

## **2007 Harvest of Forest Products**<sup>1</sup>

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The Mississippi forest industry harvested and delivered \$1.1 billion worth of forest products to mills and other processors over the course of 2007. The forest industry in Mississippi and the harvest volumes in this report include all producers and harvesters of forest products paying a severance tax collected by the Mississippi Tax Commission. The total estimated value of the 2007 Mississippi timber harvest delivered to the point of first processing (such as a pulpwood yard or sawmill) was \$1,101,120,057. The estimated volume and value of the 2007 timber harvest by product is presented in Table 1. The 2007 harvest value is 9.2% lower than in 2006. This decline resulted from lower harvest volumes and lower prices, particularly for pine sawlogs (See Table 2). The year 2007 was the 15<sup>th</sup> straight year Mississippi's timber production value was over \$1 billion. Timber was the second most valuable agricultural commodity in 2007. Poultry and eggs were the most valuable at \$2.33 billion. Timber was second at \$1.1 billion. Soybeans were third at \$511 million. Mississippi's forest landowners collected \$630.8 million for their standing timber in 2007. The estimated value of the logging and transportation sector was \$470 million, which is the difference between the delivered and standing values.

Severance tax collections on forest products were \$3,537,091 in 2007, which is 2.1% higher than in 2006. Twenty percent of severance tax collections, or about \$707,418, were returned to counties where the timber was harvested. Eighty percent, or about \$2,829,673, went to the Forest Resource Development Program (FRDP) to provide cost share funds to nonindustrial private forest landowners for reforestation and other forest management practices.

A comparison between 2006 and 2007 harvest volumes and delivered values by product category is presented in Table 3. The harvest volume of pine sawlogs decreased by 14.2%, and its value declined 25.2%. Pine pulpwood volume increased by 27.5% while the value increased 34.8%. The volume of pine poles increased 32.6% while their value slightly increased 1.3%. Hardwood sawlog volume decreased 3.7% while value increased 2.6%. Hardwood pulpwood harvest volumes were reduced by 3% while value increased by 6.7%. Crossties declined in volume by 47.7% and decreased in value by 49.6%. Christmas tree harvests and value declined 10% from the previous year.

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There were a number of major factors in the U.S. economy that influenced the 2007 Mississippi harvest of forest products in terms of volume and value. These factors caused Mississippi's 2007 delivered value to decrease 9.2% from the previous year. Foremost among these economic factors were the weak U.S. dollar, rising energy prices, and the subprime mortgage crisis.

The dollar's slide combined with a strong global economy was good news for some U.S. companies as it created export opportunities. Such was the case for American pulp and paper companies. Increased production and exports combined with reduced residual wood chips from solid wood production resulted in increased demand for pulpwood. This contributed to a 27.5% increase in volume and 34.8% increase value for Mississippi pine pulpwood in 2007 over 2006. Increased demand for pulpwood resulted in higher pulpwood prices for much of 2007, which was good news for landowners needing to conduct first thinning operations. Canadian lumber imports to the U.S. were not helped by the weak U.S. dollar as imports of Canadian lumber fell. Typically this would lead to increased U.S. softwood lumber production and improved timber prices benefiting Mississippi forest landowners; however, this potential advantage for U.S. lumber producers was eclipsed by the impacts of the subprime mortgage crisis.

Rising fuel prices contributed to a greater disparity between standing and delivered values for forest products in 2007, as this increased costs for harvesting timber and transporting timber products. The south-wide average price for diesel fuel increased 6.8% in 2007 over the previous year. This rise in diesel prices increased the cost of timber harvesting and delivery operations. The estimated value of the logging and transportation sector was \$470,300,406 for 2007, which was 13.9% greater than in 2006.

The dominant economic factor of 2007 impacting Mississippi timber markets was the U.S. subprime mortgage crises resulting in a troubled residential construction sector. Foreclosures across the U.S. in 2007 grew 75% over the previous year with an estimated 405,000 households losing their homes. The sale of new homes in the U.S. in 2007 posted the biggest decline on record which were down 26% to 774,000 units from 1.05 million in 2006. Also, the 2007 median home price fell 1.3% to \$218,900, which was the first decline in existing home sale values since the National Association of Realtors began tracking sales in 1968.

These events in the real-estate markets contributed to a drastic decline in housing starts, which is the number of new residential constructions begun each month as measured by the U.S. Census Bureau. U.S. housing starts year-end totals for 2007 experienced the biggest decline in 27 years falling 25% to 1.35 million units. This decline in housing starts is the largest since the 1980 recession and is the third largest such decline on record. The events in the U.S. residential construction sector impacted solid wood production and timber production in Mississippi. As the residential construction market began to weaken, most solid wood producing mills across the U.S. South reduced production in 2007. This in turn reduced demand for pine sawlogs in Mississippi, which contributed to a 14.2% decrease in volume and a 25.2% decrease in value for pine sawlogs in 2007 as compared with the previous year.

The decline in housing starts experienced in 2007 is projected to continue as many economists are forecasting 2008 to have the lowest level of housing constriction since 1991 with no significant rebounds likely until 2009. The implication for timber markets is a down year for pine sawlogs in 2008, followed by potential improvement in 2009 as solid wood production increases following an anticipated resurgence in the residential construction sector. The value of Mississippi's harvest of forest products is historically very dependent on sawlog production as compared with other Southern U.S. states, as Mississippi is the number one producer of sawlogs in the South. Timberland owners with mature pine timber ready or near harvest age may choose to delay harvesting and "bank on the stump" until markets improve for pine sawlogs. Pulpwood prices are expected to continue to rise in 2008, as they have in 2007, signaling increased demand for long pulpwood. This is good news for owners of young pine plantations needing to conduct a first thinning operation.

In spite of the current and near-term troubles facing the residential construction sector, which have contributed to a recent decline in pine sawlog prices, the long-term outlook for timber production in Mississippi remains favorable. Economists are projecting a resurgence in the residential construction sector, which will ultimately result in increased demand for Mississippi timber products.

Harvested volumes by product and by country obtained from the Mississippi State Tax Commission are presented in Table 4. For information on current Mississippi timber prices, consult the Mississippi Timber Price Report available on-line at www.msucares.com. Select "Forestry" then "Timber Price Reporting for Mississippi." For more information on timber marketing, harvesting, or prices contact your local County Extension Service or the Mississippi State University Department of Forestry, Box 9681, Mississippi State, MS 39762. Table 1. Estimated volumes and values of the 2007 timber harvest.

Product/Unit <sup>1</sup>	Volume	Standing <sup>2</sup> Value(\$)	Delivered <sup>2</sup> Value(\$)
Pine Sawlogs, MBF, D	1,322,737	410,232,642	549,067,911
Hardwood Sawlogs <sup>3</sup> , MBF,D	335,916	86,065,261	139,511,597
Pine Pulpwood, Cords	4,275,004	89,038,177	280,786,211
Hardwood Pulpwood, Cords	1,512,992	25,896,198	104,104,987
Poles, MBF,D	34,748	18,524,689	24,107,268
Crossties <sup>4</sup> , MBF,D	4,935	1,059,703	1,833,910
Stumpwood <sup>5</sup> , Tons	596	2,980	37,548
Christmas Trees <sup>6</sup> , Tree	49,500	**	1,670,625
Total Value		630,819,651	1,101,120,057

<sup>1</sup> Unit abbreviations: MBF = thousand board feet, and D = Doyle log rule.

<sup>2</sup> Standing and delivered values calculated using regional (north and south Mississippi) volumes reported by the Miscellaneous Tax Division of the Mississippi Tax Commission and product prices from sources such as Timber Mart-South.

<sup>3</sup>Composite price for hardwood sawlogs calculated under the assumption that hardwood sawmills cut 70% oak and 30% mixed hardwood.

<sup>4</sup> Crosstie values calculated using standing and delivered values for mixed hardwood sawtimber prices by region. <sup>5</sup> Stumpwood values calculated at \$5/ton standing and \$63/ton delivered.

<sup>6</sup> Christmas trees value and volumes estimated by Mississippi State University Extension Forester Stephen Dicke. \*\* Not reported since most tress are sold as choose-n-cut.

	FF	*	Standin	g Prices			Delivered Prices				
			Stat	Statewide Average			Stat	verage			
<b>Product / Unit<sup>2</sup></b>	Region	Average	2007	2006	% Change	Average	2007	2006	% Change		
Pine Pulpwood, Cords	North South	21.75 20.31	21.03	18.11	16.1	65.82 65.63	65.73	62.44	5.3		
Hardwood Pulpwood, Cords	North South	16.64 15.51	16.07	15.65	2.7	67.81 61.59	64.70	59.30	9.1		
Pine Sawtimber, MBF,D	North South	298.25 318.00	308.13	411.63	-25.1	403.50 423.00	413.25	484.63	-14.7		
Mixed Hardwood Sawtimber, MBF,D	North South	214.00 218.50	216.25	211.13	2.4	374.50 357.25	365.88	368.75	-0.8		
Oak Sawtimber, MBF,D	North South	263.50 280.75	272.13	302.50	-10.0	461.00 433.50	447.25	408.63	9.5		
Pine Poles, MBF,D	North South	483.25 412.75	448.00	549.17	-18.4	652.67 595.25	623.96	908.50	-31.3		
Pine Pulp, Ton	North South	8.11 7.58	7.85	6.76	16.0	24.56 24.49	24.53	23.30	5.3		
Oak Pulp, Ton	North South	5.74 5.35	5.55	5.40	2.7	23.38 21.24	22.31	20.45	9.1		

Table 2. Comparison of 2007 and 2006 Mississippi Major Product Prices<sup>1</sup>.

<sup>1</sup> Data source: Timber Mart-South <sup>2</sup> Unit abbreviations: MBF = thousand board feet, and D = Doyle log rule.

<b>k</b>	,	2006			2007	
Product/Unit <sup>1</sup>	Volume	Value	Volume	% Change	Value	% Change
		-Dollars-			-Dollars-	
Pine Sawlogs, MBF, D	1,541,417	733,717,609	1,322,737	-14.2	549,067,911	-25.2
Hardwood Sawlogs, MBF,D	348,959	135,971,374	335,916	-3.7	139,511,597	2.6
Pine Pulpwood, Cords	3,353,527	208,374,796	4,275,004	27.5	280,786,211	34.8
Hardwood Pulpwood, Cords	1,665,680	97,591,765	1,616,272	-3.0	104,104,987	6.7
Poles, MBF,D	26,199	23,802,468	34,748	32.6	24,107,268	1.3
Crossties, MBF,D	9,441	3,638,817	4,935	-47.7	1,833,910	-49.6
Stumpwood, Tons	780	49,140	596	-23.6	37,548	-23.6
Christmas Trees, Tree	55,000	1,856,250	49,500	-10.0	1,670,625	-10.0
Total Value		1,213,102,219			1,101,120,057	-9.2

Table 3. Comparison of 2006 and 2007 harvest volumes and delivered values by product.

<sup>1</sup> Unit abbreviations: MBF = thousand board feet, and  $D = Doyle \log rule$ .

NORTHERN REGION	PINE LUMBER	HARD- WOOD LUMBER	PINE SAWLOGS	HARD- WOOD SAWLOGS	PINE PULPWOOD	HARD- WOOD PULPWOOD	PINE POLES	STUMP WOOD	CROSSTIES	OTHER	PINE LOGS	HARD- WOOD LOGS
COUNTY	MBM	МВМ	MBF,D	MBF,D	CORDS	CORDS	C CU FT	TONS	MBF,D	MBF CORDS	TONS	TONS
ALCORN		124.00	5327.00	1120.21	22383.33	15706.67	0.14					
ATTALA	189.33	85.33	24564.00	3201.33	91819.40	28803.33	9.30				188.27	
BENTON			4805.00	1030.67	20426.67	12840.00	1.40					
BOLIVAR			591.00	3154.67	3583.33	25751.11						
CALHOUN			23858.00	1450.67	78163.33	10848.89	13.83		9.33			
CARROLL		7.83	10463.00	2986.67	97633.50	25276.89	5.11		16.00			
CHICKASAW			16423.67	301.33	25782.97	3675.60	0.92					
CHOCTAW		511.95	15414.00	1206.67	90374.37	24654.62	8.71		280.00		213.33	
CLAY			9372.86	1149.33	15863.87	6275.07	0.48		2.67		444.47	
COAHOMA			29.00	1546.67	10.00	3227.78						
DESOTO			727.00	1442.67	7680.00	612.22						
GRENADA			2237.00	1301.33	35136.67	8150.00	0.19					
HOLMES			8426.00	6958.33	50303.33	22920.00	0.60					
HUMPHREYS				178.67		968.89						
ISSAQUEENA			9.00	7580.00	56.67	16988.89						
ITAWAMBA			20501.00	3987.07	31663.33	31622.22	4.74				12.00	
KEMPER		28.00	72853.00	2650.67	106969.33	59161.69	28.75				1187.59	
LAFAYETTE			11510.00	1257.33	35996.67	5061.11	4.88					
LEAKE		72.00	19657.00	4897.33	63756.67	32716.67	5.35				237.33	
LEE		1.33	5979.00	1326.67	5153.33	5873.33	0.06					
LEFLORE			10.00	48.00	20.00	895.56						
LOWNDES		9.33	9770.41	1598.67	18654.37	23163.16	0.06		710.67		449.44	
MADISON		193.33	11994.00	2765.33	57183.33	25533.33	5.07				1298.67	5.33
MARSHALL			4475.00	826.67	9650.00	3930.00						
MONROE			24646.00	4917.57	36094.03	23816.31	2.76		1.33		437.67	
MONTGOMERY	249.33	6.67	8386.00	1578.67	47246.67	16726.67	5.59		1.33		26.67	
NESHOBA		138.67	16968.00	2433.33	46400.00	27864.13	6.33		41.33		388.00	
NOXUBEE	1	82.67	28138.00	2542.67	91857.30	21884.84	2.50				218.79	
OKTIBBEHA	1	48.00	14275.11	856.00	36153.13	13244.67	8.04		1401.33		321.53	
PANOLA			6111.00	1713.33	28310.00	23562.22	0.10					
PONTOTOC	1	2.67	13147.00	1117.33	23663.33	6850.00	0.08		20.00		36.00	
PRENTISS	1	17.33	8990.00	2263.72	42013.33	26004.44			305.33			1.33
QUITMAN	1		46.00	26.67	80.00	38.89						
SHARKEY	1		8.00	1205.33	76.67	4132.22						
SUNFLOWER	1				46.67	287.78						
TALLAHATCHIE	•		856.00	1153.33	6696.67	3993.33	0.10					[

Table 4. 2007 Harvested timber volumes by county and product.

NORTHERN REGION	PINE LUMBER	HARD- WOOD LUMBER	PINE SAWLOGS	HARD- WOOD SAWLOGS	PINE PULPWOOD	HARD- WOOD PULPWOOD	PINE POLES	STUMP WOOD	CROSSTIES	OTHER	PINE LOGS	HARD- WOOD LOGS
COUNTY	МВМ	MBM	MBF,D	MBF,D	CORDS	CORDS	C CU FT	TONS	MBF,D	MBF CORDS	TONS	TONS
TATE			605.00	1256.00	16040.00	958.89						
TIPPAH		516.00	5810.36	978.67	46830.00	18420.00	1.67		408.00			
TISHOMINGO		10.67	7594.59	1957.33	46470.00	27871.00			276.00			
TUNICA			49.00	1078.67		93.33						
UNION			12422.44	3476.35	17573.33	21315.56						
WASHINGTON			408.00	1660.00	410.00	13900.58					4.00	
WEBSTER		48.00	37717.02	2070.67	56806.90	18383.91	30.60		598.67		672.76	
WINSTON		108.00	24393.25	3784.00	73877.57	37463.69	5.44		17.33		93.72	
YALOBUSHA			8361.95	928.00	51993.33	8628.89	9.39		26.67		4.00	
YAZOO			1184.30	9945.33	14047.33	23730.00						
NORTHERN TOTAL	438.67	2011.78	499112.96	100909.92	1550950.73	733828.38	162.19	0.00	4116.00	0.00	6234.23	6.67
SOUTHERN REGION	PINE LUMBER	HARD- WOOD LUMBER	PINE SAWLOGS	HARD- WOOD SAWLOGS	PINE PULPWOOD	HARD- WOOD PULPWOOD	PINE POLES	STUMP WOOD	CROSSTIES	OTHER	PINE LOGS	HARD- WOOD LOGS
COUNTY	МВМ	MBM	MBF,D	MBF,D	CORDS	CORDS	C CU FT	TONS	MBF,D	MBF CORDS	TONS	TONS
ADAMS	88.01	14.67	2021.00	10912.00	12113.33	69427.78	3.00	32.00				
AMITE	502.67	1646.39	34972.00	4583.40	134555.20	40663.51	45.34				93.33	
CLAIBORNE	2.67	30.67	7127.44	12973.33	27704.33	28897.78					324.75	
CLARKE		8.00	42230.79	4737.33	92486.67	37239.38	119.93				6616.27	89.33
COPIAH		45.33	52019.00	10357.33	110822.30	41273.34	11.93				728.00	
COVINGTON		348.00	11616.00	3001.33	66080.00	13417.78	5.64				4714.67	
FORREST		148.00	11472.00	942.67	36583.33	5435.56	6.73				2686.67	25.33
FRANKLIN	314.67	353.33	33657.82	3664.00	88656.67	27373.33	10.68				73.33	
GEORGE		42.67	8537.00	1180.00	48333.33	3208.89	8.16				2805.33	
GREENE		16.00	17582.00	3393.33	146360.00	22597.78	15.24	544.00			3199.64	
HANCOCK			11207.00	194.67	29116.67	3102.22					2405.33	
HARRISON		26.67	9719.00	17.33	56790.00	3971.11	0.47				1248.00	
HINDS		13.33	8924.00	10309.33	53040.00	31063.33					228.00	
JACKSON		1.33	9206.00	32.00	60153.33	991.11	1.76				1132.00	
JASPER		214.67	43896.00	11562.67	117610.00	45626.44	18.32		361.33		10930.67	2449.33
JEFF DAVIS		68.00	27131.00	1721.00	74230.00	14573.00	2.34				3356.00	26.67
JEFFERSON	220.00	2.67	12395.00	8252.00	56126.00	25648.89	4.24				81.33	
JONES	402.67	60.00	19249.00	9721.33	60150.00	5888.84	5.91		136.00		6445.33	889.33
LAMAR		48.00	22290.00	978.67	70443.33	15786.67	21.70	20.00			3336.00	294.67
LAUDERDALE		181.33	37575.00	3876.00	98039.73	66951.07	33.44				4909.33	666.67

Table 4. 2007 Harvested timber volumes by county and product (continued).

SOUTHERN REGION	PINE LUMBER	HARD- WOOD LUMBER	PINE SAWLOGS	HARD- WOOD SAWLOGS	PINE PULPWOOD	HARD- WOOD PULPWOOD	PINE POLES	STUMP WOOD	CROSSTIES	OTHER	PINE LOGS	HARD- WOOD LOGS
COUNTY	MBM	МВМ	MBF,D	MBF,D	CORDS	CORDS	C CU FT	TONS	MBF,D	MBF CORDS	TONS	TONS
LAWRENCE		97.33	25819.00	4736.00	67800.00	23866.67	1.94				1925.33	69.33
LINCOLN	361.33	260.00	37926.00	5960.00	107680.00	45680.00	17.73				202.67	
MARION	605.33	360.00	28824.00	5724.00	82626.67	26724.44	3.29				4269.33	404.00
NEWTON		84.00	28119.00	3070.67	37999.10	35840.31	15.52		270.67	493.33	3674.67	68.00
PEARL RIVER		18.67	22849.00	5594.67	117436.67	19213.33	0.44		8.00		2144.00	58.67
PERRY		10.67	11597.00	1998.67	71740.00	5062.22	3.50				3910.67	65.33
PIKE		141.33	21480.00	2955.19	52521.50	14488.89	9.91				554.67	45.33
RANKIN		232.00	33343.00	14224.00	133400.00	38004.44	9.21		2.67		2533.33	105.33
SCOTT		26.67	22112.00	4410.67	74043.33	17395.56	31.83				2430.67	1712.00
SIMPSON		41.33	46355.00	4756.00	68616.67	17115.56	3.61				3521.33	20.00
SMITH	166.67	377.33	24982.00	7589.33	112786.67	21351.11	3.35		12.00		4124.00	248.00
STONE		30.67	18108.00	221.33	87113.33	2368.89	2.71				2854.67	
WALTHALL		525.33	16234.00	15438.67	41980.00	20093.07	1.49				2132.00	164.00
WARREN	185.33	2.67	912.00	23676.00	2566.67	35363.91						
WAYNE		273.33	37964.00	16588.00	82431.23	21115.78	29.13				7038.67	
WILKINSON	221.33	1006.67	20663.42	6390.67	104347.07	32975.47	21.11		28.00		17.33	
SOUTHERN TOTAL	3070.68	6757.05	820114.47	225743.58	2684483.13	879797.45	469.60	596.00	818.67	493.33	96647.32	7401.33
GRAND TOTAL	3509.35	8768.83	1319227.43	326653.51	4235433.87	1613625.83	631.79	596.00	4934.67	493.33	102881.55	7408.00

Table 4. 2007 Harvested timber volumes by county and product (continued).