



Harvest Trends 2012

September 2013

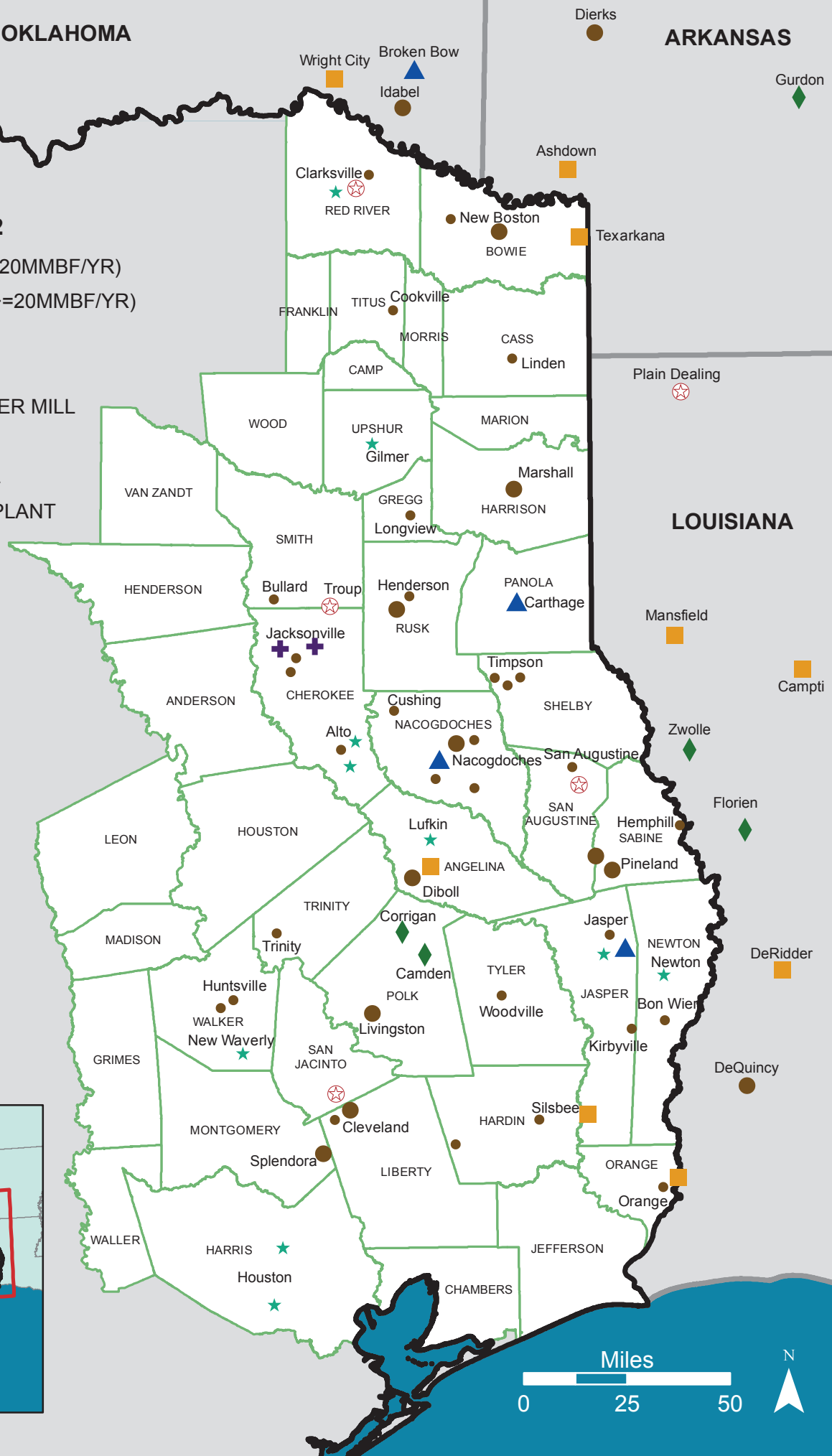


OKLAHOMA

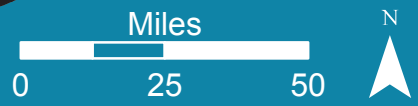
ARKANSAS

MILLS SURVEYED FOR HARVEST TRENDS 2012

- SMALL SAWMILL (<20MMBF/YR)
- LARGE SAWMILL (>=20MMBF/YR)
- ◆ PLYWOOD MILL
- ▲ OSB MILL
- ⊕ HARDWOOD VENEER MILL
- ⊗ CHIP MILL
- PULP / PAPER MILL
- ★ WOOD TREATING PLANT



NOTE:
Mills in East LA,
East AR, and Central
TX are not shown



Harvest Trends 2012

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September 2013

HIGHLIGHTS

Harvest Trends 2012

TIMBER REMOVAL

- ◆ Total growing stock timber removal was 498.7 million cubic feet, an increase of 8.8 percent from last year.
 - Pine removal was 392.6 million cubic feet, up 3.9 percent from last year.
 - Hardwood removal was up 31.8 percent to 106.1 million cubic feet. (About one-half of the increase is attributed to improved survey methods.)
- ◆ Harvest of timber for industrial use in the production of wood products was 515.0 million cubic feet.
 - 408.9 million cubic feet of pine were harvested for industrial consumption.
 - 106.1 million cubic feet of hardwood were harvested for industrial consumption.
- ◆ Stumpage value increased 9.2 percent to \$229.7 million, and delivered value was up 10.2 percent to \$556.8 million.
- ◆ Harvest of sawlogs was down 6.6 percent from last year to 1.1 billion board feet.
- ◆ Harvest of wood for veneer and structural panel production increased 11.9 percent to 110.7 million cubic feet from last year.
- ◆ Pulpwood harvest increased 23.6 percent to 2.9 million cords. (Improved survey methods account for about one-third of the increase.)
- ◆ Total timber volume imported from other states was 74.7 million cubic feet while the total volume exported was 72.6 million cubic feet. The net import was 2.1 million cubic feet.

PRIMARY FOREST PRODUCTS

- ◆ Production of primary wood products included:
 - 1.4 billion board feet of lumber, a decrease of 3.6 percent from last year.
 - 2.0 billion square feet (3/8-inch basis) of structural panel products, an increase of 7.0 percent.
 - 2.1 million tons of paperboard, up 2.6 percent from last year.

MILL AND LOGGING RESIDUES

- ◆ Total production of mill residue was 5.5 million green tons.
- ◆ Total production of logging residue was 2.7 million green tons.

Harvest Trends 2012

INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The forest sector employed more than 60,000 people in 2011¹. The forest sector ranked seventh among manufacturing sectors in the state in 2011². In 25 of 43 East Texas counties, the forest sector was one of the two largest manufacturing employers¹. The value of harvested timber ranked ninth in 2011 among Texas' top agricultural commodities, behind cattle, cotton, milk, broilers, greenhouse and nursery, corn, wheat, and eggs³.

To gather the most current information on the status of this valuable resource, Texas A&M Forest Service conducts an annual survey of the state's primary forest products industry. This 47th annual report provides information on the volume and value of timber harvested in East Texas during 2012, and reports the production of primary wood products, logging residue, and mill residue. Data on forest management activities are also presented. Information for this report was provided by 81 mills in Texas and 21 mills in surrounding states. Texas A&M Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

2012 ECONOMIC CONDITIONS

The United States economy showed steady signs of recovery in 2012. Real Gross Domestic Product (GDP) increased 2.2 percent, which surpassed the 2011 annual increase of 1.8 percent⁴. GDP growth was primarily attributed to expenditures in individual investments, personal consumption, and exports. U.S. corporate profits from current production were up 6.8 percent in 2012, which was slightly less than the 7.3 percent growth rate observed in 2011. The economy was on a path of recovery with continued increases in corporate profits and a moderate drop in the rate of unemployment to 8.1 percent in 2012⁵.

In September, the Federal Reserve announced that it will continue to buy \$40 billion per month of mortgage-backed securities and \$85 billion each month of longer-term securities, placing downward pressure on longer-term interest rates and support for the mortgage market. Meanwhile, the federal funds rate has remained constant at 1/4 percent since 2008⁶.

The Consumer Price Index (CPI), the most closely watched indicator for U.S. inflation, increased 1.7 percent in 2012. Gasoline prices increased 1.7 percent, but at a smaller rate compared to 13.8 percent in 2010 and 9.9 percent in 2011⁷.

The U.S. housing market showed signs of recovery in 2012. Nationwide, housing starts rose 28.2 percent to 780,600 units⁸. Single-family housing starts increased 24.3 percent to 535,300 units. The share of single-family starts was 69 percent, slightly lower than the 71 percent the previous year. Multi-family housing starts rose 37.7 percent. National residential housing permits, the best indicator of future housing starts activity, rose substantially (32.9 percent) to 829,700 units in 2012. A large share of this gain (51.3 percent) was contributed by multi-family permits. Single-family building permits also increased by 23.9 percent to 518,700 in 2012⁸.

Housing affordability continued to soar to a historical high of 194, meaning that a family earning the median family income has 194% of the income necessary to qualify for a conventional loan covering 80% of a median-priced, existing single-family house. The median sale price of existing homes averaged \$176,600 in 2012, up 6.3 percent from 2011⁹.

Mortgage rates dropped to historical lows in 2012. The national monthly average 30-year fixed mortgage rate started at 3.92 percent in January, dipped to an all-time low of 3.35 percent in November, and remained constant at 3.35 percent in December. The annual rate averaged 3.66 percent, which was the lowest annual average in 65 years¹⁰.

Existing home sales had a strong run as the total number of sales in 2012 rose to its highest level in five years. Total home sales in 2012 were 4.65 million, up 9.2 percent over 2011⁹. More employment opportunities, coupled with record-low mortgage rates, helped increase housing sales in 2012⁹.

The Texas economy continued to outperform the economy of the rest of the U.S. Real Gross Domestic Product by State (GDP-State) grew 4.8 percent in 2012¹¹, placing Texas 2nd among all states. Texas gained 304,300 jobs in 2012¹² with additions in most sectors, including trade, transportation and utilities, construction, education and health services, manufacturing, mining and logging, information, professional and business services, leisure and hospitality¹². The unemployment rate in Texas dropped to 6.8 percent in 2012⁵.

The total number of residential building permits in Texas increased 39 percent in 2012 to 138,332 units. Single-family housing building permits increased 21.8% to 81,926. Consistent with the national trend, a substantial increase in

Million Cubic Feet

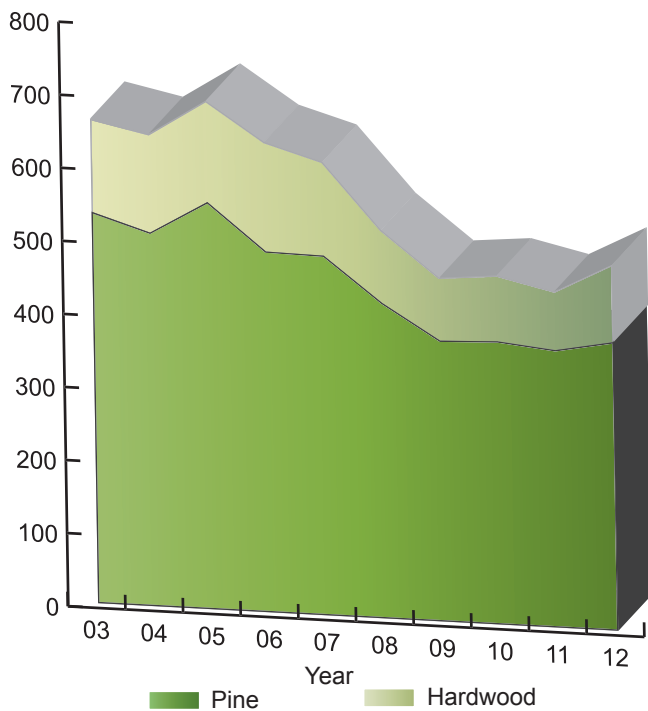


Figure 1. Total Timber Removal, 2003-2012

Million Dollars

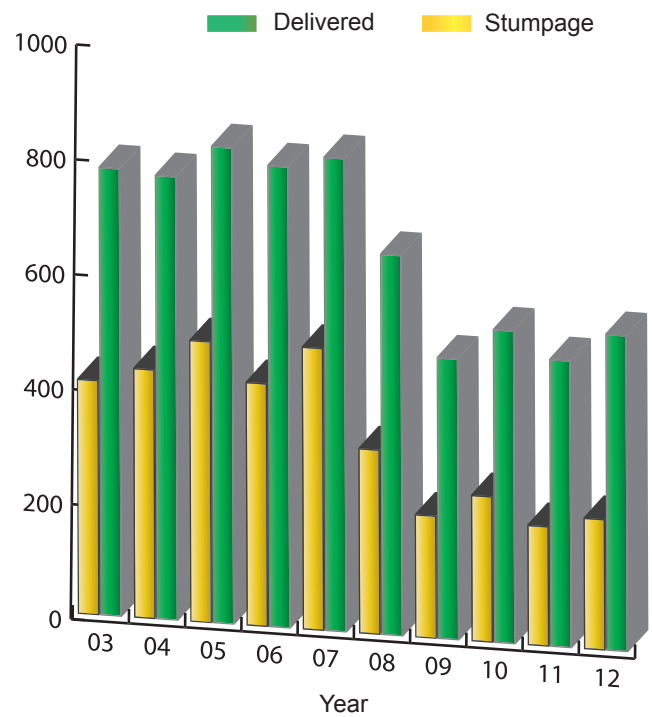


Figure 2. Value of Timber Harvest, 2003-2012

multi-family housing building permits occurred in Texas where the number increased 76.2 percent to 54,145 units in 2012¹³.

U.S. softwood lumber production posted a third consecutive annual gain in 2012, up 8.1 percent to 28.65 billion board feet (bbf), but still 28.9% percent below the recent high of 40.3 bbf in 2005. Lumber production in the U.S. South accounted for 49.8 percent of the U.S. total, or 14.3 bbf, a 6 percent increase from 2011¹⁴.

Structural panels production in the U.S. rebounded 6.3 percent from 2011 to 20.2 billion square feet (bsf) (3/8-inch basis)¹⁴, including 9.2 bsf of plywood and 11.0 bsf of oriented strand board (OSB). Southern OSB production increased 9.1 percent to 8.7 billion square feet in 2012. Southern plywood production dropped 5.3 percent to 5.5 billion square feet¹⁴.

U.S. lumber markets rebounded strongly in 2012, after a down period the past six years. Gains in lumber prices were largely attributed to strong U.S. housing starts and building permits in 2012. Demand for U.S. lumber in China, however, was low compared to previous years. While the Japanese housing market surged due to rebuilding efforts following the 2011 earthquake and tsunami, this did not help increase total U.S. softwood lumber exports. Political unrest hindered trading in the Middle East. Surging demand for building materials prompted U.S. entrepreneurs to concentrate their focus on the domestic market.

The average annual Random Lengths Framing Lumber Composite Price increased 18.4 percent, from \$272 per thou-

sand board feet (mbf) in 2011 to \$322 per mbf in 2012¹⁴. The average annual Random Lengths Structural Panel Composite Price increased 31.5 percent to \$384 per thousand square feet (msf) in 2012¹⁴.

U.S. paper and paperboard production posted a second consecutive annual decline in 2012, dropping slightly to 80.9 million short tons. A lower level of paper production was considered the primary reason behind this decline¹⁵.

STUMPAGE PRICES

According to the *Texas Timber Price Trends* bimonthly timber market report, the average annual pine saw-timber price was nearly flat at \$185.87 per mbf, Doyle scale, in 2012, compared to last year's average annual price of \$186.44 per mbf. The average annual mixed hardwood saw-timber price showed a modest increase of 1.3 percent from a year earlier to \$237.93 per mbf. Pine pulpwood price increased 11.1 percent to \$17.45 per cord. Mixed hardwood pulpwood price increased 37.7 percent to \$23.32 per cord. Table 6 provides historic data on stumpage prices.

TIMBER REMOVALS

Growing Stock Removals

Total removals of growing stock in East Texas, including pine and hardwood, increased 8.8 percent from the previous year (Figure 1). The total volume of growing stock removed from the 43-county region was 498.7 million cubic feet, compared to 458.5 million cubic feet a year earlier. Included in the total growing stock removals are timber harvested for industrial use and an estimate of logging residue. Growing stock removals are based on the latest East Texas Harvest and Utilization Study by the USDA Forest Service.

By species group, growing stock removals were comprised of 392.6 million cubic feet of pine and 106.1 million cubic feet of hardwood. Pine removals were up 3.9 percent and hardwood removals were up 31.8 percent from a year earlier. About one-half of the increase for hardwoods is attributed to improved survey methods. Figure 3 and Table 14 illustrate the harvest volume by species group by year.

Industrial Roundwood Harvest

Industrial roundwood harvest in Texas, the portion of the total removals that was subsequently utilized in the manufacture of wood products, totaled 408.9 and 106.1 million cubic feet for pine and hardwood, respectively. Pine industrial roundwood harvest was up 4.1 percent, and hardwood roundwood harvest was up 35.0 percent from a year earlier. About one-half of the increase for hardwoods is attributed to improved survey methods. The combined harvest increased 9.3 percent to 515.0 million cubic feet. Ninety-three percent of the industrial roundwood was from growing stock and 7 percent of the industrial roundwood was from non-growing stock (Table 13).

Table 1 lists the harvest of pine and hardwood by county. The top five timber producing counties were Polk, Tyler, Jasper, Newton, and San Augustine.

Figure 4 on the next page illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. San Augustine, Shelby, Bowie, Angelina, and Cherokee counties had the five highest relative timber harvesting intensities.

Value of Timber Harvest

Stumpage value of East Texas timber harvest increased 9.2 percent to \$229.7 million (Figure 2). Stumpage values remain below levels observed in the years prior to the recent recession. The delivered value was up 10.2 percent to \$556.8 million. Pine timber accounted for 80 percent of the total stumpage value. Figure 3 depicts the value of harvest by product. Table 7 lists stumpage and delivered value by

product category.

Sawlogs

Harvest of sawlogs for lumber production decreased 6.6 percent to 1.1 billion board feet, which accounted for 33.2 percent of the total timber harvest. The pine sawlog cut totaled 930 million board feet, down 3.6 percent. Hardwood sawlog harvest was down 24.4 percent to 122 million board feet. Polk, Cherokee, Tyler, Newton, and Jasper counties were the top five producers of sawlogs. Table 2 lists sawlog harvest by county.

Veneer and Panel Roundwood

Harvest of timber for the production of structural panels, including plywood, OSB and hardwood veneer, was 110.7 million cubic feet, an 11.9 percent increase from a year earlier. The timber harvest for structural panels was 21.5 percent of the total timber harvest. Almost all of the veneer and panel roundwood was pine. Angelina, Cherokee, Houston, Polk, and Trinity counties were the top five producers of veneer and panel roundwood. Table 3 lists the harvest of veneer and panel roundwood by county.

Pulpwood

Harvest of timber for pulp and paper products in Texas increased 23.6 percent from a year earlier to 2.9 million cords. About one-third of the increase is attributed to improved survey methods. Roundwood pulpwood harvest accounted for 44.7 percent of the total timber harvest. Pine pulpwood made up 62.7 percent of the total pulpwood production. Cass, San Augustine, Bowie, Jasper, and Tyler counties were the top five producers of pulpwood. Table 4 lists the roundwood pulpwood harvest by county.

Other Roundwood

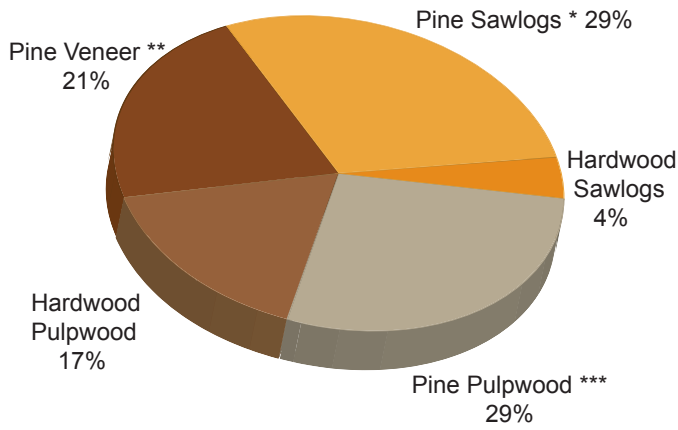
Other roundwood harvest included posts, poles and pilings that totaled 3.0 million cubic feet. Table 5 lists harvest of these products by county.

Import-Export Trends

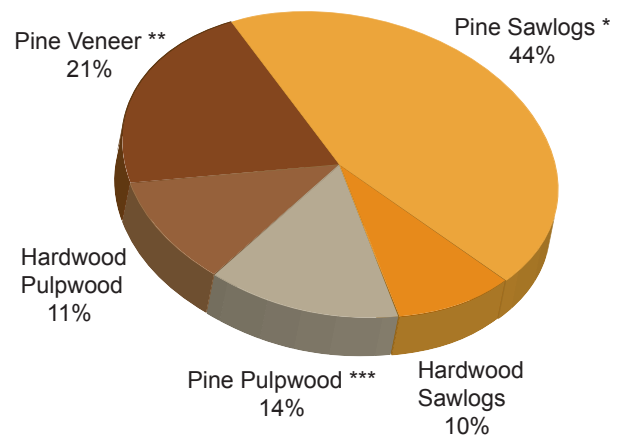
Texas imported slightly more timber from surrounding states than exported to surrounding states. Exports of roundwood from Texas were 72.6 million cubic feet, while imports totaled 74.7 million cubic feet. The net import of roundwood was 2.1 million cubic feet. Table 8 details the interstate movement of roundwood.

Texas mills utilized 85.9 percent of the timber harvested in the state. The remainder was processed mainly by mills in Arkansas, Louisiana, and Oklahoma. Details are listed in Table 8.

**Harvest Volume
(515.0 Million Cubic Feet)**



Stumpage Value **
(\$229.7 Million)**



- * Includes chip-n-saw
- ** Includes panel roundwood (pulpwood sized material chipped for panel production)
- *** Includes posts, pole and pilings
- **** Products with stumpage value less than 1% of total are not included

Figure 3. Volume and Value of Timber Harvest, 2012

Cubic Feet Harvested Per Acre of Timberland

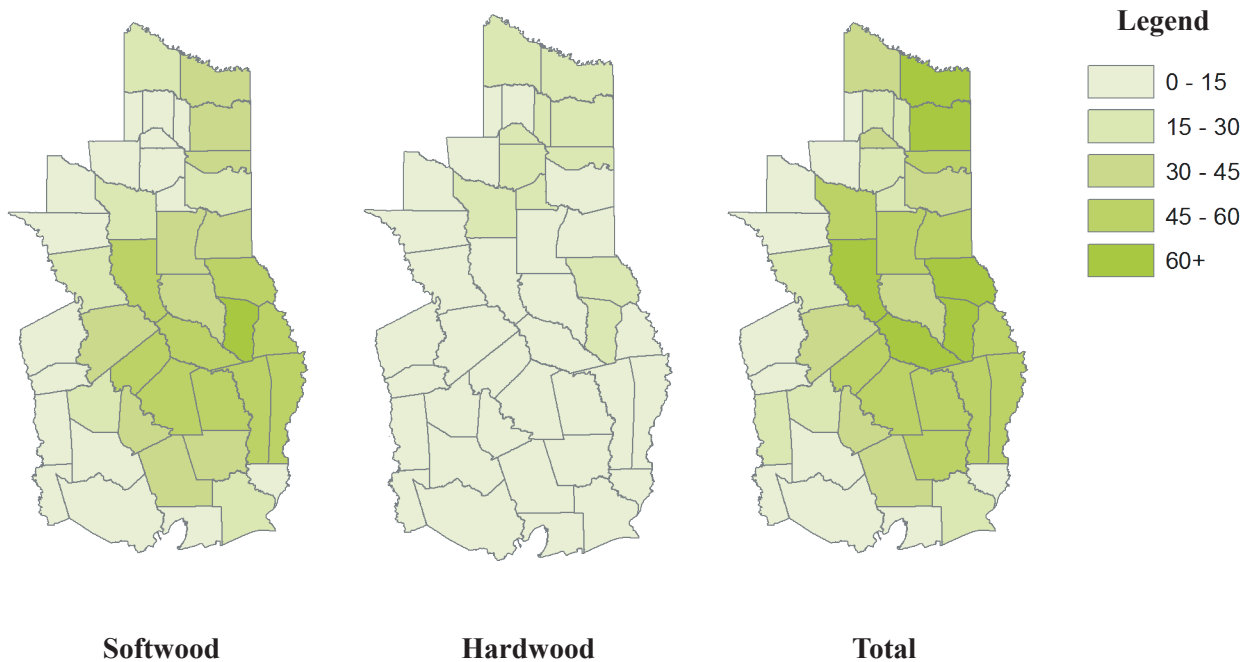


Figure 4. Intensity of Timber Harvest by County, 2012

Million Board Feet

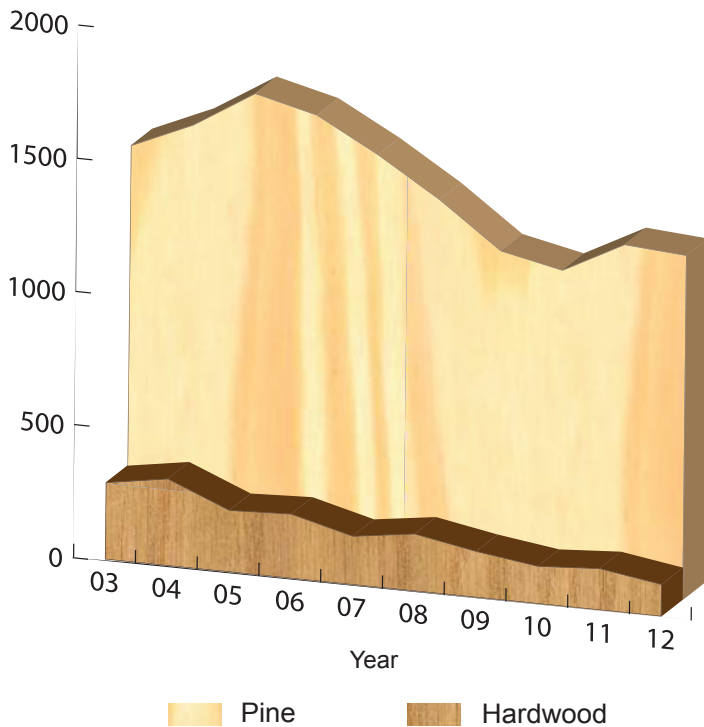


Figure 5. Texas Lumber Production, 2003-2012

Million Square Feet

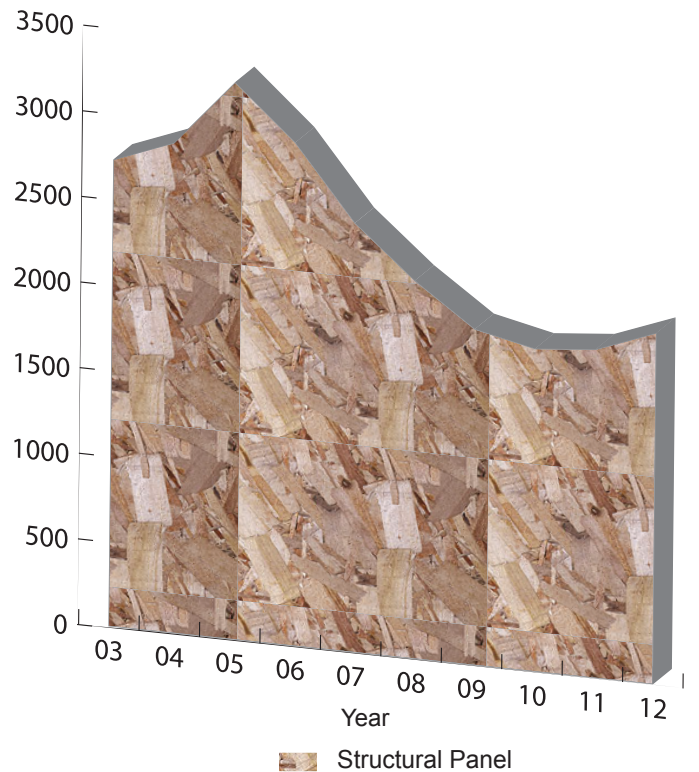


Figure 6. Texas Structural Panel Production, 2003-2012

PRODUCTION OF FOREST PRODUCTS

Lumber

Texas sawmills produced 1.4 billion board feet of lumber, a decrease of 3.6 percent from a year earlier. Production of pine lumber declined 1.3 percent to 1.3 billion board feet and hardwood lumber production declined 23.1 percent to 118.8 million board feet. Table 9 and Figure 5 present a 10-year trend in lumber production.

Structural Panel Products

Production of structural panels, including plywood and OSB, was up 7.0 percent to 2.0 billion square feet (3/8-inch basis). Table 9 and Figure 6 show the recent trend in structural panel output.

Paper Products

Production of paperboard totaled 2.1 million tons, up 2.6 percent from a year earlier. There has not been any major paper production in Texas since 2003. Table 10 and Figure 7 summarize recent trends in paper product output.

Treated Wood Products

The total volume of wood treated by Texas wood treat-

ers was 36.0 million cubic feet, a decrease of 18.7 percent from a year earlier. Among major treated products, lumber accounted for 62.7 percent of the total volume, crossties 16.6 percent, and utility poles 10.2 percent. Table 11 contains treated volume by product for the past two years.

Primary Mill Residue

Total mill residue, including chips, sawdust, shavings, and bark in primary mills such as sawmills, panel mills and chip mills was 5.5 million tons, based on updated residue product ratios (Table 12). This was 3.1 percent lower than a year earlier. Eighty-three percent of the mill residue was from pine species and 17 percent was from hardwood species. Chips accounted for 45.6 percent of mill residue, followed by bark (35.0 percent), sawdust (13.4 percent), and shavings (5.9 percent) (Figure 8).

Logging Residue

Types of logging residue include stumps, tops, limbs and unutilized cull trees. Total logging residue produced was 2.7 million green tons. Logging residue comes from both growing stock and non-growing stock. For this year, 24.6 percent of the logging residue was from growing stock, and 75.4 percent was from non-growing stock. Sixty-five percent of the residue was from pine and 35 percent was from hardwood (Table 13, Figure 9).

Thousand Tons

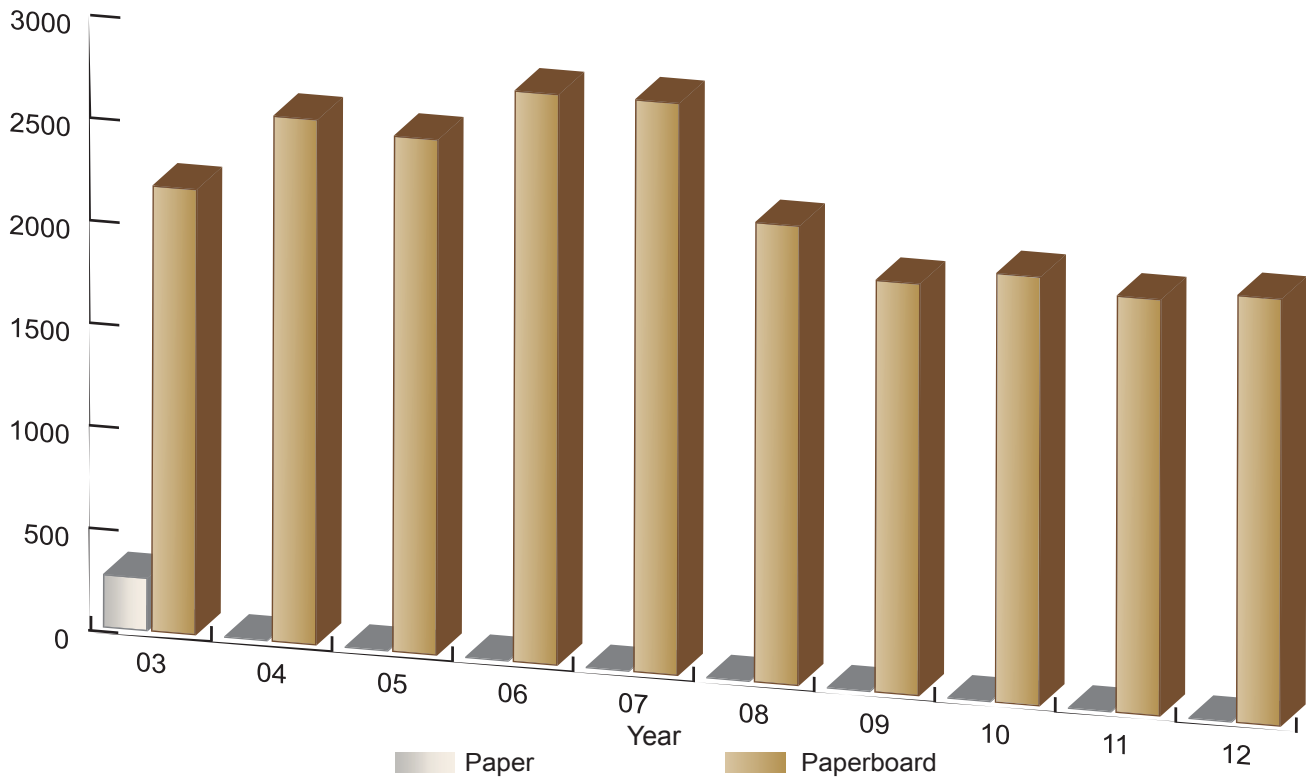


Figure 7. Texas Paper and Paperboard Production, 2003-2012

Thousand Tons

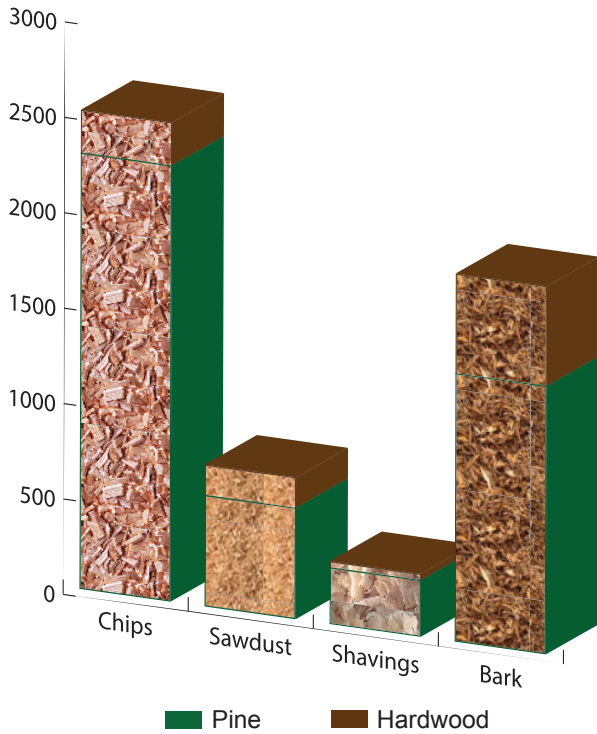


Figure 8. Texas Primary Mill Residue, 2012

Thousand Tons

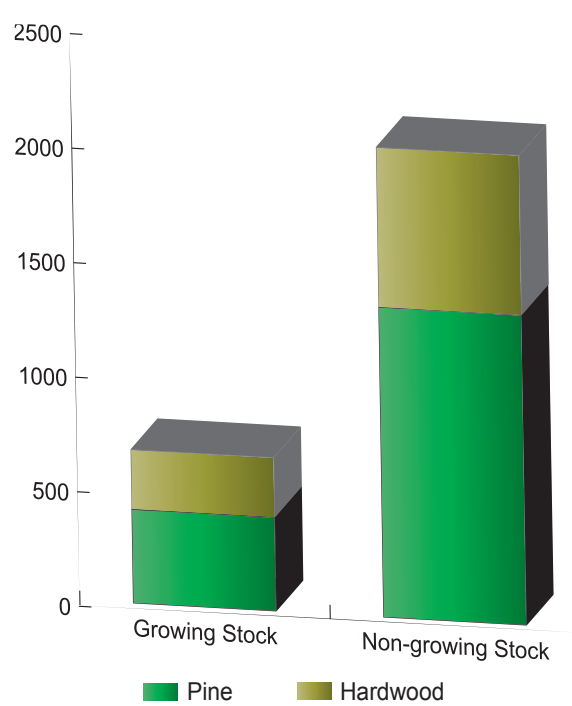


Figure 9. Texas Logging Residue, 2012

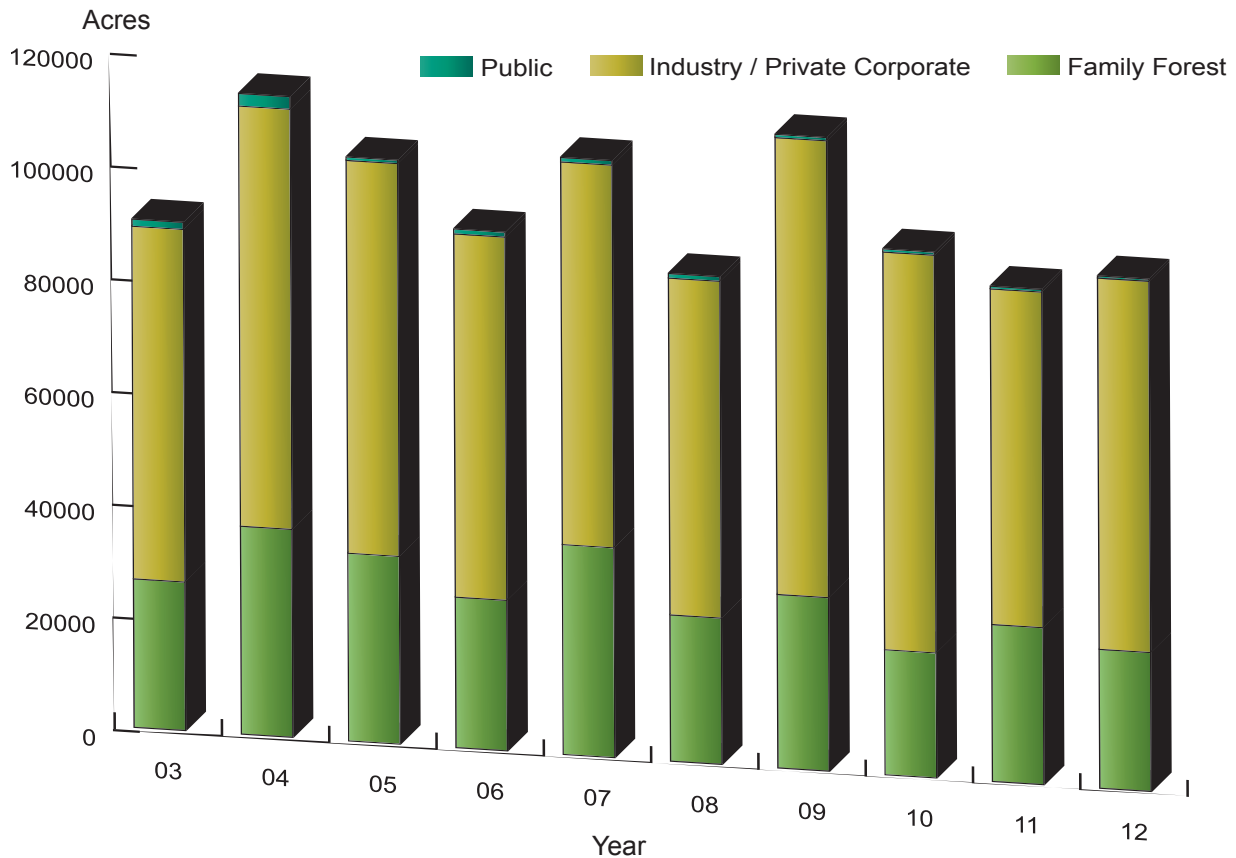


Figure 10. Reforestation Acreage by Ownership in Texas, 2003-2012

REFORESTATION

Accomplishments in reforestation by funding source and ownership are presented in Table 15. A total of 90,920 acres was planted during the winter 2011/spring 2012 planting season. This was a 3.5 percent increase from the previous year. Industrial landowners planted 65,867 acres, 10.6 percent more than the previous year. Family forest owners planted 24,651 acres. Public landowners planted 402 acres. Family forest owners received \$2.17 million in cost share assistance for reforestation through federal cost share programs.

REFERENCES

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- ³USDA Economic Research Service. U.S. and State Farm Income and Wealth Statistics. Annual cash receipts by commodity groups and selected commodities, by state.
- ⁴<http://www.bea.gov/national/index.htm>
- ⁵<http://www.bls.gov/lau/lastrk12.htm#>
- ⁶<http://www.federalreserve.gov/monetarypolicy/fomccal-endars.htm>
- ⁷<http://www.bls.gov/cpi/>
- ⁸<http://www.census.gov/>
- ⁹<http://www.realtor.org/research/research/housinginx>
- ¹⁰<http://www.freddiemac.com/pmms/pmms30.htm>
- ¹¹U.S. Bureau of Economic Analysis. 2012. Real GDP by state (chained dollars).
- ¹²<http://www.bls.gov/sae/>
- ¹³<http://recenter.tamu.edu/data>
- ¹⁴Random Lengths, Year Book, 2012.
- ¹⁵<http://www.statmill.org/>

Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2012

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	----- cubic feet -----			----- thousand dollars -----	
Anderson	8,909,816	489,149	9,398,965	4,657	10,406
Angelina	19,392,981	4,299,694	23,692,675	11,504	26,469
Bowie	11,673,051	8,150,517	19,823,568	7,813	20,924
Camp	454,794	964,150	1,418,944	454	1,445
Cass	16,061,973	9,259,616	25,321,589	10,384	26,960
Chambers	24,209	26,497	50,706	45	80
Cherokee	20,554,404	3,547,736	24,102,140	12,711	27,791
Franklin	172,163	938,819	1,110,982	383	1,184
Gregg	1,136,912	1,299,410	2,436,322	1,188	2,846
Grimes	2,128,263	191,879	2,320,142	1,156	2,582
Hardin	18,889,624	2,352,670	21,242,294	9,112	22,389
Harris	1,371,049	271,897	1,642,946	1,025	2,052
Harrison	9,220,345	4,425,414	13,645,759	5,907	14,763
Henderson	843,144	602,323	1,445,467	727	1,686
Houston	15,450,678	683,269	16,133,947	8,424	18,304
Jasper	27,657,524	1,413,609	29,071,133	10,407	28,341
Jefferson	1,078,863	87,373	1,166,236	504	1,232
Leon	194,601	671	195,272	146	263
Liberty	13,874,590	5,513,039	19,387,629	9,206	21,772
Madison	5,996	640	6,636	3	7
Marion	7,984,856	3,250,210	11,235,066	5,232	12,461
Montgomery	4,489,192	608,614	5,097,806	3,094	6,262
Morris	726,788	1,175,282	1,902,070	644	1,958
Nacogdoches	15,457,409	4,256,215	19,713,624	9,722	22,242
Newton	26,546,999	880,528	27,427,527	11,009	27,818
Orange	1,131,367	39,242	1,170,609	540	1,262
Panola	14,067,504	3,940,078	18,007,582	7,853	19,278
Polk	29,314,144	2,412,231	31,726,375	15,879	35,511
Red River	6,068,054	5,208,718	11,276,772	3,999	11,561
Rusk	11,652,889	2,905,340	14,558,229	6,696	15,895
Sabine	12,203,991	1,181,665	13,385,656	5,700	14,038
San Augustine	18,422,522	7,280,795	25,703,317	9,607	26,181
San Jacinto	10,616,367	1,351,441	11,967,808	5,294	12,758
Shelby	17,039,810	6,223,576	23,263,386	10,031	24,952
Smith	5,682,087	5,822,399	11,504,486	4,586	12,356
Titus	488,849	1,465,166	1,954,015	746	2,134
Trinity	17,698,631	1,098,088	18,796,719	8,459	20,058
Tyler	25,649,771	3,563,584	29,213,355	12,897	31,181
Upshur	2,144,967	3,646,438	5,791,405	2,314	6,328
Van Zandt	129,754	614,704	744,458	297	833
Walker	9,920,404	64,534	9,984,938	6,568	12,606
Waller	681,036	96,862	777,898	411	892
Wood	814,612	2,166,928	2,981,540	1,002	3,104
Other Counties	906,952	2,306,782	3,213,734	1,360	3,633
Total Production	408,933,935	106,077,792	515,011,727	229,693	556,796

Table 2. Sawlog Harvest by County in Texas, 2012

County	Pine	Hardwood	Total
	-----thousand board feet ¹ -----		
Anderson	24,596	1,699	26,295
Angelina	46,623	7,253	53,876
Bowie	20,624	5,116	25,740
Camp	677	113	790
Cass	39,581	5,269	44,850
Chambers	38	158	196
Cherokee	53,844	11,362	65,206
Franklin	406	283	689
Gregg	2,437	2,749	5,186
Grimes	686	5	691
Hardin	44,658	6,237	50,895
Harris	5,260	880	6,140
Harrison	23,178	3,965	27,143
Henderson	2,218	875	3,093
Houston	38,176	1,775	39,951
Jasper	52,981	2,110	55,091
Jefferson	3,026	521	3,547
Leon	765	4	769
Liberty	30,383	10,544	40,927
Madison	19	0	19
Marion	24,386	3,123	27,509
Montgomery	11,551	1,825	13,376
Morris	727	634	1,361
Nacogdoches	39,684	8,050	47,734
Newton	54,784	1,201	55,985
Orange	3,861	234	4,095
Panola	32,596	3,428	36,024
Polk	70,066	6,502	76,568
Red River	2,413	5,994	8,407
Rusk	29,470	4,724	34,194
Sabine	36,477	102	36,579
San Augustine	33,957	1,111	35,068
San Jacinto	23,409	987	24,396
Shelby	39,928	1,389	41,317
Smith	10,769	5,319	16,088
Titus	270	1,502	1,772
Trinity	35,640	1,580	37,220
Tyler	58,359	6,553	64,912
Upshur	3,669	3,672	7,341
Van Zandt	313	0	313
Walker	24,484	381	24,865
Waller	537	8	545
Wood	1,553	453	2,006
Other Counties	869	2,238	3,107
Total Production	929,948	121,928	1,051,876

¹International ¼-inch rule.

Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2012

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	4,399,132	82,784	4,481,916
Angelina	9,348,901	0	9,348,901
Bowie	1,030,756	0	1,030,756
Camp	0	0	0
Cass	115,566	0	115,566
Chambers	17,886	0	17,886
Cherokee	8,752,338	41,278	8,793,616
Franklin	810	0	810
Gregg	113,897	0	113,897
Grimes	1,124,545	0	1,124,545
Hardin	1,884,935	0	1,884,935
Harris	143,135	0	143,135
Harrison	2,873,020	0	2,873,020
Henderson	121,300	82,784	204,084
Houston	8,533,012	0	8,533,012
Jasper	6,112,428	0	6,112,428
Jefferson	12,290	0	12,290
Leon	70,432	0	70,432
Liberty	2,541,575	0	2,541,575
Madison	0	0	0
Marion	50,980	0	50,980
Montgomery	1,579,344	0	1,579,344
Morris	1,782	0	1,782
Nacogdoches	5,676,400	82,784	5,759,184
Newton	4,559,924	0	4,559,924
Orange	10,518	0	10,518
Panola	5,995,989	0	5,995,989
Polk	7,573,198	0	7,573,198
Red River	1,567,151	0	1,567,151
Rusk	5,197,789	0	5,197,789
Sabine	3,210,815	0	3,210,815
San Augustine	2,216,609	0	2,216,609
San Jacinto	1,857,550	0	1,857,550
Shelby	4,500,352	0	4,500,352
Smith	1,092,585	41,278	1,133,863
Titus	7,938	0	7,938
Trinity	7,226,168	0	7,226,168
Tyler	5,004,047	0	5,004,047
Upshur	76,950	0	76,950
Van Zandt	21,751	82,784	104,535
Walker	5,003,770	0	5,003,770
Waller	351,561	0	351,561
Wood	18,888	0	18,888
Other Counties	166,563	114,028	280,591
Total Production	110,164,580	527,720	110,692,300

Table 4. Pulpwood Roundwood Harvest by County in Texas, 2012

County	Pine	Hardwood	Total
	----- cords -----		
Anderson	6,135	1,518	7,653
Angelina	27,902	38,542	66,444
Bowie	90,115	91,157	181,272
Camp	4,260	11,815	16,075
Cass	117,661	104,700	222,361
Chambers	2	0	2
Cherokee	34,653	20,013	54,666
Franklin	1,303	11,142	12,445
Gregg	7,753	10,480	18,233
Grimes	11,019	2,388	13,407
Hardin	120,566	16,334	136,900
Harris	4,633	1,554	6,187
Harrison	31,978	47,006	78,984
Henderson	4,473	4,660	9,133
Houston	9,004	4,820	13,824
Jasper	157,810	13,247	171,057
Jefferson	7,112	0	7,112
Leon	2	0	2
Liberty	79,112	46,810	125,922
Madison	36	8	44
Marion	49,148	34,081	83,229
Montgomery	12,808	3,782	16,590
Morris	7,496	13,362	20,858
Nacogdoches	37,842	35,293	73,135
Newton	158,206	8,489	166,695
Orange	6,111	0	6,111
Panola	32,807	42,065	74,872
Polk	128,164	16,523	144,687
Red River	50,539	52,544	103,083
Rusk	19,268	26,414	45,682
Sabine	36,258	14,557	50,815
San Augustine	127,099	88,681	215,780
San Jacinto	61,288	14,824	76,112
Shelby	71,644	74,883	146,527
Smith	35,110	61,114	96,224
Titus	5,397	15,166	20,563
Trinity	57,931	10,414	68,345
Tyler	137,209	30,808	168,017
Upshur	18,189	37,883	56,072
Van Zandt	707	6,649	7,356
Walker	11,701	8	11,709
Waller	2,993	1,194	4,187
Wood	6,716	26,137	32,853
Other Counties	325	22,718	23,043
Total Production	1,790,485	1,063,783	2,854,268

Table 5. Other Roundwood Harvest by County in Texas, 2012¹

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	26,730	0	26,730
Angelina	226,448	0	226,448
Bowie	0	0	0
Camp	0	0	0
Cass	0	0	0
Chambers	0	0	0
Cherokee	267,088	0	267,088
Franklin	0	0	0
Gregg	0	0	0
Grimes	0	0	0
Hardin	0	0	0
Harris	0	0	0
Harrison	0	0	0
Henderson	0	0	0
Houston	0	0	0
Jasper	174,554	0	174,554
Jefferson	0	0	0
Leon	0	0	0
Liberty	0	0	0
Madison	0	0	0
Marion	0	0	0
Montgomery	0	0	0
Morris	0	0	0
Nacogdoches	283,079	0	283,079
Newton	292,190	0	292,190
Orange	0	0	0
Panola	130,378	0	130,378
Polk	2,176	0	2,176
Red River	16,200	0	16,200
Rusk	117,320	0	117,320
Sabine	143,402	0	143,402
San Augustine	406,705	0	406,705
San Jacinto	0	0	0
Shelby	264,084	0	264,084
Smith	0	0	0
Titus	0	0	0
Trinity	2,901	0	2,901
Tyler	72,040	0	72,040
Upshur	0	0	0
Van Zandt	0	0	0
Walker	0	0	0
Waller	0	0	0
Wood	0	0	0
Other Counties	573,199	0	573,199
Total Production	2,998,494	0	2,998,494

¹Including posts, poles and piling.

Table 6. Timber Stumpage Price in East Texas by Product, 2003-2012

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	--- \$/MBF-Doyle ---		--- \$/cord ---			
2003	289.30	157.81	14.90	15.85	41.90	68.44
2004	286.42	189.73	19.52	16.90	43.74	77.00
2005	305.58	164.16	17.44	19.69	47.99	77.38
2006	294.82	144.98	17.22	13.22	43.72	76.50
2007	321.40	162.69	32.79	30.09	46.78	59.16
2008	241.71	217.87	25.90	22.31	41.80	54.28
2009	180.62	177.34	17.27	18.42	32.66	57.75
2010	200.60	270.49	21.99	31.75	38.66	55.06
2011	186.44	234.94	15.70	16.93	25.55	52.00
2012	185.87	237.93	17.45	23.32	30.00	52.50

SOURCE: *Texas Timber Price Trends* bi-monthly market report, with pine pole price from *Timber Mart-South*.

Table 7. Value of East Texas Timber Harvest, 2012

Product	Unit	Stumpage		Delivered	
		Price ¹ (\$/unit)	Value (million \$)	Price ² (\$/unit)	Value (million \$)
PINE					
Sawlogs/Chip-n-Saw	MBF ³	–	102.1	–	193.6
Sawlogs	MBF ³	123.90	89.8	220.55	159.9
Chip-n-Saw	MBF ³	60.00	12.3	164.71	33.8
Veneer/Panel Roundwood	MCF	–	48.0	–	114.4
Veneer Logs	MCF	764.33	33.7	1,360.60	60.0
Panel Roundwood	MCF	215.43	14.2	823.46	54.4
Pulpwood	cords	17.45	31.2	66.70	119.4
Others	MCF	–	1.7	–	3.6
All pine products			183.0		431.1
HARDWOOD					
Sawlogs	MBF ³	174.96	21.3	301.99	36.8
Veneer/Panel Roundwood	MCF	–	0.6	–	1.0
Veneer Logs	MCF	1,043.28	0.6	1,800.75	1.0
Panel Roundwood	MCF	291.50	0.0	1,033.72	0.0
Pulpwood	cords	23.32	24.8	82.70	88.0
All hardwood products			46.7		125.7
ALL PRODUCTS			229.7		556.8

¹Average annual statewide prices as published in *Texas Timber Price Trends*, Texas A&M Forest Service.

²Average annual statewide prices, obtained by adding the difference between the standing timber prices and the delivered prices published in *Timber Mart-South* to the stumpage prices published in *Texas Timber Price Trends*, Texas A&M Forest Service.

³International ¼-inch rule.

Table 8. Interstate Movement of Roundwood by Species Group and Product in Texas, 2012

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
PINE						
Sawlogs	MBF ¹	144,203	897,695	32,253	1,041,898	929,948
Veneer/Panel Roundwood	MCF	2,267	102,752	7,413	105,019	110,165
Pulpwood	ords	506,623	1,230,162	560,323	1,736,785	1,790,485
Others	MCF	2,584	2,998	0	5,583	2,998
All Pine Products	MCF	69,263	350,908	58,026	420,170	408,934
HARDWOOD						
Sawlogs	MBF ¹	2,935	121,928	0	124,863	121,928
Veneer/Panel Roundwood	MCF	342	528	0	870	528
Pulpwood	ords	57,474	881,291	182,492	938,765	1,063,783
All Hardwood Products	MCF	5,432	91,478	14,599	96,911	106,078
TOTAL						
Sawlogs	MBF ¹	147,138	1,019,623	32,253	1,166,761	1,051,876
Veneer/Panel Roundwood	MCF	2,610	103,279	7,413	105,889	110,692
Pulpwood	ords	564,097	2,111,453	742,815	2,675,550	2,854,268
Posts, Poles, Pilings	MCF	2,584	2,998	0	5,583	2,998
ALL PRODUCTS	MCF	74,695	442,386	72,625	517,081	515,012

¹International ¼-inch rule.

Table 9. Texas Industrial Roundwood Products, 2003-2012

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	----- m. bd. ft ¹ -----			m. sq. ft.
2003	1,490,311	287,062	1,777,373	2,723,225
2004	1,591,109	324,663	1,915,772	2,859,012
2005	1,733,314	230,090	1,963,403	3,249,558
2006	1,676,461	240,214	1,916,676	2,935,637
2007	1,550,716	180,713	1,731,429	2,503,941
2008	1,406,103	213,191	1,619,293	2,204,544
2009	1,237,801	171,514	1,409,315	1,958,794
2010	1,188,294	139,389	1,327,683	1,881,763
2011	1,308,427	154,593	1,463,020	1,915,605
2012	1,291,578	118,823	1,410,401	2,049,084

¹International 1/4-inch rule.

Table 10. Texas Pulp, Paper, and Paperboard Production, 2003-2012

Year	Paper Products			Market Pulp
	Paper	Paperboard ¹	Total	
	----- tons -----			
2003	255,462	2,170,185	2,425,647	0
2004	0	2,560,480	2,560,480	0
2005	0	2,512,262	2,512,262	0
2006	0	2,781,865	2,781,865	0
2007	0	2,788,308	2,788,308	0
2008	0	2,239,347	2,239,347	0
2009	0	2,007,054	2,007,054	43,627
2010	0	2,089,521	2,089,521	0
2011	0	2,029,405	2,029,405	42,000
2012	0	2,081,521	2,081,521	0

¹Includes fiberboard and miscellaneous products.

Table 11. Products Treated by Texas Wood Preserving Plants, 2011-2012

Product	Unit of Measure	Volume by Specific Unit		Volume by Cubic Feet	
		2011	2012	2011	2012
Utility poles	number	211,094	218,089	3,554,915	3,672,721
Constr. poles	number	*	*	*	*
Piling	m lin.ft.	*	*	*	*
Fence posts	number	2,359,747	1,994,146	2,077,408	1,755,550
Crossties	number	2,042,765	1,617,384	7,540,033	5,969,913
Switch ties	MBF	6,250	7,719	621,055	767,017
Cross arms	number	0	0	0	0
Lumber	MBF	308,871	270,720	25,739,250	22,560,010
Plywood/OSB	MSF	10,203	10,563	318,844	330,089
Other	CF	4,414,904	951,754	4,414,904	951,754
Total	CF	—	—	44,266,664	36,007,282

* Data suppressed to avoid disclosure of individual company information.

Table 12. Texas Primary Mill Residue, 2012¹

Residue Type	Pine	Hardwood	Total
	----- tons -----		
Chips ²	2,280,483	224,712	2,505,195
Sawdust	577,992	159,923	737,916
Shavings	291,680	32,512	324,192
Bark ³	1,400,679	523,070	1,923,749
Total	4,550,835	940,217	5,491,052

¹Primary mills include sawmills, structural panel mills, and chip mills.

²Does not include chips produced in chip mills.

³Includes bark from sawmills, panel mills, and chip mills.

Table 13. Industrial Roundwood Removal and Logging Residue by Product in East Texas, 2012

Product	Industrial Roundwood			Logging Residue			Total Volume		
	Pine	Hardwood	Total	Pine	Hardwood	Total	Pine	Hardwood	Total
	----- thousand tons -----			----- thousand tons -----			----- thousand tons -----		
Growing Stock									
Sawtimber	6,313.3	812.9	7,126.2	375.8	117.4	493.2	6,689.1	930.3	7,619.4
Poletimber	5,808.3	2,563.9	8,372.3	33.0	143.9	176.9	5,841.3	2,707.8	8,549.2
Sub-total	12,121.6	3,376.8	15,498.4	408.8	261.3	670.1	12,530.4	3,638.1	16,168.5
Non-growing Stock									
Sawtimber	120.3	14.9	135.2	744.2	192.8	937.0	864.5	207.7	1,072.2
Poletimber	777.2	228.5	1,005.8	608.8	505.4	1,114.2	1,386.0	734.0	2,120.0
Sub-total	897.5	243.4	1,140.9	1,353.0	698.2	2,051.2	2,250.5	941.6	3,192.1
All									
Sawtimber	6,433.5	827.8	7,261.3	1,120.1	310.2	1,430.2	7,553.6	1,137.9	8,691.5
Poletimber	6,585.6	2,792.4	9,378.0	641.7	649.4	1,291.1	7,227.3	3,441.8	10,669.1
Total	13,019.1	3,620.2	16,639.3	1,761.8	959.5	2,721.3	14,780.9	4,579.7	19,360.6

Note: Sawtimber includes sawlogs, chip-n-saw, veneer logs, and poles; poletimber includes pulpwood, panel roundwood, post, and piling. See documents from the Forest Inventory and Analysis (FIA) Program for definition of growing stock. The separation of industrial roundwood harvest by source was based upon wood utilization rates from the *East Texas Harvest and Utilization Study, 2008*.

Table 14. Removals of Industrial Roundwood and Growing Stock in East Texas, 1993-2012

Year	Pine		Hardwood		All	
	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock
	----- MMCF -----					
1993	512.1	504.0	121.7	123.2	633.8	627.2
1994	522.3	514.1	139.6	141.3	661.9	655.4
1995	523.5	515.2	143.1	144.8	666.6	660.1
1996	543.5	534.9	116.5	117.9	660.0	652.8
1997	557.5	548.7	118.4	119.8	675.9	668.5
1998	542.4	533.9	127.9	129.5	670.3	663.3
1999	541.4	532.9	157.9	159.8	699.3	692.7
2000	508.9	500.9	116.7	118.1	625.6	619.0
2001	488.5	480.8	111.6	113.0	600.1	593.8
2002	537.0	528.5	130.6	132.2	667.6	660.7
2003	542.1	533.6	126.1	127.6	668.2	661.2
2004	517.7	509.5	133.5	135.1	651.2	644.7
2005	564.3	555.4	137.2	138.9	701.5	694.3
2006	500.0	492.1	148.3	150.1	648.3	642.2
2007	501.2	490.7	127.6	128.6	628.8	619.3
2008	440.3	430.2	97.7	100.1	538.0	530.2
2009	396.4	382.6	83.4	86.3	479.8	468.8
2010	401.2	385.9	89.4	90.3	490.6	476.1
2011	392.7	378.0	78.6	80.5	471.3	458.5
2012	408.9	392.6	106.1	106.1	515.0	498.7

Note: Total industrial roundwood harvest includes harvest from both growing stock and non-growing stock. The growing stock removal was calculated using wood utilization rates from the *East Texas Harvest and Utilization Study, 2008*.

Table 15. Tree Planting by Ownership and Funding Source in Texas, 2003-2012

Year ¹	Family Forest											Industry ⁴	Public	Total
	Federal Cost Share Programs ²		Texas Reforestation Foundation (TRF)		All Cost Share Programs		Non-Cost Share ³	Total Acres		Acres	Acres			
	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Acres	Acres					
2003	4,938	907,098	3,763	238,903	8,701	1,146,001	17,657	26,358	62,557	1,278	90,193			
2004	10,040	945,528	2,091	123,282	12,131	1,068,810	24,765	36,896	74,542	2,248	113,686			
2005	11,713	1,267,815	1,061	117,997	12,774	1,385,811	20,522	33,296	69,712	593	103,601			
2006	10,034	1,317,024	398	41,896	10,432	1,358,920	16,278	26,710	64,457	863	92,030			
2007	12,497	2,073,855	2,912	187,917	15,409	2,261,772	21,820	37,229	67,910	797	105,936			
2008	15,585	1,004,163	1,040	78,174	16,625	1,082,337	9,335	25,960	59,764	822	86,546			
2009	17,152	746,763	0	0	17,152	746,763	13,639	30,791	81,067	564	112,422			
2010	16,255	1,569,178	0	0	16,255	1,569,178	5,919	22,174	70,577	555	93,306			
2011	22,338	2,060,568	0	0	22,338	2,060,568	5,522	27,860	59,554	473	87,887			
2012	19,738	2,172,624	0	0	19,738	2,172,624	4,913	24,651	65,867	402	90,920			

¹Federal fiscal year. For example, fiscal year 2003 begins on October 1, 2002 and ends on September 30, 2003.

²Includes Forestry Incentives Program (FIP), Stewardship Incentives Program (SIP), Environmental Quality Incentives Program (EQIP), Conservation Reserve Program (CRP), Forest Land Enhancement Program (FLEP), Emergency Forestry Conservation Reserve Program (EFCRP), Wetlands Reserve Program (WRP), Landowner Incentive Program (LIP), United States Fish and Wildlife Service (USFWS) Partners Program, and Wildlife Habitat Incentive Program (WHIP) accomplishments. Federal funding also includes the Ice Storm Recovery Program in 2002 - 2004.

³Non-cost share acres include only family forest acres planted with TFS assistance.

⁴Acres for industry tree planting includes acres planted by Timber Investment Management Organizations (TIMOs) and timberland Real Estate Investment Trusts (REITs).

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