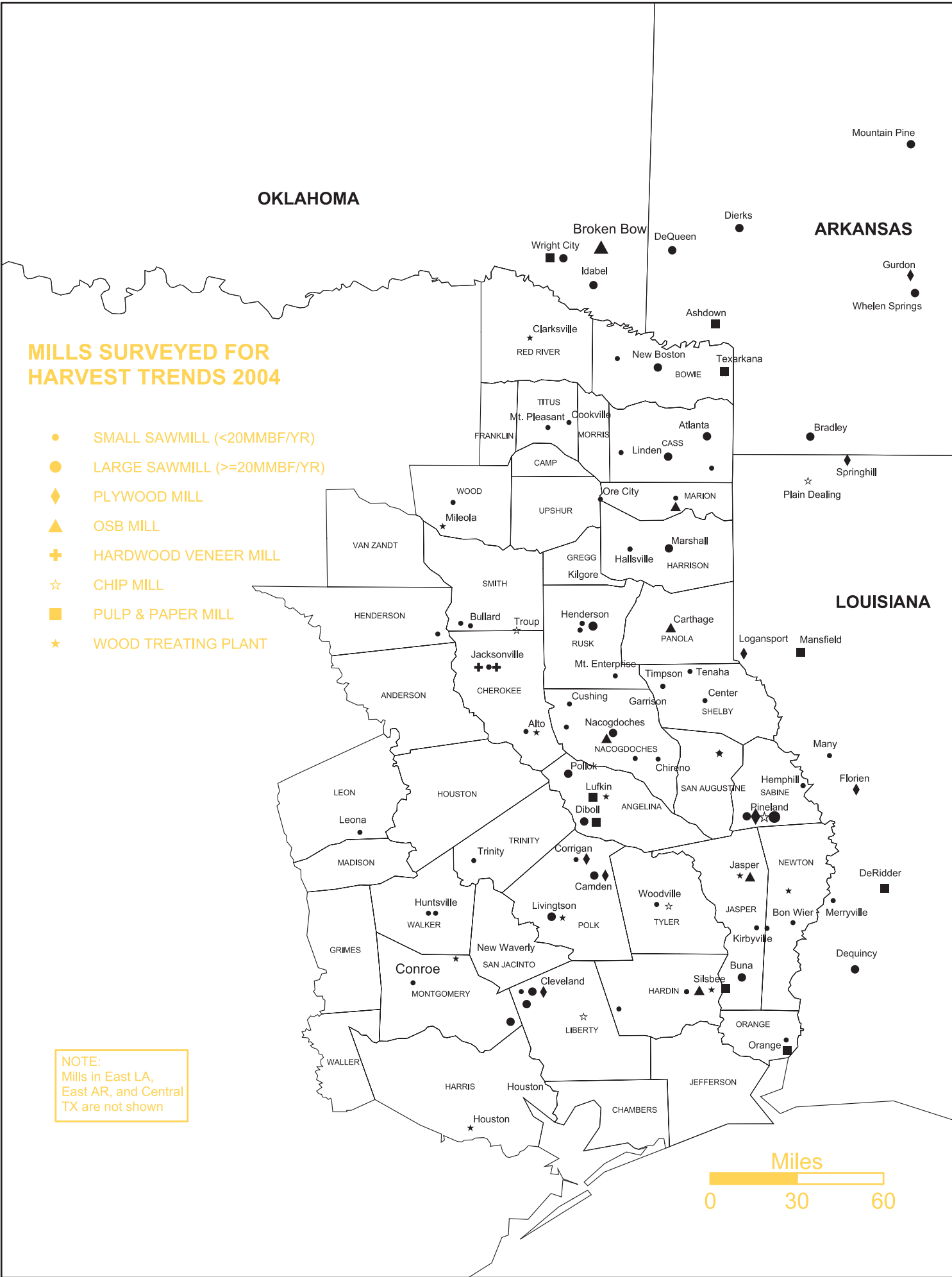


# Harvest Trends 2004

August 2005



**OKLAHOMA**

**ARKANSAS**

**LOUISIANA**

**MILLS SURVEYED FOR HARVEST TRENDS 2004**

- 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



**Texas Forest Resource**

# **Harvest Trends 2004**

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**College Station, Texas**



**August 2005**



# HIGHLIGHTS

## *Texas Forest Resource Harvest Trends 2004*

### **2004 TIMBER REMOVAL**

- ◆ Total growing stock timber removal was 644.8 million cubic feet in 2004, a decrease of 2.2 percent from last year.
  - ◆ Pine removal was down 4.1 percent to 508.6 million cubic feet.
  - ◆ Hardwood removal was up 5.5 percent to 136.2 million cubic feet.
- ◆ Harvest of timber for industrial use in the production of wood products was 651.1 million cubic feet.
  - ◆ 517.7 million cubic feet of pine was harvested for industrial consumption.
  - ◆ 133.5 million cubic feet of hardwood was harvested for industrial consumption.
- ◆ The stumpage value was up 6.2 percent to \$438.4 million, while delivered value was down 0.9 percent to \$781.8 million.
- ◆ Harvest of sawlogs increased 4.4 percent from 2003 to 1,581.5 million board feet.
- ◆ Harvest of wood for veneer and structural panel production decreased 1.9 percent to 182.4 million cubic feet from a year ago.
- ◆ Pulpwood harvest decreased 12.8 percent to 2.59 million cords.
- ◆ Texas exported more timber than it imported in 2004. The total import from other states was 64.7 million cubic feet while the total export was 83.0 million cubic feet. The net export was 2.8 percent of the total roundwood production in Texas.

### **PRIMARY FOREST PRODUCTS**

- ◆ Production of primary wood products in 2004 included:
  - ◆ 1.92 billion board feet of lumber, an increase of 7.8 percent from last year.
  - ◆ 2.86 billion square feet of structural panel products, an increase of 5.0 percent from 2003.
  - ◆ 2.56 million tons of paper and paperboard, up 5.6 percent from 2003.

### **MILL AND LOGGING RESIDUES**

- ◆ Total production of mill residue in 2004 was 6.38 million tons.
- ◆ Total production of logging residue in 2004 was 109.9 million cubic feet.

# Harvest Trends 2004

## INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The wood-based industry employed over 95,000 people in 2000 and was one of the top 10 manufacturing sectors in the state. In 23 of 43 East Texas counties, the forest sector was one of the top two largest manufacturing employers. The value of timber ranked fifth in 2003 among Texas' top agricultural commodities, behind beef, cotton, greenhouse and nursery, and broilers<sup>1</sup>.

To gather the most current information on the status of this valuable resource, the Texas Forest Service (TFS) conducts an annual survey of the state's primary forest products industry. This 40th annual report provides information on the volume and value of timber harvested in East Texas during 2004, 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 117 mills in Texas and 27 mills in surrounding states. The Texas Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

## 2004 ECONOMIC CONDITIONS

Recovered from recession by the end of 2003, the US economy experienced strong growth in 2004. The real Gross Domestic Product (GDP) growth was 4.2 percent on a year-over-year basis comparing GDP in 2004 as a whole and GDP in 2003 as a whole<sup>2</sup>. Quarterly GDP growth rates (seasonally adjusted) was robust through out the year: 4.3 percent for first quarter, 3.5 percent for second quarter, 4.0 percent for third quarter, and 3.5 percent for fourth quarter. With the economy on track with strong growth, the Federal Reserve raised the short term discount rate 25 base points five times from June 2004 to the end of 2004, changing the rate from 1 percent in the beginning of the year to 2 1/4 percent by the end of the year<sup>3</sup>. Mortgage rates stayed at record low level despite the actions of the Federal Reserve.

The record low mortgage rates continued to support a strong housing market in the US. The total number of residential housing units authorized by building permits

increased 9.0 percent to 2,073.3 thousand units in 2004 from 1,901.9 thousand units in 2003. Single-family building permits increased 9.7 percent, from 1,473.0 thousand units in 2003 to 1,616.6 thousand units in 2004. Multifamily starts grew at an annual rate of 6.5 percent in 2004. The total number of multifamily starts increased from 428.9 thousand units in 2003 to 456.7 thousand units in 2003<sup>4</sup>.

Growth in the Texas economy was stronger than national average in 2004. Real Gross State Products (GSP) was up 4.5 percent to \$777.1 billion (based on 1996 constant dollar) in 2004 from the previous year<sup>5</sup>. The annual growth rate for residential housing building permits in Texas was 5.9 percent in 2004. Total number of building permits in Texas was up from 180.6 thousand units in 2003 to 191.2 thousand units in 2004. Multifamily housing declined 0.7 percent and single-family housing went up 10.1 percent<sup>4</sup>.

The national wood product market grew at a fast pace with the strong economy and housing market. Total softwood lumber production in the US in 2004 was 38.3 billion board feet, an increase of 5.3 percent from 36.4 billion board feet in 2003. Of the total softwood lumber production, 48.8 percent was from the US West, 45.4 percent was from the US South, and 5.8 percent was from the rest of the country. The annual softwood lumber production in the three US regions increased 6.2 percent (West), 4.2 percent (South), and 5.9 percent (Other), respectively<sup>6</sup>.

The softwood lumber prices in 2004 were up substantially from the previous year. The annual average Random Lengths Framing Lumber Composite price jumped up 29.9 percent, from \$311 per thousand board feet (mbf) in 2003 to \$404 per mbf in 2004<sup>6</sup>.

The 2004 production of structural panel in the US, including plywood and oriented strand board (OSB), increased 2.2 percent from a year ago. The US produced 28.94 billion square feet (3/8-inch basis) of structural panels in 2004, compared to 28.32 billion square feet in 2003. Production of plywood and OSB changed in opposite directions. Plywood production was down 0.3 percent to 14.67 billion square feet, while OSB production was up 4.8 percent to 14.27 billion board feet. OSB continued to gain market share over plywood because of its lower wood cost and higher manufacturing efficiency. The share of OSB in total panel production in the US increased to 49.3 percent in 2004, up from 48.1 percent in 2003<sup>6</sup>.

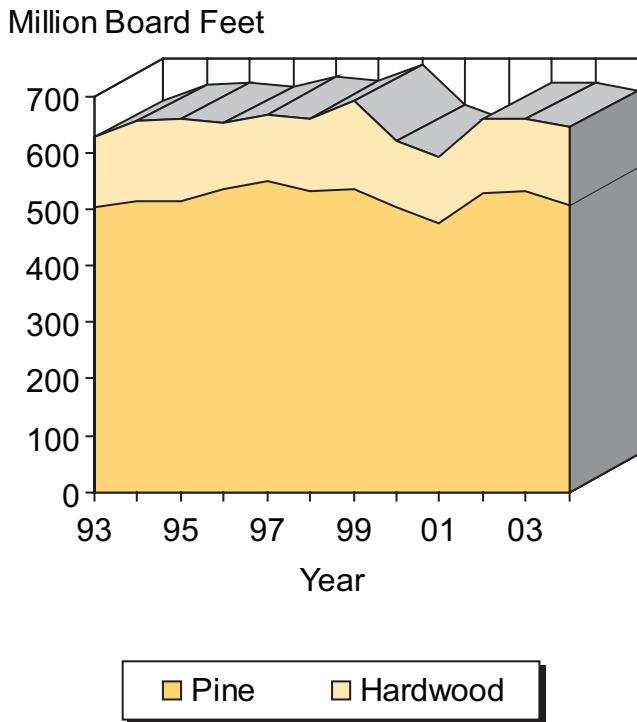


Figure 1. Total Timber Removals, 1993-2004

Structural panel prices continued to ascend a fast pace two years in a row. The average annual Random Lengths Structural Panel Composite price was \$462 per thousand square feet (msf) in 2004, which was 25.9 percent higher than 2003 and 86.3 percent higher than 2002<sup>6</sup>.

The paper and paperboard sector in the U.S. had healthy growth in 2004 after a multi-year slump. The total production of paper and paperboard went up 4.0 percent from 88.4 million short tons in 2003 to 91.9 million short tons in 2004. Paper production totaled 41.8 million tons in 2004, rising 3.6 percent from 2003. Paperboard production was up 4.3 percent to 50.1 million tons. Market pulp shipment in 2004 was 8.1 million short tons, compared with 7.6 million short tons in 2003<sup>7</sup>.

## STUMPAGE PRICES

According to the *Texas Timber Price Trends* bi-monthly timber market report, the average annual pine sawtimber price declined slightly in 2004 to \$286.42 per mbf, Doyle scale, down 1 percent from the 2003 average annual price of \$289.30 per mbf. The average annual mixed hardwood sawtimber prices jumped up 20.2 percent from its 2003 level to \$189.73 per mbf in 2004. Pine pulpwood price rose sharply to \$19.52 per cord from its 2003 price,

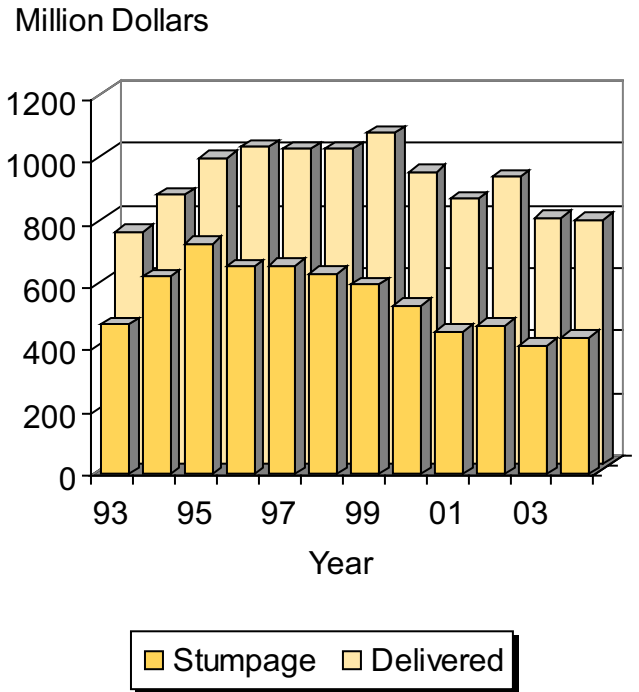


Figure 2. Value of the Timber Harvest, 1993-2004

up 31.0 percent. Mixed hardwood pulpwood prices were up 6.6 percent to \$16.90 per cord in 2004. Table 6 provides historic data on stumpage prices.

## TIMBER REMOVALS

### Growing Stock Removals

Total removal of growing stock in East Texas in 2004, including both pine and hardwood, decreased 2.2 percent from the previous year (Figure 1). The total volume of growing stock removed from the 43-county region was 644.8 million cubic feet in 2004, compared to 659.3 million cubic feet in 2003. Included in the total growing stock removal are timber harvested for industrial use and an estimate of logging residue. Growing stock removals in 2004 and the past years were adjusted using the new harvest residue ratios from the updated Texas Wood Utilization Study by the USDA Forest Service.

By species group, growing stock removals in 2004 were comprised of 508.6 million cubic feet of pine and 136.2 million cubic feet of hardwood. Pine removals were down 4.1 percent and hardwood removal were up 5.5 percent from 2003. 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 removal that was subsequently utilized in the manufacture of wood products, totaled 517.7 and 133.5 million cubic feet for pine and hardwood, respectively. The pine industrial roundwood harvest was down 4.4 percent, and the hardwood roundwood harvest was up 5.8 percent from 2003. The combined harvest was down 2.6 percent to 651.1 million cubic feet. Ninety five percent of the industrial roundwood were from growing stock and 5 percent of the industrial roundwood were from non-growing stock in 2004 (Table 13).

Table 1 lists the harvest of pine and hardwood by county for 2004. Top timber producing counties included Jasper, Cass, Newton, Tyler, and Cherokee.

Figure 4 illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. San Augustine, Jasper, Cass, Cherokee, and Newton Counties had the highest relative timber harvesting intensity during 2004.

## Value of the Timber Harvest

As Figure 2 illustrates, stumpage value of East Texas timber harvest increased 6.3 percent in 2004 to \$438.4 million. The delivered value was down 0.9 percent to \$781.8 million. Pine timber accounted for 88.1 percent of the total stumpage value. Figure 3 depicts the value of the harvest by product. Table 1 lists the value of the harvest by county. Table 7 lists stumpage and delivered value by product category.

## Sawlogs

Harvest of sawlogs for lumber production increased 4.4 percent to 1.58 billion board feet, which accounted for 39.8 percent of the 2004 total timber harvest. The pine sawlog cut totaled 1.3 billion board feet, up 5.8 percent while the hardwood sawlog harvest was down 1.5 percent to 283.7 million board feet. Cass, Cherokee, Jasper, Newton, and Angelina 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 both plywood and OSB and hardwood veneer, was 182.4 million cubic feet in 2004, a 1.9 percent decrease from 2003. The timber harvest for structural panels was 28.1 percent of the total timber harvest in 2004. All of the veneer and panel roundwood were pine. Polk, Jasper, Cherokee, Tyler, and Newton 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 dropped 12.8 percent in 2004 to 2.59 million cords. The roundwood pulpwood harvest accounted for 32.1 percent of the total timber harvest in 2004. Pine pulpwood made up 87.4 percent of the total pulpwood production in 2004. Jasper, Newton, Cass, Hardin, and Tyler 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 2.1 million cubic feet in 2004. Table 5 lists harvest of these products by county.

## Import-Export Trends

Texas was a net exporter of timber products from surrounding states in 2004. Net exports of roundwood were 18.3 million cubic feet, or about 2.8 percent of the total industrial wood production in Texas. Exports of roundwood from Texas were 83.0 million cubic feet, while imports totaled 64.7 million cubic feet in 2004. Table 8 details the interstate movement of roundwood.

Texas mills utilized 87.2 percent of the timber harvested in the state in 2004. 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 1.92 billion board feet of lumber in 2004, an increase of 7.8 percent over 2003. Production of pine lumber rose 6.8 percent to 1.59 billion board feet in 2004 and hardwood lumber production jumped 13.1 percent to 324.7 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 5 percent to 2.86 billion square feet (3/8-inch basis) in 2004. Table 9 and Figure 6 show the recent trend in structural panel output.

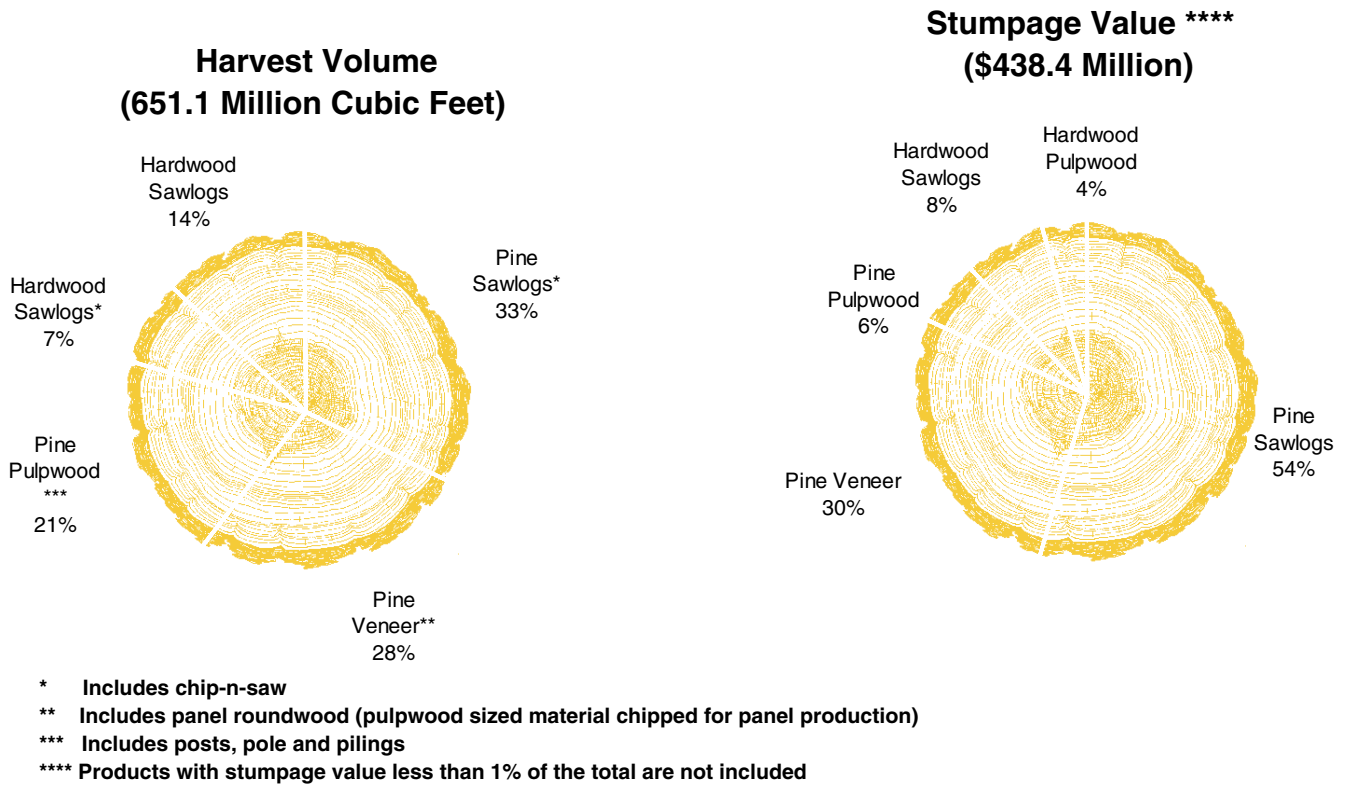


Figure 3. Volume and Value of the Timber Harvest, 2004

### Cubic Feet Harvested Per Acre of Timberland

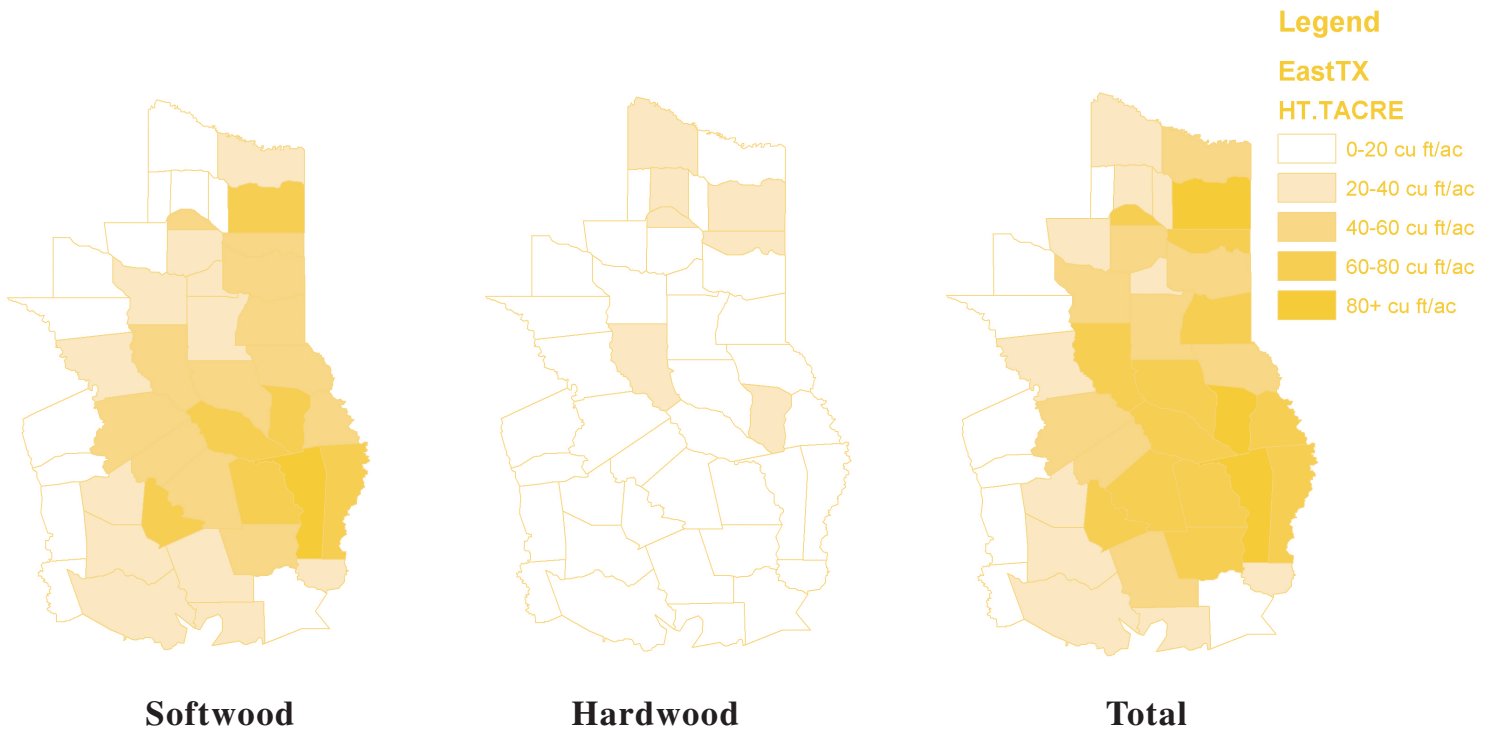


Figure 4. Intensity of Timber Harvest by County, 2004



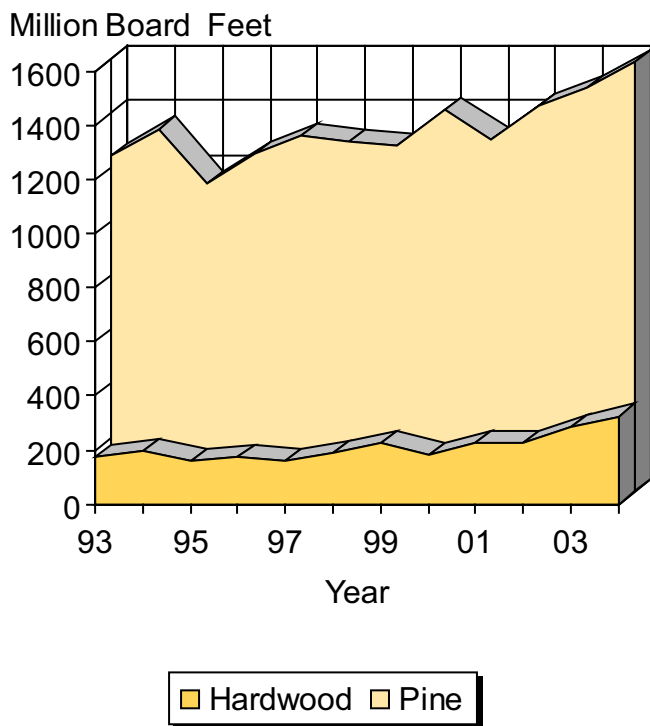


Figure 5. Texas Lumber Production, 1993-2004

### Paper Products

Production of paper and paperboard totaled 2.56 million tons in 2004, up 5.0 percent from 2003. Paper production went to zero in 2004 with the permanent idling of the last paper mill in Texas by the end of 2003. The output of paperboard rose 18.0 percent to 2.56 million tons. There was no market pulp production in Texas in 2004. Table 10 and Figure 7 summarize recent trends in paper product output.

### Treated Wood Products

There was a 24 percent increase in the volume of wood processed by Texas wood treaters in 2004 from the previous year. The total volume treated in 2004 was 54.3 million cubic feet. Among major treated products, lumber accounted for 62.6 percent of the total volume, crossties accounted for 21.1 percent, and utility poles and switch ties each accounted for 6.2 percent and 7.2 percent, respectively. Table 11 contains treated volume by product for 2003 and 2004.

### Primary Mill Residue

Total mill residue, including chips, sawdust, shavings, and bark in primary mills such as sawmills, panel

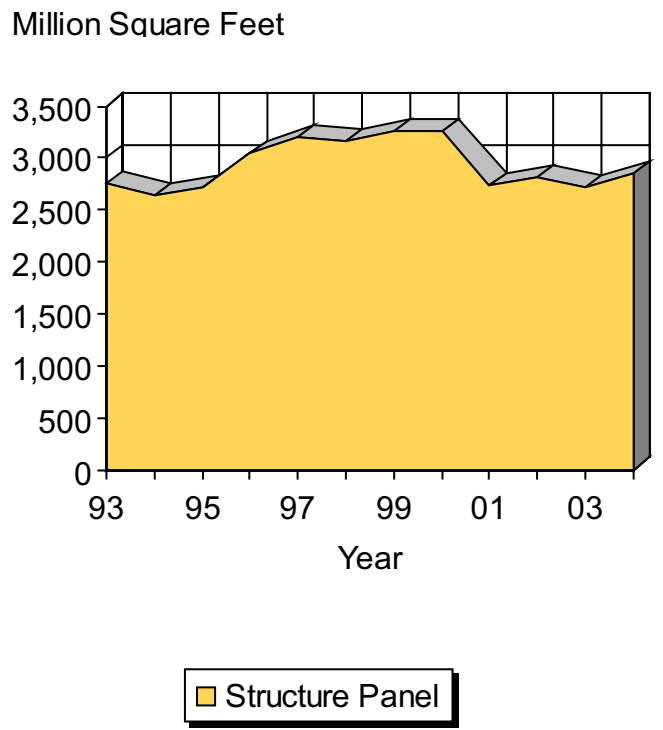


Figure 6. Texas Structural Panel Production, 1993-2004

mills and chip mills in 2004 was 6.38 million short tons, 7.2 percent over 2003 level (Table 12). Eighty one percent of the mill residue was from pine species and 19 percent was from hardwood species IN 2004. Chips accounted for 51.3 percent of mill residue, followed by bark (33.7 percent), sawdust (8.9 percent), and shavings (6.0 percent) (Figure 8).

### Logging Residue

Types of logging residue includes stumps, tops, limbs and unutilized cull trees. Total logging residue produced in 2004 was 109.9 million cubic feet. Logging residue comes from both growing stock and non-growing stock trees. In 2004, 22.9 percent of the logging residue was from growing stock trees, and 77.1 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 2004 (Table 13, Figure 9).

## REFORESTATION ACCOMPLISHMENTS

Accomplishments in reforestation by funding resource and ownership are presented in Table 15. A total of 113,686 acres was planted during the winter 2003/spring

Thousand Tons

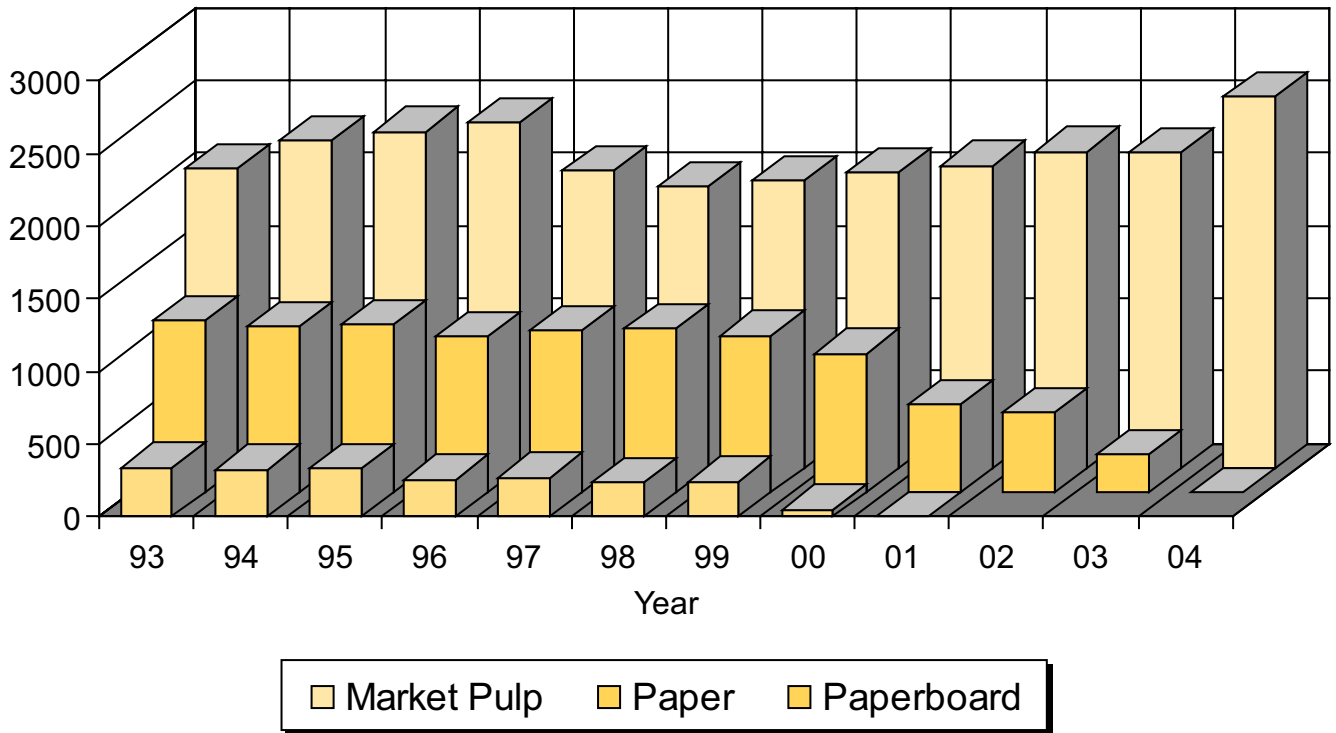
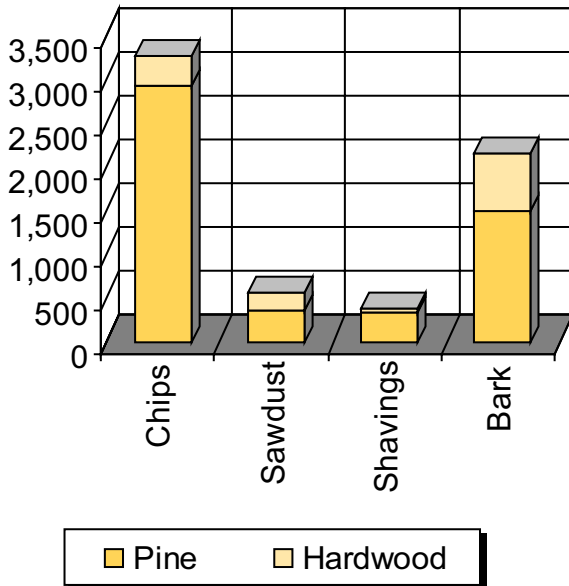


Figure 7. Texas Paper Production, 1993-2004

Thousand Tons



Million Cubic Feet

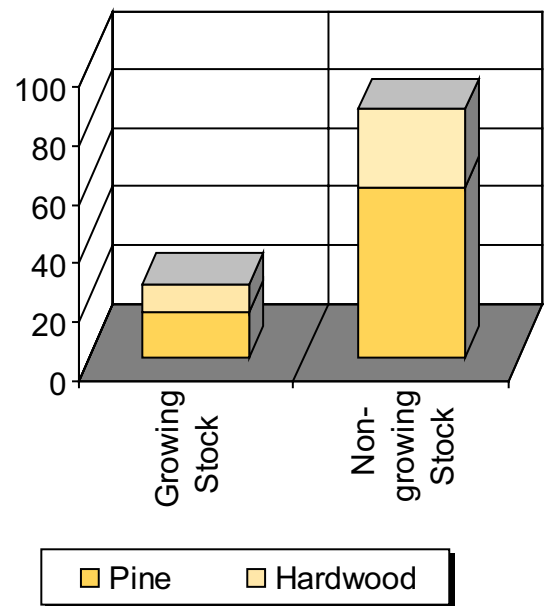


Figure 8. Texas Primary Mill Residue, 2004

Figure 9. Texas Logging Residue, 2004

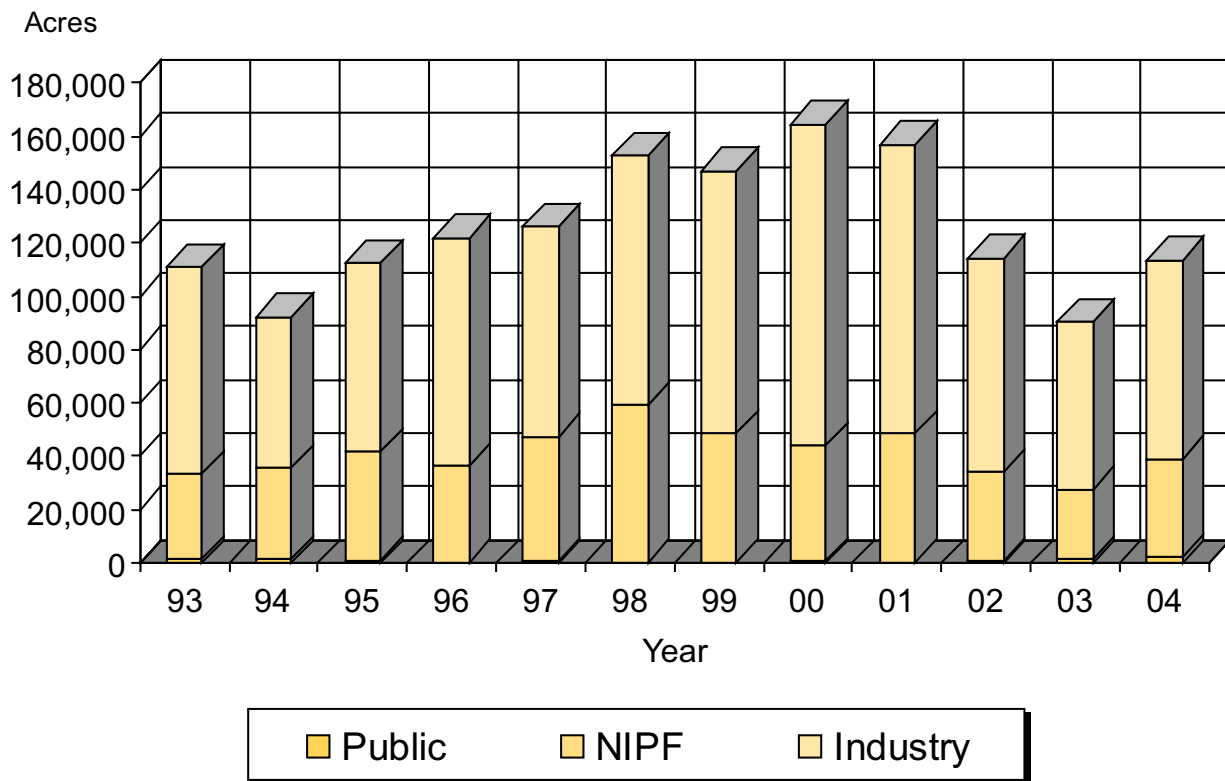


Figure 10. Reforestation Acreage by Ownership in Texas, 1993-2004

2004 planting season. This was a 26.0 percent increase from the previous year. Industrial landowners planted 74,542 acres, up 19.2 percent from the previous year. The nonindustrial private forest (NIPF) landowners planted 36,896 acres, up 40 percent. Public landowners planted 2,248 acres in 2004. The NIPF landowners received \$1,068,810 in cost share assistance for reforestation through federal and industrial cost share programs. Federal programs provided \$945,528 in cost share funds. The Texas Reforestation Foundation provided \$123,282 cost share funding.

## REFERENCES

- <sup>1</sup>Texas Agricultural Statistics 2003 Bulletin (<http://www.nass.usda.gov/tx/mbullpdf.htm>)
- <sup>2</sup><http://www.bea.gov/bea/dn/home/gdp.htm>
- <sup>3</sup><http://www.federalreserve.gov/fomc/default.htm#calendars>
- <sup>4</sup> <http://recenter.tamu.edu/Data/>
- <sup>5</sup> <http://www.window.state.tx.us/m25econ.html>
- <sup>6</sup>Random Lengths, Year Book, 2004
- <sup>7</sup>American Forest and Paper Association (AF & PA)

**Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2004**

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	----- cubic feet -----			----- thousand dollars -----	
Anderson	9,648,827	3,291,375	12,940,202	8,619	15,584
Angelina	22,038,602	2,832,839	24,871,441	19,047	32,689
Bowie	7,131,722	5,437,225	12,568,947	7,386	12,948
Camp	2,288,931	1,103,569	3,392,500	2,472	4,092
Cass	31,489,322	11,992,969	43,482,291	31,824	52,752
Chambers	802,731	391,182	1,193,913	908	1,535
Cherokee	23,733,915	9,411,480	33,145,395	22,995	40,940
Franklin	448,981	952,841	1,401,822	729	1,310
Gregg	2,706,561	910,752	3,617,313	2,586	4,511
Grimes	2,457,290	151,424	2,608,714	2,474	3,887
Hardin	22,546,034	4,899,185	27,445,219	15,026	29,820
Harris	4,692,415	1,572,094	6,264,509	5,586	8,629
Harrison	16,357,395	5,185,455	21,542,850	14,955	25,790
Henderson	1,613,682	1,316,813	2,930,495	1,744	3,306
Houston	19,580,302	3,119,179	22,699,481	14,844	27,174
Jasper	44,071,691	4,268,477	48,340,168	24,699	52,214
Jefferson	627,591	199,350	826,941	646	1,079
Leon	1,781,317	1,232,430	3,013,747	2,224	3,599
Liberty	10,522,315	6,547,361	17,069,676	12,119	20,250
Madison	60,233	32,788	93,021	59	103
Marion	10,661,334	4,445,674	15,107,008	10,628	18,029
Montgomery	9,479,282	1,678,342	11,157,624	10,255	15,989
Morris	1,386,898	1,326,178	2,713,076	1,488	2,707
Nacogdoches	20,769,849	4,029,340	24,799,189	18,614	32,101
Newton	37,384,436	2,972,222	40,356,658	22,909	45,981
Orange	3,419,840	703,418	4,123,258	2,529	4,819
Panola	16,118,321	4,413,294	20,531,615	13,495	24,029
Polk	29,997,866	2,891,437	32,889,303	26,306	44,410
Red River	3,905,524	7,735,831	11,641,355	4,921	9,351
Rusk	11,727,604	5,006,401	16,734,005	13,018	21,880
Sabine	15,883,110	2,199,679	18,082,789	12,038	21,981
San Augustine	21,936,353	6,942,962	28,879,315	19,308	34,475
San Jacinto	19,256,723	1,308,566	20,565,289	13,737	25,267
Shelby	16,762,427	3,807,139	20,569,566	12,177	23,017
Smith	7,281,322	4,541,023	11,822,345	8,724	14,759
Titus	1,343,357	1,907,379	3,250,736	2,200	3,582
Trinity	15,251,394	1,751,779	17,003,173	13,658	22,897
Tyler	31,369,031	4,053,639	35,422,670	21,093	40,795
Upshur	5,699,694	2,946,203	8,645,897	6,431	10,722
Van Zandt	245,769	282,594	528,363	465	750
Walker	8,985,047	566,396	9,551,443	8,992	14,095
Waller	66,769	75,953	142,722	80	143
Wood	2,851,261	1,180,048	4,031,309	2,663	4,685
Other Counties	1,289,098	1,857,676	3,146,774	1,739	3,137
<b>Total Production</b>	<b>517,672,166</b>	<b>133,471,961</b>	<b>651,144,127</b>	<b>438,408</b>	<b>781,812</b>

**Table 2. Sawlog Harvest by County in Texas, 2004**

County	Pine	Hardwood	Total
----- thousand board feet <sup>1</sup> -----			
Anderson	21,911	12,333	34,244
Angelina	68,186	8,316	76,502
Bowie	25,787	4,543	30,330
Camp	9,233	1,658	10,891
Cass	122,252	10,421	132,673
Chambers	2,434	1,639	4,073
Cherokee	52,855	40,406	93,261
Franklin	1,289	1,948	3,237
Gregg	8,986	3,339	12,325
Grimes	5,795	372	6,167
Hardin	40,924	7,540	48,464
Harris	15,643	2,412	18,055
Harrison	51,558	6,879	58,437
Henderson	2,581	5,944	8,525
Houston	43,414	5,586	49,000
Jasper	81,695	5,568	87,263
Jefferson	1,665	570	2,235
Leon	7,045	2,040	9,085
Liberty	22,138	13,609	35,747
Madison	195	40	235
Marion	37,792	6,814	44,606
Montgomery	24,855	2,974	27,829
Morris	3,712	2,132	5,844
Nacogdoches	55,108	14,053	69,161
Newton	80,466	6,127	86,593
Orange	7,855	2,584	10,439
Panola	35,787	5,539	41,326
Polk	69,031	4,820	73,851
Red River	9,169	6,398	15,567
Rusk	33,990	21,598	55,588
Sabine	43,818	4,363	48,181
San Augustine	56,791	17,536	74,327
San Jacinto	35,754	1,881	37,635
Shelby	29,226	3,628	32,854
Smith	26,326	17,170	43,496
Titus	6,995	3,950	10,945
Trinity	38,029	3,441	41,470
Tyler	64,109	6,581	70,690
Upshur	19,362	8,119	27,481
Van Zandt	1,051	1,677	2,728
Walker	23,026	415	23,441
Waller	70	129	199
Wood	8,735	2,354	11,089
Other Counties	1,183	4,238	5,421
<b>Total Production</b>	<b>1,297,826</b>	<b>283,684</b>	<b>1,581,510</b>

<sup>1</sup>International ¼-inch rule.

**Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2004**

County	Pine	Hardwood	Total
----- cubic feet -----			
Anderson	4,336,934	0	4,336,934
Angelina	6,825,316	0	6,825,316
Bowie	1,334,666	0	1,334,666
Camp	713,810	0	713,810
Cass	6,669,526	0	6,669,526
Chambers	111,966	0	111,966
Cherokee	10,690,990	0	10,690,990
Franklin	123,314	0	123,314
Gregg	1,053,827	0	1,053,827
Grimes	1,330,970	0	1,330,970
Hardin	5,723,980	0	5,723,980
Harris	1,947,292	0	1,947,292
Harrison	6,735,684	0	6,735,684
Henderson	1,010,867	0	1,010,867
Houston	7,955,943	0	7,955,943
Jasper	11,250,865	0	11,250,865
Jefferson	233,765	0	233,765
Leon	546,006	0	546,006
Liberty	4,878,161	0	4,878,161
Madison	27,652	0	27,652
Marion	2,246,159	0	2,246,159
Montgomery	4,630,244	0	4,630,244
Morris	526,147	0	526,147
Nacogdoches	7,561,113	0	7,561,113
Newton	10,074,242	0	10,074,242
Orange	347,736	0	347,736
Panola	6,192,581	0	6,192,581
Polk	16,472,392	0	16,472,392
Red River	1,037,720	0	1,037,720
Rusk	5,054,182	0	5,054,182
Sabine	4,343,033	0	4,343,033
San Augustine	6,678,700	0	6,678,700
San Jacinto	8,826,189	0	8,826,189
Shelby	5,841,669	0	5,841,669
Smith	1,813,790	0	1,813,790
Titus	174,389	0	174,389
Trinity	8,067,263	0	8,067,263
Tyler	10,454,260	0	10,454,260
Upshur	2,366,621	0	2,366,621
Van Zandt	31,177	0	31,177
Walker	4,563,383	0	4,563,383
Waller	46,431	0	46,431
Wood	1,138,776	0	1,138,776
Other Counties	457,093	0	457,093
Total Production	182,446,824	0	182,446,824



**Table 4. Pulpwood Roundwood Harvest by County in Texas, 2004**

County	Pine	Hardwood	Total
	----- cords -----		
Anderson	21,689	15,289	36,978
Angelina	50,087	17,978	68,065
Bowie	19,563	58,442	78,005
Camp	927	10,319	11,246
Cass	60,533	128,067	188,600
Chambers	3,657	1,454	5,111
Cherokee	53,252	32,942	86,194
Franklin	1,441	7,827	9,268
Gregg	2,421	4,385	6,806
Grimes	2,308	1,113	3,421
Hardin	125,784	45,434	171,218
Harris	2,585	14,595	17,180
Harrison	15,467	50,398	65,865
Henderson	2,277	4,000	6,277
Houston	56,630	27,280	83,910
Jasper	238,323	41,684	280,007
Jefferson	1,530	1,297	2,827
Leon	1,152	11,129	12,281
Liberty	25,378	53,314	78,692
Madison	12	326	338
Marion	26,947	41,287	68,234
Montgomery	10,124	14,745	24,869
Morris	3,198	12,108	15,306
Nacogdoches	51,553	20,908	72,461
Newton	172,131	24,309	196,440
Orange	22,208	3,376	25,584
Panola	50,701	43,555	94,256
Polk	28,834	26,039	54,873
Red River	16,706	83,286	99,992
Rusk	14,366	17,305	31,671
Sabine	54,781	18,350	73,131
San Augustine	74,098	50,027	124,125
San Jacinto	57,221	12,414	69,635
Shelby	75,686	39,984	115,670
Smith	14,816	20,770	35,586
Titus	433	15,562	15,995
Trinity	12,588	14,684	27,272
Tyler	128,678	36,875	165,553
Upshur	2,401	19,808	22,209
Van Zandt	546	17	563
Walker	8,508	6,210	14,718
Waller	111	679	790
Wood	3,661	9,816	13,477
Other Counties	176	14,337	14,513
<b>Total Production</b>	<b>1,515,488</b>	<b>1,073,724</b>	<b>2,589,212</b>

**Table 5. Other Roundwood Harvest by County in Texas, 2004<sup>1</sup>**

County	Pine	Hardwood	Total
	----- cubic feet -----		
Anderson	3,337	0	3,337
Angelina	103,337	0	103,337
Bowie	32,400	0	32,400
Camp	3,360	0	3,360
Cass	99,599	0	99,599
Chambers	0	0	0
Cherokee	161,787	0	161,787
Franklin	0	0	0
Gregg	0	0	0
Grimes	0	0	0
Hardin	0	0	0
Harris	0	0	0
Harrison	11,321	0	11,321
Henderson	0	0	0
Houston	0	0	0
Jasper	274,338	0	274,338
Jefferson	0	0	0
Leon	0	0	0
Liberty	0	0	0
Madison	0	0	0
Marion	106,409	0	106,409
Montgomery	0	0	0
Morris	0	0	0
Nacogdoches	100,000	0	100,000
Newton	324,338	0	324,338
Orange	0	0	0
Panola	17,964	0	17,964
Polk	0	0	0
Red River	28,350	0	28,350
Rusk	0	0	0
Sabine	0	0	0
San Augustine	50,000	0	50,000
San Jacinto	0	0	0
Shelby	52,791	0	52,791
Smith	0	0	0
Titus	0	0	0
Trinity	0	0	0
Tyler	100,000	0	100,000
Upshur	0	0	0
Van Zandt	0	0	0
Walker	0	0	0
Waller	0	0	0
Wood	0	0	0
Other Counties	625,984	0	625,984
Total Production	2,095,315	0	2,095,315

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

**Table 6. Timber Stumpage Price in East Texas by Product, 1994-2004**

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	--- \$/MBF-Doyle ---		--- \$/cord ---		\$/cord	\$/ton
1994	382.21	93.18	22.47	15.56	50.30	42.68
1995	438.42	105.17	27.26	28.65	63.15	65.72
1996	395.46	88.28	25.25	10.78	59.18	77.33
1997	441.75	132.20	33.22	11.71	73.39	96.36
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

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, 2004**

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>	–	228.5	–	343.3	
Sawlogs		192.87	211.7	278.70	305.9	
Chip-n-Saw		83.80	16.8	187.06	37.5	
Veneer/Panel Roundwood	m cu.ft.	–	115.9	–	221.7	
Veneer Logs	m cu.ft.	1,190.00	*	1,720.00	*	
Small Roundwood	m cu.ft.	180.00	*	800.00	*	
Pulpwood	cords	14.90	22.6	64.82	98.2	
Others	m cu.ft.	–	2.8	–	4.0	
All pine products			369.8		667.3	
HARDWOOD						
Sawlogs	m bd.ft. <sup>3</sup>	116.04	32.9	205.01	58.2	
Veneer/Panel Roundwood	m cu.ft.	–	0.0	–	0.0	
Veneer Logs	m cu.ft.	690.00	0.0	1,220.00	0.0	
Panel Roundwood	m cu.ft.	800.00	0.0	470.00	0.0	
Pulpwood	cords	15.85	17.0	37.24	40.0	
All hardwood products			49.9		98.1	
All products			419.7		765.4	

<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, 2004**

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
<b>PINE</b>						
Sawlogs	m bd.ft. <sup>1</sup>	61,307	1,172,618	125,208	1,233,925	1,297,826
Veneer/Panel Roundwood	m cu.ft.	7,301	163,592	18,855	170,893	182,447
Pulpwood	cords	269,099	1,134,907	380,581	1,404,006	1,515,488
Others	m cu.ft.	3,549	1,850	246	5,399	2,095
All pine products	m cu.ft.	42,584	447,449	70,223	490,033	517,672
<b>HARDWOOD</b>						
Sawlogs	m bd.ft. <sup>1</sup>	10,855	282,059	1,625	292,914	283,684
Veneer/Panel Roundwood	m cu.ft.	0	0	0	0	0
Pulpwood	cords	253,866	916,896	156,828	1,170,762	1,073,724
All hardwood products	m cu.ft.	22,130	120,653	12,819	142,783	133,472
<b>TOTAL</b>						
Sawlogs	m bd.ft. <sup>1</sup>	72,162	1,454,677	126,833	1,526,839	1,581,510
Veneer/Panel Roundwood	m cu.ft.	7,301	163,592	18,855	170,893	182,447
Pulpwood	cords	522,965	2,051,803	537,409	2,574,768	2,589,212
Posts, poles, pilings	m cu.ft.	3,549	1,850	246	5,399	2,095
All products	m cu.ft.	64,714	568,102	83,042	632,816	651,144

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

**Table 9. Texas Industrial Roundwood Products, 1994-2004**

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	----- m. bd. ft -----			m. sq. ft.
1994	1,340,882	195,693	1,536,575	2,632,833
1995	1,139,462	159,831	1,299,293	2,721,487
1996	1,248,627	175,570	1,424,196	3,042,736
1997	1,316,762	160,553	1,477,315	3,200,317
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

**Table 10. Texas Pulp, Paper, and Paperboard Production, 1994-2004**

Year	Paper Products			Market Pulp
	Paper	Paperboard <sup>1</sup>	Total	
	----- tons -----			
1994	1,139,411	2,256,722	3,396,133	323,810
1995	1,159,677	2,317,212	3,476,889	335,504
1996	1,071,015	2,376,486	3,447,501	255,141
1997	1,116,018	2,052,153	3,168,171	270,235
1998	1,126,648	1,933,906	2,925,856	230,155
1999	1,079,397	1,979,592	3,058,989	242,113
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

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

**Table 11. Products Treated by Texas Wood Preserving Plants, 2003-2004**

Product	Volume by Specific Unit			Volume by Cubic Feet	
	Unit of Measure	2003	2004	2003	2004
Utility poles	number	207,845	201,553	3,500,215	3,394,254
Constr. poles	number	4,910	7,703	14,730	23,108
Piling	m lin.ft.	40,026	40,051	19,464	19,476
Fence posts	number	1,947,612	1,448,599	1,714,584	1,275,277
Crossties	number	2,426,481	3,110,481	8,956,363	11,481,070
Switch ties	m bd.ft.	46,198	39,189	4,590,459	3,894,041
Cross arms	number	0	0	0	0
Lumber	m bd.ft.	285,634	392,568	24,750,271	34,016,204
Plywood/OSB	m sq.ft.	8,890	7,707	277,825	240,854
Other	cu.ft.	0	0	0	0
<b>Total</b>	cu.ft.	–	–	43,823,910	54,344,284

**Table 12. Texas Primary Mill Residue, 2004<sup>1</sup>**

Residue Type	Pine	Hardwood	Total
	----- tons -----		
Chips <sup>2</sup>	2,918,966	353,883	3,272,849
Sawdust	365,955	204,538	570,493
Shavings	350,044	35,713	385,757
Bark <sup>3</sup>	1,506,728	641,241	2,147,969
<b>Total</b>	<b>5,141,693</b>	<b>1,235,374</b>	<b>6,377,067</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, 2004**

Product	Industrial Roundwood			Residue			Total Volume		
	Pine	Hardwood	Total	Pine	Hardwood	Total	Pine	Hardwood	Total
Growing Stock	----- million cubic feet -----			----- million cubic feet -----			----- million cubic feet -----		
Sawtimber	288.2	46.6	334.8	13.7	6.0	19.7	301.9	52.6	354.5
Poletimber	204.8	80.1	284.9	1.9	3.6	5.4	206.7	83.6	290.4
Sub-total	493.0	126.7	619.7	15.6	9.5	25.1	508.6	136.2	644.8
Non-growing Stock									
Sawtimber	5.5	1.0	6.5	32.9	10.2	43.1	38.4	11.2	49.6
Poletimber	19.2	5.8	6.5	25.2	16.6	41.7	44.3	22.4	66.7
Sub-total	24.6	6.8	31.4	58.1	26.7	84.8	82.7	33.6	116.3
All									
Sawtimber	293.7	47.6	341.3	46.6	16.2	62.8	340.3	63.7	404.0
Poletimber	224.0	85.9	309.9	27.0	20.1	47.2	251.0	106.0	357.0
Total	517.7	133.5	651.1	73.7	36.3	109.9	591.3	169.7	761.1

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 wood utilization rates from Texas 2003 Wood Utilization Study.

**Table 14. Removals of Industrial Roundwood and Growing Stock in East Texas, 1992-2004**

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	655.3
1995	523.5	515.3	143.1	144.8	666.6	660.1
1996	543.5	535.0	116.5	117.9	660.0	652.9
1997	557.5	548.7	118.4	119.8	675.9	668.5
1998	542.4	532.0	127.9	129.0	670.3	661.0
1999	541.4	533.7	157.9	158.1	699.3	691.8
2000	508.9	502.9	116.7	118.1	625.6	620.9
2001	488.5	476.6	111.6	113.8	600.0	590.4
2002	537.0	527.3	130.6	131.9	667.6	659.2
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

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, 1995-2004**

Year <sup>1</sup>	Nonindustrial Private							Industry <sup>4</sup>	Public	Total	
	Federal Cost Share Programs <sup>2</sup>		Texas Reforestation Foundation (TRF)		All Cost Share Programs		Non-Cost Share <sup>3</sup>	Total Acres	Acres	Acres	Acres
	Acres	Cost Share \$	Acres	Cost Share \$	Acres	Cost Share \$	Acres				
1995	17,414	911,500	10,108	464,645	27,522	1,376,145	13,318	40,840	70,731	974	112,545
1996	17,414	866,500	10,108	441,370	27,522	1,307,870	8,391	35,913	85,680	358	121,951
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

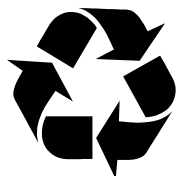
<sup>1</sup> Federal fiscal year. For example, fiscal year 1995 begins on October 1, 1994 and ends on September 30, 1995.

<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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