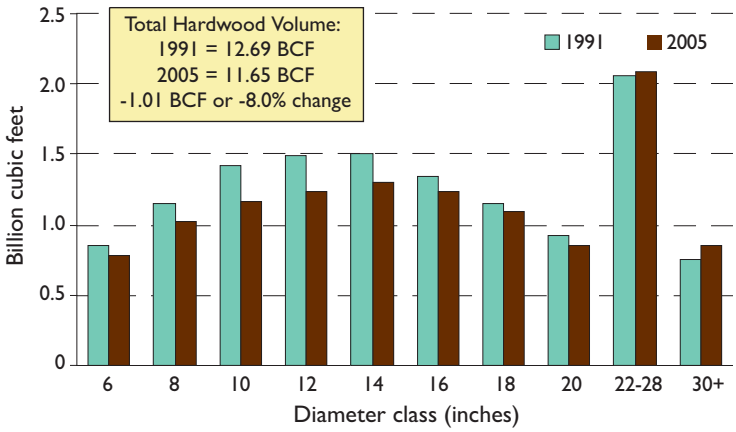
Hardwood—accounted for 52% the State's total tree volume. However, it decreased almost 8% since 1991. The decrease in volume was dispersed throughout the 6-20 inch diameter classes with the majority occurring in the 10-, 12-, and 14-inch diameter classes. Sweetgum and water oak dominated the hardwood volume with 15 and 12% or 1.8 and 1.4 billion cubic feet, respectively.

Volume of live trees on timberland by d.b.h. class, 1991 and 2005

Softwoods



Hardwoods



Annual Growth, Removals, and Mortality

Growth—Total or annual gross growth of all live trees averaged more than 1.1 billion cubic feet annually in Louisiana for the period 1991 to 2005. Softwoods accounted for 633 million cubic feet or 56% of gross growth. Hardwood accounted for 492 million cubic feet or 44%. The average gross growth of both softwood and hardwood trees increased since the last survey by 3 and 4 percent respectively.

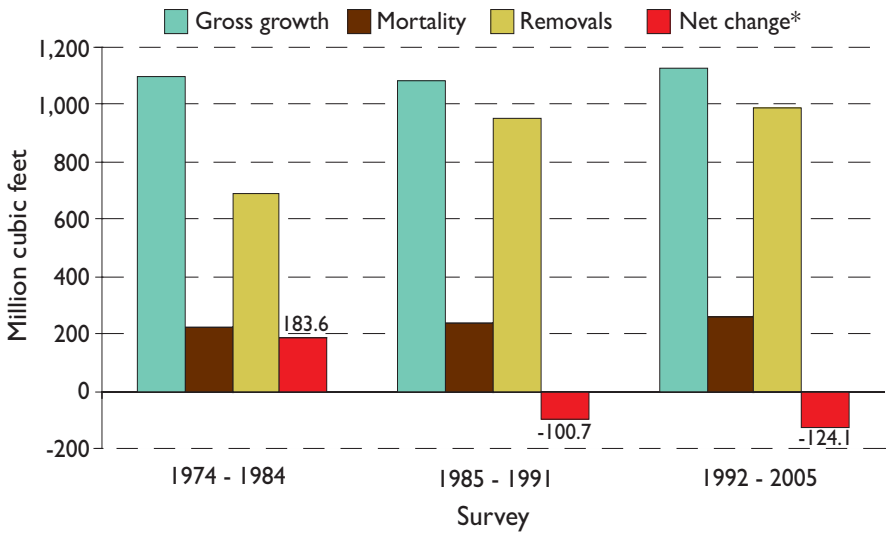
Removals—Total annual removals of all live trees averaged 991 million cubic feet and increased 39 million cubic feet since 1991. Softwood accounted for 650 million cubic feet or 66% of all removals. Hardwood accounted for 341 million cubic feet or 34%. Softwood annual removals decreased 17 million cubic feet and hardwood increased 56 million cubic feet.

Mortality—Total mortality of all live trees averaged 258 million cubic feet annually for the period 1991-2005. Softwood accounted for 60 million cubic feet or 23% of all mortality and decreased 28 million cubic feet annually since the last survey. Hardwood accounted for 198 million cubic feet or 77% but increased 51 million cubic feet annually.

Average annual components of change, 1991-2005

Components of change	Softwoods		Hardwoods	
	Live trees	Growing stock	Live trees	Growing stock
	million cubic feet			
Gross growth	632.5	616.2	491.5	403.3
Mortality	60.0	56.0	197.5	130.8
Net growth	572.5	560.2	294.0	272.4
Removals	649.7	635.1	340.9	277.3

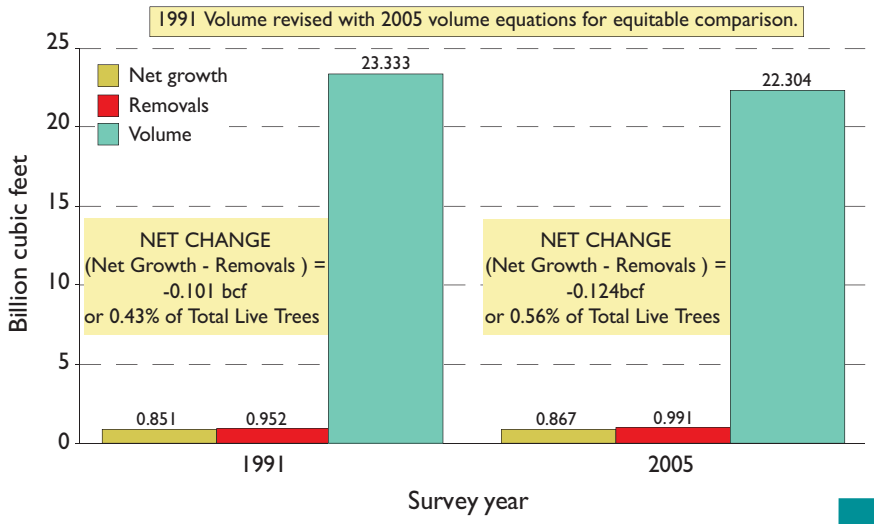
Average annual live trees gross growth, mortality, removals, and net change on timberland by survey



* Net change = Gross growth - Mortality - Removals

Net Change—Net change = Gross growth - Mortality - Removals. This is an indicator of whether the forest tree volume is increasing or decreasing on the average each year during the survey period. During the 1991 survey, the average net change was -101 million cubic feet each year. For the 2005 survey the net change was -124 million cubic feet each year. While that is an indicator tree volume is decreasing, it is only a reduction of about 0.6% annually of the total tree volume in Louisiana. While net change is reasonably stable in regard to total live tree volume, the net change indicator is a tool for the forestry community to consider opportunities to foster sustainability incentives for all forest landowners.

Net growth and removals vs. total volume of live trees



Definition of Terms

Average annual gross growth. Average annual increase in volume of trees 5.0 inches d.b.h. and larger in the absence of cutting and mortality. Gross growth includes survivor growth, ingrowth, growth on ingrowth, growth on removals before removal, and growth on mortality before death.

Average annual mortality. Average annual volume of trees 5.0 inches d.b.h. and larger that died from natural causes during the intersurvey period.

Average annual net growth. Average annual net change in volume of trees 5.0 inches d.b.h. and larger in the absence of removals during the intersurvey period. Average annual net growth is equal to average annual gross growth minus average annual mortality.

Average annual removals. Average annual volume of trees 5.0 inches d.b.h. and larger removed from the inventory by harvesting, cultural operations, (such as timber-stand improvement), land clearing, or changes in land use during the intersurvey period.

D.b.h. Tree stem diameter in inches measured outside the bark and 4.5 feet above the ground (breast height).

Forest land. Land at least 10 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. The minimum dimensions are 1 acre in size and 120 feet in width.

Timberland. Forest land capable of producing 20 cubic feet of wood volume per acre annually and not withdrawn from timber utilization.

Reserved forest land. Public forest land capable of producing 20 cubic feet of wood volume per acre annually, but withdrawn from timber utilization through statute or administrative regulation.

Other forest land. Forest land that is incapable of producing 20 cubic feet of wood volume per acre annually under natural conditions due to adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness.

Forest industry land. Private land owned by companies or individuals operating primary wood-using plants.

Forest type. Forest land classification of the species forming a plurality of live tree stocking, and largely based on an algorithm of tallied trees.

Forest-type groups. A combination of forest types that share closely associated species or site requirements. For this report, groups are: longleaf-slash, loblolly-shortleaf, oak-pine, oak-hickory, oak-gum-cypress, elm-ash-cottonwood, maple-beech-birch, white-red-jack pine, and spruce-fir.

Hardwoods. Dicotyledonous trees, usually broadleaf and deciduous.

Nonforest land. Land that either has never supported forests, e.g., marsh, noncensus water, or land formerly forested that has been developed for agricultural, urban or uses.

Nonstocked. A forest condition < 10 percent stocked with live trees.

Private land: Individual or other corporate land.

Individual. Private land owned by individuals and families, including farms, where the owner does not own a primary wood-using plant or is not a formally incorporated company or organization.

Other corporate land. Private land owned by companies or organizations, including farms, other than forest industry land, e.g. hunt club-owned land, nongovernment organizations, real estate investment trusts, timber investment management organizations.

Poletimber. Softwood species 5.0 to 8.9 inches d.b.h. and hardwoods 5.0 to 10.9 inches d.b.h.

Saplings. Live trees 1.0 to 4.9 inches d.b.h.

Sawtimber. Softwood species 9.0 inches d.b.h. and larger and hardwoods 11.0 inches d.b.h. and larger.

Seedlings. Live trees < 1.0 inch d.b.h. and ≥ 1 foot tall for hardwoods, ≥ 6 inches tall for softwoods.

Softwoods. Coniferous trees, usually evergreen, having needles or scale-like leaves.

Stand. Vegetation of a specific area (≥ 1 acre in size and ≥ 120 feet in width) and sufficiently uniform in species composition, age arrangement, structure, and condition as to be distinguished from the vegetation on adjoining areas.

Stand-size class. A classification of forest land based on the diameter class distribution of live trees in the stand. Largely based on an algorithm of tallied trees and stocking.

Stocking. Stem density assigned to a sampled tree, expressed as a percent of the total density required to utilize the growth potential of the land.

Timberland. Forest land capable of producing 20 cubic feet of industrial wood per acre per year and not withdrawn from timber utilization.

Tree. Woody plants having one erect perennial stem or trunk at least 3 inches d.b.h., a more or less definitely formed crown of foliage, and a height of at least 13 feet at maturity.

Volume. The amount of sound wood in live trees at least 5.0 inches d.b.h. from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem.

For more information contact:

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