



Texas, 2008

James Bentley

FOREST INVENTORY & ANALYSIS FACTSHEET



The Nation's Forest Census



Loblolly pine on Radcliff Lake in Houston County, TX. (photo by Ron Billings, Texas Forest Service)

Forested Area

Total forest area amounted to nearly 62.5 million acres and covers 37 percent of the surveyed land area (table 1). Twenty-three percent, or 14.5 million acres, of the forest area was considered available for timber production and known as timberland. The remaining forest area is reserved forest land where timber removals are prohibited by law or unproductive forest land (produces <20 cubic feet per acre per year).

Introduction

This science update summarizes the findings of the first statewide annual inventory conducted by the Southern Forest Inventory and Analysis (FIA) Program in cooperation with the Texas Forest Service of the forest resource attributes in Texas. The 254 counties of Texas are consolidated into seven FIA survey units—southeast (unit 1), the northeast (unit 2), the north central (unit 3), the south (unit 4), the west central (unit 5), the northwest (unit 6), and the west (unit 7). East Texas is made-up of units 1 and 2, while the central and west Texas consists of units 3 through 7 (fig. 1). This overview represents the period from 2004 to 2008 covering the eighth forest survey of east Texas and 50 percent of the first forest survey for central and west Texas. The 2008 survey provides a complete remeasurement of annual inventory plots for east Texas and the initial establishment of plots in central and west Texas.



Figure 1—Survey units of east and central/west Texas, 2008

Table 1—Area by land class by region, Texas, 2008

Land class	Total	Central/ West	
		East	West
<i>million acres</i>			
Forest land			
Timberland	14.47	11.96	2.50
Other/reserved	48.02	0.16	47.85
Total forest land	62.48	12.13	50.35
Nonforest land	104.98	9.35	95.63
Total land area	167.47	21.48	145.98
Percent forested	37%	56%	34%

Numbers in rows and columns may not sum to totals due to rounding.

Inventory Volume

Results from the 2008 inventory show all-live volume on forest land at 32.6 billion cubic feet (table 2). Sixty percent of this volume is on timberland, which is concentrated mainly in east Texas. The remaining 40 percent, or 13 billion cubic feet, is from reserved or unproductive forest land.

Table 2—Volume by land class and region, Texas, 2008

Land class	Total	Central/ West	
		East	West
<i>billion cubic feet</i>			
Timberland	19.61	17.29	2.32
Other forest land	12.47	0.01	12.47
Other/reserved	0.50	0.33	0.17
Total volume	32.59	17.62	14.96

Numbers in rows and columns may not sum to totals due to rounding.



EAST TEXAS, 2008

East Texas Forested Area

Total forest area amounted to 12.1 million acres in 2008 and occupied 56 percent of the land area in east Texas (table 3). Nearly 12.0 million acres, or 99 percent, of the forest land is considered timberland. The area of forest land in east Texas has remained relatively stable.

Table 3—Area by land class by survey, east Texas

Land class	1992	2003	2008
	<i>million acres</i>		
Forest land			
Timberland	11.77	11.66	11.96
Other/reserved	0.17	0.21	0.16
Total forest land	11.94	11.96	12.13
Nonforest land	9.65	9.59	9.35
Total land area	21.59	21.46	21.48
Percent forested	55%	55%	56%

Numbers in rows and columns may not sum to totals due to rounding.

Forest-type Composition

Hardwood timber types comprise the majority of timberland area in east Texas, accounting for 6.7 million acres (fig. 3). Softwood forest types occupy 5.2 million acres of east Texas' timberland area. Loblolly-shortleaf pine is the most abundant forest-type group with 4.9 million acres and comprises the majority (95 percent) of all softwood forest types. East Texas' softwood timberland area is split nearly equally between natural pine stands (2.6 million acres) and planted pine stands (2.5 million acres). Oak-hickory is the predominant hardwood forest-type group with 3.0 million acres, followed by oak-pine (1.5 million acres) and oak-gum-cypress (1.4 million acres).

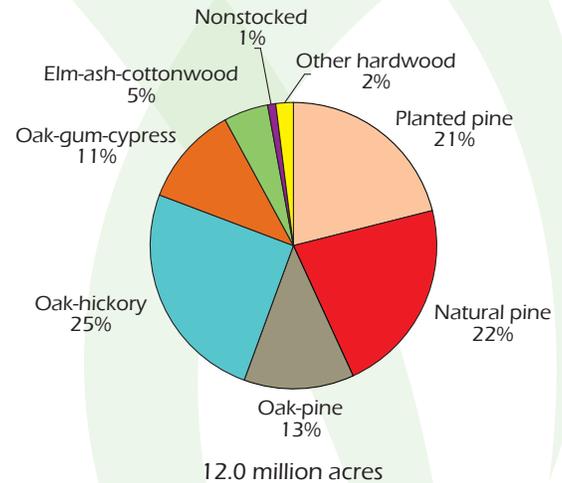


Figure 3—Timberland by major forest-type groups, east Texas, 2008.

Forest Ownership

Nonindustrial private landowners control the majority (52 percent) of east Texas' 12.0 million acres of timberland, and another 21 percent is controlled by private corporations (a more than two-fold increase since the 2003 survey) (fig. 2). Forest industry continues to decline as this group owns 19 percent of the timberland. Only 8 percent of east Texas' timberland is publicly owned and includes national forest lands, other Federal land, State, and local lands.

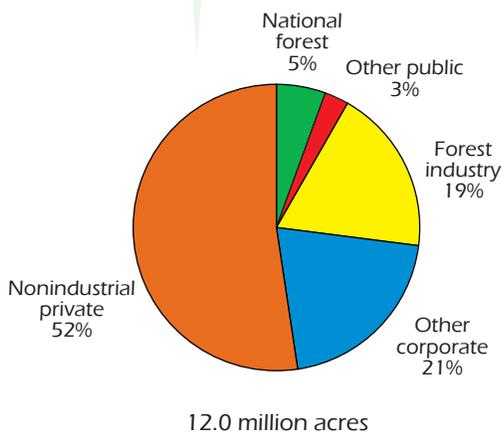


Figure 2—Timberland by ownership class, east Texas, 2008.

Inventory Volume

Total all-live volume on timberland was 17.3 billion cubic feet, exceeding all previously recorded levels (fig. 4). All-live volume in softwood species amounted to 9.5 billion cubic feet, while hardwood species total 7.8 billion cubic feet. Loblolly-shortleaf pine group accounted for 8.8 billion cubic feet (93 percent) of the all-live softwood volume.

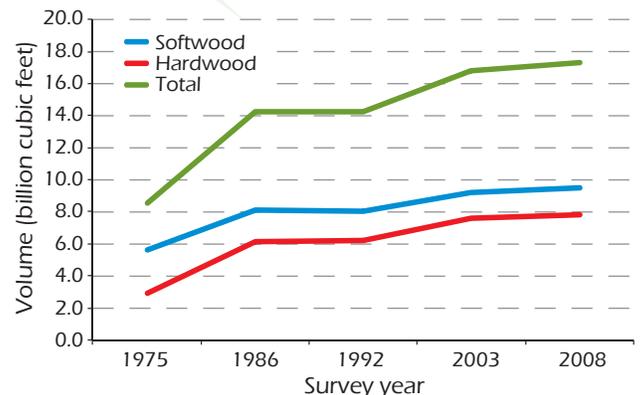


Figure 4—Volume of live trees on timberland by species group and survey year, east Texas.



All-live volume of softwoods has increased in nearly all diameter classes since 2003 (fig. 5). Volume by 2-inch diameter class shows the majority (59 percent) is centered within the 7.0- to 16.9-inch diameter classes.

All-live volume of hardwoods showed increases in nearly all diameter classes since 2003 (fig. 6). The 19.0- to 20.9-inch diameter class was the only class to show a slight (5 percent) decline.

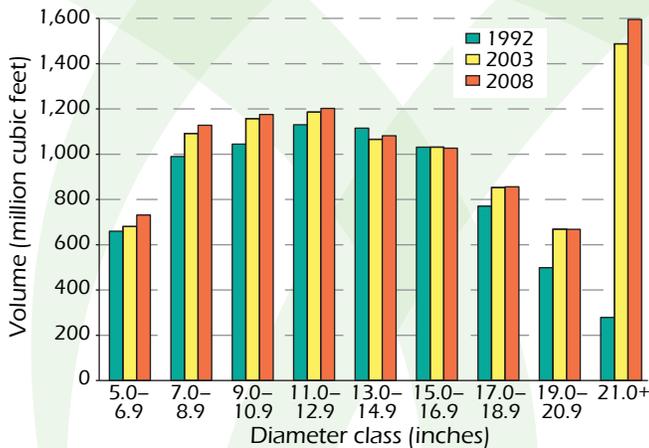


Figure 5—Softwood volume by diameter class and survey on timberland, east Texas.

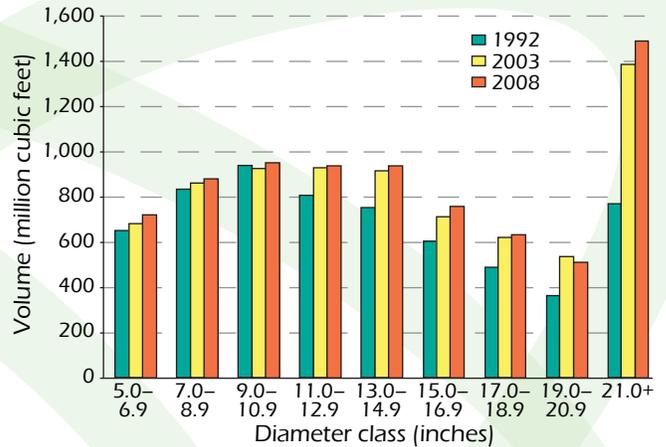


Figure 6—Hardwood volume by diameter class and survey on timberland, east Texas.

Cross canyon view through trees in Lost Maples State Park. (photo by Andrew Crocker, Texas Forest Service)



Growth, Removals, and Mortality

Total net annual growth for all-live trees on timberland was 967.9 million cubic feet per year between 2004 and 2008 (fig. 7). Total annual removals for all-live trees on timberland were 732.8 million cubic feet per year for the same time period, while mortality averaged 147.2 million cubic feet per year. Since 2003, net growth for all-live softwood species on timberland averaged 649.9 million cubic feet per year, and annual softwood removals averaged 547.1 million cubic feet per year. Softwood annual removals increased 6 percent since 2003. Net annual growth for hardwood species averaged 318.0 million cubic feet per year since 2003. Average annual removals of hardwood species decreased 16 percent since 2003, to 185.8 million cubic feet per year.

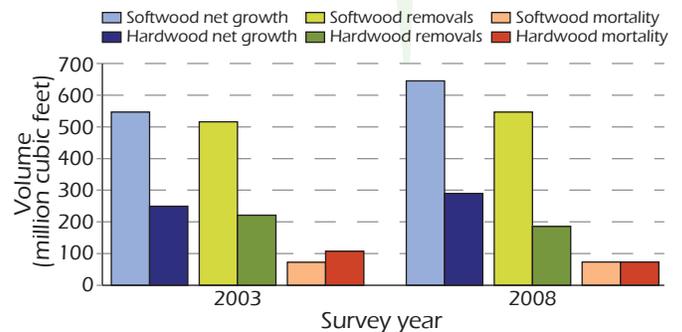


Figure 7—All-live net growth, removals, and mortality by survey year, east Texas.



Central and West Texas Forested Area

Total forest area amounted to 50.4 million acres in 2008 and occupied 34 percent of the land area in central and west Texas (table 1). Less than 5 percent, or 2.5 million acres, of the forest area was considered available for timber production and known as timberland. The remaining 47.9 million acres is either reserved forest land where timber removals are prohibited by law or unproductive forest land (produces <20 cubic feet per acre per year).

Forest Ownership

Nonindustrial private landowners control the majority (77 percent) of central and west Texas' 50.4 million acres of forest land, and another 18 percent is controlled by private corporations (fig. 8). Only 5 percent of central and west Texas' forest land is publicly owned and includes national forest lands, other Federal land, State, and local lands. Forest industry controls < 1 percent of the forest land.

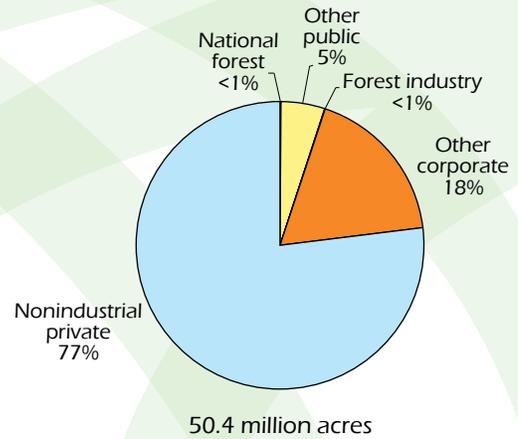


Figure 8—Forest land by ownership class, central and west Texas, 2008.

Post oaks in Bastrop County, TX.
(photo by Ron Billings, Texas Forest Service)





Forest-type Group

Hardwood timber types comprise the majority of forest land area in central and west Texas, accounting for 37.7 million acres (fig. 9). Softwood forest types occupy 9.8 million acres of central and west Texas' forest land area. Woodland hardwoods are the most abundant forest-type group with 23.4 million acres. Oak-hickory forest type accounts for another 21 percent or 10.6 million acres. Pinyon-juniper is the predominant softwood forest-type group with 9.5 million acres, accounting for 97 percent of the softwood forest-type group.

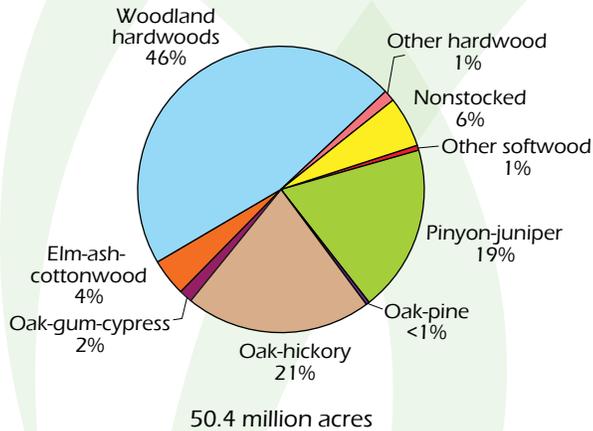


Figure 9—Forest land by major forest-type group, central and west Texas, 2008.

Volume

The 2008 inventory shows all-live volume on forest land at nearly 15.0 billion cubic feet for central and west Texas. All-live volume of hardwood amounted to nearly 14.0 billion cubic feet, while softwood total just over 1.0 billion cubic feet. Volume by 2-inch diameter class shows the majority of the total volume (67 percent) is within the 5.0- to 14.9-inch diameter classes (fig. 10). Within this range of diameter classes, there is 67 percent of the hardwood volume and 78 percent of the softwood volume.

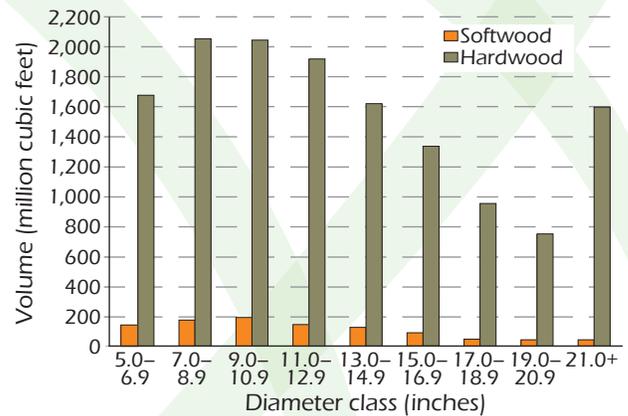


Figure 10—Volume of softwood and hardwood by diameter class on forest land, central and west Texas, 2008.

How to Cite This Publication

Bentley, J. 2011. Texas, 2008 forest inventory and analysis factsheet. e-Science Update SRS-031. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 5 p.

Spring flowers in Llano County. (photo by Andrew Crocker, Texas Forest Service)

Contact Information

James Bentley, Forester
 Forest Inventory and Analysis
 Southern Research Station, USDA Forest Service
 4700 Old Kingston Pike
 Knoxville, TN 37919
 Phone: 865-862-2056 / Fax: 865-862-0262
 Email: jbentley@fs.fed.us
 Southern FIA: <http://srsfia2.fs.fed.us>
 National FIA: <http://fia.fs.fed.us>

Chris Brown, FIA Coordinator
 Texas Forest Service
 John B. Connally Bldg.
 301 Tarrow, Suite 364
 College Station, TX 77840
 Phone: 979-458-6666 / Fax: 979-458-6633
 Email: cbrown@tfs.tamu.edu
<http://www.texasforestservice.tamu.edu>



The Forest Service, U.S. Department of Agriculture (USDA), is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.

The USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.