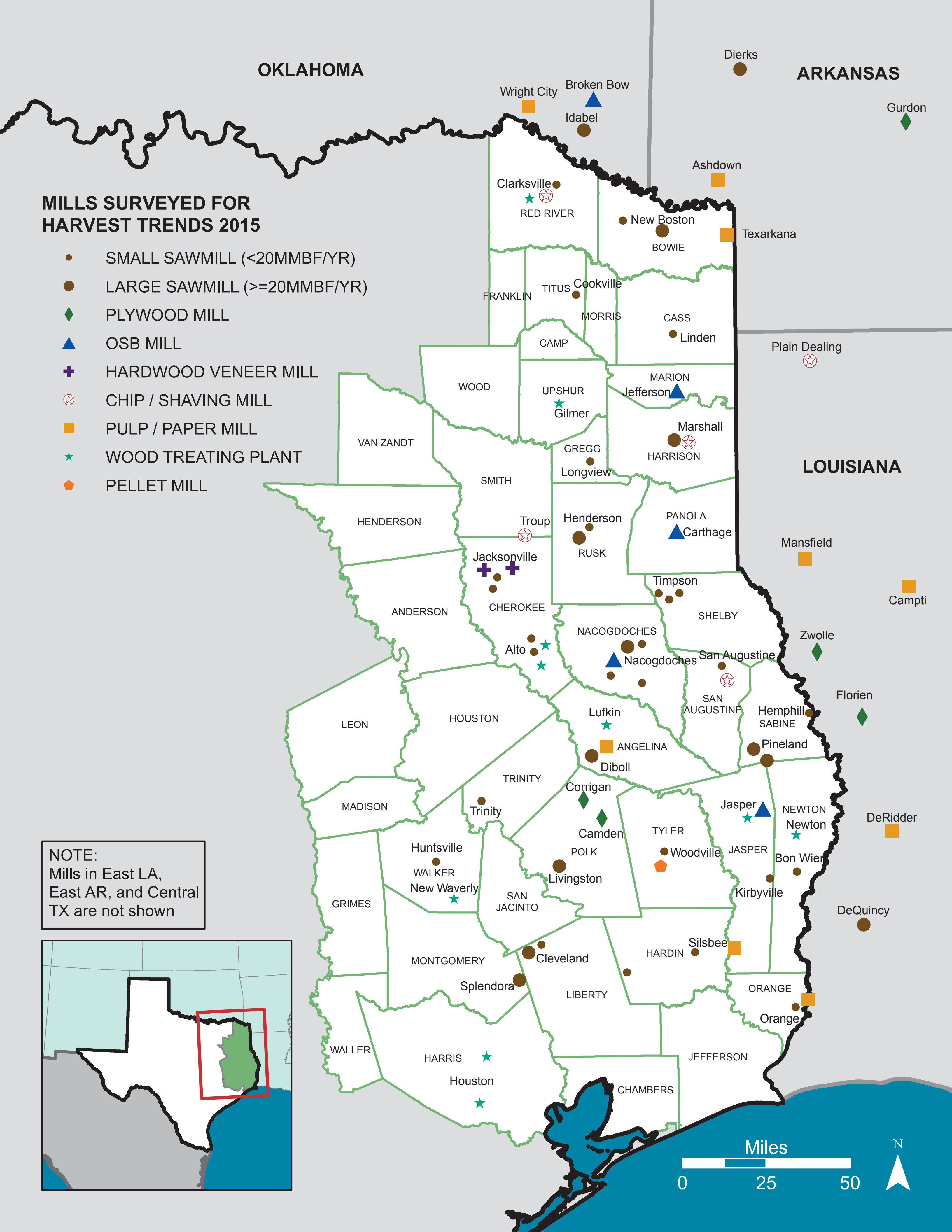
Harvest Trends 2015

January 2017

Texas A&M Forest Service


OKLAHOMA
ARKANSAS
LOUISIANA
MILLS SURVEYED FOR HARVEST TRENDS 2015
SMALL SAWMILL (<20MMBF/YR)
LARGE SAWMILL (>=20MMBF/YR)
PLYWOOD MILL
OSB MILL
HARDWOOD VENEER MILL
CHIP / SHAVING MILL
PULP / PAPER MILL
WOOD TREATING PLANT
PELLET MILL
NOTE:
Mills in East LA, East AR, and Central TX are not shown
Wright City
Broken Bow
Idabel
Dierks
Gurdon
Ashdown
Texarkana
Clarksville
RED RIVER
New Boston
BOWIE
FRANKLIN
TITUS
Cookville
MORRIS
CASS
Linden
CAMP
Plain Dealing
WOOD
UPSHUR
Gilmer
MARION
Jefferson
VAN ZANDT
GREGG
Longview
Marshall
HARRISON
SMITH
HENDERSON
Troup
Henderson
RUSK
PANOLA
Carthage
Mansfield
Campti
Jacksonville
CHEROKEE
ANDERSON
Timpson
SHELBY
NACOGDOCHES
Nacogdoches
Alto
San Augustine
SAN AUGUSTINE
Zwolle
Florien
Hemphill
SABINE
LEON
HOUSTON
Lufkin
ANGELINA
Diboll
Pineland
TRINITY
Trinity
Corrigan
Camden
MADISON
Jasper
NEWTON
Newton
DeRidder
TYLER
Woodville
JASPER
Huntsville
WALKER
POLK
Livingston
Bon Wier
New Waverly
SAN JACINTO
Kirbyville
GRIMES
DeQuincy
MONTGOMERY
Cleveland
HARDIN
Silsbee
Splendora
LIBERTY
ORANGE
Orange
WALLER
HARRIS
Houston
JEFFERSON
CHAMBERS
Miles
0
25
50
N

Harvest Trends 2015

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HIGHLIGHTS

Harvest Trends 2015

TIMBER REMOVAL

♦ Total growing stock timber removal was 504.7 million cubic feet, a decrease of 1.7 percent from last year.

- Pine removal was 400.2 million cubic feet, down 5.2 percent from last year.
- Hardwood removal was up 14.4 percent to 104.5 million cubic feet.

♦ Harvest of timber for industrial use in the production of wood products was 523.4 million cubic feet.

- 418.2 million cubic feet of pine were harvested for industrial consumption.
- 105.2 million cubic feet of hardwood were harvested for industrial consumption.

♦ Stumpage value increased 9.4 percent to $316.4 million, and delivered value was up 2.1 percent to $660.3 million.

♦ Harvest of sawlogs was down 7.6 percent from last year to 1.0 billion board feet.

♦ Harvest for veneer and structural panel production decreased 4.6 percent from last year to 124.3 million cubic feet.

♦ Pulpwood and pellet roundwood harvest was 2.8 million cords, an increase of 5.6 percent from last year.

♦ Total timber volume imported from other states was 93.6 million cubic feet while the total volume exported was 59.7 million cubic feet. The net import was 34.0 million cubic feet.

PRIMARY FOREST PRODUCTS

♦ Production of primary wood products included:

- 1.5 billion board feet of lumber, a decrease of 2.0 percent from last year.
- 2.4 billion square feet (3/8-inch basis) of structural panel products, an increase of 4.1 percent.
- 2.1 million tons of pulp and paperboard, down 4.8 percent from last year.

MILL AND LOGGING RESIDUES

♦ Total production of mill residue was 5.9 million green tons, an increase of 0.4%.

♦ Total production of logging residue was 2.7 million green tons, a decrease of 0.7%.

Harvest Trends 2015

INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The wood-based industry employed more than 64,000 people in 2014.[1] The wood-based sector ranked fourth among manufacturing sector employers in the state in 2014.[2] In 33 of 43 East Texas counties, the wood-based sector was among the top five manufacturing employers in 2012.[1] The value of harvested timber ranked ninth in 2014 among Texas' top agricultural commodities, behind cattle and calves, milk, broilers, cotton lint, miscellaneous crops, corn, sorghum grain, and eggs.[3]

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 50th annual report provides information on the volume and value of timber harvested in East Texas during 2015, 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 comes from a survey of 71 mills in Texas and 20 mills in surrounding states. Texas A&M Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

2015 ECONOMIC CONDITIONS

The United States (U.S.) economy showed steady signs of recovery in 2015. The real Gross Domestic Product (GDP) increased 2.4 percent, the same rate as in 2014.[4] GDP growth was primarily due to increase in personal consumption of goods and services, nonresidential and residential fixed investments, and exports. U.S. corporate profits from current production were down by $64.0 billion in 2015. The economy was on a path of recovery with a drop in the rate of unemployment to 5.3 percent in 2015, from 6.2 percent in 2014.[5] Given the considerable improvement in labor market conditions and the economic outlook, the Federal Reserve terminated the asset purchase program in October 2014. Since December 2015, the target range of federal funds rate has been raised to 1/4–1/2 percent, which was constant at 0–1/4 percent since 2008.[6]

The Consumer Price Index (CPI), the most closely watched indicator for U.S. inflation, increased 0.7 percent in 2015, a slightly smaller increase than the 0.8 percent rise in 2014. The energy index declined sharply for the second year in a row. The gasoline index, in particular, declined 19.7 percent after a 21.0 percent decline in 2014.[7]

The U.S. housing market continued to improve at a modest rate in 2015. Compared to 2014, housing starts rose 10.8 percent to 1,111,800 units in 2015, the highest annual total since 2007.[8] Single-family housing starts increased 10.3 percent to 714,500 units. The share of single-family starts was 64.0 percent, slightly lower than the 65.0 percent the previous year. Multi-family housing starts rose 12.0 percent. National residential housing permits, the best indicator of future housing starts activity, rose 12.4 percent to 1,182,600 units in 2015. A large share of this gain (59.0 percent) was contributed by single-family permits. Multi-family building permits also increased 18.0 percent to 486,600 units in 2015.[8]

The housing affordability index was 164 in 2015, meaning that a family earning the median family income has 164.0 percent of the income necessary to qualify for a conventional loan covering 80.0 percent of a median priced, existing single-family house.[9] The median sale price of existing homes averaged $223,900 in 2015, up 7.2 percent from 2014.[9] Existing home sales increased in 2015 after a decline in 2014. Total home sales in 2015 were 5.25 million, up 6.3 percent over 2014.[9]

The average annual 30-year fixed mortgage rate was 3.9 percent in 2015, which was slightly lower than the 2014 annual average of 4.2 percent. The national monthly average 30-year fixed mortgage rate started at 3.7 percent in January and ended with the rate of 4.0 percent in December.[10]

The Texas economy continued to outperform the economy of the rest of the U.S. Real Gross Domestic Product by State (GDP-State) grew 3.8 percent in 2015.[11] Texas gained 279,100 jobs in 2015 with additions in major sectors, including mining and logging, construction, professional and business, leisure and hospitality, trade, transportation and utilities, education and health services, financial activities, information, and government.[12] The unemployment rate in Texas dropped to 4.5 percent in 2015.[5]

Compared to 2014, the total number of residential building permits in Texas increased 3.0 percent in 2015 to 175,443 units. Single-family housing building permits increased 2.3 percent to 105,448. Multi-family building permits increased 4.0 percent to 69,995 units in 2015.[13]

U.S. softwood lumber production posted a sixth con-

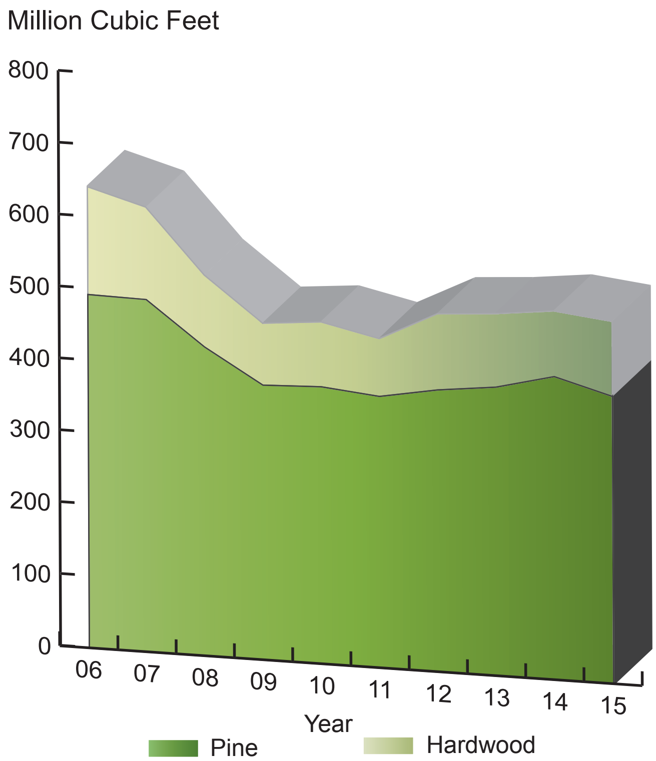


Figure 1. Total Timber Removal, 2006-2015

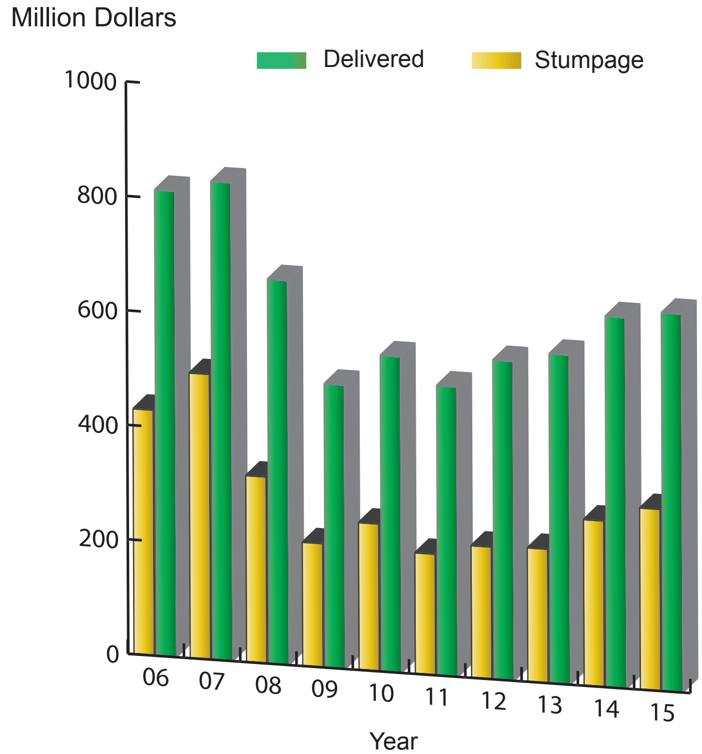


Figure 2. Value of Timber Harvest, 2006-2015

secutive annual gain in 2015, up 1.2 percent to 31.8 billion board feet (bbf), but still 21.0 percent less than the production in 2005. Lumber production in the U.S. South accounted for 52.0 percent, or 16.6 bbf, of the U.S. total, a 3.0 percent increase from 2014.[14]

Structural panel production in the U.S. remained constant at 22.0 billion square feet (bsf) (3/8-inch basis),[14] including 8.7 bsf of plywood and 13.3 bsf of oriented strand board (OSB). Southern OSB production increased 1.9 percent to 10.7 bsf in 2015. Southern plywood production, however, dropped 3.8 percent to 5.1 bsf.

The surge in lumber prices that started in 2012 was not sustained in 2015. Despite a 10.8 percent rise in U.S. housing starts, the domestic softwood lumber market in the U.S. did not post substantial improvement in 2015. The annual average Random Lengths framing lumber composite price in 2015 was $330 per thousand board feet (mbf), a 13.8 percent drop from 2014.[14] The average annual Random Lengths Structural Panel Composite Price decreased 5.2 percent to $365 per thousand square feet (msf) in 2015.[14] U.S. imports of softwood lumber, particularly from Canada, soared 9 percent to 13.2 bbf, due mostly to the expiration of the 2006 U.S.-Canada Softwood Lumber Agreement in October 2015. U.S. total exports of softwood lumber, however, dropped 10.5 percent to 1.4 bbf in 2015.[14] Similarly, Southern yellow pine and total hardwood log and lumber exports were also down significantly in 2015.

U.S. paper and paperboard production posted a slight decline in 2015, dropping 1.0 percent to 79 million short tons. Production was 5.0 percent lower than in 2010, and down 13.0 percent from 2005. A lower level of paper production was considered the primary reason behind this decline.[15]

STUMPAGE PRICES

Across the U.S. South, average annual prices for pine and hardwood sawtimber in 2015 increased 0.6 percent and 3.7 percent, respectively.[16] Average south-wide pulpwood prices for both pine and hardwood, however, were down 2.1 percent and 3.1 percent, respectively.[16] Along with usual demand and supply factors, weather, competition, mill inventories, tract size and location, and tree size and quality are the major causes of stumpage price variation in the U.S. South.[17]

According to the *Texas Timber Price Trends* bimonthly timber market report, the average annual pine sawtimber price in Texas increased 8.4 percent to $235.26 per mbf, Doyle scale, in 2015, from the last year's average annual price of $217.10 per mbf. The average annual mixed hardwood sawtimber price increased 16.5 percent from a year earlier to $372.15 per mbf. Pine pulpwood price increased 3.7 percent to $25.33 per cord. Mixed hardwood pulpwood price increased 67.1 percent to $45.56 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 1.7 percent from the previous year (Figure 1). The total volume of growing stock removed was 504.7 million cubic feet, compared to 513.7 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 400.2 million cubic feet of pine and 104.5 million cubic feet of hardwood. Pine removals were down 5.2 percent and hardwood removals were up 14.4 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 418.2 and 105.2 million cubic feet for pine and hardwood, respectively. Pine industrial roundwood harvest was down 4.9 percent, and hardwood roundwood harvest was up 15.0 percent from a year earlier. The combined harvest decreased 1.5 percent to 523.4 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, Cass, Tyler, Newton, and Jasper.

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

Value of Timber Harvest

Stumpage value of East Texas timber harvest increased 9.4 percent to $316.4 million (Figure 2). Higher stumpage prices produced the significant increase in stumpage value. The delivered value was up 2.1 percent to $660.3 million. Pine timber accounted for 76 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 7.6 percent to 1.0 billion board feet, which accounted for 32.5 percent of the total timber harvest. The pine sawlog cut totaled 949.4 million board feet, down 7.9 percent. Hardwood sawlog harvest was down 5.2 percent to 95.4 million board feet. Polk, Cherokee, Tyler, Cass, and Newton 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 124.3 million cubic feet, a 4.6 percent decrease from a year earlier. The timber harvest for structural panels was 23.8 percent of the total timber harvest. Almost all of the veneer and panel roundwood was pine. Nacogdoches, Polk, Cherokee, Tyler, and Rusk counties were the top five producers of veneer and panel roundwood. Table 3 lists the harvest of veneer and panel roundwood by county.

Pulpwood and Pellet Roundwood

Harvest of timber for pulp and paper products and pellets was 2.8 million cords, an increase of 5.6 percent from a year earlier. Pulpwood and pellet roundwood harvest accounted for 43.0 percent of the total timber harvest. Pine made up 60.1 percent of the total production. Cass, Polk, Newton, Tyler, and Hardin counties were the top five producers. Table 4 lists the pulpwood and pellet roundwood harvest by county.

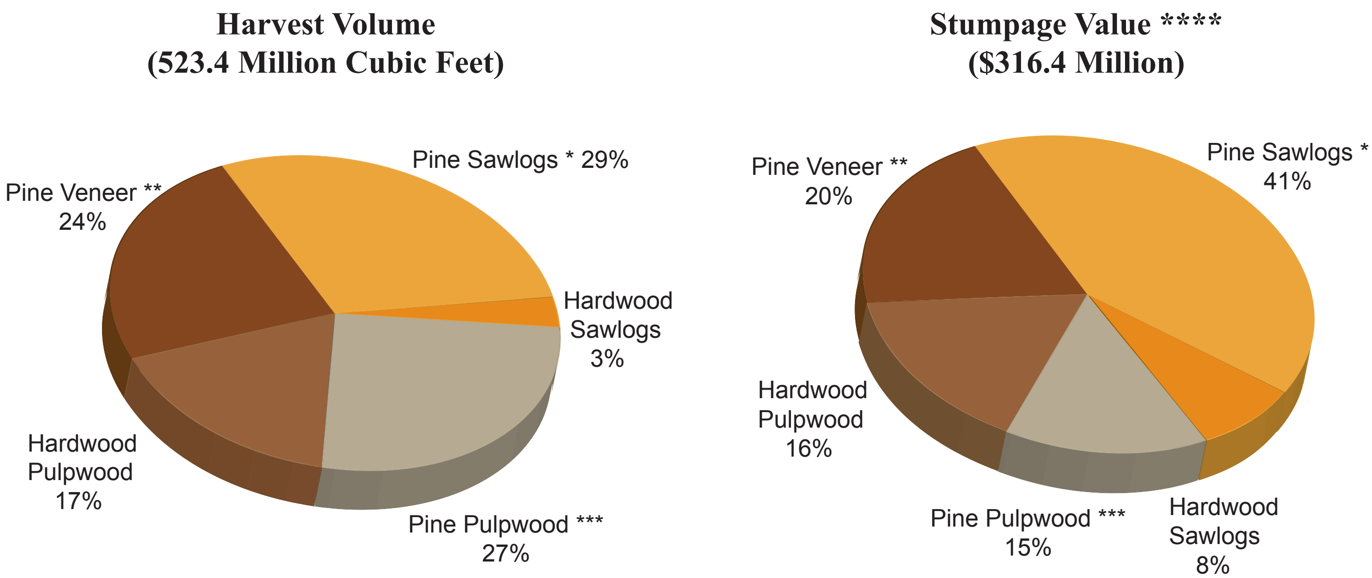
Other Roundwood

Other roundwood harvest included posts, poles and pilings that totaled 4.1 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 59.7 million cubic feet, while imports totaled 93.6 million cubic feet. The net import of roundwood was 34.0 million cubic feet. Table 8 details the interstate movement of roundwood.

Texas mills utilized 88.6 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.



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

Figure 3. Volume and Value of Timber Harvest, 2015

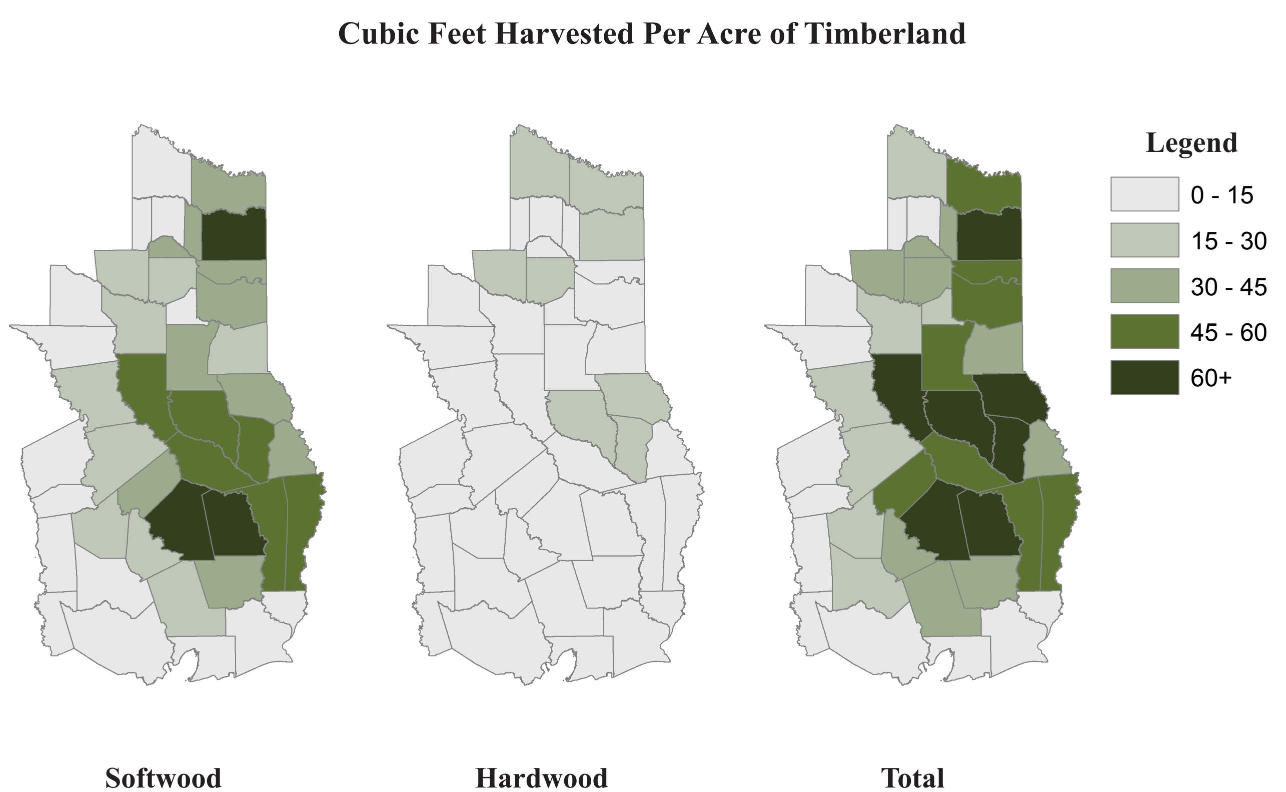


Figure 4. Intensity of Timber Harvest by County, 2015

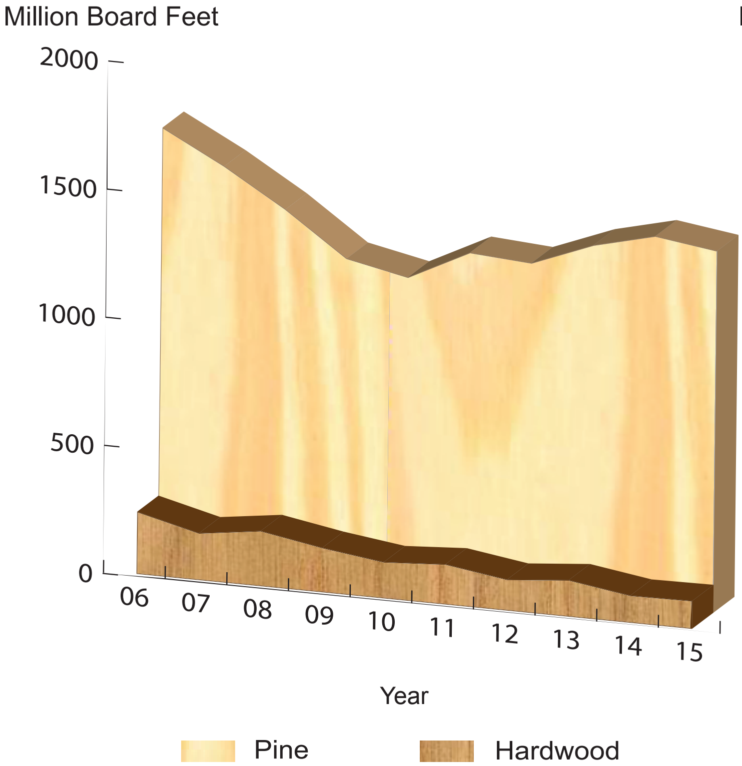


Figure 5. Texas Lumber Production, 2006-2015

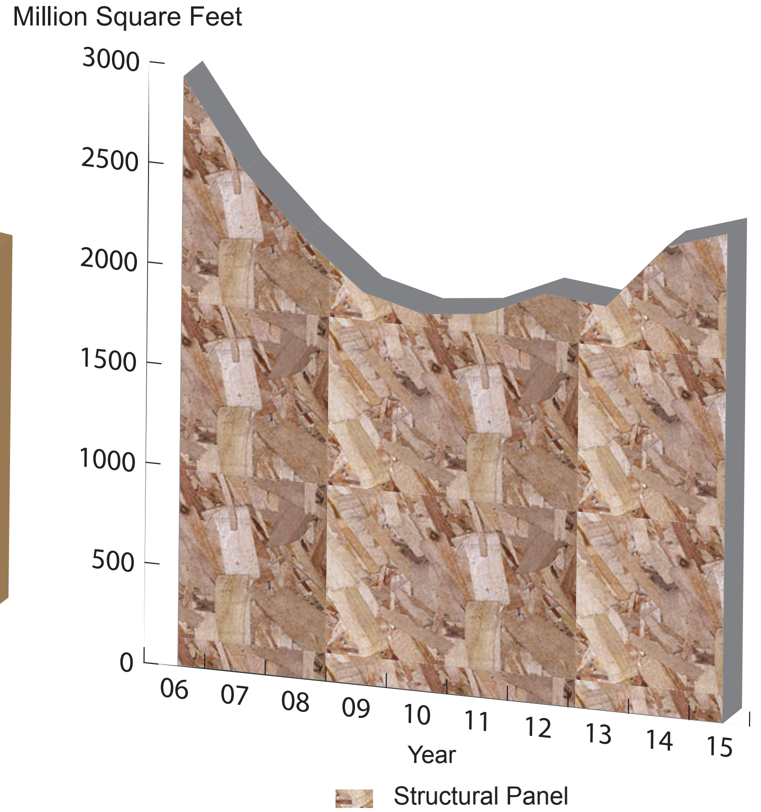


Figure 6. Texas Structural Panel Production, 2006-2015

PRODUCTION OF FOREST PRODUCTS

Lumber

Texas sawmills produced 1.5 billion board feet of lumber, a decrease of 2.0 percent from a year earlier. Production of pine lumber decreased 2.3 percent to 1.4 billion board feet and hardwood lumber production increased 2.8 percent to 107.0 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 4.1 percent to 2.4 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, fiberboard, and market pulp totaled 2.1 million tons, down 4.8 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 treaters was 39.3 million cubic feet, an increase of 4.5 percent from a year earlier. Among major treated products, lumber accounted for 61.1 percent of the total volume, ties 18.6 percent, and poles and pilings 9.0 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 5.9 million tons (Table 12). Eighty-five percent of the mill residue was from pine species and 15 percent was from hardwood species. Chips accounted for 48.3 percent of mill residue, followed by bark (33.7 percent), sawdust (12.3 percent), and shavings (5.8 percent) (Figure 8).

Logging Residue

Logging residue includes 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 percent of the logging residue was from growing stock, and 76 percent was from non-growing stock. Sixty-six percent of the residue was from pine and 34 percent was from hardwood (Table 13, Figure 9).

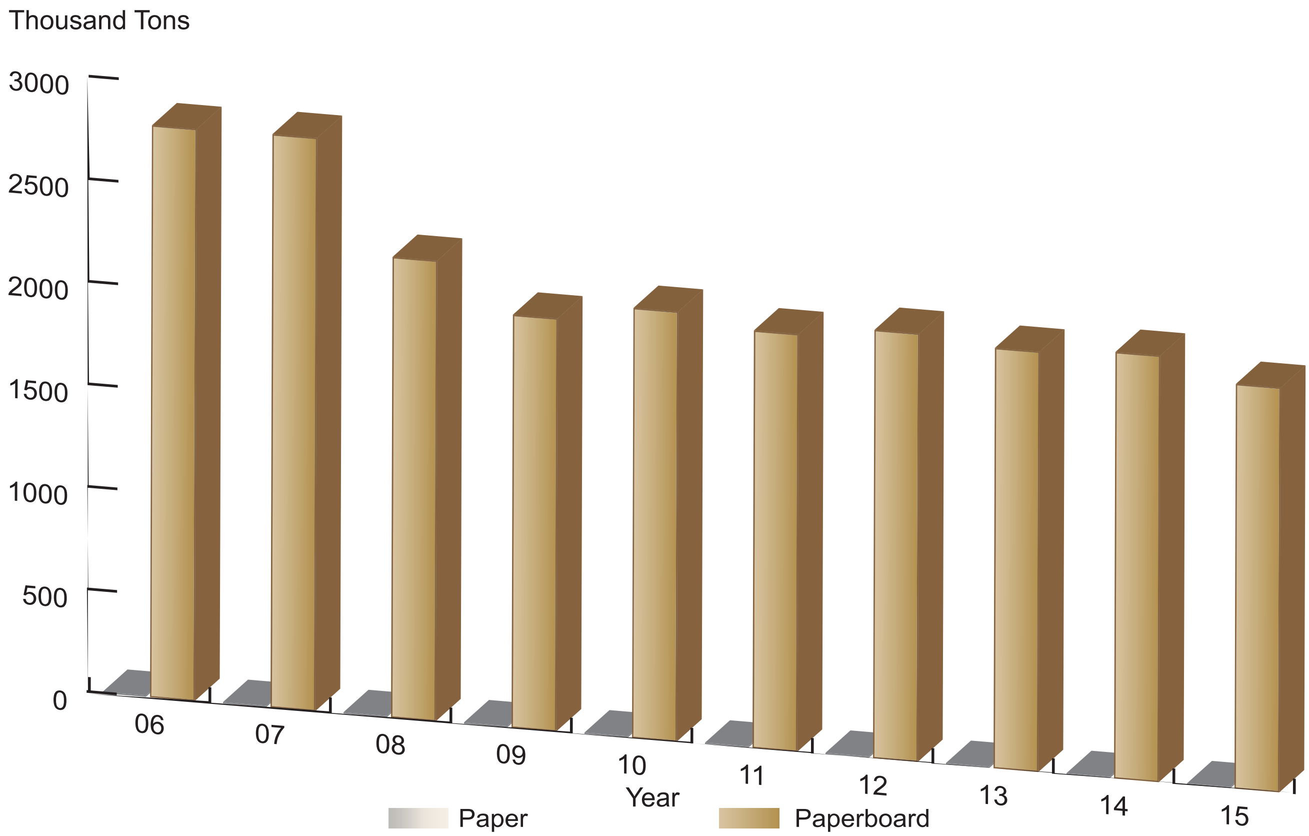


Figure 7. Texas Paper and Paperboard Production, 2006-2015

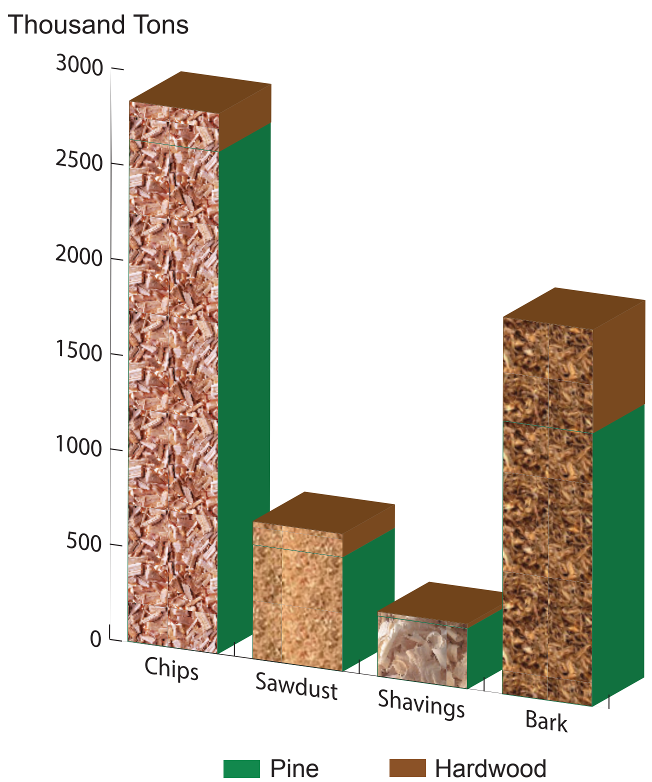


Figure 8. Texas Primary Mill Residue, 2015

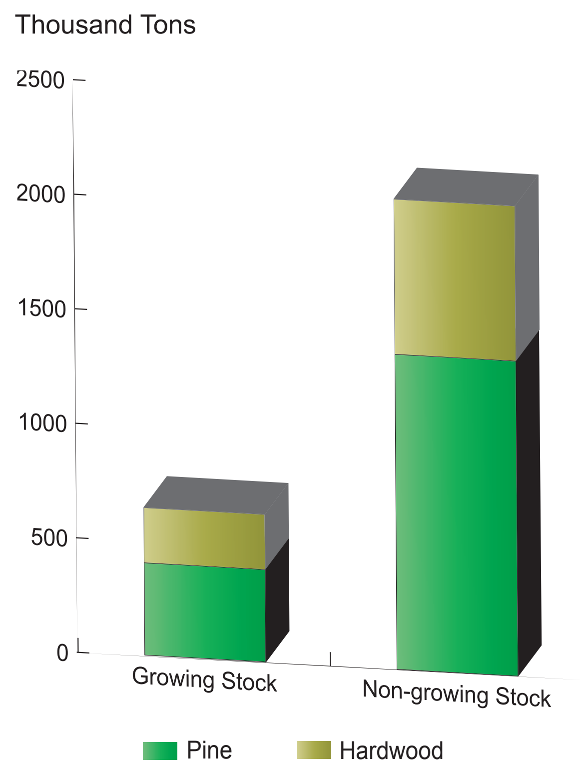


Figure 9. Texas Logging Residue, 2015

Figure 10. Reforestation Acreage by Ownership in Texas, 2006-2015

REFORESTATION

Accomplishments in reforestation by funding source and ownership are presented in Table 15. A total of 77,009 acres was planted during the winter 2014/spring 2015 planting season. Industrial landowners planted 48,530 acres, 49 percent less than the previous year. Family forest owners planted 26,326 acres. Public landowners planted 2,153 acres. Family forest owners received $2.2 million in cost share assistance for reforestation through federal cost share programs.

REFERENCES

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[3]USDA 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/lastrk15.htm#

[6]http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

[7]http://www.bls.gov/news.release/archives/cpi_01162015.pdf

[8]http://www.census.gov/construction/nrc/historical_data/index.html

[9]http://www.realtor.org/topics/housing-affordability-index

[10]http://www.freddiemac.com/pmms/pmms30.htm

[11]http://www.bea.gov/newsreleases/regional/gdp_state/qgsp_newsrelease.htm

[12]http://www.bls.gov/sae/

[13]https://www.recenter.tamu.edu/data/building-permits/

[14]Random Lengths, Year Book, 2015.

[15]http://www.statmill.org/

[16]Timber-Mart South

[17]http://www.forest2market.com/uploads/Legacy/5-causes-of-stumpage-price-variation-in-the-us-south.pdf

Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2015

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	– – – – – – – – – – cubic feet – – – – – – – – – –			– – – – – thousand dollars – – – – –	
Anderson	10,429,084	1,071,417	11,500,501	6,802	14,216
Angelina	18,129,928	2,265,379	20,395,307	14,218	27,401
Bowie	9,193,403	6,033,552	15,226,955	9,615	19,884
Camp	1,265,575	350,629	1,616,204	908	1,973
Cass	29,243,161	8,583,722	37,826,883	21,943	46,836
Chambers	119,092	66,334	185,426	176	299
Cherokee	19,809,101	4,668,965	24,478,066	17,454	33,378
Franklin	9,574	729,747	739,321	550	1,096
Gregg	897,112	638,938	1,536,050	1,334	2,372
Grimes	1,127,637	13,239	1,140,876	726	1,448
Hardin	16,833,954	3,016,032	19,849,986	9,945	23,018
Harris	2,265,297	629,414	2,894,711	1,936	3,831
Harrison	14,436,203	4,068,588	18,504,791	12,021	24,130
Henderson	647,864	558,081	1,205,945	862	1,688
Houston	8,766,184	593,739	9,359,923	5,196	11,220
Jasper	27,310,869	1,257,731	28,568,600	14,438	32,883
Jefferson	323,751	261,467	585,218	388	790
Leon	706,671	1,750,227	2,456,898	1,768	3,507
Liberty	9,828,360	5,069,857	14,898,217	10,542	20,561
Madison	1,763	0	1,763	2	3
Marion	9,238,288	2,167,022	11,405,310	6,538	14,006
Montgomery	4,786,574	763,423	5,549,997	3,547	7,146
Morris	2,049,384	706,252	2,755,636	1,799	3,617
Nacogdoches	20,334,761	7,828,530	28,163,291	18,317	36,938
Newton	28,548,187	1,895,374	30,443,561	14,445	34,215
Orange	1,015,736	266,551	1,282,287	592	1,441
Panola	11,471,946	4,758,651	16,230,597	10,318	21,078
Polk	39,481,215	3,446,618	42,927,833	26,150	53,960
Red River	4,646,720	5,094,015	9,740,735	5,740	12,473
Rusk	14,786,548	2,876,095	17,662,643	11,619	23,077
Sabine	8,312,388	1,542,400	9,854,788	5,976	12,396
San Augustine	14,182,390	6,778,531	20,960,921	11,825	25,866
San Jacinto	7,789,932	531,349	8,321,281	5,793	11,112
Shelby	11,487,454	8,852,285	20,339,739	12,288	26,084
Smith	3,829,896	1,387,549	5,217,445	3,477	6,915
Titus	236,430	1,243,759	1,480,189	1,011	2,083
Trinity	14,192,531	1,886,694	16,079,225	10,021	20,458
Tyler	32,831,306	2,116,997	34,948,303	19,085	41,688
Upshur	4,688,738	3,037,324	7,726,062	4,598	9,829
Van Zandt	208,034	295,600	503,634	282	633
Walker	5,296,149	156,797	5,452,946	4,347	7,784
Waller	35,053	2,222	37,275	14	39
Wood	6,719,455	4,805,926	11,525,381	6,394	14,221
Other Counties	668,114	1,162,458	1,830,572	1,431	2,722
Total Production	418,181,812	105,229,480	523,411,292	316,429	660,316

Table 2. Sawlog Harvest by County in Texas, 2015

County	Pine	Hardwood	Total
	–––––––––thousand board feet[1]–––––––––		
Anderson	24,636	1,067	25,703
Angelina	42,353	4,615	46,968
Bowie	25,518	3,287	28,805
Camp	2,298	383	2,681
Cass	60,188	3,818	64,006
Chambers	26	168	194
Cherokee	64,651	7,740	72,391
Franklin	0	736	736
Gregg	3,049	2,054	5,103
Grimes	3,208	5	3,213
Hardin	20,035	5,749	25,784
Harris	6,600	890	7,490
Harrison	42,525	2,154	44,679
Henderson	1,134	1,226	2,360
Houston	11,801	953	12,754
Jasper	54,457	2,427	56,884
Jefferson	199	658	857
Leon	922	1,515	2,437
Liberty	23,437	10,401	33,838
Madison	6	0	6
Marion	15,533	1,317	16,850
Montgomery	10,132	1,930	12,062
Morris	5,622	895	6,517
Nacogdoches	51,521	4,058	55,579
Newton	56,979	1,342	58,321
Orange	826	217	1,043
Panola	28,909	2,100	31,009
Polk	89,269	7,643	96,912
Red River	6,947	3,638	10,585
Rusk	39,212	3,804	43,016
Sabine	24,100	0	24,100
San Augustine	29,893	900	30,793
San Jacinto	22,030	788	22,818
Shelby	27,855	463	28,318
Smith	12,057	1,022	13,079
Titus	129	1,205	1,334
Trinity	36,001	1,586	37,587
Tyler	65,030	6,560	71,590
Upshur	8,460	2,665	11,125
Van Zandt	390	0	390
Walker	18,867	145	19,012
Waller	5	8	13
Wood	12,355	1,102	13,457
Other Counties	201	2,175	2,376
Total Production	949,366	95,409	1,044,775

[1]International ¼-inch rule.

Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2015

County	Pine	Hardwood	Total
	– – – – – – – – – – – – – – –	cubic feet	– – – – – – – – – – – – – – –
Anderson	5,938,336	*	5,938,336
Angelina	6,602,449	*	6,602,449
Bowie	497,541	*	497,541
Camp	393,715	*	393,715
Cass	5,740,077	*	5,740,077
Chambers	105,724	*	105,724
Cherokee	8,291,387	*	8,291,387
Franklin	745	*	745
Gregg	391,932	*	391,932
Grimes	73,840	*	73,840
Hardin	1,821,239	*	1,821,239
Harris	16,020	*	16,020
Harrison	6,862,890	*	6,862,890
Henderson	447,597	*	447,597
Houston	4,460,990	*	4,460,990
Jasper	5,406,255	*	5,406,255
Jefferson	790	*	790
Leon	474,676	*	474,676
Liberty	1,523,777	*	1,523,777
Madison	790	*	790
Marion	3,422,709	*	3,422,709
Montgomery	359,622	*	359,622
Morris	372,623	*	372,623
Nacogdoches	9,557,819	*	9,557,819
Newton	4,698,035	*	4,698,035
Orange	3,499	*	3,499
Panola	5,382,566	*	5,382,566
Polk	9,215,806	*	9,215,806
Red River	1,447,627	*	1,447,627
Rusk	7,991,322	*	7,991,322
Sabine	2,455,971	*	2,455,971
San Augustine	4,463,100	*	4,463,100
San Jacinto	1,746,392	*	1,746,392
Shelby	4,207,987	*	4,207,987
Smith	1,343,533	*	1,343,533
Titus	2,171	*	2,171
Trinity	5,159,185	*	5,159,185
Tyler	8,200,733	*	8,200,733
Upshur	2,370,581	*	2,370,581
Van Zandt	67,786	*	67,786
Walker	1,498,119	*	1,498,119
Waller	790	*	790
Wood	1,178,954	*	1,178,954
Other Counties	53,341	*	53,341
Total Production	124,251,041	*	124,251,041

*Data suppressed to avoid disclosure of individual company information.

Table 4. Pulpwood and Pellet Roundwood Harvest by County in Texas, 2015

County	Pine	Hardwood	Total
	– – – – – – – – – – – – – – – cords	– – – – – – – – – – – – – – –	
Anderson	5,788	11,156	16,944
Angelina	40,021	18,643	58,664
Bowie	56,290	68,529	124,819
Camp	6,165	3,580	9,745
Cass	169,715	99,293	269,008
Chambers	113	477	590
Cherokee	9,951	42,137	52,088
Franklin	109	7,579	7,688
Gregg	135	3,681	3,816
Grimes	6,590	155	6,745
Hardin	145,251	25,649	170,900
Harris	14,561	6,002	20,563
Harrison	8,395	46,342	54,737
Henderson	203	4,406	4,609
Houston	29,279	5,424	34,703
Jasper	159,463	10,634	170,097
Jefferson	3,589	1,889	5,478
Leon	1,019	18,702	19,721
Liberty	55,624	41,570	97,194
Madison	0	0	0
Marion	40,713	24,327	65,040
Montgomery	34,378	5,497	39,875
Morris	9,450	6,952	16,402
Nacogdoches	25,702	89,350	115,052
Newton	176,742	20,879	197,621
Orange	10,844	2,877	13,721
Panola	17,324	55,081	72,405
Polk	195,003	27,061	222,064
Red River	25,593	56,049	81,642
Rusk	5,419	27,977	33,396
Sabine	21,002	19,280	40,282
San Augustine	59,219	82,845	142,064
San Jacinto	30,525	4,990	35,515
Shelby	27,166	109,683	136,849
Smith	6,567	15,202	21,769
Titus	2,634	13,021	15,655
Trinity	39,477	20,259	59,736
Tyler	172,778	12,711	185,489
Upshur	11,689	32,380	44,069
Van Zandt	951	3,695	4,646
Walker	9,132	1,656	10,788
Waller	413	11	424
Wood	43,677	57,764	101,441
Other Counties	111	8,546	8,657
Total Production	1,678,770	1,113,941	2,792,711

Table 5. Other Roundwood Harvest by County in Texas, 2015[1]			
County	Pine	Hardwood	Total
	– – – – – – – – – – – – – – – – cubic feet – – – – – – – – – – – – – – – –		
Anderson	28,415	0	28,415
Angelina	1,420,404	0	1,420,404
Bowie	0	0	0
Camp	0	0	0
Cass	0	0	0
Chambers	0	0	0
Cherokee	231,725	0	231,725
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	20,704	0	20,704
Jasper	160,920	0	160,920
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	343,537	0	343,537
Newton	298,080	0	298,080
Orange	0	0	0
Panola	0	0	0
Polk	0	0	0
Red River	0	0	0
Rusk	0	0	0
Sabine	248,670	0	248,670
San Augustine	76,995	0	76,995
San Jacinto	0	0	0
Shelby	563,760	0	563,760
Smith	0	0	0
Titus	0	0	0
Trinity	0	0	0
Tyler	94,500	0	94,500
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	4,060,909	0	4,060,909

[1]Including posts, poles and pilings.

Table 6. Timber Stumpage Price in East Texas by Product, 2006-2015

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	– – – $/MBF-Doyle – – –		– – – $/cord – – –		$/cord	$/ton
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
2013	177.84	266.43	18.88	23.88	29.01	52.13
2014	217.10	319.55	24.42	27.27	34.68	51.50
2015	235.26	372.15	25.33	45.56	39.23	50.34

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, 2015

Product	Unit	Stumpage		Delivered	
		Price[1] ($/unit)	Value (million $)	Price[2] ($/unit)	Value (million $)
PINE					
Sawlogs/Chip-n-Saw	MBF[3]	–	131	–	227
Sawlogs	MBF[3]	156.82	113	256.47	185
Chip-n-Saw	MBF[3]	78.47	18	186.35	43
Veneer/Panel Roundwood	MCF	–	63	–	142
Veneer Logs	MCF	967.43	35	1,582.20	57
Panel Roundwood	MCF	312.72	28	958.80	84
Pulpwood	cords	25.33	43	77.66	130
Others	MCF	–	3	–	6
All pine products			239		505
HARDWOOD					
Sawlogs	MBF[3]	273.66	26	398.67	38
Veneer	MCF	2,201.31	0	3,685.23	0
Pulpwood	cords	45.56	51	104.64	117
All hardwood products			77		155
ALL PRODUCTS			316		660

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

[2]Average 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.

[3]International ¼-inch rule.

Table 8. Interstate Movement of Roundwood by Species Group and Product in Texas, 2015						
Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
PINE						
Sawlogs	MBF[1]	171,844	928,911	20,455	1,100,755	949,366
Veneer/Panel Roundwood	MCF	7,014	117,499	6,752	124,513	124,251
Pulpwood	cords	495,838	1,387,483	291,287	1,883,321	1,678,770
Others	MCF	1,475	4,061	0	5,536	4,061
All Pine Products	MCF	76,506	384,520	33,661	461,027	418,182
HARDWOOD						
Sawlogs	MBF[1]	2,156	95,409	0	97,565	95,409
Veneer	MCF	342	114	0	456	114
Pulpwood	cords	205,172	788,960	324,981	994,132	1,113,941
All Hardwood Products	MCF	17,117	79,231	25,998	96,348	105,229
TOTAL						
Sawlogs	MBF[1]	174,000	1,024,320	20,455	1,198,320	1,044,775
Veneer/Panel Roundwood	MCF	7,356	117,613	6,752	124,969	124,365
Pulpwood	cords	701,010	2,176,443	616,268	2,877,453	2,792,711
Posts, Poles, Pilings	MCF	1,475	4,061	0	5,536	4,061
ALL PRODUCTS	MCF	93,624	463,751	59,660	557,375	523,411

[1]International ¼-inch rule.

Table 9. Texas Industrial Roundwood Products, 2006-2015

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	––––– m. bd. ft[1] –––––			m. sq. ft.
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
2013	1,385,043	140,427	1,525,470	2,017,406
2014	1,444,203	104,089	1,548,292	2,348,023
2015	1,410,472	107,029	1,517,501	2,444,464

[1]Lumber tally.

Table 10. Texas Pulp and Paperboard Production, 2006-2015

Year	Pulp and Paperboard Products[1]
	tons
2006	2,781,865
2007	2,788,308
2008	2,239,347
2009	2,050,681
2010	2,089,521
2011	2,071,405
2012	2,081,521
2013	2,168,403
2014	2,213,026
2015	2,106,412

[1]Includes fiberboard, paperboard, market pulp, and miscellaneous products.

Table 11. Products Treated by Texas Wood Preserving Plants, 2014-2015

Product	Unit of Measure	Volume by Specific Unit		Volume by Cubic Feet	
		2014	2015	2014	2015
Poles and pilings[1]	CF	3,820,370	3,525,806	3,820,370	3,525,806
Fence posts	number	1,960,602	1,927,879	1,726,020	1,697,212
Ties[2]	CF	6,888,919	7,286,134	6,888,919	7,286,134
Lumber	MBF	296,221	287,815	24,685,075	23,984,581
Plywood/OSB	MSF	13,874	13,148	433,552	410,864
Other	CF	2,364	2,351,960	2,364	2,351,960
Total	CF	–	–	37,556,300	39,256,558

[1]Includes utility poles, construction poles, and pilings.

[2]Includes cross ties, switch ties, and cross arms.

Table 12. Texas Primary Mill Residue, 2015[1]

Residue Type	Pine	Hardwood	Total
	– — – – – – tons – — – – – –		
Chips[2]	2,635,038	201,689	2,836,727
Sawdust	599,048	122,791	721,840
Shavings	317,050	23,689	340,739
Bark[3]	1,433,234	545,060	1,978,294
Total	4,984,370	893,229	5,877,599

[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, 2015

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	6,185.3	624.5	6,809.8	368.2	90.2	458.4	6,553.5	714.7	7,268.2
Poletimber	6,168.0	2,684.8	8,852.8	35.0	150.7	185.7	6,203.0	2,835.5	9,038.6
Sub-total	12,353.3	3,309.3	15,662.6	403.2	240.9	644.1	12,756.5	3,550.2	16,306.7
Non-growing Stock									
Sawtimber	117.8	11.4	129.3	729.2	148.1	877.2	847.0	159.5	1,006.5
Poletimber	825.4	239.3	1,064.7	646.5	529.3	1,175.7	1,471.8	768.6	2,240.4
Sub-total	943.2	250.7	1,193.9	1,375.6	677.4	2,053.0	2,318.8	928.1	3,246.9
All									
Sawtimber	6,303.1	635.9	6,939.0	1,097.3	238.3	1,335.6	7,400.5	874.2	8,274.7
Poletimber	6,993.4	2,924.1	9,917.5	681.5	680.0	1,361.5	7,674.9	3,604.1	11,278.9
Total	13,296.5	3,560.0	16,856.5	1,778.8	918.3	2,697.1	15,075.3	4,478.3	19,553.6

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, 1996-2015

Year	Pine		Hardwood		All	
	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock
	– — – – – – – – — – – – – MMCF – — – – – – – – — – – – –					
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
2013	419.6	402.0	102.0	102.4	521.5	504.4
2014	439.8	422.3	91.5	91.4	531.3	513.7
2015	418.2	400.2	105.2	104.5	523.4	504.7

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, 2006-2015

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	Acres	Acres
	Acres	Cost Share $	Acres	Cost Share $	Acres	Cost Share $	Acres				
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	23,299	2,172,624	0	0	23,299	2,172,624	4,913	28,212	65,867	402	94,481
2013	29,818	3,130,118	0	0	29,818	3,130,118	6,709	36,527	101,671	872	139,070
2014	27,008	2,750,446	0	0	27,008	2,750,446	7,716	34,724	95,306	941	130,971
2015	18,941	2,245,453	0	0	18,941	2,245,453	7,385	26,326	48,530	2,153	77,009

[1]Federal fiscal year. For example, fiscal year 2006 begins on October 1, 2005 and ends on September 30, 2006.

[2]Includes 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.

[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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