Staff Report # 2018-30

STUMPAGE SPEAK

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Louisiana Timber Market Report[1]
Second Quarter (Apr-Jun) 2018
LSU AgCenter

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Louisiana Stumpage Prices ($/ton)	2nd Quarter 2018	Change from Prior Quarter
Product Class	**Price per ton**	**% Change**
Pine Sawtimber	25	2%
Pine Chip-n-Saw	19	-3%
Pine Pulpwood	10	-1%
Oak Hardwood	41	-2%
Hardwood Sawtimber –Mixed Grade	32	-4%
Hardwood Pulpwood	10	5%

[1] The following document is intended for use by forest stakeholders in Louisiana. The source of these prices is proprietary in nature and rounded per agreements to disseminate to the public. Therefore, I add percentages so the reader will know if prices are up/down/flat. The prices I report are also state averages. I recommend using this document and those produced by Louisiana Department of Ag and Forestry to aid Table 1. 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********

Addendum to the "Should I wait or should I cut" write-up in the first quarter 2018 timber market report

Introduction

Two points I wanted to address from the first quarter timber market report. One was simply an error.

On page three, second to last paragraph, ignore that last sentence. It was a partial one and I meant to delete it. I've since corrected it but if you downloaded an old copy, watch out for that.

On the second point we are going to have to get into the weeds a bit. I need to be clear on the diameter breast height (dbh) growth per year I used in the analysis. The 3/8 inch number is on the lower end of growth for pine stands but my rationale for using it was two-fold.

First, I used a low site index (65), but this is not too far off for many sites in Louisiana.

Site index (SI) is a measurement commonly used by foresters to describe the productivity of a site. Typically this measurement is used to describe sites growing well-stocked even-aged forests. Site index is the average height of the dominant and codominant trees on the site, at a given age (base age). Loblolly pine stands most typically use a site index at 25 years. See figure 4 in this link. https://www.srs.fs.usda.gov/pubs/rn/rn_so250.pdf

In short, if the site has trees of 20 meters (65 feet) at age 25, we would say it has a site index of 65 (again for even aged managed loblolly pine stands). This is a typical site index on droughty soils. Dr. Blazier conducted a study at the Hill Farm with my predecessor (Dr. Mike Dunn) and the site had an index of 18 meters at 25 years, this would be approximately 59 feet, so the choice is not without some backing based off history in the western gulf region and research conducted in the region.
https://www.researchgate.net/publication/233592667_Stock_Type_Subsoiling_and_Density_Impact_Productivity_and_Land_Value_of_a_Droughty_Site

However, always keep in mind, growth can vary for a number of reasons both that the landowner controls and natural factors beyond the landowners control. Using seedlings that have been cultivated for better growth, for instance could improve your growth, which would be a management activity that the landowner could implement to increase growth rates. www.uaex.edu/publications/PDF/FSA-5030.pdf.

Also, the landowner could decide to purchase a piece of property with inherently better site index quality, although management improvements would still (to a lesser degree) have impact on the growth potential, but you would be at a higher starting point. Alternatively, perhaps the area has an unusual drought for several years, or a Hurricane (not unlikely conditions in Louisiana). This could stunt growth and or reduce volumes available at final harvest.

As a rule of thumb, I'd hedge and say to assume between 2 in of dbh growth every five years.

Unless you know you're site is poorer quality or you've let the pulpwood go several years past optimal harvest time.

There will be variation (in that rule) if you focus in on any one year of growth. For instance when the trees are first planted they will put on growth very quickly. As they begin to crowd each other, then growth in diameter slows and forces the trees upward. Once you implement a thin, say for pulpwood, then the trees left standing will be begin to put on diameter growth a greater rate than before the thinning.

Further, initial planting density (500 trees per acre were used in the simulations I ran, which is on the lower end for most landowners) and how intensively you thin will affect these rates, in any one year as well. Along with that, artificial management strategies (i.e. herbicide treatments, pre-commercial thinning) can affect this. Again the 2-inch dbh is merely a "rule of thumb" across the majority of pine stands. If you used the 3/8's I mentioned last time, you'd get 1.875 inch in dbh growth over a 5 year period.

It doesn't seem like much but after 15 years, with 1.875 per five years, you'd have around 7.5 inches in dbh (if you used the 2 inch, it would be 8 inches in dbh). As is true in other aspects of forestry, little differences add up over enough time. Basically, you'd get to pulpwood size a year earlier, CNS two years earlier, and sawtimber three years earlier.

Notice I've mentioned nothing about prices! Why? Because you aren't growing the stand for 10 inch dbh wood at that second thin (hopefully). These thinning decisions should be made on biological considerations (specifically Stand Density Index[2]), unless someone is offering you the moon for either pulpwood or small Chip-N-Saw, which does happen occasionally if the mill gets in a bind.

Secondly, most small timber owners don't engage in much of this type of management and or wait too long to harvest pulpwood and thus slow the overall growth of the stand (over its entire life), so I used a conservative number in my site index, which would reduce growth regardless of management activities when compared to higher site indexes.

Those of you with knowledge of these financial models know that reducing growth rates would lower yields and thus make the investment less attractive regardless of discount rate, costs and prices. That's true, but it's close regardless because **prices** (relative to each other and in absolute terms from say 15 years ago) are the big factor causing the shorter rotation age.

In short, even if we increase the growth rates, the general trends I showed you in last quarter's issue should still apply. You would need a lot of artificial growth strategies to change that number and even then the increased costs you'd incur in the process would likely call for even shorter rotation as those costs compounded over time.

[2] I'll discuss Stand Density Index in the next issue or in a special issue.

The story remains the same, when you have this much convergence on prices, and sawtimber prices are not much higher than CNS prices, you cut much sooner than you would otherwise.

In the example from last time, in the Florida parishes, the price differential between CNS and Sawtimber is anywhere from two to four dollars. Why? Mills in the area are opting for smaller diameter wood. Even if you can sell 15-17 inch dbh wood (find a mill willing to take that size product), it may very well be more profitable to conduct a final harvcest sooner, because prices are so similar. This is not even taking into account Hurricanes or some other disaster, which would merely serve to reinforce that take home message.

For clarification or other questions, feel free to shoot me an e-mail at stanger@agcenter.lsu.edu