

Harvest Trends 2011

September 2012

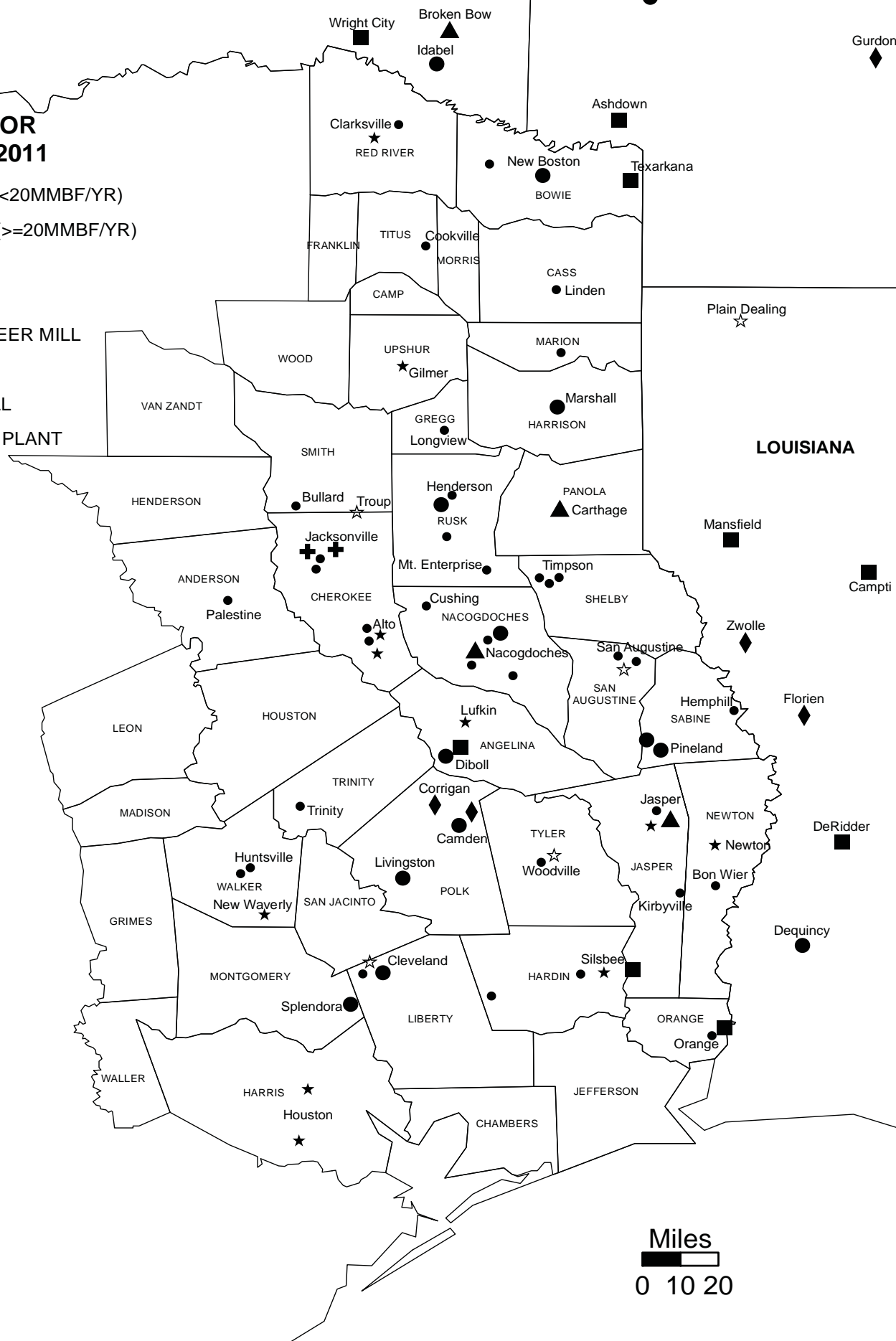


OKLAHOMA

ARKANSAS

MILLS SURVEYED FOR HARVEST TRENDS 2011

- 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 2011

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September 2012

HIGHLIGHTS

Harvest Trends 2011

TIMBER REMOVAL

- ◆ Total growing stock timber removal was 458.5 million cubic feet, a decrease of 3.7 percent from last year.
 - Pine removal was 378.0 million cubic feet, down 2.0 percent from last year.
 - Hardwood removal was down 10.9 percent to 80.5 million cubic feet.
- ◆ Harvest of timber for industrial use in the production of wood products was 471.3 million cubic feet.
 - 392.7 million cubic feet of pine were harvested for industrial consumption.
 - 78.6 million cubic feet of hardwood were harvested for industrial consumption.
- ◆ Stumpage value decreased 17.9 percent to \$210.3 million, and delivered value was down 8.3 percent to \$505.5 million.
- ◆ Harvest of sawlogs increased slightly (0.3 percent) from last year to 1.1 billion board feet.
- ◆ Harvest of wood for veneer and structural panel production increased 1.7 percent to 98.9 million cubic feet from last year.
- ◆ Pulpwood harvest decreased 10.4 percent to 2.3 million cords.
- ◆ Total timber volume imported from other states was 90.3 million cubic feet while the total volume exported was 59.4 million cubic feet. The net import was 30.9 million cubic feet.

PRIMARY FOREST PRODUCTS

- ◆ Production of primary wood products included:
 - 1.5 billion board feet of lumber, an increase of 10.2 percent from last year.
 - 1.9 billion square feet (3/8-inch basis) of structural panel products, an increase of 1.8 percent.
 - 2.0 million tons of paperboard, down 2.9 percent from last year.

MILL AND LOGGING RESIDUES

- ◆ Total production of mill residue was 5.7 million green tons.
- ◆ Total production of logging residue was 2.5 million green tons.

Harvest Trends 2011

INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The forest sector employed more than 63,000 people in 2009¹. The wood-based sector ranked eighth among manufacturing sectors in the state in 2010². In 25 of 43 East Texas counties, the forest sector was one of the two largest manufacturing employers. The value of harvested timber ranked eleventh in 2010 among Texas' top agricultural commodities, behind cattle, cotton, broilers, milk, greenhouse and nursery, corn, wheat, Sorghum grain, hay, 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 46th annual report provides information on the volume and value of timber harvested in East Texas during 2011, and reports the production of primary wood products, logging residue, and mill residue. Data on forest management activities is also presented.

Information for this report comes from a survey of 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.

2011 ECONOMIC CONDITIONS

The United States economy continued to recover in 2011, though at a rate slower than expected. The real Gross Domestic Growth (GDP) grew 1.7 percent, compared with an increase of 2.4 percent in 2010⁴. The growth was mainly due to increase in personal consumption, exports, and non-residential fixed investment. Imports and government (all levels) spending shrank. U.S. corporations continued to post strong profits after hitting an all-time high growth rate in 2010, though at a slower pace (7.9 percent in 2011). The annual average unemployment rate dropped 0.7 percentage points to 8.9 percent.

In August 2011, the Federal Reserve announced that it would hold short-term interest rates near zero through 2013 to promote the economic recovery. In September, it launched a plan to lower long-term interest rate by purchasing \$400 billion long-term Treasury securities with the proceeds from selling the same amount of short-term governmental debt. The federal funds rate has remained constant at 1/4 percent

since 2008⁵.

The Consumer Price Index (CPI), the most closely watched indicator for U.S. inflation, increased 3.2 percent in 2011 after a 1.5 percent increase in 2010, the largest annual increase since 2007. The energy index increased at a slower rate than last year, with 6.6 percent in 2011. The food index rose 4.7 percent compared to a 1.5 percent increase in 2010⁶.

The U.S. housing market remained depressed. Nationwide housing starts rose 3.7 percent to 608,800 units in 2011⁷, mainly due to strong growth in multi-family starts (a 54 percent increase). Single-family housing starts, on the other hand, decreased 8.6 percent to 430,600 units, the lowest level since record-keeping began in 1959. The share of single-family starts in all housing starts dropped to 71 percent in 2011, compared with 82 percent before the housing crisis. National residential housing permits, the best indicator of future housing starts activity, rose slightly (3.2%) to 624,100 units in 2011. The gain was mainly due to the 30 percent surge in multi-family permits. Single-family building permits dropped 6.4 percent to a record low of 418,500 units.

Housing affordability continued to soar to another record high of 186.1⁸, meaning that a family earning the median family income has 186% 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 was \$166,100 in 2011, slightly lower than 2010. Mortgage rates dropped to another record low in 2011. The national monthly average 30-year fixed mortgage rate started at 4.76 percent in January and dipped to an all-time low of 3.96 percent in December⁹.

Existing home sales increased slightly to 4.3 million units in 2011. Distressed homes accounted for more than 30 percent of sales. Total existing home inventory fell to 2.3 million by the end of 2011, representing an 8.2-month supply.

The Texas economy continued to weather the economic downturn better than the rest of the U.S. Real Gross State Product (GSP) grew by 3.3% in 2011¹⁰, gaining 216,400 jobs¹¹. Texas added jobs in most sectors, including educational and health services, professional and business services, trade, transportation and utilities, leisure and hospitality, and mining and logging. The unemployment rate in Texas dropped to 7.8 percent in 2011. The total number of residential building permits in Texas increased 12.9 percent in 2011 to 92,800 units. Similar to the national trend, most of the increase was due to the continued surge in multi-family housing sector. Single-family housing

Million Cubic Feet

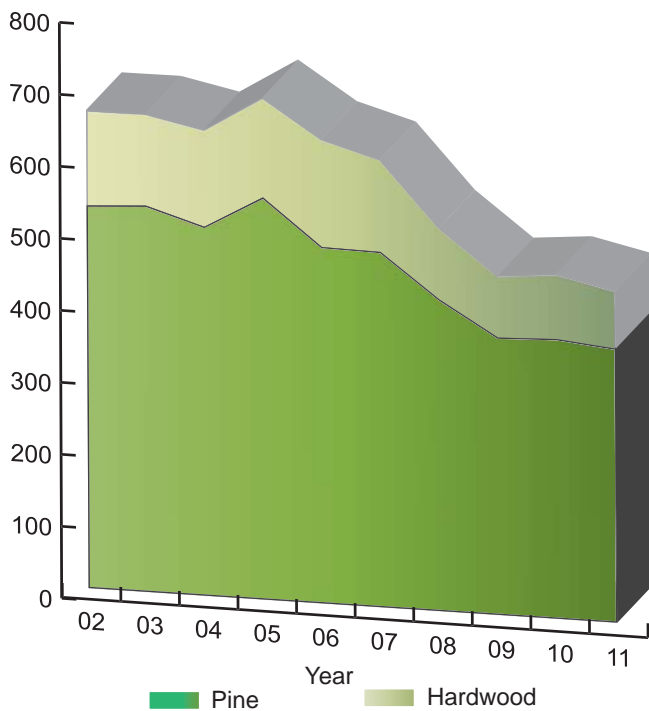


Figure 1. Total Timber Removal, 2002-2011

Million Dollars

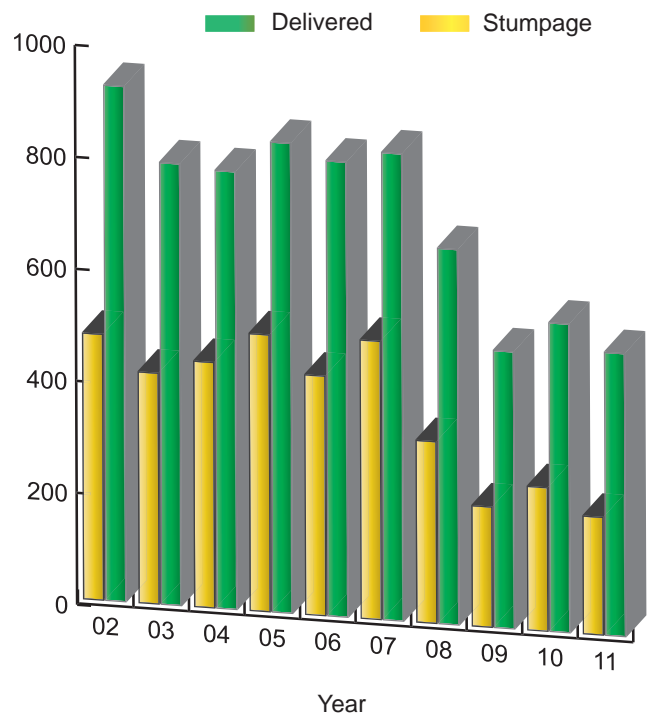


Figure 2. Value of Timber Harvest, 2002-2011

building permits dropped slightly to 61,900 units in 2011¹².

U.S. softwood lumber production posted a second consecutive annual gain in 2011, up 7.7 percent to 26.7 billion board feet (bbf), still 33.7 percent below the recent high of 40.3 bbf in 2005. Lumber production in the U.S. South accounted for 50.4 percent of the total, or 13.4 bbf, a 8.6 percent increase from 2010¹³.

The 2011 structural panel production in the U.S. dropped 2.1 percent to 19.1 billion square feet (bsf) (3/8-inch basis)¹³, including 9.0 bsf of plywood and 10.0 bsf of oriented strand board (OSB). Southern OSB production decreased 3.8 percent to 8.0 bsf in 2011. Southern plywood production gained 1.4 percent to 5.8 bsf. Both were around 30 percent below 2006 levels.

The surge in lumber prices that started in the second half of 2010 was not sustained in 2011. Lumber prices trended down and leveled off since the second quarter of the year. U.S. softwood lumber exports overseas soared to 984 million board feet (mmbf), up 48 percent from 2010 and the highest volume since 1997. Strong demand from China and Japan and the depreciating dollar contributed to the increase. Surging demand from overseas and improved repair and remodeling activities alone were not able to drive up the demand for lumber. OSB prices were steady while plywood prices trended up due to mill curtailment.

The average annual Random Lengths Framing Lumber Composite Price dropped 4.2 percent, from \$284 per thousand board feet (mbf) in 2010 to \$272 per mbf in 2011¹³. The

average annual Random Lengths Structural Panel Composite Price decreased 9.9 percent to \$292 per thousand square feet (msf) in 2011¹³.

U.S. paper and paperboard production dropped 2.0 percent to 81.5 million short tons in 2011¹⁴. This was about 11 percent below 2006. The decrease was mainly due to reduction in paper production. Paperboard production remained at 47.4 million tons.

STUMPAGE PRICES

According to Texas Timber Price Trends bimonthly timber market report, average annual pine sawtimber price decreased 7.1 percent to \$186.44 per mbf, Doyle scale, from last year's average annual price of \$200.60 per mbf. The average annual mixed hardwood sawtimber price decreased 13.1 percent from a year earlier to \$234.94 per mbf. Pine pulpwood price decreased 28.6 percent to \$15.70 per cord. Mixed hardwood pulpwood price decreased 46.7 percent to \$16.93 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, decreased 3.7 percent from the previous year (Figure 1). The total volume of growing stock removed from the 43-county region was 458.5 million cubic feet, compared to 476.1 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 378.0 million cubic feet of pine and 80.5 million cubic feet of hardwood. Pine removals were down 2.0 percent and hardwood removals were down 10.9 percent from a year earlier. 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 392.7 and 78.6 million cubic feet for pine and hardwood, respectively. Pine industrial roundwood harvest was down 2.1 percent, and hardwood roundwood harvest was down 12.1 percent from a year earlier. The combined harvest decreased 3.9 percent to 471.3 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. Top timber producing counties included Jasper, Tyler, Newton, Polk, and Angelina.

Figure 4 on the next page illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. Jasper, San Augustine, Tyler, Angelina, and Sabine counties had the highest relative timber harvesting intensity.

Value of Timber Harvest

Stumpage value of East Texas timber harvest decreased 17.9 percent to \$210.3 million (Figure 2). Stumpage values remain below levels observed in the years prior to the recent recession. The delivered value was down 8.3 percent to \$505.5 million. Pine timber accounted for 81 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 increased slightly (0.3 percent) to 1.1 billion board feet, which accounted for 38.9 percent of the total timber harvest. The pine sawlog cut totaled 965 million board feet, down 2.2 percent. Hardwood sawlog harvest was up 18.8 percent to 161 million board feet. Jasper, Tyler, Polk, Angelina, and Hardin counties were the top 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 98.9 million cubic feet, a 1.7 percent increase from a year earlier. The timber harvest for structural panels was 21.0 percent of the total timber harvest. Almost all of the veneer and panel roundwood was pine. Angelina, Polk, Trinity, Cherokee, and Walker counties were the top 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 decreased 10.4 percent from a year earlier to 2.3 million cords. Roundwood pulpwood harvest accounted for 39.6 percent of the total timber harvest. Pine pulpwood made up 72.4 percent of the total pulpwood production. Jasper, Newton, Tyler, Cass, and Hardin counties were the top producers of pulpwood. Table 4 lists the roundwood pulpwood harvest by county.

Other Roundwood

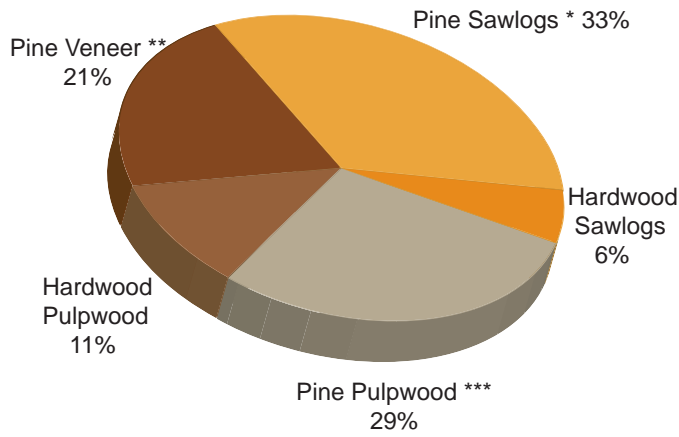
Other roundwood harvest included posts, poles and pilings that totaled 2.5 million cubic feet. Table 5 lists harvest of these products by county.

Import-Export Trends

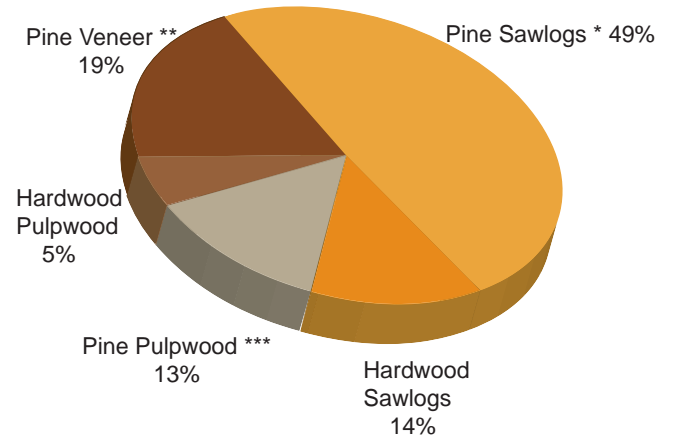
Texas imported more timber from surrounding states than exported to surrounding states. Exports of roundwood from Texas were 59.4 million cubic feet, while imports totaled 90.3 million cubic feet. The net import of roundwood was 30.9 million cubic feet. Table 8 details the interstate movement of roundwood.

Texas mills utilized 87.4 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
(471.3 Million Cubic Feet)



Stumpage Value ****
(\$210.3 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, 2011

Cubic Feet Harvested Per Acre of Timberland

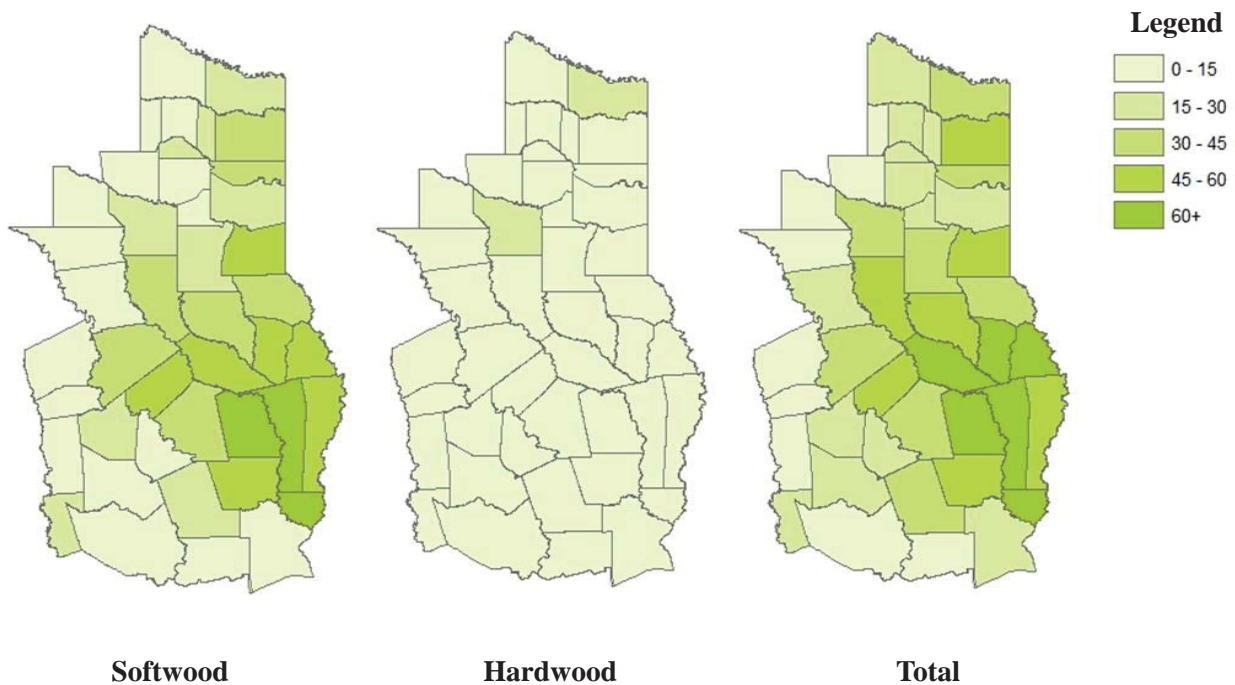


Figure 4. Intensity of Timber Harvest by County, 2011

Million Board Feet

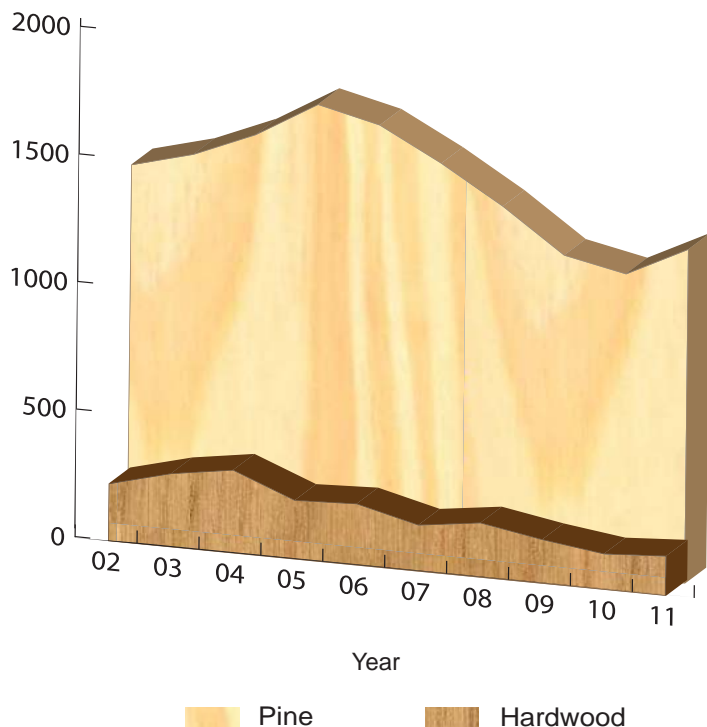


Figure 5. Texas Lumber Production, 2002-2011

Million Square Feet

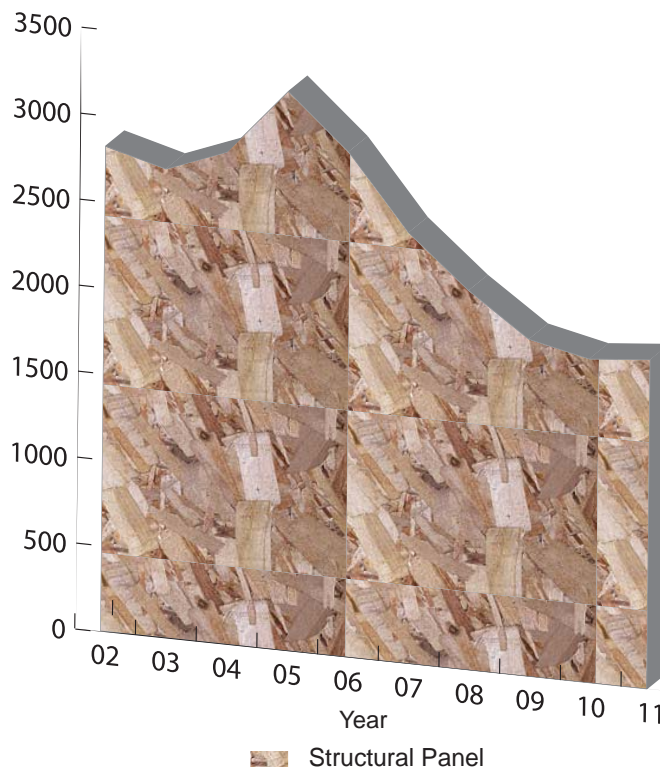


Figure 6. Texas Structural Panel Production, 2002-2011

PRODUCTION OF FOREST PRODUCTS

Lumber

Texas sawmills produced 1.5 billion board feet of lumber, an increase of 10.2 percent from a year earlier. Production of pine lumber increased 10.1 percent to 1.3 billion board feet and hardwood lumber production increased 10.9 percent to 154.6 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 1.8 percent to 1.9 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 2.0 million tons, down 2.9 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 44.3 million cubic feet, an increase of 13.3 percent from a year earlier. Among major treated products, lumber accounted for 58.1 percent of the total volume, crossties 17.0 percent, and utility poles 8.0 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 5.7 million green tons, based on updated residue product ratios. This was 4.4 percent higher than a year earlier (Table 12). Eighty-four percent of the mill residue was from pine species and 16 percent was from hardwood species. Chips accounted for 50.5 percent of mill residue, followed by bark (29.9 percent), sawdust (13.7 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 2.5 million green tons. Logging residue comes from both growing stock and non-growing stock. For this year, 25.7 percent of the logging residue was from growing stock, and 74.3 percent was from non-growing stock. Sixty-eight percent of the residue was from pine and 32 percent was from hardwood (Table 13, Figure 9).

Thousand Tons

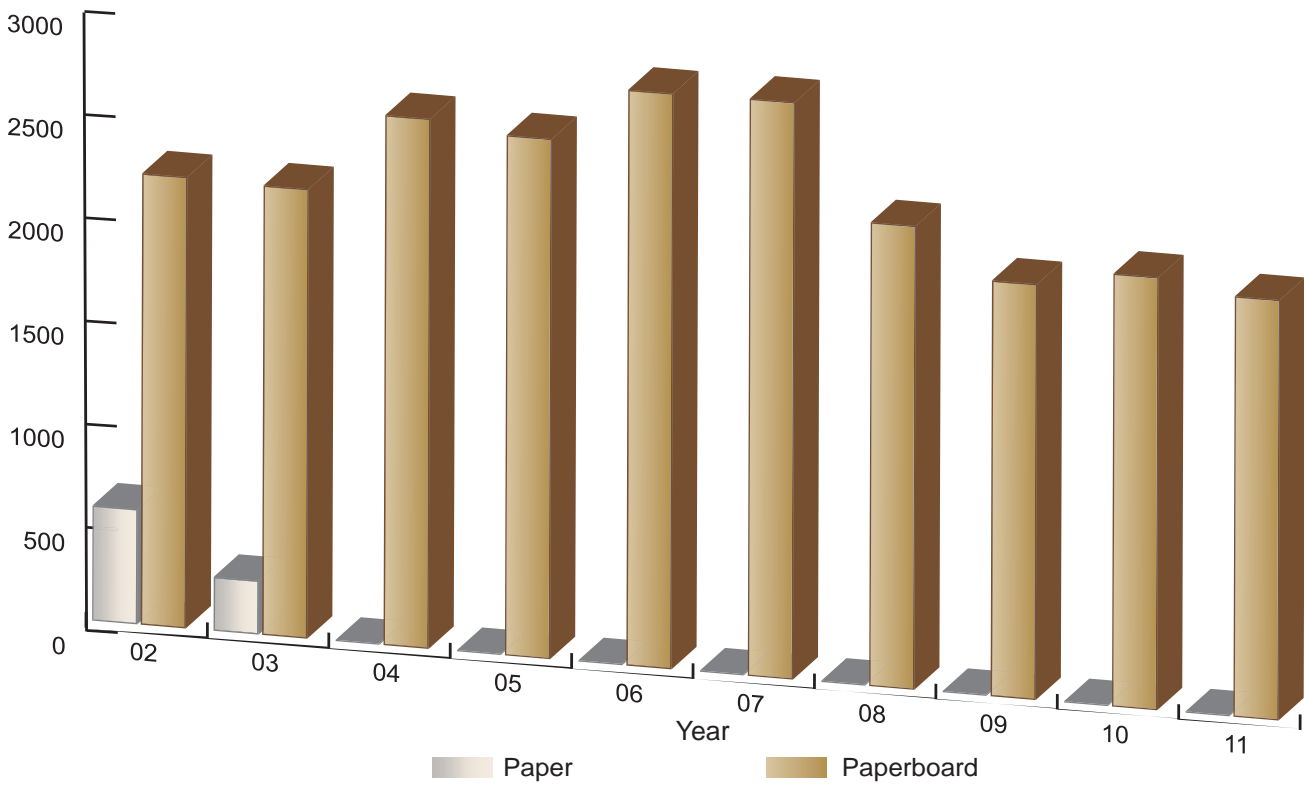


Figure 7. Texas Paper and Paperboard Production, 2002-2011

Thousand Tons

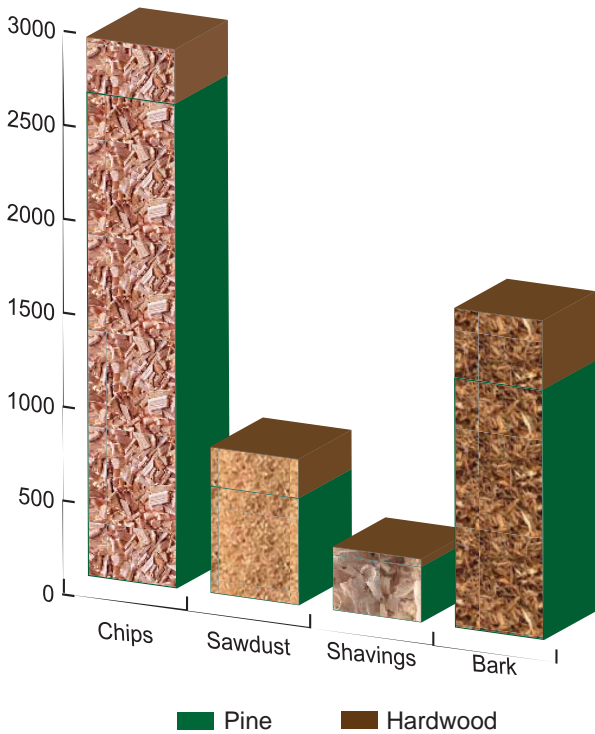


Figure 8. Texas Primary Mill Residue, 2011

Thousand Tons

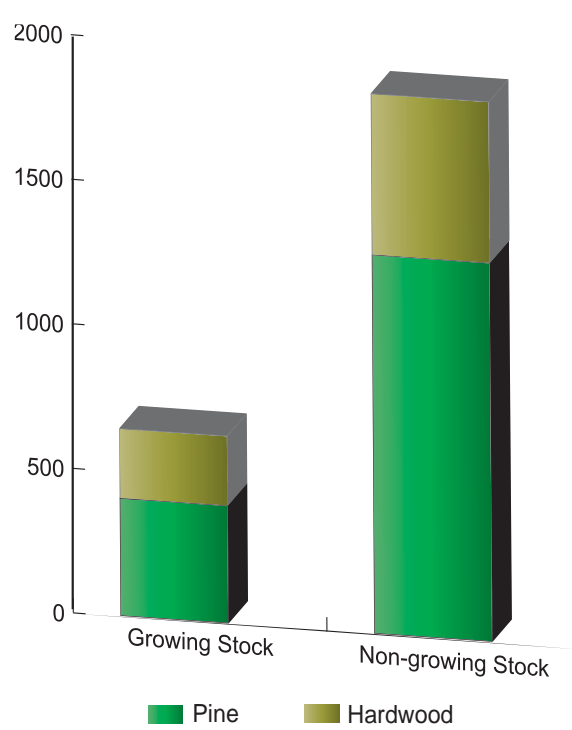


Figure 9. Texas Logging Residue, 2011

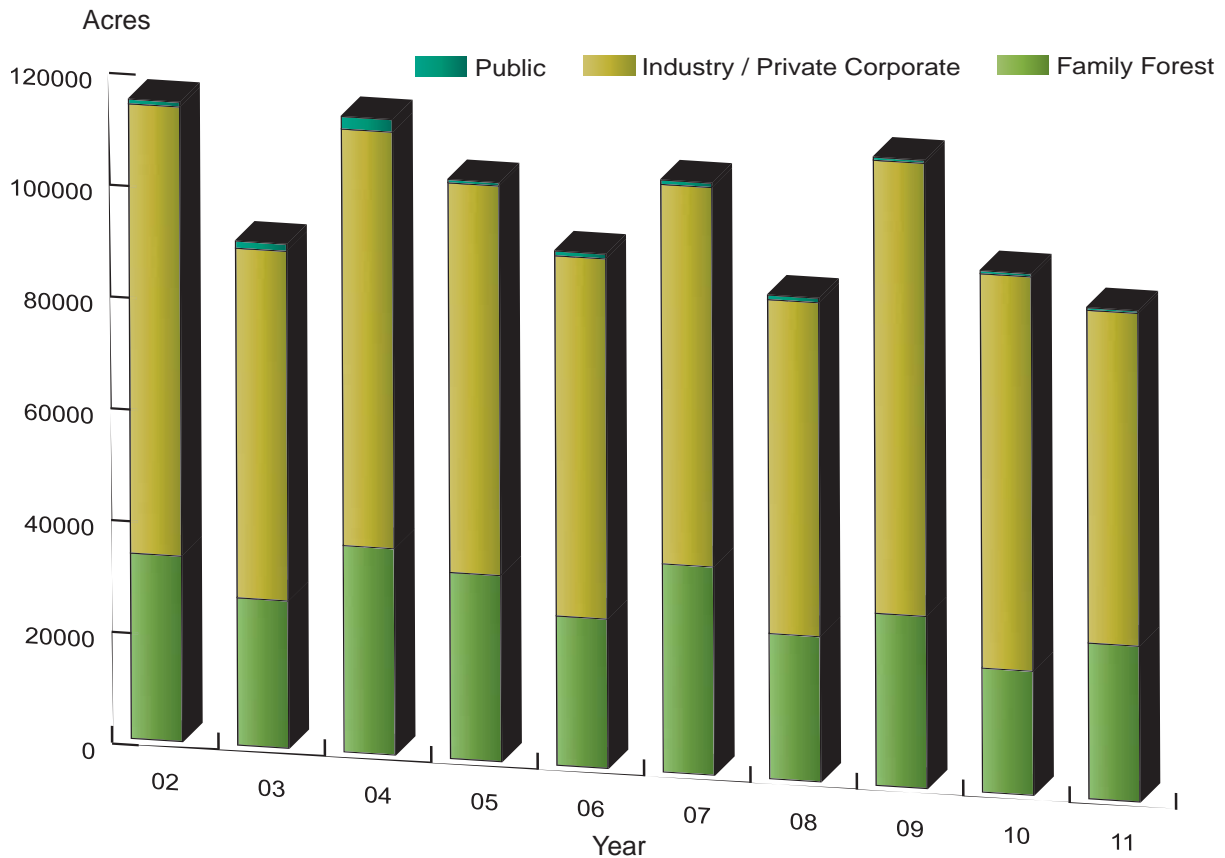


Figure 10. Reforestation Acreage by Ownership in Texas, 2002-2011

REFORESTATION

Accomplishments in reforestation by funding source and ownership are presented in Table 15. A total of 87,887 acres was planted during the winter 2010/spring 2011 planting season. This was a 6 percent decrease from the previous year. Industrial landowners planted 59,554 acres, 16 percent fewer than the previous year. Family forest owners planted 27,860 acres. Public landowners planted 473 acres. Family forest owners received \$2.06 million in cost share assistance for reforestation through federal cost share programs.

REFERENCES

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- ³USDA Economic Research Service. Annual cash receipts by commodity groups and selected commodities, by state. (<http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics.aspx>)
- ⁴<http://www.bea.gov/national/index.htm>
- ⁵<http://www.federalreserve.gov/monetarypolicy/fomccal-endars.htm>
- ⁶<http://www.bls.gov/cpi/>
- ⁷<http://www.census.gov/>
- ⁸<http://www.realtor.org/research/research/housinginx>
- ⁹<http://www.freddiemac.com/pmms/pmms30.htm>
- ¹⁰U.S. Bureau of Economic Analysis. 2012. Real GDP by state (chained dollars).
- ¹¹ <http://www.bls.gov/sae/>
- ¹²<http://recenter.tamu.edu/data>
- ¹³Random Lengths, Year Book, 2011
- ¹⁴<http://www.statmill.org/>

Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2011

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	----- cubic feet -----			----- thousand dollars -----	
Anderson	6,177,036	1,741,023	7,918,059	3,707	8,746
Angelina	20,629,336	3,032,728	23,662,064	11,301	25,980
Bowie	7,246,896	4,302,183	11,549,079	4,284	11,825
Camp	598,007	342,309	940,316	280	896
Cass	14,400,796	5,740,965	20,141,761	8,437	21,263
Chambers	75,518	26,497	102,015	84	148
Cherokee	14,393,231	5,238,146	19,631,377	10,736	23,288
Franklin	248,923	91,348	340,271	113	334
Gregg	510,669	1,278,019	1,788,688	1,346	2,617
Grimes	586,579	839	587,418	331	680
Hardin	20,541,216	2,320,311	22,861,527	9,350	23,589
Harris	2,306,067	316,855	2,622,922	1,383	2,990
Harrison	6,545,270	2,446,562	8,991,832	4,115	9,824
Henderson	888,882	738,550	1,627,432	951	2,041
Houston	12,060,416	1,141,527	13,201,943	6,862	14,920
Jasper	37,531,901	1,577,661	39,109,562	14,520	38,590
Jefferson	956,909	106,994	1,063,903	563	1,220
Leon	354,205	38,739	392,944	254	492
Liberty	12,235,783	3,659,956	15,895,739	8,235	18,333
Madison	19,344	880	20,224	12	24
Marion	7,383,718	1,697,098	9,080,816	4,430	10,086
Montgomery	5,160,692	1,267,999	6,428,691	3,748	7,714
Morris	1,297,127	555,451	1,852,578	545	1,752
Nacogdoches	16,127,505	4,360,949	20,488,454	10,033	22,889
Newton	28,119,064	1,288,983	29,408,047	9,231	27,453
Orange	6,871,067	310,090	7,181,157	2,843	7,234
Panola	16,849,615	2,993,889	19,843,504	8,981	21,266
Polk	22,156,877	1,545,265	23,702,142	12,647	27,086
Red River	4,971,658	2,149,258	7,120,916	3,059	7,670
Rusk	8,507,761	3,403,465	11,911,226	6,080	13,728
Sabine	16,181,778	1,752,656	17,934,434	6,901	18,036
San Augustine	14,432,561	2,888,043	17,320,604	6,828	17,698
San Jacinto	3,276,440	1,201,416	4,477,856	2,074	4,923
Shelby	11,588,957	3,024,222	14,613,179	5,639	14,849
Smith	4,317,847	5,125,880	9,443,727	4,470	10,854
Titus	723,055	1,196,251	1,919,306	536	1,855
Trinity	20,226,616	373,034	20,599,650	9,325	21,846
Tyler	30,391,314	3,112,380	33,503,694	13,667	34,427
Upshur	2,512,676	2,198,328	4,711,004	1,885	5,034
Van Zandt	107,662	559,984	667,646	221	697
Walker	9,452,958	684,454	10,137,412	6,509	12,525
Waller	1,184,833	201,577	1,386,410	1,071	1,908
Wood	1,098,565	922,484	2,021,049	718	2,056
Other Counties	1,407,786	1,649,044	3,056,830	1,953	4,067
Total Production	392,655,116	78,604,292	471,259,408	210,260	505,454

Table 2. Sawlog Harvest by County in Texas, 2011

County	Pine	Hardwood	Total
	-----MBF ¹ -----		
Anderson	11,225	6,025	17,250
Angelina	53,239	9,361	62,600
Bowie	15,143	4,013	19,156
Camp	779	144	923
Cass	41,426	4,156	45,582
Chambers	33	158	191
Cherokee	36,964	21,087	58,051
Franklin	155	227	382
Gregg	1,157	6,329	7,486
Grimes	579	5	584
Hardin	56,328	5,671	61,999
Harris	5,904	911	6,815
Harrison	20,104	3,366	23,470
Henderson	2,091	2,629	4,720
Houston	36,721	3,024	39,745
Jasper	86,706	2,179	88,885
Jefferson	3,493	638	4,131
Leon	800	231	1,031
Liberty	38,011	10,393	48,404
Madison	16	0	16
Marion	23,421	3,363	26,784
Montgomery	12,466	1,901	14,367
Morris	1,007	604	1,611
Nacogdoches	43,819	8,322	52,141
Newton	45,739	1,125	46,864
Orange	16,645	396	17,041
Panola	46,711	3,632	50,343
Polk	57,111	6,200	63,311
Red River	4,521	5,607	10,128
Rusk	21,650	11,742	33,392
Sabine	44,418	376	44,794
San Augustine	29,143	3,226	32,369
San Jacinto	12,196	911	13,107
Shelby	24,478	1,265	25,743
Smith	11,435	10,581	22,016
Titus	639	604	1,243
Trinity	54,503	1,786	56,289
Tyler	72,156	6,085	78,241
Upshur	4,342	3,855	8,197
Van Zandt	149	0	149
Walker	23,059	381	23,440
Waller	1,022	1,202	2,224
Wood	2,549	520	3,069
Other Counties	650	7,113	7,763
Total Production	964,703	161,344	1,126,047

¹International ¼-inch rule.

Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2011

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	3,332,204	82,784	3,414,988
Angelina	10,590,696	0	10,590,696
Bowie	884,865	0	884,865
Camp	0	0	0
Cass	210,232	0	210,232
Chambers	69,520	0	69,520
Cherokee	5,537,967	41,278	5,579,245
Franklin	1,539	0	1,539
Gregg	101,346	0	101,346
Grimes	345,305	0	345,305
Hardin	2,164,491	0	2,164,491
Harris	395,596	0	395,596
Harrison	698,028	0	698,028
Henderson	158,838	82,784	241,622
Houston	5,126,866	0	5,126,866
Jasper	5,169,086	0	5,169,086
Jefferson	8,542	0	8,542
Leon	222,256	0	222,256
Liberty	2,715,023	0	2,715,023
Madison	14,563	0	14,563
Marion	391,301	0	391,301
Montgomery	2,332,152	0	2,332,152
Morris	16,039	0	16,039
Nacogdoches	4,607,120	82,784	4,689,904
Newton	3,648,987	0	3,648,987
Orange	24,106	0	24,106
Panola	4,369,053	0	4,369,053
Polk	8,890,709	0	8,890,709
Red River	1,532,174	0	1,532,174
Rusk	4,146,099	0	4,146,099
Sabine	4,625,241	0	4,625,241
San Augustine	2,466,043	0	2,466,043
San Jacinto	561,567	0	561,567
Shelby	3,060,851	0	3,060,851
Smith	1,057,127	41,278	1,098,405
Titus	0	0	0
Trinity	8,250,203	0	8,250,203
Tyler	3,949,038	0	3,949,038
Upshur	183,287	0	183,287
Van Zandt	19,845	82,784	102,629
Walker	5,275,743	0	5,275,743
Waller	1,007,016	0	1,007,016
Wood	52,452	0	52,452
Other Counties	162,365	114,028	276,393
Total Production	98,375,481	527,720	98,903,201

Table 4. Pulpwood Roundwood Harvest by County in Texas, 2011

County	Pine	Hardwood	Total
	----- cords -----		
Anderson	12,203	8,098	20,301
Angelina	16,435	18,286	34,721
Bowie	48,240	45,365	93,605
Camp	5,824	3,977	9,801
Cass	92,291	63,050	155,341
Chambers	8	0	8
Cherokee	31,983	20,757	52,740
Franklin	2,744	666	3,410
Gregg	2,738	2,708	5,446
Grimes	1,820	0	1,820
Hardin	114,150	17,116	131,266
Harris	11,771	2,051	13,822
Harrison	31,956	23,526	55,482
Henderson	3,634	2,686	6,320
Houston	12,112	7,930	20,042
Jasper	224,553	15,153	239,706
Jefferson	4,718	0	4,718
Leon	28	0	28
Liberty	41,472	23,963	65,435
Madison	27	11	38
Marion	39,456	14,164	53,620
Montgomery	9,973	11,865	21,838
Morris	13,801	5,677	19,478
Nacogdoches	50,769	36,032	86,801
Newton	208,839	13,754	222,593
Orange	51,221	3,046	54,267
Panola	59,408	29,810	89,218
Polk	49,455	6,319	55,774
Red River	33,416	15,112	48,528
Rusk	10,521	17,929	28,450
Sabine	52,589	21,120	73,709
San Augustine	86,693	29,338	116,031
San Jacinto	9,110	13,108	22,218
Shelby	53,654	35,151	88,805
Smith	17,372	41,377	58,749
Titus	7,648	13,687	21,335
Trinity	38,740	919	39,659
Tyler	181,536	26,149	207,685
Upshur	20,069	19,398	39,467
Van Zandt	786	5,965	6,751
Walker	5,424	7,757	13,181
Waller	150	0	150
Wood	7,814	10,441	18,255
Other Counties	4,754	4,277	9,031
Total Production	1,671,905	637,738	2,309,643

Table 5. Other Roundwood Harvest by County in Texas, 2011¹

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	36,833	0	36,833
Angelina	77,354	0	77,354
Bowie	0	0	0
Camp	0	0	0
Cass	0	0	0
Chambers	0	0	0
Cherokee	272,815	0	272,815
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	96,746	0	96,746
Houston	0	0	0
Jasper	119,380	0	119,380
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	305,107	0	305,107
Newton	140,227	0	140,227
Orange	0	0	0
Panola	96,746	0	96,746
Polk	2,679	0	2,679
Red River	0	0	0
Rusk	0	0	0
Sabine	96,746	0	96,746
San Augustine	220,461	0	220,461
San Jacinto	0	0	0
Shelby	214,341	0	214,341
Smith	0	0	0
Titus	0	0	0
Trinity	3,572	0	3,572
Tyler	41,695	0	41,695
Upshur	0	0	0
Van Zandt	0	0	0
Walker	0	0	0
Waller	0	0	0
Wood	0	0	0
Other Counties	754,992	0	754,992
Total Production	2,479,694	0	2,479,694

¹ Including posts, poles and piling.

Table 6. Timber Stumpage Price in East Texas by Product, 2002-2011

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	--- \$/MBF-Doyle ---		--- \$/cord ---			
2002	334.86	156.97	12.33	15.67	41.92	66.63
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

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, 2011

Product	Unit	Stumpage		Delivered	
		Price ¹ (\$/unit)	Value (million \$)	Price ² (\$/unit)	Value (million \$)
PINE					
Sawlogs/Chip-n-Saw	MBF ³	–	102.9	–	194.8
Sawlogs	MBF ³	124.28	91.0	216.93	158.9
Chip-n-Saw	MBF ³	51.10	11.9	154.76	36.0
Veneer/Panel Roundwood	MCF	–	40.9	–	100.2
Veneer Logs	MCF	766.67	*	1,338.27	*
Panel Roundwood	MCF	193.83	*	816.14	*
Pulpwood	cords	15.70	26.2	66.11	110.5
Others	MCF	–	1.0	–	2.6
All pine products			171.0		408.1
HARDWOOD					
Sawlogs	MBF ³	172.76	27.9	299.98	48.4
Veneer/Panel Roundwood	MCF	–	0.5	–	0.9
Veneer Logs	MCF	1,030.17	0.5	1,788.74	0.9
Panel Roundwood	MCF	211.63	0.0	940.66	0.0
Pulpwood	cords	16.93	10.8	75.25	48.0
All hardwood products			39.2		97.3
ALL PRODUCTS			210.3		505.5

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.

*Data suppressed to avoid disclosure of individual company information.

Table 8. Interstate Movement of Roundwood by Species Group and Product in Texas, 2011

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
PINE						
Sawlogs	MBF ¹	110,145	919,604	45,099	1,029,749	964,703
Veneer/Panel Roundwood	MCF	2,259	92,724	5,651	94,983	98,375
Pulpwood	ords	489,038	1,190,155	481,750	1,679,193	1,671,905
Others	MCF	2,152	2,480	0	4,632	2,480
All Pine Products	MCF	61,876	340,673	51,982	402,549	392,655
HARDWOOD						
Sawlogs	MBF ¹	2,692	161,344	0	164,036	161,344
Veneer/Panel Roundwood	MCF	342	528	0	870	528
Pulpwood	ords	345,437	544,544	93,194	889,981	637,738
All Hardwood Products	MCF	28,428	71,149	7,456	99,577	78,604
TOTAL						
Sawlogs	MBF ¹	112,837	1,080,948	45,099	1,193,785	1,126,047
Veneer/Panel Roundwood	MCF	2,601	93,252	5,651	95,853	98,903
Pulpwood	ords	834,475	1,734,699	574,944	2,569,174	2,309,643
Posts, Poles, Pilings	MCF	2,152	2,480	0	4,632	2,480
ALL PRODUCTS	MCF	90,305	411,821	59,438	502,126	471,259

¹International ¼-inch rule.

Table 9. Texas Industrial Roundwood Products, 2002-2011

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	----- MBF ¹ -----			MSF, 3/8" basis
2002	1,425,613	223,932	1,649,544	2,818,356
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

¹International 1/4-inch rule.

Table 10. Texas Pulp, Paper, and Paperboard Production, 2002-2011

Year	Paper Products			Market Pulp
	Paper	Paperboard ¹	Total	
	----- tons -----			
2002	551,367	2,179,423	2,730,790	0
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

¹Includes fiberboard and miscellaneous products.

Table 11. Products Treated by Texas Wood Preserving Plants, 2010-2011

Product	Unit of Measure	Volume by Specific Unit		Volume by Cubic Feet	
		2010	2011	2010	2011
Utility poles	number	167,565	211,094	2,821,873	3,554,915
Constr. poles	number	75	75	225	225
Piling	m lin.ft.	1	63	0	0
Fence posts	number	1,469,652	2,359,747	1,293,811	2,077,408
Crossties	number	1,989,765	2,042,765	7,344,405	7,540,033
Switch ties	MBF	6,260	6,250	622,046	621,055
Cross arms	number	0	0	0	0
Lumber	MBF	264,692	308,871	22,057,684	25,739,250
Plywood/OSB	MSF	18,207	10,203	568,969	318,844
Other	CF	4,363,545	4,414,904	4,363,545	4,414,904
Total	CF	—	—	39,072,558	44,266,634

Table 12. Texas Primary Mill Residue, 2011¹

Residue Type	Pine	Hardwood	Total
	----- tons -----		
Chips ²	2,570,440	292,967	2,863,407
Sawdust	566,418	208,066	774,485
Shavings	292,353	42,299	334,651
Bark ³	1,324,848	370,236	1,695,085
Total	4,754,059	913,569	5,667,628

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

² Does not include chips produced in chip mills.

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

Table 13. Industrial Roundwood Removal and Logging Residue by Product in East Texas, 2011

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	6,288.9	1,069.0	7,357.9	374.4	154.4	528.7	6,663.2	1,223.4	7,886.6
Poletimber	5,385.8	1,537.1	6,922.9	30.6	86.3	116.9	5,416.4	1,623.3	7,039.7
Sub-total	11,674.7	2,606.1	14,280.8	404.9	240.7	645.6	12,079.6	2,846.8	14,926.4
Non-growing Stock									
Sawtimber	119.8	19.6	139.4	741.4	253.5	994.9	861.2	273.1	1,134.2
Poletimber	720.7	137.0	857.7	564.5	303.0	867.5	1,285.2	440.0	1,725.2
Sub-total	840.5	156.6	997.1	1,305.8	556.5	1,862.3	2,146.3	713.1	2,859.4
All									
Sawtimber	6,408.7	1,088.6	7,497.3	1,115.7	407.9	1,523.6	7,524.4	1,496.5	9,020.9
Poletimber	6,106.5	1,674.1	7,780.5	595.0	389.3	984.3	6,701.5	2,063.4	8,764.9
Total	12,515.1	2,762.7	15,277.8	1,710.8	797.2	2,508.0	14,225.9	3,559.9	17,785.8

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, 1992-2011

Year	Pine		Hardwood		All	
	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock
	----- MMCF -----					
1992	496.6	488.8	111.4	112.8	608.0	601.5
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

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, 2002-2011

Year ¹	Family Forest										Industry ⁴	Public	Total
	Federal Cost Share Programs ²		Texas Reforestation Foundation (TRe)		All Cost Share Programs		Non-Cost Share ³		Total Acres				
	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Acres			
2002	10,772	581,833	5,649	348,273	16,421	930,106	16,743	930,106	33,164	80,388	840	114,392	
2003	4,938	907,098	3,763	238,903	8,701	1,146,001	17,657	1,146,001	26,358	62,557	1,278	90,193	
2004	10,040	945,528	2,091	123,282	12,131	1,068,810	24,765	1,068,810	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	1,385,811	33,296	69,712	593	103,601	
2006	10,034	1,317,024	398	41,896	10,432	1,358,920	16,278	1,358,920	26,710	64,457	863	92,030	
2007	12,497	2,073,855	2,912	187,917	15,409	2,261,772	21,820	2,261,772	37,229	67,910	797	105,936	
2008	15,585	1,004,163	1,040	78,174	16,625	1,082,337	9,335	1,082,337	25,960	59,764	822	86,546	
2009	17,152	746,763	0	0	17,152	746,763	13,639	746,763	30,791	81,067	564	112,422	
2010	16,255	1,569,178	0	0	16,255	1,569,178	5,919	1,569,178	22,174	70,577	555	93,306	
2011	22,338	2,060,568	0	0	22,338	2,060,568	5,522	2,060,568	27,860	59,554	473	87,887	

¹ Federal fiscal year. For example, fiscal year 1995 begins on October 1, 1994 and ends on September 30, 1995.

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

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

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

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