Texas Forest Resource

Harvest Trends 2003

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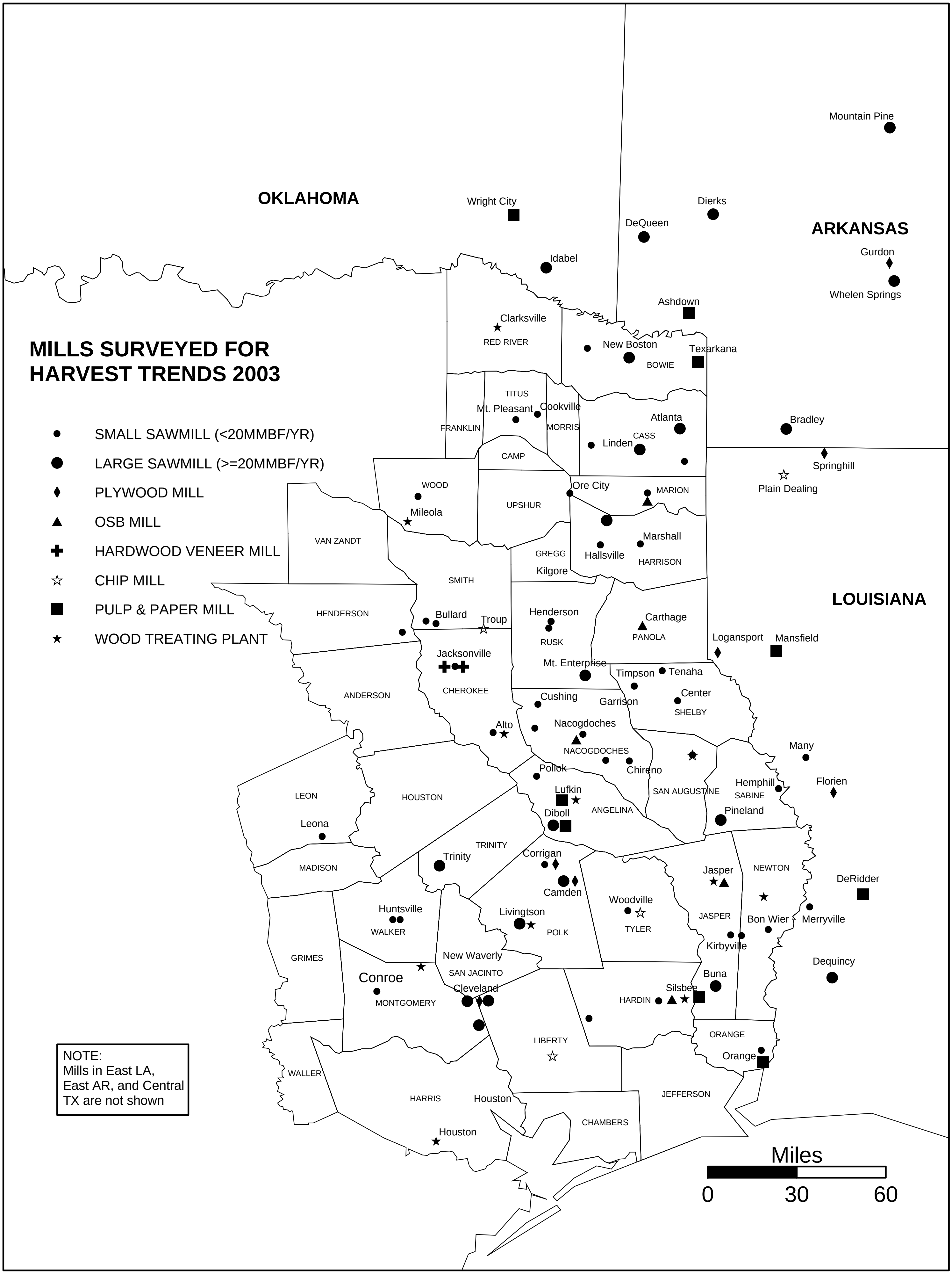
The Texas A&M University System

Publication 165   October 2004


MILLS SURVEYED FOR HARVEST TRENDS 2003
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
OKLAHOMA
ARKANSAS
LOUISIANA
Miles
0
30
60
Mountain Pine
Wright City
Dierks
DeQueen
Gurdon
Whelen Springs
Idabel
Ashdown
Clarksville
RED RIVER
New Boston
BOWIE
Texarkana
TITUS
Mt. Pleasant
Cookville
FRANKLIN
MORRIS
Atlanta
CASS
Linden
Bradley
Springhill
CAMP
Plain Dealing
WOOD
Ore City
MARION
UPSHUR
Mileola
VAN ZANDT
Marshall
GREGG
Hallsville
HARRISON
Kilgore
SMITH
HENDERSON
Bullard
Troup
Henderson
Carthage
RUSK
PANOLA
Logansport
Mansfield
Jacksonville
Mt. Enterprise
Timpson
Tenaha
CHEROKEE
ANDERSON
Cushing
Garrison
Center
SHELBY
Alto
Nacogdoches
NACOGDOCHES
Many
Pollok
Chireno
SAN AUGUSTINE
Hemphill
SABINE
Florien
LEON
HOUSTON
Lufkin
Diboll
ANGELINA
Pineland
Leona
MADISON
TRINITY
Trinity
Corrigan
Jasper
NEWTON
DeRidder
Camden
Woodville
Huntsville
WALKER
Livingston
POLK
TYLER
JASPER
Bon Wier
Merryville
Kirbyville
GRIMES
New Waverly
SAN JACINTO
Conroe
Cleveland
MONTGOMERY
Dequincy
Buna
Silsbee
HARDIN
LIBERTY
ORANGE
Orange
WALLER
HARRIS
Houston
JEFFERSON
CHAMBERS
Houston

HIGHLIGHTS

Texas Forest Resource Harvest Trends 2003

2003 TIMBER REMOVAL

- Total growing stock timber removal was 659.3 million cubic feet in 2003, almost unchanged from last year.
  - Pine removal was up 0.6 percent to 530.2 million cubic feet.
  - Hardwood removal decreased 2.1 percent to 129.1 million cubic feet.
- Harvest of timber for industrial use in the production of wood products was 668.3 million cubic feet.
  - 542.1 million cubic feet of pine was harvested for industrial consumption.
  - 126.1 million cubic feet of hardwood was harvested for industrial consumption.
- The value of timber harvested decreased from last year.
  - Stumpage value decreased 13.2 percent to $412.3 million.
  - Delivered value was down 14.3 percent to $789.0 million.
- Harvest of sawlogs increased 1.6 percent from 2002 to 1,514.5 million board feet.
- Harvest of wood for veneer and structural panel production reduced 6.2 percent to 179.0 million cubic feet from a year ago.
- Pulpwood harvest rose 3.9 percent to 2.97 million cords.
- Texas imported more timber than exported in 2003. The total import from other states was 70.1 million cubic feet while the total export was 67.5 million cubic feet. The net import was 0.4 percent of the total roundwood production (668.3 million cubic feet) in Texas.

PRIMARY FOREST PRODUCTS

- Production of primary wood products included:
  - 1.78 billion board feet of lumber, an increase of 7.7 percent from last year.
  - 2.72 billion square feet of structural panel products, down 3.4 percent from 2002.
  - 2.43 million tons of paper and paperboard, down 11.2 percent from 2002.

Harvest Trends 2003

INTRODUCTION

Forests are vital economic and environmental assets in East Texas. The wood-based industry employed over 95 thousand people in 2000 and was one of the top 10 manufacturing sectors in the state. In 23 of 43 East Texas counties, forest sector was the top two largest manufacturing employers. The value of timber ranked fourth among Texas' top agricultural crops, behind beef, greenhouse and nursery products, and cotton[1].

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 thirty-ninth annual report provides information on the volume and value of timber harvested in East Texas during 2003, and reports the production of primary wood products. Data on timber growth and forest management activities is also presented.

Information for this report was provided by 104 mills in Texas and 26 mills in surrounding states. The Texas Forest Service appreciates the cooperation of these companies, without which this report would not be possible.

2003 ECONOMIC CONDITIONS

The U.S. economy in 2003 continued to recover from a recession in 2001 with a 3.0 percent annual growth for real Gross Domestic Product (GDP)[2]. Quarterly GDP growth rates have been rising through the third quarter: 1.9 percent for first quarter, 4.1 percent for second quarter, 7.4 percent for third quarter, and 4.2 percent for fourth quarter. The historically low interest rates (13 cuts for the Federal Reserve fund rate between January 2001 and June 2003), the tax incentives provided by the Congress, and a host of other factors helped fuel the growth of the economy from the recession. The June 2003 rate cut, from an already low 1 1/4 by 25 basis points to 1 1/4 percent[3], was an important contributing factor to the overall economic recovery and growth.

The record low mortgage rates continued to support a strong housing market in the U.S. The total number of residential housing units authorized by building permits increased 7.4 percent to 1,901.9 thousand units in 2003 from 1,771.6 thousand units in 2002. Single-family building permits increased 9.1 percent, from 1,350.7 thousand units in 2002 to 1,473.0 thousand units in 2003. Multifamily starts grew at an annual rate of 1.9 percent in 2003. The total number of multifamily starts increased from 420.9 thousand units in 2002 to 428.9 thousand units in 2003[4].

The Texas economy continued to improve and grow in 2003. Real Gross State Products (GSP) was up 3.0 percent to 739.1 billion dollars (based on 1996 constant dollar) in 2003 from 2002[5]. The annual growth rate for residential housing building permits in Texas was 9.2 percent in 2003. Total number of building permits in Texas was up from 165.3 thousand units in 2002 to 180.6 thousand units in 2003. Multifamily housing rose 1.6 percent and single-family housing was up 11.9 percent[4].

The national wood product market continued to improve from the low of 2001. Total softwood lumber production in the U.S. in 2002 was 36.6 billion board feet, an increase of 2.2 percent from 35.8 billion board feet in 2002. Of the total softwood lumber production, 48.1 percent was from the U.S. West, 46.0 percent was from the U.S. South, and 5.9 percent was from the rest of the country. The annual softwood lumber production in the three U.S. regions increased 3.3 percent (West), 1.0 percent (South), and 2.1 percent (Others), respectively[6].

The softwood lumber prices in 2003 were on the rise, compared to 2002. The annual average Random Lengths Framing Lumber Composite price increased 2.3 percent in 2003, up from \$304 per thousand board feet (mbf) in 2002 to \$311 per mbf[7].

The 2003 production of structural panel in the U.S., including plywood and oriented strand board (OSB), decreased 1 percent from a year ago. The U.S. produced 28.33 billion square feet (3/8-inch basis) of structural panels in 2003, compared to 28.63 billion square feet in 2002. Production of plywood and OSB changed in opposite directions. Plywood production dropped 3.2 percent to 14.71 billion square feet. OSB production was up 1.4 percent to 13.62 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 U.S. increased to 48.1 percent in 2003, up from 46.9 percent in 2002[8].

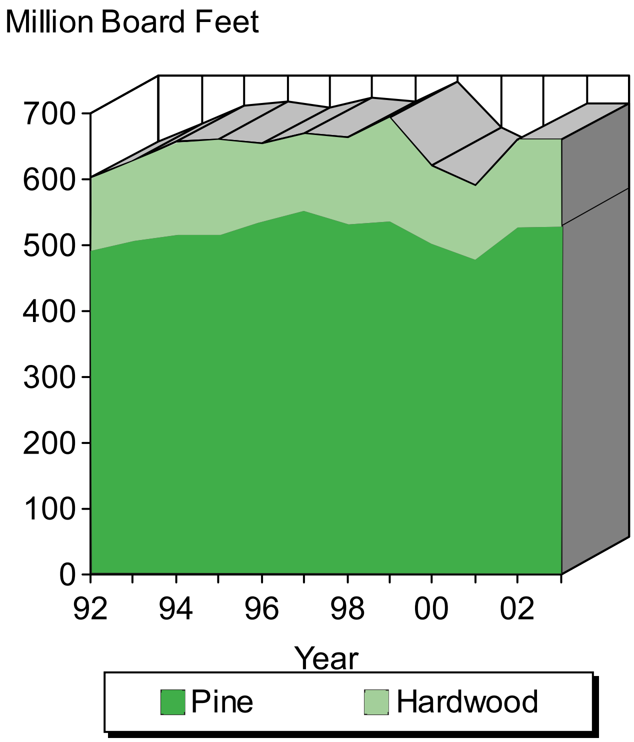


Figure 1. Total Timber Removals, 1992-2003

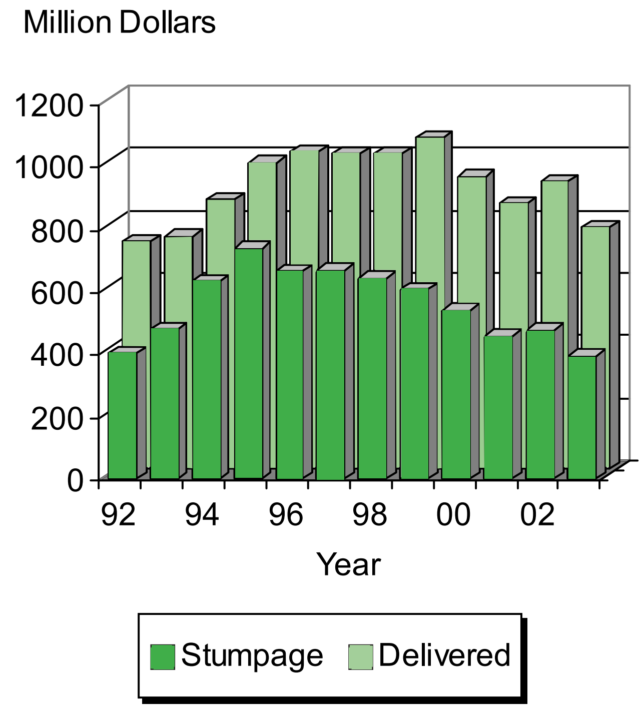


Figure 2. Value of the Timber Harvest, 1992-2003

The average annual Random Lengths Structural Panel Composite price jumped up 48 percent to $367 per thousand square feet (msf) in 2003 from $248 per msf in 2002[7].

The performance of the paper and paperboard sector in the U.S. continued to be lackluster in 2003. Its total production declined 1.5 percent from 89.7 million short tons in 2002 to 88.4 million short tons in 2003. Paper production totaled 40.4 million tons in 2003, down 2.9 percent from 2002. Paperboard production decreased 0.2 percent to 48 million tons. Market pulp production in 2003 was 8.5 million short tons, the same as in 2002. Total wood pulp production was 57.66 million short tons in 2003, down 0.7 percent from last year[9].

STUMPAGE PRICES

According to the *Texas Timber Price Trends* bimonthly timber market report, the average annual pine sawtimber price decreased substantially in 2003 from 2002. It was $289.3 per mbf, Doyle scale, down 13.6 percent from the 2002 average annual price of $334.86. The average annual mixed hardwood sawtimber prices increased 0.5 percent from its 2002 level to $157.81 per mbf in 2003. Pine pulpwood price rebounded to $14.9 per cord from its 2002 price in 2002, up 20.8 percent. Mixed hardwood pulpwood prices increased 1.1 percent to $15.85 per cord in 2003. Table 6 provides historic data on stumpage prices.

TIMBER REMOVALS

Total Removals

Total removal of growing stock in East Texas in 2003, including both pine and hardwood, was almost unchanged from the previous year (Figure 1). The total volume of growing stock removed from the 43-county region was 659.3 million cubic feet in 2003, compared to 659.2 million cubic feet in 2002. Included in the total removal are timber harvested for industrial use and an estimate of logging residue and other timber removals. The growing stock removal in 2003 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, the growing stock removal is comprised of 530.2 million cubic feet of pine and 129.1 million cubic feet of hardwood. Pine removal was down 0.6 percent and hardwood removal declined 2.1 percent from 2002. Figure 3 and Table 14 illustrate the harvest volume by species group by year. This year, we discontinued the growth estimates since the growth figures derived from the Forest

Inventory and Analysis results are not necessarily compatible with the harvest figures from the mill survey. New growth estimates will be developed and released seperately.

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 542.1 and 126.1 million cubic feet for pine and hardwood, respectively. The pine industrial roundwood harvest was up 1.0 percent, and the hardwood roundwood harvest was down 3.4 percent from 2002. The combined harvest was up 0.1 percent to 668.3 million cubic feet. Note that the softwood roundwood harvest in 2003 was even bigger than the removal of softwood growing stock. That was because a part of the industrial roundwood harvest was from non-growing stock trees.

Table 1 lists the harvest of pine and hardwood by county for 2003. Top timber producing counties included Jasper, Polk, Tyler, Angelina, Cass, and Newton.

Figure 4 illustrates the intensity of timber harvest expressed in cubic feet of harvest per acre of timberland. Jasper, Angelina, Tyler, San Augustine, and Polk Counties had the highest relative timber harvesting intensity during 2003.

Value of the Timber Harvest

As Figure 2 illustrated, stumpage value of the East Texas timber harvest decreased 13.2 percent in 2003 from its 2002 level to $412.3 million. The delivered value was down 14.3 percent to $789.0 million. Pine timber accounted for 88.2 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 was up by 1.3 percent to 1.51 billion board feet, which accounted for 37 percent of the 2003 total timber harvest. The pine sawlog cut totaled 1.23 billion board feet, down 3.9 percent while the hardwood sawlog harvest surged 36.7 percent to 288.1 million board feet. Cass, Jasper, Tyler, Polk, and Angelina counties were the top producers of sawlogs. Table 2 lists sawlog harvest by county.

Veneer and Panel Roundwood

Harvest of timber for production of structural panels, including both plywood and OSB and hardwood veneer, was 179.0 million cubic feet in 2003. This was 26.8 percent of the total timber harvest in 2003, a 6.2 percent decrease from 2002. Almost all of the veneer and panel roundwood were pine. Polk, Tyler, Harrison, Trinity, Panola, and Angelina 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 rose 3.6 percent from 2002 to 2.97 million cords. The roundwood pulpwood harvest accounted for 36 percent of the total timber harvest in 2003. Pine pulpwood made up 67.3 percent of the total pulpwood production in 2003. Jasper, Tyler, Polk, and Newton 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 2.4 million cubic feet in 2003. Table 5 lists harvest of these products by county.

Import-Export Trends

Texas was a net importer of timber products from surrounding states in 2003. Net imports of roundwood were 2.6 million cubic feet, or about 0.4 percent of the total industrial wood production in Texas. Exports of roundwood from Texas were 67.5 million cubic feet, while imports totaled 70.1 million cubic feet in 2003. Table 8 details the interstate movement of roundwood.

Texas mills utilized 89.9 percent of the timber harvested in the state in 2003. The remainder was mostly processed by mills in Arkansas, Louisiana, and Oklahoma. Details are listed in Table 8.

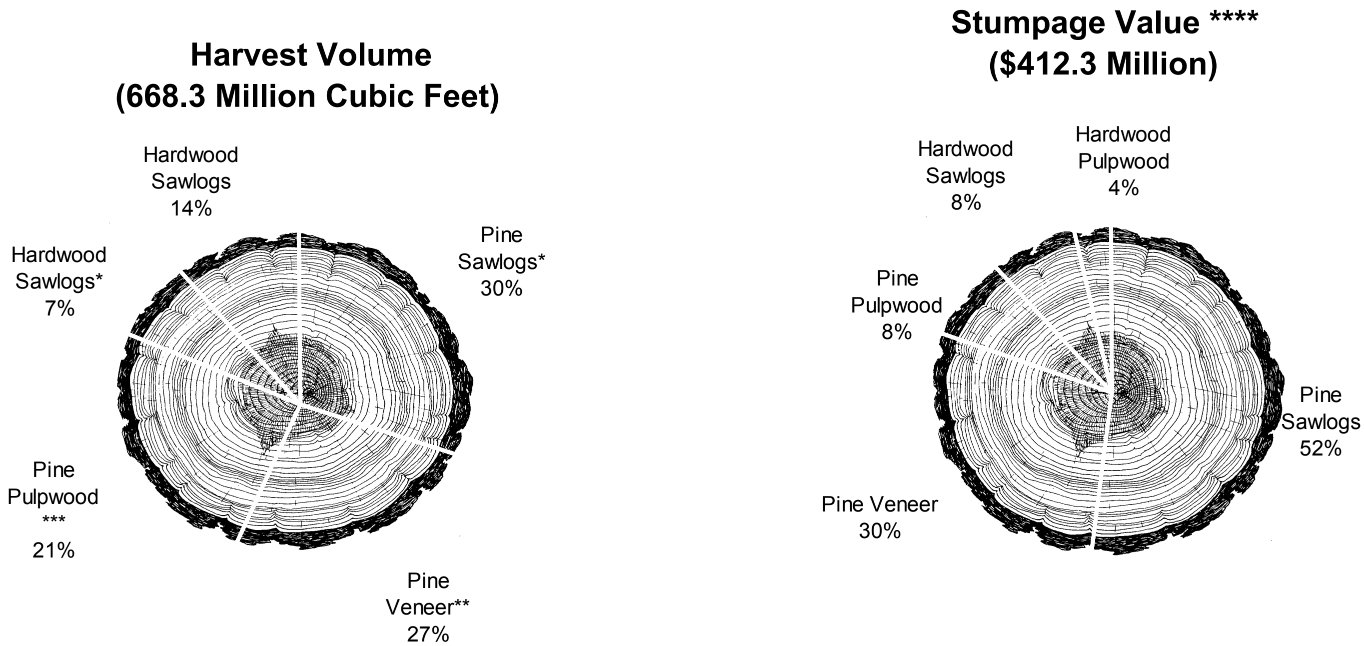
PRODUCTION OF FOREST PRODUCTS

Lumber

Texas sawmills produced 1.75 billion board feet of lumber in 2003, an increase of 7.7 percent over 2002. Production of pine lumber rose 4.5 percent to 1.49 billion board feet in 2003 and hardwood lumber production soared 28.2 percent to 287.1 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 down 3.4 percent to 2.72 billion square feet (3/8-inch basis) in 2003. Table 9 and Figure 6 show the recent trend in structural panel output.



*** 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, 2003

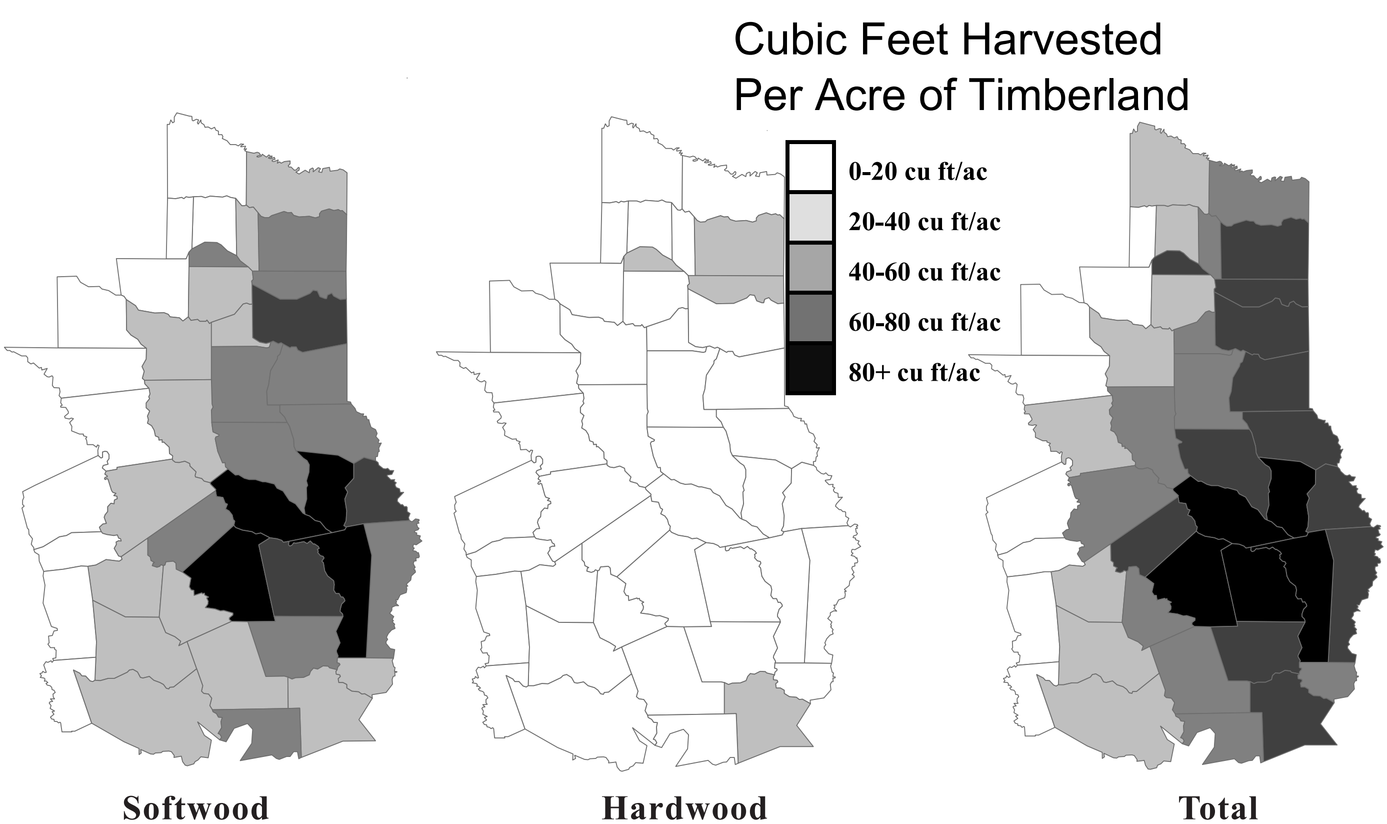


Figure 4. Intensity of Timber Harvest by County, 2003

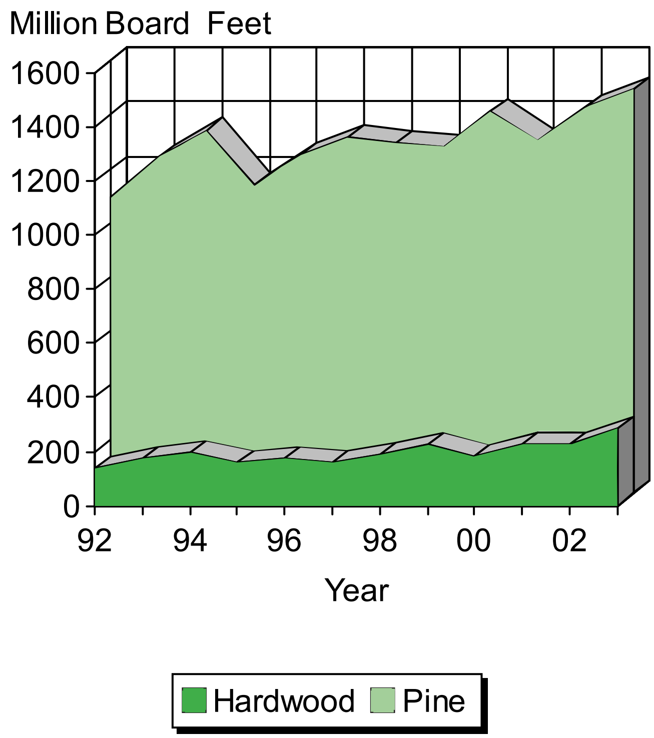


Figure 5. Texas Lumber Production, 1992-2003

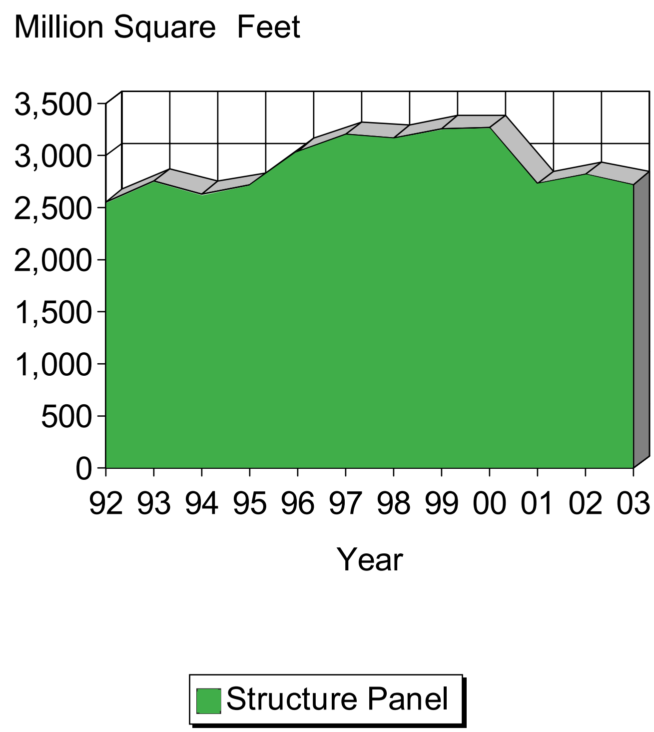


Figure 6. Texas Structural Panel Production, 1992-2003

Paper Products

Production of paper and paperboard totaled 2.43 million tons in 2003, declined11.2 percent from 2002. Paper production plummeted 53.7 percent to 0.26 million tons due to the closure of a major paper mill by the end of 2002. The output of paperboard decreased slightly by 0.4 percent to 2.17 million tons. There was no market pulp production in Texas in 2003. Table 10 and Figure 7 summarize recent trends in paper product output.

Primary Mill Residue

Total mill residue, including chips, sawdust, shavings, and bark in primary mills such as sawmills, panel mills and chip mills in 2003 was 9.54 million short tons, a slight decrease of 0.5 percent less than 2002 (Table 11). Sixty six percent of the residue was from pine species and 34 percent was from hardwood species. Barks accounted for 51.5 percent of mill residue, followed by chips (33.6 percent), sawdust (11.4 percent), and shavings (3.5 percent) (Figure 8).

Treated Wood Products

There was a 27 percent boost in the volume of wood processed by Texas wood treaters in 2003 from the previous year. The total volume treated in 2003 was 46.9 million cubic feet. Among major treated products, lumber accounted for 52.7 percent of the total volume, crossties accounted for 19.1 percent, utility poles and switch ties each accounted for 7.5 percent and 9.8 percent, respectively. Table 12 contains treated volume by product for 2002 and 2003.

REFORESTATION ACCOMPLISHMENTS

Accomplishments in reforestation by funding resource and ownership are presented in Table 15. A total of 90,193 acres was planted during the winter 2002/spring 2003 planting season. This was a 21.2 percent drop from the previous year. Industrial landowners planted 62,557 acres, down 22.2 percent from the previous year. The non-industrial private forest (NIPF) landowners planted 26,358 acres, down 20.5 percent. Public landowners planted 1,278 acres in 2003. The declining pine stumpage prices and the divestiture of about 1.5 million acres of industrial timberland were among the important factors leading to the declined tree planting. The NIPF landowners received $1,146,001 in cost share assistance for reforestation through federal and industrial cost share programs. Federal programs provided $907,098 in cost share funds. The Texas Reforestation Foundation provided $238,903 cost share funding.

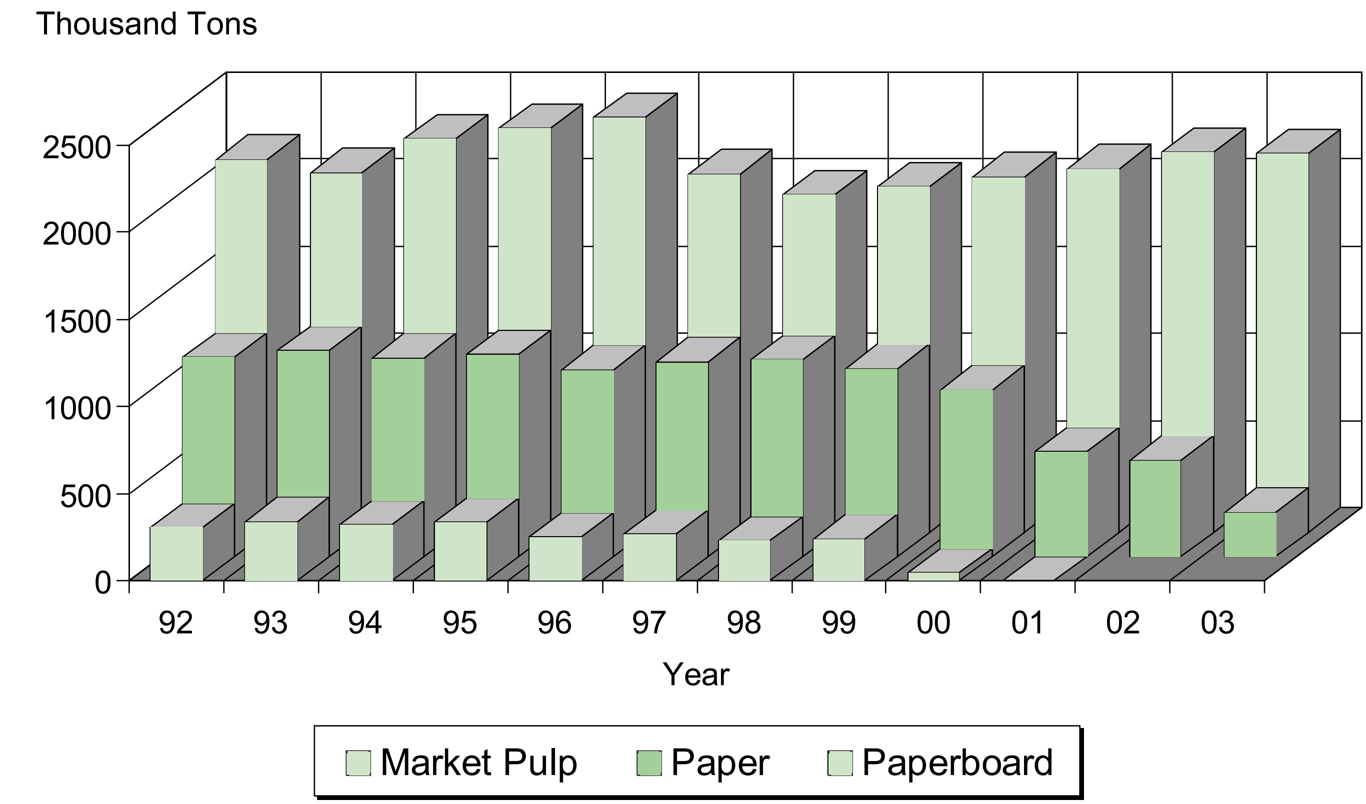


Figure 7. Texas Paper Production, 1992-2003

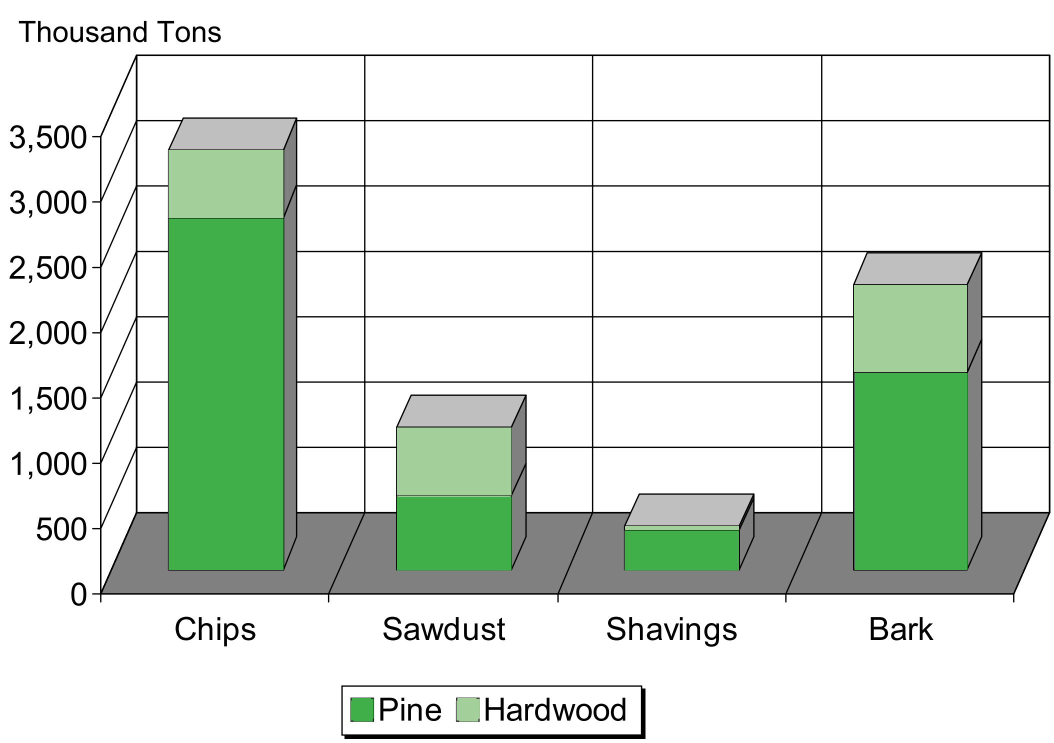


Figure 8. Texas Primary Mill Residue, 2003

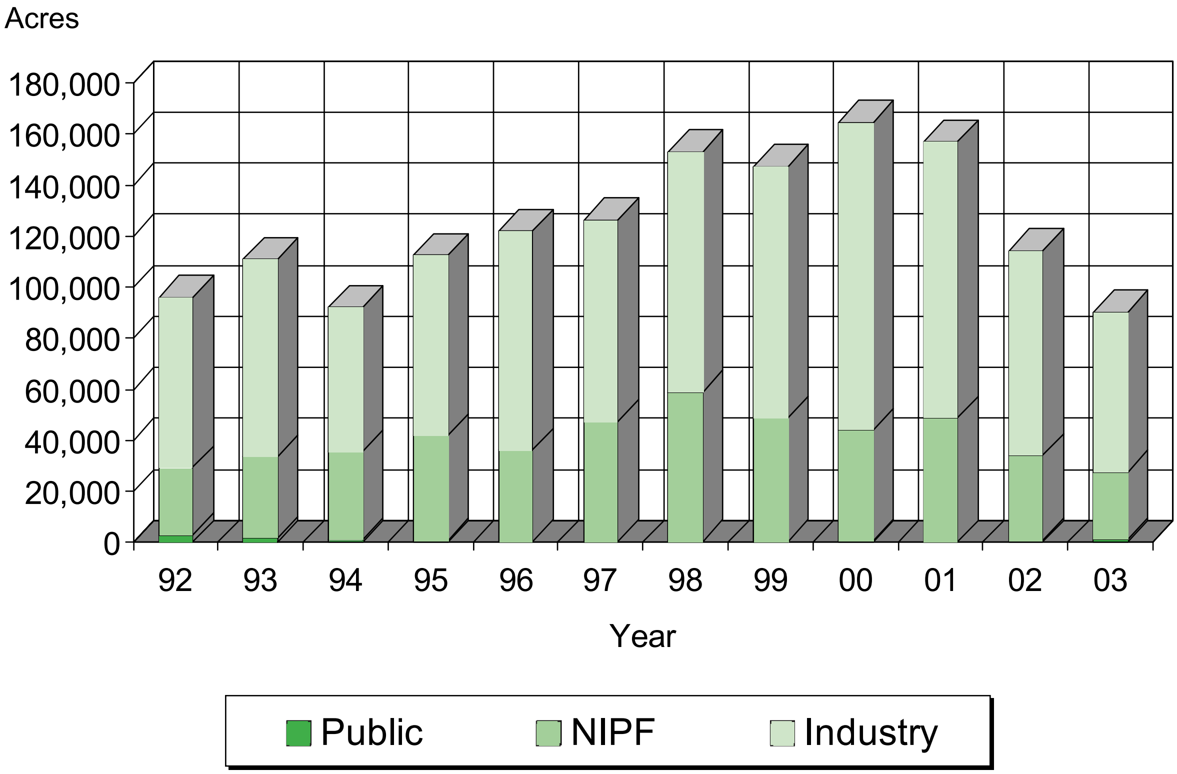


Figure 9. Reforestation Acreage by Ownership in Texas, 1992-2003

REFERENCES

[1]Texas Agricultural Statistics 2002 Bulletin (http://www.nass.usda.gov/tx/mbullpdf.htm)
[2]http://www.bea.gov/bea/dn/home/gdp.htm
[3]http://www.federalreserve.gov/fomc/default.htm#calendars
[4] http://recenter.tamu.edu/Data/
[5] http://www.window.state.tx.us/m25econ.html
[6]Western Wood Products Association (WWPA)
[7]Random Lengths, Year Book, 2002
[8]The Engeneered Wood Association (APA)
[9]American Forest and Paper Association (AF & PA)

Table 1. Total Industrial Timber Harvest Volume and Value by County in Texas, 2003

County	Volume Harvested			Value of Harvest	
	Pine	Hardwood	Total	Stumpage Value	Delivered Value
	– – – – – – – – – – cubic feet – – – – – – – – – –			– – – – – thousand dollars – – – – –	
Anderson	6,642,957	2,632,149	9,275,106	6,187	11,698
Angelina	31,423,886	3,706,293	35,130,179	21,432	41,806
Bowie	8,706,228	6,167,470	14,873,698	9,581	16,909
Camp	2,097,563	1,058,656	3,156,219	2,218	3,837
Cass	23,502,424	10,733,070	34,235,494	23,016	40,657
Chambers	1,423,866	89,139	1,513,005	837	1,696
Cherokee	13,858,758	6,490,709	20,349,467	13,974	26,327
Franklin	187,726	385,019	572,745	259	517
Gregg	2,860,268	1,509,670	4,369,938	3,167	5,887
Grimes	1,312,620	272,980	1,585,600	1,557	2,460
Hardin	23,874,061	3,588,587	27,462,648	14,433	29,748
Harris	4,413,180	1,649,385	6,062,565	5,015	8,251
Harrison	23,438,056	4,614,159	28,052,215	19,234	34,743
Henderson	1,335,715	1,084,758	2,420,473	1,687	3,305
Houston	15,115,429	3,530,222	18,645,651	11,784	22,007
Jasper	44,735,037	4,858,405	49,593,442	24,742	53,160
Jefferson	2,623,591	1,614,045	4,237,636	1,778	4,518
Leon	1,709,897	998,989	2,708,886	2,049	3,597
Liberty	10,599,618	3,917,983	14,517,601	7,926	15,772
Madison	6,927	19,360	26,287	12	21
Marion	11,652,079	4,428,524	16,080,603	11,273	19,934
Montgomery	10,693,529	1,804,541	12,498,070	10,823	17,872
Morris	2,692,448	1,095,477	3,787,925	3,156	5,249
Nacogdoches	23,436,921	4,110,527	27,547,448	17,968	34,071
Newton	29,185,213	3,673,796	32,859,009	17,795	36,611
Orange	4,058,266	1,016,521	5,074,787	1,892	4,575
Panola	19,408,940	5,324,072	24,733,012	14,721	27,818
Polk	44,789,740	3,718,292	48,508,032	31,334	59,093
Red River	3,567,822	5,222,402	8,790,224	4,446	8,377
Rusk	15,356,962	5,018,943	20,375,905	12,562	24,718
Sabine	16,725,690	1,573,322	18,299,012	8,644	18,907
San Augustine	24,555,566	1,771,714	26,327,280	16,601	31,524
San Jacinto	10,497,751	1,065,952	11,563,703	10,680	17,375
Shelby	18,450,201	3,097,264	21,547,465	11,198	23,014
Smith	7,519,073	2,933,343	10,452,416	7,494	13,724
Titus	615,228	1,769,028	2,384,256	983	1,959
Trinity	19,271,018	3,680,388	22,951,406	14,496	28,088
Tyler	38,811,872	9,435,908	48,247,780	25,753	54,535
Upshur	4,365,867	2,045,755	6,411,622	4,039	7,534
Van Zandt	240,149	759,876	1,000,025	488	922
Walker	11,612,776	648,853	12,261,629	11,078	18,208
Waller	274,255	4,846	279,101	308	474
Wood	2,569,936	1,092,057	3,661,993	1,971	3,850
Other Counties	1,926,929	1,906,303	3,833,232	1,701	3,664
Total Production	542,146,038	126,118,752	668,264,790	412,292	789,011

Table 2. Sawlog Harvest by County in Texas, 2003

County	Pine	Hardwood	Total
	– – – – – – – – – – thousand board feet[1] – – – – – – – – – – – – – – –		
Anderson	15,686	9,639	25,325
Angelina	72,112	10,811	82,923
Bowie	35,962	7,359	43,321
Camp	8,375	1,311	9,686
Cass	89,709	12,689	102,398
Chambers	2,515	96	2,611
Cherokee	33,960	26,188	60,148
Franklin	616	579	1,195
Gregg	9,710	6,689	16,399
Grimes	3,732	522	4,254
Hardin	48,826	5,499	54,325
Harris	13,012	2,164	15,176
Harrison	65,171	6,607	71,778
Henderson	3,669	5,677	9,346
Houston	32,336	5,067	37,403
Jasper	83,019	12,602	95,621
Jefferson	1,216	8,410	9,626
Leon	6,192	2,954	9,146
Liberty	15,561	7,332	22,893
Madison	29	0	29
Marion	41,465	7,523	48,988
Montgomery	30,303	2,657	32,960
Morris	13,746	2,311	16,057
Nacogdoches	54,184	13,854	68,038
Newton	61,309	9,053	70,362
Orange	5,093	1,065	6,158
Panola	39,808	5,027	44,835
Polk	79,427	3,622	83,049
Red River	12,121	6,201	18,322
Rusk	31,946	19,788	51,734
Sabine	30,156	1,574	31,730
San Augustine	60,644	825	61,469
San Jacinto	29,345	1,739	31,084
Shelby	25,299	3,530	28,829
Smith	24,756	10,968	35,724
Titus	2,144	2,045	4,189
Trinity	37,196	13,784	50,980
Tyler	54,492	39,028	93,520
Upshur	12,201	4,508	16,709
Van Zandt	982	1,133	2,115
Walker	29,033	412	29,445
Waller	708	6	714
Wood	6,407	1,244	7,651
Other Counties	2,223	3,987	6,210
Total Production	1,226,396	288,079	1,514,475

[1]International ¼-inch rule.

Table 3. Veneer and Panel Roundwood Harvest by County in Texas, 2003

County	Pine	Hardwood	Total
		cubic feet	
Anderson	2,709,672	0	2,709,672
Angelina	8,958,545	0	8,958,545
Bowie	1,224,366	0	1,224,366
Camp	688,292	0	688,292
Cass	5,228,048	16,874	5,244,922
Chambers	156,308	0	156,308
Cherokee	4,547,107	0	4,547,107
Franklin	30,121	0	30,121
Gregg	1,187,533	0	1,187,533
Grimes	667,242	0	667,242
Hardin	6,097,749	0	6,097,749
Harris	1,721,873	0	1,721,873
Harrison	11,576,505	0	11,576,505
Henderson	460,063	0	460,063
Houston	6,341,337	0	6,341,337
Jasper	5,859,293	0	5,859,293
Jefferson	2,383,304	0	2,383,304
Leon	481,806	0	481,806
Liberty	2,421,000	0	2,421,000
Madison	2,226	0	2,226
Marion	3,398,876	750	3,399,626
Montgomery	3,608,618	0	3,608,618
Morris	359,561	0	359,561
Nacogdoches	7,850,183	0	7,850,183
Newton	5,545,671	0	5,545,671
Orange	3,129,414	0	3,129,414
Panola	9,015,919	0	9,015,919
Polk	18,953,761	0	18,953,761
Red River	557,078	728	557,806
Rusk	7,367,536	0	7,367,536
Sabine	4,663,798	0	4,663,798
San Augustine	7,773,361	0	7,773,361
San Jacinto	4,156,987	0	4,156,987
Shelby	5,641,155	0	5,641,155
Smith	2,707,790	0	2,707,790
Titus	233,585	0	233,585
Trinity	9,434,108	0	9,434,108
Tyler	12,232,957	0	12,232,957
Upshur	2,274,888	0	2,274,888
Van Zandt	66,224	671	66,895
Walker	5,344,784	0	5,344,784
Waller	143,936	0	143,936
Wood	1,401,840	1,277	1,403,117
Other Counties	330,664	0	330,664
Total Production	178,935,084	20,300	178,955,384

Table 4. Pulpwood Roundwood Harvest by County in Texas, 2003			
County	Pine	Hardwood	Total
	– – – – – – – – – – – – – – – cords	– – – – – – – – – – – – – – –	
Anderson	17,098	12,696	29,794
Angelina	131,735	23,666	155,401
Bowie	20,120	61,667	81,787
Camp	638	10,485	11,123
Cass	42,167	107,353	149,520
Chambers	10,616	913	11,529
Cherokee	44,503	26,237	70,740
Franklin	713	3,599	4,312
Gregg	1,219	4,849	6,068
Grimes	499	2,318	2,817
Hardin	121,751	33,330	155,081
Harris	7,186	16,081	23,267
Harrison	15,936	43,827	59,763
Henderson	3,468	1,659	5,127
Houston	43,611	33,506	77,117
Jasper	310,168	34,313	344,481
Jefferson	533	2,546	3,079
Leon	2,770	6,295	9,065
Liberty	69,831	33,605	103,436
Madison	0	242	242
Marion	18,287	39,577	57,864
Montgomery	26,825	16,987	43,812
Morris	1,292	8,849	10,141
Nacogdoches	82,761	22,340	105,101
Newton	165,152	26,945	192,097
Orange	1,275	10,474	11,749
Panola	48,493	56,013	104,506
Polk	160,014	38,886	198,900
Red River	11,100	52,272	63,372
Rusk	34,704	21,256	55,960
Sabine	88,565	16,367	104,932
San Augustine	84,330	20,417	104,747
San Jacinto	19,555	9,679	29,234
Shelby	106,522	31,316	137,838
Smith	9,856	13,675	23,531
Titus	421	17,826	18,247
Trinity	46,995	17,110	64,105
Tyler	217,854	36,136	253,990
Upshur	1,362	16,122	17,484
Van Zandt	182	7,115	7,297
Walker	19,281	7,247	26,528
Waller	192	48	240
Wood	1,599	11,027	12,626
Other Counties	8,493	15,471	23,964
Total Production	1,999,672	972,342	2,972,014

Table 5. Other Roundwood Harvest by County in Texas, 2003[1]

County	Pine	Hardwood	Total
	– – – – – – – – – – – – – – – –	cubic feet	– – – – – – – – – – – – – – –
Anderson	5,670	0	5,670
Angelina	105,670	0	105,670
Bowie	22,712	0	22,712
Camp	0	0	0
Cass	317,035	0	317,035
Chambers	0	0	0
Cherokee	202,060	0	202,060
Franklin	0	0	0
Gregg	0	0	0
Grimes	0	0	0
Hardin	0	0	0
Harris	0	0	0
Harrison	6,496	0	6,496
Henderson	0	0	0
Houston	0	0	0
Jasper	295,338	0	295,338
Jefferson	0	0	0
Leon	0	0	0
Liberty	0	0	0
Madison	0	0	0
Marion	50,485	0	50,485
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	12,282	0	12,282
Polk	0	0	0
Red River	146,845	0	146,845
Rusk	0	0	0
Sabine	0	0	0
San Augustine	121,209	0	121,209
San Jacinto	0	0	0
Shelby	80,000	0	80,000
Smith	0	0	0
Titus	0	0	0
Trinity	911	0	911
Tyler	100,000	0	100,000
Upshur	2,867	0	2,867
Van Zandt	0	0	0
Walker	0	0	0
Waller	0	0	0
Wood	0	0	0
Other Counties	547,999	0	547,999
Total Production	2,441,917	0	2,441,917

[1] including posts, poles and piling.

Table 6. Timber Stumpage Price in East Texas by Product, 1993-2003

Year	Sawtimber/Veneer		Pulpwood		Pine Chip-N-Saw	Pine Poles
	Pine	Mixed Hardwood	Pine	Mixed Hardwood		
	– – – $/MBF-Doyle – – –		– – – $/cord – – –		$/cord	$/ton
1993	283.80	80.67	26.89	12.76	39.46	44.51
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

SOURCE: *Texas Timber Price Trends* bi-monthly market report.

Table 7. Value of the East Texas Timber Harvest, 2003

Product	Unit	Stumpage		Delivered	
		Price[1]	Value	Price[2]	Value
PINE		$/unit	million $	$/unit	million $
Sawlogs/Chip-n-Saw	m bd.ft.[3]	–	214.2	–	334.5
Sawlogs		192.87	197.0	290.37	296.6
Chip-n-Saw		83.80	17.2	184.81	37.9
Veneer/Panel Roundwood	m cu.ft.	–	116.9	–	221.4
Veneer Logs	m cu.ft.	1,190.00	*	1,790.00	*
Small Roundwood	m cu.ft.	180.00	*	750.00	*
Pulpwood	cords	14.90	29.8	60.94	121.9
Others	m cu.ft.	–	2.6	–	4.0
All pine products			363.4		681.7
HARDWOOD					
Sawlogs	m bd.ft.[3]	116.04	33.4	257.21	74.1
Veneer/Panel Roundwood	m cu.ft.	–	0.0	–	0.0
Veneer Logs	m cu.ft.	690.00	0.0	1,530.00	0.0
Panel Roundwood	m cu.ft.	750.00	0.0	430.00	0.0
Pulpwood	cords	15.85	15.4	34.10	33.2
All hardwood products			48.9		107.3
All products			412.3		789.0

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

[3]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, 2003

Product	Units	Imports	Produced & Utilized in State	Exports	Texas Mill Receipts	Texas Roundwood Production
PINE						
Sawlogs	m bd.ft.[1]	110,691	1,135,572	90,824	1,246,263	1,226,396
Veneer/Panel Roundwood	m cu.ft.	6,990	161,503	17,432	168,493	178,935
Pulpwood	cords	321,569	1,704,625	295,047	2,026,194	1,999,672
Others	m cu.ft.	3,548	2,292	150	5,840	2,442
All pine products	m cu.ft.	54,528	485,944	56,202	540,471	542,146
HARDWOOD						
Sawlogs	m bd.ft.[1]	9,426	284,160	3,919	293,586	288,079
Veneer/Panel Roundwood	m cu.ft.	0	0	20	0	20
Pulpwood	cords	174,373	840,219	132,123	1,014,592	972,342
All hardwood products	m cu.ft.	15,531	114,871	11,247	130,402	126,119
TOTAL						
Sawlogs	m bd.ft.[1]	120,117	1,419,732	94,743	1,539,849	1,514,475
Veneer/Panel Roundwood	m cu.ft.	6,990	161,503	17,452	168,493	178,955
Pulpwood	cords	495,942	2,544,844	427,170	3,040,786	2,972,014
Posts, poles, pilings	m cu.ft.	3,548	2,292	150	5,840	2,442
All products	m cu.ft.	70,058	600,815	67,450	670,873	668,265

[1]International ¼-inch rule.

Table 9. Texas Industrial Roundwood Products, 1993-2003

Year	Lumber			Structural Panel
	Pine	Hardwood	Total	
	------------------ m. bd. ft ------------------			m. sq. ft.
1993	1,244,373	171,976	1,416,349	2,754,949
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

Table 10. Texas Pulp, Paper, and Paperboard Production, 1993-2003

Year	Paper Products			Market Pulp
	Paper	Paperboard[1]	Total	
	---------------------------------- tons --------------------------------			
1993	1,182,826	2,059,091	3,241,917	339,771
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

[1]Includes fiberboard and miscellaneous products.

Table 11. Texas Primary Mill Residue, 2003[1]

Residue Type	Pine	Hardwood	Total
	------------- tons ------------------		
Chips[2]	2,694,808	513,840	3,208,649
Sawdust	566,318	522,452	1,088,770
Shavings	298,062	31,577	329,639
Bark[3]	2,716,625	2,196,154	4,912,779
Total	6,275,814	3,264,023	9,539,837

[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 12. Products Treated by Texas Wood Preserving Plants, 2002-2003						
Product	Volume by Specific Unit			Volume by Cubic Feet		Percent
	Unit of Measure	2002	2003	2002	2003	Change
Utility poles	number	188,153	207,845	3,168,592	3,500,215	10
Constr. poles	number	5,810	4,910	17,430	14,730	-15
Piling	m lin.ft.	40,026	40,026	19,464	19,464	0
Fence posts	number	1,351,230	1,947,612	1,189,558	1,714,584	44
Crossties	number	2,200,000	2,426,481	8,120,401	8,956,363	10
Switch ties	m bd.ft.	47,370	46,198	4,706,985	4,590,459	-2
Cross arms	number	0	0	0	0	0
Lumber	m bd.ft.	219,312	285,634	19,003,462	24,750,271	30
Plywood	m sq.ft.	15,987	8,890	499,597	277,825	-44
Other	cu.ft.	106,412	3,097,717	106,412	3,097,717	2811
Total	cu.ft.	–	–	36,831,901	46,921,627	27

Table 13. Industrial Roundwood and Residue Removal by Product in East Texas, 2003						
Product	**Industrial Roundwood**			Residue		
	Pine	Hardwood	Total	Pine	Hardwood	Total
	----- million cubic feet -------			----- million cubic feet -------		
Growing Stock						
Sawtimber	278.4	47.3	325.7	5.3	1.0	6.3
Poletimber	236.4	72.5	308.9	22.1	5.3	27.4
Sub-total	514.7	119.8	634.6	27.4	6.3	33.7
Non-growing Stock						
Sawtimber	5.3	1.0	6.3	39.7	15.4	55.1
Poletimber	22.1	5.3	6.3	9.1	12.9	22.0
Sub-total	27.4	6.3	33.7	48.8	28.3	77.2
All						
Sawtimber	283.6	48.3	332.0	45.0	16.4	61.4
Poletimber	258.5	77.8	336.3	31.2	18.2	49.4
Total	542.1	126.1	668.3	76.2	34.6	110.9

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, 1992-2003

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

Note:
Total industrial roundwood harvest incudes 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, 1994-2003

Year[1]	Nonindustrial Private								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				
1994	19,675	907,584	10,483	470,806	30,158	1,378,390	4,259	34,417	56,580	1,211	92,208
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

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

[2] Includes Forestry Incentives Program (FIP), Stewardship Incentives Program (SIP), Environmental Quality Incentives Program (EQIP), Conservation Reserve Program (CRP), and Forest Land Enhancement Program (FLEP) accomplishments.
Federal funding also includes the Ice Storm Recovery Program in 2002 and 2003.

[3] Non-cost share acres include only NIPF acres planted with TFS assistance.

4 Acres for Industry tree planting includes acres planted by TIMOs.