STUMPAGE SPEAK

http://www.lsuagcenter.com/topics/environment/forestry
http://www.lsuagcenter.com/portals/blogs/stumpagespeak

In this issue:
1. Part IV of what goes into prices– Variation in high and low reported values

Louisiana Timber Market Report[1]
First Quarter (Jan-Mar.) 2017
Dr. Shaun M. Tanger LSU AgCenter

E-mail: stanger@agcenter.lsu.edu
LSU AgCenter
Staff Report # 2017-11

Louisiana Stumpage Prices ($/ton)	1st Quarter 2017	Change from Prior Quarter
Product Class	Price per ton	% Change
Pine Sawtimber	26	-4
Pine Chip-n-Saw	20	5
Pine Pulpwood	10.50	9
Oak Hardwood	43	-3
Hardwood Sawtimber – Mixed Grade	35	-11
Hardwood Pulpwood	8.50	-10

[1] The following document is intended for use by forestland owners in Louisiana. The source of these prices is proprietary in nature and are therefore rounded per agreements to disseminate to the public. The prices I report are also state averages and the LDAF numbers are by specific regions. I recommend using both to aid in decisions about purchases, sales, and determining harvesting schedules. As always, communicate with a **consultant forester** on prices before executing contracted agreements with wood buyers.

****Price Conversions: Pine Sawtimber/ MBF= Tons * 8; Hardwood Sawtimber/ MBF = Tons * 9.5; CNS and Pine Pulpwood Cords = Tons * 2.7; Hardwood Pulpwood Cords = Tons * 2.85********

Table 1. Prices for major product classes of Timber Harvested in Louisiana

Timber Mart-South
LOUISIANA STUMPAGE PRICES

1st Quarter 2012

Product	Area	$/Std. Cord			$/Ton			$/per thousand board foot (MBF)								
								Scribner			Doyle			International		
		Lo	Hi	Avg	Lo	Hi	Avg	Lo	Hi	Avg	Lo	Hi	Avg	Lo	Hi	Avg
Pine Sawtimber	1	65.69	94.80	80.25	24.51	35.37	29.94	184	265	225	196	283	240	153	220	186
	2	57.03	78.35	67.69	21.28	29.24	25.26	160	219	189	170	234	202	132	182	157
	Avg	61.36	86.58	73.97	22.90	32.30	27.60	172	242	207	183	258	221	143	201	172

Table 2. Tons of Timber Harvested in Louisiana by major product class.

		Tons pine saw	Tons hrd wd saw	Tons chip	Tons pine pulp	Tons hrd wd pulp
2012	1	1,191,624.46	186,463.75	521,078.49	2,695,145.02	464,411.86
	2	1,536,361.44	116,277.20	383,411.72	2,809,033.24	448,979.46
	3	1,407,519.43	285,931.14	418,239.51	1,902,616.79	302,479.57
	4	2,428,430.93	523,664.31	591,877.72	5,466,706.88	987,212.08

Table 3. Hypothetical Pine Sawtimber Transaction Data of Price Reporting Agency

Transaction Number	Price	Quantity Harvested	Percent of Total Reported Cut	Revenue	Ratio	Weighted Value
1	25	20,000.00	1.68%	500,000.00	0.017	0.42
2	36	500,500.00	42.00%	18,018,000.00	0.420	15.12
3	20	32,000.00	2.69%	640,000.00	0.027	0.54
4	18	10,000.00	0.84%	180,000.00	0.008	0.15
5	26	60,000.00	5.04%	1,560,000.00	0.050	1.31
6	27	35,000.00	2.94%	945,000.00	0.029	0.79
7	29	280,812.23	23.57%	8,143,554.67	0.236	6.83
8	30	240,000.00	20.14%	7,200,000.00	0.201	6.04
9	15	50.00	0.00%	750.00	0.000	0.00
10	18	12,000.00	1.01%	216,000.00	0.010	0.18
12	17	100.00	0.01%	1,700.00	0.000	0.00
13	16	812.23	0.07%	12,995.68	0.001	0.01
14	15	350.00	0.03%	5,250.00	0.000	0.00
Totals	N/A	1,191,624.46	100.00%	37,423,250.35	1.000	31.41
Simple Average	22.46	no weights; each price has equal representation	see second column			
Average of Averages	22.29	median price included in both lower average and upper	TMS			
Weighted Sum	31.41	sum of weighted values	see last column			
Total Revenue Divided by Total Harvest	31.41	total revenue divided by total acres; no weights	LDAF			

I. What's in a price

One final issue to discuss on how prices are determined for stumpage products and how we arrive at that state 'average' from all the surveys that get turned in for a particular quarter. On the previous page, Table 1 shows Timber Mart-South (TMS) prices for the 1st Quarter of 2012. The prices for pine sawtimber are in tons, cords (2.5 tons), and MBF (thousand board feet)[1]. Note the differences, the high and low categories are themselves averages of reported timber harvest sale transactions that are at the lower or higher end of those reported, so that the state average price is actually an average of averages[2]. This is to both protect the privacy of those reporting and to avoid the bias of strong outliers.

Let us look at a hypothetical example; one large timber owner was responsible for 500,000 tons of sawtimber harvested in the first quarter of 2012. That would account for roughly 50% of the harvested timber in the state that quarter (see Table 2)[3]. They likely get a much higher price than a small landowner due the premium placed on that large amount of volume by procurement professionals. The idea being that the harvester of the wood can lower their costs of harvesting that timber (i.e. moving equipment, people, and wood).[4] If we use a raw average of prices, this might bias the average up artificially even though it may be an atypical sale. All other sales reported that quarter could be far lower in terms of price per ton.

They then can report that transaction to TMS, Louisiana Department of Ag and Forestry (LDAF), and/or Forest2Market (F2M) and it goes into the pool to generate the prices for that quarter. However, LDAF and TMS do not report the same way (see Table 3). LDAF takes the total revenue

---

[1] See the price conversions on the first page for the relationship between tons and MBF (thousand board feet).

[2] The low and high averages are the averages above and below the median (and include the median in both averages. Then those averages are averaged together.

[3] I'm simplifying, all pine sawtimber is not equal. Size, quality, access, specific mill demand in the area – are just a couple of factors as to why price per ton could be higher for one sale or another. Holding those constant though, the more acres you have to harvest, the higher your price per unit should be for the sale.

[4] Varies depending on the tons per acre that are available, but a logging operation typically needs 3-5 (minimum) per day to operate a basic crew. Larger, more automated crews could harvest and haul far more.

of a region and divides by the quantity harvested in the perspective region. Which one is most accurate? No way to know the real answer because they are dependent on voluntary reporting (likely a sample of the total number of transactions that took place that quarter) and the specific mix of prices reported that quarter. The most accurate _I can think of_ is to do a weighted sum, which in Table 3 gives the same value as the LDAF number, but this assumes perfect reporting. On the contrary, notice that in this case, TMS is very close to the 'simple' average[5]. The more transactions that have a similar price the closer the two series will be for that quarter.

The important thing to remember when looking at an average TMS (that I provide) or that LDAF provides is that small landowners with smaller tracts are much more likely to be at the lower end of that price 'average'. That would be 82% (68% of the high price) of the average price in the northern region (region 1) and around 84% (73% of the high price) of the average price in the southern region (region 2) referring back to Table 1.

I'll close by saying that many sales never are reported and any price reporting service is only as good as input provided by those conducting timber sales in the state. I would encourage anyone reading to report their sales to all the agencies, they give you freebies for doing so that you may find useful. As for LDAF, you get the freebies regardless, but the quality is not as good if you do not provide input. In addition, it is the longest running series in the country! I also really like their report because it breaks the state down into five regions, while TMS only has two.[6]

Next Time: This will be the last issue where I have a detailed discussion attached to the price report, I will continue to do the discussions but as standalone documents. The price reports in the future will simply be the prices and the harvests of timber in Louisiana for that quarter. I will have hyperlinks to them here so you can view them.

---

[5] The logic here is that including the median in both averages and then average those, more weight is given to the middle transaction prices.

[6] http://www.ldaf.state.la.us/forestry/reports/

Regional differences can be a function of mill activity, availability of logging operators and weather in the area, along with some more minor reasons. Those are the big three though.