

Michigan Public Timber Markets, 3rd Quarter (April - June), FY 2015

State forest data – Overall, volumes dipped in the 3rd quarter of FY 2015 after having increased substantially in the 2nd quarter. All sold bid and non-bid species (total) volume more than doubled from the 1st quarter volume of 131,507 cords to 309,866 cords in the 2nd quarter (bid species only volume rose from 106,712 to 281,937 cords). In the 3rd quarter, total volume was 280,634 cords and bid species volume only was 249,934 cords. NLP sale volume was relatively unchanged from the 2nd quarter, whereas there was a noticeable drop in UP sale volume. Sale volume was at an all-time high of 368,864 cords in the 3rd quarter of FY 2014 – partly due to rebid sales from earlier quarters which had not attracted bids initially - before plunging to 160,344 cords in the 4th quarter. Based upon the past two years, the FY 2015 4th quarter may be disappointing; unless it is double what the past two 4th quarter sales were, total sales for the year will not be above 1 million cords.

The State Forest overall average timber price index continued upward, replacing the record level of \$64.32 per cord for bid species set in the 2nd quarter with a new record of \$69.99 per cord. Aspen pulpwood bid species sale volumes set a new quarterly record of 41,328 cords in the NLP as quarterly sale volume dropped in the UP, from 18,223 cords down to 17,242 cords. The aspen pulpwood cord price dipped in both peninsulas, with the UP price going from \$57.39 to \$54.72 per cord as the NLP price went from \$33.74 to \$30.24 per cord. Red and jack pine pulpwood sale volumes changed in opposite ways across the peninsulas. NLP red pine pulpwood bid species volume changed slightly from 17,750 to 18,304 cords while the UP's dropped from 18,223 cords to 6,196 cords. NLP jack pine pulpwood bid species volume went from 29,292 cords dropped to 8,818 cords while the UP changed slightly from 12,837 to 12,424 cords. Red pine pulpwood prices hit new highs in both peninsulas with UP red pine pulpwood prices going from \$112 to \$120 per cord while the NLP price shot up from under \$80 to over \$124 per cord. UP Jack pine pulpwood sale prices dropped from \$74.80 to \$61.50 per cord as they went from \$34.05 to \$25.35 per cord in the NLP. UP softwood pulpwood sale volume jumped from dropped from 18,226 to 16,600 cords while the price rose from \$41.54 to \$44.38 per cord. NLP Oak pulpwood sale volume dropped back from a high level of 24,182 cords in the 2nd quarter to 16,034 cords while the price dropped from \$36.33 to \$32.48 per cord. Other hardwood pulpwood volume - which had more than doubled statewide, from 21,260 cords to 47,030 cords in the 2nd quarter – continued to increase to 50,964 cords in the 3rd quarter. Its price was little changed at \$40.13 per cord. Statewide red pine sawtimber prices dipped from \$268 to \$245 per mbf while volumes increased further from 9.6 to over 13mmbf. UP sugar maple sawtimber prices plummeted from \$1054 to \$771 per mbf at the same time the volume rose slightly from 904 to 946mbf. NLP sugar maple sawtimber price continued to rise from \$513 to \$688 per mbf as the volume more than doubled from 220 to 484mbf. NLP oak sawtimber fell back from a record 5.3mmbf to 3.1mmbf while prices rose from \$236 to \$289 per mbf.

Federal forest data – The Ottawa decreased both pulpwood (from 23 to 9.6mmbf) and sawtimber sale volume (from a record 5mmbf to 3.8mmbf). The Huron-Manistee sawtimber sale volume increased from 1.6 to 3.4mmbf while pulpwood volume shot up from 2.6 to 8.4mmbf. Hiawatha volumes barely changed, sawtimber volume went from 2.2 to 2.5mmbf and pulpwood volume went from 7.3 to 7.2mmbf.

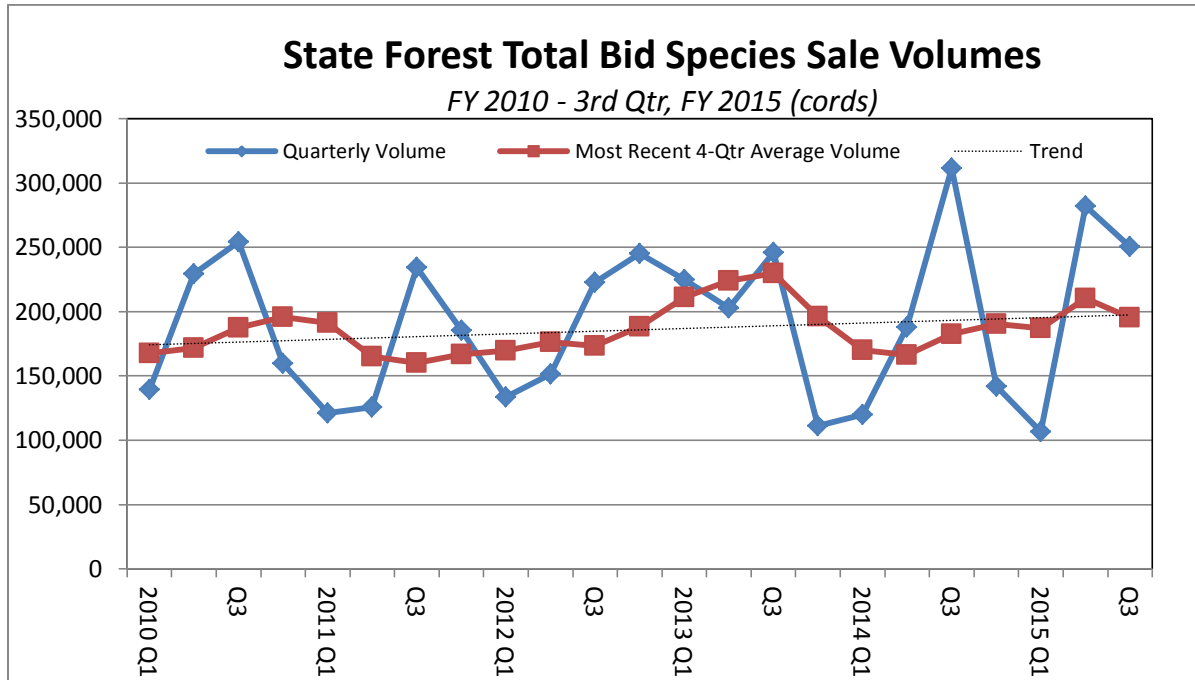
Ottawa's overall average sawtimber price dropped to \$232 per mbf, but its overall pulpwood price shot up to a record over \$85 per mbf. Ottawa sugar maple sawtimber sale volume fell back from over 2mmbf to .42mmbf at the same time its price went from \$533 to \$465 per mbf. Its aspen pulpwood sale volume also dropped from 5.1 to 2.3mmbf while the price jumped further, from \$70 to over \$90 per mbf. The "hardwood-other" pulpwood volume similarly fell from 14.6 to 5.1mmbf while the price rose from \$38 to \$61 per mbf. The Hiawatha's overall sawtimber price dropped further, from \$190 to \$174 per mbf as its red pine price fell from \$232 to \$214 and its "hardwood-other" price fell further from \$227 to \$217. Hiawatha aspen pulpwood sales have been declining; volume fell from 1 to .5mmbf while the price shot up from \$36 to \$64 per mbf. There were no jack pine sales. Red pine pulpwood volume was also negligible. The Huron-Manistee's prices rose sharply with sawtimber going from \$67 to \$130 per mbf while pulpwood went from \$26.75 to over \$90 per mbf, but the latter mostly due to a skewed oak pulpwood bid. The H-M had little aspen sawtimber or pulpwood sale volume this quarter but jack pine volume was 2.5mmbf. Red pine sawtimber volume rose to 1.4mmbf as the price rose to \$165 per mbf; red pine pulpwood volume rose to 3.75mmbf and its price shot up from \$35.40 to \$115.56 per mbf.

State Forest Timber Sales for Major Species & Products

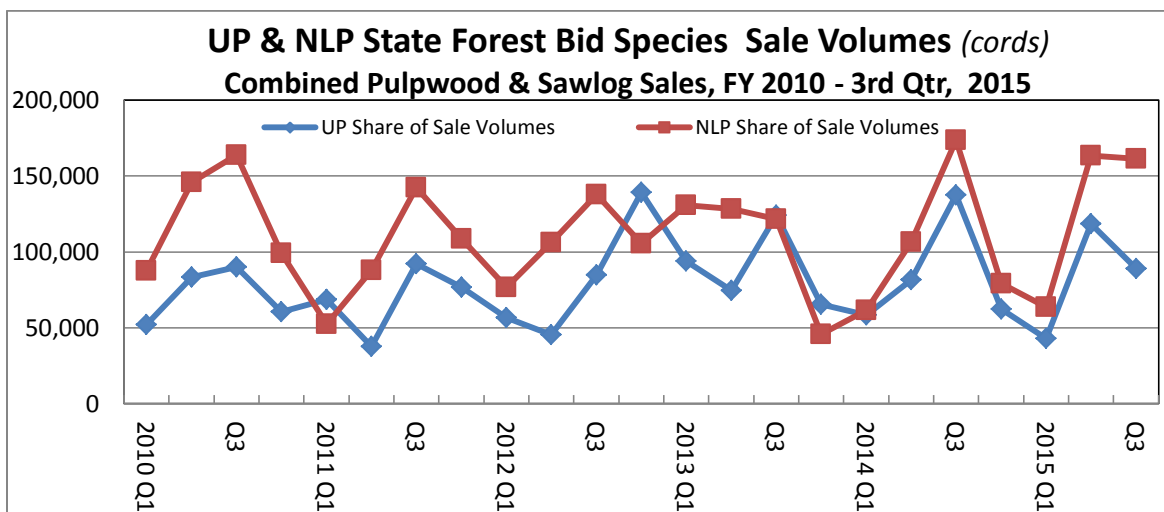
Quarter 1, FY 2010 – Quarter 3, FY 2015

Source: Michigan DNR, Forest Resources Division

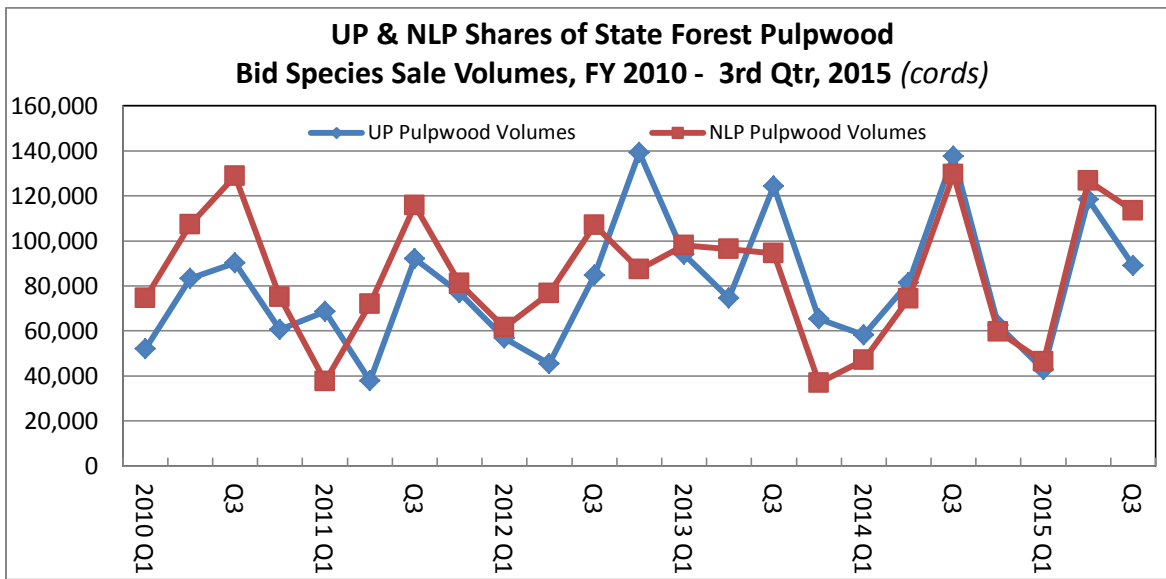
The State follows the federal fiscal year (October 1 through September 30). Graphs below use bid species volume and value data; total volumes and values are slightly more. The graphs often include a dotted trend line based upon data for the average of the most recent four quarters (labeled as “Most Recent 4-Qtr Average Volume” or “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.



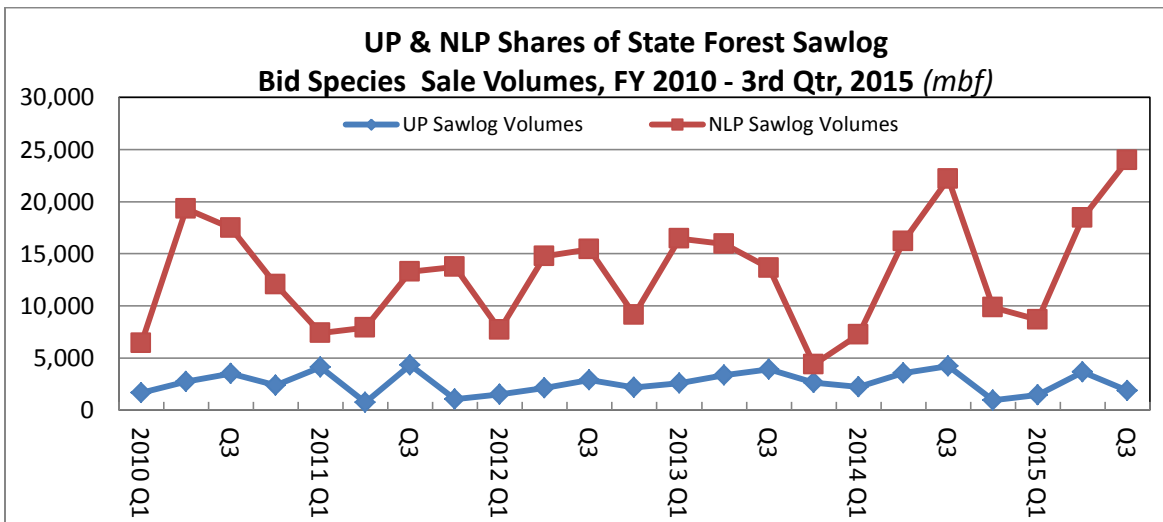
Sale Volume for bid species dipped in the 3rd quarter to 250,000 cords after rising sharply in the 2nd quarter to 282,000 cords. Sales were expected to rebound from the previous two quarters' low levels. For six years, the 4th and 1st quarters of every fiscal year have averaged less than one quarter of annual sales while the 2nd quarter accounts for slightly more than a quarter and the 3rd quarter accounts for almost one-third of sale volume. The highest quarterly level reached in the past five years was over 311,000 in the 3rd quarter of FY 2014. This record sale volume was in part due to a large number of rebid sales which were originally offered earlier but did not attract bidders. If the recent quarterly pattern holds, the coming 4th quarter may decline further, but probably not as much as the 4th quarters in the past two fiscal years.



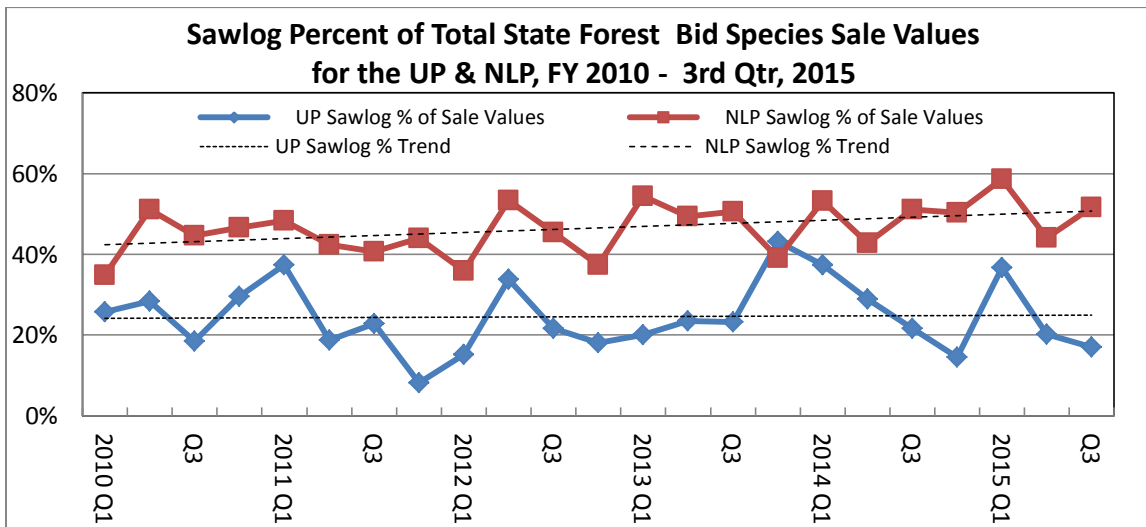
FY 2015 3rd quarter sale volumes dipped in the NLP and dropped more sharply in the UP. Sales had increased in both the UP and NLP in the 2nd quarter. For over two years, peninsula volume shares had been fairly equal and moved in tandem.



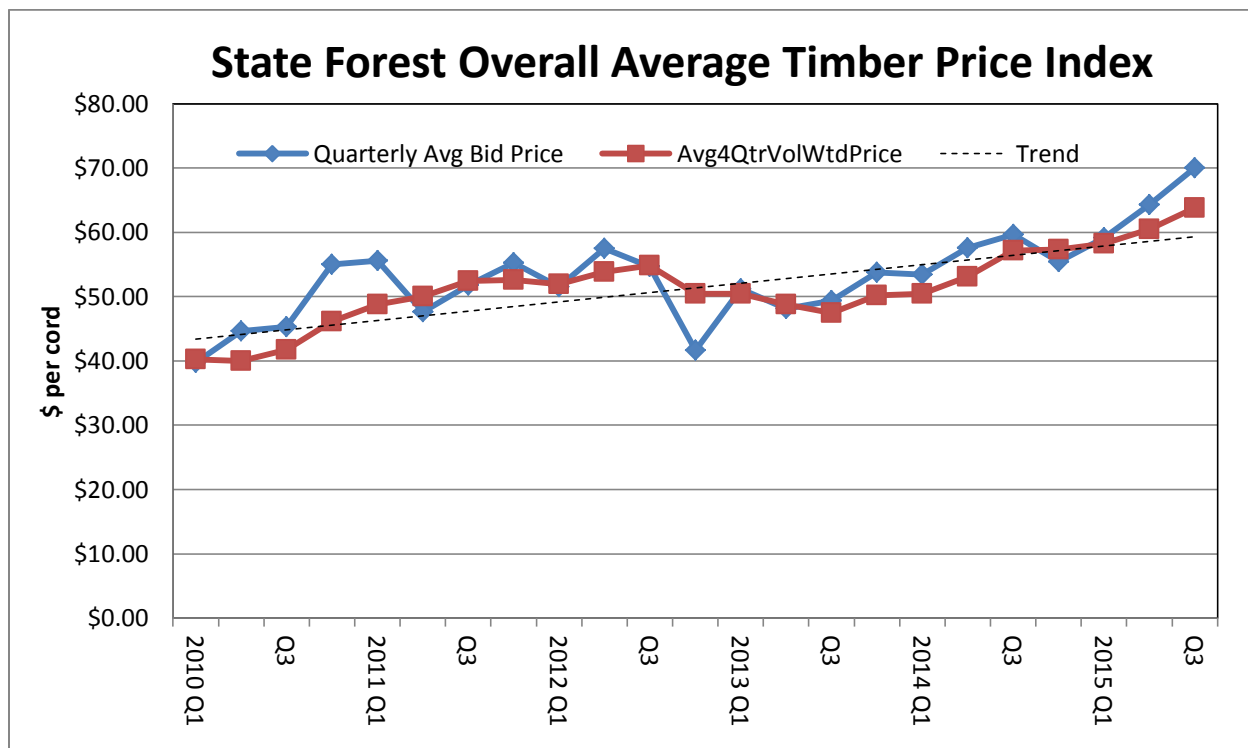
Pulpwood sale volume generally accounts for over 80% of total State Forest sale volume. The above graph indicates sale volumes dropped in the 3rd quarter, particularly in the UP, but not below their averages for the five-year period.



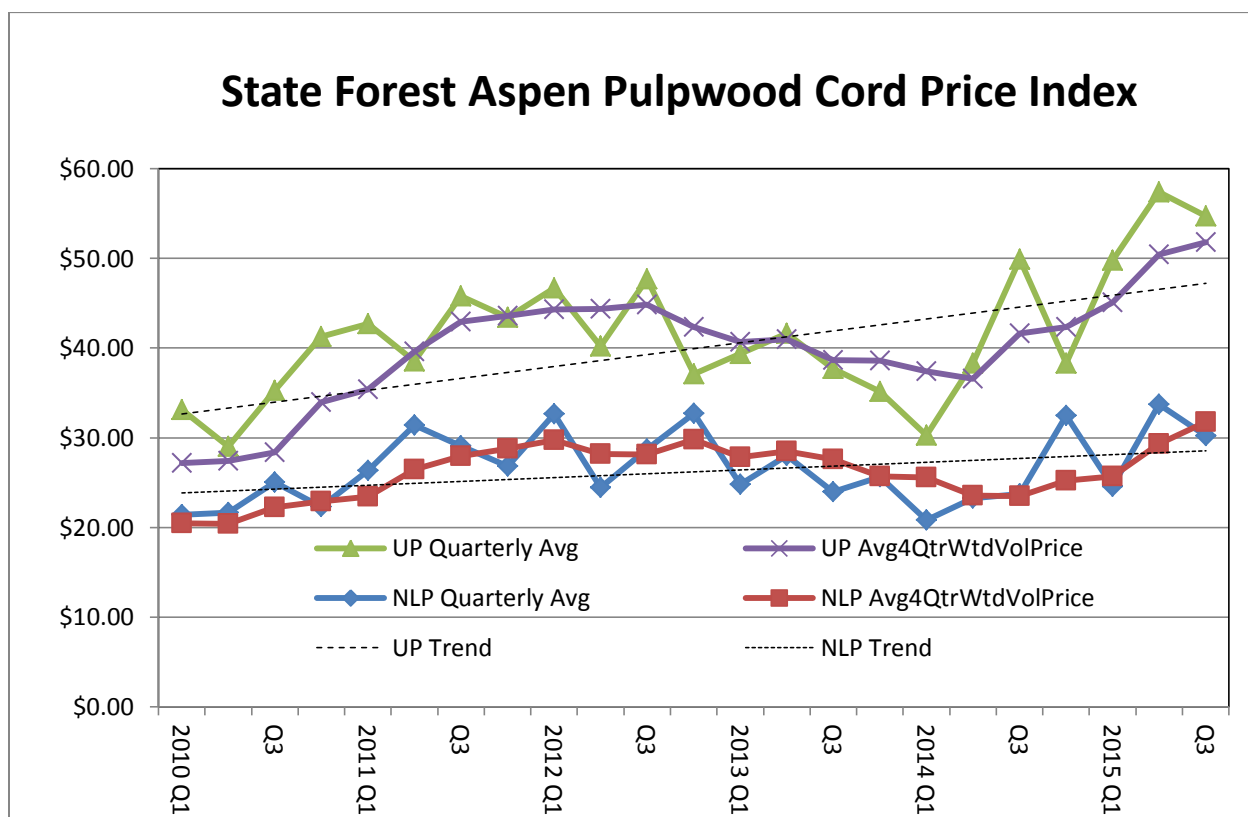
NLP sawlog volume hit a five-year record in the 3rd quarter while UP sawlog volume declined. The NLP generally accounts for more than 80% of State Forest sawlog volume (but closer to 70% of sawlog sale value).



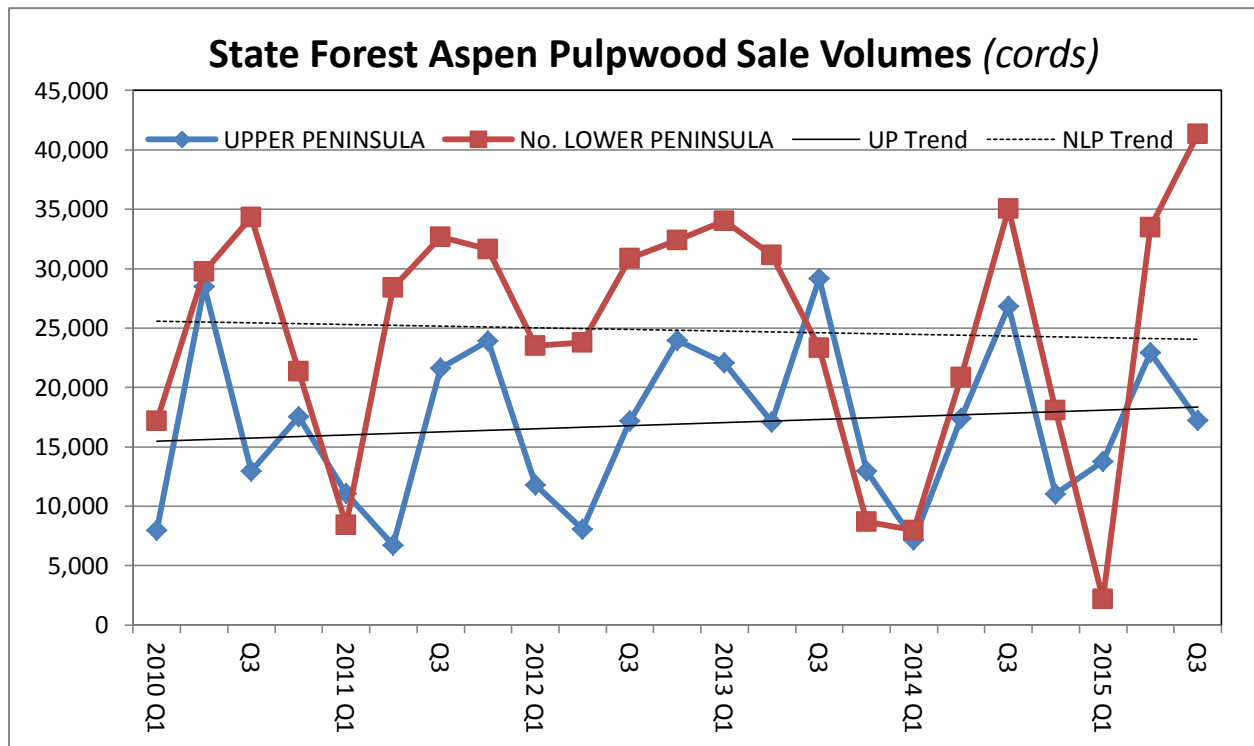
Reflecting their 3rd quarter sawlog shares in the previous graph, the NLP sawlog percent of bid species sale values rose while the UP percent continued to decline. Note the UP trend line is flat while the NLP trend line is slightly increasing.



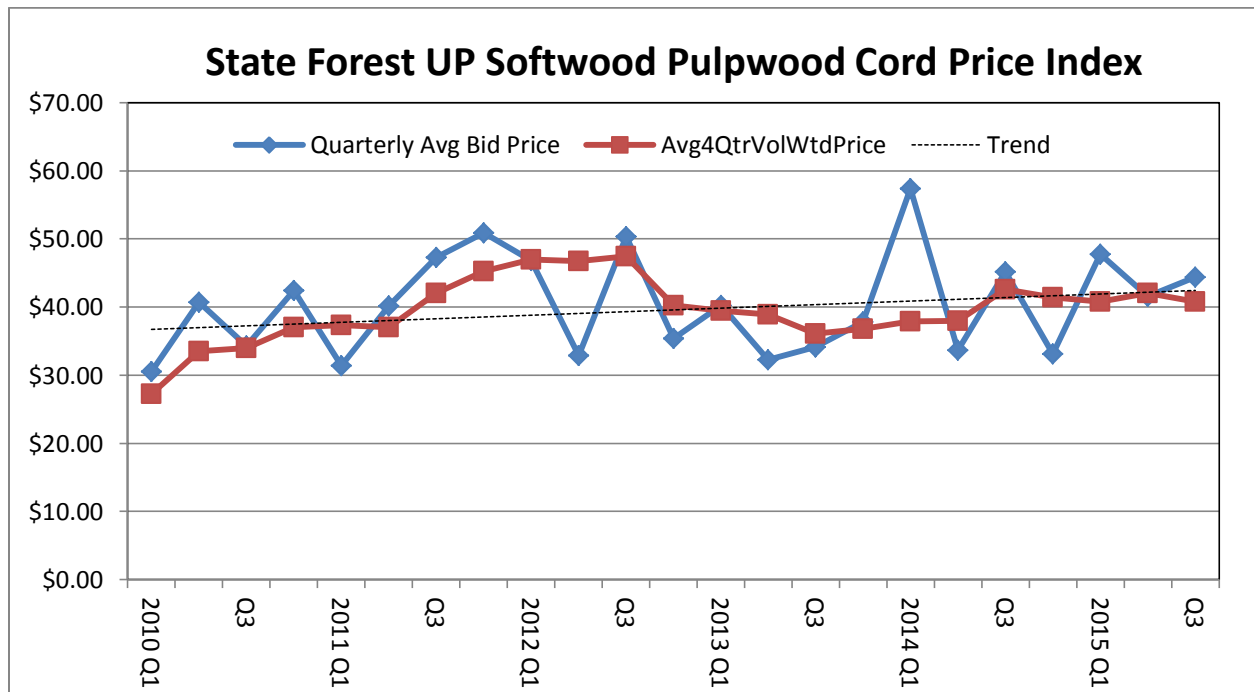
The overall average timber price index jumped to a new record \$69.99 per cord in the 3rd quarter, replacing the \$64.32 record set last quarter. It was \$59.16 in the 1st quarter of FY 2015 and had reached a previous high of \$59.66 per cord in the 3rd quarter of 2014. With a few exceptions (notably the 4th quarters of FY 2012 and FY 2014), prices have been increasing fairly steadily for the past five years.



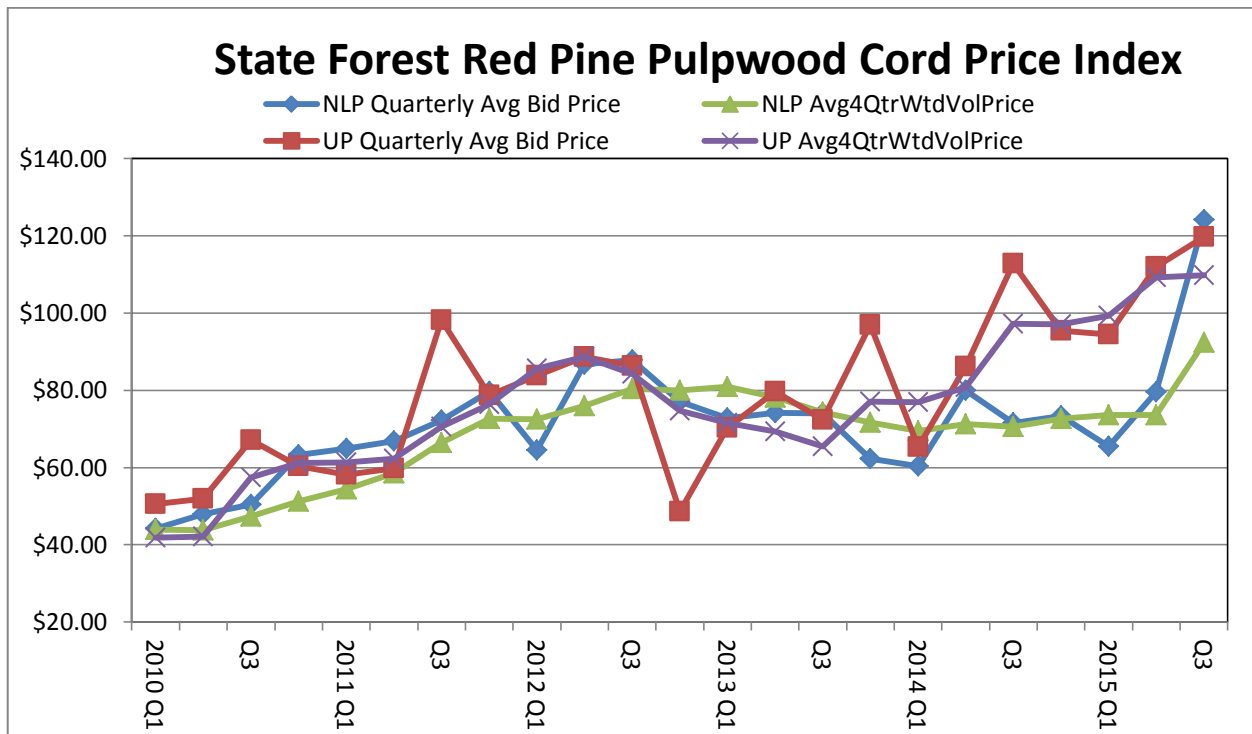
UP average Aspen pulpwood prices dropped back to \$54.72 in the 3rd quarter. They had increased from \$49.75 per cord in the 1st quarter to a record level of \$57.39 per cord in the second quarter. The NLP aspen cord price also decreased in the most recent quarter, from \$33.74 to \$30.24, thereby maintaining close to a \$25 price gap between the peninsulas. The UP price trend has a steeper slope to it than the NLP; this has been reinforced by the recent UP quarterly prices.



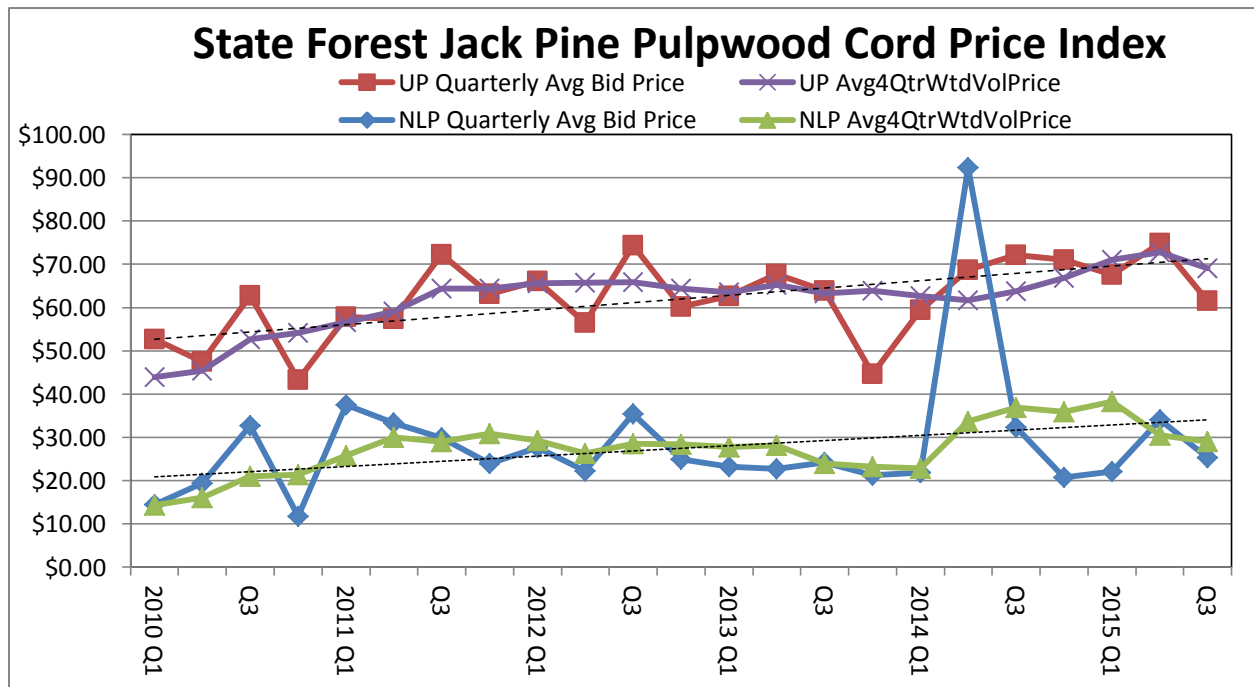
NLP aspen pulpwood rose further in the 3rd quarter to a record high of 41,328 cords. As the graph above indicates, there have been some dramatic swings in quarterly sale volumes for NLP aspen. In the 1st quarter, at only 2,168 cords, sale volume was lower than it had been at any time in the past five-plus years. The two most recent quarters are reversing the overall five-year declining sale volume trend. UP aspen sale volume swings have not been as dramatic as the NLP. Sale volume decreased moderately in the 3rd quarter to 17,242, after climbing to 22,909 cords in the 2nd quarter. The UP has a slightly increasing sale volume trend line in contrast to the NLP.



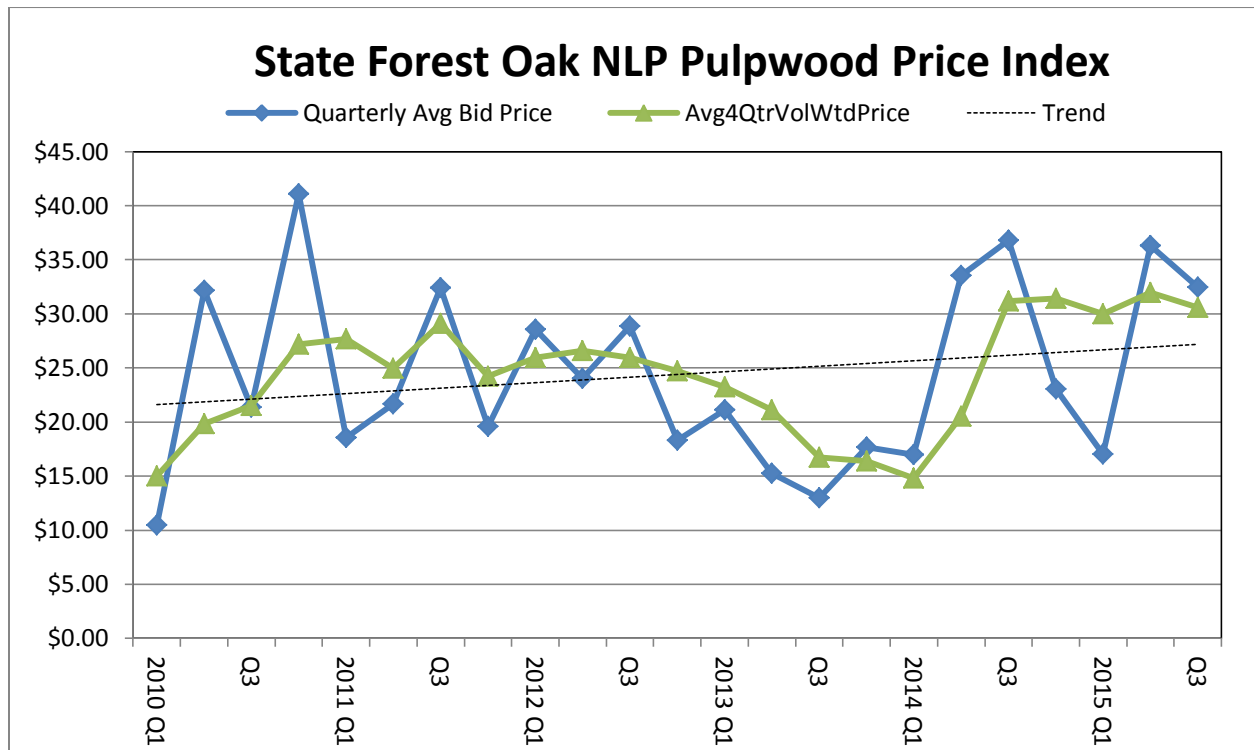
The UP accounts for the vast majority of what is sold as “softwood pulpwood.” The 3rd quarter softwood pulpwood cord price rose to \$44.38 per cord on 16,600 cords of sale volume. Previously, it had fallen from \$47.79 per cord in the 1st quarter down to \$41.54 while sale volumes jumped from 7,862 cords up to 18,226 for the same quarters. A record level of 35,100 cords were sold in the 3rd quarter of FY 2014. There is a modest upward price trend for the product.



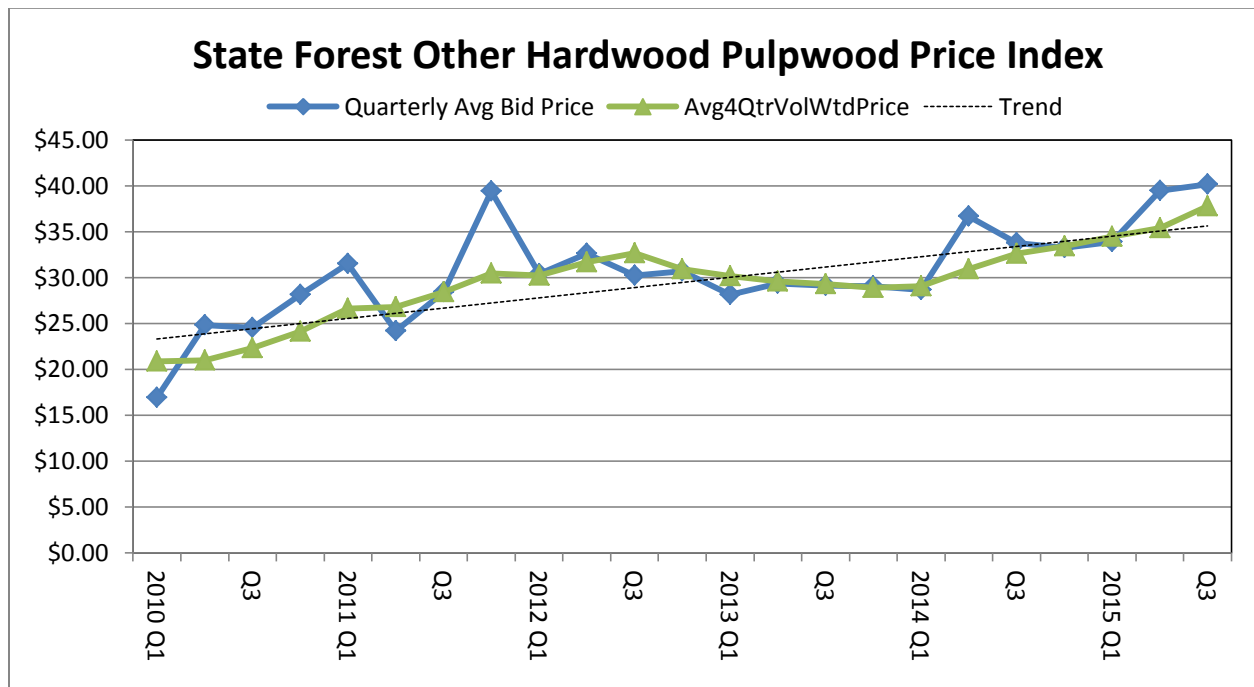
The 3rd quarter NLP red pine pulpwood price shot up to over \$124 per cord from \$79.60 per cord in the 2nd quarter while the UP price rose from \$111.96 to \$119.76 per cord. The UP has generally had higher RP pulpwood prices than the NLP, but the 3rd quarter's NLP price increase changed that. UP red pine pulpwood prices rose sharply to almost \$113 per cord last fiscal year while the NLP prices remained more stable in a \$70 to \$80 per cord range. The UP sale volume dropped back sharply from 18,223 cords in the 2nd quarter to 6,196 cords in the 3rd quarter while the NLP volume remained little changed, increasing from 17,750 cords up to 18,304 cords.



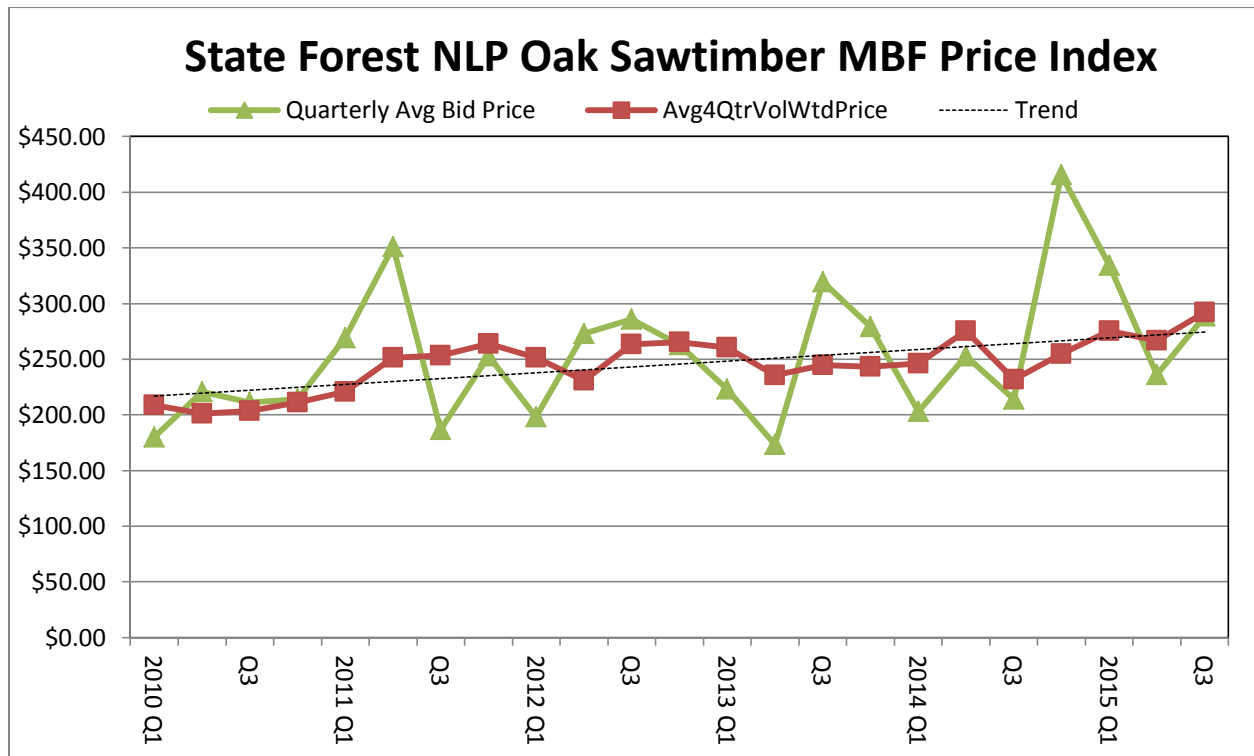
Prices in both peninsulas decreased in the 3rd quarter, with the NLP going from \$34.05 to \$25.35 per cord and the UP from \$74.80 to \$61.50 per cord. The UP price has consistently been twice to over three times the NLP price. Jack pine sale volumes are highly volatile from quarter to quarter. UP sale volumes rose from a very low 972 cords in the 1st quarter to a relatively high (for the UP) 12,837 cords in the 2nd quarter and 12,424 in the 3rd quarter. The NLP sale volume rose from 5,710 cords all the way up to 29,292 cords, but then fell back to 8,818 cords in the 3rd quarter. The 2nd quarter NLP \$90 price is an anomaly and should be ignored; quarters around it were fairly stable in the \$20 to \$35 range.



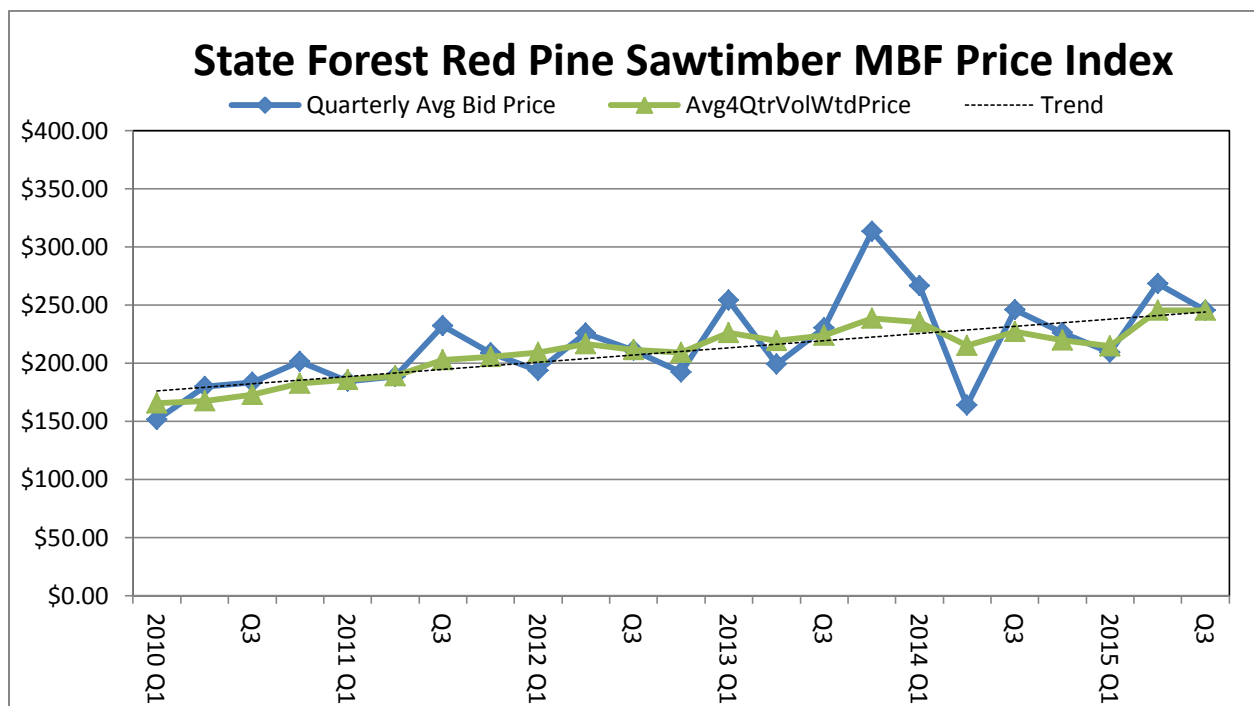
The 3rd quarter NLP oak pulpwood price dipped to \$32.48 in the 3rd quarter. The price had more than doubled from \$17 to \$36.33 per cord in the 2nd quarter. Prices had risen dramatically in FY 2014, following six quarters of hovering around the \$20 level. Sale volume had risen from 5,800 cords to 9,230 cords between the 4th quarter of FY 2014 and the 1st quarter of 2015, but it leaped up further to a very high 24,182 cords in the 2nd quarter and then dropped back to 16,034 cords in the most recent (3rd) quarter. Average quarterly sale volume for the 5-year period is just over 10,000 cords.



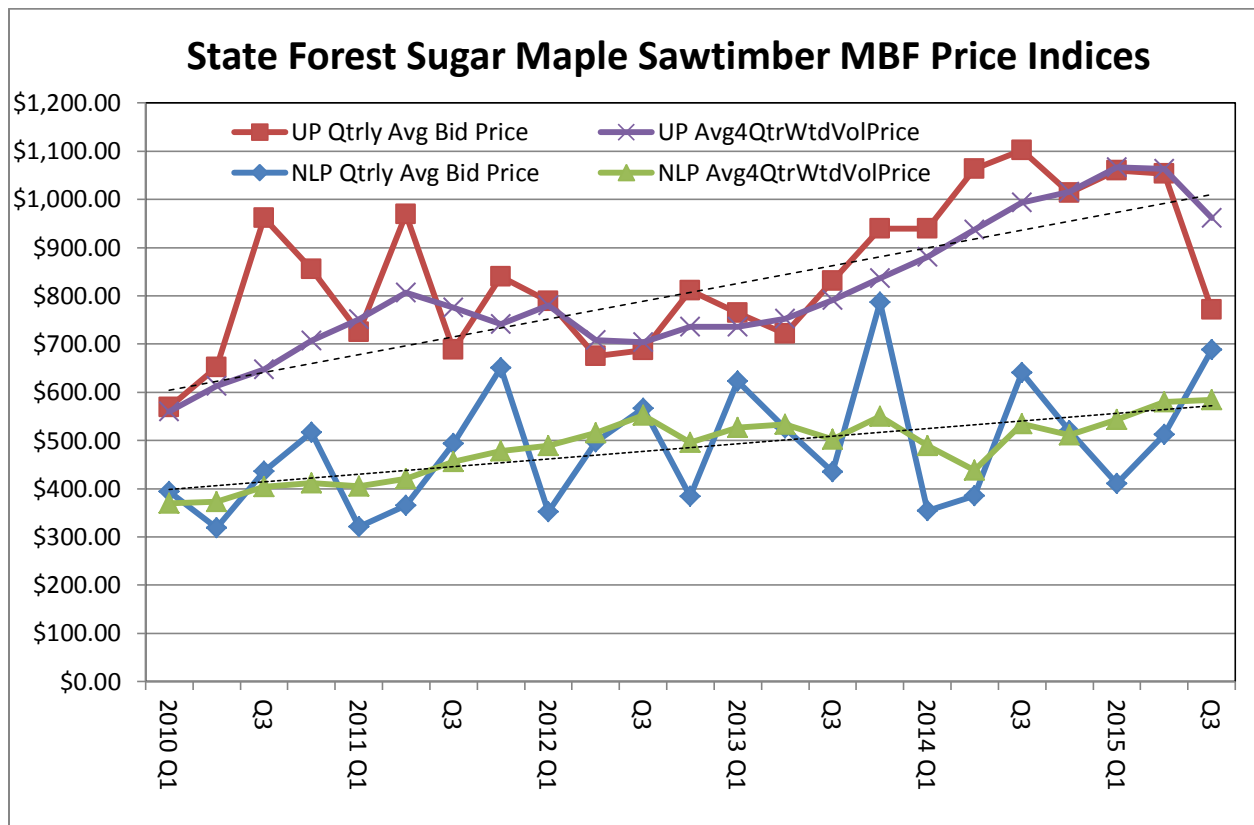
The 3rd quarter "other hardwood pulpwood" cord price of \$40.13 per cord was little changed from the \$39.49 per cord in the 2nd quarter. It had been quite stable for the prior three quarters at just under \$35 per cord. Sale volumes hit a record 66,150 cords in the 3rd quarter of FY 2014. They were down to less than a third of that - to 21,258 cords - in the 1st quarter of FY 2015, but the volume rebounded in the 2nd quarter to 47,029 cords and increased in the 3rd quarter to 50,964 cords.



NLP oak sawtimber prices rebounded somewhat to \$289 per mbf in the 3rd quarter. They had almost doubled in the 4th quarter of FY 2014 to \$415 per mbf - a 5-year record - but they fell back to \$334 per mbf in the 1st quarter of FY 2015 and then fell further to \$236 in the 2nd quarter. Prices hit a low of \$173 in the 2nd quarter of FY 2013. Sale volume was 2.5mmbf in the 1st quarter of FY 2015 - close to the average for the five-year period - but then it set a sale volume record of 5.3mmbf in the 2nd quarter before falling to 3.1mmbf in the most recent (3rd) quarter.



Red pine sawtimber prices declined modestly in the 3rd quarter from \$268 to \$245 per mbf. They had rebounded from a low of \$164 to \$246 between the 2nd and 3rd quarters of FY 2014 before falling for two quarters. Prices have been moderately increasing for the most recent five-year period and have averaged \$215 per mbf. Sale volume fell from 14.2mmbf in the 3rd quarter of FY 2014 down to 5.75mmbf in the 4th quarter and hit 3.2mmbf in the 1st quarter of FY 2015 before rebounding in the 2nd quarter to 9.6mmbf and increasing further in the most recent (3rd) quarter to 13.137mmbf.

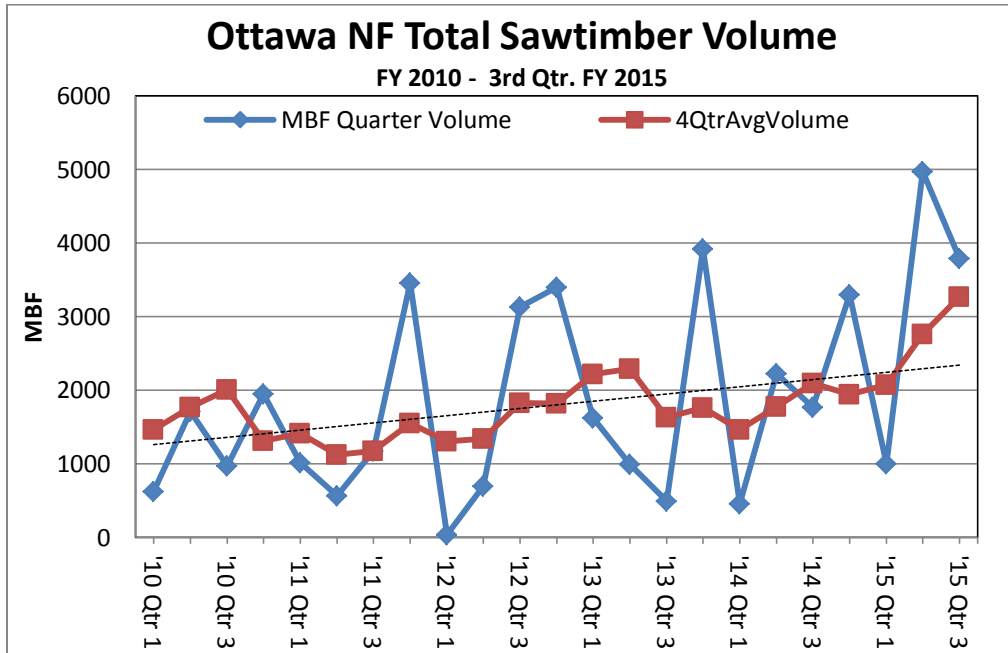


The gap between the UP and NLP sugar maple sawlog prices closed significantly in the 3rd quarter. The UP price dropped sharply from \$1,053 to \$771 per mbf at the same time the NLP price rose from \$513 to \$688 per mbf. Despite the 3rd quarter sharp drop in price, the UP price has a fairly steep five-year price trend. The NLP also has an increasing price trend, but not as steep as the UP's. UP Sale volume rose slightly to 946mbf; it had increased from 820 to 904 mbf between the 1st and 2nd quarters. The NLP sugar maple sawlog volume more than doubled to 484 mbf in the 3rd quarter. It was 220mbf in the 2nd quarter, up from the very low level of just 96mbf in the 1st quarter (which was only one-fifth of the 456mbf average for the five-year period). NLP sugar maple sawlog prices peaked at almost \$790 per mbf in the 4th quarter of 2013.

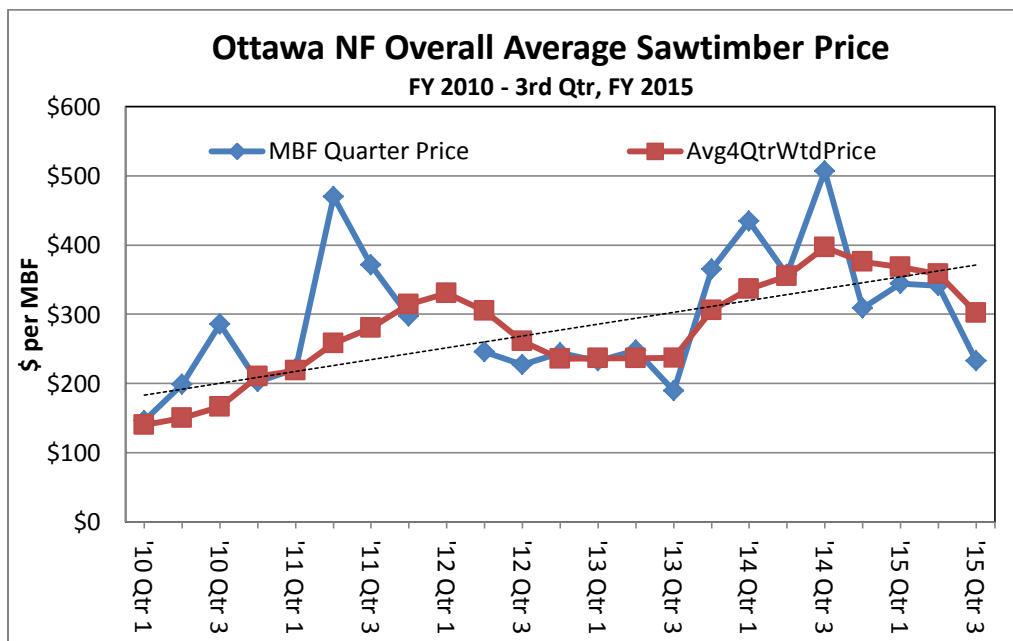
Ottawa National Forest Major Species/Product Timber Sales, FY 2010 – 3rd Qtr, FY 2015

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 2015 (April through June, 2015). 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:

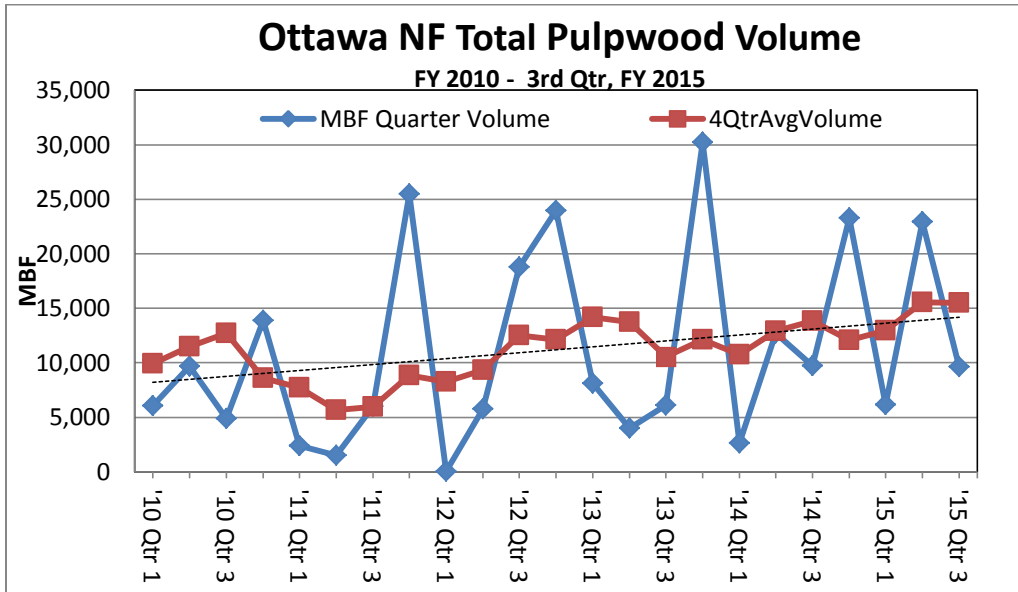
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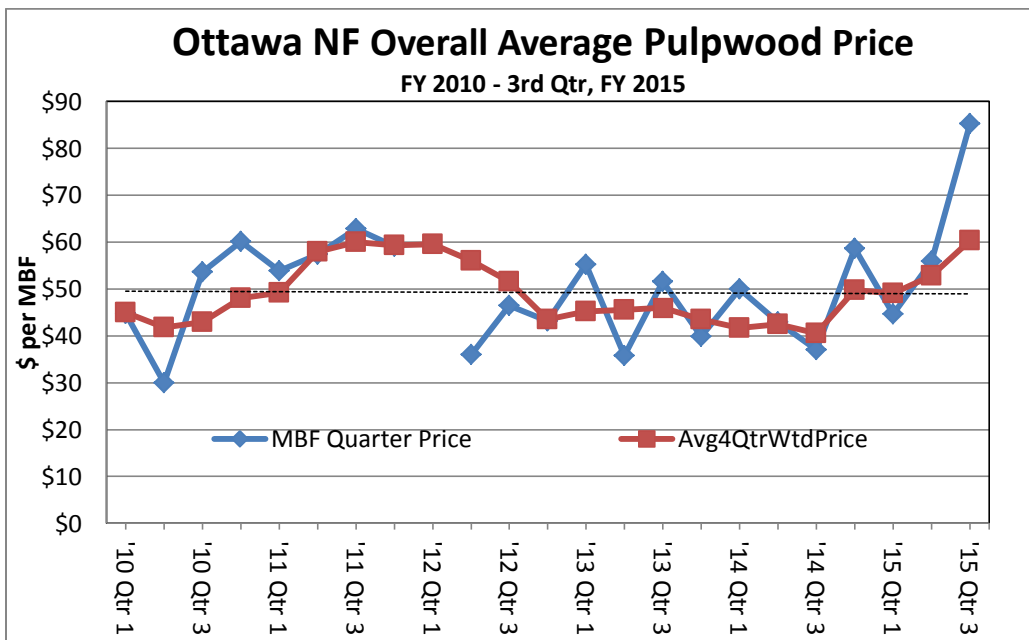
Total sawtimber sale volume rose to a five-year record of almost 5mmbf in the 2nd quarter from just 1mmbf in the 1st quarter. It dipped slightly in the third quarter to 3.8mmbf; it was expected to fall sharper than it did. The average for the past five years has been close to 1.8mmbf. Normally, the 4th quarter has the highest volume, but it would not be surprising if the volume dipped next quarter given the high volumes in the most recent two quarters. Sawtimber sale volume has been increasing overall during the past five years, with sale volumes from quarter to quarter somewhat erratic.



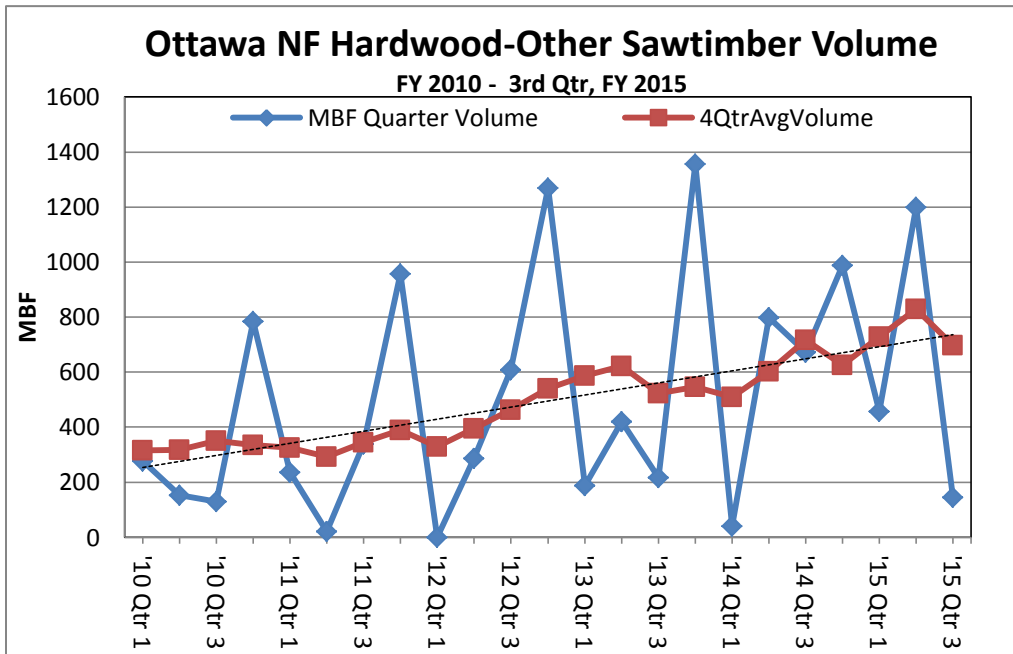
The 3rd quarter overall average sawtimber price fell fairly sharply, from \$341 to \$232 per mbf. It peaked at \$507 per mbf in the 3rd quarter of FY 2014. There is an increasing five-year price trend. Average prices are impacted by the mix of sold species and products. The Ottawa sawtimber price trend is greatly influenced by sugar maple volumes and prices.



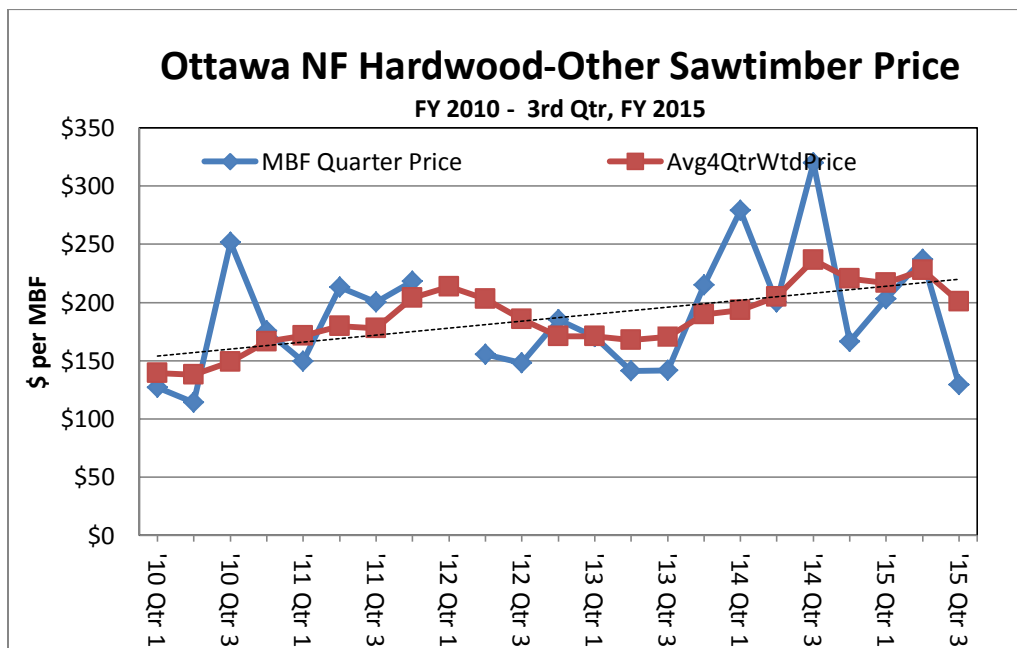
The 3rd quarter total pulpwood volume dropped back to 9.6mmbf. It has been seesawing back and forth from under 10mmbf to close to 23mmbf for five quarters. The 1st quarter FY 2015 volume fell off from the 4th quarter level of 23.3mmbf down to 6.2mmbf. It rose to 23mmbf in the 2nd quarter. The record high level for the past five years was over 30mmbf reached in the 4th quarter of FY 2013. Overall, there has been a slight pulpwood sale volume increasing trend during the past five years. As with sawtimber volumes, pulpwood volumes have been consistently highest in the 4th quarter after which they often fall sharply. Given the most recent lower quarterly volume and the 5-year pattern of higher volumes in the 4th quarter, it is expected that sale volume will increase in the coming 4th quarter.



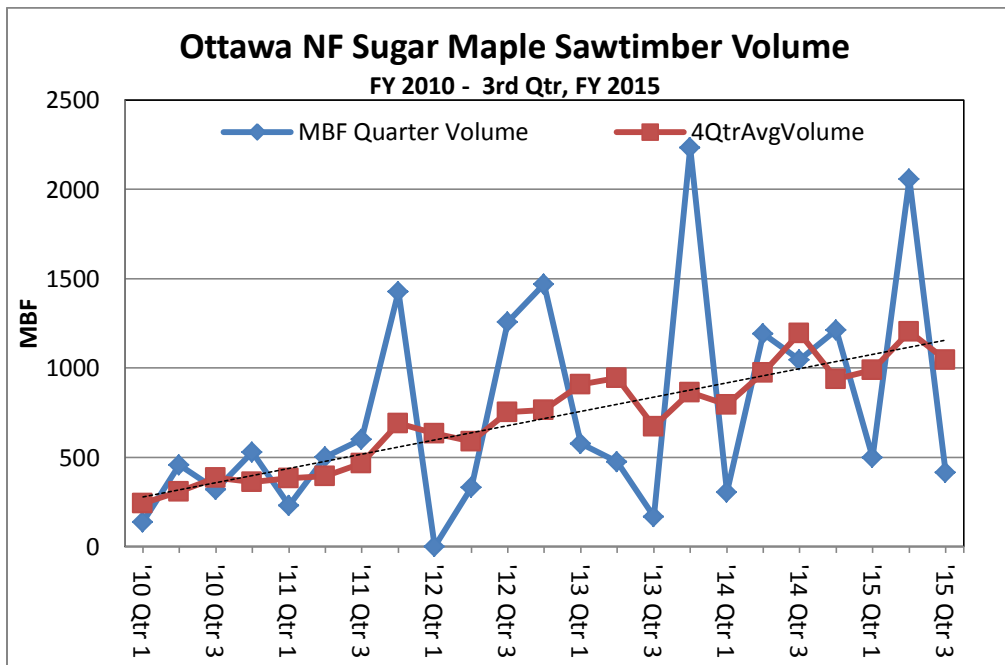
The 3rd quarter overall average pulpwood price shot up to a record \$85.22 per mbf level. This price is more than \$30 above the past five year's average mbf price. Prices had been bouncing back and forth mostly in a \$35 to \$55 range for three years before this large increase occurred. The increase in the 3rd quarter price virtually eliminates what had been a declining price trend over the past five years. Price increases occurred across pulpwood species, including aspen, other hardwoods, jack pine, and red pine.



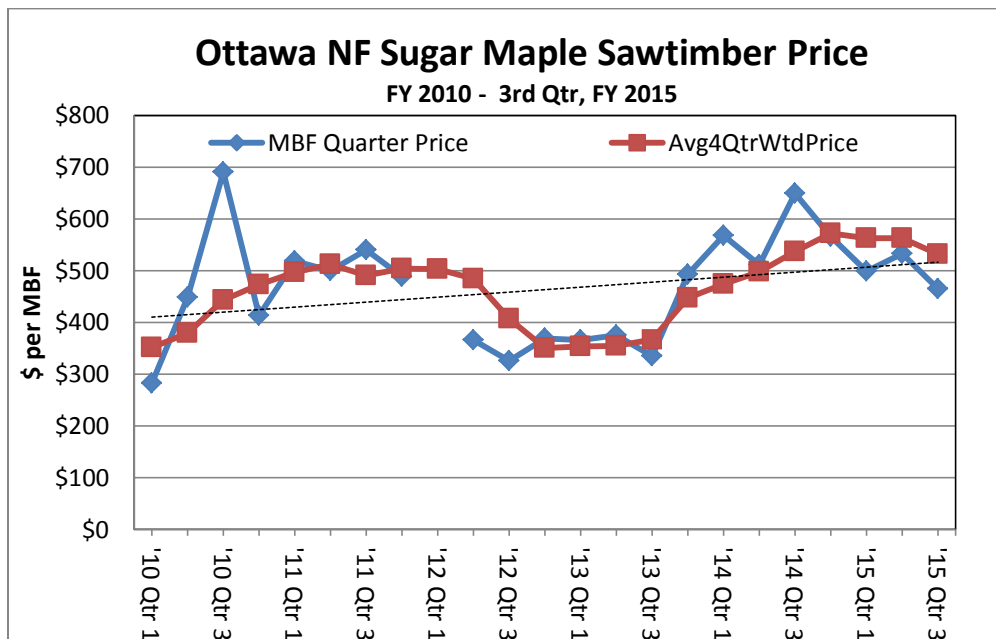
Last quarter it was stated that it was probable that the 3rd quarter “hardwood other” sawtimber sale volume would drop from the 2nd quarter level. The 3rd quarter sale volume wound up plummeting in the 3rd quarter to 146mbf after having been at a 1200mbf level in the 2nd quarter. Despite the steep decline in the most recent quarter, the volume trend has been sharply increasing over the past five years, but sales are somewhat erratic. There has been a fairly consistent seasonal pattern with distinctive, higher-volume peaks in the 4th quarter (July-Sep.) of each year and lower volumes otherwise; the high sale volume in the 2nd quarter of FY 2015 was an exception to this pattern. Given the large drop in the most recent (3rd) quarter sales and the pattern of higher 4th quarter sales, it is expected that next quarter’s sale volume will rebound substantially.



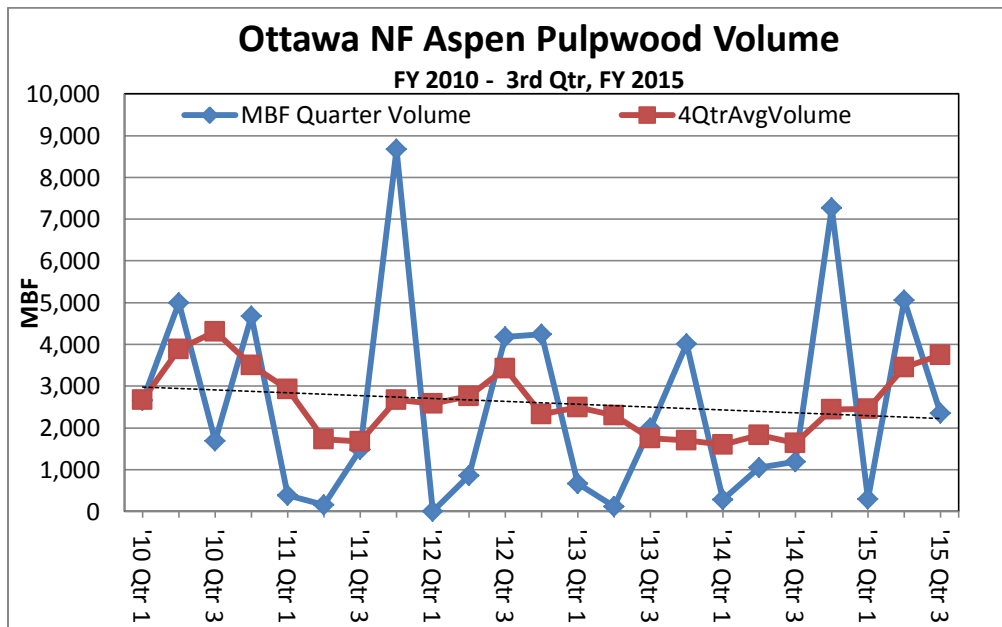
Hardwood-other sawtimber prices dropped sharply in tandem with the sale volume decrease during the 3rd quarter, from \$237 to \$129 per mbf, to their lowest level since FY 2010. They were at a record high of almost \$320 mbf in the 3rd quarter of last year before dropping sharply to \$166 in the 4th quarter. Prices had been close to \$140 per mbf in the 2nd and 3rd quarters of FY 2013; by the 1st quarter of FY 2014 they had almost doubled to \$280. Despite the most recent decline, there is an increasing price trend line for the past five years.



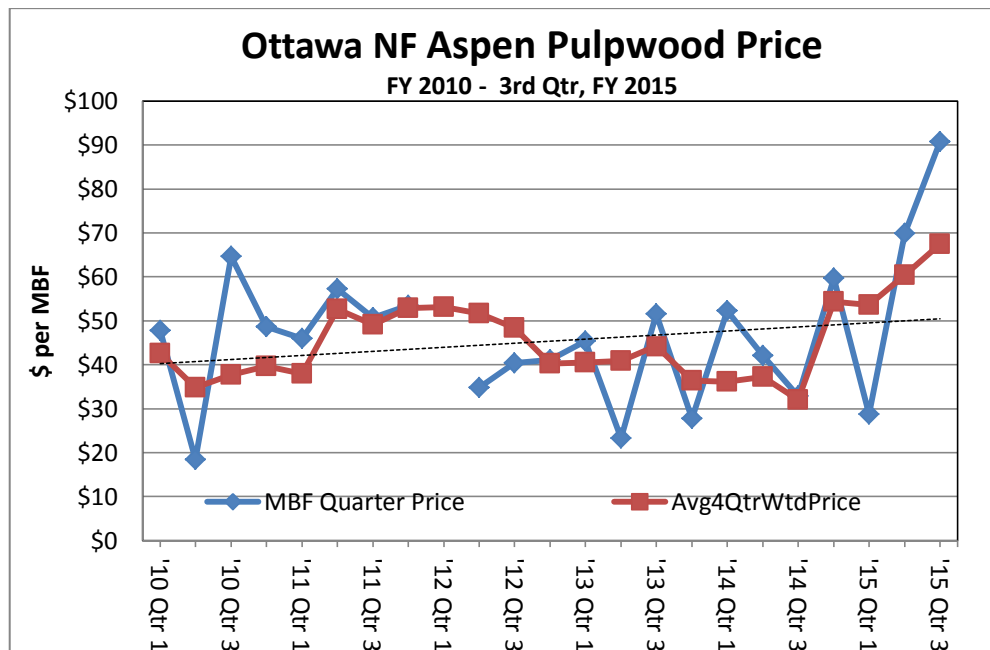
It was predicted that the 3rd quarter sale volume would fall sharply and it did. Sugar maple sawtimber sale volumes dropped even more in the 3rd quarter than they had gone up in the 2nd quarter. They reached 2.1mmbf in the 2nd quarter from .5mmbf in the 1st quarter of FY 2015, but fell back to .417mmbf in the 3rd quarter. All three prior quarters exceeded 1mmbf. 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. There is a sharply increasing sales volume trend for the past five years despite the low 1st and 3rd quarter sales this fiscal year. Next quarter sales should bounce back somewhat although they may not reach the 2nd quarter's level.



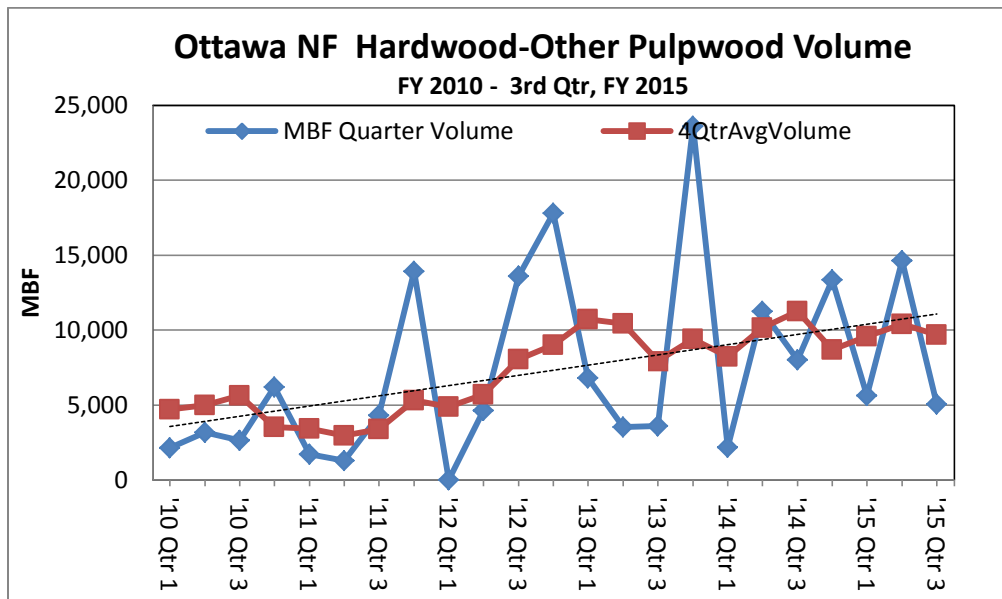
Sugar maple sawtimber prices dropped from \$533 to \$465 per mbf in the 3rd quarter. They had peaked at \$650 per mbf in the 3rd quarter of FY 2014. For five quarters before that quarter, prices had been quite stable and averaged \$355 per mbf. They then have averaged over \$500 per mbf for the eight quarters since the 3rd quarter of FY 2013. There is an increasing price trend over the past five years despite the highest price for the five-year period coming in the 3rd quarter of FY 2010 and the recent five-quarter downward price trend.



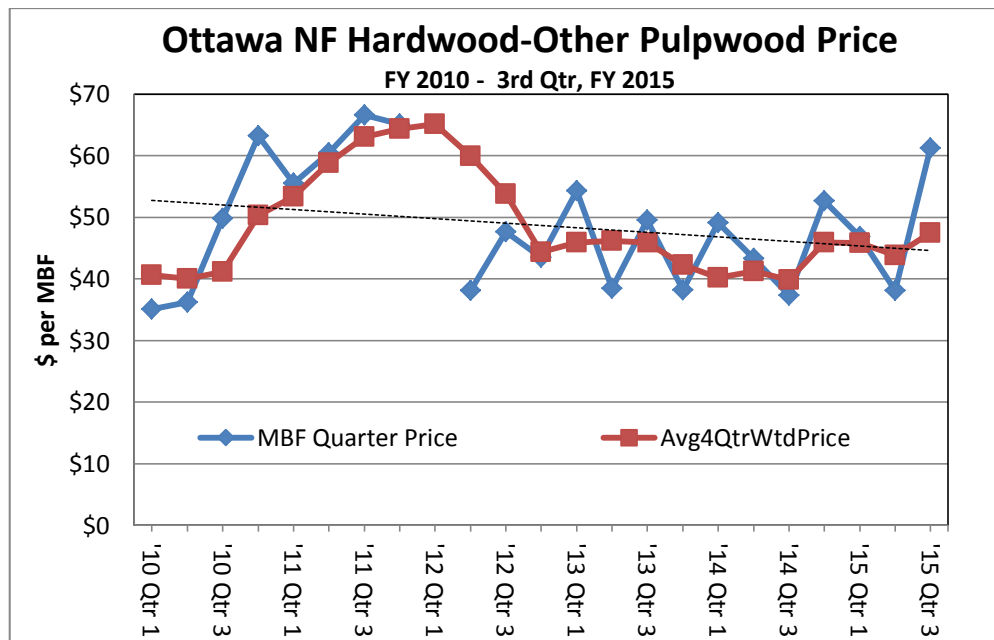
Aspen pulpwood sale volume dropped to 2.3mmbf, about the average for the past five years. It reached 5.1mmbf in the 2nd quarter after being at .3mmbf in the 1st quarter. The previous (4th quarter, FY 2014) sale volume was almost 7.3mmbf, but high 4th quarter volumes are not unusual. Sale volume has been quite erratic over the past four years with sale volumes at the extremes (under 1,000 mbf or over 4,000 mbf) more frequent than sales in the middle range. Despite the 2nd quarter sale volume, there is a downward sale volume trend. If the five-year pattern holds, sales may rebound somewhat in the coming 4th quarter.



The 3rd quarter aspen pulpwood price rose again, following a very sharp rise in the 2nd quarter. The 1st quarter was only \$29 per mbf, while the 2nd quarter increased to almost \$70 per mbf and the 3rd quarter continued upwards to over \$90 per mbf, replacing the record price set in the previous quarter. Before the most recent successive price increases, there had been a seesaw pattern of price swings from quarter to quarter for the past two and a half years with this product. With sale volumes being erratic and including many quarters with low or no volume, the overall price trend for the five-year period has been moderately increasing. However, the most recent two quarters' price increases are hardly moderate.



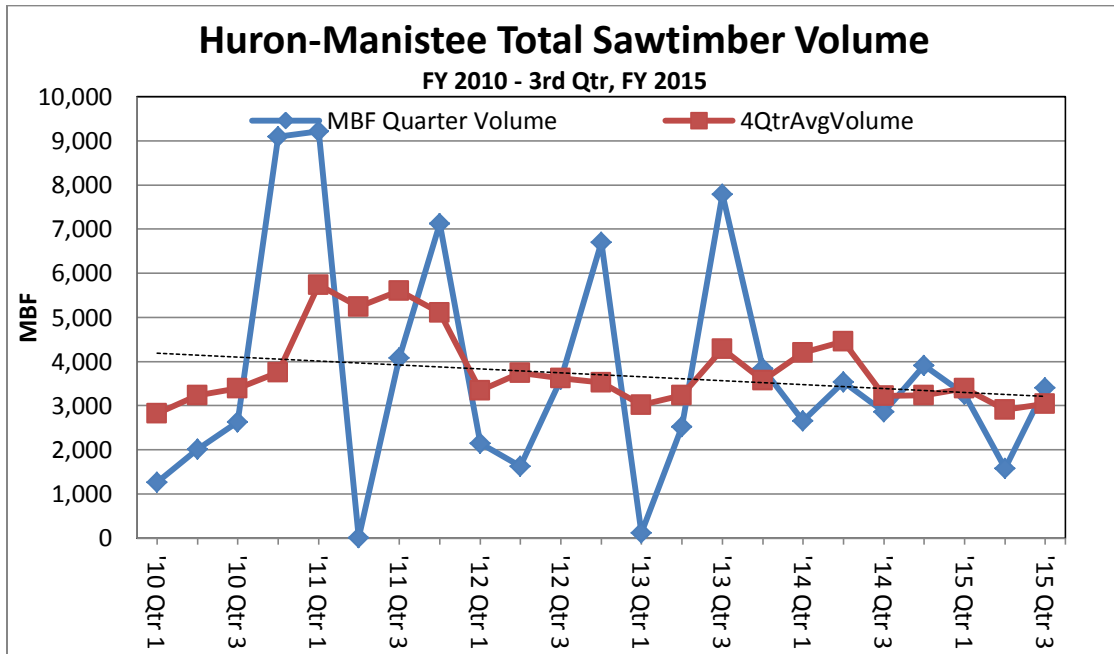
Hardwood-Other pulpwood sale volume dropped back to 5.1mmbf in the 3rd quarter after having increased from 5.6mmbf in the 1st quarter to 14.6mmbf in the 2nd quarter. Sale volume hit a record high 23.6mmbf volume in the 4th quarter of FY 2013. Sale volume swings have moderated over the past two years. However, the decline in the 3rd quarter volume was steeper than expected, given the recent moderation in sale changes quarter-to-quarter. Volumes have trended upward and have more than doubled in the past five years. Sale volume is expected to rebound in the coming 4th quarter to a level of 10mmbf or greater.



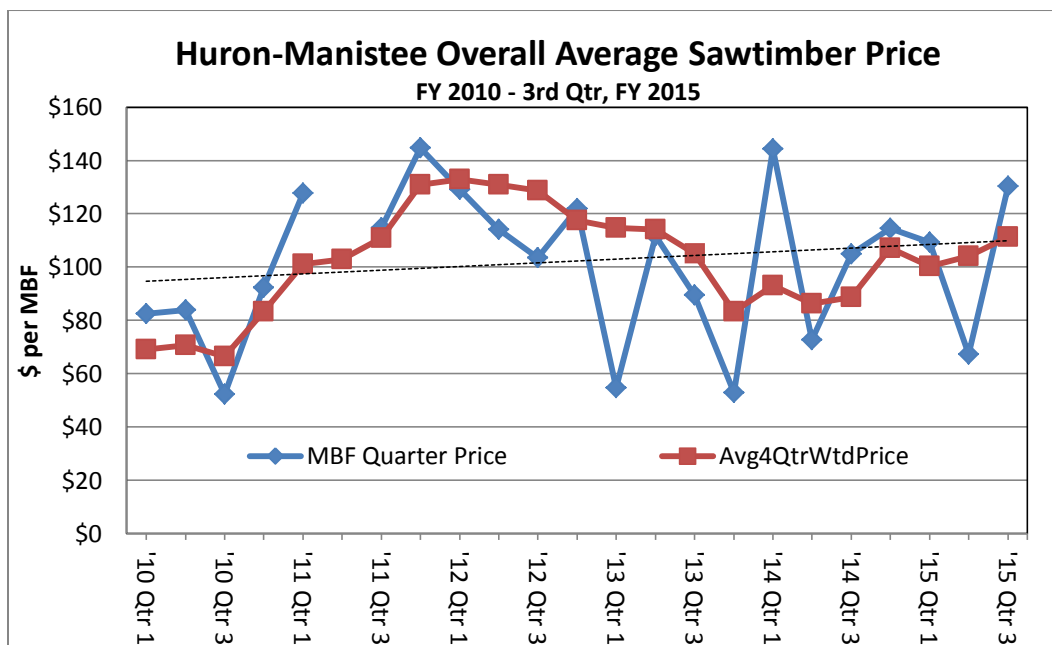
The 3rd quarter hardwood-other pulpwood price rose sharply to over \$61 per mbf. This is outside of the fairly narrow \$38 to \$55 range it had been in for over three years. It had fallen from \$47 per mbf in the 1st quarter of FY 2015 to \$38 per mbf in the 2nd quarter. Prices peaked in FY 2011 at over \$65 per mbf. Despite the most recent quarter's price increase, the 5-year price trend is slightly declining (due to the higher prices in FY 2010 and FY 2011).

Huron-Manistee National Forest Major Species Product Timber Sales, FY 2010 – 3rd Qtr, 2015

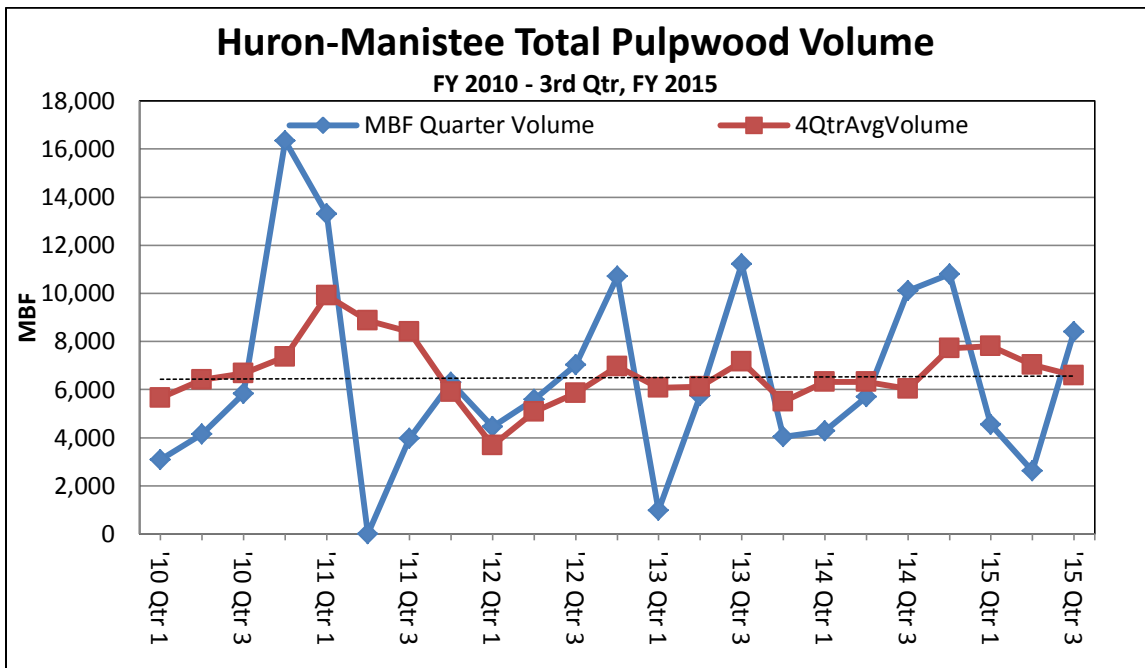
All graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter. The National Forests follow the federal fiscal year from October 1 through September 30. The most recent data included here is for the 3rd quarter covering April through June, 2015. 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/sold-harvest/cut-sold.shtml>



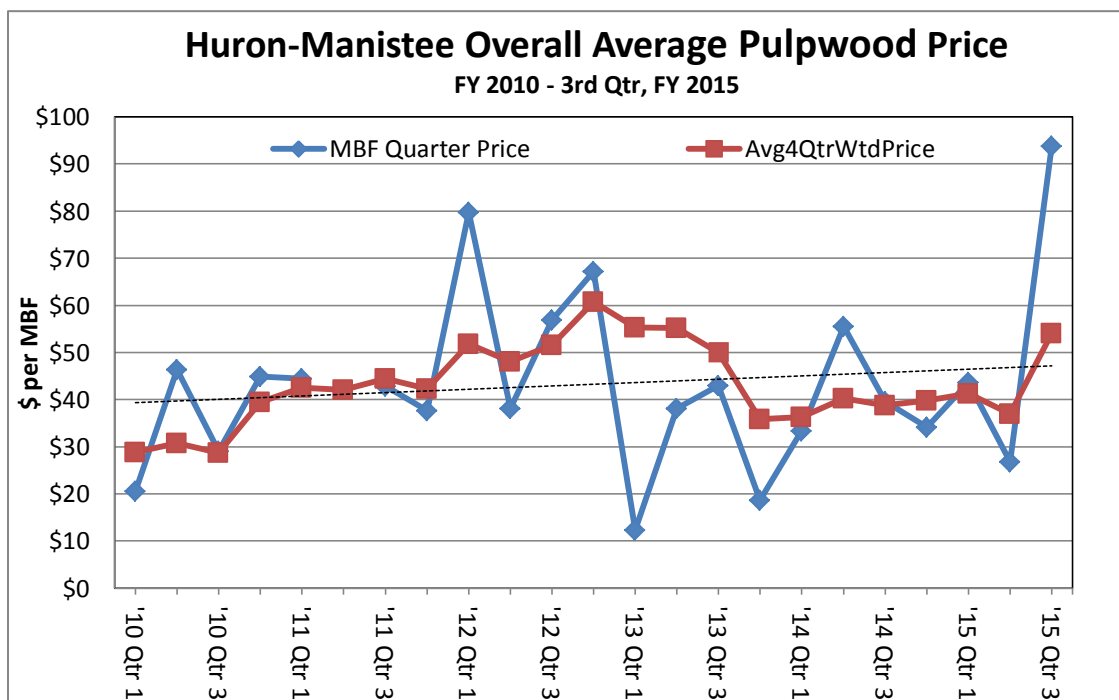
The volume of Huron-Manistee (H-M) sawtimber sale volume rebounded from 1.58mmbf in the 2nd quarter of FY 2015 to over 3.4mmbf in the 3rd quarter. This most recent quarterly volume is in line with the sold volume for the previous six quarters before the low 2nd quarter volume. Prior to the most recent eight quarters, H-M sawtimber sale volume had been extremely erratic from quarter to quarter. The coming fourth quarter may see another increase in volume, given that annual sale volume usually peaks in the third or fourth quarters and the 3rd quarter volume level was somewhat modest.



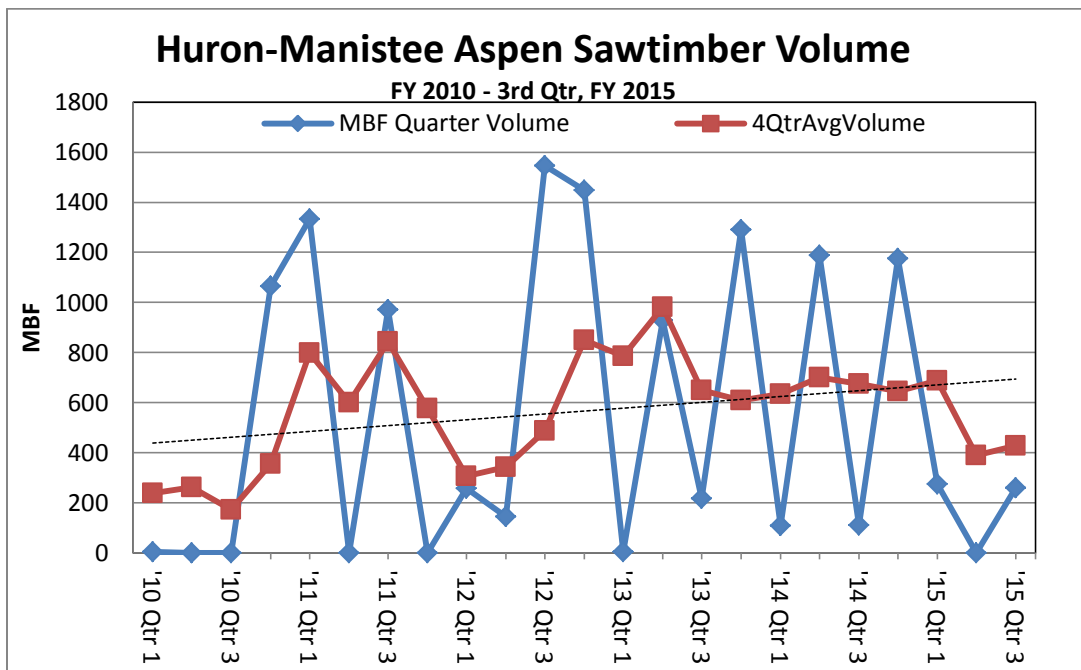
The overall average sawtimber price increased sharply to \$130 per mbf in the 3rd quarter. Prices had been relatively steady for three quarters before dropping from over \$100 to \$67 per mbf in the 2nd quarter. Sawtimber prices are greatly influenced by the mix of species and quality of products put up for sale. Generally, red pine accounts for close to half of the H-M sawtimber sale volume and has the greatest influence on the overall average sawtimber price.



Total pulpwood volume increased sharply in the 3rd quarter, but at 8.4mmbf, it was still below the levels achieved in the 3rd (10.1mmbf) and 4th (10.8mmbf) quarters of FY 2014. In the 1st quarter of FY 2015 it had fallen to 4.56mmbf and it further dropped in the second quarter to 2.63mmbf in the 2nd quarter. Pulpwood sales exceeded 16mmbf in the 4th quarter of FY 2010 followed by 13.3mmbf in the next quarter; they have not reached such levels since then. H-M's quarterly pulpwood sale volume for the past five years does not follow any particular seasonal pattern. It was expected that the sale volume would increase in the 3rd quarter based upon two back-to-back quarters of below average sales in the 1st and 2nd quarters. Given that the sale volume did increase significantly in the 3rd quarter, it is difficult to predict what will happen with the coming 4th quarter sale volume; it may not change up or down much from the 3rd quarter. The five-year sale volume trend is relatively flat.

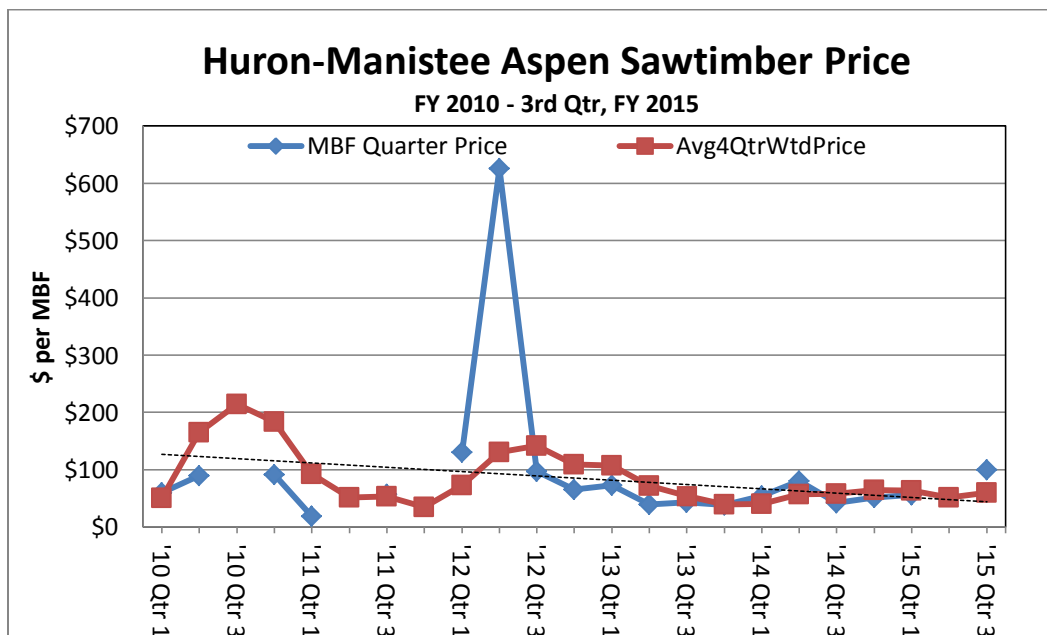


The reported overall average pulpwood price shot up to its highest level ever, but largely as a result of skewed bids on one oak sale. The average oak pulpwood price for the 1st and 2nd quarter of FY 2015 was \$4.05 per mbf. The reported cumulative average price when the 3rd quarter was added in rose to \$284.90! Due to this, the reported Huron-Manistee third quarter prices for oak and the overall pulpwood average price are anomalies and unreliable. However, even without the extreme oak price, the average pulpwood price would have risen due to red pine increases (see below).

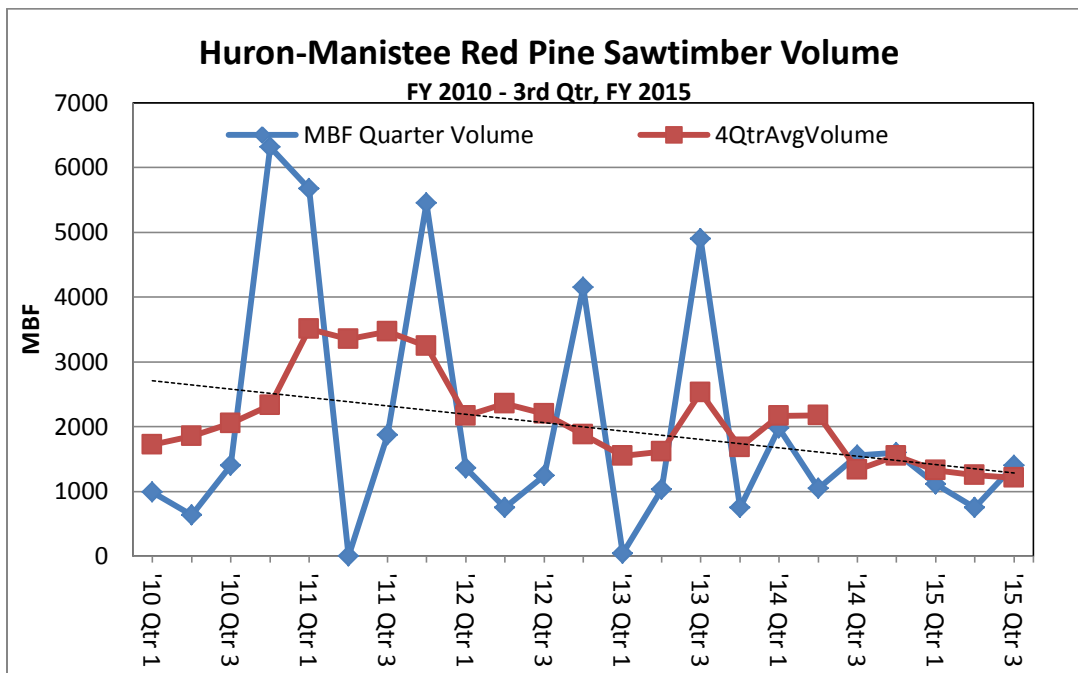


At 260mbf, the 3rd quarter aspen sawtimber sale volume was below its five-year average. There was no aspen sawtimber sale volume in the previous quarter and only 275mbf in the 1st quarter, making this fiscal year on track to be the lowest year in 5 years. As the above graph indicates, volume for this product has often seesawed from quarter to quarter.

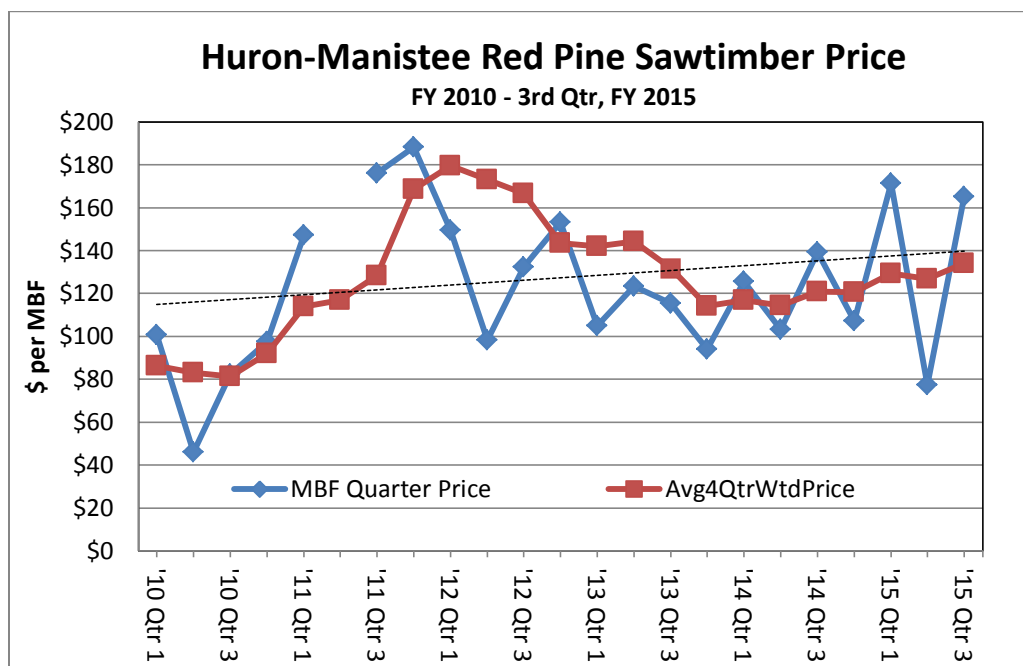
There were ten quarters during the past five years when there were sales of less than 200mbf, but there were also nine quarters of sales close to or exceeding 1000mbf and no quarters with sales between 300mbf and 900mbf. Because of the large number of quarters with no sales in 2010 and 2011, there is an increasing sale trend over the period despite the low sales so far in FY 2015.



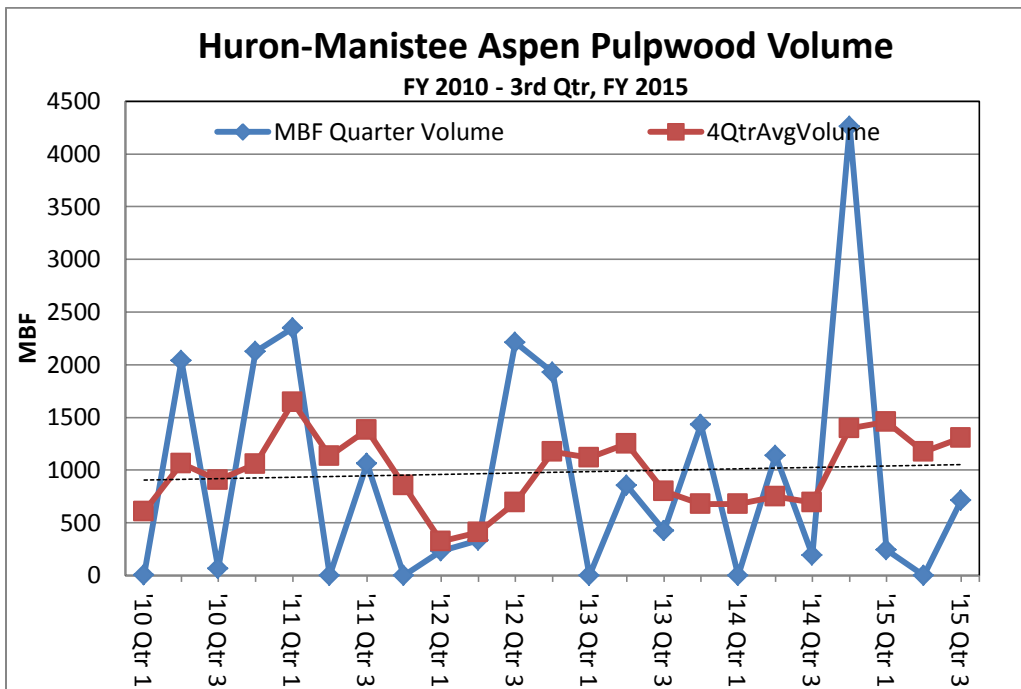
Aspen sawtimber prices jumped to \$100 per mbf (on modest sale volume) in the 3rd quarter. Relative to other types of sawtimber prices and H-M aspen sale volumes, aspen sawtimber prices had been quite steady for three years in a \$38 to \$80 range. They increased slightly from \$51 per mbf in the 4th quarter of FY 2014 to \$56 in the 1st quarter of FY 2015.



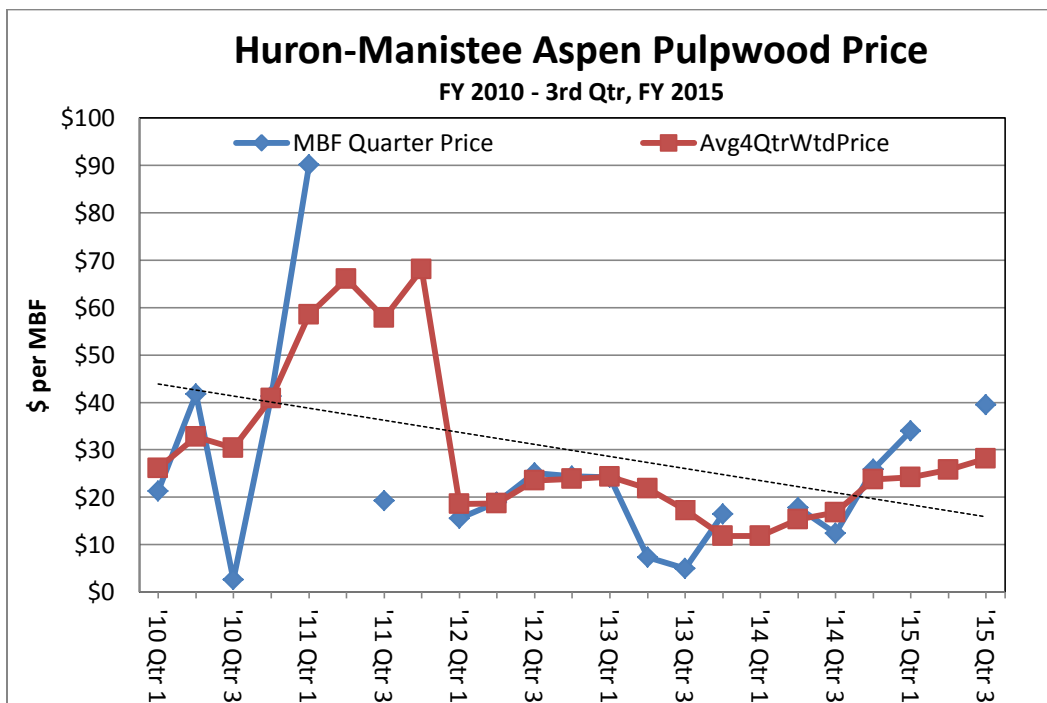
Red pine sawtimber volume rose to 1.4mmbf after having dropped somewhat from 1.1mmbf in the 1st quarter down to .75mmbf in the 2nd quarter. Volume was close to 1.6mmbf in the 3rd and 4th quarters of FY 2014. The sale volume trend line is declining. Sale volume has been below 2mmbf for the past two years, in contrast to the previous four years which annually saw peak quarter sale levels above 4mmbf. Red pine often accounts for the majority of the sawtimber volume sold on the Huron-Manistee, but there are also many quarters when little or no volume is sold. Sales have often peaked in the 4th quarter and may do so again in the coming quarter, but have been consistently low for eight quarters now.



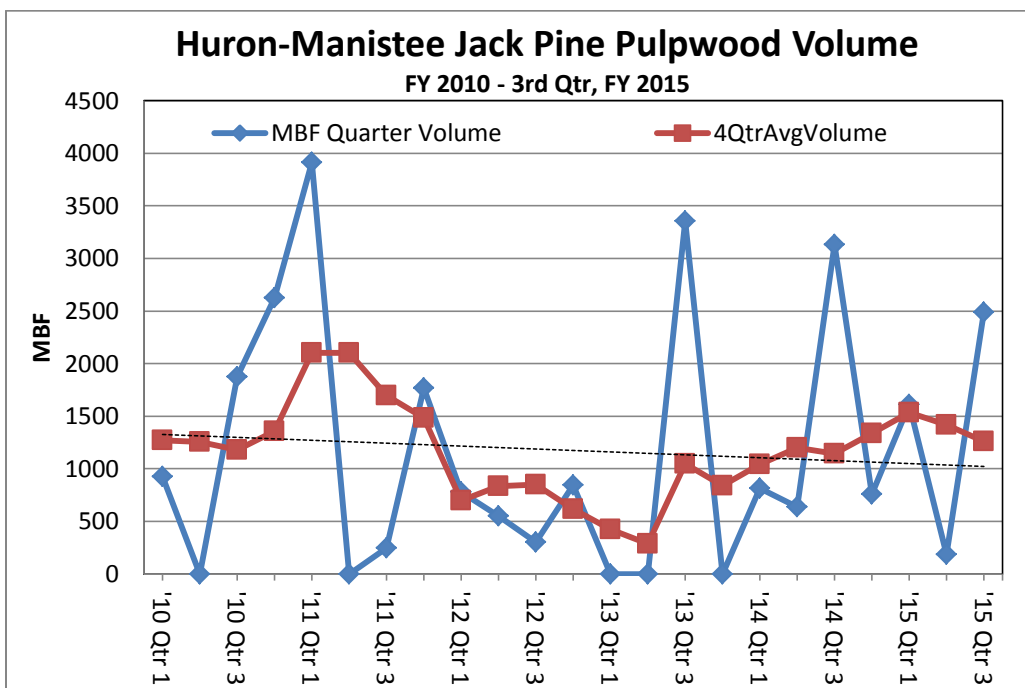
Red pine prices rebounded to \$165 per mbf after having dropped from \$171 in the 1st quarter to \$77 in the 2nd quarter. Prices had been relatively stable between \$95 and \$125 in FY 2013 and FY 2014. There is a steadily increasing price trend over the past five years, especially due to the 1st and 3rd quarter prices of FY 2015.



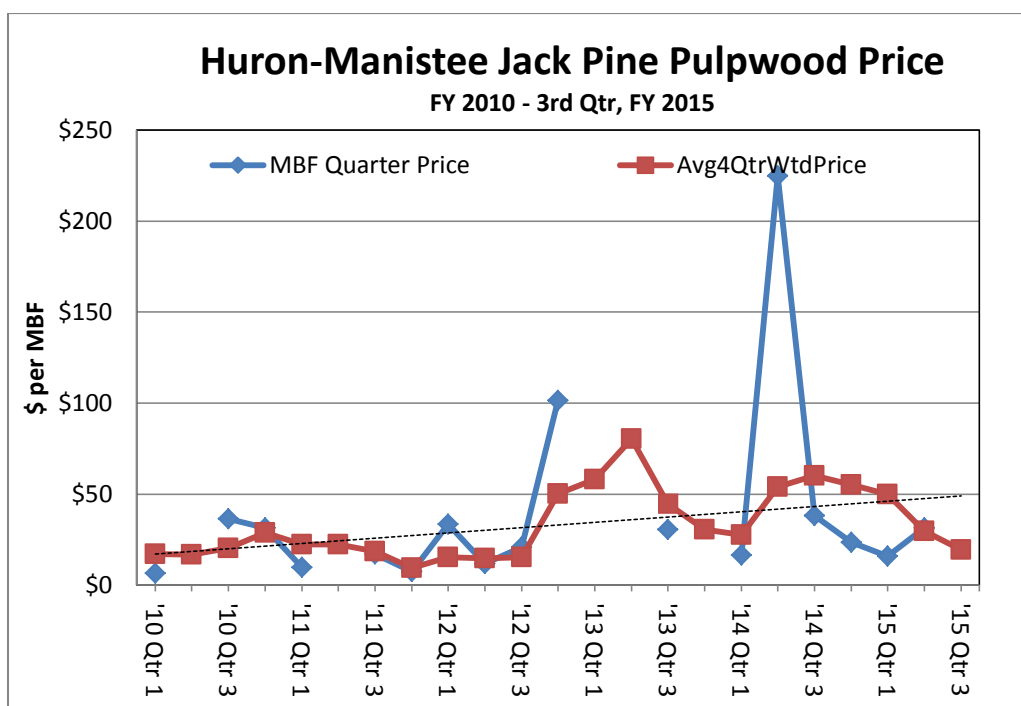
Aspen pulpwood sale volume was 713mbf in the 3rd quarter. There was no aspen pulpwood volume sold in the 2nd quarter of FY 2015 and only 244mbf sold in the 1st quarter. Sale volume hit a record 4.26mmbf in the 4th quarter of FY 2014 – double the level of any other quarter in the past five years. Sale volumes of aspen pulpwood have been extremely erratic over the past five years. There are many quarters without sales but other quarters with sale volumes close to or in excess of 2mmbf. There does not appear to be a well-established quarterly pattern to the data and little basis to project what the coming 4th quarter sale volume will be. The sale trend is slightly increasing, but if the record volume in the 4th quarter of FY 2014 were removed, it would be declining.



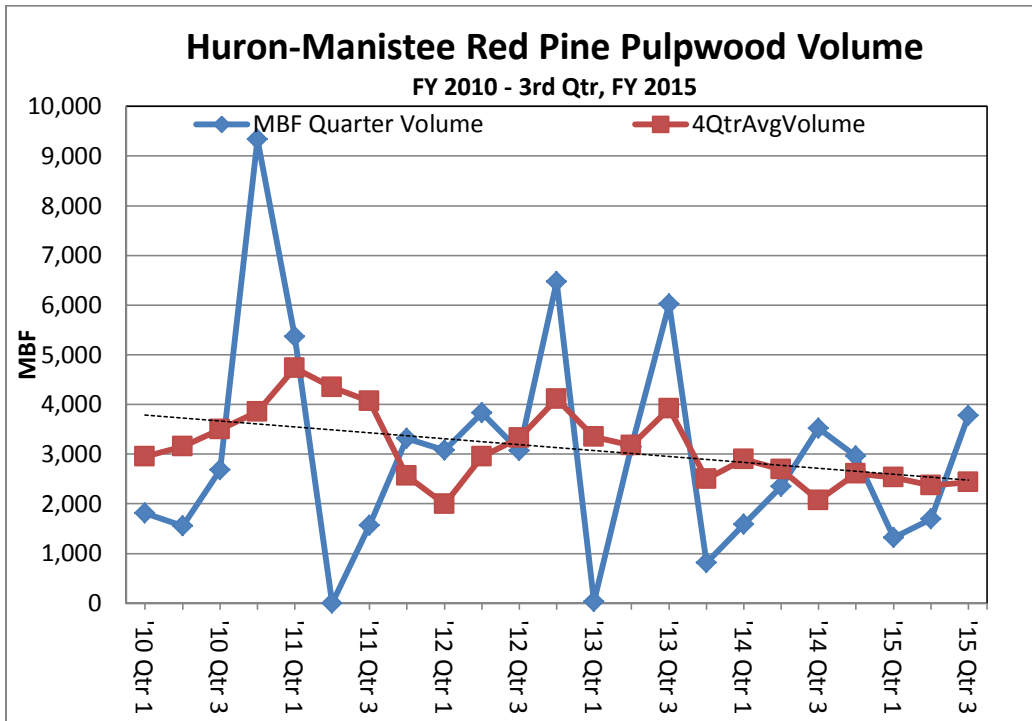
Aspen pulpwood prices hit \$39.52 per mbf in the 3rd quarter, up from \$34 in the 1st quarter. They have been increasing since the 3rd quarter of FY 2014 when they were \$12 per mbf. Aspen pulpwood prices were extremely low (<\$10) in the 2nd and 3rd quarters of FY 2013. In contrast, the price exceeded \$40 several quarters in FY 2010 and FY2011. The result has been a fairly steep five-year price decline trend, but prices for many quarters are based on low or no sale volumes.



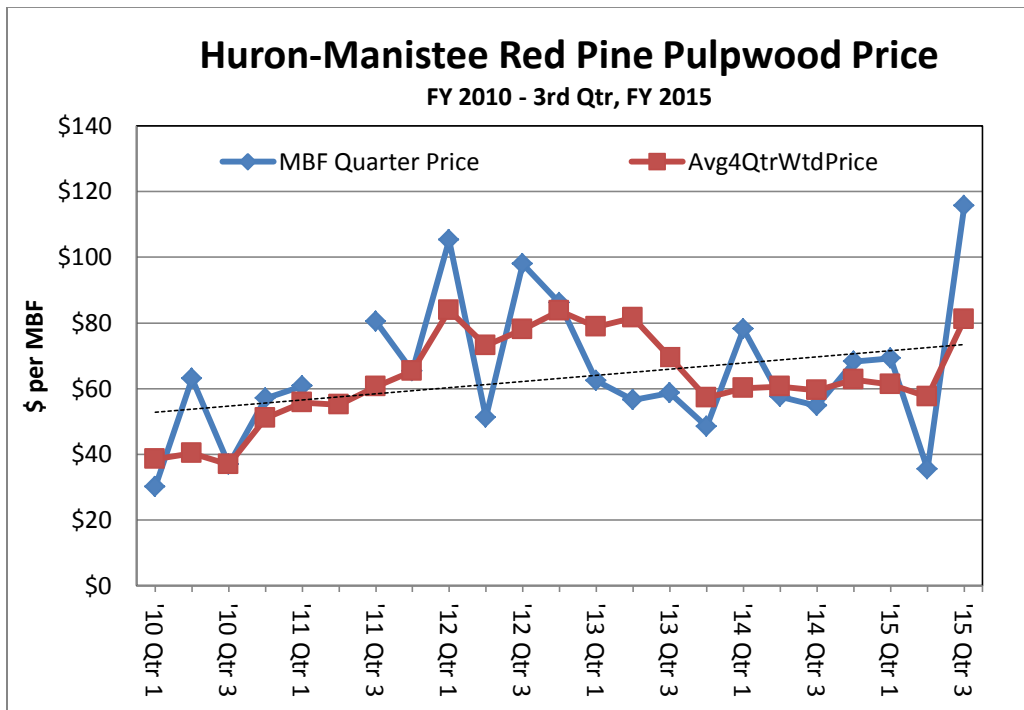
Jack pine pulpwood sale volume shot back up to almost 2.5mmbf from virtually no sale volume in the 2nd quarter. It was over 3.1mmbf in the 3rd quarter of FY 2014. Overall, jack pine pulpwood sale volume has been on a downward trend over the past five years and many quarters there are no sales or the sale volume is well below 1mmbf. There have been a few distinct exceptions like the most recent quarter when volume shoots up to 2.5mmbf, but even those peaks have been declining (see above graph). 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. There is no seasonal or quarterly pattern.



The 3rd quarter jack pine pulpwood price fell back from \$31.48 to \$19.47 per mbf. The price was \$15.80 in the 1st 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. Besides erratic prices, there have been two price outliers (the 4th quarter of FY 2012 being the other one) and too many quarters without sales to establish a credible five-year price trend line.



Red pine pulpwood sale volume rose further to 3.75mmbf in the 3rd quarter. It has risen from 1.3mmbf in the 1st quarter to 1.7mmbf in the 2nd quarter. Like many other products on the H-M, the five-year sale volume pattern has large swings in volumes, from quarters with over 6mmbf to subsequent quarters with no or negligible sale volume. However, overall, there has been a declining volume trend over the past five years. During that period, sale volume exceeded 6mmbf three times, but it has been eight quarters since sale volume has exceeded even 4mmbf.

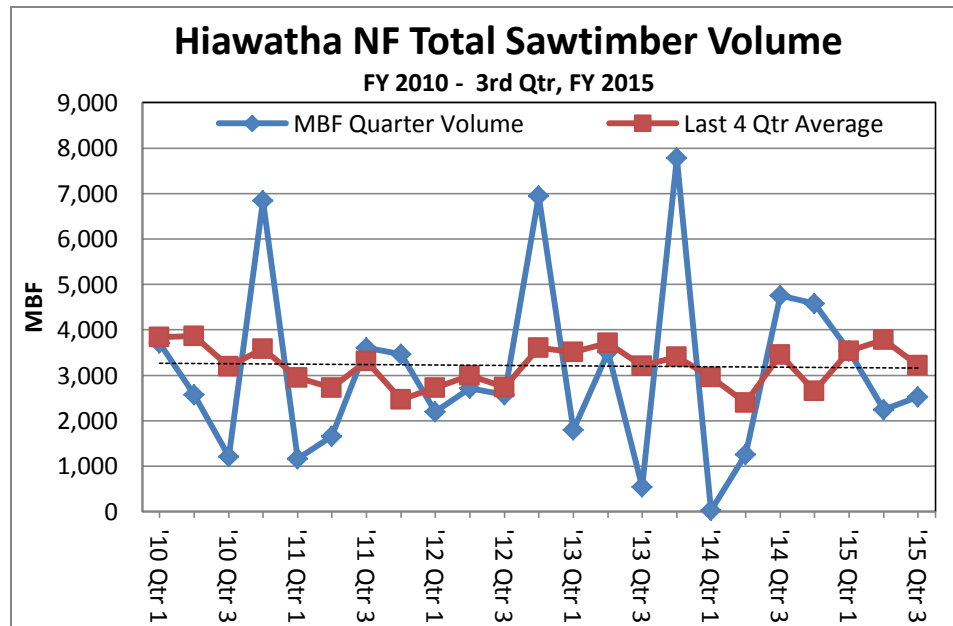


The 3rd quarter price hit a record level of \$115.56 per mbf. The 2nd quarter price had declined sharply, from \$69.28 per mbf to \$35.40, the lowest price since FY 2010. Now the 3rd quarter is the highest price since before FY 2010. Other than the two most recent quarters, there had been fairly stable prices in the \$50 to \$70 per mbf range for three years. Overall, prices for the past five years have seen an increasing trend, helped along in particular by the most recent quarter.

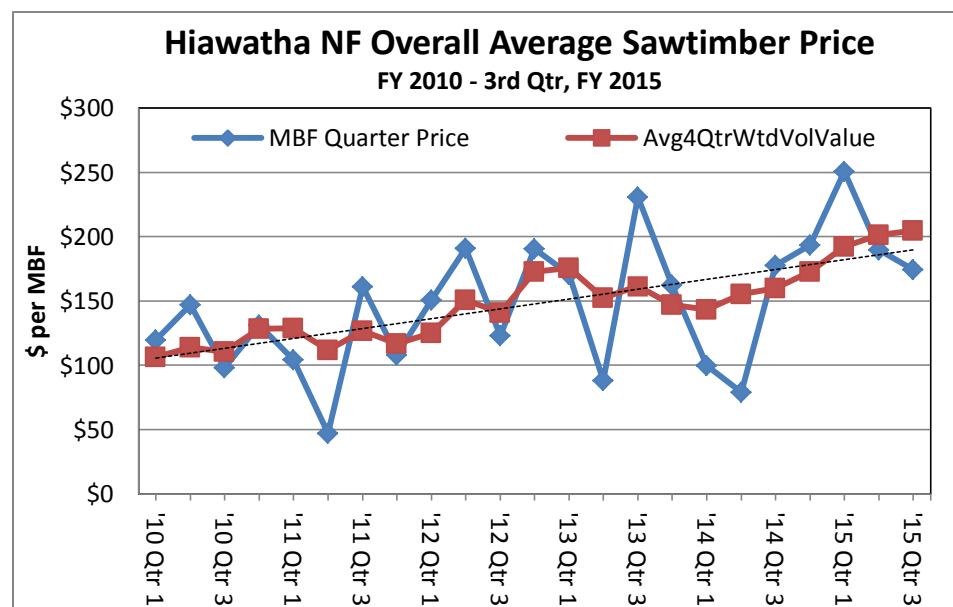
Hiawatha National Forest Major Species Product Timber Sales, FY 2010 – 3rd Qtr, 2015

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 third quarter of FY 2015, covering April through June, 2015 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:

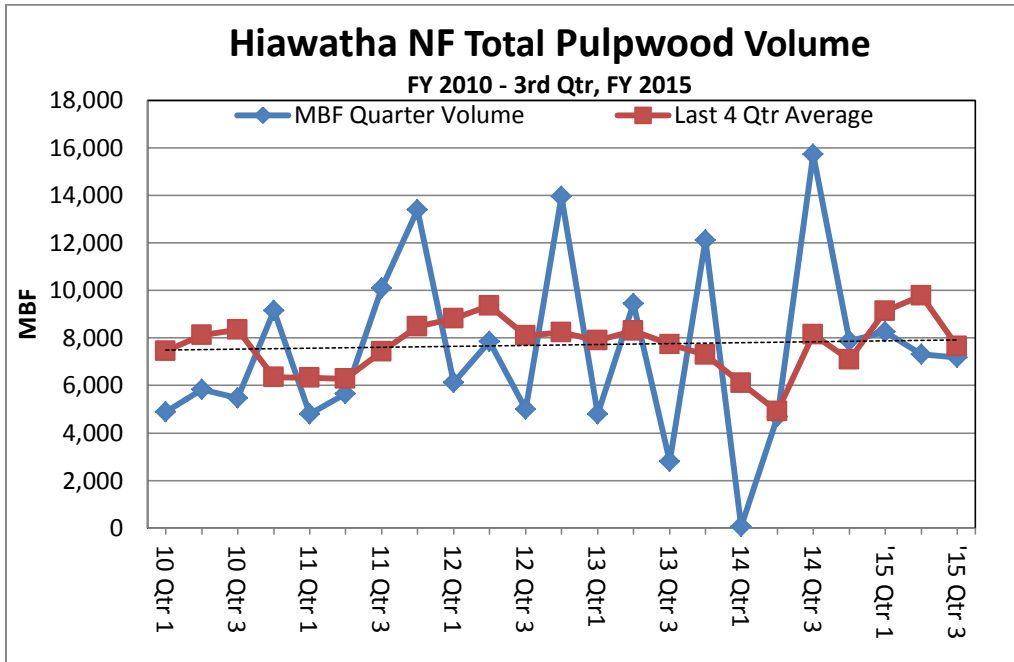
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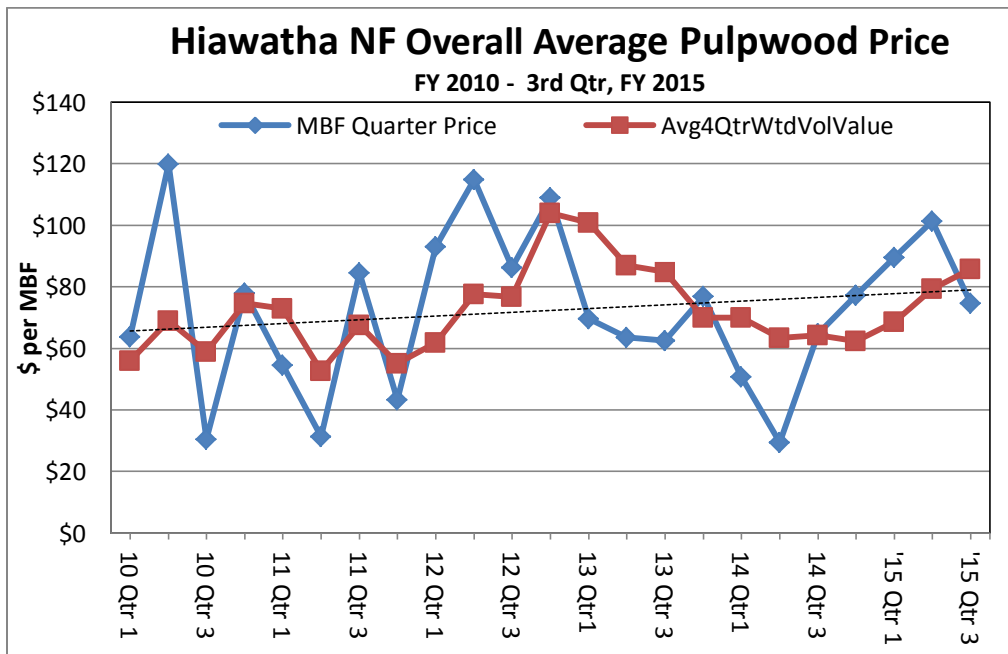
Hiawatha sawtimber sale volume increased slightly to 2.5mmbf in the 3rd quarter. It had dropped in the 2nd quarter of FY 2015, from 3.5 million board feet (mmbf) in the 1st quarter down to 2.2mmbf. In FY 2014, sale volume had jumped to 4.75mmbf in the 3rd quarter and dipped to 4.6mmbf in the 4th quarter, following two back-to-back quarters with the lowest sale volume in many years. The highest single quarter volume sold (7.8 mmbf) was in the fourth quarter of fiscal year 2013. The Hiawatha has a tendency for higher sales in the fourth quarter most years, followed by much lower sales in the 1st quarter. The five-year trend of sawtimber sale volume has been flat. If the past sale pattern holds, the coming 4th quarter will see another increase in sale volume.



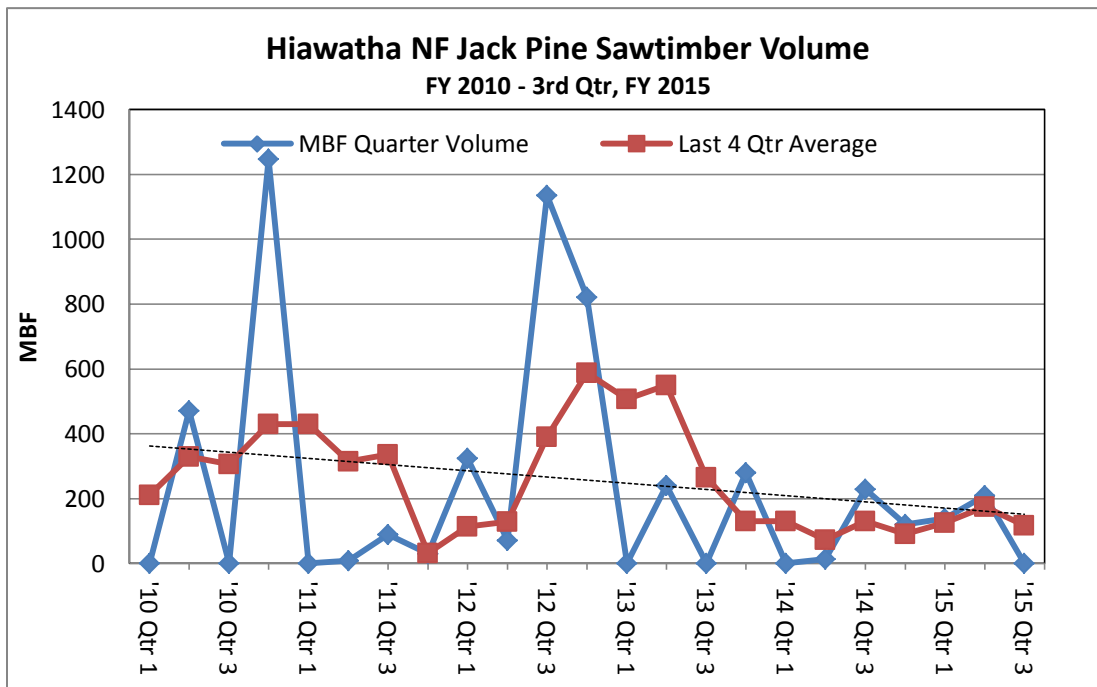
The average sawtimber price dropped further to \$174 per mbf in the 3rd quarter of FY 2015. It had dropped from \$251 to \$190 per mbf between the 1st and 2nd quarters. It was only \$80 per mbf in the 2nd quarter of FY 2014. The average sawtimber price is influenced by the mix of species and products offered. The 5-year price trend has been increasing.



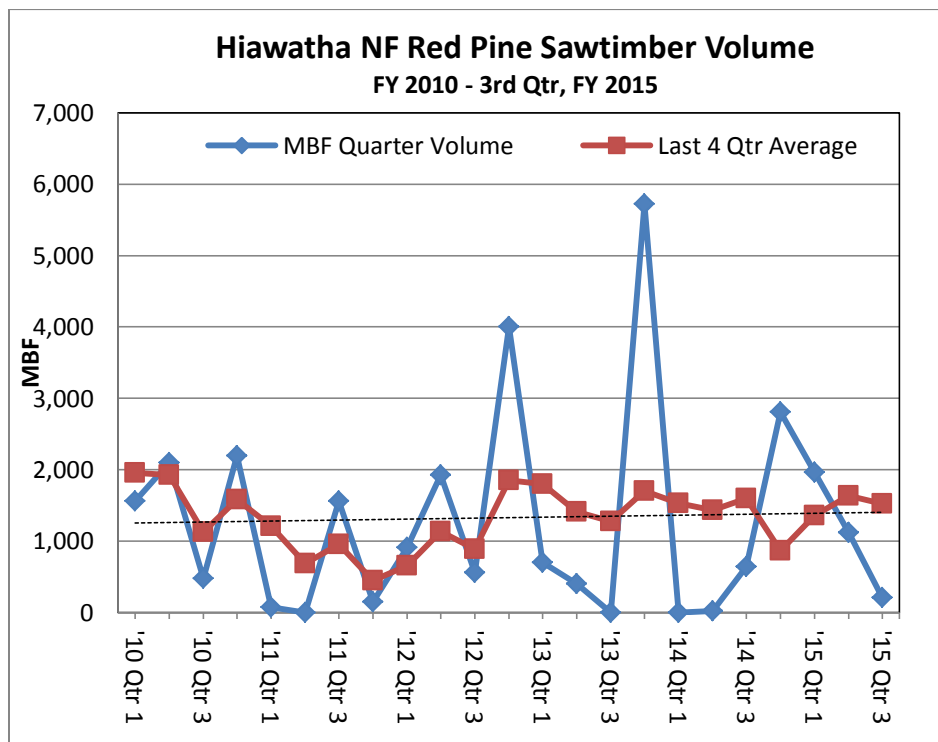
FY 2015 pulpwood sale volumes decreased from 8.25mmbf in the 1st quarter down to 7.3mmbf in the 2nd quarter and dipped further in the 3rd quarter to 7.2mmbf. These levels are close to the average level for the past five years. The highest they have been was in the 3rd quarter of FY 2014 at 15.73mmbf. The overall 5-year trend is flat. There has tended to be higher sales in the 4th quarter versus other quarters for the past five years, but the 2014 quarterly peak occurred in the 3rd quarter. Also, 1st quarter sales normally drop off sharply from 4th quarter volumes; but this also did not happen this past year. The stable volumes in the last four quarters are quite different from the large quarter-to-quarter swings in prior sale volumes. It is difficult to predict the coming 4th quarter's sale volume, given the contrast of the level sales in the past four quarters versus the previous wide swings in sales for previous quarters. However, sales can be expected to increase to some extent if the pattern for higher 4th quarter sales holds.



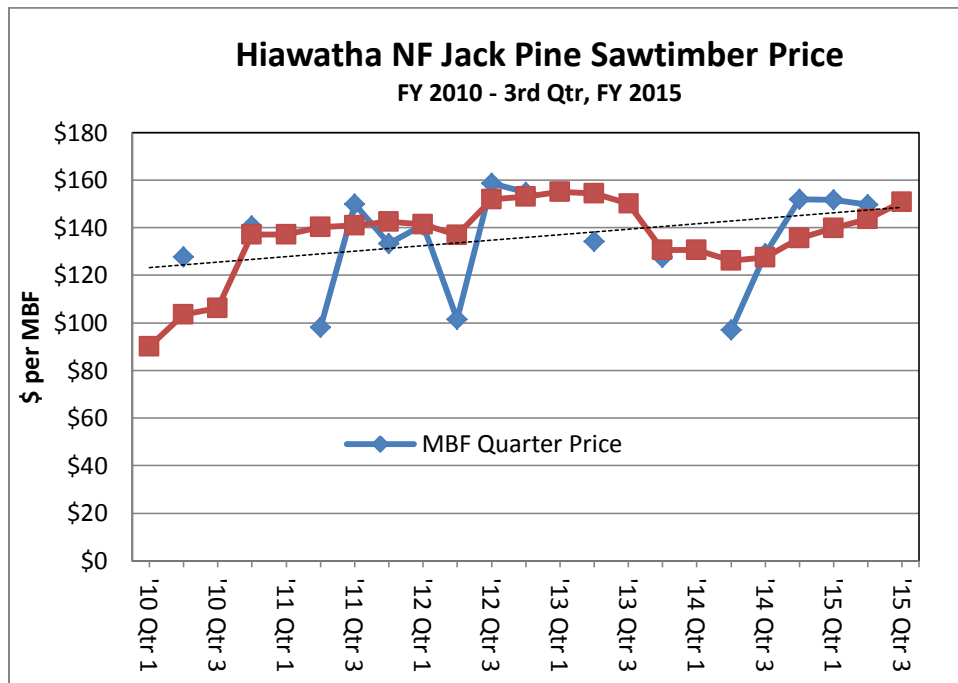
The 3rd quarter average pulpwood price fell to just under \$75 per mbf. It was predicted that the overall average pulpwood price would likely decline following four quarters of rising prices, from under \$30 in the second quarter of FY 2014 to over \$101 per mbf last quarter. The trend line shows a slight increasing price trend since the beginning of FY 2010. Now that the price has moderated somewhat, it is not likely to change much next quarter from its 3rd quarter level.



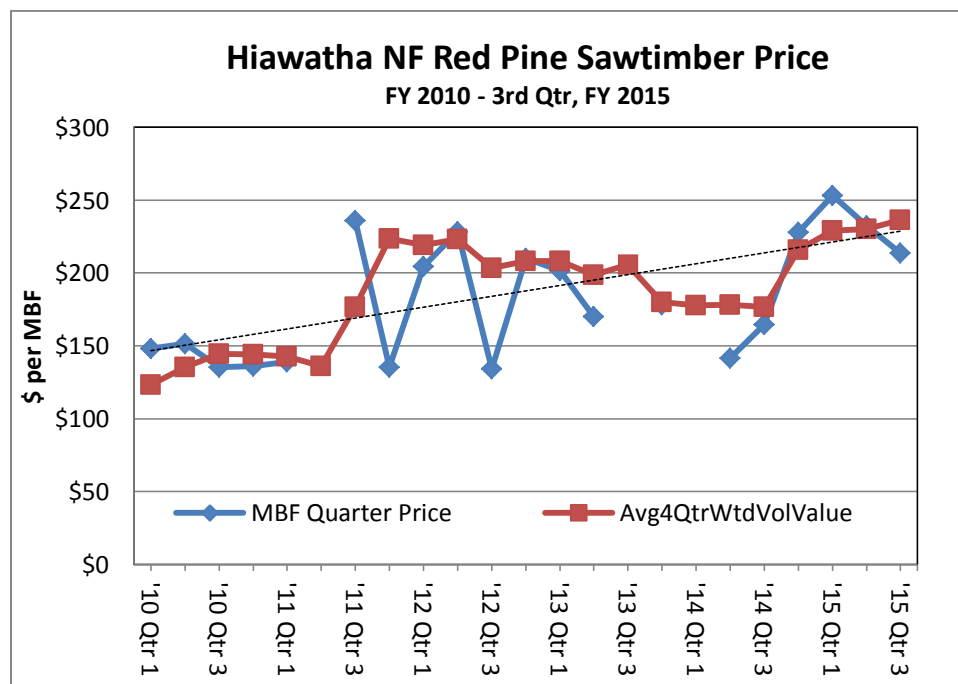
There were no sales of jack pine sawtimber in the 3rd quarter. Hiawatha sales of jack pine sawtimber have been relatively negligible; the average sale volume since FY 2010 is under 250mbf. The highest volume sold, 1.25mmbf, was back in the 4th quarter of FY 2010. Jack pine sawtimber sales dropped from 229mbf in the 3rd quarter of FY 2010 to 121mbf in the 4th quarter, went up slightly in the 1st quarter of FY 2015 to 139mbf and reached 209mbf in the 2nd quarter. There now have been eleven quarters in a row of sales below 300mbf and the average for these most recent quarters is 100mbf. The most recent sale volume level reinforces a five-year downward sale volume trend. As with jack pine pulpwood, there are almost as many quarters without jack pine sawtimber sales as there are quarters with sales.



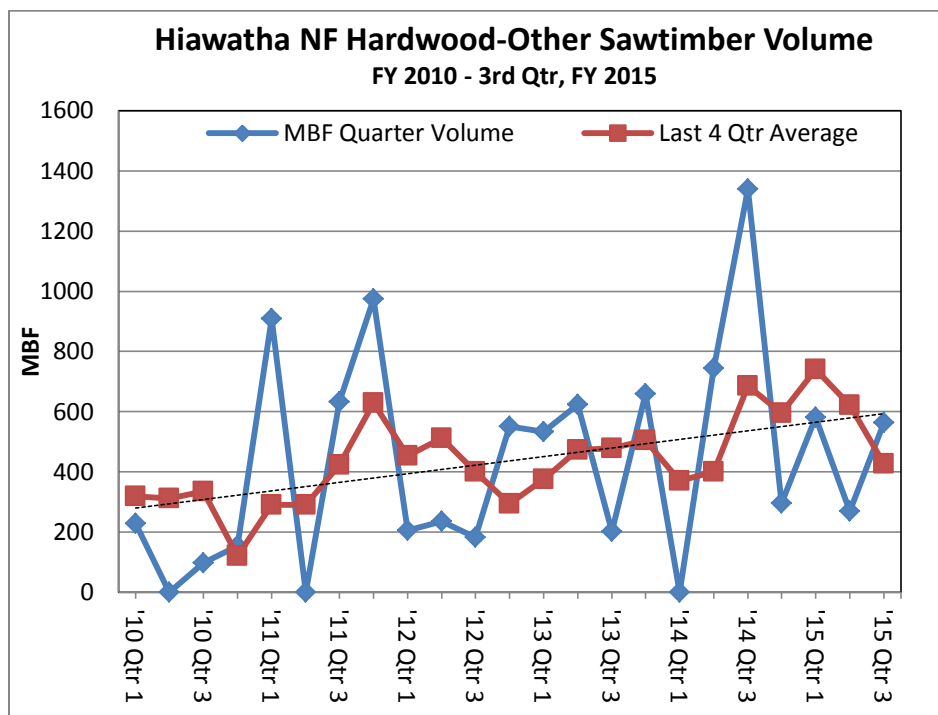
Twice as much red pine sawtimber as jack pine sawtimber has been sold on the Hiawatha during the past five years. Red pine sawtimber sale volume declined again in the 3rd quarter to .21mmbf from 1.12mmbf in the 2nd quarter to .21mmbf. It was 1.97mmbf in the 1st quarter of FY 2015 which was down from 2.8mmbf in the 4th quarter of FY 2014. The previous two 4th quarters were higher; 5.7mmbf was sold in the 4th quarter of FY 2013 and 4mmbf was sold in the 4th quarter of 2012. Volume tends to be low in the 3rd quarter; presumably it will rebound somewhat in the coming 4th quarter.



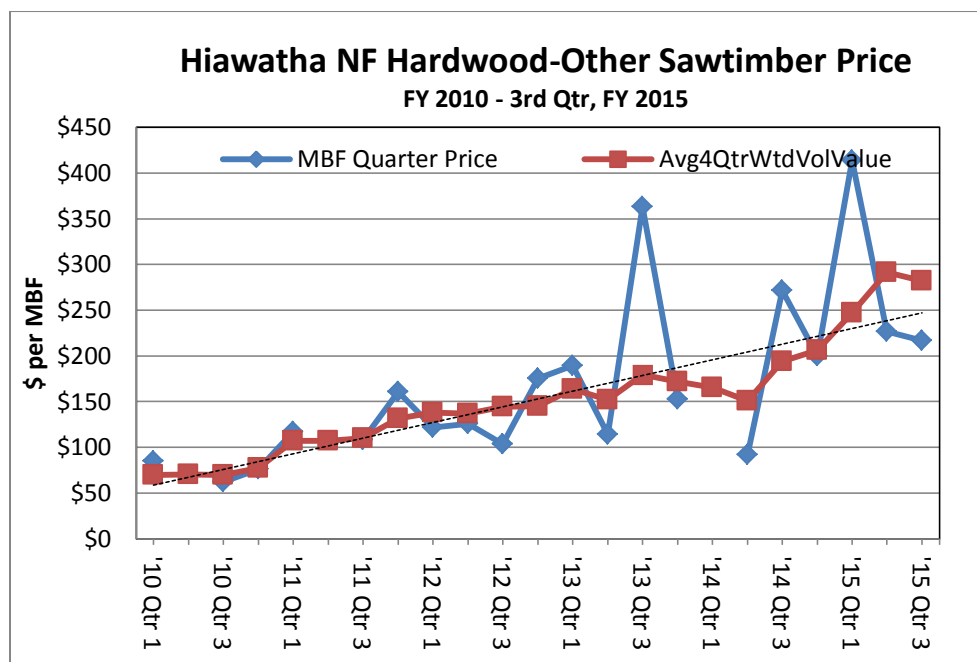
There is no jack pine sawtimber price (as there was no sale volume) for the 3rd quarter. The Hiawatha jack pine sawtimber price per mbf dipped slightly in the 2nd quarter. It had risen from just under \$100 in the 2nd quarter of FY 2014 to almost \$130 in the 3rd quarter and then it reached \$152 in the 4th quarter where it remained through the 1st quarter of FY 2015. Overall, based upon the 4-quarter volume-weighted average price, there appears to be an increasing price trend over the past five years, but there are so many quarters with negligible or no sales that the trend is not well-defined or reliable.



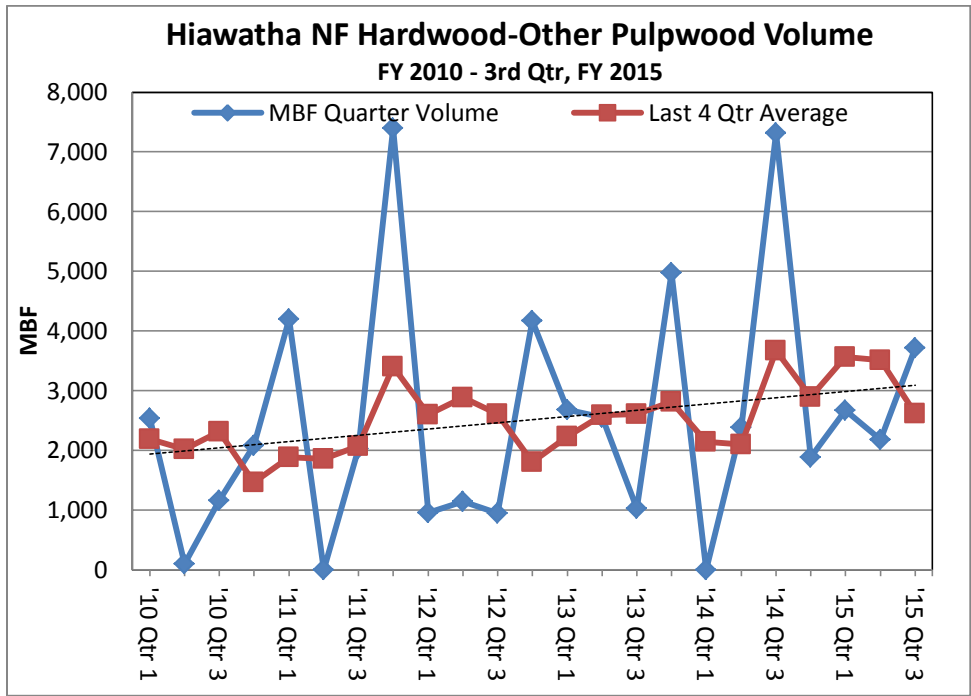
Red pine sawtimber price dipped further to \$214 per mbf in the 3rd quarter. It had reached \$253 per mbf in the 1st quarter of FY 2015, its highest level in recent years, before falling to \$232 per mbf in the 2nd quarter. It was \$142 in the 2nd quarter of FY 2014 and \$165 in the 3rd quarter, then jumped to \$228 in the 4th quarter. Prices have generally been within a range of \$140 to \$230 per mbf range over the past five years. The overall five-year price trend has been increasing. Price declines were predicted for the 2nd and 3rd quarters. It is likely that prices will not change much in the 4th quarter.



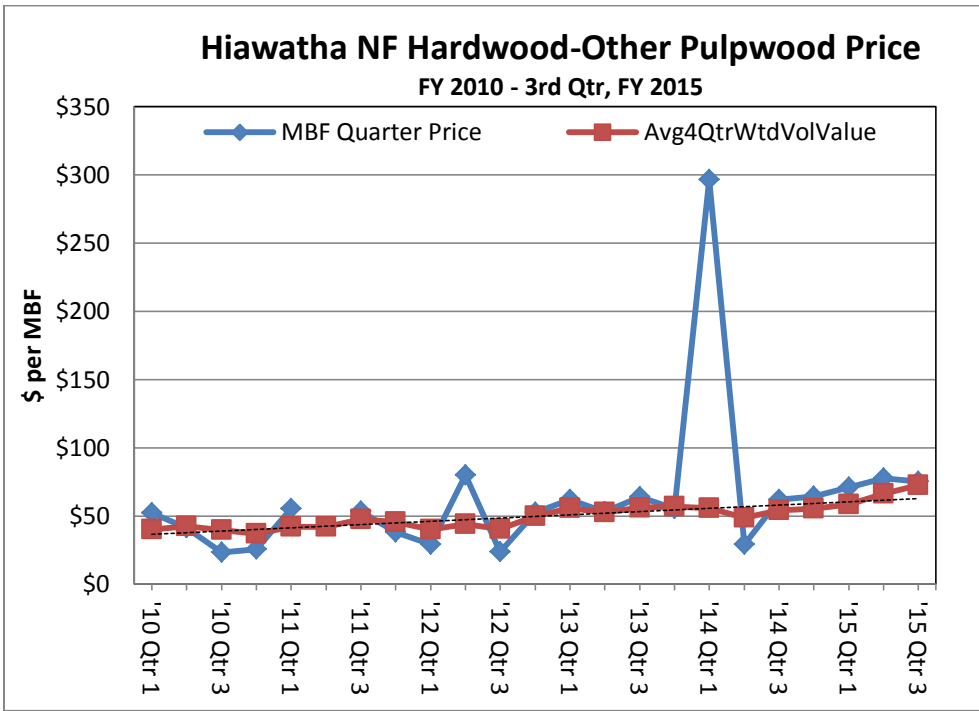
The “hardwood-other” sawtimber sale volume increased from 270mbf to 563mbf in the 3rd quarter. The 1st quarter volume was close to 580mbf. Quarterly sale volume reached a 5-year record level of 1.3mmbf in the 3rd quarter of FY 2014 before falling to the 4th quarter 300mbf level. Although at times erratic from quarter to quarter, sales of “hardwood other” have trended upward over the past five years; however this trend is strongly influenced by the high 2nd and 3rd quarter sale volumes of FY 2014. Based upon the 5-year pattern, it was predicted that 3rd quarter sales would be higher as they turned out to be. Sale volume for the coming 4th quarter is less predictable and could go up or down.



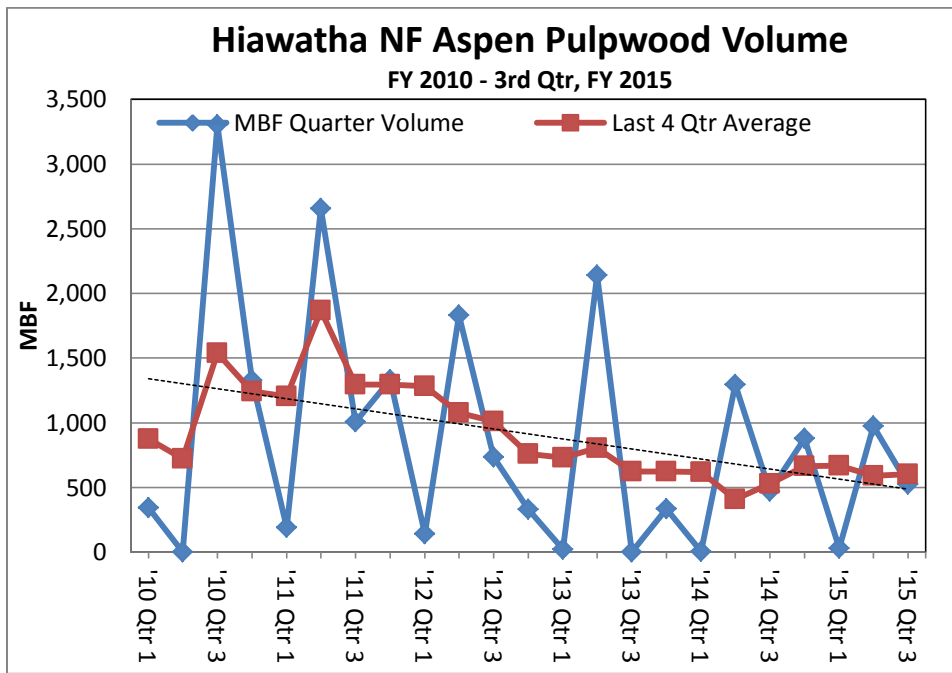
The “hardwood-other” sawtimber 2nd quarter price dropped back to \$227 per mbf from the record \$414 per mbf price it reached in the 1st quarter and it dipped further in the 3rd quarter to \$217 per mbf. In the 2nd quarter FY 2014, the price was below \$92 per mbf. Despite the recent price decreases, the quarterly price trend has risen quite steeply over the past five years – more than jack or red pine sawtimber - from well under \$100 to well over \$200 per mbf.



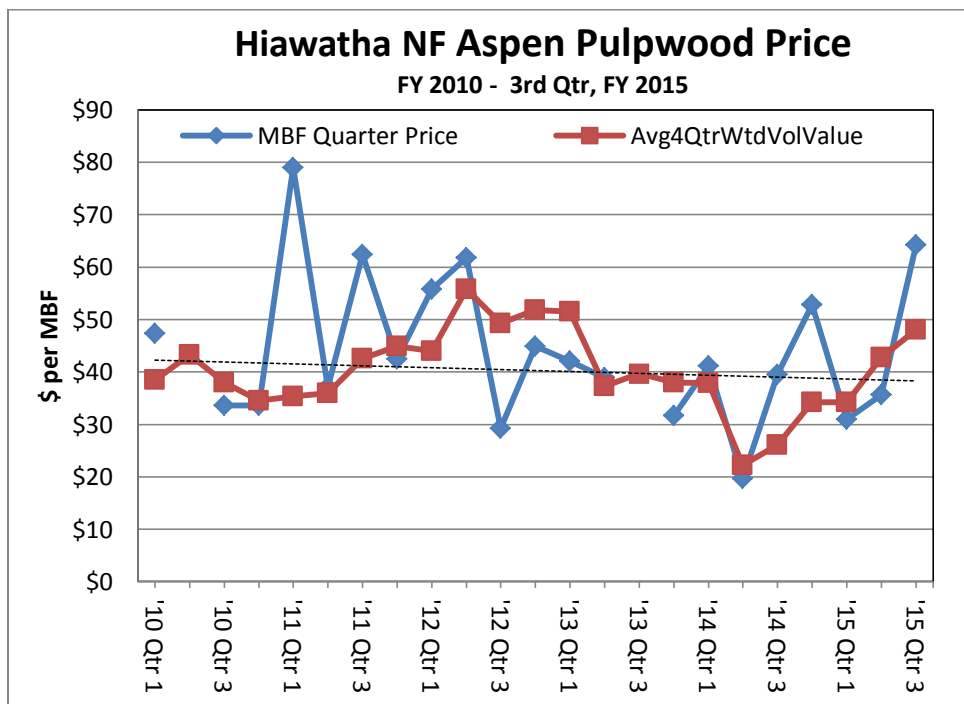
Sales of “hardwood-other” pulpwood volume increased in the 3rd quarter from 2.2mmbf to 3.7mmbf. In the 1st quarter of FY 2015 it was 2.7mmbf. After shooting up in the 3rd quarter of FY 2014 to over 7.3 mmbf, the pulpwood sales came sharply down in the 4th quarter to 1.9mmbf. Sales were under 2.4mmbf in the 2nd quarter of FY 2014 and there were no sales in the 1st quarter of FY 2014. Generally, sales are highest in the 4th quarter, but FY 2014 was an exception with the peak sales in the 3rd quarter. Beyond the erratic nature of sale volumes from quarter-to-quarter, there is a moderate increasing sale volume trend over the past five years. Similar to “hardwood-other” sawtimber, it was projected that the 3rd quarter volume was likely to increase moderately and it did. It may increase again in the coming (4th) quarter.



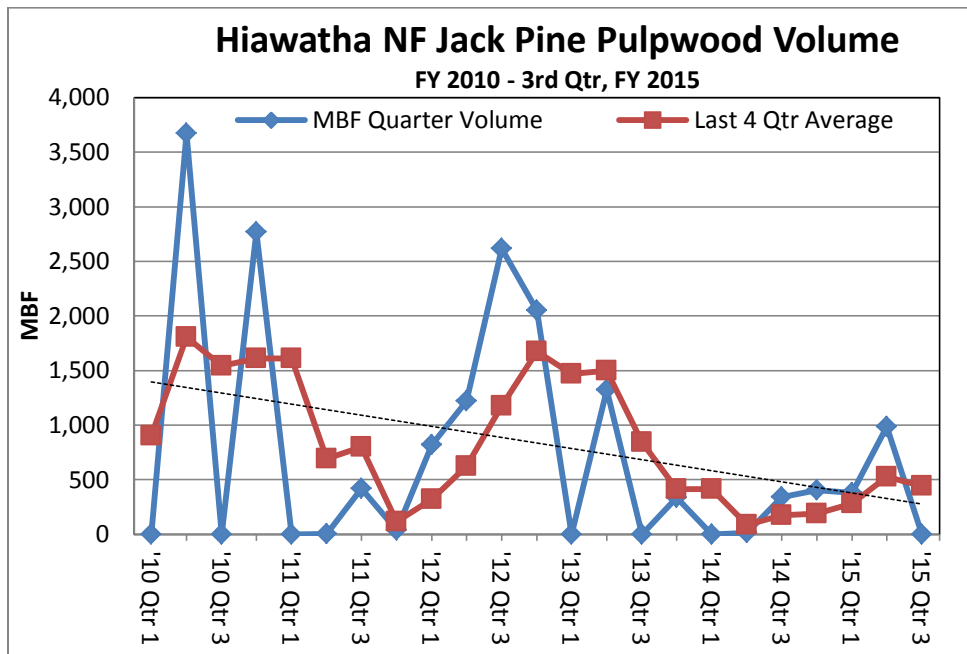
There was a slight dip to \$75 per mbf in the “hardwood-other” pulpwood price for the 3rd quarter. The 2nd quarter \$77 price was the fourth straight moderate quarterly increase. A year earlier, it was at a low value of \$29 in the 2nd quarter of FY 2014. The 1st quarter FY 2014 price is an anomaly or error. For the past five years, the price has tended to range between \$28 and \$70.



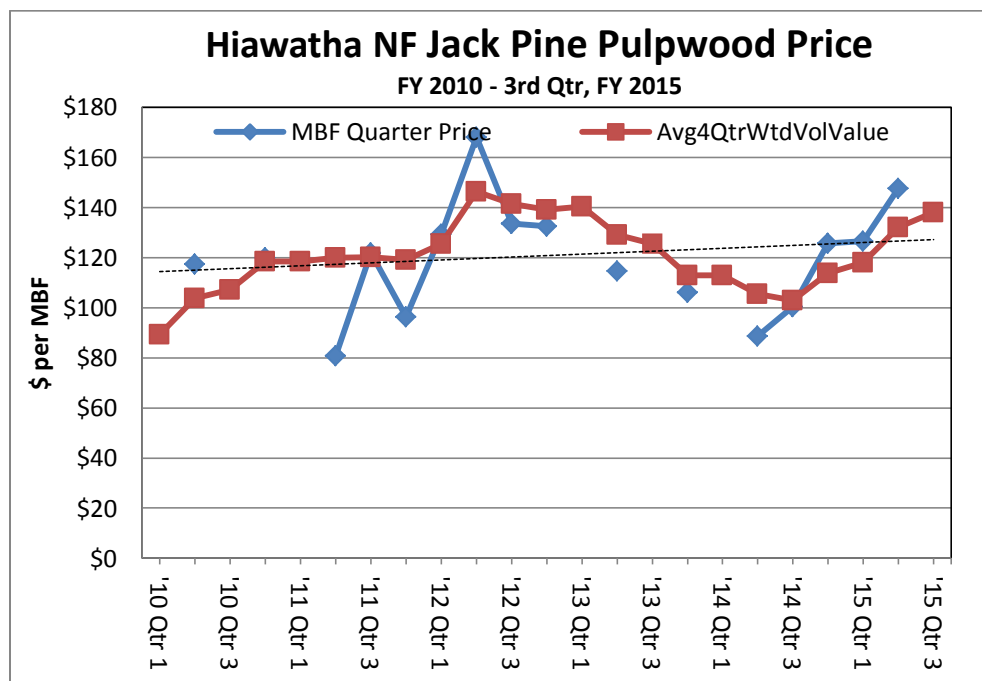
Aspen pulpwood sale volume fell to 528mbf from 974mbf in the 3rd quarter of FY 2015. Aspen pulpwood volumes are quite erratic, often going from no or negligible volume in one quarter to 1mmbf or more the next quarter. However, as the above graph shows, there is a distinctively downward trend over the past five-plus years with each year's peak quarterly volume diminishing over time. Unlike for many other products, there is not a pattern of higher 4th quarter sales for aspen. The most recent annual sale peaks have come in the second quarter of the fiscal year; the highest peak for the past five years came in the 3rd quarter of FY 2010. If the declining sale pattern holds, the coming 4th quarter sale volume will be under 1mmbf, resulting in the lowest aspen sale volume for a fiscal year since at least FY 2009.



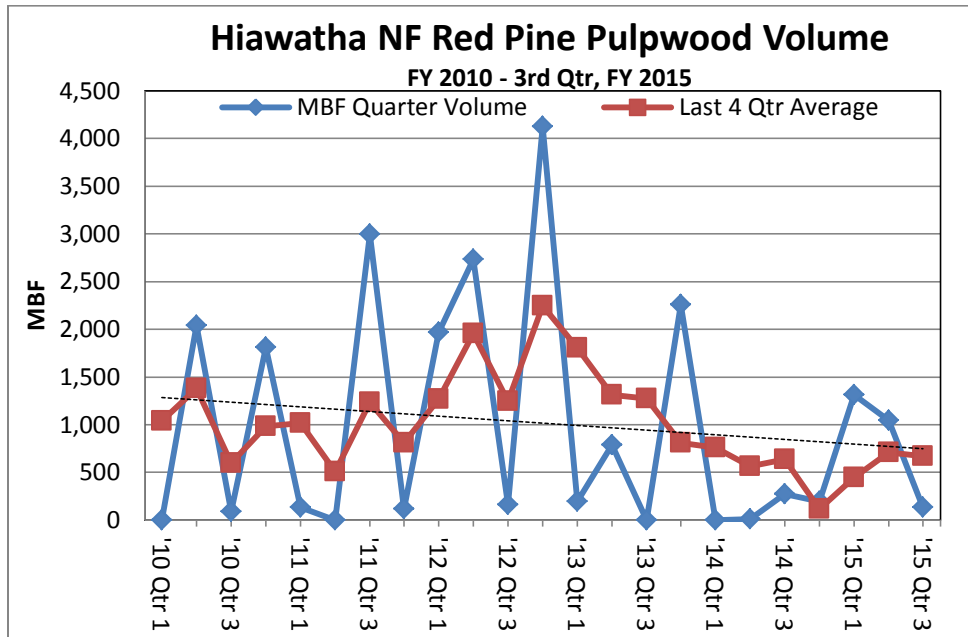
The 3rd quarter aspen pulpwood price shot up from \$36 to over \$64 per mbf. It had doubled in the 3rd quarter of FY 2014, from a five-year record low under \$20 to almost \$40 per mbf, and rose again in the 4th quarter to \$53 per mbf. The steep rise in the "Avg4QtrWtdVolValue" line over the past six quarters shows the recent price trend. Despite the most recent increase, there is a slight downward trend to prices over the past five years. If sale volumes continue their downward trend, prices will likely continue to rise and a reversal in the five-year price trend will take place.



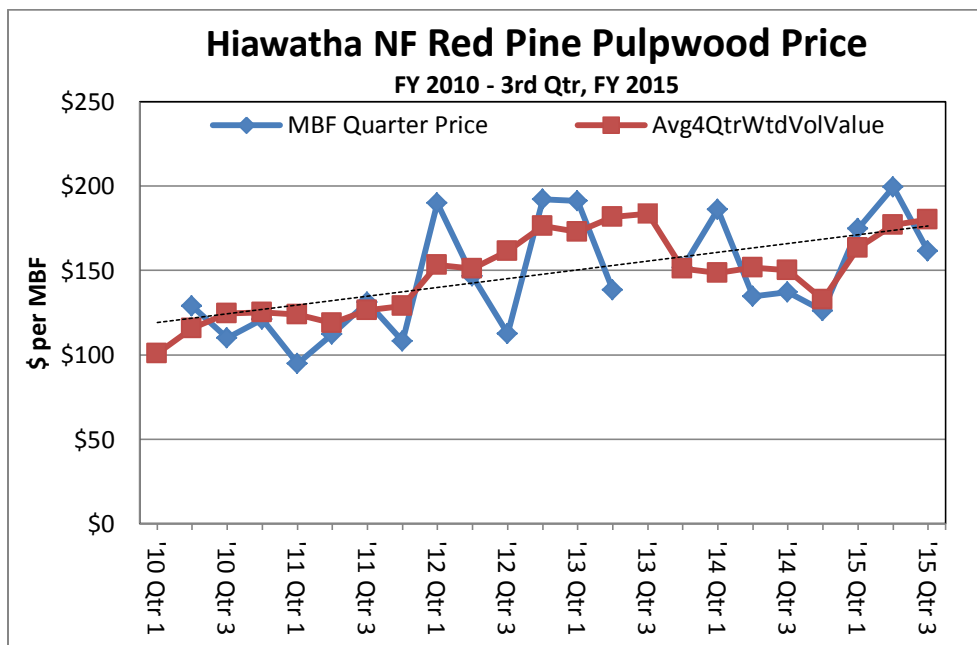
There were no jack pine pulpwood sales in the 3rd quarter. Sales had been quite stable for three quarters at 340, 402, and 379 mbf before going to 985mbf in the 2nd quarter of FY 2015. There were no jack pine pulpwood sales in the first two quarters of FY 2014. Sales have been on a steep downward trend over the past five years and, like aspen pulpwood, there were no sales in the 1st and 3rd quarters of fiscal year 2013. Besides the recent no sale quarters, there were two quarters without sales in FY 2010 and three quarters without sales in FY 2011. It has been noted that if the pattern of the last five years continues, sales in some upcoming quarter might exceed 1,000mbf; however, there is a better likelihood that there will be quarters without any sale volume given the downward volume five-year trend and the number of quarters with no sale volume.



With no sale volume, there is no price for the 3rd quarter. The 2nd quarter jack pine pulpwood price increased to \$146 per mbf. The price had remained virtually the same at \$126 per mbf for the previous two quarters and was \$105 per mbf in the 4th quarter of FY 2013. Beyond increases in these four quarters, no longer-term price trend for jack pine pulpwood prices can be discerned, given that there have been about as many quarters without sales of jack pine as there have been quarters with sales over the past five years.



Red pine pulpwood sale volume was negligible in the 3rd quarter; it was reported to be 134mbf. It had declined from 1.3mmbf in the 1st quarter of FY 2015 to 1.05mmbf in the second quarter. There were no sales of Hiawatha red pine pulpwood in the first two quarters of FY 2014 and only 270mbf sold in the 3rd quarter and 197mbf in the 4th quarter. The red pine pulpwood sale volume for the four FY 2014 quarters is by far the lowest annual volume sum for the past five years. The sum for all four quarters of FY 2014 year amounts to less than half of what the average is per quarter for the past five years. In the most recent five-year period, there had not been four quarters in a row without one or more quarters exceeding 1.8mmbf until FY 2014. It appears FY 2015's highest quarter may be just 1.3mmbf. Sales were erratic from FY 2010 through FY 2013; however, since then sales have moderated through losing quarters with high spikes in sales and keeping the low and negligible sale quarters. The 3rd quarter sale volume reinforces a declining five-year volume trend.



The 3rd quarter red pine pulpwood price declined from \$200 to \$161 per mbf (on low sale volume). It was \$126 in the 4th quarter of FY 2014 (on low volume) and rose to \$175 per mbf in the 1st quarter of FY 2015. The 4th quarter of FY 2013 had an average price of \$152 per mbf on significant (2.3mmbf) sale volume. Prices have been on an upward trend over the past five years; however, there is very little or no sale volume in many quarters over this period.