

# Harvest Trends 2008

November 2009



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Texas Forest Resource

# Harvest Trends 2008

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## HIGHLIGHTS

### *Texas Forest Resource Harvest Trends 2008*

#### **2008 TIMBER REMOVAL**

- ◆ Total growing stock timber removal was 530.2 million cubic feet in 2008, a decrease of 14.4 percent from last year.
  - ◆ Pine removal was down 12.3 percent to 430.2 million cubic feet.
  - ◆ Hardwood removal was down 22.2 percent to 100.1 million cubic feet.
- ◆ Harvest of timber for industrial use in the production of wood products was 538.0 million cubic feet.
  - ◆ 440.3 million cubic feet of pine was harvested for industrial consumption.
  - ◆ 97.7 million cubic feet of hardwood was harvested for industrial consumption.
- ◆ Stumpage value decreased 34.7 percent to \$324.7 million, and delivered value was down 19.6 percent to \$670.6 million.
- ◆ Harvest of sawlogs decreased 3.7 percent from last year to 1.37 billion board feet.
- ◆ Harvest of wood for veneer and structural panel production decreased 36.9 percent to 103.7 million cubic feet from a year ago.
- ◆ Pulpwood harvest decreased 9.6 percent to 2.6 million cords.
- ◆ The total timber volume imported from other states was 73.0 million cubic feet while the total volume exported was 57.7 million cubic feet. The net import was 15.3 million cubic feet in 2008.

#### **PRIMARY FOREST PRODUCTS**

- ◆ Production of primary wood products in 2008 included:
  - ◆ 1.6 billion board feet of lumber, a drop of 6.5 percent from last year.
  - ◆ 2.2 billion square feet of structural panel products, a decrease of 12.0 percent from 2007.
  - ◆ 2.2 million tons of paper and paperboard, down 19.7 percent from 2007.

#### **MILL AND LOGGING RESIDUES**

- ◆ Total production of mill residue in 2008 was 5.5 million tons.
- ◆ Total production of logging residue in 2008 was 2.9 million tons.

# Harvest Trends 2008

## INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The wood-based industry employed about 78,400 people in 2007 and was one of the top 10 manufacturing sectors in the state. In 25 of 43 East Texas counties, the forest sector was one of the top two largest manufacturing employers. The value of timber ranked seventh in 2007 among Texas' top agricultural commodities, behind beef, cotton, greenhouse and nursery, milk, broilers, and corn<sup>1</sup>.

To gather the most current information on the status of this valuable resource, Texas Forest Service conducts an annual survey of the state's primary forest products industry. This 43rd annual report provides information on the volume and value of timber harvested in East Texas during 2008, 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 was provided by 102 mills in Texas and 26 mills in surrounding states. Texas Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

## 2008 ECONOMIC CONDITIONS

The growth of the U.S. economy continued to slow in 2008. The real Gross Domestic Product (GDP) growth was 1.1 percent on a year-over-year basis comparing GDP in 2008 as a whole and GDP in 2007 as a whole<sup>2</sup>. The quarterly GDP growth rates in 2008 varied substantially during the year. First quarter GDP growth rate in 2008 was 0.9 percent. It increased to 2.8 percent for the second quarter in the year. In the third and fourth quarters, the GDP growth rates were negative 0.5 and 6.3 percent, respectively. The Federal Reserve federal funds rate changed from 3.5 percent to 1/4 percent over the course of the year to combat the obvious slowdown of the economy.<sup>3</sup> Inflation during most of 2008 was the highest it has been since the early 1990's but decreased to nearly 0 by December. Mortgage rates climbed steadily through the first half of the year but decreased to lower than the January rate by the end of 2008. The nation wide average monthly mortgage rate for a 30-year fixed rate mortgage was 6.25 percent in

January. It rose to a high of 7.00 percent in August, and dropped down to 6.01 percent by December<sup>4</sup>.

The housing market in the U.S. continued its historical decline following the downward trend set in 2006. The national total number of residential housing units authorized by building permits dropped an amazing 35.4 percent to 907,000 units in 2008 from 1.40 million units in 2007. Single-family building permits declined 41.4 percent, from 986,000 units in 2007 to 577,000 units in 2008. Multi-family permits decreased 21.2 percent in 2008, from 419,000 units to 330,000 units<sup>5</sup>.

The growth of the Texas economy was slower than last year but still stronger than the national average. Real Gross State Product (GSP) was up 2.0 percent (from the previous year) to \$925.5 billion (based on chained 2000 dollar)<sup>6</sup>. The housing market in Texas also fared better than the national average. The total number of residential building permits in Texas decreased 26.8 percent in 2008 to 131,004 units. Single-family building permits declined 32.6 percent to 81,107 units while multi-family housing decreased 14.8 percent to 49,897 units in 2008<sup>5</sup>.

The slumping housing market had a significant negative impact on the demand for solid wood products. Total softwood lumber production in the U.S. in 2008 was 28.3 billion board feet, a drop of 18.9 percent from 2007. Of the total softwood lumber production, 45.3 percent was from the U.S. West, 49.4 percent was from the U.S. South, and 5.3 percent was from the rest of the country. The annual softwood lumber production dropped 21.6 percent in the U.S. West, 16.2 percent in the U.S. South, and 19.5 percent in the other U.S. regions from the previous year<sup>7</sup>.

The weak demand of softwood lumber in 2008 resulted in falling prices. The annual average Random Lengths Framing Lumber Composite price decreased 11.3 percent, from \$284 per thousand board feet (mbf) in 2007 to \$252 per mbf in 2008<sup>7</sup>.

The 2008 production of structural panels in the U.S., including plywood and oriented strand board (OSB), slipped 13.9 percent from a year ago, as a result of the weak housing market. The U.S. produced 23.2 billion square feet (3/8-inch basis) of structural panels in 2008, compared to 27.0 billion square feet in 2007. Plywood production was down 16.4 percent to 10.2 billion square feet, while OSB production was off by 11.9 percent to 13.0 billion board feet. OSB continued to gain market share over plywood

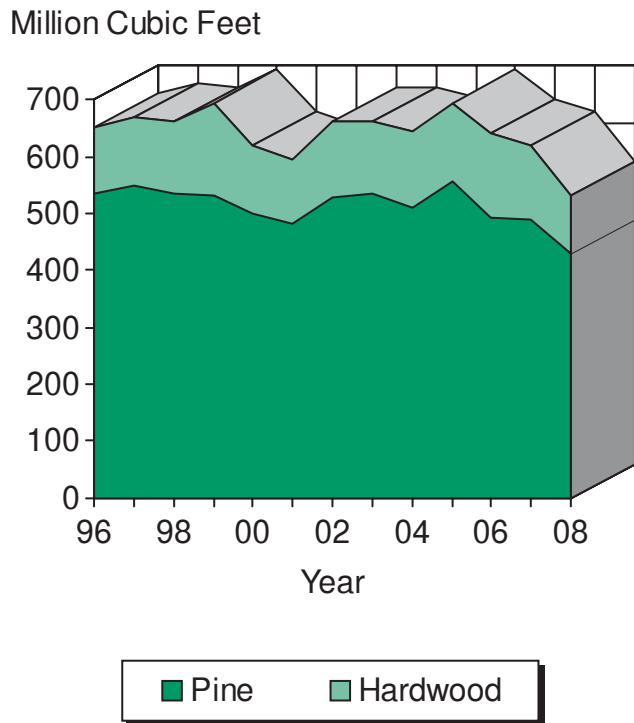


Figure 1. Total Timber Removals, 1996-2008

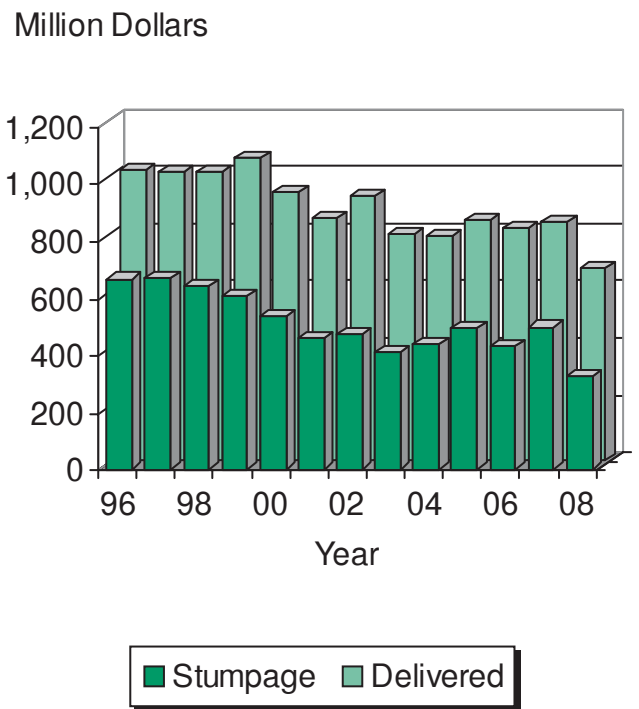


Figure 2. Value of the Timber Harvest, 1996-2008

because of its lower wood cost and higher manufacturing efficiency. The share of OSB in total panel production in the U.S. increased to 56.0 percent in 2008, up from 54.7 percent in 2007<sup>7</sup>.

The average price of structural panel continued to decrease in 2008. The average annual Random Lengths Structural Panel Composite price was \$292 per thousand square feet (msf) in 2008, which was 2.0 percent lower than that of 2007<sup>7</sup>.

The total production of paper and paperboard in the U.S. was down in 2008 compared to the previous year. The total production of paper and paperboard dropped 4.3 percent from last year to 87.7 million short tons in 2008. Paper production totaled 39.1 million tons in 2008, a decrease of 4.1 percent from 2007. Paperboard production fell 3.7 percent to 48.6 million tons<sup>8</sup>.

## STUMPAGE PRICES

According to the *Texas Timber Price Trends* bi-monthly timber market report, the average annual pine sawtimber price decreased 24.8 percent to \$241.71 per mbf, Doyle scale, in 2008, from the 2007 average annual price of \$321.40 per mbf. The average annual mixed hardwood sawtimber price increased 33.9 percent from its 2007 level

to \$217.87 per mbf in 2008. Pine pulpwood price decreased 21 percent to \$25.90 per cord from its 2007 price. Mixed hardwood pulpwood price fell 25.9 percent to \$22.31 per cord in 2007. Table 6 provides historic data on stumpage prices. The decrease in pine sawtimber price was due to the slow housing market, while the lower pulpwood price was the result of market stability after the recovery from the effects of salvaged timber from Hurricane Rita.

## TIMBER REMOVALS

### Growing Stock Removals

Total removals of growing stock in East Texas in 2008, including both pine and hardwood, decreased 14.4 percent from the previous year (Figure 1). The total volume of growing stock removed from the 43-county region was 530.2 million cubic feet in 2008, compared to 619.3 million cubic feet in 2007. Included in the total growing stock removals are timber harvested for industrial use and an estimate of logging residue. Growing stock removals in 2008 and the past years were adjusted using the harvest residue ratios from the updated Texas Wood Utilization Study by the USDA Forest Service.

By species group, growing stock removals in 2008



were comprised of 430.2 million cubic feet of pine and 100.1 million cubic feet of hardwood. Pine removals were down 12.3 percent and hardwood removals were down 22.2 percent from 2007. 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 440.3 and 97.7 million cubic feet for pine and hardwood, respectively. Pine industrial roundwood harvest was down 12.2 percent, and hardwood roundwood harvest was down 23.4 percent from 2007. The combined harvest dropped 14.4 percent to 538.0 million cubic feet. Ninety five percent of the industrial roundwood was from growing stock and 5 percent of the industrial roundwood was from non-growing stock in 2008 (Table 13).

Table 1 lists the harvest of pine and hardwood by county for 2008. Top timber producing counties included Angelina, Newton, Polk, Tyler, and Jasper.

Figure 4 illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. Angelina, Tyler, Newton, Polk, and Jasper Counties had the highest relative timber harvesting intensity during 2008.

### **Value of Timber Harvest**

As Figure 2 illustrates, stumpage value of East Texas timber harvest decreased 34.7 percent in 2008 to \$324.7 million. The delivered value was down 19.6 percent to \$670.6 million. Pine timber accounted for 83.7 percent of the total stumpage value. Figure 3 depicts the value of the harvest by product. Table 7 lists stumpage and delivered value by product category.

### **Sawlogs**

Harvest of sawlogs for lumber production decreased 3.7 percent to 1.37 billion board feet, which accounted for 42 percent of the 2008 total timber harvest. The pine sawlog cut totaled 1.1 billion board feet, down 6.7 percent, while the hardwood sawlog harvest was up 15.8 percent to 222.4 million board feet. Angelina, Cherokee, Newton, Nacogdoches, and Polk 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 103.7 million cubic feet in 2008, a 36.9 percent decline from 2007. The timber harvest for structural panels was 19 percent of the total timber harvest in 2008. Almost all of the veneer and panel roundwood was pine. Angelina, Polk, Houston, Walker, and Tyler 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 9.6 percent in 2008 to 2.6 million cords. Roundwood pulpwood harvest accounted for 39 percent of the total timber harvest in 2008. Pine pulpwood made up 71.0 percent of the total pulpwood production in 2008. Newton, Jasper, Tyler, Polk, 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 2.7 million cubic feet in 2008. Table 5 lists harvest of these products by county.

### **Import-Export Trends**

Texas imported more timber from surrounding states than exported to surrounding states in 2008. Exports of roundwood from Texas were 57.7 million cubic feet, while imports totaled 73.0 million cubic feet in 2008. The net imports of roundwood were 15.3 million cubic feet in 2008. Table 8 details the interstate movement of roundwood.

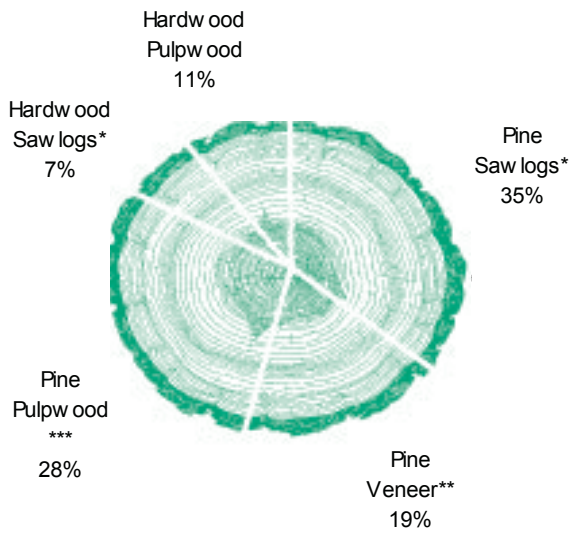
Texas mills utilized 89.3 percent of the timber harvested in the state in 2008. The remainder was processed mainly by mills in Arkansas, Louisiana, and Oklahoma. Details are listed in Table 8.

## **PRODUCTION OF FOREST PRODUCTS**

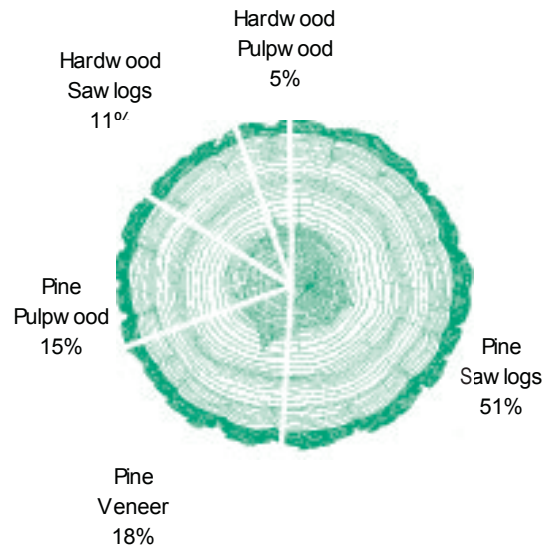
### **Lumber**

Texas sawmills produced 1.6 billion board feet of lumber in 2008, a decrease of 6.5 percent over 2007. Production of pine lumber decreased 9.3 percent to 1.4 billion board feet in 2008 but hardwood lumber production increased 18.0 percent to 213.2 million board feet. Table 9 and Figure 5 present a 10-year trend in lumber production.

### Harvest Volume (538.0 Million Cubic Feet)



### Stumpage Value \*\*\*\* (\$324.7 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 the total are not included

Figure 3. Volume and Value of the Timber Harvest, 2008

### Cubic Feet Harvested Per Acre of Timberland

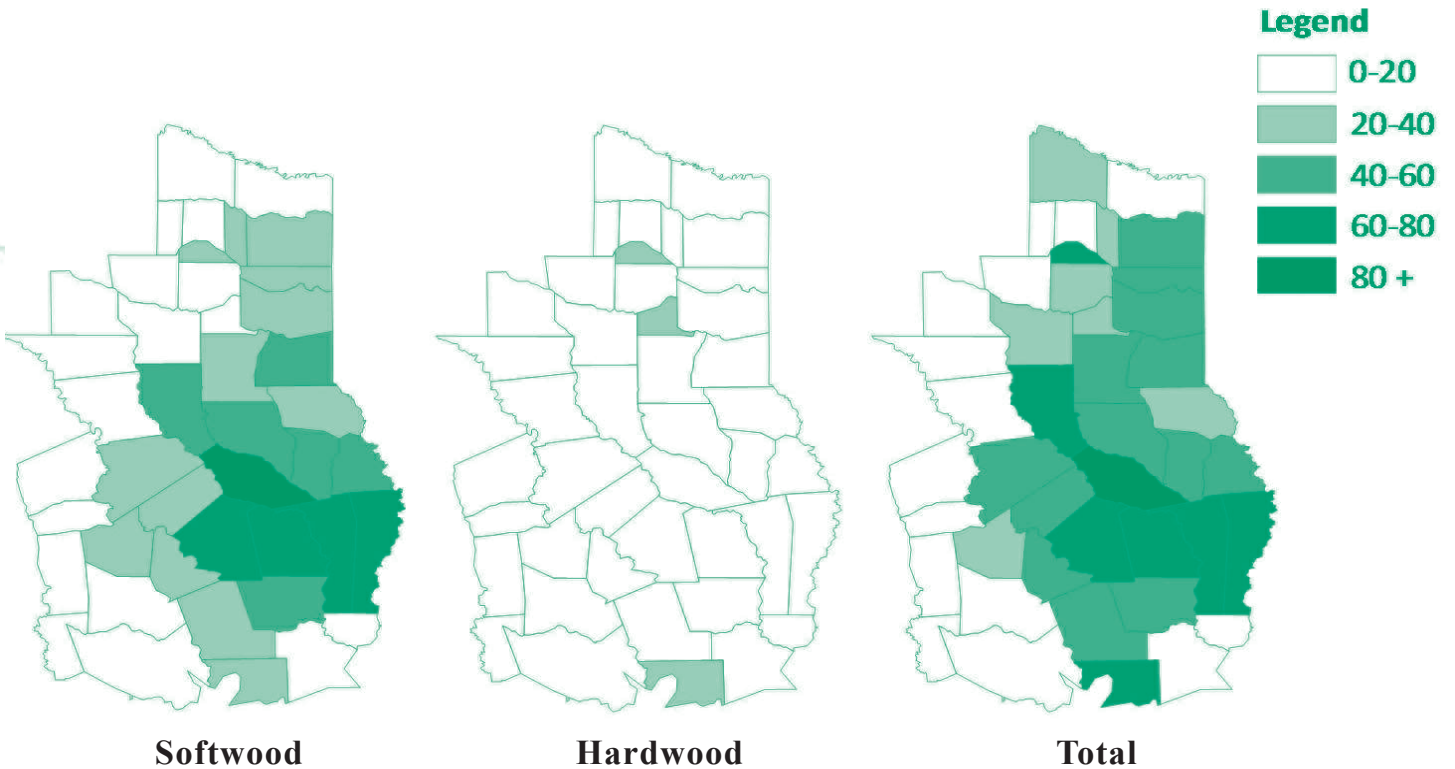


Figure 4. Intensity of Timber Harvest by County, 2008



Million Board Feet

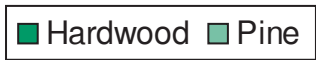
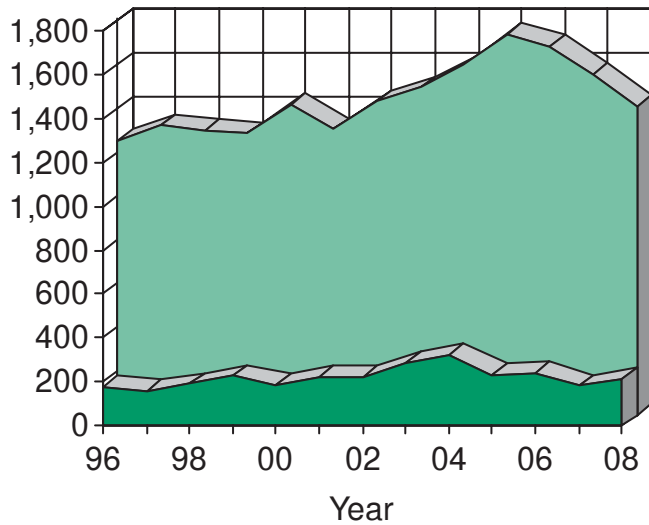


Figure 5. Texas Lumber Production, 1996-2008

Million Square Feet

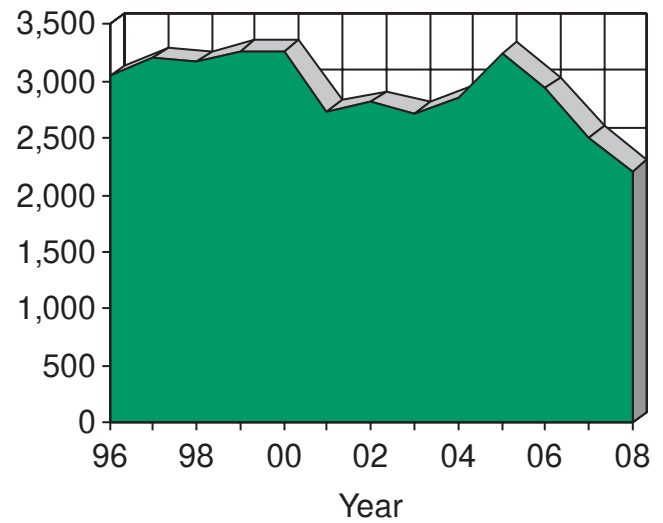


Figure 6. Texas Structural Panel Production, 1996-2008

**Structural Panel Products**

Production of structural panels, including plywood and OSB, was down 12.0 percent to 2.2 billion square feet (3/8-inch basis) in 2008. Table 9 and Figure 6 show the recent trend in structural panel output.

**Paper Products**

Production of paperboard totaled 2.2 million tons in 2008, down 19.7 percent from 2007. There was no paper or market pulp production in Texas in 2008. Table 10 and Figure 7 summarize recent trends in paper product output.

**Treated Wood Products**

There was a 17.1 percent decrease in the volume of wood processed by Texas wood treaters in 2008 from the previous year. The total volume treated in 2008 was 37.8 million cubic feet. Among major treated products, lumber accounted for 66.2 percent of the total volume, crossties accounted for 17.6 percent, and utility poles and fence posts accounted for 8.8 percent and 4.8 percent, respectively. Table 11 contains treated volume by product for 2007 and 2008.

**Primary Mill Residue**

Total mill residue, including chips, sawdust, shavings, and bark in primary mills such as sawmills, panel mills and chip mills in 2008 was 5.5 million short green tons, 7.8 percent lower than the 2007 level (Table 12). Eighty five percent of the mill residue was from pine species and 15 percent was from hardwood species in 2008. Chips accounted for 51.4 percent of mill residue, followed by bark (34.1 percent), sawdust (8.4 percent), and shavings (6.1 percent) (Figure 8).

**Logging Residue**

Types of logging residue include stumps, tops, limbs and unutilized cull trees. Total logging residue produced in 2008 was 2.95 million green tons. Logging residue comes from both growing stock and non-growing stock trees. In 2008, 22.8 percent of the logging residue was from growing stock trees, and 77.2 percent of the logging residue was from non-growing stock trees. Sixty seven percent of the residue was from pine and 33 percent was from hardwood in 2008 (Table 13, Figure 9).

Thousand Tons

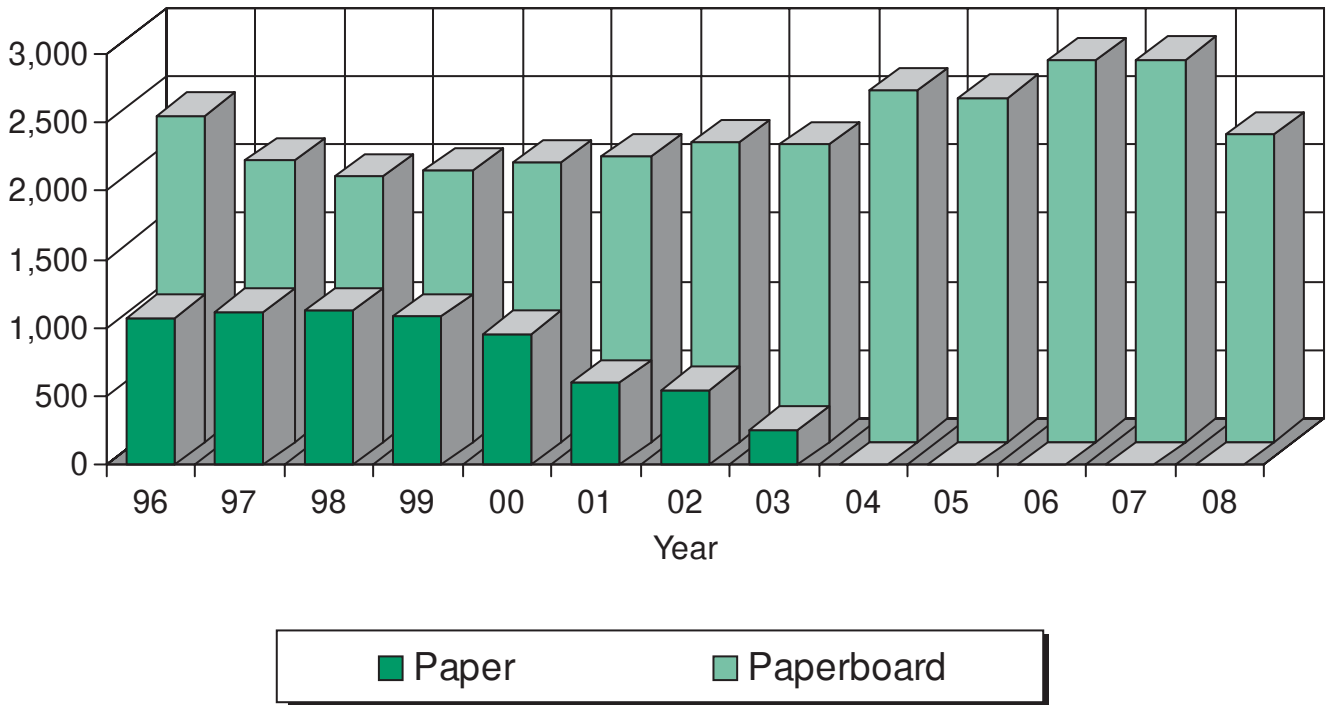


Figure 7. Texas Paper Production, 1996-2008

Thousand Tons

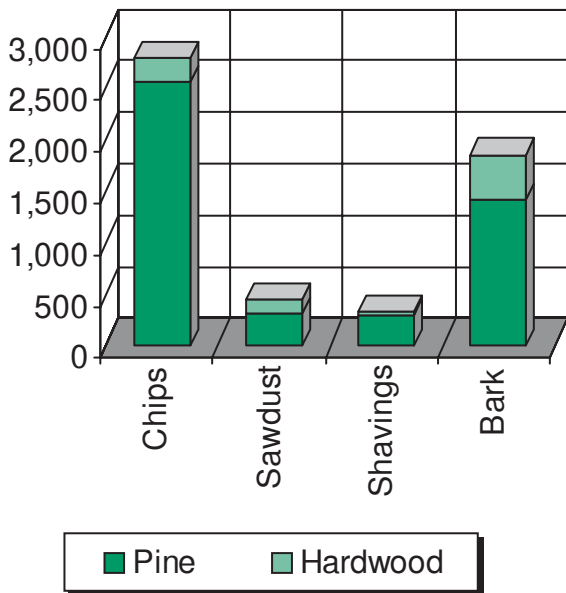


Figure 8. Texas Primary Mill Residue, 2008

Thousand Tons

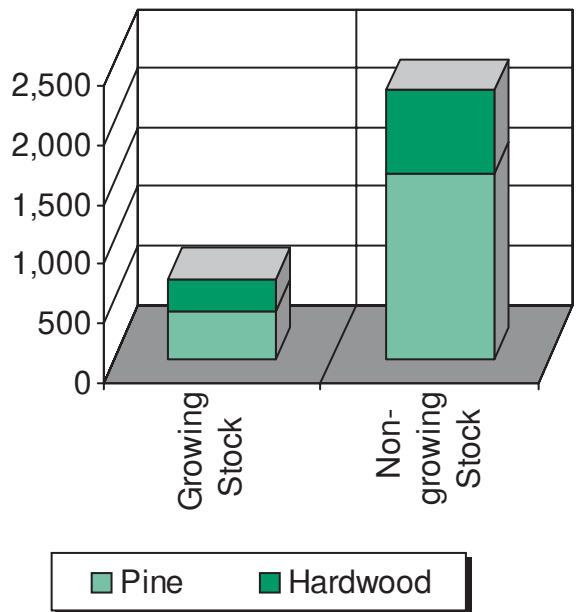


Figure 9. Texas Logging Residue, 2008

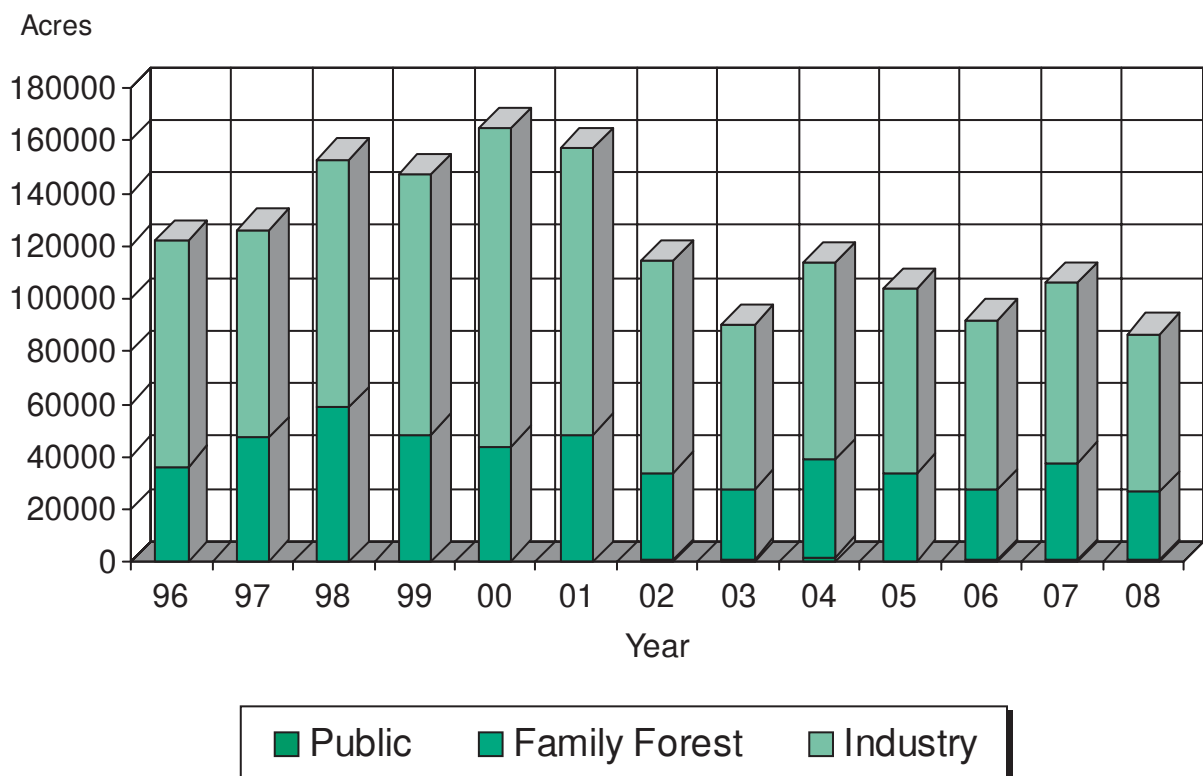


Figure 10. Reforestation Acreage by Ownership in Texas, 1996-2008

## REFORESTATION ACCOMPLISHMENTS

Accomplishments in reforestation by funding source and ownership are presented in Table 15. A total of 86,546 acres was planted during the winter 2007/spring 2008 planting season. This was a 18.3 percent decrease from the previous year. Industrial landowners planted 59,764 acres, down 12.0 percent from the previous year. Family Forest owners planted 25,960 acres, down 30.3 percent. Public landowners planted 822 acres in 2008. Family Forest owners received \$1.1 million in cost share assistance for reforestation through federal and industrial cost share programs. Federal programs provided \$1.0 million in cost share funds. The Texas Reforestation Foundation provided \$78,174 cost share funding.

## REFERENCES

- <sup>1</sup>Texas Agricultural Statistics 2007 Bulletin ([http://www.nass.usda.gov/Statistics\\_by\\_State/Texas/Publications/Annual\\_Statistical\\_Bulletin/bull2007.pdf](http://www.nass.usda.gov/Statistics_by_State/Texas/Publications/Annual_Statistical_Bulletin/bull2007.pdf))
- <sup>2</sup><http://www.bea.gov/national/index.htm>
- <sup>3</sup><http://www.federalreserve.gov/monetarypolicy/fomccalendars.htm>
- <sup>4</sup><http://www.hsh.com/mtghst.html>
- <sup>5</sup><http://recenter.tamu.edu/data/databp.html>
- <sup>6</sup>Interactive Tables: Gross Domestic Product by State (<http://www.bea.gov/regional/gsp/>)
- <sup>7</sup>Random Lengths, Year Book, 2008
- <sup>8</sup>Pulp & Paper, RISI, March 2008.

**Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2008**

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	----- cubic feet -----			----- thousand dollars -----	
Anderson	6,643,096	1,521,468	8,164,564	5,506	10,738
Angelina	38,272,861	5,379,158	43,652,019	27,714	55,142
Bowie	3,435,889	2,566,768	6,002,657	3,670	7,621
Camp	1,140,967	747,439	1,888,406	1,098	2,342
Cass	16,220,842	6,962,578	23,183,420	12,615	27,807
Chambers	1,048,222	1,308,337	2,356,559	1,408	2,952
Cherokee	17,192,977	6,244,621	23,437,598	16,849	32,041
Franklin	136,856	305,464	442,320	315	624
Gregg	951,774	2,391,160	3,342,934	2,855	5,210
Grimes	1,414,712	4,919	1,419,631	1,178	2,002
Hardin	20,343,051	2,928,823	23,271,874	11,633	26,851
Harris	2,463,827	178,133	2,641,960	2,275	3,830
Harrison	14,529,314	3,937,085	18,466,399	11,207	22,958
Henderson	904,457	725,590	1,630,047	1,183	2,274
Houston	14,560,238	1,719,162	16,279,400	11,469	21,605
Jasper	33,215,621	2,768,020	35,983,641	18,716	41,947
Jefferson	284,721	105,149	389,870	263	520
Leon	1,362,517	356,810	1,719,327	1,581	2,622
Liberty	14,609,662	4,214,107	18,823,769	11,999	24,071
Madison	760,391	19,200	779,591	481	971
Marion	6,281,108	3,349,081	9,630,189	5,529	11,888
Montgomery	5,589,259	1,082,679	6,671,938	5,368	9,442
Morris	1,362,143	719,895	2,082,038	1,181	2,558
Nacogdoches	19,960,151	1,899,632	21,859,783	16,153	29,685
Newton	36,863,884	2,009,157	38,873,041	20,880	45,827
Orange	1,320,631	63,391	1,384,022	808	1,695
Panola	17,060,089	3,711,373	20,771,462	11,495	24,955
Polk	32,858,900	5,046,471	37,905,371	20,145	44,502
Red River	2,096,112	6,183,513	8,279,625	3,876	9,724
Rusk	9,026,290	5,178,176	14,204,466	9,227	18,746
Sabine	12,634,704	199,181	12,833,885	8,029	15,983
San Augustine	11,251,514	1,013,830	12,265,344	8,237	15,922
San Jacinto	11,438,395	1,323,648	12,762,043	8,087	16,065
Shelby	11,023,544	1,449,447	12,472,991	7,336	15,328
Smith	4,588,917	4,751,880	9,340,797	6,461	12,867
Titus	794,636	1,384,875	2,179,511	1,195	2,718
Trinity	13,929,554	1,489,105	15,418,659	8,580	18,491
Tyler	31,443,251	4,567,324	36,010,575	18,054	41,493
Upshur	2,622,757	2,720,648	5,343,405	2,826	6,488
Van Zandt	58,774	208,784	267,558	152	341
Walker	12,386,180	415,097	12,801,277	10,199	17,806
Waller	252,901	1,342	254,243	215	363
Wood	2,105,643	1,654,384	3,760,027	1,797	4,324
Other Counties	3,839,793	2,877,335	6,717,128	4,889	9,244
<b>Total Production</b>	<b>440,281,125</b>	<b>97,684,239</b>	<b>537,965,364</b>	<b>324,733</b>	<b>670,584</b>

**Table 2. Sawlog Harvest by County in Texas, 2008**

County	Pine	Hardwood	Total
----- thousand board feet <sup>1</sup> -----			
Anderson	20,584	5,335	25,919
Angelina	126,535	11,879	138,414
Bowie	13,585	3,268	16,853
Camp	4,049	727	4,776
Cass	46,699	2,828	49,527
Chambers	6,210	158	6,368
Cherokee	55,172	26,852	82,024
Franklin	485	1,177	1,662
Gregg	3,183	13,531	16,714
Grimes	4,993	5	4,998
Hardin	36,999	5,966	42,965
Harris	9,693	1,025	10,718
Harrison	54,578	3,299	57,877
Henderson	3,002	2,629	5,631
Houston	40,415	2,426	42,841
Jasper	67,112	3,836	70,948
Jefferson	565	627	1,192
Leon	8,130	1,705	9,835
Liberty	40,311	16,012	56,323
Madison	575	0	575
Marion	17,558	4,597	22,155
Montgomery	20,883	4,898	25,781
Morris	3,844	1,046	4,890
Nacogdoches	64,336	8,026	72,362
Newton	76,501	3,724	80,225
Orange	2,752	378	3,130
Panola	36,097	1,612	37,709
Polk	63,822	7,728	71,550
Red River	4,277	8,933	13,210
Rusk	22,560	21,527	44,087
Sabine	35,472	1,026	36,498
San Augustine	35,087	4,767	39,854
San Jacinto	32,807	1,554	34,361
Shelby	26,223	1,071	27,294
Smith	11,099	21,385	32,484
Titus	1,560	3,386	4,946
Trinity	28,999	4,891	33,890
Tyler	60,550	5,979	66,529
Upshur	5,507	5,351	10,858
Van Zandt	171	0	171
Walker	28,665	984	29,649
Waller	357	8	365
Wood	5,536	507	6,043
Other Counties	19,409	5,759	25,168
<b>Total Production</b>	<b>1,146,947</b>	<b>222,422</b>	<b>1,369,369</b>

<sup>1</sup>International 1/4-inch rule.



**Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2008**

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	2,767,111	82,784	2,849,895
Angelina	9,506,462	0	9,506,462
Bowie	142,544	0	142,544
Camp	220,325	0	220,325
Cass	2,726,953	0	2,726,953
Chambers	30,316	0	30,316
Cherokee	4,585,419	41,278	4,626,697
Franklin	0	0	0
Gregg	405,675	0	405,675
Grimes	552,207	0	552,207
Hardin	2,275,790	0	2,275,790
Harris	799,598	0	799,598
Harrison	4,863,285	0	4,863,285
Henderson	95,216	82,784	178,000
Houston	7,040,197	0	7,040,197
Jasper	3,168,372	0	3,168,372
Jefferson	140,324	0	140,324
Leon	27,870	0	27,870
Liberty	3,033,339	0	3,033,339
Madison	356,879	0	356,879
Marion	2,128,932	0	2,128,932
Montgomery	1,502,910	0	1,502,910
Morris	267,458	0	267,458
Nacogdoches	5,517,259	82,784	5,600,043
Newton	4,239,391	0	4,239,391
Orange	34,538	0	34,538
Panola	4,347,936	0	4,347,936
Polk	9,277,901	0	9,277,901
Red River	383,530	0	383,530
Rusk	2,767,481	0	2,767,481
Sabine	3,479,797	0	3,479,797
San Augustine	2,935,914	0	2,935,914
San Jacinto	2,089,008	0	2,089,008
Shelby	1,752,668	0	1,752,668
Smith	521,008	41,278	562,286
Titus	153,130	0	153,130
Trinity	5,131,272	0	5,131,272
Tyler	5,961,751	0	5,961,751
Upshur	1,121,530	0	1,121,530
Van Zandt	1,167	82,784	83,951
Walker	6,496,810	0	6,496,810
Waller	180,775	0	180,775
Wood	98,096	0	98,096
Other Counties	24,779	114,028	138,807
<b>Total Production</b>	<b>103,152,923</b>	<b>527,720</b>	<b>103,680,643</b>

**Table 4. Pulpwood Roundwood Harvest by County in Texas, 2008**

County	Pine	Hardwood	Total
	----- cords -----		
Anderson	6,617	6,800	13,417
Angelina	100,484	42,338	142,822
Bowie	13,472	25,234	38,706
Camp	3,263	7,819	11,082
Cass	73,137	81,104	154,241
Chambers	139	16,023	16,162
Cherokee	42,210	21,253	63,463
Franklin	719	1,351	2,070
Gregg	372	1,525	1,897
Grimes	656	51	707
Hardin	148,808	24,104	172,912
Harris	1,148	78	1,226
Harrison	10,110	42,298	52,408
Henderson	3,983	2,524	6,507
Houston	11,960	16,404	28,364
Jasper	236,035	26,559	262,594
Jefferson	652	0	652
Leon	207	886	1,093
Liberty	62,247	19,111	81,358
Madison	3,831	240	4,071
Marion	16,124	32,227	48,351
Montgomery	8,657	3,266	11,923
Morris	5,822	6,806	12,628
Nacogdoches	46,689	5,886	52,575
Newton	247,576	17,308	264,884
Orange	10,346	0	10,346
Panola	82,609	43,013	125,622
Polk	163,230	46,881	210,111
Red River	12,584	58,568	71,152
Rusk	32,122	19,601	51,723
Sabine	39,255	339	39,594
San Augustine	28,457	2,680	31,137
San Jacinto	49,771	13,288	63,059
Shelby	57,684	15,873	73,557
Smith	28,010	14,054	42,064
Titus	4,798	10,213	15,011
Trinity	50,588	8,361	58,949
Tyler	191,855	44,558	236,413
Upshur	7,513	22,791	30,304
Van Zandt	369	1,575	1,944
Walker	15,343	3,126	18,469
Waller	176	0	176
Wood	13,706	19,617	33,323
Other Counties	158	22,469	22,627
<b>Total Production</b>	<b>1,833,492</b>	<b>748,202</b>	<b>2,581,694</b>

**Table 5. Other Roundwood Harvest by County in Texas, 2008<sup>1</sup>**

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	3,337	0	3,337
Angelina	115,979	0	115,979
Bowie	0	0	0
Camp	0	0	0
Cass	0	0	0
Chambers	0	0	0
Cherokee	245,210	0	245,210
Franklin	0	0	0
Gregg	0	0	0
Grimes	0	0	0
Hardin	16,558	0	16,558
Harris	0	0	0
Harrison	0	0	0
Henderson	0	0	0
Houston	0	0	0
Jasper	50,000	0	50,000
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	232,261	0	232,261
Newton	170,482	0	170,482
Orange	1,986	0	1,986
Panola	169,646	0	169,646
Polk	14,115	0	14,115
Red River	0	0	0
Rusk	0	0	0
Sabine	225,294	0	225,294
San Augustine	323,012	0	323,012
San Jacinto	0	0	0
Shelby	347,823	0	347,823
Smith	0	0	0
Titus	0	0	0
Trinity	0	0	0
Tyler	126,442	0	126,442
Upshur	0	0	0
Van Zandt	0	0	0
Walker	0	0	0
Waller	0	0	0
Wood	0	0	0
Other Counties	655,900	0	655,900
<b>Total Production</b>	<b>2,698,045</b>	<b>0</b>	<b>2,698,045</b>

<sup>1</sup> Including posts, poles and piling.

**Table 6. Timber Stumpage Price in East Texas by Product, 1998-2008**

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	--- \$/MBF-Doyle ---		--- \$/cord ---		\$/cord	\$/ton
1998	414.51	138.75	37.01	14.41	76.40	72.26
1999	382.86	139.44	28.95	12.24	68.44	62.25
2000	376.57	120.88	19.20	7.97	57.69	54.92
2001	325.14	120.32	12.94	15.11	42.06	55.81
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

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

**Table 7. Value of the East Texas Timber Harvest, 2008**

Product	Unit	Stumpage		Delivered	
		Price <sup>1</sup>	Value	Price <sup>2</sup>	Value
PINE		\$/unit	million \$	\$/unit	million \$
Sawlogs/Chip-n-Saw	m bd.ft. <sup>3</sup>	—	162.7	—	269.1
Sawlogs		161.14	138.9	252.97	218.0
Chip-n-Saw		83.60	23.8	179.35	51.2
Veneer/Panel Roundwood	m cu.ft.	—	59.7	—	125.5
Veneer Logs	m cu.ft.	993.94	*	1,560.38	*
Small Roundwood	m cu.ft.	319.75	*	995.49	*
Pulpwood	cords	25.90	47.5	80.64	147.9
Others	m cu.ft.	—	2.0	—	3.9
All pine products			271.9		546.4
HARDWOOD					
Sawlogs	m bd.ft. <sup>3</sup>	160.20	35.6	284.28	63.2
Veneer/Panel Roundwood	m cu.ft.	—	0.5	—	0.9
Veneer Logs	m cu.ft.	955.33	0.5	1,695.28	0.9
Panel Roundwood	m cu.ft.	278.88	0.0	1,003.88	0.0
Pulpwood	cords	22.31	16.7	80.32	60.1
All hardwood products			52.8		124.2
All products			324.7		670.6

<sup>1</sup>Average annual statewide prices as published in *Texas Timber Price Trends*, Texas Forest Service.

<sup>2</sup>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 Forest Service.

<sup>3</sup>International 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, 2008**

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
<b>PINE</b>						
Sawlogs	m bd.ft. <sup>1</sup>	85,153	1,104,374	42,573	1,189,527	1,146,947
Veneer/Panel Roundwood	m cu.ft.	3,739	95,268	7,885	99,007	103,153
Pulpwood	cords	409,280	1,431,286	402,206	1,840,566	1,833,492
Others	m cu.ft.	3,147	2,698	0	5,845	2,698
All Pine Products	m cu.ft.	53,840	392,917	47,364	446,757	440,281
<b>HARDWOOD</b>						
Sawlogs	m bd.ft. <sup>1</sup>	8,616	222,247	175	230,863	222,422
Veneer/Panel Roundwood	m cu.ft.	342	528	0	870	528
Pulpwood	cords	216,672	618,954	129,248	835,626	748,202
All Hardwood Products	m cu.ft.	19,121	87,315	10,369	106,436	97,684
<b>TOTAL</b>						
Sawlogs	m bd.ft. <sup>1</sup>	93,769	1,326,621	42,748	1,420,390	1,369,369
Veneer/Panel Roundwood	m cu.ft.	4,082	95,795	7,885	99,877	103,681
Pulpwood	cords	625,952	2,050,240	531,454	2,676,192	2,581,694
Posts, Poles, Pilings	m cu.ft.	3,147	2,698	0	5,845	2,698
All Products	m cu.ft.	72,961	480,232	57,733	553,193	537,965

<sup>1</sup>International 1/4-inch rule.



**Table 9. Texas Industrial Roundwood Products, 1998-2008**

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	----- m. bd. ft -----			m. sq. ft.
1998	1,293,432	191,165	1,484,597	3,169,713
1999	1,279,487	225,570	1,505,057	3,260,055
2000	1,410,999	184,172	1,595,171	3,265,644
2001	1,293,823	213,795	1,507,618	2,732,940
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

**Table 10. Texas Pulp, Paper, and Paperboard Production, 1998-2008**

Year	Paper Products			Market Pulp
	Paper	Paperboard <sup>1</sup>	Total	
	----- tons -----			
1998	1,509,898	1,415,958	2,925,856	302,099
1999	1,462,647	1,458,124	2,920,771	303,426
2000	955,117	2,037,148	2,992,265	48,413
2001	599,902	2,083,326	2,683,228	0
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

<sup>1</sup>Includes fiberboard and miscellaneous products.

**Table 11. Products Treated by Texas Wood Preserving Plants, 2007-2008**

Product	Volume by Specific Unit			Volume by Cubic Feet	
	Unit of Measure	2007	2008	2007	2008
Utility poles	number	198,073	198,069	3,335,649	3,335,582
Constr. poles	number	0	2,904	0	8,712
Piling	m lin.ft.	51	26	25	13
Fence posts	number	2,042,949	2,049,279	1,798,514	1,804,087
Crossties	number	1,868,767	1,803,047	6,897,790	6,655,211
Switch ties	m bd.ft.	924	1,292	91,816	128,386
Cross arms	number	0	0	0	0
Lumber	m bd.ft.	377,466	289,128	32,707,610	25,053,054
Plywood/OSB	m sq.ft.	25,528	26,964	797,760	842,609
Other	cu.ft.	0	0	0	0
<b>Total</b>	cu.ft.	—	—	45,629,164	37,827,654

**Table 12. Texas Primary Mill Residue, 2008<sup>1</sup>**

Residue Type	Pine	Hardwood	Total
----- tons -----			
Chips <sup>2</sup>	2,568,930	232,378	2,801,308
Sawdust	323,404	134,310	457,714
Shavings	309,343	23,451	332,794
Bark <sup>3</sup>	1,419,267	439,009	1,858,275
<b>Total</b>	<b>4,620,943</b>	<b>829,148</b>	<b>5,450,090</b>

<sup>1</sup> Primary mills include sawmills, structural panel mills, and chip mills.

<sup>2</sup> Does not include chips produced in chip mills.

<sup>3</sup> Includes bark from sawmills, panel mills, and chip mills.

**Table 13. Industrial Roundwood and Logging Residue Removal by Product in East Texas, 2008**

Product	Industrial Roundwood			Residue			Total Volume		
	Pine	Hardwood	Total	Pine	Hardwood	Total	Pine	Hardwood	Total
Growing Stock	----- thousand tons -----			----- thousand tons -----			----- thousand tons -----		
Sawtimber	7,313.5	1,461.6	8,775.2	347.6	187.7	535.2	7,661.1	1,649.3	9,310.4
Poletimber	6,032.8	1,830.9	7,863.7	55.9	81.2	137.1	6,088.7	1,912.1	8,000.8
Sub-total	13,346.4	3,292.6	16,638.9	403.5	268.9	672.3	13,749.8	3,561.4	17,311.3
Non-growing Stock									
Sawtimber	138.8	31.2	170.0	835.2	319.5	1,154.7	974.0	350.7	1,324.7
Poletimber	564.4	133.1	697.5	740.8	378.5	1,119.3	1,305.2	511.7	1,816.8
Sub-total	703.2	164.3	867.5	1,576.0	698.1	2,274.0	2,279.2	862.4	3,141.6
All									
Sawtimber	7,452.4	1,492.8	8,945.2	1,182.8	507.2	1,689.9	8,635.2	2,000.0	10,635.2
Poletimber	6,597.2	1,964.0	8,561.2	796.7	459.8	1,256.4	7,393.8	2,423.8	9,817.6
Total	14,049.6	3,456.9	17,506.5	1,979.4	966.9	2,946.3	16,029.0	4,423.8	20,452.8

Note: Sawtimber includes sawlog, chip-n-saw, veneer log, and pole; poletimber include 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 Texas 2003 Wood Utilization Study.

**Table 14. Removals of Industrial Roundwood and Growing Stock in East Texas, 1992-2008**

Year	Pine		Hardwood		All	
	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock	Industrial Roundwood	Growing Stock
----- million cubic feet -----						
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	515.3	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	530.2	126.1	129.1	668.3	659.3
2004	517.7	508.6	133.5	136.2	651.1	644.8
2005	564.3	555.3	137.2	139.1	701.4	694.4
2006	500.0	491.4	148.3	149.9	648.4	641.3
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

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 Texas 2003 Wood Utilization Study.

**Table 15. Tree Planting by Ownership and Funding Source in Texas, 1997-2008**

Year <sup>1</sup>	Family Forest											Industry <sup>4</sup>	Public	Total
	Federal Cost Share Programs <sup>2</sup>		Texas Reforestation Foundation (TRe)		All Cost Share Programs		Non-Cost Share <sup>3</sup>		Total Acres		Acres			
	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Acres				
1997	9,254	409,272	13,041	485,242	22,295	894,514	24,715	47,010	78,730	496	126,236			
1998	13,371	347,693	13,272	500,919	26,643	848,612	31,951	58,594	93,991	363	152,948			
1999	11,998	262,590	11,628	441,787	23,626	704,377	24,732	48,358	98,449	282	147,089			
2000	11,496	489,165	5,401	270,451	16,897	694,103	26,284	43,181	120,523	725	164,430			
2001	15,818	602,700	6,325	315,030	22,143	917,730	26,295	48,438	108,254	183	156,875			
2002	10,772	581,833	5,649	348,273	16,421	930,106	16,743	33,164	80,388	840	114,392			
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			

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

<sup>2</sup> Includes Forestry Incentives Program (FIP), Stewardship Incentives Program (SIP), Environmental Quality Incentives Program (EQIP), Conservation Reserve Program (CRP), and Forest Land Enhancement Program (FLEP) accomplishments.

Federal funding also includes the Ice Storm Recovery Program in 2002 - 2004.

<sup>3</sup> Non-cost share acres include only NIPF acres planted with TFS assistance.

<sup>4</sup> Acres for industry tree planting includes acres planted by TIMOs.



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