

Michigan Public Timber Markets, 3rd Quarter (April-June), FY 2016

State Forest data – Total sale volume decreased in the 3rd quarter of FY 2016. Bid-species-only volume fell from 212,100 to 189,237 cords while total sale volume fell from 239,695 to 213,383 cords. NLP bid species sale volume declined slightly from 119,464 to 115,165 cords. The UP bid species sale volume fell more, from 92,861 to 74,073 cords. For several years, there has been a pattern of lower 4th and 1st quarter sale volumes and higher sale volumes in the subsequent 2nd and 3rd quarters. If this pattern holds, 4th quarter total sale (bid & non-bid species) volumes will fall short of 200,000 cords and the annual sum will be between 825,000 and 850,000 cords.

The 3rd quarter overall average bid price decreased again, from \$60.14 to \$57.55 per cord. This is the fourth quarter in a row of relatively stable prices. The overall price index reached a record \$69.99 per cord in the 3rd quarter of FY 2015. While there may continue to be a few quarters of relatively stable or even declining prices, the long-term trend is expected to include moderate price increases.

NLP aspen pulpwood bid species quarterly sale volumes continue to be quite high, having been at 28,529, 27,599, and now 30,665 cords in the 3rd quarter. They went from a record 41,330 cords down to 7,550 cords in the last quarters of FY 2015. The NLP 3rd quarter price went from \$25.07 to \$32.80 per cord. UP aspen pulpwood sale volume rose from 13,988 to 15,416 cords in the most recent (3rd) quarter while prices jumped from \$49.23 to \$56.38 per cord. UP red pine pulpwood bid species sale volumes dropped from 12,394 to 8,965 cords while the NLP volume went from 12,114 to 11,121 cords. The NLP red pine pulpwood price fell further, from \$61.48 to \$58.94 per cord while the UP price dropped from \$98.45 to \$91.48. NLP jack pine pulpwood bid species volume increased again. It went from 29,292 cords in the 2nd quarter of last year, down to 8,818 cords, then to 4,586 cords, and bottomed out at 2,933 cords before hitting 5,628 cords in the 2nd quarter and then 7,064 cords in the most recent quarter. UP jack pine pulpwood sale volume was over 12,000 cords several quarters last year before plummeting to only 221 cords in the 1st quarter; it rebounded to 13,087 cords in the 2nd quarter before falling again to 2,780 cords in the 3rd quarter. UP jack pine pulpwood cord prices rose from \$45.60 to \$61.08 in the 2nd quarter and then rose again in the 3rd quarter to \$63.05. NLP jack pine cord prices decreased sharply from \$87.42 per cord in the 1st quarter down to \$26.42 before rising in the 3rd quarter to \$30.55. UP softwood pulpwood sale volume was essentially unchanged at 13,497 cords. It had dropped from 24,800 to 15,090 cords in the 1st quarter then dipped further in the 2nd quarter to 13,628 cords. Its price rose dipped in the 3rd quarter from \$39.92 to \$37.82 per cord. NLP Oak pulpwood sale volume almost doubled, from 8,526 to 16,648 cords while its price also climbed from \$24.67 to \$34.01 per cord. Other hardwood pulpwood volume fell back from 55,652 cords down to 38,248 cords while its price slightly increased to \$37.53 per cord. Statewide red pine sawtimber prices continued their gradual decline, down to just under \$200 per mbf while volumes also declined from over 8.3mmbf down to 5.3mmbf. UP sugar maple sawtimber prices rose again from \$895 to \$932 per mbf as volume sharply dropped from 1,125mbf down to 544mbf. The NLP sugar maple sawtimber price jumped from \$474 to \$774 per mbf as the volume fell more than the UP volume decline, from 1,252mbf down to 329mbf. NLP oak sawtimber volume increased appreciably, from 2.74 to 4.6mmbf while its price declined from rose from \$225 to \$250 per mbf.

National Forest data – Total National Forest sawtimber 3rd quarter sale volume increased on the Ottawa from 4.75 to 5.3mmbf, sharply declined from 12.6 to 1mmbf on the Hiawatha, and rose on the Huron-Manistee (H-M) from .9 to 3.4mmbf. Total pulpwood sale volumes changed little on the Ottawa, going from 14.9 to 14.8mmbf, they dropped from 10.4 to 3.2mmbf on the Hiawatha, and they increased from 1.8 to 4.1mmbf on the Huron-Manistee.

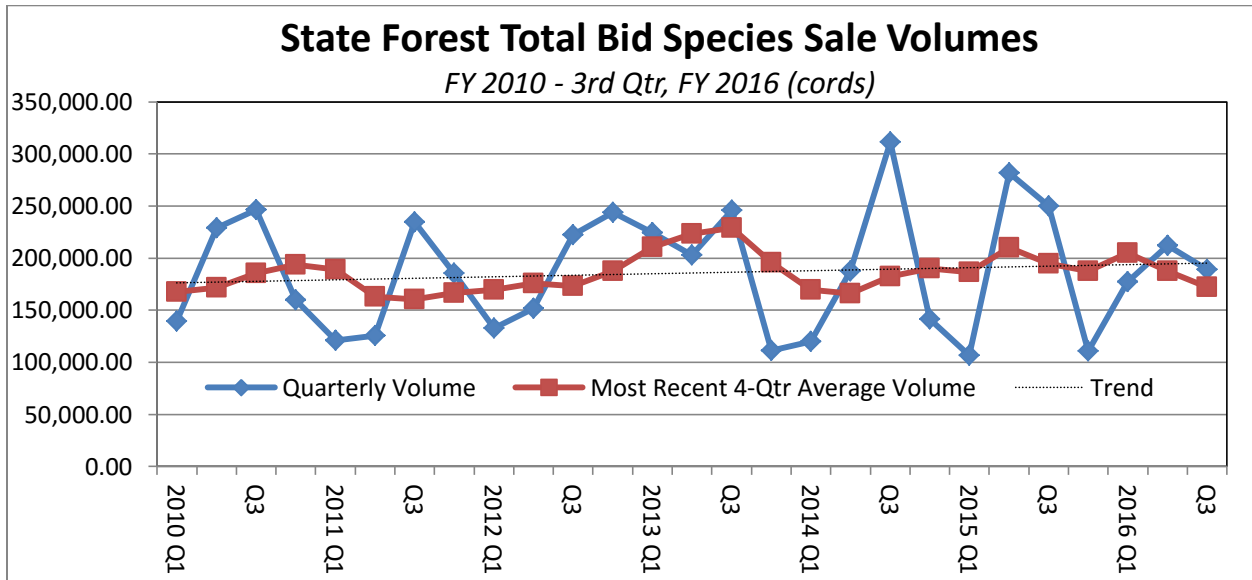
Ottawa's overall average sawtimber price increased from \$179 to \$199 per mbf while its overall pulpwood price dropped further from \$70.60 to \$56.25 per mbf. Ottawa sugar maple sawtimber sale volume rose from 402 to 630mbf in the 3rd quarter while its price rose from \$365 to \$440 per mbf in the 3rd quarter. Its aspen pulpwood sale volume dipped further from 2.8 to 2.6mmbf in the 3rd quarter as its price went from \$45 to \$64 per mbf. The "hardwood-other" pulpwood volume more than doubled from 4.8 to 9.5mmbf while its average price also increased sharply from only \$24 to over \$39 per mbf. The Hiawatha's overall average sawtimber price decreased from \$174 to \$169 per mbf as its red pine sawtimber price fell back from \$183 to \$167 per mbf. Its "hardwood-other" sawtimber price more than doubled, going from \$108 to \$264 per mbf (but on very low - 71mbf – volume). Hiawatha aspen pulpwood sale volumes fell back from 1.5 to .3mmbf while the price dipped further from \$24 to \$23.50 per mbf; it had been over \$102 in the 1st quarter. Jack pine pulpwood sale volume rose just slightly as it went from 80 to 98mbf and its average price did not change much, dipping to \$24.50 per mbf. Red pine pulpwood volume came down from 3.6 to .97mmbf with its average price declining from \$143 to \$136 per mbf. H-M average mbf sawtimber prices went back up from \$87 to over \$92 per mbf while average pulpwood prices also rose from \$42.50 to over \$50 per mbf. For the third quarter in a row, there has been virtually no H-M aspen sawtimber sold; a record 3.74mmbf was sold in the 4th quarter of FY 2015. Similarly, the 4th quarter's aspen pulpwood 4.8mmbf record sale level has been followed by three quarters of virtually no aspen sales. Red pine sawtimber sale volume rose sharply from .3 to 2.8mmbf as its average price dropped from \$127 to \$101 per mbf. Jack pine pulpwood volume increased tenfold, from 143 to 1,433mbf, while its price went from \$26 to \$32 per mbf. H-M red pine pulpwood sale volume rose sharply from .77 to 2.5mmbf as its price went from \$57 to \$62 per mbf.

State Forest Quarterly Timber Sales for Major Species & Products

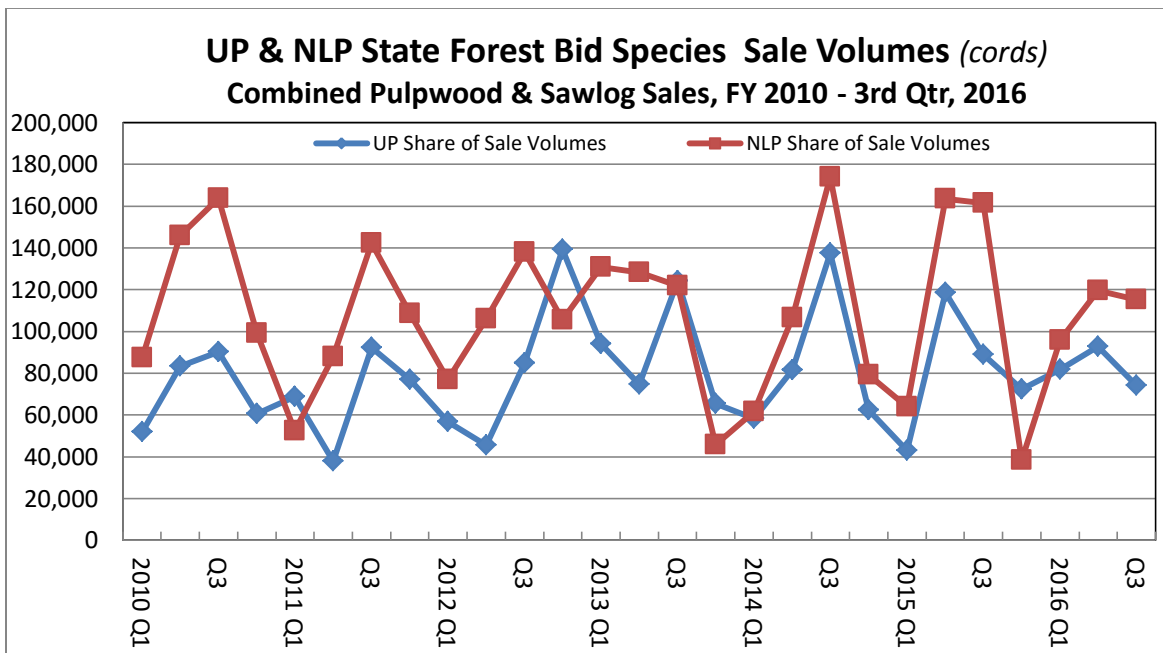
FY 2010 – 3rd Quarter, FY 2016

Source: Michigan DNR, Forest Resources Division

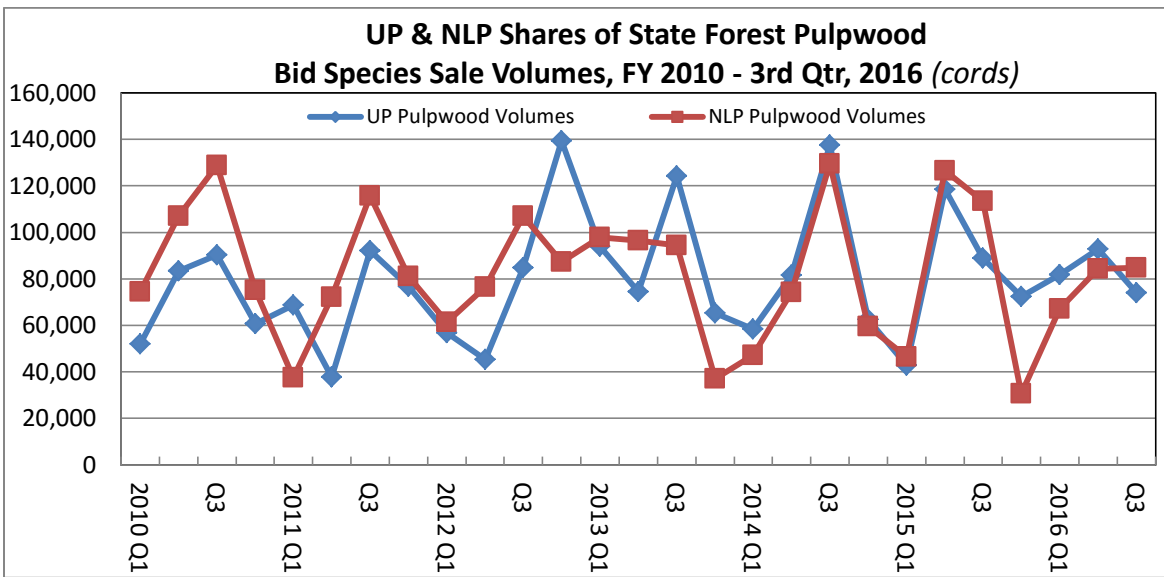
The State follows the federal fiscal year (October 1 through September 30). Graphs below show bid species sale volume and value data; total sale volumes and values are slightly more. The graphs often include a dotted trend line based upon data for the average of the most recent four quarters (labeled as "Avg4QtrVolWtdPrice"). This average eliminates variability in quarterly data due to seasonal issues and variation in quarterly sales. It takes volumes into account when averaging prices. It also may represent the values and volumes of stumpage that are available on the market better than the most recent quarter. Gaps in the blue line indicate no sales in the quarter.



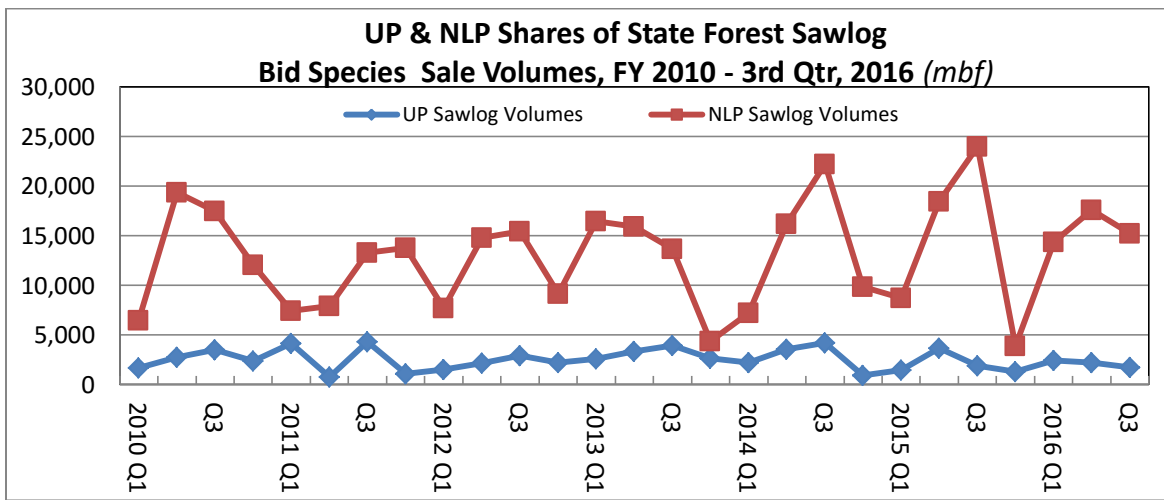
Sale volume for bid species dropped from 212,100 to 189,200 cords in the 3rd quarter. The volume had dropped sharply in the 4th quarter of FY 2015 to 111,000 cords after being at 282,000 and 250,000 cords in the previous two quarters. Record sale volume in the 3rd quarter of FY 2014 was partly due to a large number of rebid sales. The 4th and 1st quarters of every fiscal year have tended to have lower sales than the 2nd and 3rd quarters and this pattern has been more pronounced in recent years. Overall, there is a slight increasing trend over the past six years.



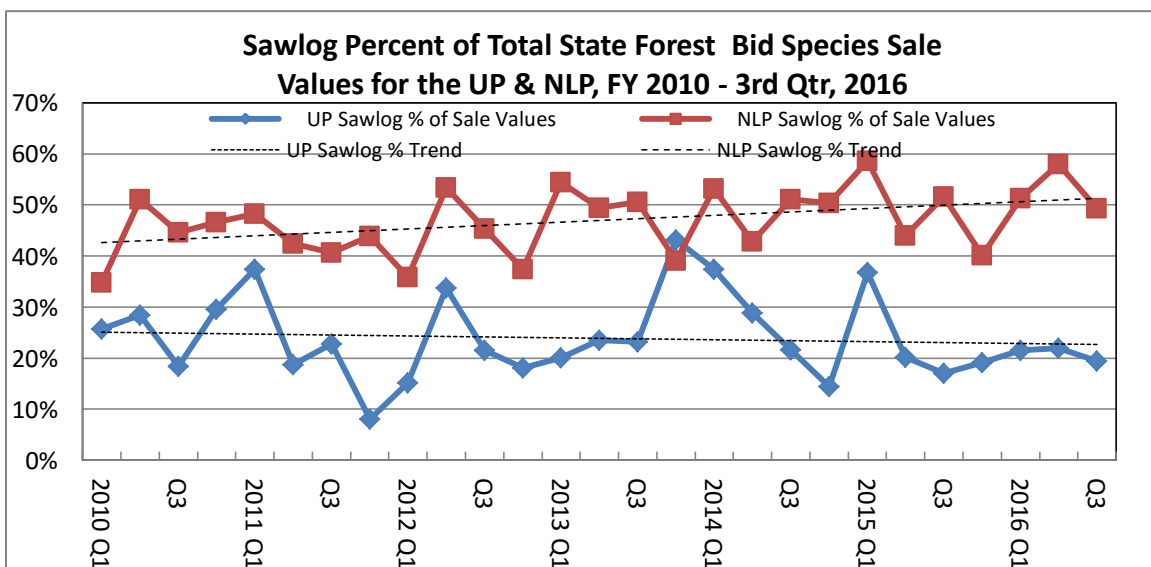
Bid species sale volumes declined in the 3rd quarter of FY 2016, from 92,861 to 74,073 cords in the UP and from 119,464 to 115,165 in the NLP. Both peninsulas had increased their sale volumes in the prior two quarters, following lows in the 4th quarter of FY 2015. The 4th quarter NLP volume was the lowest in the past six years; however, it followed back-to-back high sale volumes in the prior two quarters. The NLP generally has higher, but more extreme swings in its sale volumes.



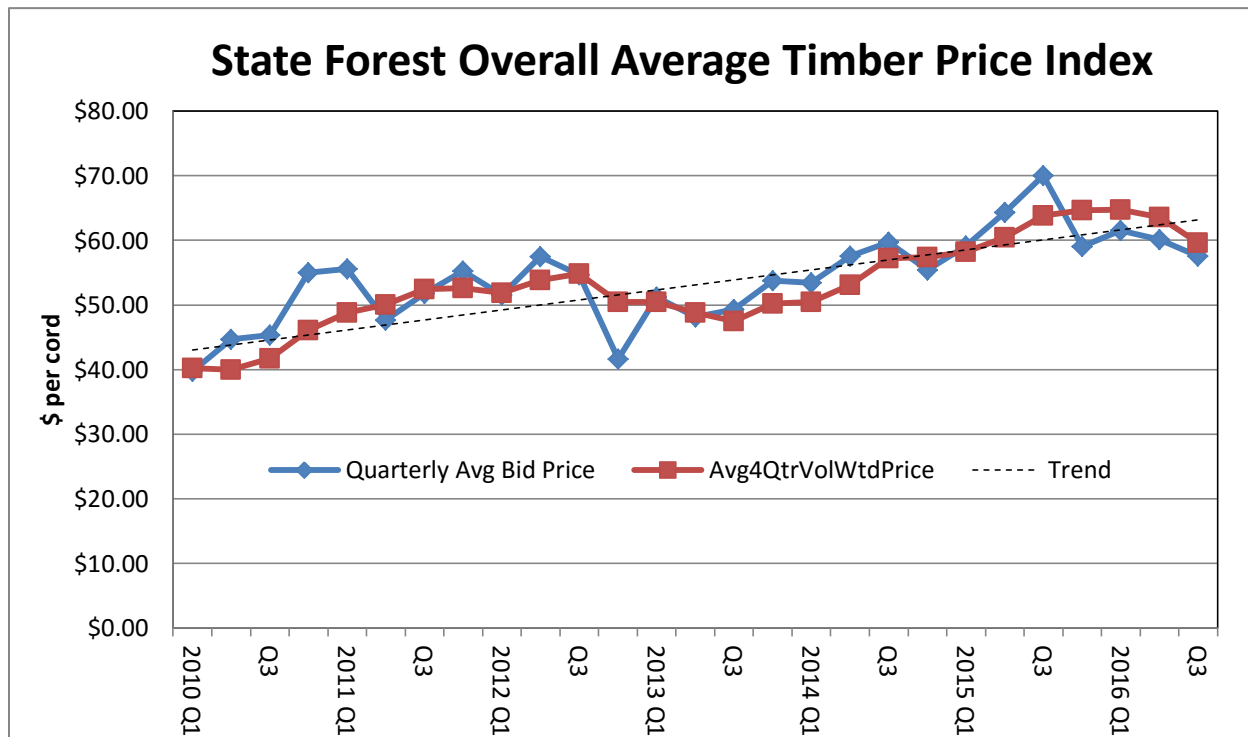
Pulpwood sale volume accounts for about 80% of total State Forest sale volume. UP pulpwood sale volumes decreased in the 3rd quarter (from 88,471 to 70,672 cords) while the NLP held steady at close to 84,500 cords.



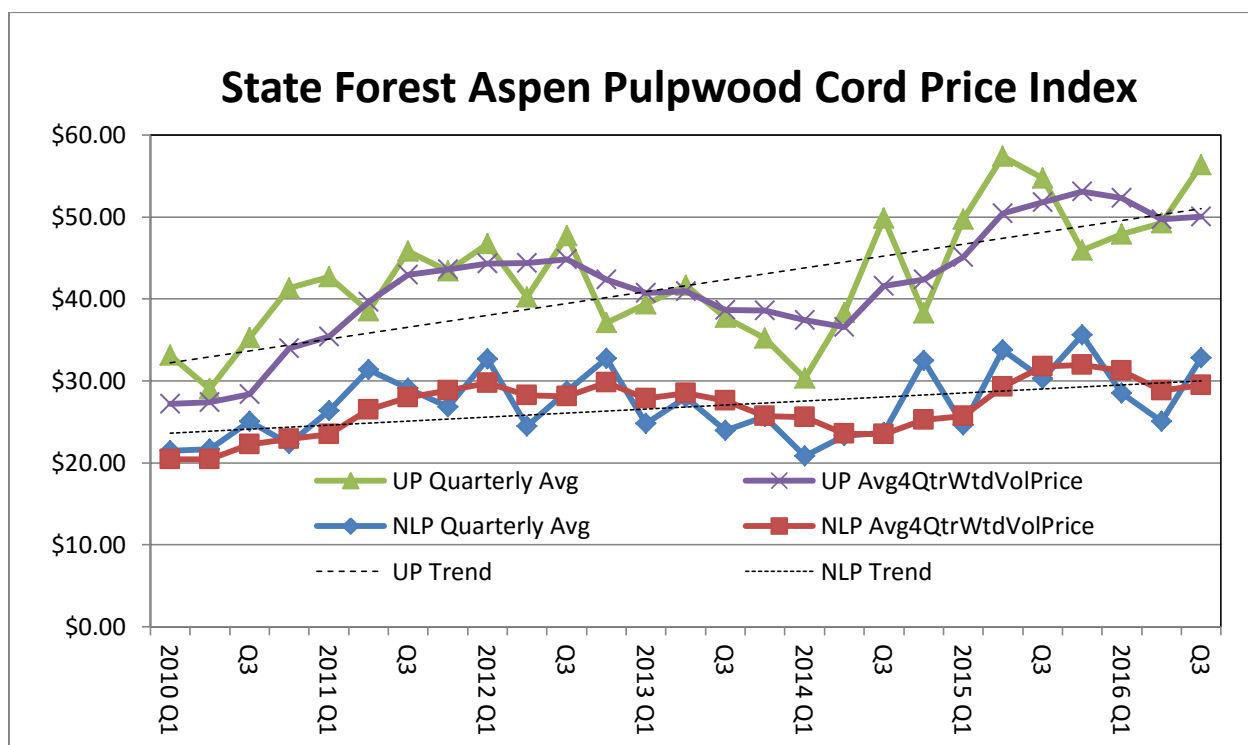
NLP sawlog volumes and values are generally much higher but more erratic than the UP's. 3rd quarter NLP sawlog volume dipped, but remained above 15mmbf while UP sawlog volume decreased from 2.2 to 1.7mmbf.



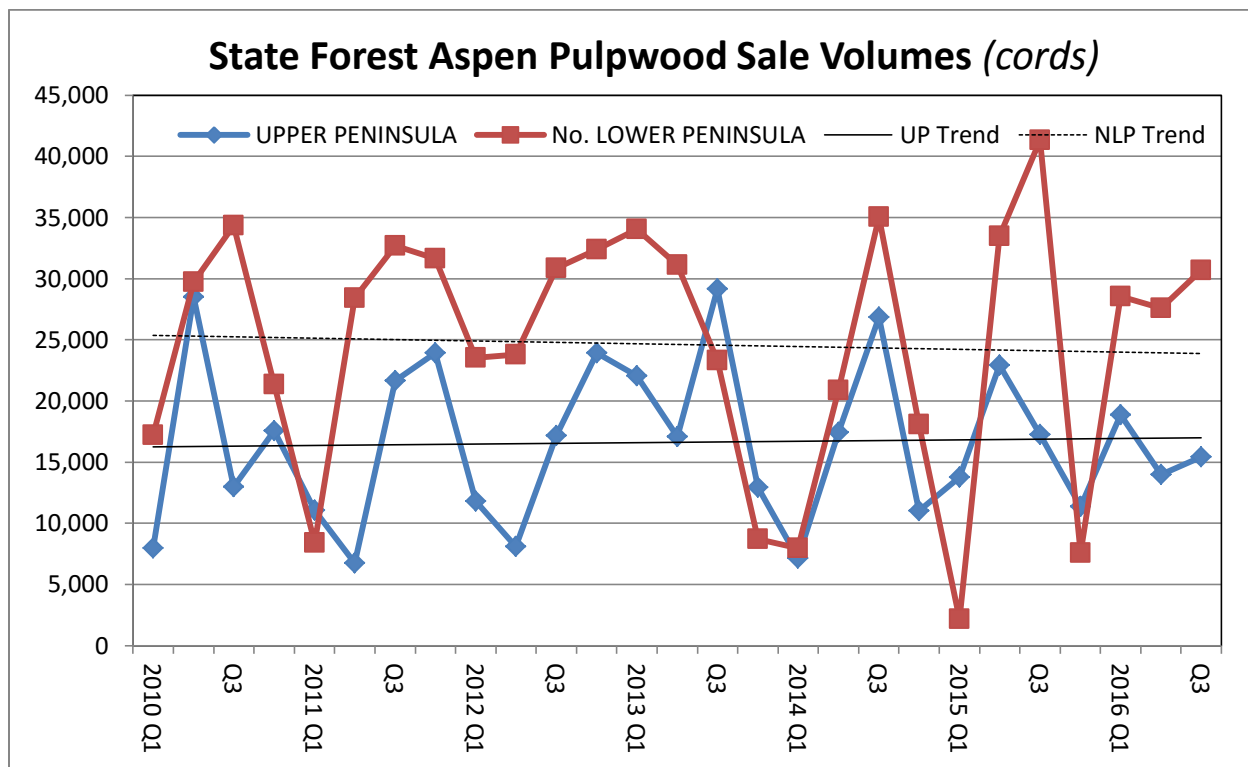
NLP and UP sawlog percent of bid species sale values reversed course and decreased in the 3rd quarter. The UP six-year trend line is flat and close to 20% while the NLP's trend line is modestly increasing, from under 45% to just above 50%.



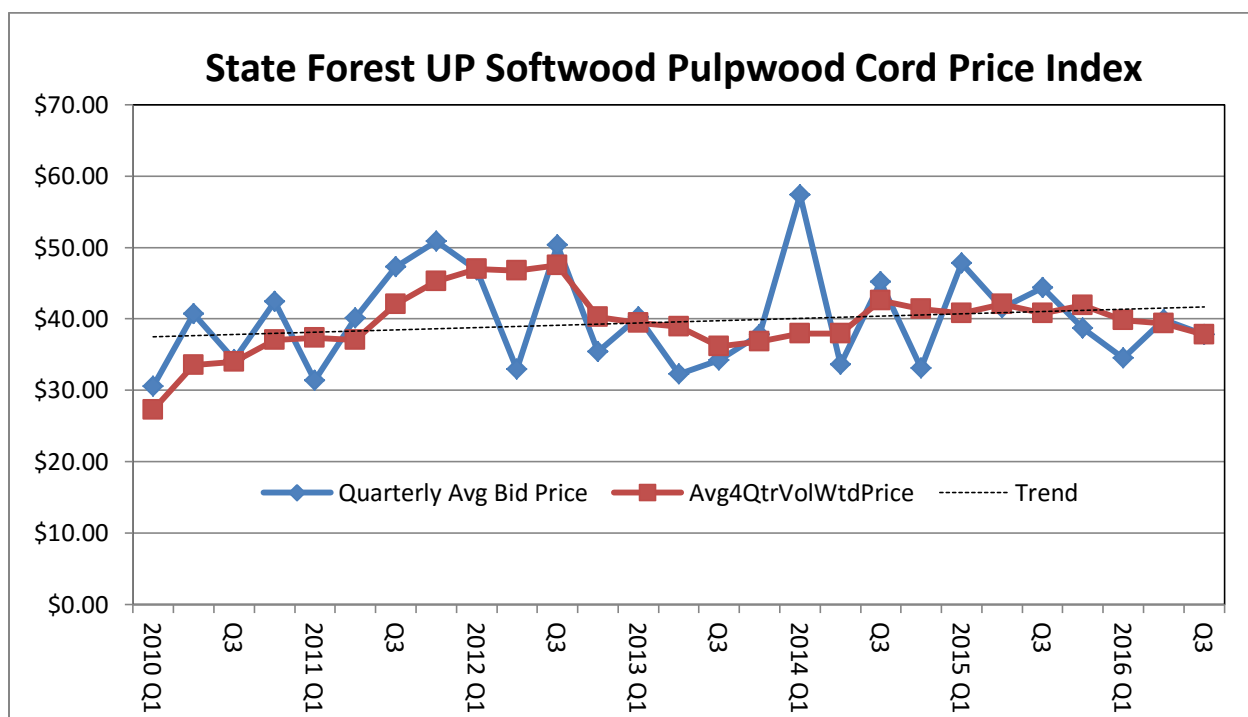
The 3rd quarter overall average timber price index declined slightly again, from \$60.14 to \$57.55 per cord. It was at a record level of \$69.99 per cord one year ago, but since then it has been quite stable in the vicinity of \$60 per cord. With a few notable exceptions – including the most recent three quarters - prices have been increasing fairly steadily for the past six years. Price declines have often occurred in the 4th quarter in recent years.



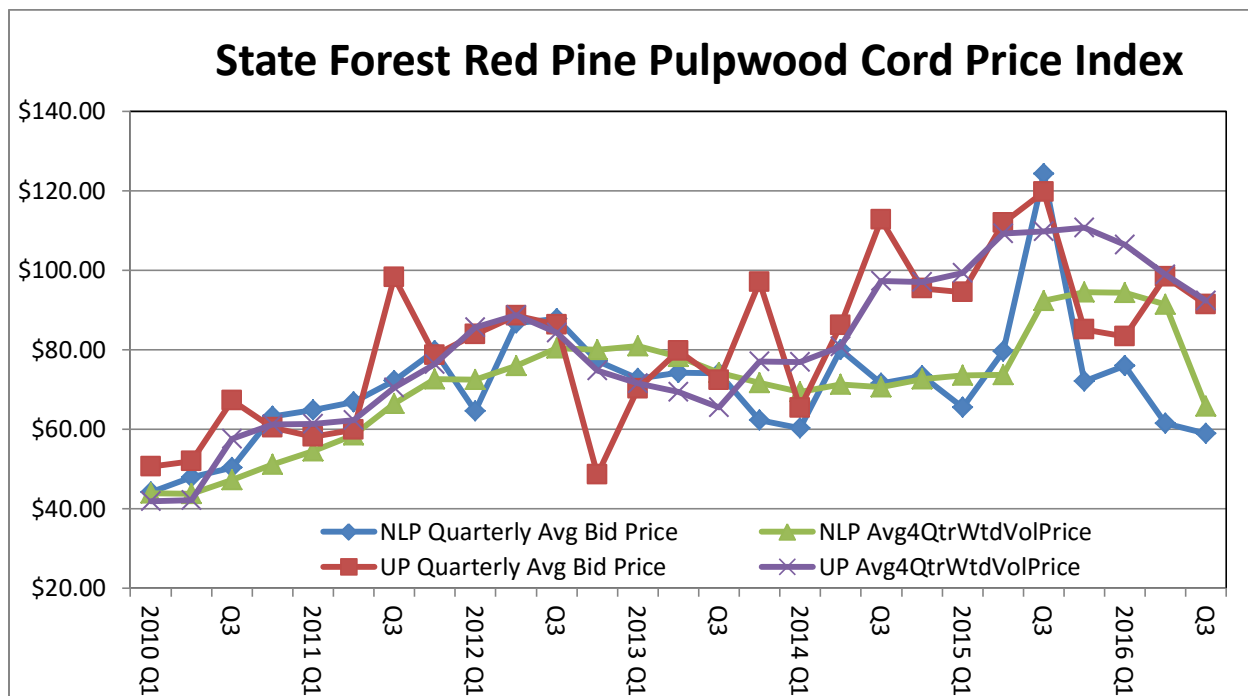
For the fourth quarter in a row, UP average Aspen pulpwood cord prices rose again, from \$49.23 in the 2nd quarter to \$56.38 in the 3rd quarter. In FY 2015, they had reached a record level of \$57.39 per cord in the second quarter before falling all the way to \$45.93 in the 4th quarter. The NLP aspen pulpwood cord price also rose, from \$25.07 to \$32.80 per cord, but this increase follows to quarters in a row of price decreases. The average per cord price gap between the peninsulas remained about the same as last quarter at close to \$24 per cord. Both peninsulas exhibit increasing price trends, but the UP price trend is steeper relative to the NLP price trend.



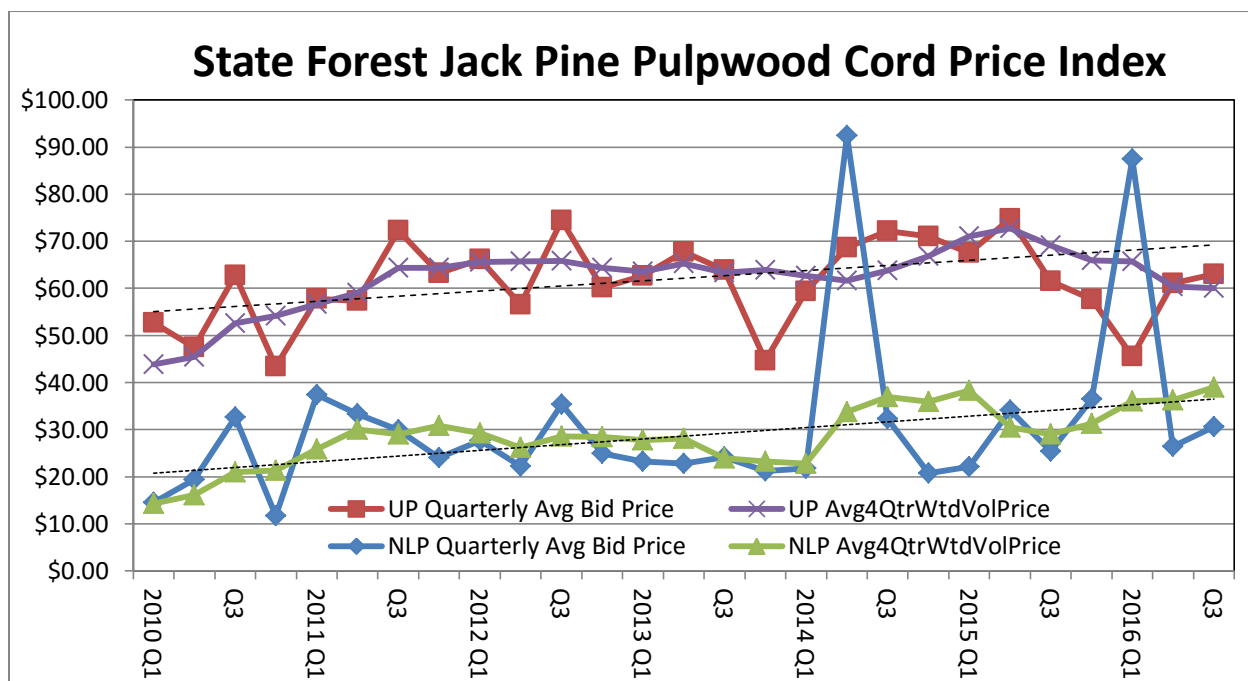
Both peninsulas saw increases in 3rd quarter sale volume for aspen pulpwood. NLP aspen pulpwood sale volume rose from 27,599 to 30,665 cords. It had plummeted from a record high of 41,328 cords down to only 7,553 cords in the 3rd and 4th quarters of FY 2015. The above graph shows how there have been extreme swings in quarterly sale volumes for NLP aspen in recent years, with highs in the 3rd quarter. The UP 3rd quarter sale volume rose from 13,988 to 15,416 cords. The UP quarter-to-quarter sale volumes appear to be moderating in contrast to the NLP's more erratic pattern. The UP also has a slightly increasing sale volume six-year trend line while the NLP has had a slightly declining trend.



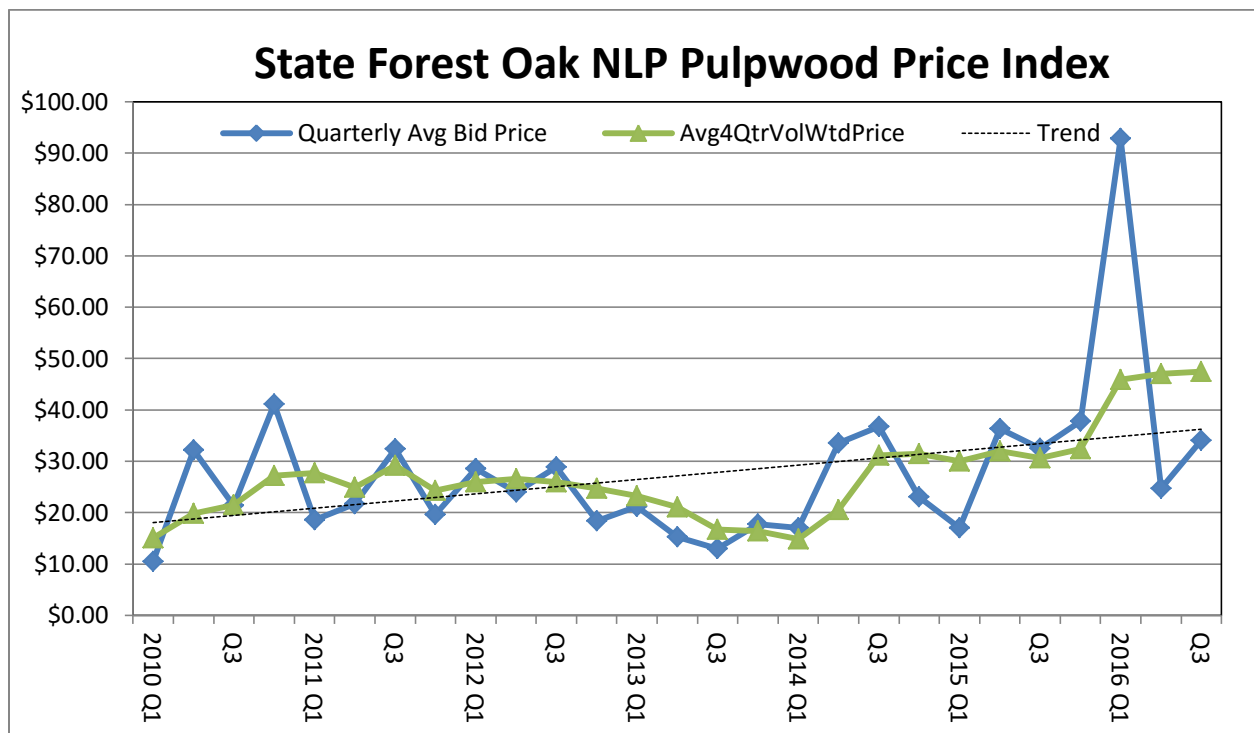
The UP accounts for close to 90% of what is sold as "softwood pulpwood." The 3rd quarter softwood pulpwood cord price declined from \$39.92 to \$37.82 per cord on 15,725 cords of sale volume. Prices do not fluctuate as much for UP softwood pulpwood as they do for other timber products. A record high price of \$57.39 was reached in the 1st quarter of FY 2014; the price has often dipped below \$35 per cord in the past six years, but it has not been below \$30 since before FY 2010. A record level of 35,100 cords was sold in the 3rd quarter of FY 2014. There is a slight upward price trend for the product.



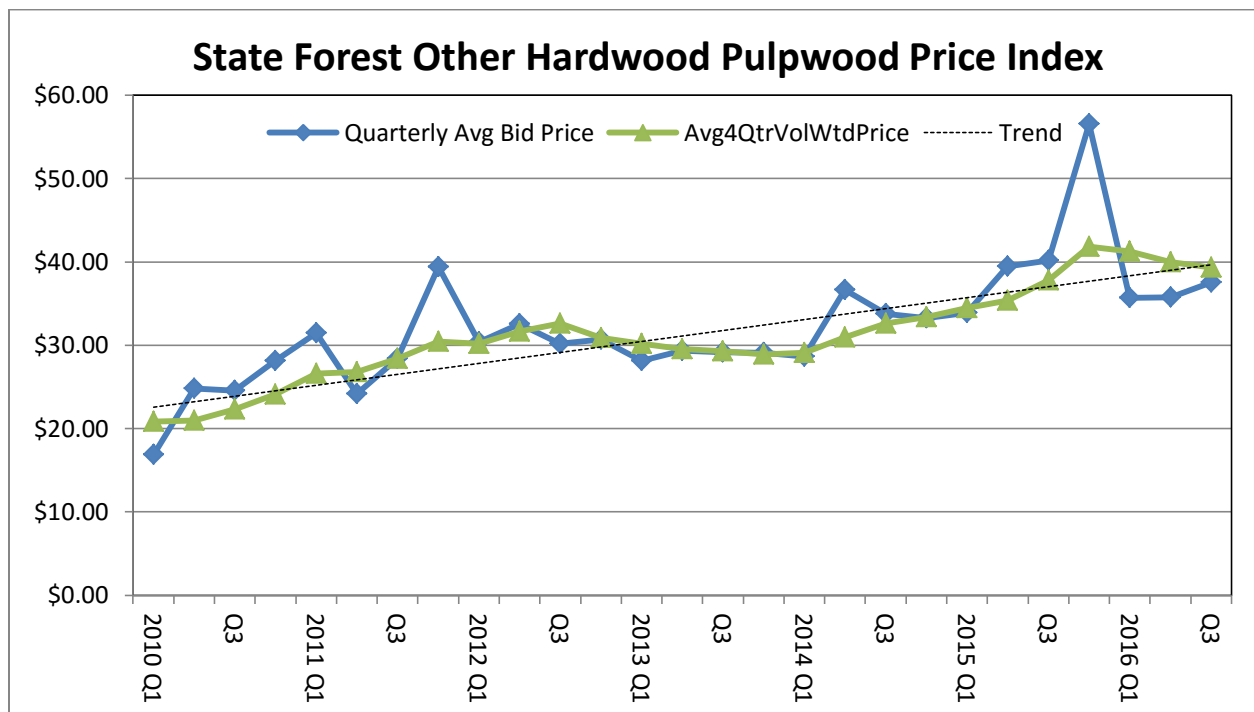
The FY 2016 3rd quarter NLP red pine pulpwood price declined further from \$61.48 to \$58.94 per cord. The price had shot up in the 3rd quarter of FY 2015 to over \$124 per cord before dropping back even more sharply in the 4th quarter to a \$72 price. The UP generally has higher RP pulpwood prices than the NLP. The UP price dropped in the 3rd quarter from \$98.45 to \$91.48 per cord. It had reached \$119 per cord in the 3rd quarter of last year before falling to \$85 in the 4th quarter. UP sale volume declined from 12,394 cords in the 2nd quarter to 8,965 cords in the 3rd quarter. NLP volume declined less, from 12,114 cords in the 2nd quarter to 11,121 cords in the 3rd quarter.



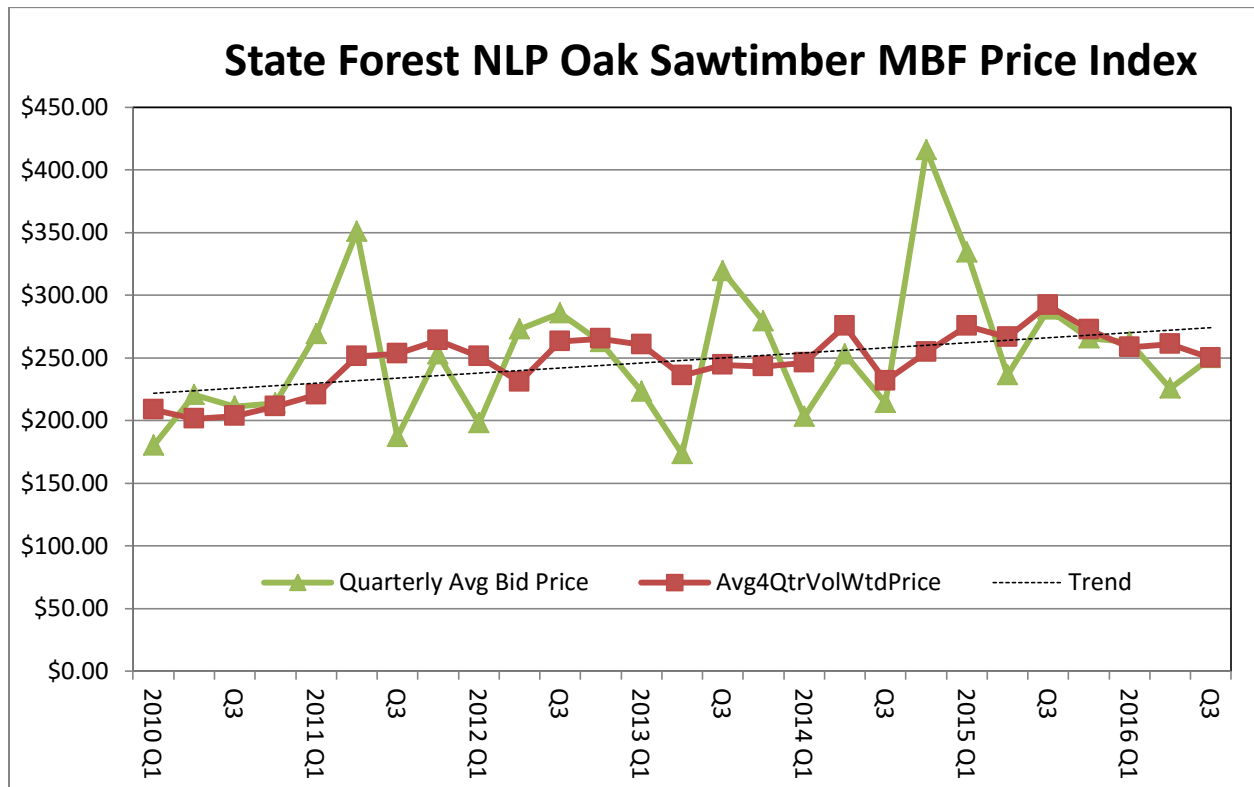
The NLP jack pine pulpwood cord price dropped sharply from \$87.42 per cord in the 1st quarter to \$26.42 in the 2nd quarter and then rose slightly to \$30.55 per cord in the 3rd quarter. The UP price rose from \$61.08 per cord in the 2nd quarter to \$63.05 in the 3rd quarter. The UP price has generally been two to three times the NLP price, although there are a few exceptions. Jack pine sale volumes are highly volatile from quarter to quarter. UP 1st quarter sale volume was only 221 cords, it was 13,087 cords in the 2nd quarter, and then 2,780 cords in the 3rd quarter. NLP sale volume fell from 29,292 cords in the 2nd quarter of FY 2015 to 8,818 cords and 4,586 cords in the 3rd and 4th quarters and then was 2,933 cords in the 1st quarter of this fiscal year, 5,628 cords in the 2nd quarter, and reached 7,064 cords in the 3rd quarter.



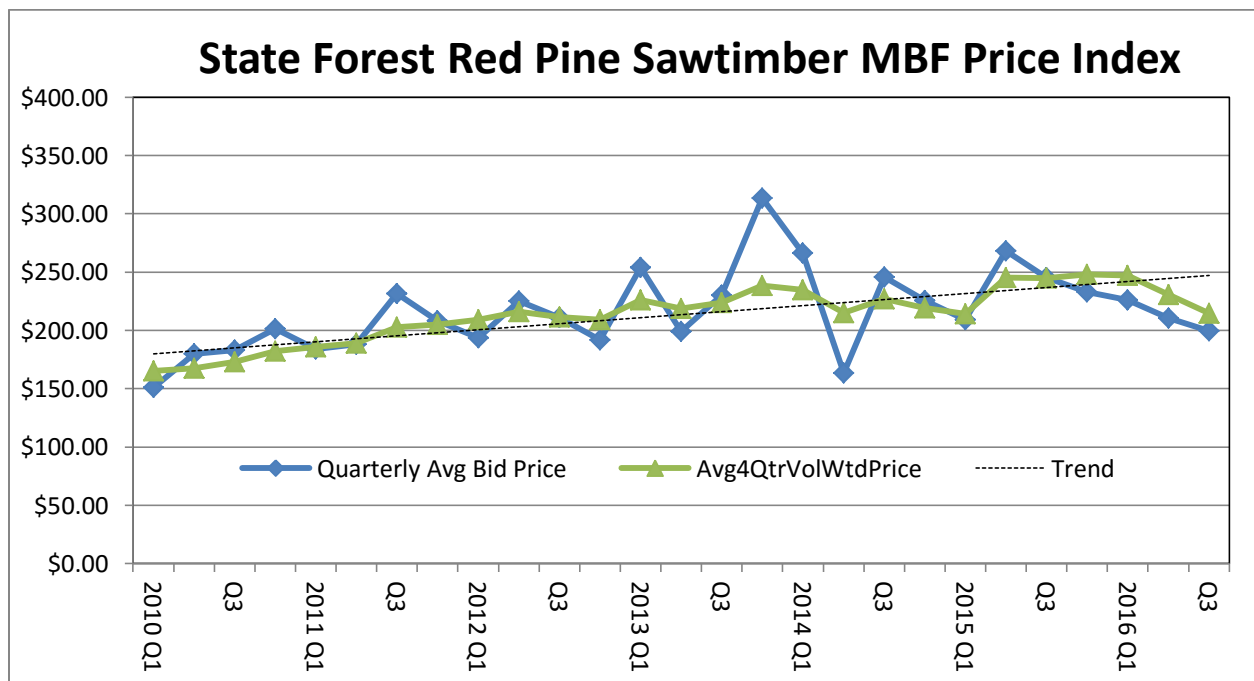
The 1st quarter NLP oak pulpwood price shot up to a record \$92.84 per cord, more than double any price achieved in the past six years, but then it dropped more to \$24.67 in the 2nd quarter and went up to \$34.01 in the 3rd quarter. The average price over the past six years was under \$30.00 per cord; the price was \$17.03 per cord in the 1st quarter of FY 2015. Sale volume was a respectable 10,904 cords in the 1st quarter and declined to 8,526 cords in the 2nd quarter but jumped to 16,648 cords in the 3rd quarter. FY 2015 volume reached 24,182 cords in the 2nd quarter, dropped to 16,034 cords in the 3rd quarter, then fell to 4,602 cords in the 4th quarter. Spikes in prices may be caused by sudden changes in demand, sudden constraints on supply in the presence of high demand, a classification or coding complication or error, or a reporting error. The price level is seldom maintained after a large spike in price and the decline in price is usually just as sharp as the spike in price - as was just seen in the 2nd quarter of FY 2016.



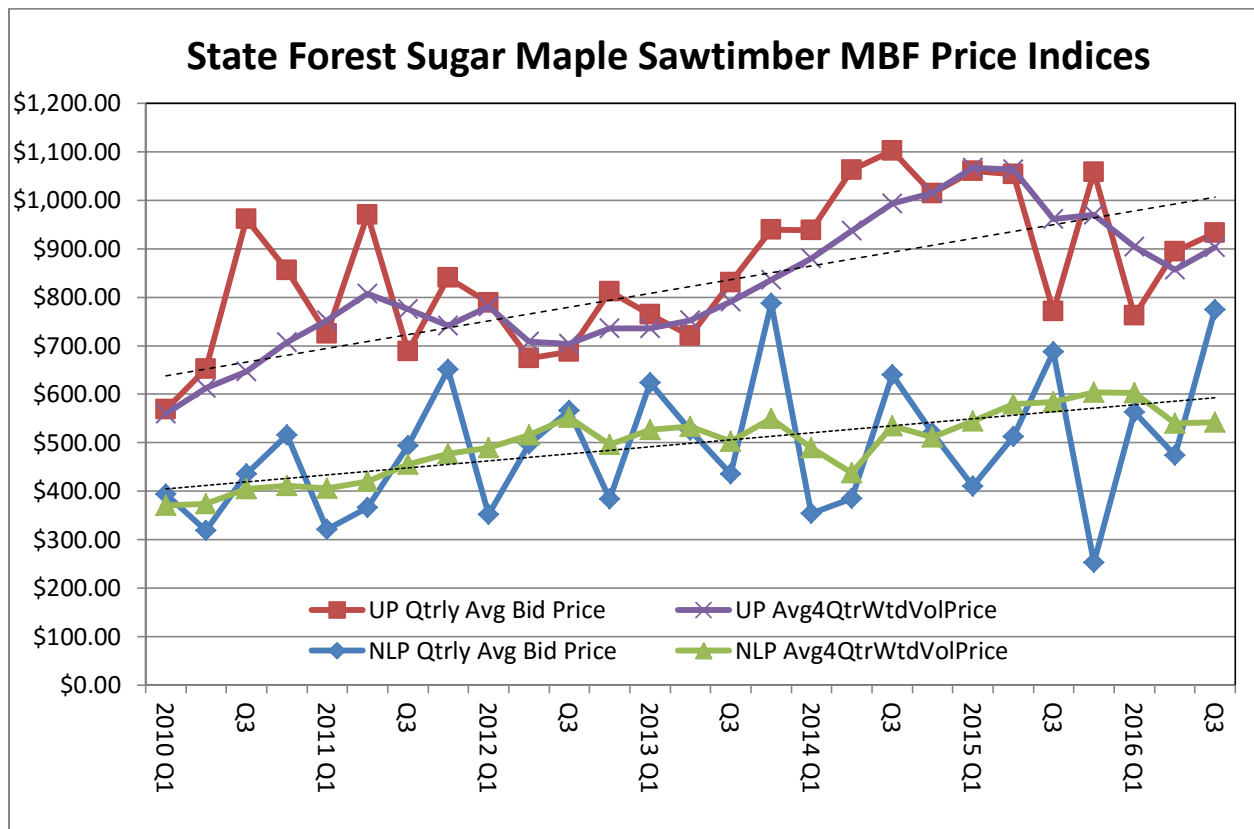
The 3rd quarter "other hardwood pulpwood" cord price was virtually unchanged again. It went from \$35.70 to \$35.76 per cord between the 1st and 2nd quarters and rose to \$37.53 in the 3rd quarter. It reached a record high price of \$56.55 per cord in the 4th quarter last year. Bid species sale volume in the 3rd quarter was down from 55,652 to 38,248 cords. Average quarterly volume for the past six years is close to 40,000 cords. The product has an increasing price trend.



NLP oak sawtimber prices rose in the 3rd quarter, from \$225 to \$250 per mbf. Prices reached a high of \$415 per mbf in the 4th quarter of FY 2014 before falling back to \$236 in the 2nd quarter of FY 2015. Overall, there has been a modestly increasing price trend for the past six years. Sale volume increased from 2.74 to 4.64mmbf in the 3rd quarter; the volume was only 1.28mmbf in the 4th quarter of FY 2015. Sale volume of 5.3mmbf was reached in the 2nd quarter of FY 2015.



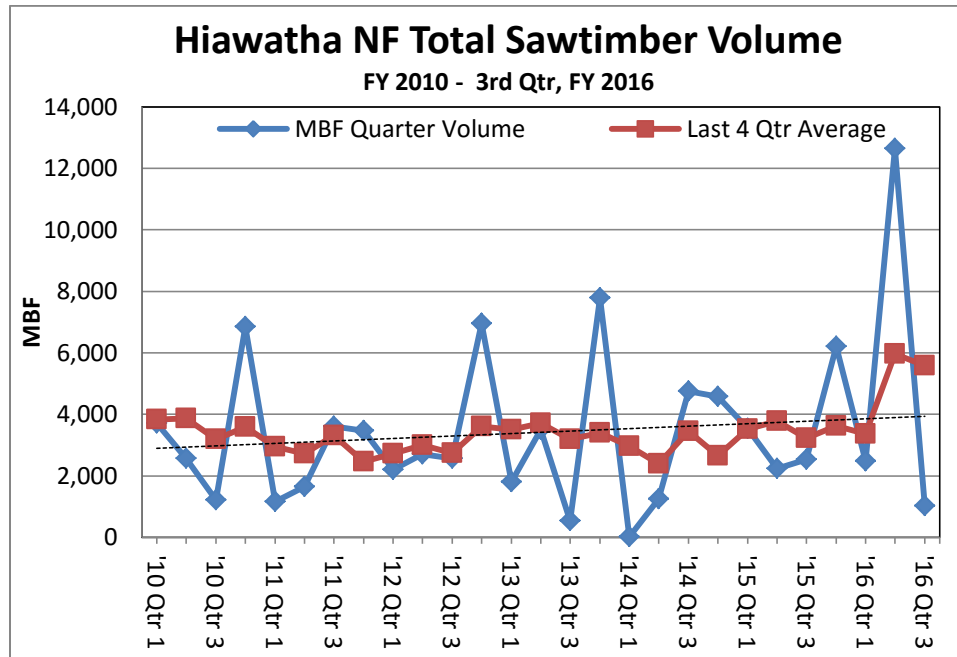
In the 3rd quarter, red pine sawtimber prices had their fifth decline in a row; the price is now just below \$200 per mbf. For the past six-year period, prices have been moderately increasing and have averaged over \$215 per mbf. Sale volume rose from a low 1.79mmbf in the 4th quarter of FY 2015 to 6.97mmbf in the 1st quarter of FY 2016 and reached 8.354mmbf in the 2nd quarter before falling back to 5.335mmbf in the 3rd quarter. Volume reached 13.14mmbf in the 3rd quarter of FY 2015; the average for the past six years is slightly over 7mmbf.



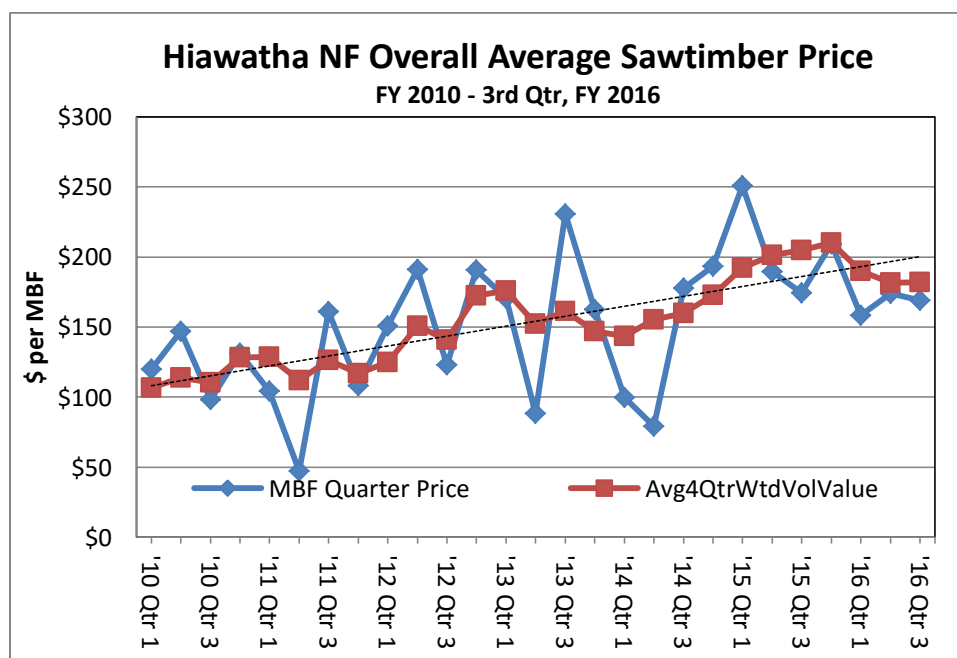
Sugar maple sawtimber peninsula prices rose in both peninsulas in the 3rd quarter. The UP price rose from \$895 to \$932 per mbf; it had been \$1058 per mbf in the 4th quarter of FY 2015. Sale volume had increased from 534mbf in the 2nd quarter, but it fell back down to 544mbf in the 3rd quarter. The NLP 3rd quarter price shot up from \$474 to \$774 per mbf as its sale volume fell sharply from 1,252 to only 329mbf. The UP price has a fairly steep six-year trend; the NLP's price trend is slightly less steep. Most quarters the UP sells more sugar maple sawtimber sale volume than the NLP; the UP's six-year quarterly average is just over 700mbf while the NLP's average is just over 450mbf.

Hiawatha National Forest Major Species Product Timber Sales, FY 2010 – 3rd Qtr, 2016

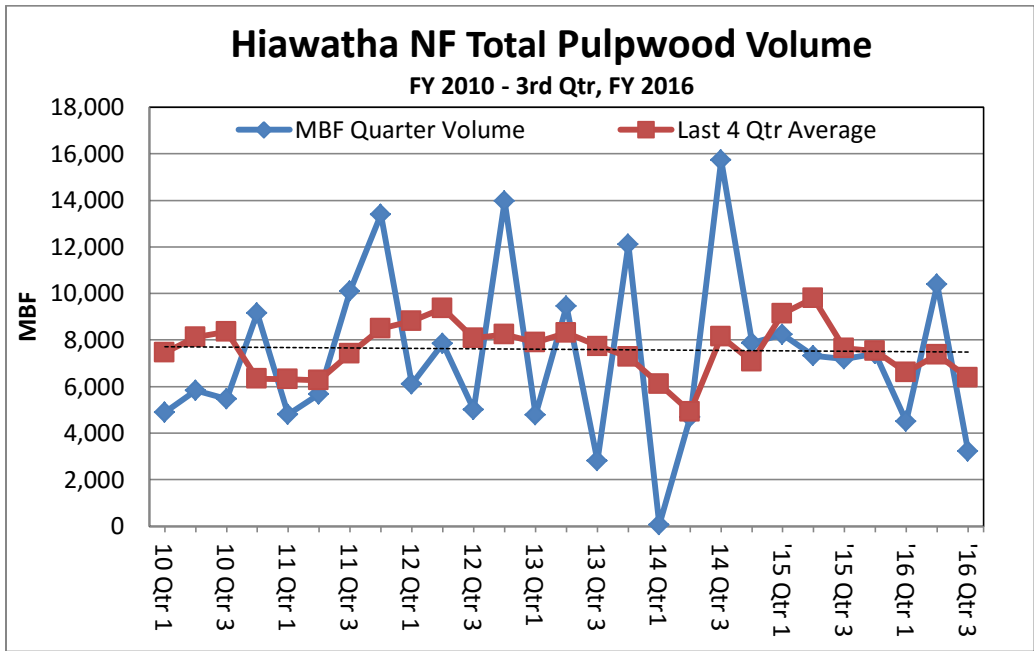
All graphs include a dotted trend line based upon the data set for the average of the most recent four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year (FY) from October 1 through September 30 (as does the MI DNR). The most recent data included here is for the 3rd quarter of FY 2016, covering April through June of 2016 sales. Only certain major categories of timber sales are shown; more information is available through the Region 9 pdf reports posted on the Forest Service website: <http://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml>



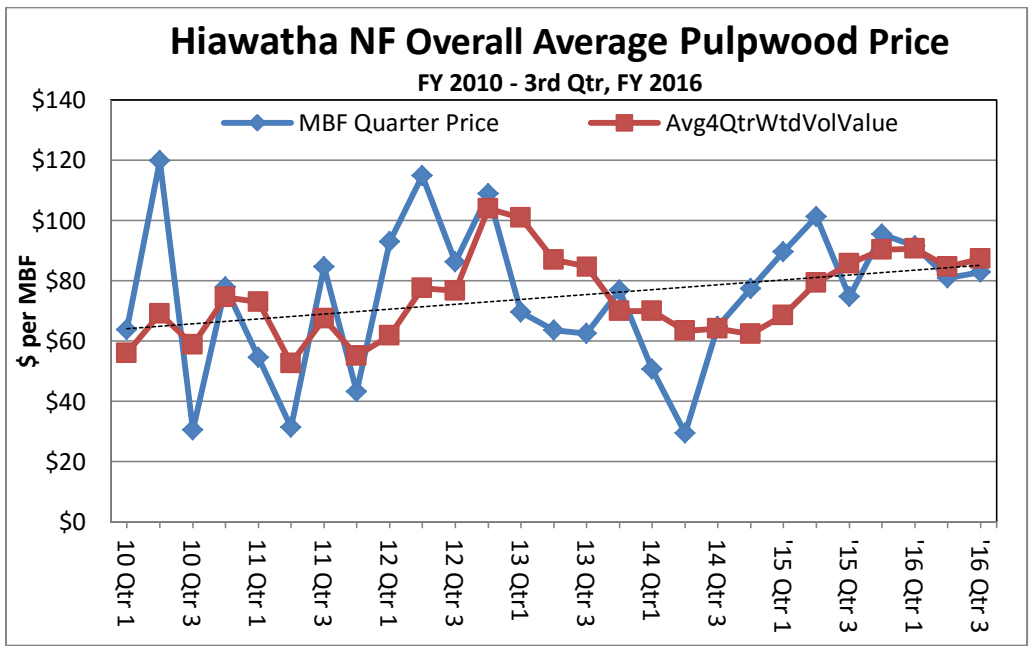
Hiawatha sawtimber sale volume was only 1.025mmbf in the 3rd quarter. Sales were expected to be significantly lower in the quarter after achieving a record 12.6mmbf volume in the 2nd quarter. The 6-year trend of sawtimber sale volume is slightly increasing, in large part due to the 2nd quarter record volume. Sale volume should bounce back again next quarter as 4th quarter sales generally are higher than other quarters.



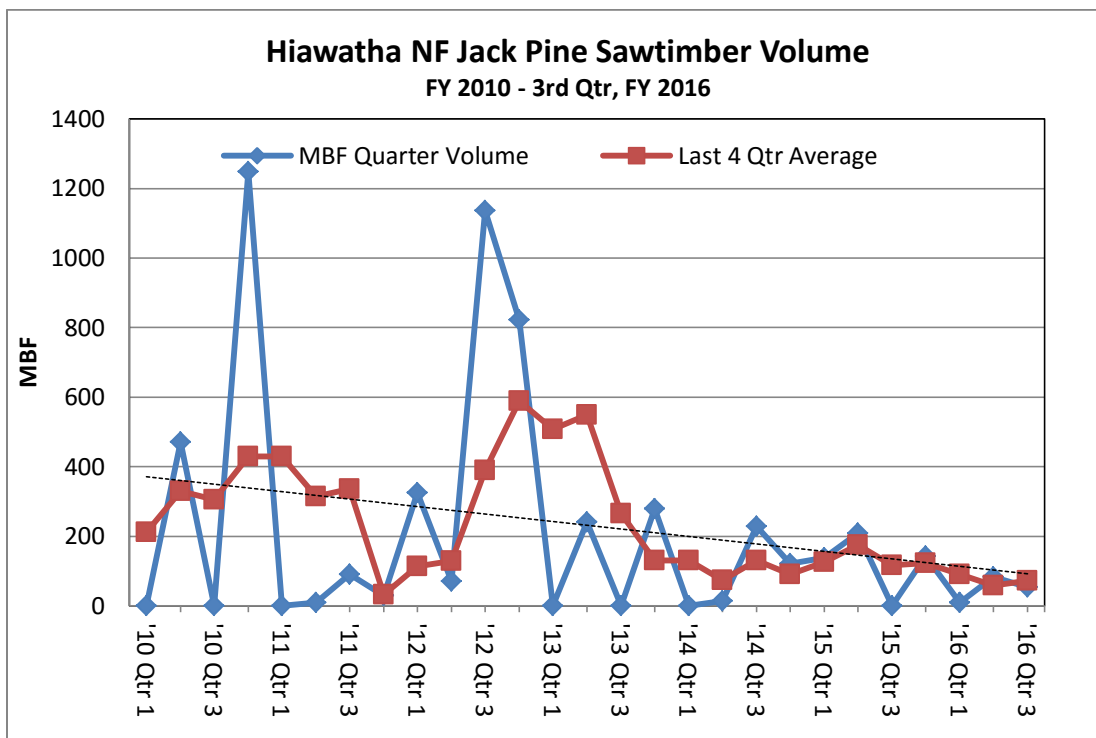
Average Hiawatha sawtimber prices dipped from \$174 to \$168.90 per mbf in the 3rd quarter. They peaked at \$250 in the 1st quarter of FY 2015 then fell for two quarters before rising to \$209 per mbf in the 4th quarter of FY 2015. The average sawtimber price is strongly influenced by the mix of species and products offered. The six-year price trend has been increasing, with almost a doubling of the nominal price.



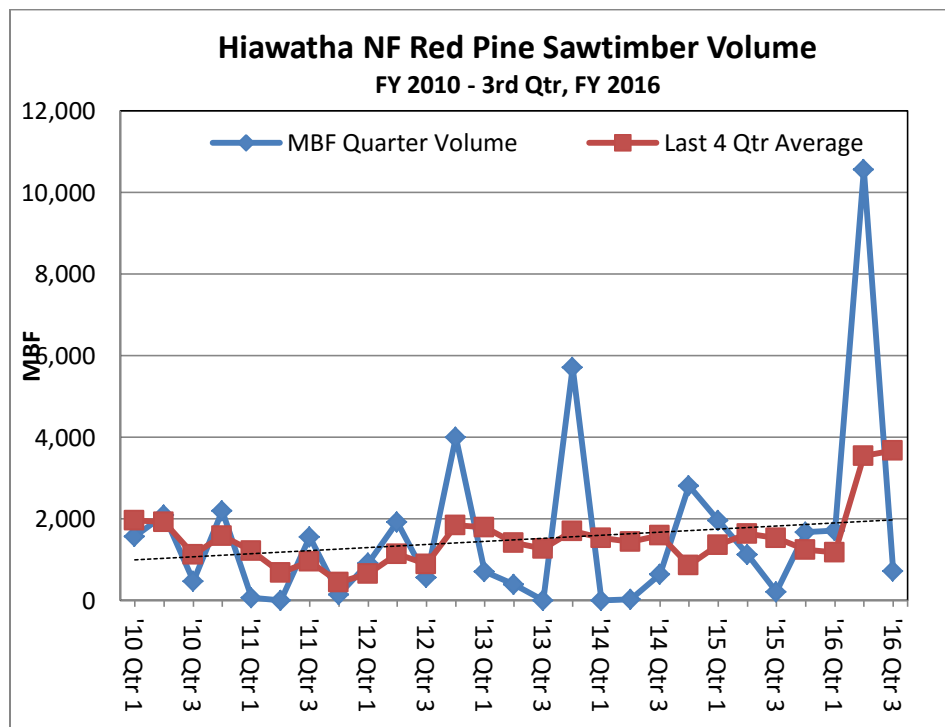
Hiawatha 3rd quarter pulpwood sale volume fell sharply from 10.4mmbf to 3.2mmbf. The sale volume was expected to decline, but not as sharply as it did. Volumes quarter-to-quarter have been relatively stable for the past two years relative to the preceding four years. The highest sale volume in the past six years was 15.73mmbf in the 3rd quarter of FY 2014. The six-year trend is virtually flat overall. Sale volumes should bounce back in the coming 4th quarter based upon the quarterly sale pattern over the past six years.



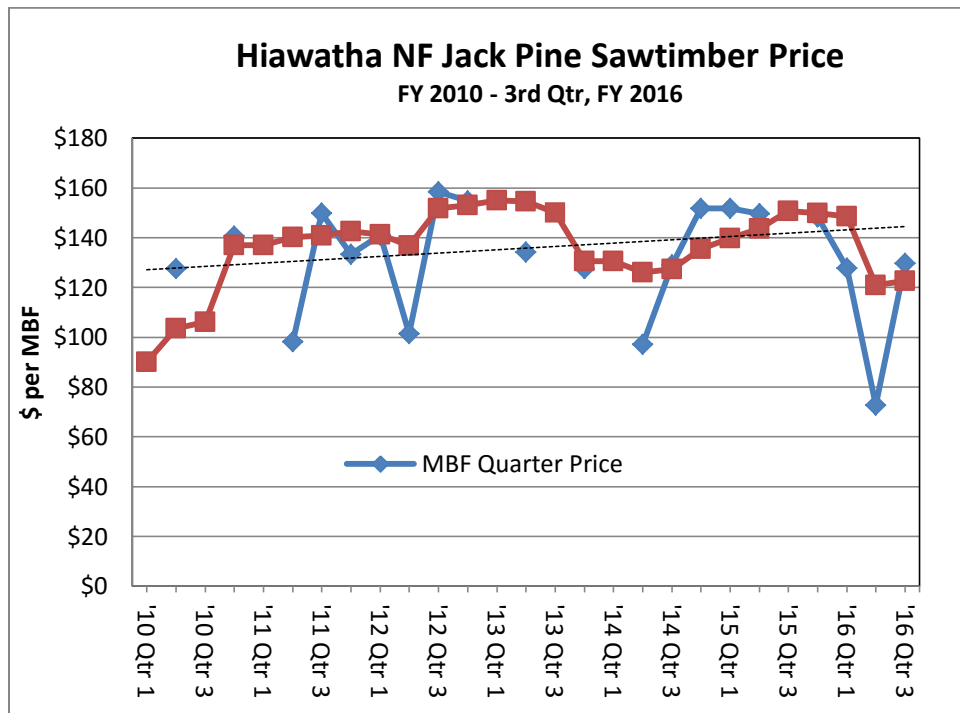
The 3rd quarter FY 2016 average pulpwood price increased slightly from \$81 to \$83 per mbf. It had been \$95 per mbf in the 4th quarter of FY 2015. It had peaked at \$101 per mbf in the 2nd quarter of FY 2015 after rising four quarters from a low of under \$30 in the second quarter of FY 2014. The six-year trend line shows a moderately increasing price trend since the beginning of FY 2010. If sale volumes continue to be relatively stable, they may also influence prices to be less volatile. In this regard and given the trend line, prices were expected to be stable or slightly increase in the 3rd quarter. The coming 4th quarter should also see little change in the price.



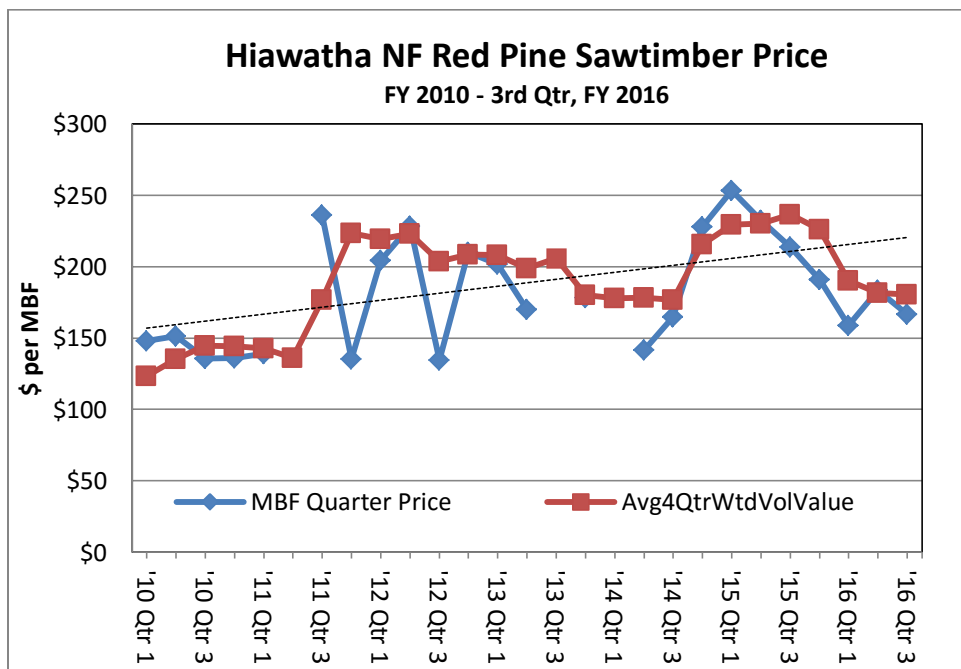
Hiawatha sale volumes of jack pine sawtimber continued their downward slide, dropping from 83mmbf in the 2nd quarter to 54mmbf in the 3rd quarter. Sale volumes have been negligible for over three years. No volume was sold in the 3rd quarter of FY 2015, volume was only 143mmbf in the 4th quarter of FY 2015 and only 9mmbf were reported sold for the 1st quarter of FY 2016. The highest volume sold in the past six years (1.25mmbf) was way back in the 4th quarter of FY 2010; sales also exceeded 800mmbf twice in 2012. As with jack pine pulpwood, there are almost as many quarters without sales (or only incidental sales less than 10mmbf) as there are quarters with sales.



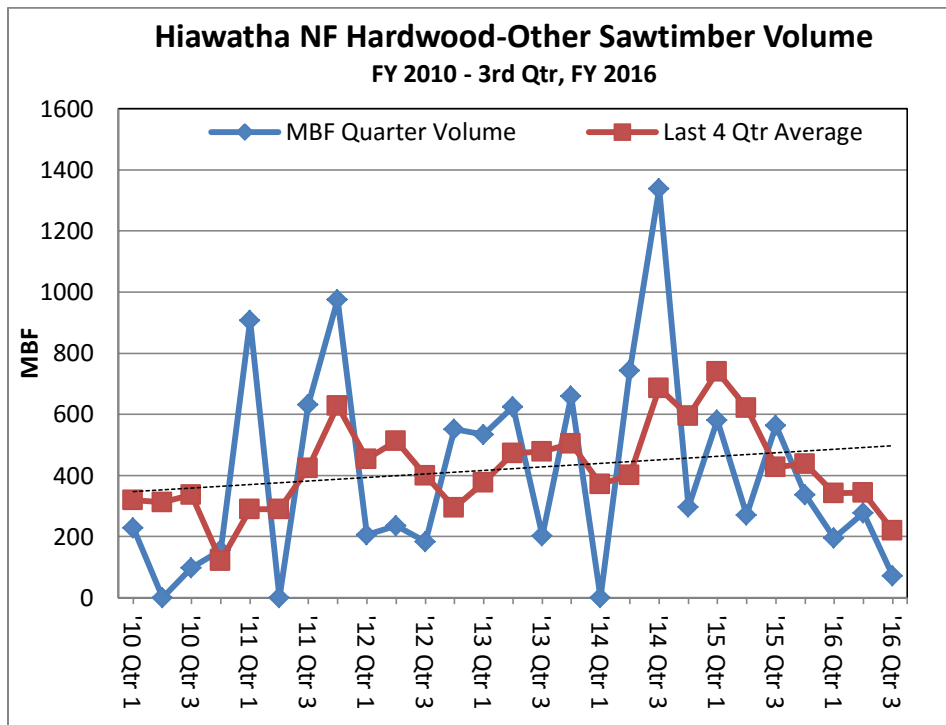
As expected, red pine sawtimber sale volume tumbled to 726mmbf in the 3rd quarter after hitting a record level of 10.56mmbf in the 2nd quarter. The six-year sale average before the 2nd quarter was 1.3mmbf and the previous high was 5.7mmbf in the 4th quarter of FY 2013. Over the past six years, three times as much red pine sawtimber as jack pine sawtimber has been sold on the Hiawatha. The coming 4th quarter volumes should increase, but only moderately.



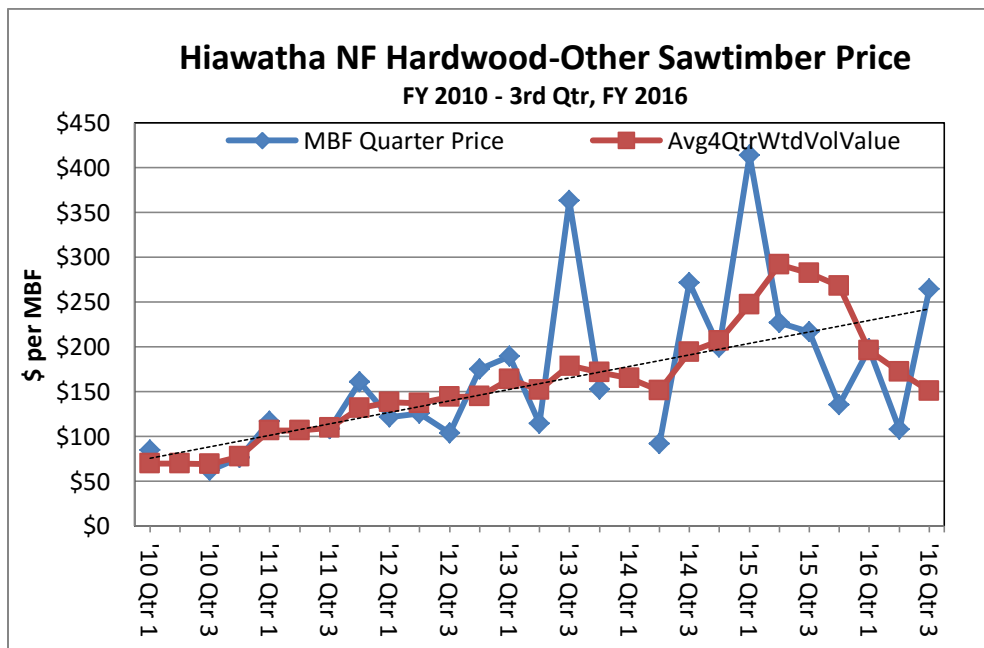
The 3rd quarter jack pine sawtimber price rebounded from the 2nd quarter price of \$73 per mbf up to \$130 per mbf, just above its 1st quarter level of \$128. The 4th quarter FY 2015 jack pine sawtimber price was \$148 per mbf. Prices have been based upon negligible volumes sold for the past three years. There is a moderate increasing price trend over the past six years, but this price trend is based upon many quarters with negligible or no sales.



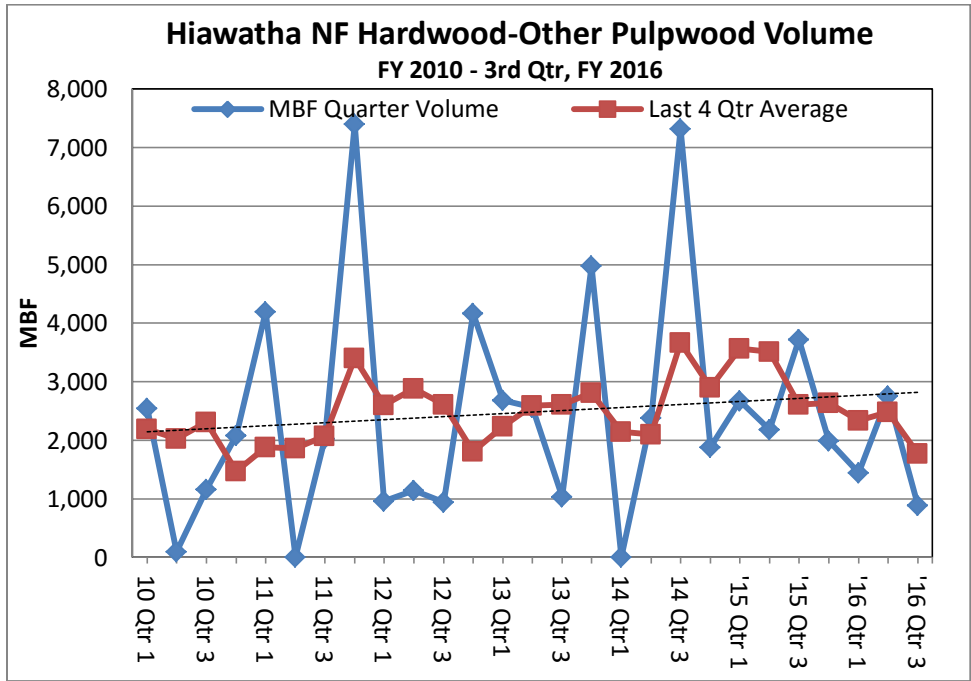
The red pine sawtimber price decreased from \$183 to \$167 per mbf in the 3rd quarter. The price reached \$253 per mbf in the 1st quarter of FY 2015, its highest level in years, before declining for four straight quarters. It was \$142 in the 2nd quarter of FY 2014 before beginning its ascent to the \$253 price. The overall six-year price trend has been increasing. For the coming 4th quarter, the price is likely to not change much, but it is more likely to increase moderately than decline.



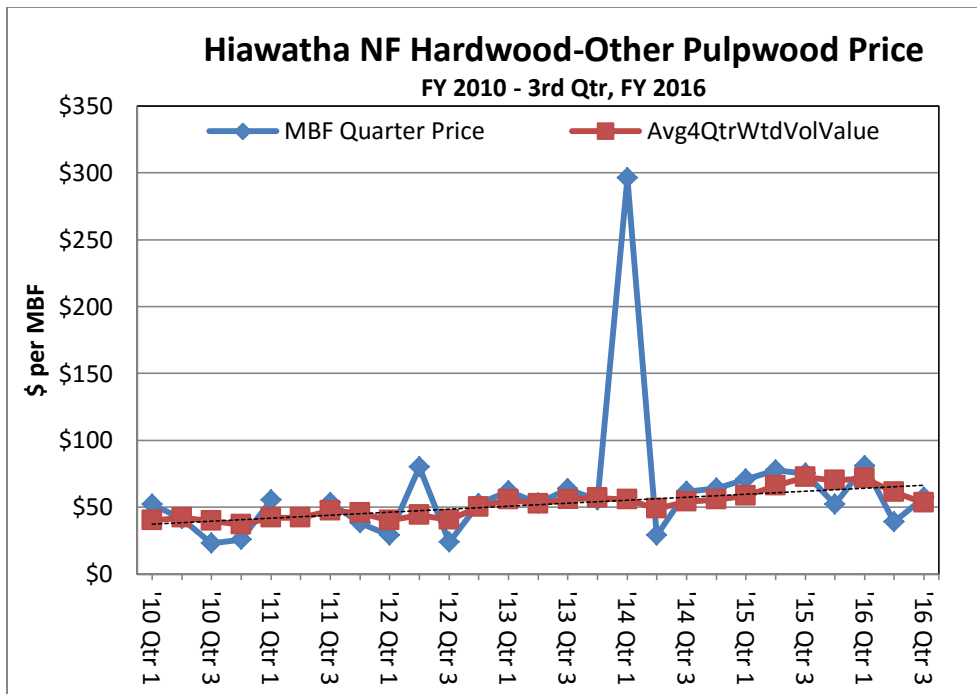
Hiawatha's "hardwood-other" sawtimber sale volume decreased substantially, from 278mbf to 71mbf in the 3rd quarter. Quarterly sale volume reached a six-year record level of 1.3mmbf in the 3rd quarter of FY 2014 and while sale volumes have seesawed back and forth since then, they have largely been on a downward decline. There is a modestly increasing six-year sale volume trend, but this is strongly influenced by the high 2nd and 3rd quarter sale volumes of FY 2014 without which the trend would be flat.



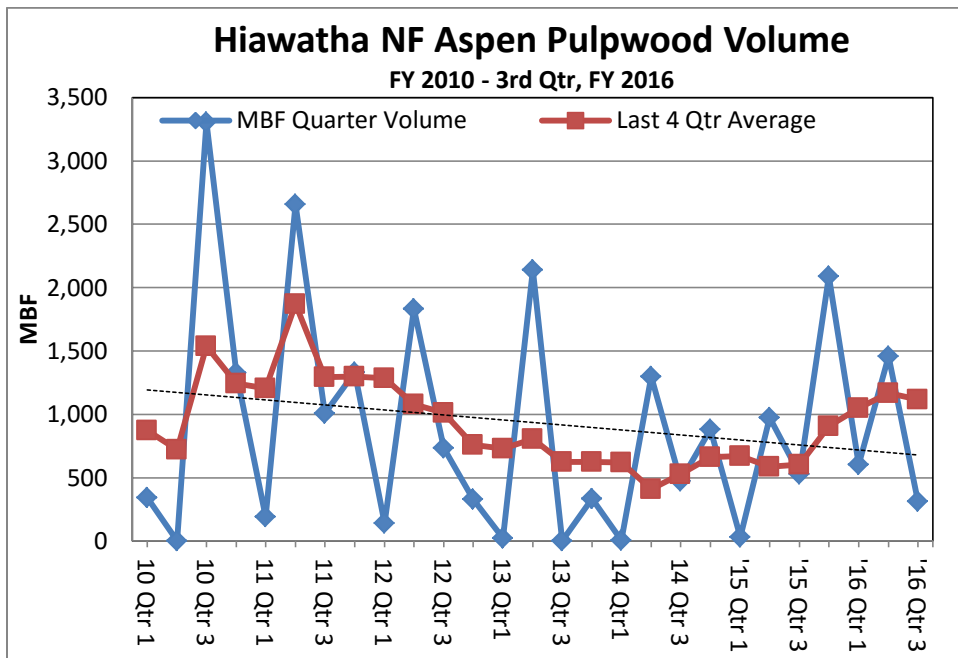
The "hardwood-other" sawtimber 2nd quarter price increased sharply from \$108 to \$264 per mbf. It had fallen for three quarters from a record \$414 per mbf price in the 1st quarter of FY 2015 before slightly rebounding to \$198 price two quarters ago. In the 2nd quarter FY 2014, the price was below \$92 per mbf. The quarterly price trend has risen very steeply over the past six years, from under \$70 to over \$250 per mbf. Next quarter's (July-September) price should decline modestly; other future quarters should see prices levelling off and the price trend moderating somewhat.



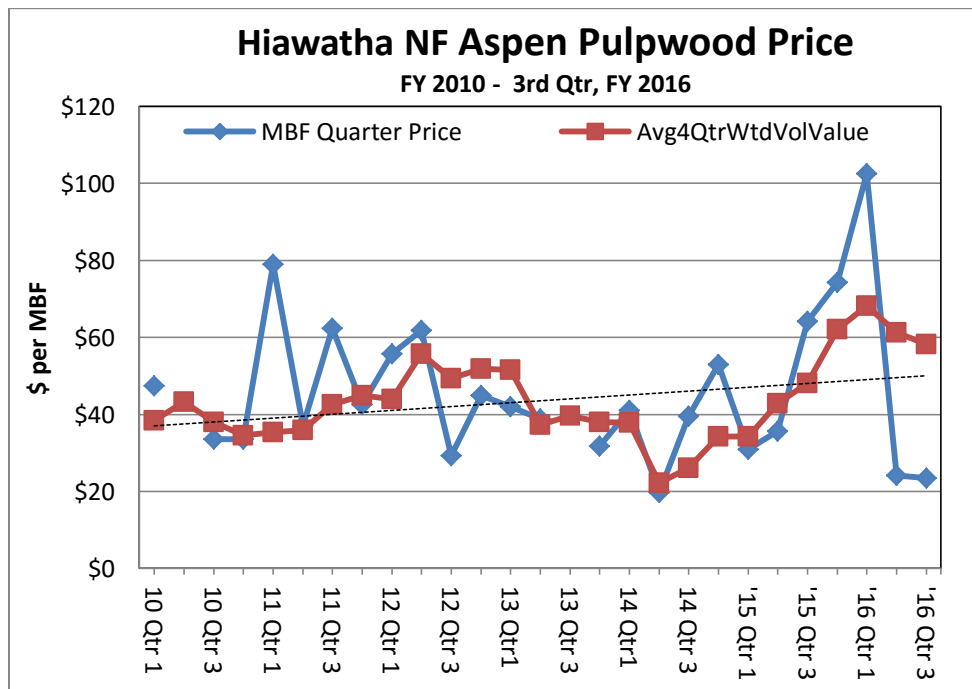
After rebounding to 2.76mmbf last quarter, sales of “hardwood-other” pulpwood volume dropped to just under .9mmbf in the 3rd quarter. They had reached a peak over 7.3mmbf in the 3rd quarter of FY 2014 before dropping to under 2mmbf in the next quarter. Generally, sales are highest in the 4th quarter, but annual peak sales were in the 3rd quarter the last two fiscal years. There is an increasing sale volume trend over the past six years, but this is disappearing due to the moderate sales of the last eight quarters. The erratic nature of earlier sale volumes from quarter-to-quarter appears to be moderating based upon the past eight quarters; in any case, the sale volume is sure to increase in the coming quarter.



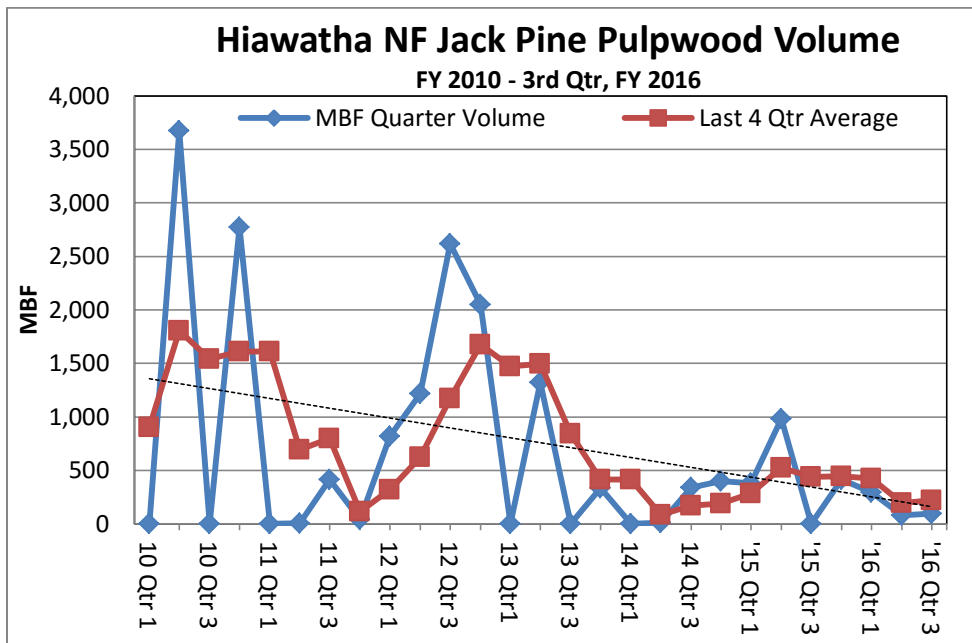
Prices rose to \$57 per mbf in the 3rd quarter, after falling from \$81 to \$39 per mbf in the 2nd quarter for “hardwood-other” pulpwood. Prices had risen gradually from \$29 in the 2nd quarter of FY 2014 before dropping back down to \$52 in the 4th quarter of FY 2015. The 1st quarter FY 2014 price is an anomaly or error. Other than this major exception and a few minor ones, the price has fluctuated in a fairly narrow range around \$50 over the past six years. There has been a relatively modest increasing price trend for the period.



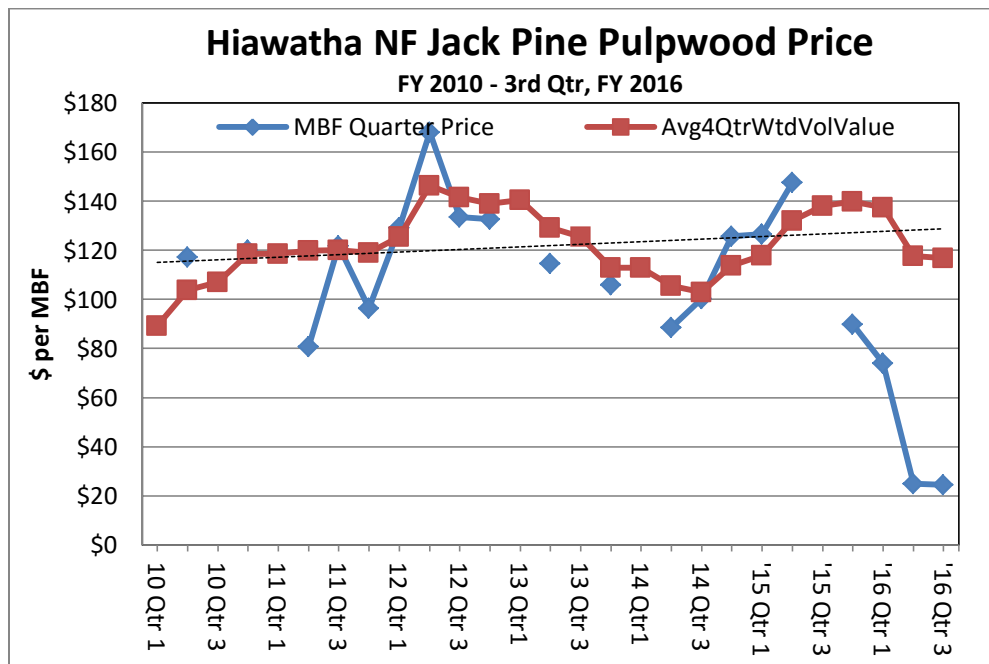
It was stated last quarter that it would be a good indication that the declining aspen pulpwood sale volume trend is being reversed if the 3rd quarter volume did not fall below the 500mbf level. Unfortunately, it did fall below that level. The volume decreased from 1,457mbf to only 314mbf. It hit a ten-quarter peak of 2.1mmbf in the 4th quarter of FY 2015. Aspen pulpwood sale volumes have been erratic; often there has been low or no sales in the 1st quarter of every fiscal year, followed by higher sales in the 2nd quarter. There also has been a downward sale volume trend over the past six years and the most recent 3rd quarter sale volume reinforces this pattern.



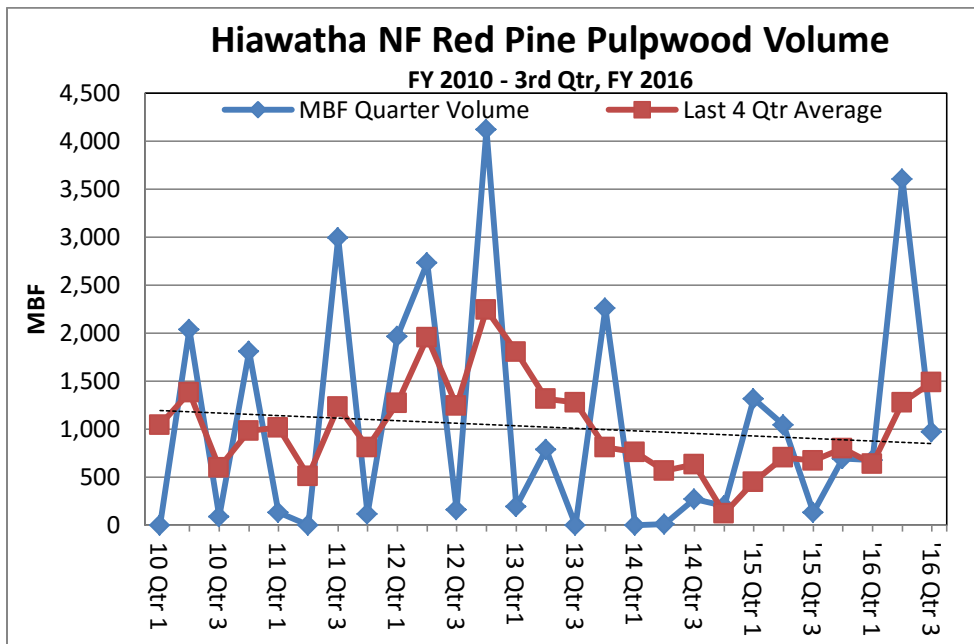
The 2nd quarter aspen pulpwood price had a very steep drop from a record \$103 per mbf price last quarter - down to \$24 – and the price essentially remained at that level in the 3rd quarter, almost matching the six-year record low under \$20 in the 2nd quarter of FY 2014.. It is not surprising that there was a sharp drop in prices last quarter, given how much prices had risen in the prior four quarters. However, the amount of the decline was quite large and it is unlikely that prices will remain at this low of a level for long; an increase in coming 4th quarter prices is expected.



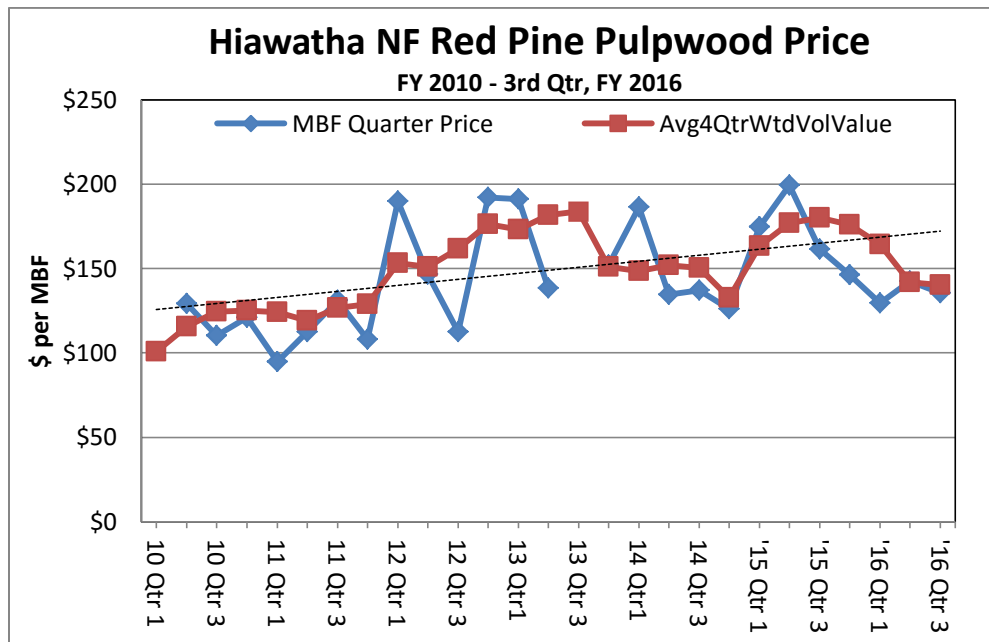
Jack pine has had a diminishing role in Hiawatha timber sales. Jack pine pulpwood sales dropped further in the 2nd quarter, from 297mbf to 80mbf and remained at 98mbf in the 3rd quarter. Only 413mbf of jack pine pulpwood was sold in the 4th quarter of FY 2015 and there were no jack pine pulpwood sales in the prior quarter. Sales have been below 500mbf each quarter for three years except for the 2nd quarter of FY 2015 when they reached 985mbf. There were no jack pine pulpwood sales in two quarters of both FY 2013 and FY 2014. Sales have been on a steep downward trend over the past six years. Sales in some upcoming quarter might exceed 1,000mbf; however, most quarters are likely to have very negligible or no volumes.



The 2nd quarter jack pine pulpwood price dropped from \$74 to \$25 per mbf, its lowest price in the past six years – until the 3rd quarter when the price dropped below \$24.50 per mbf. The 2nd quarter FY 2015 jack pine pulpwood price was at \$146 per mbf. Previous higher prices influence the slightly increasing six-year price trend shown above, but this trend line is misleading given that there have been about as many quarters without sales of jack pine as there have been quarters with sales over the past six years. While not a trend, recent quarters' lower prices for jack pine pulpwood are probably as relevant for future prices as the longer-term six-year trend line. Future quarters' prices are likely to rebound substantially.



Red pine pulpwood sale volume shot up to over 3.6mmbf in the 2nd quarter of FY 2016 and then dropped almost as much to .97mmbf in the 3rd quarter. FY 2014 had no sales in the first two quarters followed by only 270mbf sold in the 3rd quarter and 197mbf in the 4th quarter. FY 2015's sale volume was higher, but well below most earlier years which often had quarters with more than 2mmbf in sale volume. The very high 2nd quarter did not reverse a declining six-year volume trend, although red pine's downward trend is not nearly as steep as the jack pine pulpwood volume trend.

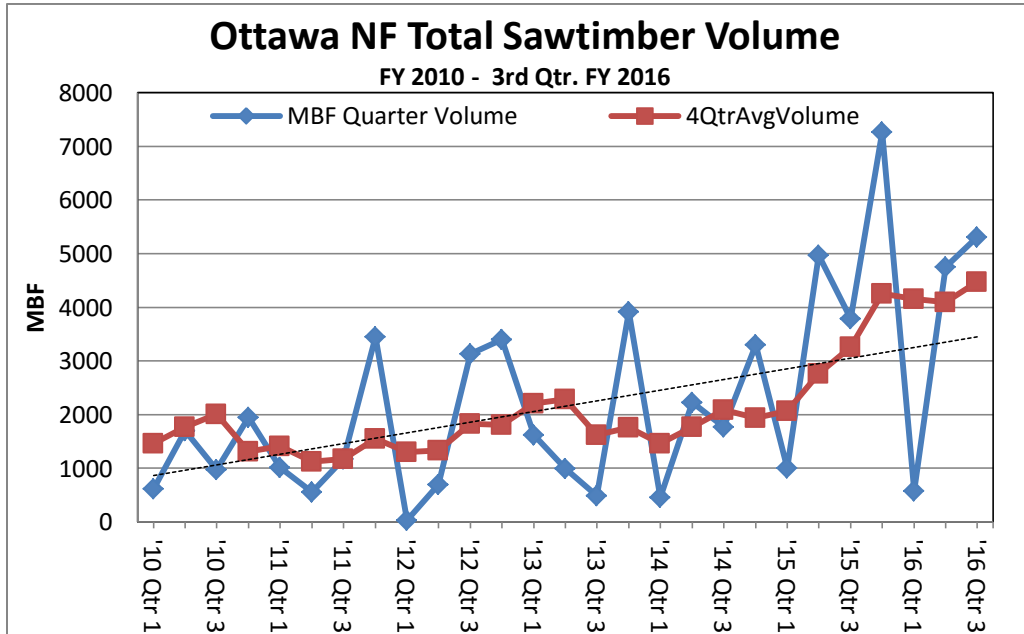


The 3rd quarter red pine pulpwood price dipped from \$143 per mbf to \$136 per mbf. It had gone from \$175 to \$200 per mbf between the 1st and 2nd quarters of FY 2015 before beginning a descent. Prices have been on an upward trend over the past six years. However, if FY 2010 and FY 2011 were dropped, the most recent four-year price trend would be flat. It also should be noted that there has been very low or no sale volumes in many quarters over the past six years, which undercuts the significance of the price trend.

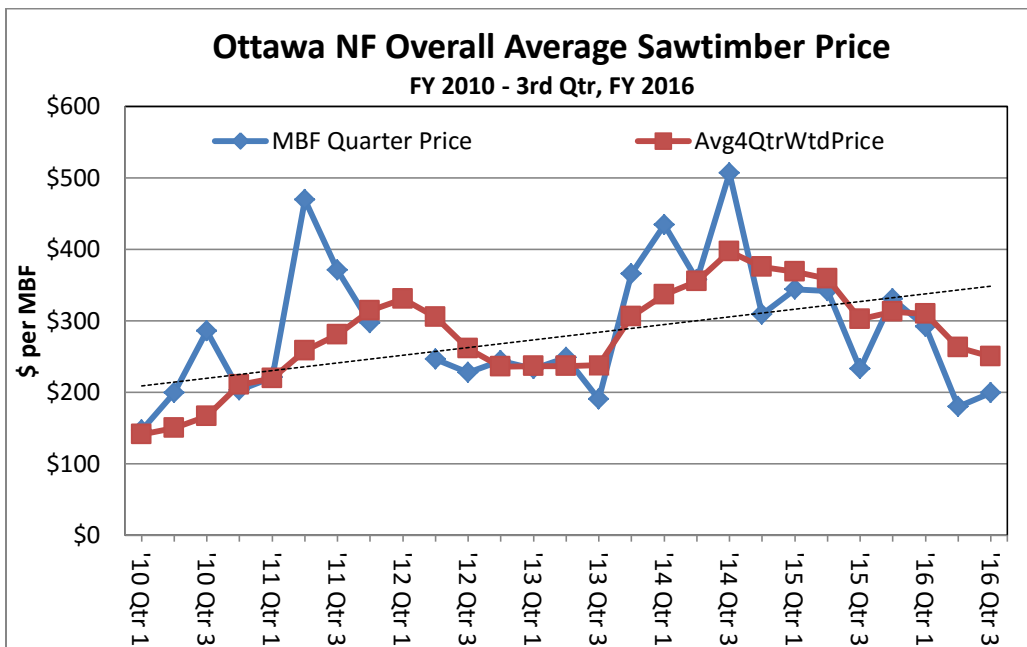
Ottawa National Forest Major Species/Product Timber Sales, FY 2010 – 3rd Qtr, FY 2016

All graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year from October 1 through September 30. The sale data included here goes through the third quarter of FY 2016 (April - June, 2016). Only certain major categories of timber sales are shown; more information is available through the Region 9 pdf reports posted on the Forest Service website:

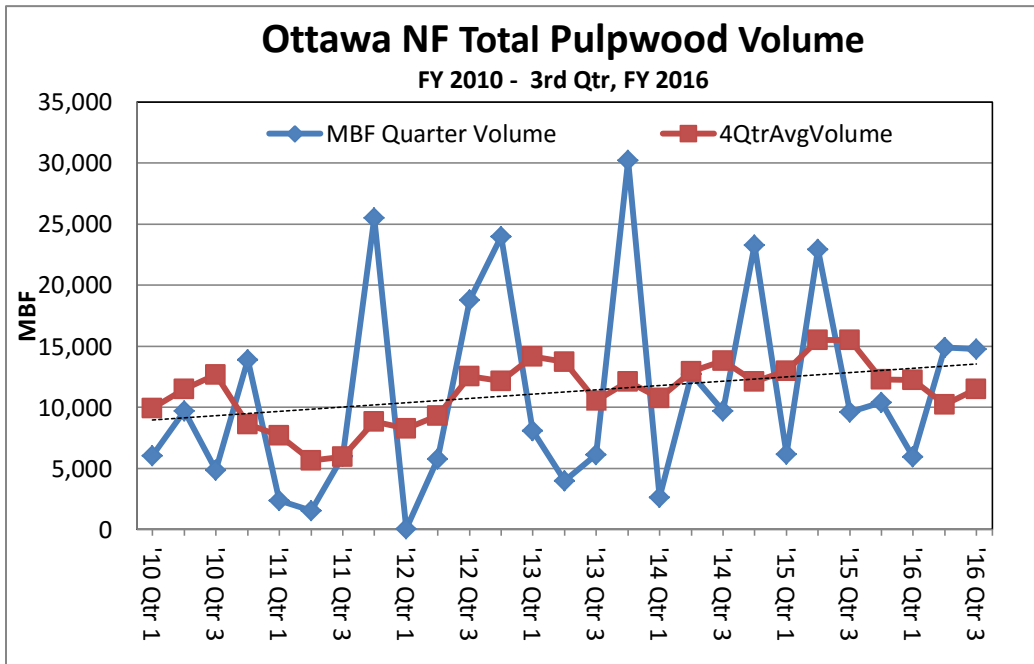
<http://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml>



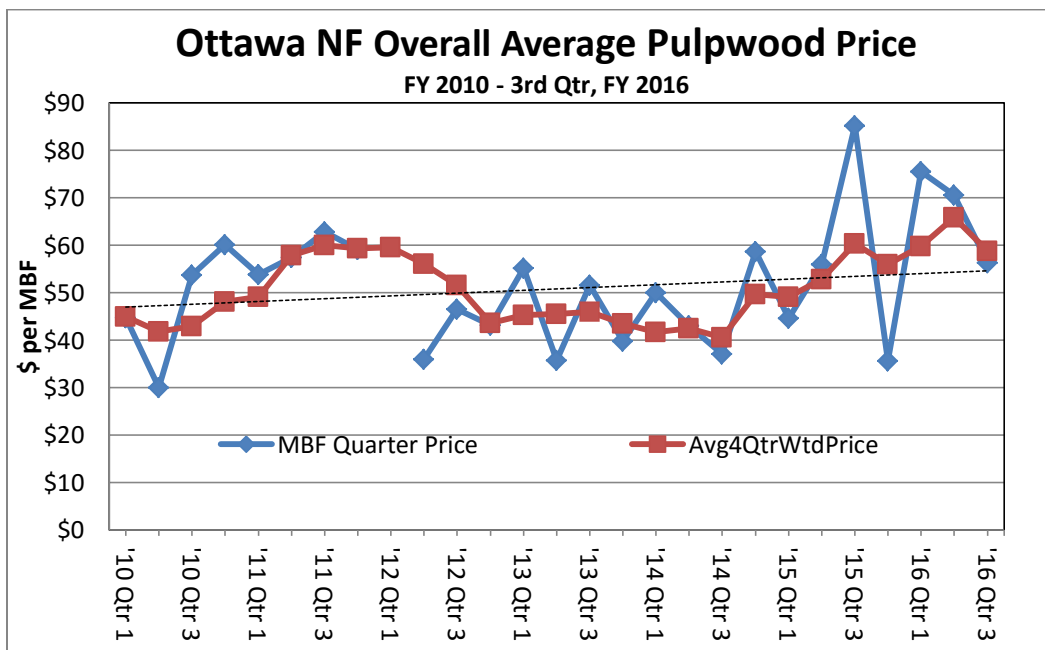
Total Ottawa sawtimber sale volume rose further to 5.3mmbf in the 3rd quarter after being at only 577mbf in the 1st quarter of FY 2016 and then jumping to 4.75mmbf in the 2nd quarter. The increase in the 3rd quarter was unexpected. Sale volume for all of FY 2015 was more than twice the volume of any recent year. There is a sharply increasing six-year sale volume trend, although volumes from quarter-to-quarter are somewhat erratic. Volumes are generally higher in 4th quarters.



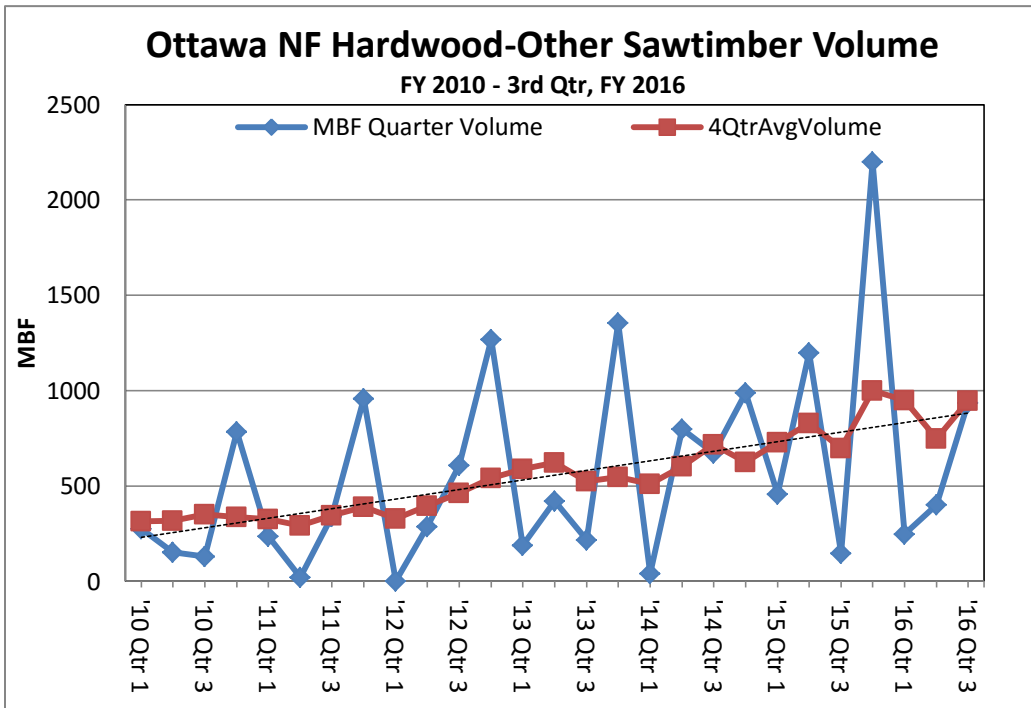
The 3rd quarter overall average sawtimber price rose moderately from \$179 to \$199 per mbf. It peaked at \$507 per mbf in the 3rd quarter of FY 2014. There is an increasing six-year price trend although the price has fallen over the past two years. Average prices are impacted by the mix of sold species and products. The Ottawa sawtimber price trend is greatly influenced by sugar maple volumes and prices.



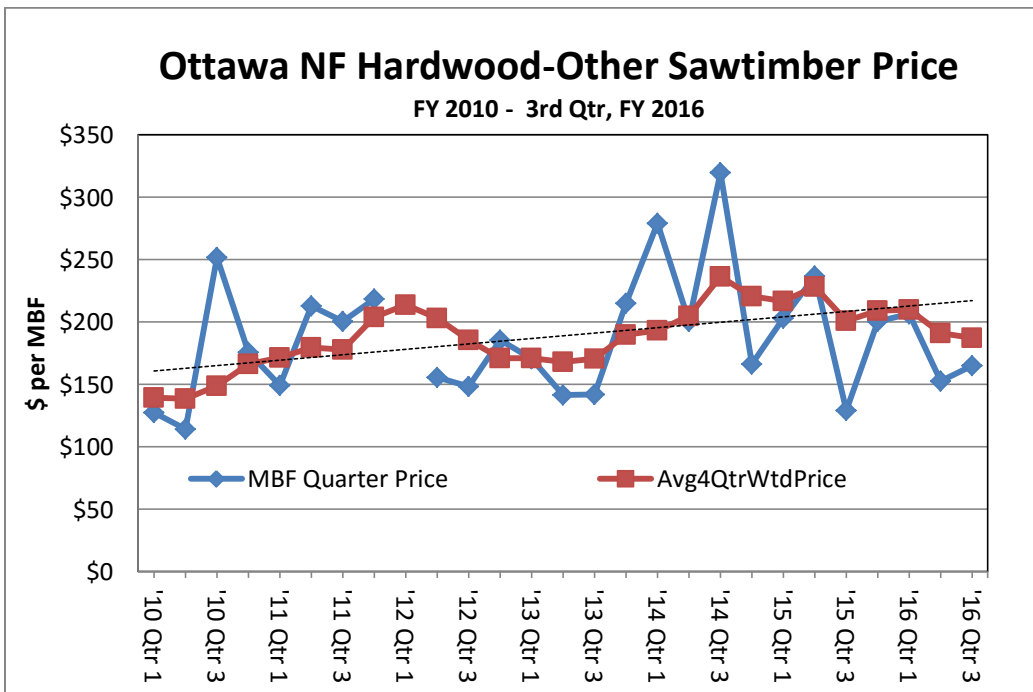
The 3rd quarter total pulpwood sale volume was virtually unchanged, going from 14.9mmbf last quarter to 14.8mmbf this quarter. For most of the past five years, Ottawa pulpwood volumes have seesawed back and forth from one quarter to the next, going from 5mmbf or less one quarter to close to or above 25mmbf the next quarter. However, sale volumes for the past five quarters have not been as erratic. The record high level for the past six years was over 30mmbf reached in the 4th quarter of FY 2013. Overall, there has been a modest increasing sale volume trend during the past six years. Ottawa sawtimber and pulpwood volumes have been generally highest in the 4th quarter; however, a higher sale volume for the coming 4th quarter is less certain, given the moderately high volumes of the 2nd and 3rd quarters this fiscal year.



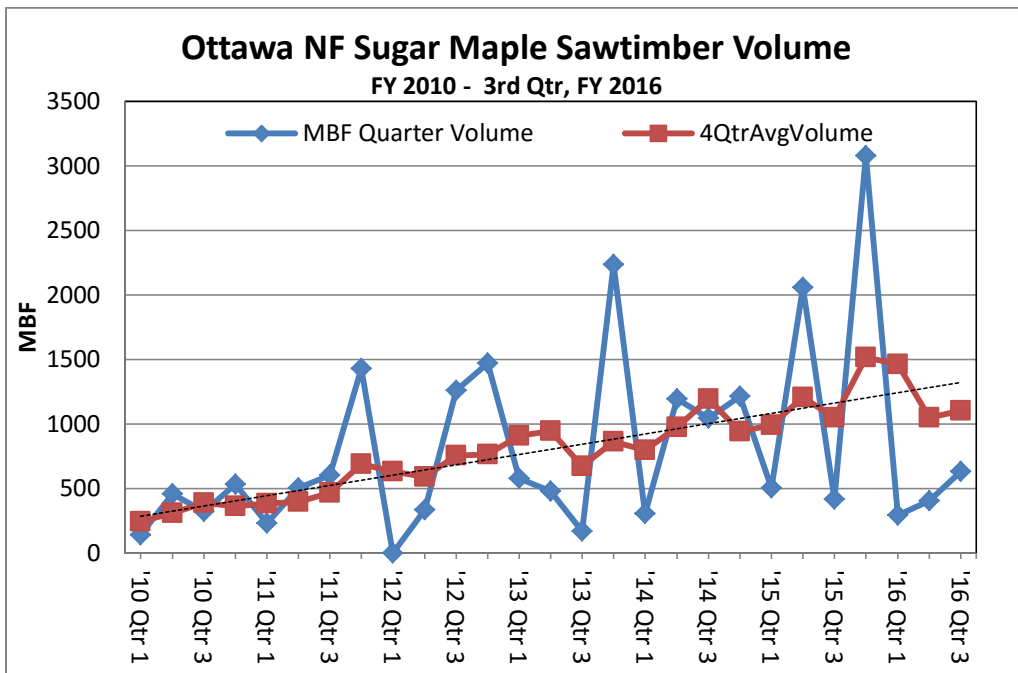
The 3rd quarter overall average pulpwood price dropped further, from \$70.60 to \$56.25 per mbf. This 3rd quarter price puts it right in line with the mildly increasing six-year time line. Prices had fallen from a six-year peak of \$85.22 to \$35.56 per mbf between the 3rd quarter and 4th quarter of FY 2015 before rebounding to \$75.52 in the 1st quarter of FY 2016. Prior to the 3rd quarter of FY 2015, there had been a slightly declining price trend over the previous five years. Prices could rise or fall some in the coming quarter, but they are not expected to change dramatically.



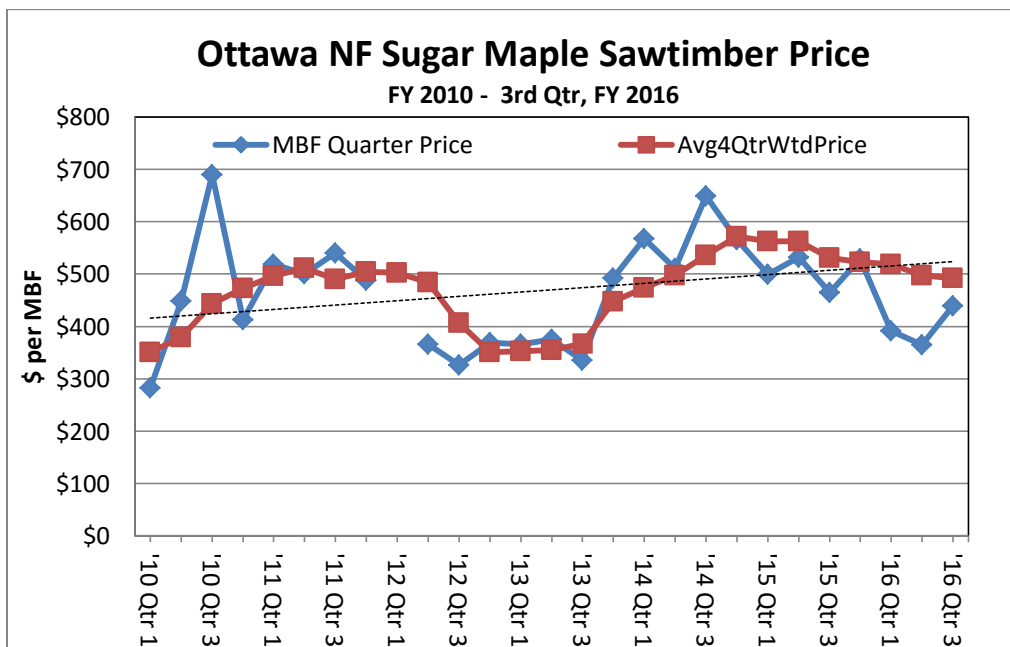
The FY 2016 3rd quarter hardwood-other sawtimber sale volume rose further to 934mbf after having edged up from 247 to 401mbf in the previous quarter. It reached a record 2.2mmbf level in the 4th quarter of FY 2015. This level was achieved after being at only a 146mbf level in the 3rd quarter of last year. The sale volume trend has been sharply increasing over the past six years, but sales are erratic from one quarter to the next. There has been a fairly consistent seasonal pattern with distinctive, higher-volume peaks in the 4th quarter (July-September) of most years and lower volumes otherwise. Given this pattern, It is expected that sale volumes will continue to increase in the coming 4th quarter.



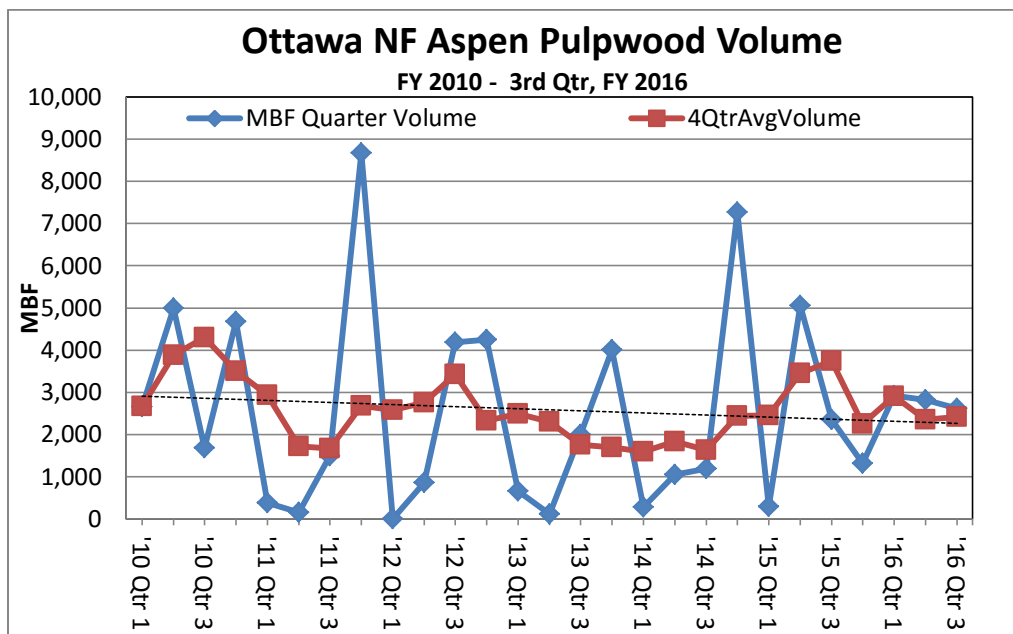
Hardwood-other sawtimber prices rose modestly in the 3rd quarter, from \$152.50 per mbf to almost \$164 per mbf. They had been close to \$200 per mbf the prior two quarters. They were at a record high of almost \$320 mbf in the 3rd quarter of FY 2014 before dropping sharply to \$166 in the following quarter. Overall, there is an increasing price trend line for the past six years. For the coming 4th quarter, prices are likely to increase moderately again.



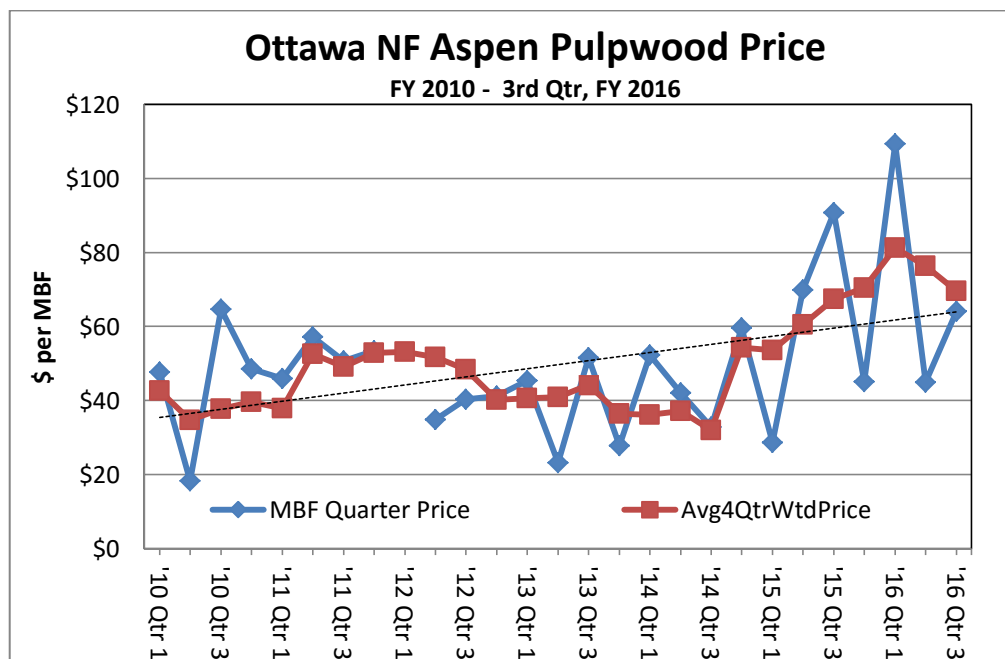
The 3rd quarter, Ottawa sugar maple sawtimber sale volume rose slightly again, from 402 to 630 mbf. Sugar maple sawtimber sale volumes hit a six-year record one year ago, going from 417mbf in the 3rd quarter to 3.1mmbf in the 4th quarter. As with most Ottawa timber products, it is not unusual for the 1st quarter to have the lowest sale volume and the 4th quarter to have the highest volume. Despite the low sale volume of the last three quarters, there is a sharply increasing sales volume trend for the past six years. Given the low sale volume of the most recent three quarters, it would be very surprising (and disappointing!) if there is not a huge increase in sale volume in the coming 4th quarter



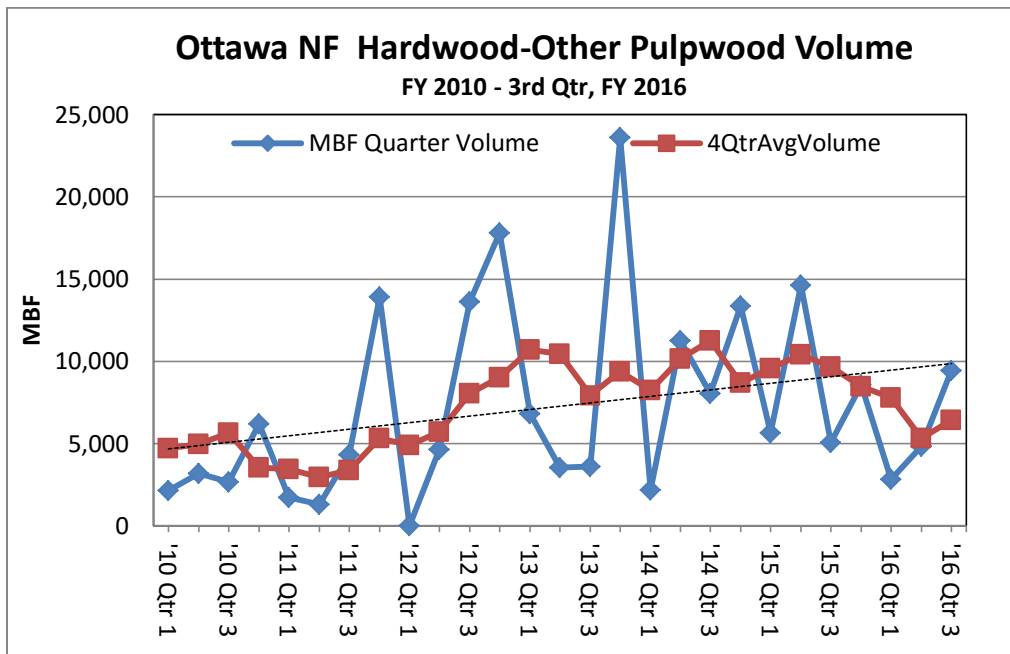
The average sugar maple sawtimber price increased from \$365 to \$440 per mbf in the 3rd quarter. It had risen from \$465 per mbf in the 3rd quarter of FY 2015 to \$529 in the 4th quarter before falling to \$391 in the 1st quarter of this year. It had previously peaked at \$650 per mbf in the 3rd quarter of FY 2014. There is a moderately increasing price trend over the past six years despite lower prices in recent quarters. The six-year trend and quarterly patterns would imply that there is a greater chance that the price may rise further in the coming 4th quarter.



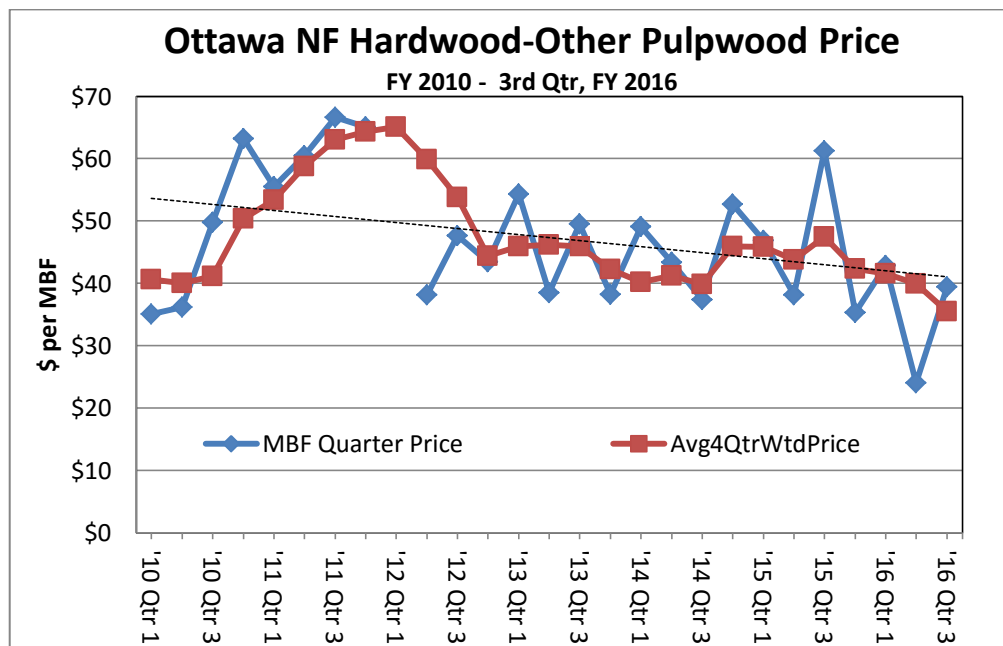
Aspen pulpwood sale volume dipped further in the 3rd quarter, from 2.8 to 2.6mmbf. Sale levels have been at slightly above average levels for three quarters now. Previously, sale volumes had been quite erratic from quarter to quarter, with volumes at the extremes (under 1,000 mbf or over 4,000 mbf) more frequent than sales in the middle range. Sales have been as high as 8.7mmbf in the 4th quarter of FY 2011 and 7.3mmbf in the 4th quarter of FY 2014. They reached 5.1mmbf in the 2nd quarter of last year. There is a slight downward sale volume trend. It is uncertain whether the sale volume for the 4th quarter will increase or decrease. Generally, the 4th quarter has higher sale volumes, but there was a decrease in the 4th quarter of FY 2015 and the following three quarters of above-average sales would indicate a downturn is likely.



The 3rd quarter aspen pulpwood price rose to \$64 per mbf, right in line with its six-year price trend. The 1st quarter aspen pulpwood price shot up to a record \$109 per mbf from a 4th quarter price of \$45, but the price came right back down to \$45 again in the 2nd quarter. The price had been at what was then a record high of \$91 per mbf in the 3rd quarter of FY 2015. Before then, there had been a seesaw pattern of price swings for two and a half years. With erratic sale volumes and many quarters with low or no volume as a backdrop, the overall price trend for the past six years has been increasing.



Hardwood-Other pulpwood 3rd quarter sale volume rose again, from 4.8mmbf to almost 9.5mmbf. It was only 2.8mmbf in the 1st quarter of this fiscal year. It had been 8.6mmbf in the 4th quarter of FY 2015, but it had reached 14.6mmbf two quarters earlier. Sale volume hit a record high 23.6mmbf in the 4th quarter of FY 2013. Sale volume swings appear to have moderated over the past two or three years. Volumes have trended upward and have more than doubled in the past six years, but the upward trend might also be moderating. The 3rd quarter volume was very much in line with the six-year trend. It will be interesting to see if the coming 4th quarter volume is much higher than the 3rd quarter - as some prior 4th quarters have been - or if it too is closer to the trend line and does not change much from the 3rd quarter.

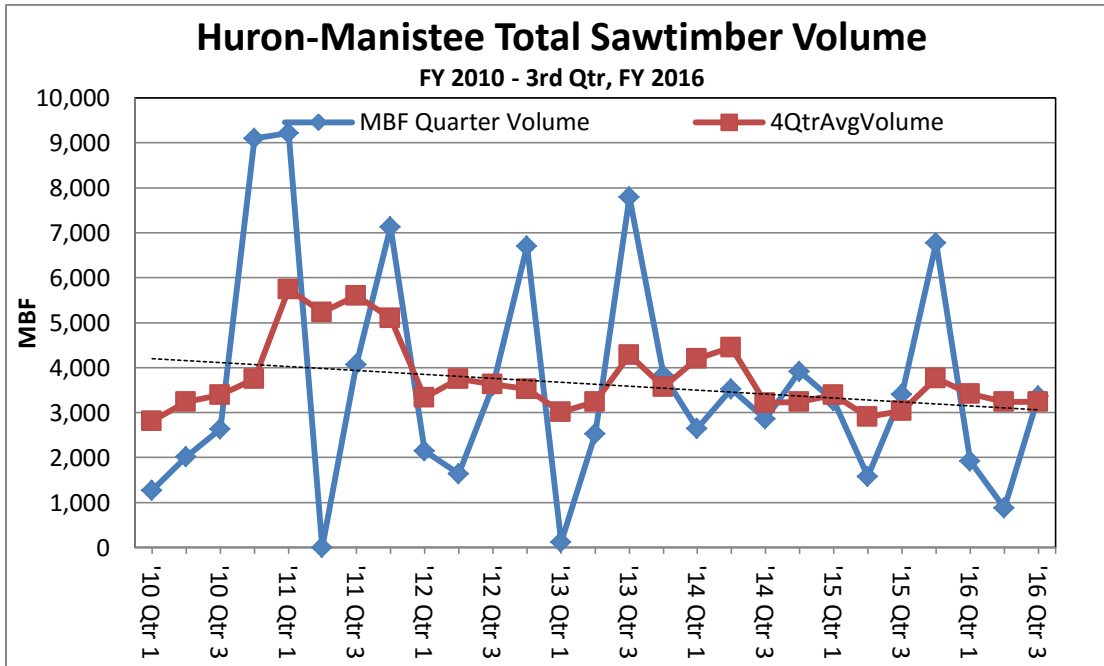


The 3rd quarter hardwood-other pulpwood price rebounded to \$39 per mbf. It had decreased significantly from \$43 to \$24 per mbf in the 2nd quarter, its lowest level in six years. It was over \$61 per mbf before falling in the 4th quarter of FY 2015 to \$35. The product had been selling in a fairly narrow \$38 to \$55 range between FY 2012 and FY 2014. Prices peaked in FY 2011 at over \$65 per mbf. The six-year price trend is declining, particularly influenced by higher prices in FY 2010 and FY 2011.

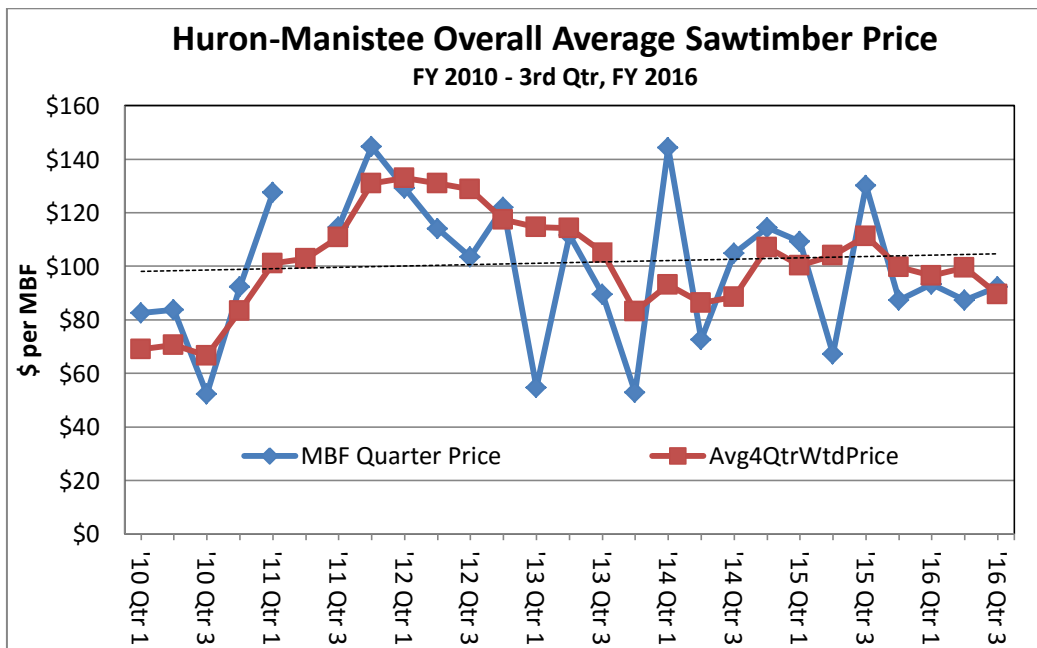
Huron-Manistee National Forest Major Species Product Timber Sales, FY 2010 – 3rd Qtr, 2016

All graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter. The National Forests follow the federal fiscal year from October 1 through September 30. The most recent data included here is for the 3rd quarter of FY 2016 (April through June, 2016). Only certain major categories of timber sales are shown; more information is available through the Region 9 pdf reports posted on the Forest Service website:

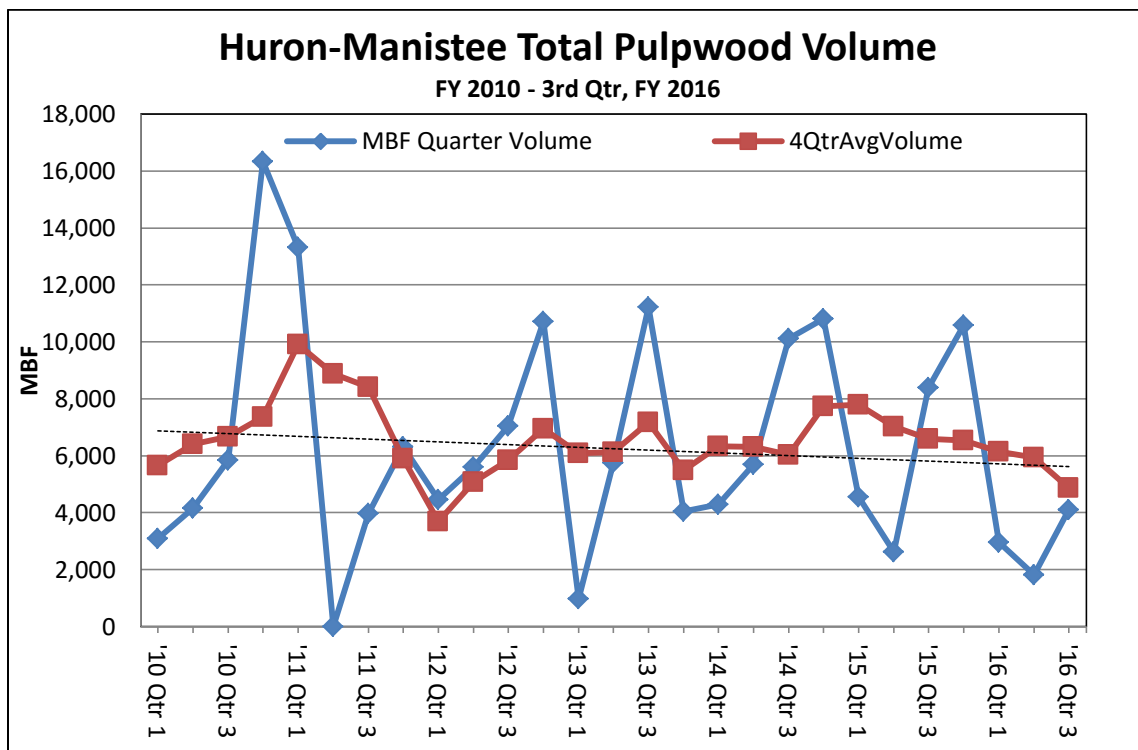
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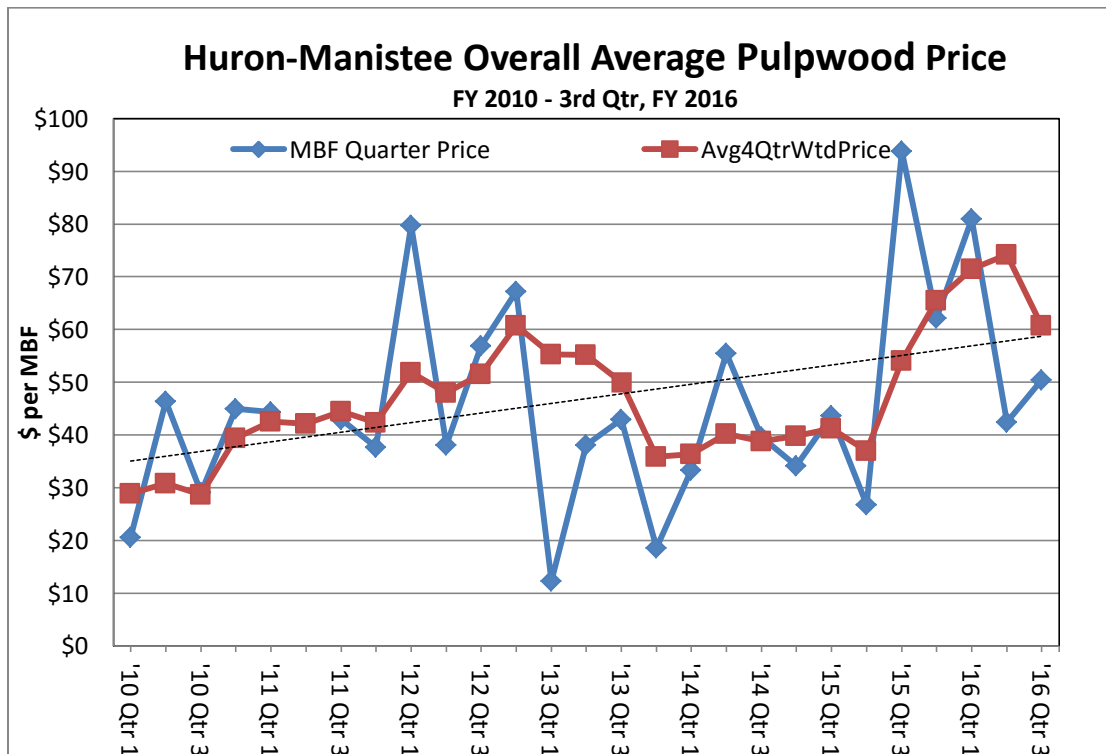
The Huron-Manistee (H-M) sawtimber sale volume rose from 874mbf to 3.375mmbf in the 3rd quarter. Sale volumes quarter-to-quarter have been erratic although they were less so for much of FY 2014 and FY 2015. There is a slight downward volume trend over the past six years. H-M sawtimber sale volume tends to peak in the fourth quarter and be lower in the 1st quarter and 2nd quarters. If the quarterly sale pattern holds, volumes will be higher next (4th) quarter.



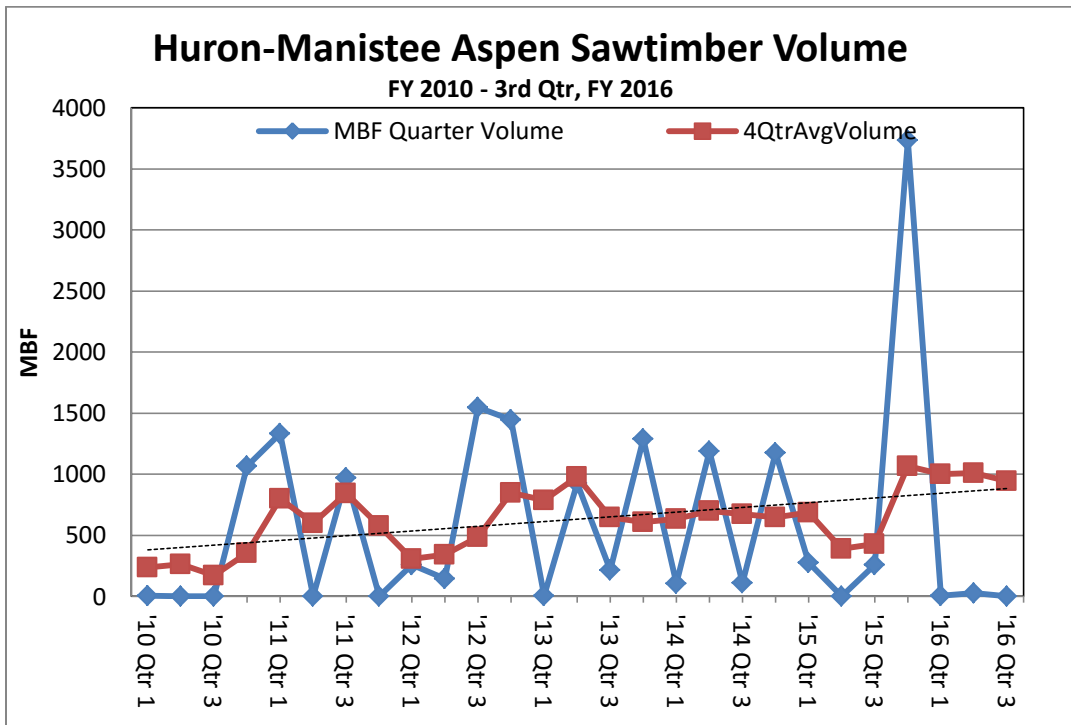
The overall average sawtimber price has been relatively stable for four quarters. For the 3rd quarter, it increased slightly from \$87 to \$92 per mbf. Sawtimber prices are greatly influenced by the mix of species and quality of products sold. Generally, red pine accounts for close to half or more of the H-M sawtimber sale volume and it has the greatest influence on the overall average sawtimber price. It accounted for over 80% (2.8 of 3.4mmbf) of the volume in the 3rd quarter.



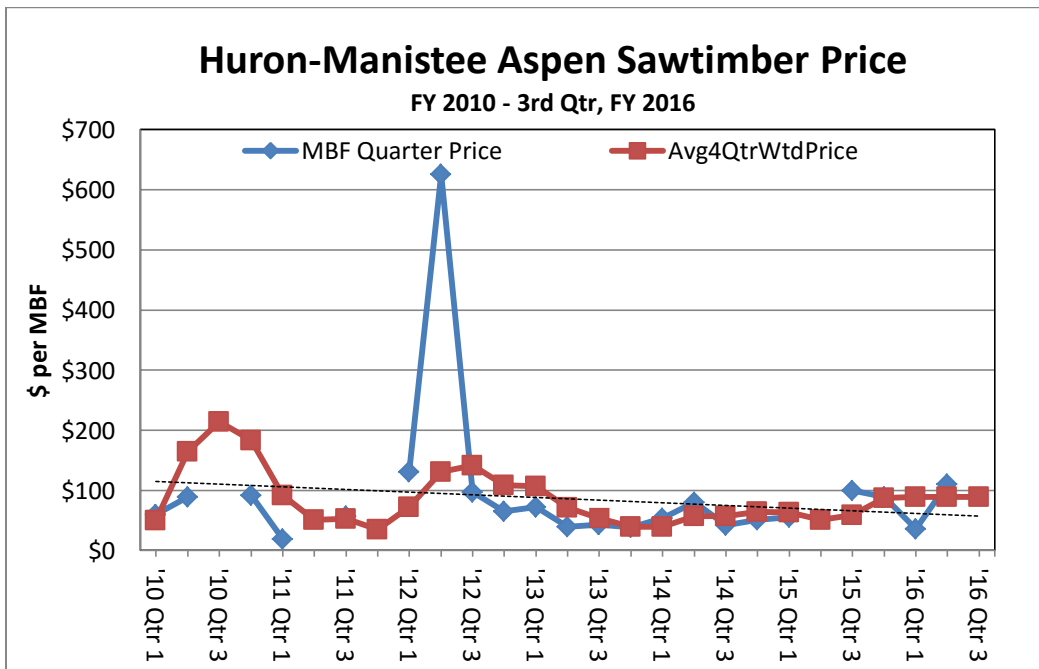
As expected due to the low sale levels in the two prior quarters, total pulpwood sale volume rose in the 3rd quarter, from 1.82 to 4.1mmbf. It was at 10.6mmbf in the 4th quarter of FY 2015 and typically has high 4th quarter sales. The six-year sale volume trend has gone from flat to slightly declining, although this may be reversed with the coming 4th quarter which is expected to see an appreciable sale volume increase.



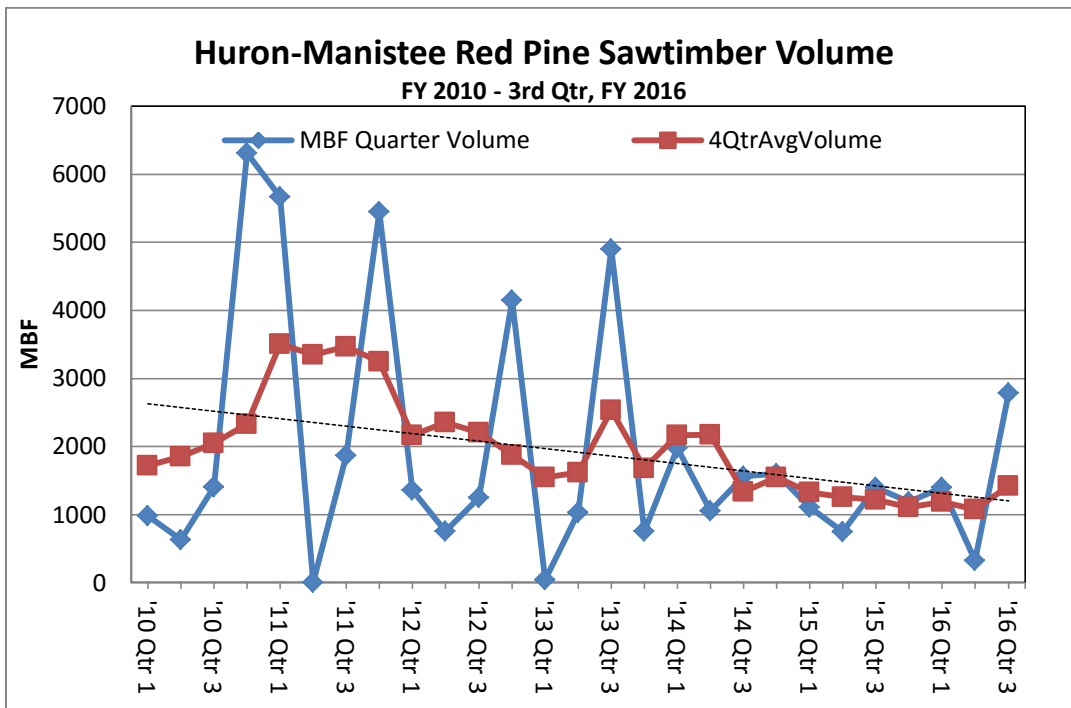
The overall average pulpwood price fell sharply in the 2nd quarter from \$81 to \$42.50 per mbf, but rose to \$50.44 in the 3rd quarter. The 3rd quarter FY 2015 average over \$93 was largely a result of skewed bids on one large oak sale and was not viewed as being truly indicative of overall prices and trends. However, the subsequent 4th and 1st quarter prices reinforce a clear upward trend in average H-M pulpwood prices. It was expected that the 3rd quarter prices would rebound somewhat rather than fall further and they did; they are expected to rise further in the coming 4th quarter.



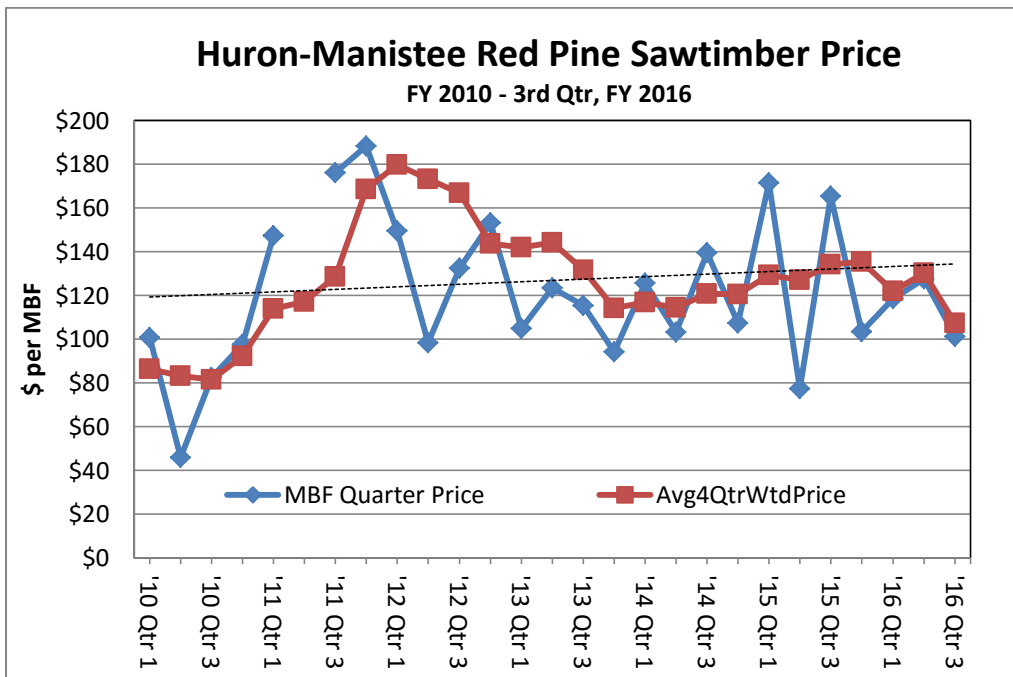
Aspen sawtimber sales were only 8mbf in the 1st quarter, 27mbf in the 2nd quarter, and nonexistent (zero) in the 3rd quarter. The six-year average quarterly volume is in the neighborhood of 500mbf. There has not been three quarters of such no or low sale volumes since FY 2010. FY 2015 saw three quarters of below average sales and then a record 3.74mmbf sale volume in the 4th quarter. It may be that FY 2016 is repeating this pattern and the coming 4th quarter will see sale volume at least above 1mmbf. There has been a tendency for the 4th quarter to have the highest sale volume. The modestly increasing sale trend over the past six years is greatly reinforced by the 4th quarter FY 2015 sale volume.



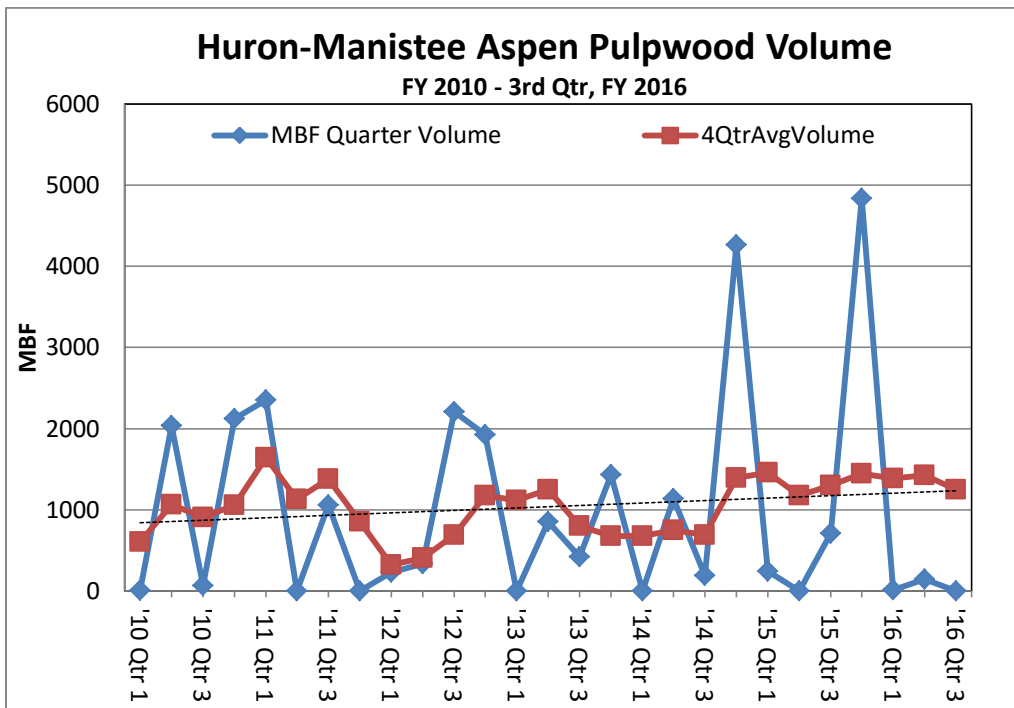
There is no 3rd quarter price for aspen sawtimber as there was no volume sold; for that matter, there is little basis for a price since the 4th quarter of FY 2015 when the price averaged close to \$89 per mbf.



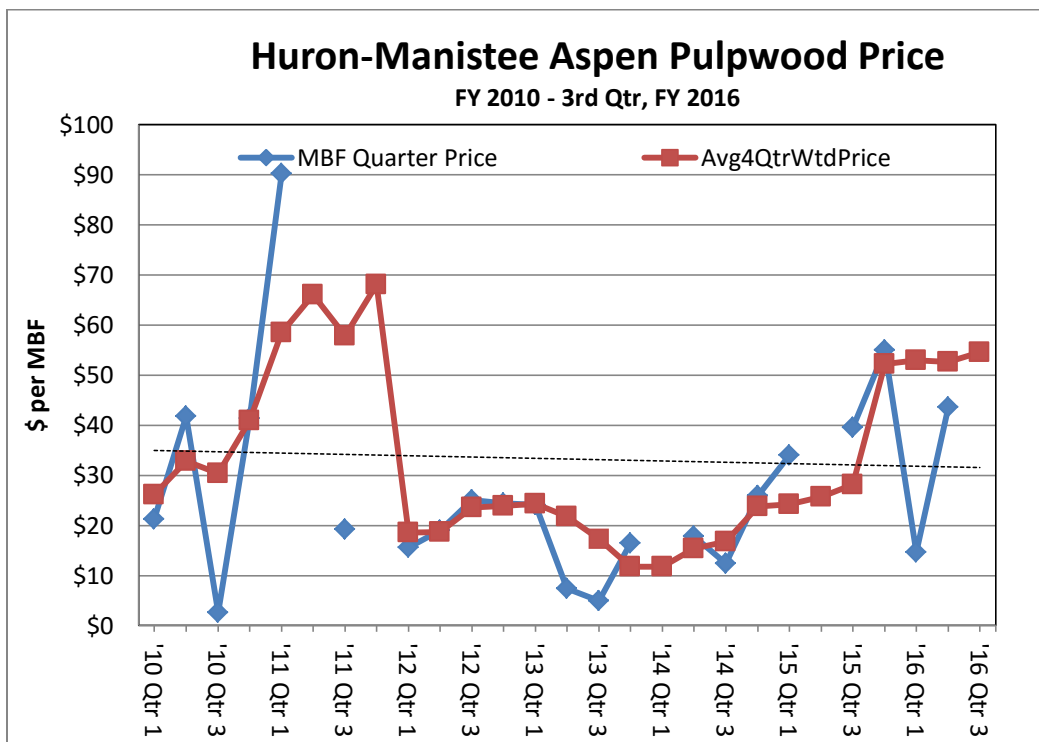
Red pine often accounts for the majority of the sawtimber volume sold on the Huron-Manistee. Red pine sawtimber volume increased sharply from 322mbf in the 2nd quarter to 2.784mmbf in the 3rd quarter. Through the 2nd quarter, there had been 10 quarters with lower but more stable volume than in previous quarters when sales would exceed 4mmbf in one quarter and then drop back to below 1mmbf in a subsequent quarter. This ten-quarter, lower stable volume trend over was so pronounced and such a contrast to the previous pattern that it pointed to a likely reversal in a coming quarter involving much higher sales. As the above graph shows, the 3rd quarter sale volume did not reach the peak levels achieved in fiscal years 2010 through 2013. With this in mind, it is expected that the coming 4th quarter will see similar even higher sales than those in the 3rd quarter despite the fairly sharp declining six-year sales trend.



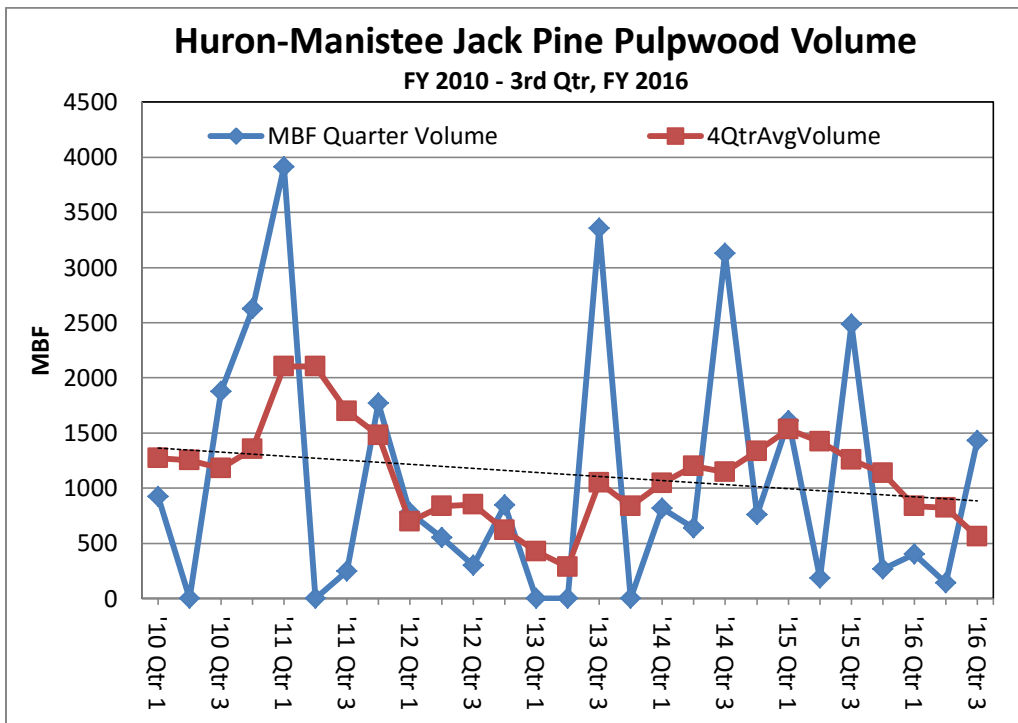
Red pine prices fell back further than expected in the 3rd quarter, from \$127 to \$101 per mbf. They had seesawed in FY 2015, from \$171 in the 1st quarter to \$77 in the 2nd quarter, back to \$165 in the 3rd quarter and then down to \$103 in the 4th quarter. There is a slight increasing price trend over the past six years. Following this trend, the price can be expected to rebound moderately higher in the coming 4th quarter.



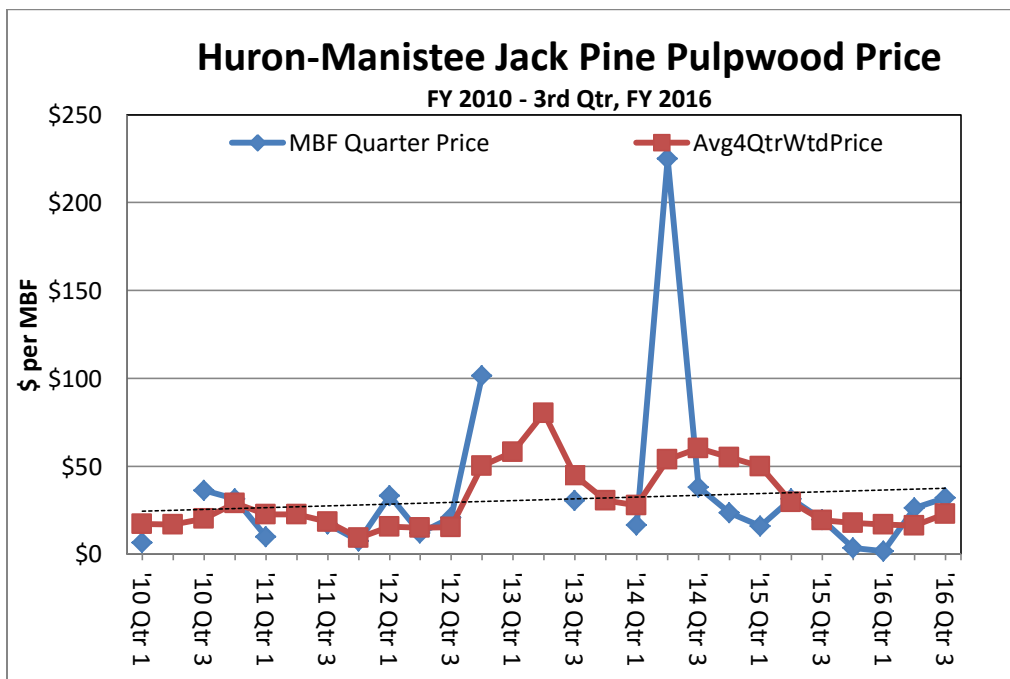
Aspen pulpwood sale volume was negligible for the third quarter in a row in the most recent (3rd) quarter. It rose steeply from 713mbf in the 3rd quarter of FY 2015 to a record level over 4.8mmbf in the 4th quarter and fell just as sharply to only 13mbf in the 1st quarter of FY 2016. The 4th quarter of FY 2014 also had a record level of sales (4.3mmbf), but often quarterly sale volumes are or at or below 1mmbf. There is not a well-established quarterly pattern to the data and the most recent two sets of high 4th quarter sales add uncertainty to quarterly projections. While most quarters are likely to continue to have sale volumes under 1mmbf, it would not be surprising if there was a large spike in sales for the coming 4th quarter.



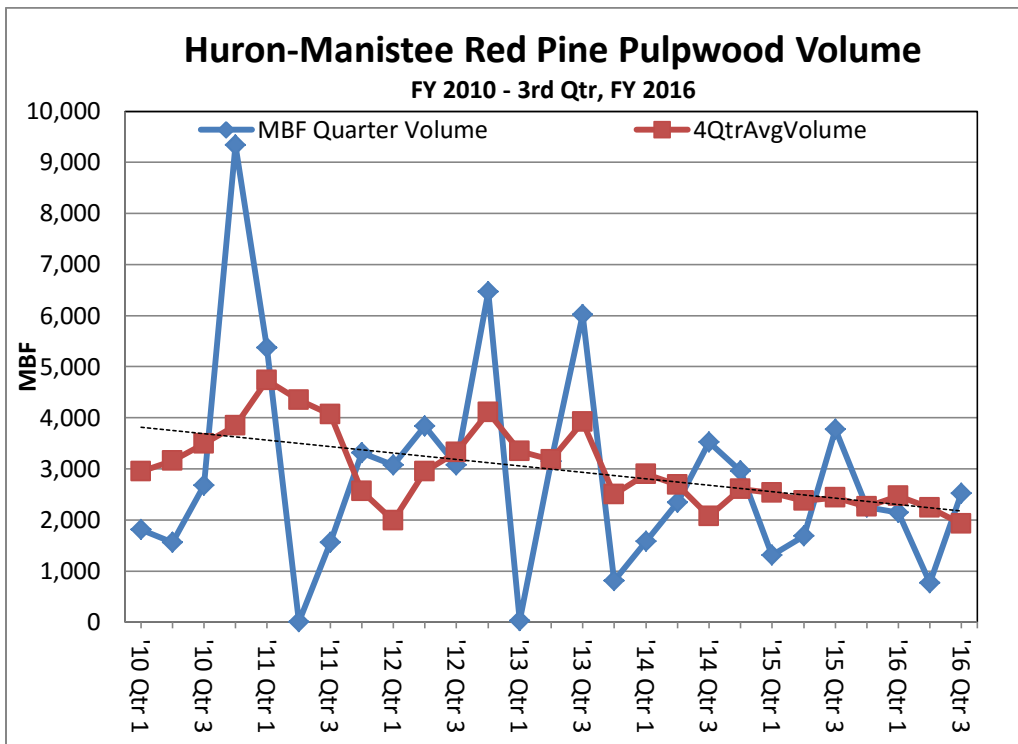
There is no 3rd quarter aspen pulpwood price as there was no sale volume. The 2nd quarter aspen pulpwood price rebounded to \$43.57 on low (147mbf) volume. It was at \$55 in the 4th quarter on high volume, up from about \$40 per mbf in the 3rd quarter. Prices have been increasing since the 3rd quarter of FY 2014 when they were only \$12 per mbf, but the 6-year price trend is slightly declining; however, prices for many quarters are based on low or no sale volumes.



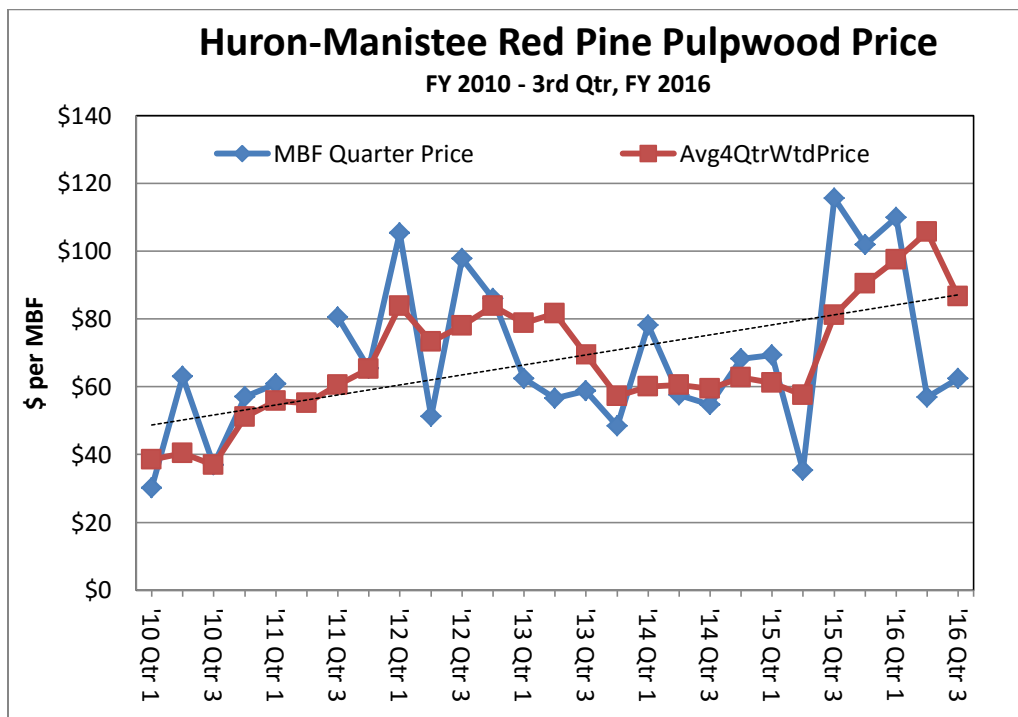
As expected, following three very low sale quarters, jack pine pulpwood sale volume rose from 143mbf to 1.433mmbf in the 3rd quarter. It had dropped back to 268mbf in the 4th quarter of FY 2015 from 2.5mmbf in the 3rd quarter. Overall, jack pine pulpwood sale volume has been on a downward trend over the past six years and many quarters the sale volume is well below 1mmbf or zero. Part of the jack pine sale volume decline in recent years may be due to more jack pine being included in a combined sale category with red and white pine. Given recent quarterly sale patterns, it would not be surprising if the sale volume declined in the coming 4th quarter.



The 3rd quarter jack pine pulpwood price rose from \$26 to \$32 per mbf. In FY 2015, the price was \$15.80 in the 1st quarter, \$31.50 in the 2nd quarter, \$19.47 in the 3rd quarter, and \$3.50 in the 4th quarter. The price for the FY 2014 2nd quarter is a mistake or an anomaly and should not be considered a reliable price for the product. The six-year price line is relatively flat, but there are many quarters with low or no sales and a few quarters with price anomalies which inhibit establishing a reliable price trend line.



Red pine pulpwood sale volume rebounded from 770mbf to 2.5mmbf in the 3rd quarter. It had dropped from 3.78mmbf in the 3rd quarter of FY 2015 to 2.25mmbf in the 4th quarter and then dipped further to 2.15mmbf in the 1st quarter of FY 2016. The six-year sale volume pattern has had some large swings in volumes, from quarters with over 6mmbf to subsequent quarters with no or negligible sale volume. Price swings have moderated in the past two years with lower highs and higher lows. Overall, there has been a declining sale volume trend over the past six years. Sales should remain about the same or dip in the coming 4th quarter.



The 3rd quarter red pine pulpwood price rose from \$57 to \$62 per mbf. The price had been at record levels over \$100 per mbf during the prior three quarters. Overall, prices for the past six years have seen a fairly steep increasing trend. Given that there was only a mild increase in price in the most recent quarter, prices are expected to continue their increase during the coming 4th quarter.