

**Department of Forestry** 

MTN - 29C

## 2013 Harvest of Forest Products<sup>1</sup> Forest Economics

April 2014

The Mississippi forest industry harvested and delivered \$1.128 billion worth of forest products to mills and other processors in 2013. The forest industry in Mississippi and the harvest volumes in this report include all producers and harvesters of forest products paying a timber severance tax collected by the Mississippi Department of Revenue. The total estimated value of the 2013 Mississippi timber harvest delivered to the point of first processing (such as a pulpwood yard or sawmill) was \$1,128,093,728. The estimated volume and value of the 2013 timber harvest by product is presented in Table 1. The 2013 harvest value is 10.8% higher than the 2012 value of \$1.018 billion. This increase in harvest value is attributable to a combination of higher harvest volumes and prices for both pine and hardwood sawlogs and pulpwood. (See Table 2). A comparison of 2013 and 2012 Mississippi timber product prices is presented in Table 3.

Timber was the second most valuable agricultural commodity in Mississippi for 2013. Poultry and eggs were the most valuable at \$2.72 billion. Mississippi's forest landowners collected \$539.3 million for their standing timber in 2013, an increase of 14.9% from the previous year. The estimated value of the harvesting and transportation sector<sup>2</sup>, which is the difference between the delivered and standing values, increased 7.3% from the previous year to \$587.3 million. The 2013 value of the harvesting and transportation sector accounted for 52.1% of the total harvest value as compared with 53.8% of the total harvest value in 2012.

Severance tax collections on forest products were \$3,652,193 in 2013, which is 4.4% higher than 2012 collections. Twenty percent of severance tax collections, or about \$730,439, is returned to counties where the timber was harvested. Eighty percent, or about \$2,921,755, is allocated 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 2013 and 2012 harvest volumes and delivered values by product category is presented in Table 2. The harvest volume of pine sawlogs increased by 7.7%, and its value increased 13.4%. Pine pulpwood volume increased by 1.9% while the value increased 6.8%. Hardwood sawlog volume increased 2.5%, and its value increased by 16.3%. Hardwood pulpwood volume increased 2.4%, and its value increased by 13.7%. Christmas tree harvest fell by 2.4% from the previous year and value decreased slightly by 0.36%.

The estimated value of the harvesting and transportation sector accounted for 52.1% of the total harvest value in 2013 amounting to a 3.23% decrease in this proportion over the previous year.

<sup>&</sup>lt;sup>1</sup> By James E. Henderson, Associate Extension Professor.

<sup>&</sup>lt;sup>2</sup> This sector includes logging firms, contractual services, contractual trucking, timber buyers, and wood dealers.

This relative decrease in the harvesting and transportation estimated value reflects a greater year over year increase in standing prices as compared with delivered prices in percentage terms for all product categories with the exception of pine sawtimber and poles. However, both standing and delivered products prices increased for all products in 2013 over 2012.

Slowly but surely markets for sawtimber are beginning to grow again after the sharp declines seen after the collapse of the U.S. housing market and ensuing recession. The Southern Forest Products Association reported southern pine lumber shipments for 2013 reached 15.026 billion board feet (Bbf) which is a 5% increase over the 2012 amount of 14.279 Bbf and a 27% increase over the 2009 volume of 11.279 Bbf. U.S. home construction continues to rise and the forecast is for continued growth. In 2009 the U.S. built about 554 thousand new homes and the National Association of Homebuilders forecast indicates that the U.S. should be building nearly 3 times that volume by 2015. So the U.S. is on pace to build over 1 million homes in 2014 and around 1.5 million by 2015. This housing construction forecast reflects that the U.S. economy is continuing to grow and recovering from the recession of the 2000's. Existing home sales for 2013 were over 9% higher than in 2012, which helped to bring down the inventory of existing homes from an average 5.9 to a 4.9 month supply. New home sales for 2013 were more than 17% higher than in 2012; however, given the 2013 rate of construction, the inventory actually increased from a 4.5 month supply in 2012 to 5.1 in 2013.

Reflecting these improvements in housing and lumber demand, prices for timber products for all categories were up considerably in 2013 as compared with 2012. However, pulpwood markets in north Mississippi will obviously be disrupted by the closure of the International Paper mill in Courtland, Alabama. It is reasonable to assume that prices for pulpwood in some portions of north Mississippi will fall in 2014 as compared with 2013. So the outlook for Mississippi's timber markets are somewhat mixed. Sawtimber should show continued gains over the next several years and pulpwood in northern Mississippi may struggle as compared with previous years.

Harvested volumes by product and by county obtained from the Mississippi Department of Revenue are presented in Table 4. For information on current Mississippi timber prices, consult the Mississippi Timber Price Report available at www.msucares.com. Select "Forestry" then "Timber Prices." 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. Also, please visit our blog <u>http://blogs.msucares.com/forestry/</u> and sign up for email updates to review the latest information from Forestry Extension on publications and educational programs.

Product/Unit <sup>1</sup>	Volume	Standing <sup>2</sup> Value(\$)	Delivered <sup>2</sup> Value(\$)
Pine Sawlogs, MBF, D	1,345,463	261,630,253	473,135,846
Hardwood Sawlogs <sup>3</sup> , MBF, D	242,444	86,080,212	126,634,579
Pine Pulpwood, Cords	5,051,231	126,085,165	360,734,557
Hardwood Pulpwood, Cords	1,599,817	52,126,013	146,840,778
Poles, MBF, D	33,726	12,648,447	17,983,482
Crossties <sup>4</sup> , MBF, D	2,836	742,323	1,314,486
Christmas Trees <sup>5</sup> , Tree	29,000	**	1,450,000
Total Value		539,312,414	1,128,093,728

Table 1. Estimated volumes and values of the 2013 timber harvest.

<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> Christmas trees value and volumes estimated by Mississippi State University Extension Forester Stephen Dicke.

\*\* Not reported since most trees are sold as choose-n-cut.

		2012		2	2013	
Product/Unit <sup>1</sup>	Volume	Value	Volume	% Change	Value	% Change
		-Dollars-			-Dollars-	
Pine Sawlogs, MBF, D	1,248,929	417,171,712	1,345,463	7.7%	473,135,846	13.4%
Hardwood Sawlogs, MBF,D	236,563	108,885,760	242,444	2.5%	126,634,579	16.3%
Pine Pulpwood, Cords	4,958,084	337,773,699	5,051,231	1.9%	360,734,557	6.8%
Hardwood Pulpwood, Cords	1,562,423	129,197,051	1,599,817	2.4%	146,840,778	13.7%
Poles, MBF,D	42,551	22,190,202	33,726	-20.7%	17,983,482	-19.0%
Crossties, MBF,D	3,844	1,645,836	2,836	-26.2%	1,314,486	-20.1%
Christmas Trees, Tree	29,700	1,455,300	29,000	-2.4%	1,450,000	-0.36%
Total Value		1,018,319,561			1,128,093,728	10.8%

Table 2. Comparison of 2012 and 2013 harvest volumes and delivered values by product.

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

		Standing Prices				Delivered Prices			
		Statewide Average				Stat	ewide Avera	age	
<b>Product</b> / Unit <sup>2</sup>	Region	2013 Average	2013	2012	% Change	2013 Average	2013	2012	% Change
Pine Pulpwood, Cords	North	20.67	24.09	20.04	14.00/	71.41	74.35	71.17	
	South	27.50	24.09	20.96	14.9%	77.28	74.55	/1.1/	4.5%
Hardwood Pulpwood, Cords	North	33.32	32.58	26.55	22.7%	94.42	91.76	82.69	11.0%
	South	31.83	52.58			89.11	91.70		
Pine Sawtimber, MBF,D	North	180.00	192.00	183.00	4.9%	347.00	350.88	333.38	5.2%
	South	204.00				354.75			
Mixed Handwood Sowtimbon MPF D	North	261.75	289.00	243.63	18.6%	463.50	480.50	426.13	12.8%
Mixed Hardwood Sawtimber, MBF,D	South	316.25				497.50			
Oak Sawtimber, MBF,D	North	351.00	369.63	325.25	13.6%	517.75	531.13	484.50	9.6%
Oak Sawuniber, MDF,D	South	388.25	309.03	323.23		544.50			
Pine Poles, MBF,D	North	380.50	376.38	272.00	1.2%	542.00	535.38	526.88	1.6%
r life r oles, widr, D	South	372.25	570.58	372.00		528.75			
Dine Duln Ten	North	7.71	8.99	7 9 2	14.9%	26.93	27.89	26.56	5.0%
Pine Pulp, Ton	South	10.26	0.99	7.82		28.84			
Oak Buln, Tan	North	11.49	11.02	0.04	25.7%	32.56	21.44	28.51	11.00/
Oak Pulp, Ton	South	10.98	11.23	8.94		30.72	31.64		11.0%

Table 3. Comparison of 2013 and 2012 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.

$\Gamma_{\rm able}$ 4. Mississingi's 2012 howystad timber volumes by product and county <sup>1</sup>	
Table 4. Mississippi's 2013 harvested timber volumes by product and county <sup>1</sup> .	

		HARDWOOD		HARDWOOD		HARDWOOD	PINE			PINE	HARDWOOD
	LUMBER	LUMBER	SAWLOGS	SAWLOGS	PULPWOOD		POLES	CROSSTIES		CHIPS	CHIPS
COUNTY	MBF	MBF	MBF,D	MBF,D	CORDS	CORDS	C CU FT	MBF,D	MBF	TONS	TONS
NORTHERN REGION											
ALCORN			4,125.000	1,254.667	27,480.000	11,487.200					
ATTALA			41,893.21	3,365.77	152,054.33	33,356.09	34.47				
BENTON			1,485.00	454.67	19,780.90	7,266.93					
BOLIVAR			514.00	664.76	136.10	8,552.53	0.29			4.00	
CALHOUN			30,750.00	794.67	43,106.70	15,849.64	2.60				
CARROLL			8,836.00	1,728.73	66,183.40	20,619.51	3.68			7.40	
CHICKASAW			18,462.50	546.43	44,003.33	20,155.24	1.08				
CHOCTAW			26,424.19	1,418.67	85,080.17	18,084.67	6.62	118.67		57.04	
CLAY			9,646.00	1,077.33	16,821.70	31,465.51	0.79	1.33			
COAHOMA			170.00	2,786.67	400.00	6,865.51				9.33	46.67
DESOTO			170.00	22.67	1,503.33	2,361.33					
GRENADA			6,657.00	1,388.00	61,737.47	20,619.60	2.33				
HOLMES			6,626.94	4,495.37	65,378.43	40,340.31	13.37	60.00		14.37	
HUMPHREYS			153.28	100.00	3,355.56						
ISSAQUENA			1,241.00	5,920.00	44.43	27,818.00					
ITAWAMBA			27,107.00	3,900.72	26,576.67	44,955.56					
KEMPER			54,316.52	1,841.33	193,795.37	48,124.22	54.07			957.68	
LAFAYETTE			8,488.00	136.28	52,490.00	6,373.69					
LEAKE			19,381.42	3,661.24	98,973.23	19,844.44	17.10			1,108.04	
LEE			4,676.00	544.00	6,904.53	7,933.33	1.94			.,	
LEFLORE			4.00	532.00	11.07	1,942.98					
LOWNDES			8,026.80	602.67	17,931.00	19,152.40		666.67	60.00	2,569.04	
MADISON			10,994.09	2,129.68	75,412.27	14,491.60	3.30			119.60	
MARSHALL			4,888.00	124.00	16,423.33	10,922.98	0.00			110.00	
MONROE			24,904.97	1,238.67	19,470.47	52,497.20	1.07			29.39	
MONTGOMERY			18,912.00	596.00	60,503.57	20,619.96	10.49			12.69	
NESHOBA			21,356.89	1,914.11	84,577.47	28,759.91	13.02	68.00	41.33	1,067.87	
NOXUBEE			28,914.35	878.67	107,367.87	23,538.13	7.27	00.00	41.55	1,007.07	
OKTIBBEHA			17,396.05	636.00	46,519.70	18,211.20	6.15	1,905.33	96.00		
PANOLA			1,742.15	16.00	54,557.53	8,102.80	0.15	1,905.55	90.00		
PONTOTOC			12,092.00	23.11	30,863.33	15,167.29	0.09	6.67			
PRENTISS	-		8,101.61	1,994.67	21,985.23	15,107.29	0.09	0.07			
OUITMAN	-		0,101.01	1,994.07	21,905.25	31,478.80					
SHARKEY				1,012.00	6.67	6,887.29					
SUNFLOWER					0.07	,					
	_		044.00	133.33	40.007.00	509.69					
TALLAHATCHIE			811.00	1,703.00	10,067.30	2,646.36					
TATE			3,045.00	124.00	12,350.00	2,089.78					
TIPPAH			3,608.91	261.33	14,226.67	14,790.00					
TISHOMINGO	_		9,396.00	1,893.33	58,363.33	34,177.78		-			
TUNICA			59.00			18.22				69.33	
UNION			6,240.00	366.77	27,073.03	14,533.33					
WASHINGTON			13.00	1,912.79	141.73	15,952.62	0.76				
WEBSTER	141.33		35,969.01	1,885.33	79,639.27	18,256.27	9.85	9.33		134.75	
WINSTON			33,137.33	3,292.93	86,656.70	35,458.71	15.15			492.85	186.07
YALOBUSHA			12,728.00	82.67	52,016.67	8,764.49	1.33				
YAZOO			1,063.06	5,056.48	33,001.87	17,350.40					
NORTHERN TOTAL	141.33	-	534,526.28	64,511.51	1,874,971.72	808,393.51	206.81	2,836.00	197.33	6,653.39	232.7

<sup>1</sup> Data source: Mississippi Department of Revenue.

		HARDWOOD		HARDWOOD		HARDWOOD				PINE	HARDWOOD
	LUMBER	LUMBER	SAWLOGS	SAWLOGS	PULPWOOD	PULPWOOD	POLES	CROSSTIES	OTHER	CHIPS	CHIPS
COUNTY	MBF	MBF	MBF,D	MBF,D	CORDS	CORDS	C CU FT	MBF,D	MBF	TONS	TONS
SOUTHERN REGION											
ADAMS			7,129.000	17,190.053	3,020.967	26,154.666					
AMITE		464.000	77,179.700	5,462.667	62,453.833	31,269.289	20.719			4.187	
CLAIBORNE			11,913.40	14,146.67	42,522.43	48,455.16	6.30			4.75	
CLARKE			26,028.21	1,855.57	143,456.57	23,953.07	112.91			2,083.57	60.00
COPIAH			48,087.60	10,520.71	162,113.63	45,206.62	26.54			45.65	
COVINGTON			13,190.25	2,141.33	74,780.80	12,738.58	0.14			762.19	249.33
FORREST			6,309.66	866.60	63,805.37	2,795.91	0.22			65.69	124.00
FRANKLIN			58,414.65	5,750.67	62,926.03	39,748.98	19.11				
GEORGE			5,842.45	450.89	35,245.20	5,885.11	1.04			328.67	76.00
GREENE			18,308.80	1,898.68	158,263.37	18,238.84	4.21			229.80	220.00
HANCOCK			6,260.00	30.67	32,365.73	510.09	0.18				81.33
HARRISON			3,307.00	101.33	15,729.07	101.47				38.67	53.33
HINDS			8,291.79	13,094.67	86,758.43	33,296.58				15.63	
JACKSON			4,473.15	332.00	50,535.97	1,159.16	1.40			826.39	30.67
JASPER			28,484.79	3,949.33	92,568.00	21,742.40	10.00			2,528.88	1,520.00
JEFF DAVIS			22,301.53	1,986.67	108,766.57	10,622.80	0.60			48.44	40.00
JEFFERSON			42,099.00	10,525.33	100,267.50	26,306.49	19.81				
JONES			14,467.86	4,036.85	114,432.77	18,175.42	2.24			307.85	170.67
LAMAR			16,770.03	774.67	114,759.03	6,040.80	2.48			25.61	233.33
LAUDERDALE			35,758.39	2,037.33	124,564.03	53,325.78	34.94			2,905.57	
LAWRENCE			25,344.62	3,110.67	110,118.80	13,099.96	4.24			4.40	
LINCOLN		5.33	41,797.66	5,061.33	115,790.50	29,044.22	15.34				
MARION			26,052.77	2,596.00	133,750.17	16,813.47	6.51			154.71	97.33
NEWTON		17.33	34,819.95	3,916.00	152,435.30	36,436.80	33.30			4,563.81	534.67
PEARL RIVER			12,402.95	1,124.00	100,394.73	7,707.73	0.48				640.00
PERRY			12,400.51	525.33	90,105.23	6,672.04	2.19			145.04	25.33
PIKE			25,358.00	2,066.67	49,268.37	20,488.13	7.23				
RANKIN			27,029.09	5,917.71	107,918.93	11,493.33	18.38			418.24	225.33
SCOTT			22,023.36	4,943.37	105,419.97	58,683.73	11.08			1,038.87	822.21
SIMPSON			23,601.52	5,238.67	94,046.23	41,328.89	10.55			346.68	68.00
SMITH			23,088.58	9,212.00	87,540.27	4,227.47	9.24			1,516.15	660.00
STONE			17,110.67	777.33	26,443.03	411.47	0.07				846.67
WALTHALL			16,125.27	1,252.32	96,286.00	11,206.09	1.24			81.33	152.00
WARREN			1,009.00	24,380.03	16,713.97	60,722.84				5.08	
WAYNE			24,070.67	1,988.00	164,244.70	18,001.91	20.84			2,177.37	62.67
WILKINSON		106.67	23,943.68	7,880.00	65,938.03	26,778.00	2.87				
SOUTHERN TOTAL	-	593.33	810,795.56	177,142.12	3,165,749.53	788,843.29	406.39	-		20,673.23	6,992.88
			,		, , ,					, .	
GRAND TOTAL	141.33	593.33	1,345,321.84	241,653.63	5,040,721.26	1,597,236.80	613.21	2,836.00	197.33	27,326.61	7,225.61

Table 4. Mississippi's 2013 harvested timber volumes by product and county (cont.)<sup>1</sup>.

<sup>1</sup> Data source: Mississippi Department of Revenue.