



Louisiana, 2010

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FOREST INVENTORY & ANALYSIS FACTSHEET



The Nation's Forest Census

This science update provides an overview of forest resources in Louisiana based on an inventory conducted by the U.S. Department of Agriculture Forest Service, Forest Inventory and Analysis (FIA) program at the Southern Research Station. This update compares data from the 2005 periodic and 2010 annualized data. The 2010 annualized data consists of 70 percent data collected in 2005 (field dates 2001 to 2005 with isolated plot revisits occurring in 2007 and 2008) and 30 percent collected using the new annualized data collection system (collected from 2009 to 2010) to form a "moving average."

Growth, removals, and mortality estimates are based only on data collected in 2009 and 2010, or 30 percent of the potential sample plots across the State. For more information about sampling procedures and changes in the FIA program, please see the "Additional Information" section of this factsheet. Data for this factsheet were accessed January 27, 2012.

Issue—May 2012

1

Table 1—Louisiana forest statistics, change between 2005 and 2010^a

| Forest statistics | 2010 Estimate | Sampling error percent | 2005 Estimate | Sampling error percent | Change since 2005 |
|------------------------------------------------------------------------|---------------|------------------------|---------------|------------------------|-------------------|
| Forest land | | | | | |
| Area (thousand acres) | 14,540 | 0.76 | 14,296 | 0.76 | 1.7 |
| Number of live trees ≥1-inch diameter (million trees) | 8,620 | 1.85 | 8,260 | 1.89 | 4.4 |
| Net volume in live trees ≥5 inches diameter (ft ³) | 23,517 | 1.86 | 22,797 | 1.89 | 3.2 |
| Net volume of growing-stock trees (ft ³) | 21,228 | 1.96 | 20,714 | 1.99 | 2.5 |
| All-live tree and sapling aboveground biomass (thousand oven-dry tons) | 627,704 | 1.74 | 608,079 | 1.78 | 3.2 |
| Net growth of live trees ≥5 inches (ft ³ /year) | 1,116 | 4.40 | — | — | — |
| Annual removals of live trees ≥5 inches (ft ³ /year) | 824 | 8.15 | — | — | — |
| Annual mortality of live trees ≥5 inches (ft ³ /year) | 285 | 9.04 | — | — | — |
| Timberland | | | | | |
| Area (thousand acres) | 14,473 | 0.77 | 14,238 | 0.77 | 1.6 |
| Number of live trees ≥1-inch diameter (million trees) | 8,593 | 1.85 | 8,235 | 1.89 | 4.3 |
| Net volume in live trees ≥5 inches diameter (ft ³) | 23,442 | 1.86 | 22,730 | 1.89 | 3.1 |
| Net volume of growing-stock trees (ft ³) | 21,157 | 1.97 | 20,649 | 1.99 | 2.5 |
| All-live tree and sapling aboveground biomass (thousand oven-dry tons) | 625,862 | 1.74 | 606,421 | 1.78 | 3.2 |
| Net growth of live trees ≥5 inches (ft ³ /year) | 1,112 | 4.41 | 859 | 3.00 | 29.4 |
| Annual removals of live trees ≥5 inches (ft ³ /year) | 824 | 8.15 | 996 | 3.74 | -17.2 |
| Annual mortality of live trees ≥5 inches (ft ³ /year) | 285 | 9.04 | 234 | 4.40 | 22.0 |

— = Growth, removals, and mortality data were not collected on forest land in 2006.

^a Estimates for 2010 are comprised of 70 percent 2005 data and 2 panels, or 30 percent 2010 data. Growth, removals, and mortality estimates for 2010 are comprised of only 2 panels of 2010 data, or 30 percent of a full sample.

Overview

Louisiana contains about 14.5 million acres of forest land. Forested area has increased by about 1.7 percent since 2005 (table 1). The number of live trees on Louisiana's forest land increased by 4.3 percent to 8.6 billion trees, while net volume increased by 3.2 percent and aboveground biomass increased by 0.6 percent. Annual net growth on timberland averaged 1,112 million cubic feet per year while annual mortality of live trees on timberland averaged 285 million cubic feet per year. Annual removals averaged 824 million cubic feet per year, or about 4 percent of the total standing timberland volume per year on average, for a growth-to-removal ratio of 1.3. In other words, trees are being added to the inventory at a rate of 1.3 times faster than they are being harvested, though those results should be seen as "preliminary" because of the small sample on which the growth, removals, and mortality numbers are based.



Brown pelican (Louisiana State bird). (photo by Tom MacKenzie, U.S. Fish and Wildlife Service)



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Frog in the Evangeline Unit of the Calcasieu Ranger District, Kisatchie National Forest. (photo by Steve Shively, U.S. Forest Service)

Forest Area

Louisiana is divided into five survey units: North and South Delta, Southwest, Southeast, and Northwest (fig. 1). The total forested land in all of the survey units is about 14.5 million acres, and accounts for 53 percent of the terrestrial land area in the State (excluding areas classified as census water by FIA). Timberland area hovered around 16 million acres from the mid-1930s to the late 1960s. From the late 1960s through the early 1980s, a time when soybean prices were peaking and many bottomland forests were being converted to agriculture, timberland area decreased by 13 percent. Timberland area has been increasing since the late 1990s (fig. 2). The most noticeable loss of timberland occurred in the North Delta survey unit between the mid-1960s inventory and the mid-1980s inventory. Timberland in the North Delta has either increased or remained stable in the last three inventories (fig. 3). Timberland area within all survey units remained stable from 2005 to 2010 (fig. 3).



Figure 1—Louisiana parishes and FIA survey units.



Figure 2—Change in timberland over time in Louisiana.

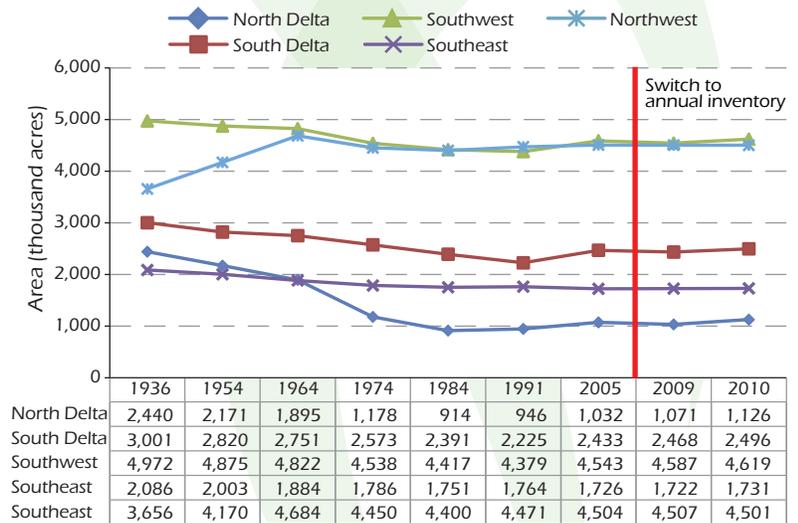


Figure 3—Timberland area change by FIA survey unit and year, Louisiana.

Forest Land Ownership

Privately owned forests constitute 61 percent of Louisiana's forest land. Forest industry and State and local governments account for the next largest ownership categories (27 and 5 percent, respectively), and U.S. Forest Service and other Federal ownerships comprise a total of 5 and 2 percent of Louisiana's forest land, respectively (fig. 4). The area of forest land owned by forest industry decreased by 11 percent between 2005 and 2010, a trend that is becoming common across the South as mills close and forest industries divest their landholdings.

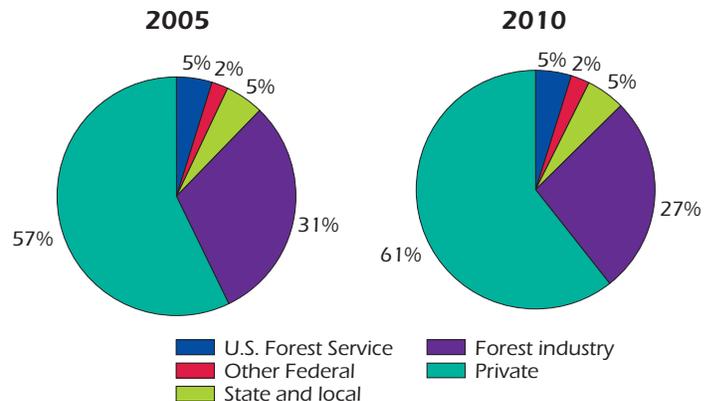


Figure 4—Percent of forest land area by ownership group, Louisiana, 2005 and 2010.

Forest Composition

The loblolly-shortleaf pine forest-type group occupies the largest proportion of forest land in Louisiana at 4.9 million acres. The next most common forest-type groups are oak-gum-cypress at 3.4 million acres, oak-hickory at 2.3 million acres, and elm-ash-cottonwood at 1.4 million acres (fig. 5). Since 2005, the area of forest land occupied by any given forest-type group has not changed significantly (fig. 6).

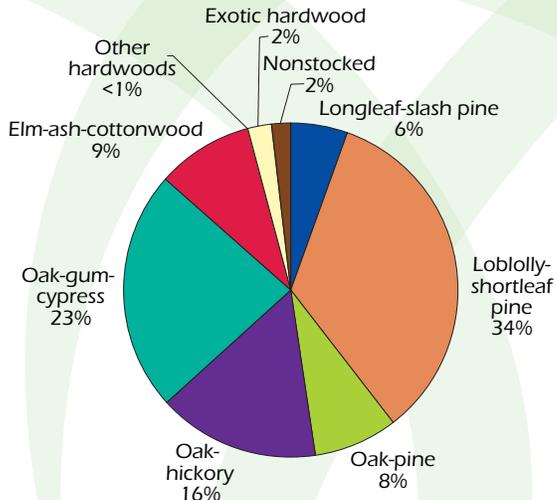


Figure 5—Proportion of forest land by forest-type group, Louisiana, 2010.

Large-diameter stands (hardwoods ≥ 11.0 inches diameter at breast height (d.b.h.); softwoods ≥ 9.0 inches d.b.h.) comprise 7.6 million acres of forest land in Louisiana, while medium-diameter (≥ 5.0 inches d.b.h. but less than large diameter d.b.h.) stands occupy about 2.9 million acres and small-diameter (< 5.0 inches d.b.h.) stands comprise about 3.8 million acres (fig. 7). No significant change has occurred in the distribution of stand-size classes since 2005.

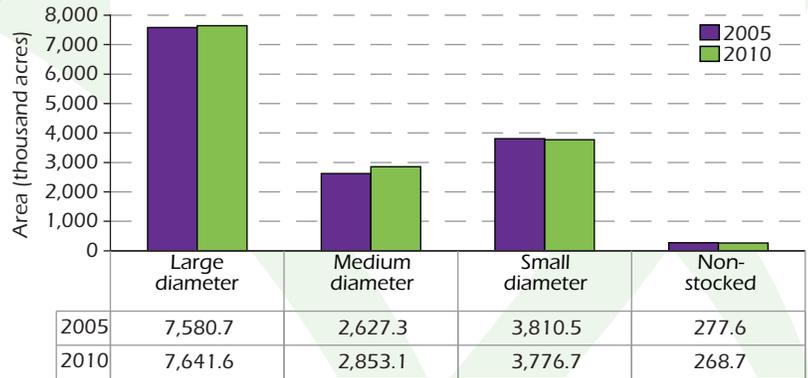


Figure 7—Area of forest land by stand-size class, Louisiana, 2005 and 2010.

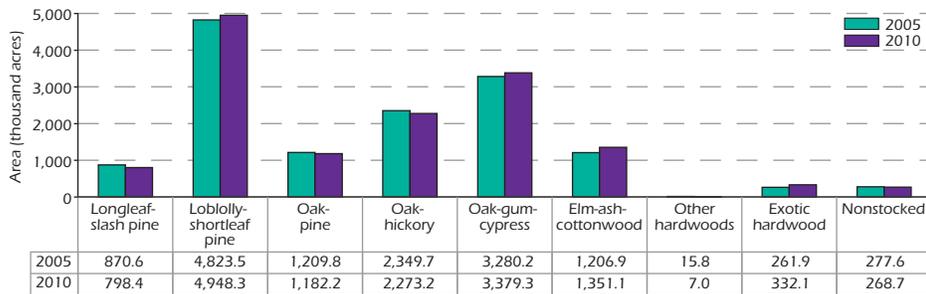


Figure 6—Area of forest land by forest-type group, Louisiana, 2005 and 2010.

Baldcypress in Lacassine National Wildlife Refuge. (photo by Steve Hillebrand, U.S. Fish and Wildlife Service)





Spider lily (*Hymenocallis* sp) blossoms on the Lacassine National Wildlife Refuge. (photo by Steve Hillebrand, U.S. Fish and Wildlife Service)

Forest Products Industry

In 2009, saw logs and pulpwood were the primary roundwood products in Louisiana. The combined output of these two products totaled 477 million cubic feet and accounted for nearly 80 percent of the State's total industrial roundwood output. From 2007 to 2009, timber product output from roundwood in Louisiana decreased 214 million cubic feet, or 26 percent (table 2). Softwood roundwood product output decreased 25 percent, while hardwood roundwood products decreased 33 percent (fig. 8). The number of mills decreased by 27 percent to 41, continuing a downward trend (fig. 9).

Table 2—Output of industrial products by product and species group, Louisiana, 2007 and 2009

| Product and species group | Year | | | |
|-------------------------------|-----------------------------|---------|----------|---------|
| | 2007 | 2009 | Change | Change |
| | --- thousand cubic feet --- | | | percent |
| Saw logs | | | | |
| Softwood | 264,861 | 134,779 | -130,082 | -49.1 |
| Hardwood | 50,766 | 19,878 | -30,888 | -60.8 |
| Total | 315,627 | 154,657 | -160,970 | -51.0 |
| Veneer logs | | | | |
| Softwood | 130,054 | 79,821 | -50,233 | -38.6 |
| Hardwood | 463 | 670 | 207 | 44.7 |
| Total | 130,517 | 80,491 | -50,026 | -38.3 |
| Pulpwood ^a | | | | |
| Softwood | 266,738 | 256,030 | -10,708 | -4.0 |
| Hardwood | 79,217 | 66,423 | -12,794 | -16.2 |
| Total | 345,955 | 322,453 | -23,502 | -6.8 |
| Composite panels ^b | | | | |
| Softwood | 19,046 | 35,287 | 16,241 | 85.3 |
| Hardwood | 109 | 0 | -109 | -100.0 |
| Total | 19,155 | 35,287 | 16,132 | 84.2 |
| Other industrial | | | | |
| Softwood | 3,199 | 7,697 | 4,498 | 140.6 |
| Hardwood | 0 | 0 | 0 | 0 |
| Total | 3,199 | 7,697 | 4,498 | 140.6 |
| All industrial | | | | |
| Softwood | 683,898 | 513,614 | -170,284 | -24.9 |
| Hardwood | 130,555 | 86,971 | -43,584 | -33.4 |
| Total | 814,453 | 600,585 | -213,868 | -26.3 |

^a Includes roundwood delivered to nonpulpmills, then chipped and sold to pulpmills (1,441,000 cubic feet in 2007 and 36,000 cubic feet in 2009).

^b Composite panel volume for 2007 was under reported.

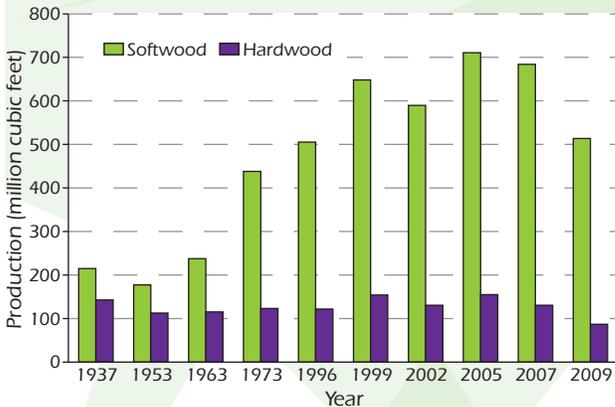


Figure 8—Timber product output from roundwood, softwood and hardwood, by year, Louisiana.

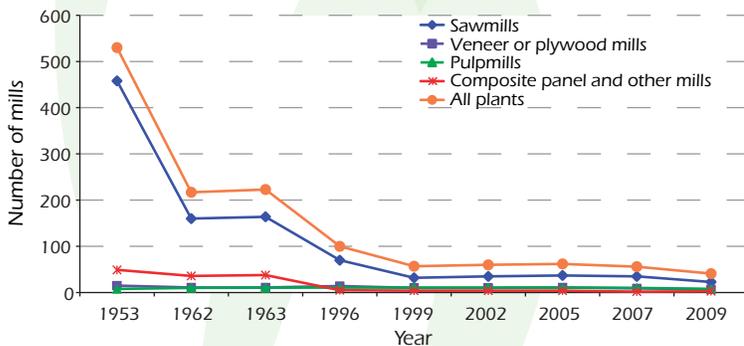


Figure 9—Number of primary wood-using plants by type of mill, Louisiana, 1953 to 2009.

Additional Information

For more information regarding past inventory reports for this State, inventory program information, variable definitions, field sampling methodology, and estimation procedures, please refer to the following:

Forest inventory and analysis database online tools and information: <http://www.fia.fs.fed.us/tools-data/default.asp>.

Brandeis, C.; Johnson, T.G.; Howell, M. 2011.

Louisiana's timber industry—an assessment of timber product output and use, 2009. Resour. Bull. SRS-185. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

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Longleaf pine forest and bog in Vernon parish, Louisiana. (photo by Converse Griffith)

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