# Florida, 2010\*

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South Florida slash pine. (photo by Jay Frost, U.S. Department of Agriculture Forest Service)

\* Revised due to a block of growth, removal, and mortality trees inadvertently omitted in original processing.

U.S. Department of Agriculture

Forest Service Southern Research Station FOREST INVENTORY & Analysis Factsheet



#### Introduction

Forest Inventory and Analysis (FIA) factsheets are produced periodically to keep the public up to date on the extent and condition of the forest lands in each State. This factsheet is an annualized update of the full 5-year cycle of panel data completed in 2007 and updated by reprocessing with new 2009 and 2010 panel data. It represents 5 years of data, 40 percent of which are new since the last factsheet produced for 2007. The new data results in a "moving" average, and keeps the inventory more up to date than if reported every 5 years at the end of the next full cycle of panels. Because these data represent a sample rather than a complete inventory of conditions, the most reliable trend information is obtained by comparing data from two full cycles (5 years of data) of completed panels. This factsheet is based on data reported for 2007, and collected in 2009 and 2010. The data herein was extracted from the FIA Evalidator interface on the Southern Research Station FIA Web site on April 30, 2012 at http://apps.fs.fed.us/Evalidator/tmattribute.jsp.

## **Forest Land Area**

In 2010, forest area in Florida was 17,342,273 acres (table 1) compared to 16,897,125 in 2007. Based on the 40 percent new data (2009 and 2010 panels), forest area appears trending upward. Forests continue to cover about 50 percent of the State's land area. Ninety-two percent of the forested area (15,999,192 acres) is classified as timberland (considered available for timber production). The other 1,343,081 acres of forest is largely reserved or unproductive. National parks, preserves, and national forest wilderness areas comprise the vast majority of the reserved area.

#### Table 1—Area by land class and year, Florida

Land class	2007	2009	2010			
	acres					
Timberland	15,912,148	15,930,451	15,999,192			
Other/reserved	984,977	1,244,698	1,343,081			
Total forest land	16,897,125	17,175,149	17,342,273			
Nonforest land	17,479,185	17,391,737	17,039,334			
Total land area	34,376,310	34,566,886	34,634,195			
Census water	7,706,518	7,516,090	7,448,575			
Total area	42,082,828	42,082,976	42,082,769			
Percent land area forested	49.15	49.69	50.01			

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#### **Forest Distribution**

Thirty-five of Florida's 67 counties were >50 percent forested. Eighteen of these were >75 percent forested (fig. 1). All of these most heavily forested counties were located in the northern half of the State. There were 14 counties <25 percent forested, all in the southern half of the State. The portion of the State's forests classified as timberland, 15,999,192 acres, are the basis for data presented and evaluated in this factsheet. Table 2 shows the distribution of this timberland by survey unit. The Northeast, Northwest, and South survey units of the State appear to be relatively stable in area of timberland. However, the Central survey unit appears to be gaining timberland.

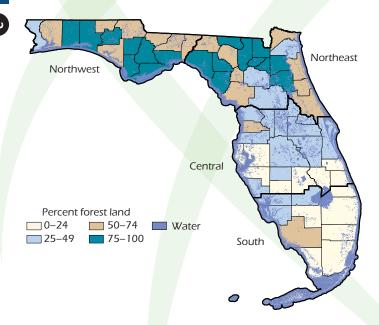


Figure 1—Survey units and percentage of land in forest by county, Florida, 2010.

				Change
				since
Survey unit	2007	2009	2010	2007
		acres		percent
Northeast	6,577,789	6,563,613	6,554,049	-0.361
Northwest	5,500,109	5,506,795	5,509,477	0.170
Central	2,657,624	2,700,163	2,752,210	3.560
South	1,176,626	1,159,881	1,183,455	0.580
All survey units	15,912,148	15,930,452	15,999,192	0.547



Hatrack cypress in southern Florida. (photo by Jay Frost, U.S. Department of Agriculture Forest Service)

## **Forest Ownership**

Nonindustrial private forest (NIPF) owners hold 65 percent of the State's timberland. NIPF area increased to 10,336,400 from 10,060,200 acres in 2007. Within the NIPF group, area under individual ownership was down, from 5,010,700 acres in 2007 to 4,682,600 acres (fig. 2). Timberland under nonindustrial corporate ownership has risen from 5,049,500 to 5,653,800 acres. Public ownerships cumulatively own 30 percent, or 4,751,700 acres, up slightly from 4,451,150 acres in 2007. Forest industry ownership accounted for 5.7 percent of the State's timberland, down from 1,400,800 acres in 2007 to 911,100 acres.

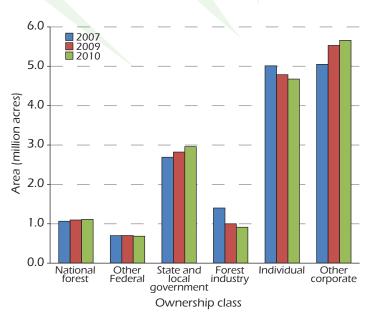
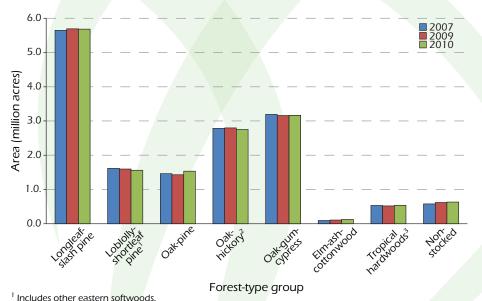


Figure 2-Area of timberland by ownership class and year, Florida.

## **Forest-Type Composition**

Altogether, hardwood forest-type groups comprise 51 percent of Florida's timberland, or 8,117,500 acres. Softwood forest types occupy 45 percent, or 7,248,600 acres of timberland, and nonstocked areas makeup the remaining 4 percent, or 633,100 acres. The longleaf-slash pine forest-type group predominates with 5,685,200 acres of the timberland (fig. 3). The oak-gum-cypress type group is second with 3,159,000 acres, and oak-hickory type group is third with 2,754,400 acres. Next is loblolly-shortleaf pine type group with 1,563,400 acres of the timberland, closely followed by area of oak-pine which is a more variable type group based on species stocking ratios. Since 2007, the order of forest-type prevalence was unchanged and changes in type group estimates were minimal.



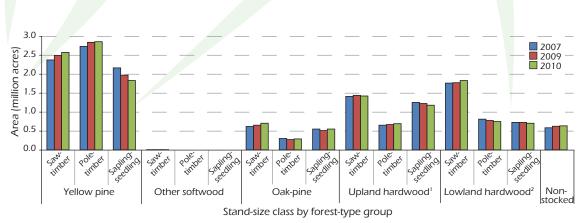
<sup>2</sup> Includes maple-beech-birch and other hardwoods.

<sup>3</sup> Includes exotic hardwoods.

Figure 3—Area of timberland by forest-type group and year, Florida.

#### **Stand-Size Distribution**

Sawtimber size (diameter ≥9.0 inches for softwoods, ≥11.0 inches for hardwoods) stands dominated with 6.527.967 acres. Sawtimber size stands dominated each of the major forest-type groups except yellow pines. Yellow pine-type groups were the most prevalent in each stand-size category (fig. 4). Poletimber size (diameter 5.0-8.9 inches for softwoods, 5.0-10.9 inches for hardwoods) stands were the predominant size class for yellow pines, whereas they were the least for upland hardwoods and oak-pine. In the lowland hardwoods, area of sawtimber size stands exceeded that of lowland poletimber and sapling-seedling size (diameter 1.0-4.9 inches) stands combined. Area of yellow pine sawtimber and poletimber has increased, whereas the area of yellow pine sapling-seedlings has decreased. The decline in area of yellow pine sapling-seedling size stands is the most pronounced change among the stand sizes and forest-type groups portrayed in figure 4. Area of lowland hardwood sawtimber size stands increased slightly. The area in lowland hardwood poletimber and sapling-seedling size stands decreased slightly. Upland hardwood poletimber size stands have increased slightly, whereas area of upland hardwood sapling-seedlings has decreased. Those changes for upland hardwood sawtimber size stands are less clear.



<sup>1</sup> Includes tropical hardwood groups.

<sup>2</sup> Includes oak-gum-cypress and elm-ash-cottonwood groups.

Figure 4—Area of timberland by stand-size class, forest-type group, and year, Florida.

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## **Stand Origin**

An estimated 5,001,930 acres of the State's timberland for 2010 displayed evidence of being artificially regenerated (planted, seeded) (fig. 5). Most, or 4,318,447 acres, were classified as a softwood type, all of which were yellow pine types. The hardwood types with evidence of planting totaled 556,824 acres. These stands were about one-half oak-pine and one-half oak-hickory type groups, dictated by species composition stocking and level of successful artificial regeneration. Area of natural softwood stands in the State increased slightly to 2,930,129 from 2,727,343 acres in 2007. Area of planted softwood stands decreased slightly from 4,534,693 acres in 2007 to 4,318,447 acres. The drop in area of planted softwoods correlates well with the decline in yellow pine sapling-seedling size stands shown in figure 4. Continuation of these trends could have important implications for the pine plantation resource in the State.

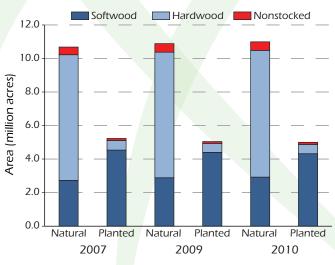


Figure 5—Timberland area by major forest-type group, stand origin, and survey year, Florida.

Florida field crew at work in oak-pine stand. (photo by Jay Frost,

**Tree Volume** 

For all species combined, all-live tree volume on timberland in Florida rose from 19.342 billion cubic feet in 2007 to 20.153 billion cubic feet. Softwood volume rose from 10.968 to 11.468 billion cubic feet with the largest volumes by diameter class occurring in the 8- and 10-inch classes (fig. 6). Volume increased slightly in all softwood diameter classes <20 inches except for the 14-inch class. The hardwood volume rose as well from 8.374 to 8.685 billion cubic feet. Most hardwood diameter classes were relatively stable with slight volume increases becoming more noticeable in the  $\geq$ 14-inch diameter classes (fig. 7).



2.5 2007 2009 2010 Volume (billion cubic feet) 2.0 10 0.5 0.0 10 20+8 12 14 16 18 Diameter class (inches)

Figure 6—Softwood all-live volume on timberland by diameter class and year, Florida.

Figure 7—Hardwood all-live volume on timberland by diameter class and year, Florida.

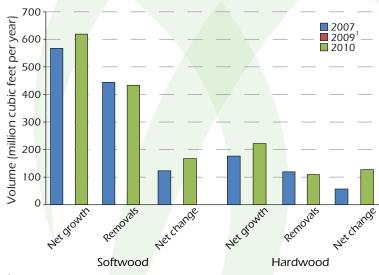


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#### Growth, Removals, and Mortality

The average annual components involved in the determination of resource change are gross growth, mortality, and removals. The overall gross growth recorded by the survey is reduced by the amount of mortality measured, which yields net growth. This remaining net growth is then diminished by the volume of removals measured. The difference between the net growth and removals is the net change for the resource.

The net growth for softwoods has increased to 615.623 from 567.224 million cubic feet in 2007 (fig. 8). Softwood removals remained nearly the same at 441.621 million cubic feet in 2010 compared to 444.146 in 2007. Under these circumstances, the softwood growth to removals relationship yields a positive



<sup>1</sup> Not processed.

Figure 8—All-live volume of net growth and removals on timberland by major forest-type group and year, Florida.

#### **Contact Information**

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net change of 174.002 million cubic feet annually in the softwood resource statewide, up from the 123.078 rate in 2007.

Net growth of all-live hardwoods on Florida's timberland also increased. Hardwood net growth averaged 221.495 million cubic feet annually in 2010 compared to 176.245 million cubic feet in 2007 (fig. 8). Simultaneously, hardwood removals decreased to 101.658 million cubic feet in 2010 from 119.458 million cubic feet in 2007. The combination of increasing net growth and decreasing removals for hardwoods has resulted in a large positive net change on the order of 119.837 million cubic feet in 2010, almost double the net change recorded for 2007.

Note: growth and removals estimates for 2009 were not processed because of previously existing procedures requiring a minimum of three panels of data.

#### How to Cite this Publication

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Lakeshore/forest edge. (photo by Larry Korhnak, University of Florida)

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