

## Michigan Public Timber Markets, 3rd Quarter (April - June), FY 2018

**State Forest data** – Bid species volume for the 3rd Quarter of 2018 settled back to a more typical level, falling to 261,000 cords – nearly splitting the difference between the Q3 value of 389,000 cords and the Q1 level of 176,000 cords. Total sale (bid & non-bid species) volume also dropped to 291,000 from the Q2 record high of 429,000 cords. Total offered sales volume for Q3 remained flat at 338,000 cords.

As expected, bid species sale volumes receded from near record highs to their normal range, tallying 101,000 (down 33%) and 160,000 cords (down 34%) for the UP and NLP, respectively. Overall average timber price turned northward to \$52.00 per cord in the 3rd quarter, up a fraction from Q2's \$48.32. As predicted, UP pulpwood sale volumes dropped in Q3 to 92,000 from nearly 138,000 cords; the NLP volume fell back to Earth to 114,000 cords from above 170,000 in Q2. Volatility prevailed in the aspen pulpwood quarterly sale volumes, especially in the UP, which dived to just 11,000 cords in Q3 from a more typical 37,000 cords in Q2. A smaller drop occurred in the NLP, i.e. to 32,000 cords from an anomalous 47,000 previously. UP aspen pulpwood cord price fell to \$39.51 per cord in Q3 from \$40.88 in Q2. Meanwhile, the average NLP aspen pulpwood cord price rose 13% in Q3 to \$27.45. UP softwood pulpwood sale volumes fell dramatically to 9,500 cords in Q3 from 21,000 in Q2, while the average price per cord soared to \$66.03 from \$26.92 (and was confirmed correct by DNR). The Q3 NLP red pine pulpwood price dropped only slightly to \$55.38 from \$58.45 per cord despite a significant volume drop to 18,000 cords from 35,000 in Q2. In the UP, the relatively higher prices (vs. NLP) for red pine pulpwood remained with an uptick to \$92.05 from last quarter's \$85.16. UP red pine pulp volume rallied to a record 28,000 cords, besting last quarter's old record of 21,000. Jack pine Q3 pulpwood cord prices rose in the UP – to \$66.32 from \$61.96 per cord – but fell in the NLP to \$20.59 from \$34.25 per cord; UP jack pine pulpwood sales shot up to 8,300 cords from 4,700 while NLP sales tanked in a commensurate manner to 9,800 from 18,600 cords. NLP oak pulpwood prices rose slightly in Q3 to \$20.47 per cord from \$18.03, while this sector's 3rd quarter volume fell to 8,700 from 14,000 in Q2.

Meanwhile, NLP sawlog volumes outpaced the UP's; its 3rd quarter volume falling to a more typical 22.7 mmbf, down from 35.0 mmbf, while the UP's volume fell to 4.2 from 6.5 mmbf. NLP oak sawtimber prices bucked a long-term downward trend, rising in Q3 to \$233.16 per mbf from \$208.52. Volume in this market was down ~ 50% in the quarter, with 1.6 mmbf sold in Q3 vs. 3.3 mmbf in Q2. Red pine sawtimber prices gained slightly in Q3 going to \$158.65 from \$151.33 per mbf. Volume for red pine sawtimber declined significantly – but closer to the long-term average - in Q3 to 10.0 from 21.7 mmbf the quarter before. The NLP sugar maple sawtimber price rose significantly, to \$555 from \$351 per mbf, opposite from the UP, which fell to \$415 in Q3 from \$528 in Q2. Volumes dropped slightly in both the NLP (to 1.62 from 1.56 mmbf) and UP (to 1.0 from 1.4 mmbf). NLP oak sawtimber prices reversed a long-term downward trend, rising in Q3 to \$233 per mbf from \$209. Volume in this market was down ~ 50% in the quarter, however, with 1.6 mmbf sold in Q2 from 3.3 mmbf in Q2.

**National Forest data** – Both sawtimber and pulpwood sale volumes rebounded and performed well in the Ottawa in Q3. In Huron-Manistee, sawtimber sale volume was up while pulpwood sale volume continued its downward trajectory. Finally, Hiawatha sawtimber sale volume was stable while pulpwood sale volume plunged to a negligible level.

The 3<sup>rd</sup> quarter was strong for the Ottawa unit's sawtimber and pulpwood. Sawtimber sale volume continued its rebound from a near record low just two quarters ago to an eight-year high of 8.5 mmbf. The average Ottawa sawtimber mbf price was \$189, down a fraction from last quarter. Total Ottawa pulpwood sale volume was also up, reaching 19.4 mmbf as average prices in the sector dropped to \$43 in Q3 from \$74 in Q2.

Ottawa hardwood-other sawtimber sale volume continued its climb from the depths, surging to 707 mbf from 400 in Q2 and a mere 72 in Q1. The Ottawa hardwood-other sawtimber price tumbled further below the long-term average to \$118 from \$161 per mbf. Ottawa sugar maple sawtimber sale volume climbed from near zero to the current 1.3 mmbf in just two quarters, back above the long-term average. Ottawa

sugar maple sawtimber price, however, dropped precipitously from last year's near record high of \$653 per mbf to a near-record low of \$293.

Ottawa aspen pulpwood likewise surged in sale volume to 5.1 mmbf with average prices down to \$51 per mbf. Ottawa hardwood-other pulpwood sale volume tracked the aspen pulpwood nicely with a climb from near zero to an above average quarterly tally, i.e. 8.4 mmbf. The Ottawa hardwood-other pulpwood category is on a three-quarter slide, coming to rest at a low \$25 per mbf.

Huron-Manistee (H-M) sawtimber sale volume rose only marginally in the 3rd quarter to 3.99 mmbf from 3.91 mmbf, accompanied by a slightly higher price - \$126.03 per mbf vs. \$121.72 previously. Meanwhile, the Q3 tally for H-M pulpwood sale volume shrunk for the 4th consecutive period to 3.5 from 4.0 mmbf. Yet H-M pulpwood prices fared well, shooting up to \$89 from \$55 per mbf.

While Q3 was the second consecutive quarter with no sale volume in the H-M aspen sawtimber AND pulpwood markets, it was 'business as usual' for H-M red pine sawtimber volume at 3.6 mmbf. The latter gained \$2 per mbf to \$136. Red pine pulpwood saw a small volume downturn in the 3rd quarter to 2.9 from 3.5 mmbf, but its price rebounded from a recent below-average trend to \$103 per mbf. H-M jack pine pulpwood volume was insignificant at 147 mbf.

Hiawatha sawtimber sale volume was nearly unchanged at 2.052 mmbf, up a notch from 2.046 mmbf, and its price exceeded expectations, rising to \$196 per mbf. On the other hand, total Hiawatha pulpwood volume tanked further in the 2nd quarter to a mere 590 mbf, but the average price on this miniscule volume zoomed up to \$116 per mbf from \$59.

Hiawatha saw negligible to zero sale volume most major categories: jack pine sawtimber (110 mbf), jack pine pulpwood (66 mbf), hardwood-other pulpwood (57 mbf), hardwood-other sawtimber (2 mbf), aspen pulpwood (0 mbf), red pine sawtimber (0 mbf) and red pine pulpwood (0 mbf).

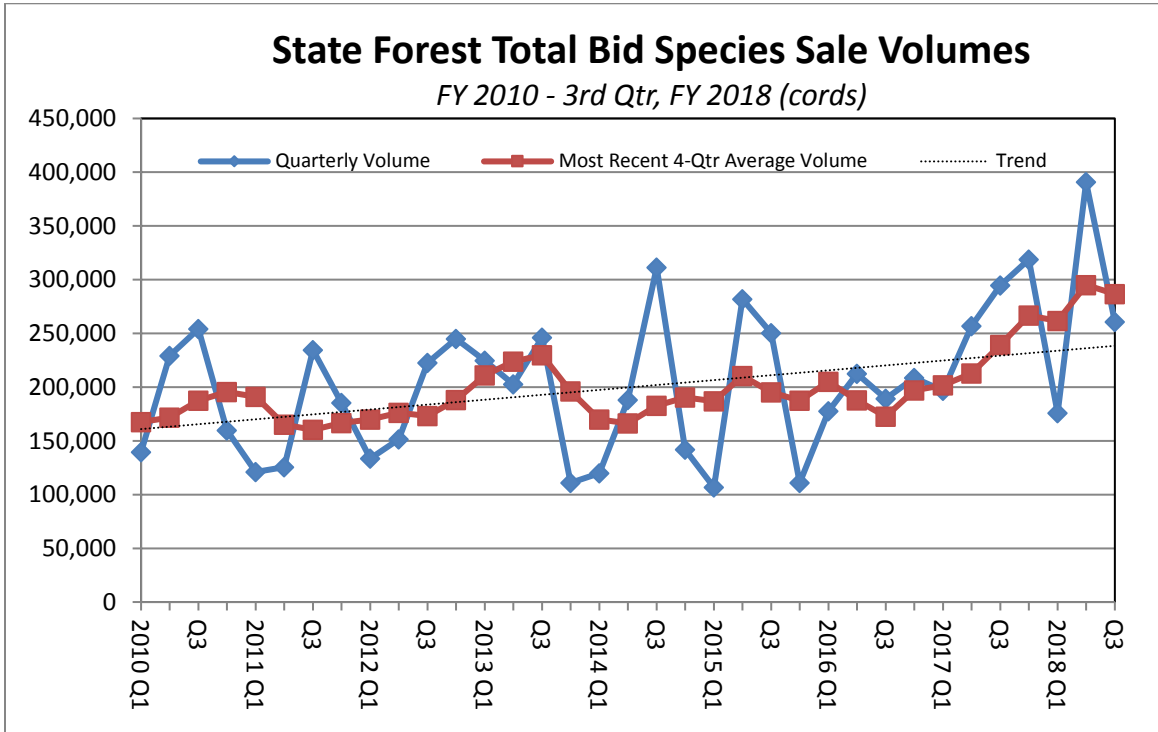
Most sawtimber and pulpwood sale volume has come from the category "Softwood – Other", which is currently not tracked in this report.

## State Forest Quarterly Timber Sales for Major Species & Products

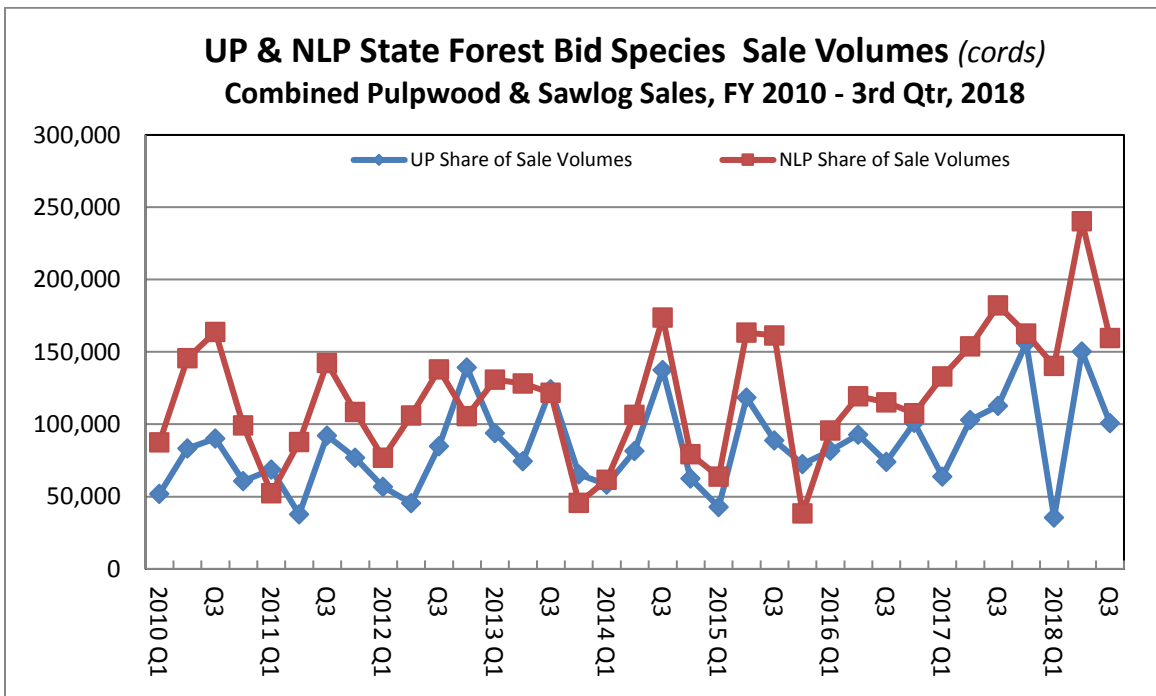
FY 2010 – 3<sup>rd</sup> Quarter, FY 2018

Source: Michigan DNR, Forest Resources Division

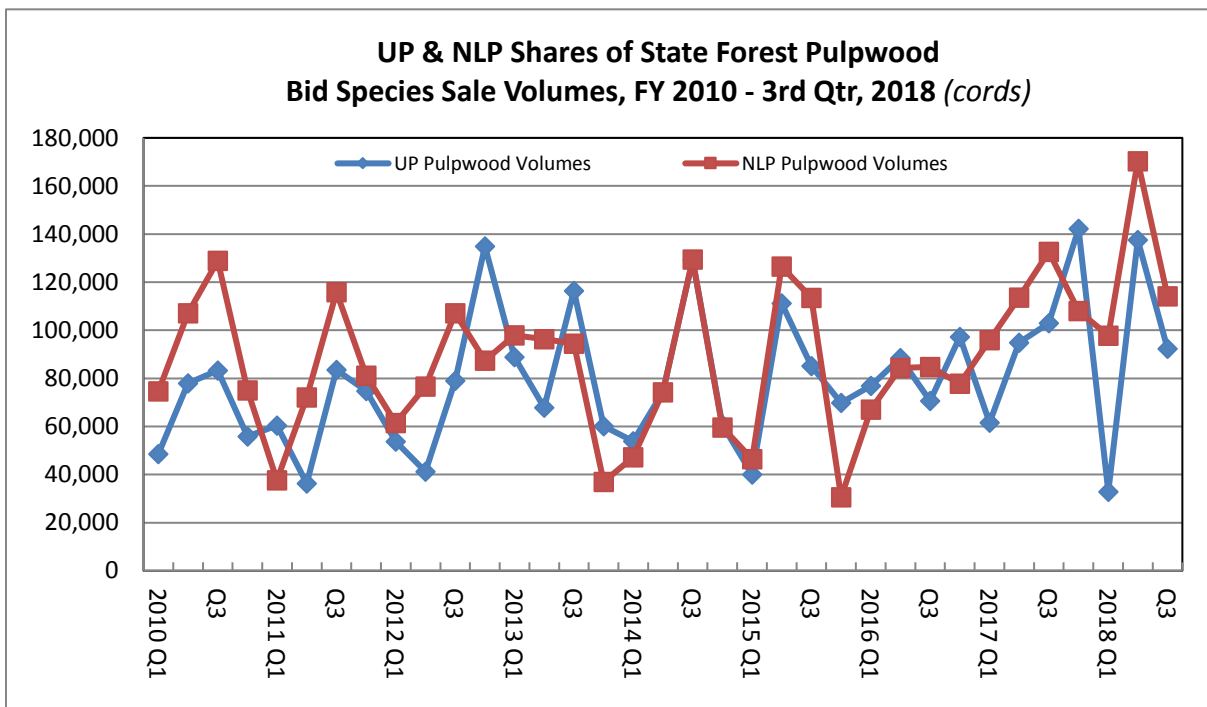
The State follows the federal fiscal year (October 1 through September 30). Most graphs below show **bid species** sale volume and value data; total sale volumes and values are slightly more. The graphs often include a dotted trend line based upon data for the average of the most recent four quarters (labeled as “Avg4QtrVolWtdPrice”). This average eliminates variability in quarterly data due to seasonal issues and variation in quarterly sales through taking volume into account. It likely represents 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. All reported values are subject to slight revisions.



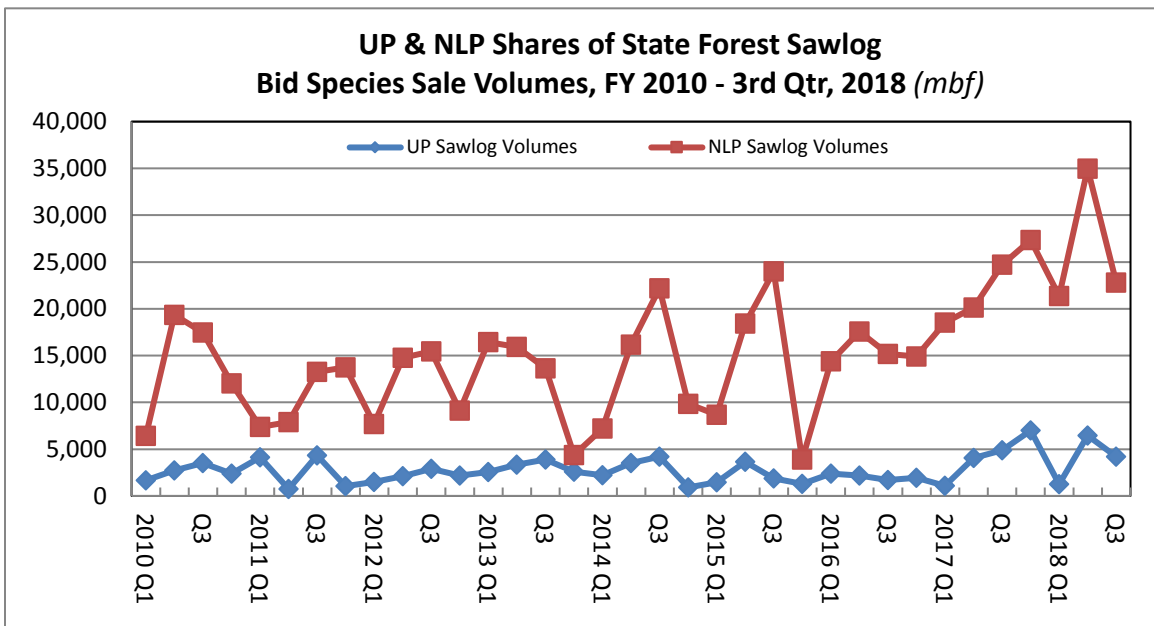
Bid species volume for the 3<sup>rd</sup> Quarter of 2018 settled back to a more typical level, falling to 261,000 cords – nearly splitting the difference between the Q3 value of 389,000 cords and the Q1 level of 176,000 cords. The Q3 sale volume came in just below the recent 4-quarter average of 286,000 cords. Total Q3 sale volume for all bid and non-bid species also dropped to 291,000 from the Q2 record high of 429,000 cords. Total offered sales volume for Q3 remained flat at 338,000 cords.



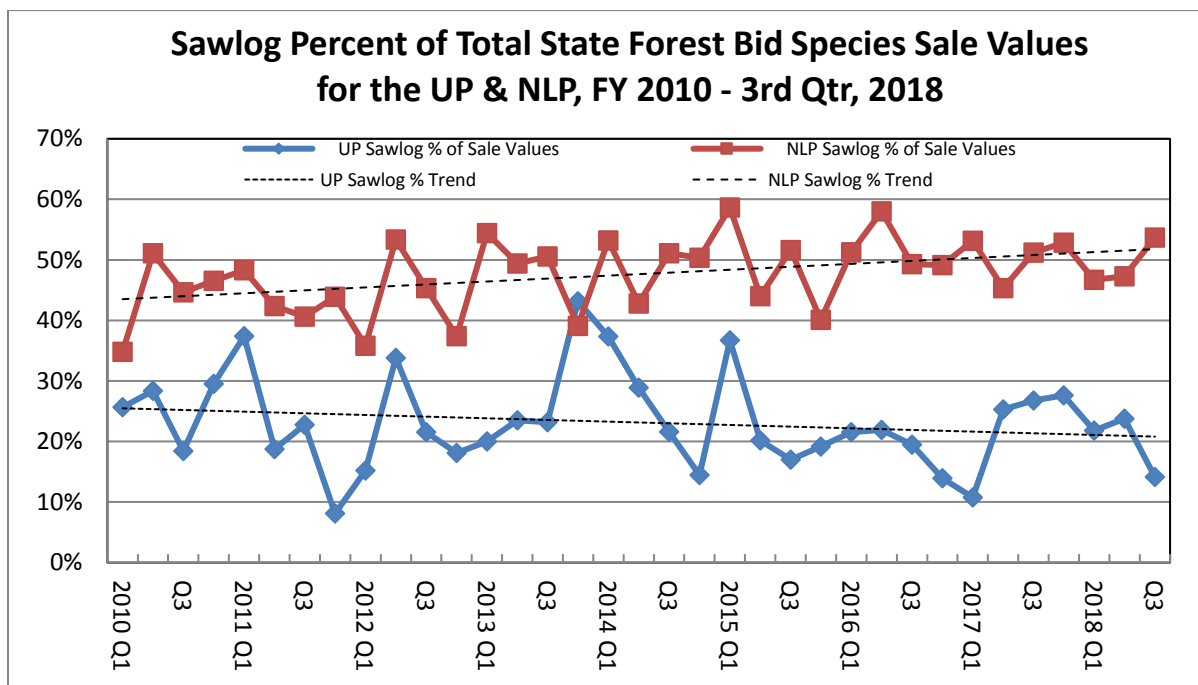
As expected, bid species sale volumes receded from near record highs to their normal range, tallying 101,000 (down 33%) and 160,000 cords (down 34%) for both the UP and NLP, respectively. The trend of generally higher volumes in the NLP continues.



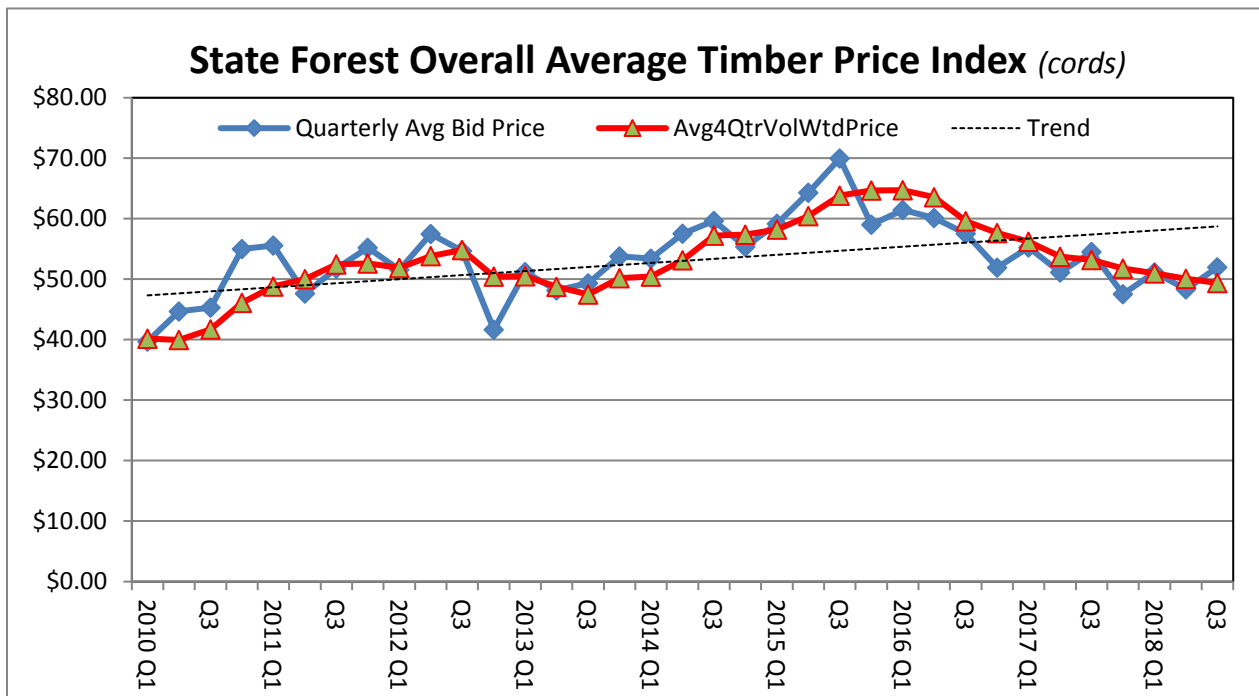
Pulpwood continues to maintain a nearly 80% share of total State Forest bid species sale volume. As predicted, UP pulpwood sale volumes dropped in the 3rd quarter, to 92,000 from nearly 138,000 cords; the NLP volume fell back to Earth to 114,000 cords from over 170,000 in the previous period.



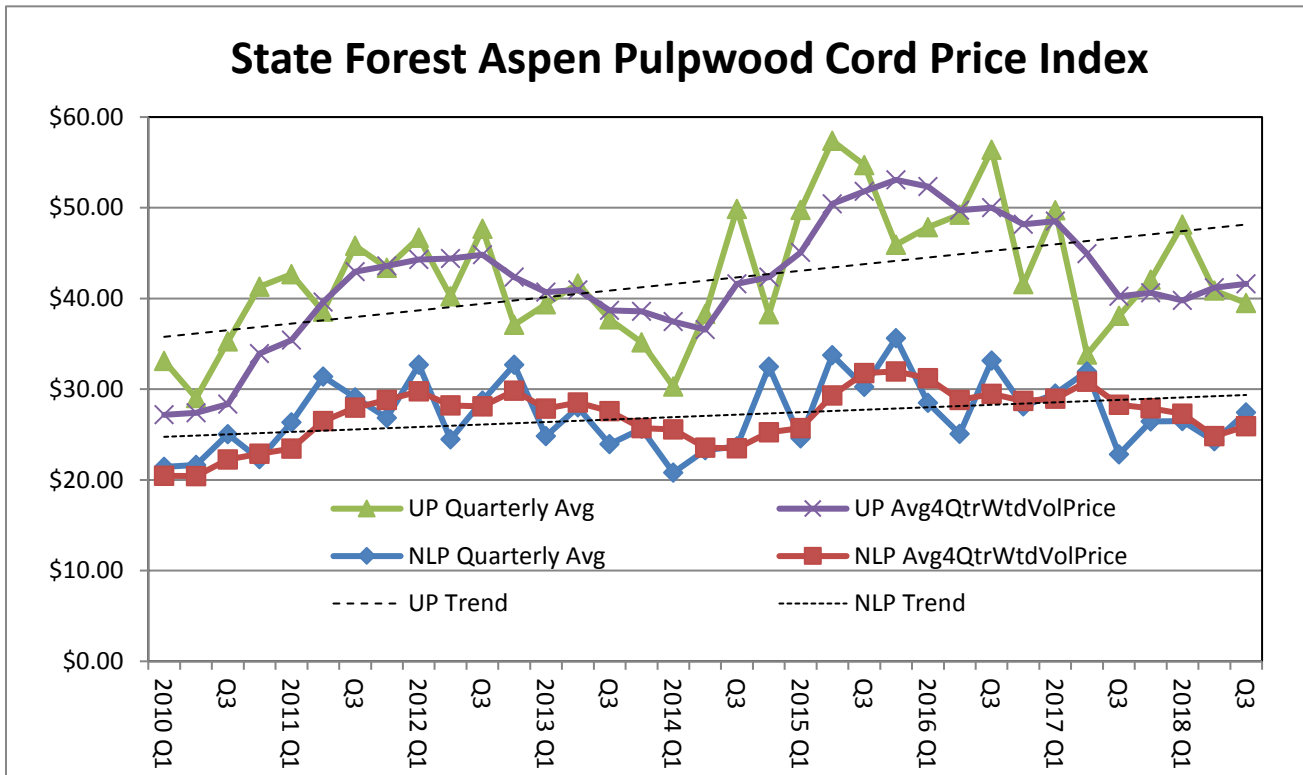
NLP sawlog volumes outpaced the UP's; its 3<sup>rd</sup> quarter volume falling to a more typical 22.7 mmbf, down from 35.0 mmbf, while the UP's volume fell to a respectable 4.2 from 6.5 mmbf.



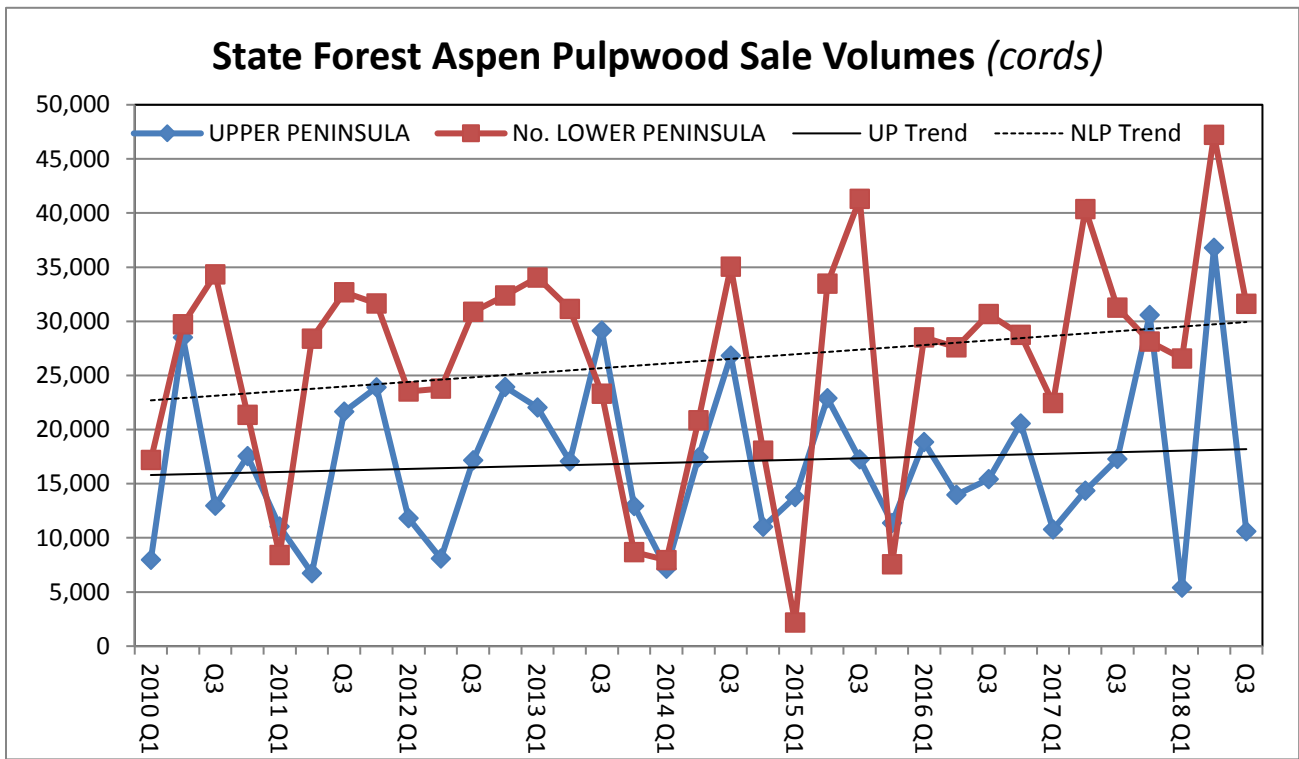
The sawlog percent of bid species sale values diverged between the peninsulas in Q3: the NLP ticked up to 54% from 47% and the UP tumbled to 14% from 24% in Q2.



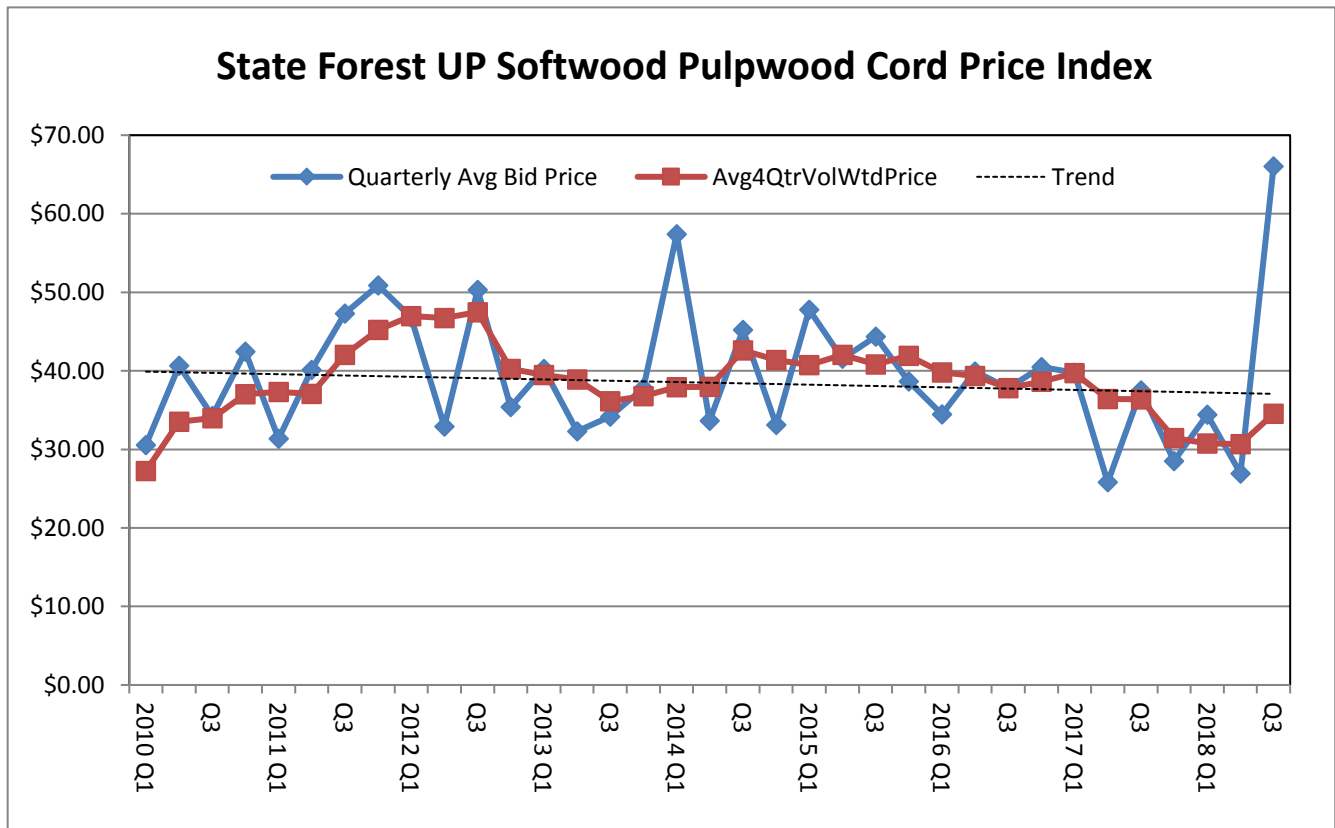
Overall average timber price experienced a slight rise to \$52.00 per cord in the 3<sup>rd</sup> quarter, up from \$48.32. While higher, this price remains significantly below the record level of \$69.99 per cord in the 3<sup>rd</sup> quarter of FY 2015, indicating that factors such as higher levels of sales, sales without bids and proportionately more low-value product sales aligned to depress prices compared to the straight line eight-year trend values.



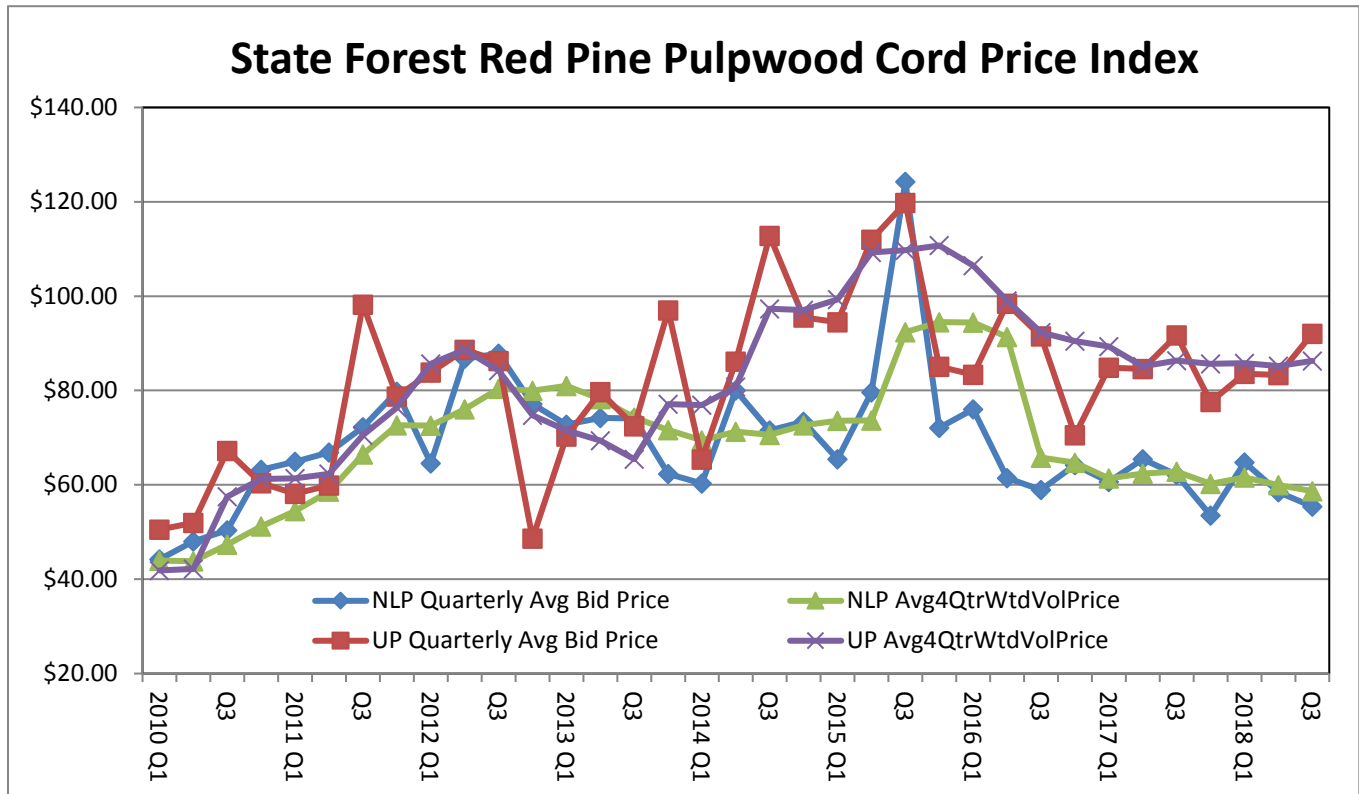
After rising for three quarters in a row, the average UP aspen pulpwood cord price has trended downward for two consecutive quarters, falling to \$39.51 per cord in the 3<sup>rd</sup> quarter from \$40.88 in the 2<sup>nd</sup> quarter. Nevertheless, prices remain well above a recent low of \$33.80 per cord in the 2<sup>nd</sup> quarter of FY 2017. Meanwhile, the average NLP aspen pulpwood cord price rose 13% in the 3<sup>rd</sup> quarter to \$27.45. While the NLP price is tracking closely to the long-term price trend, the UP price is stuck slightly below the trend despite being higher than the NLP price.



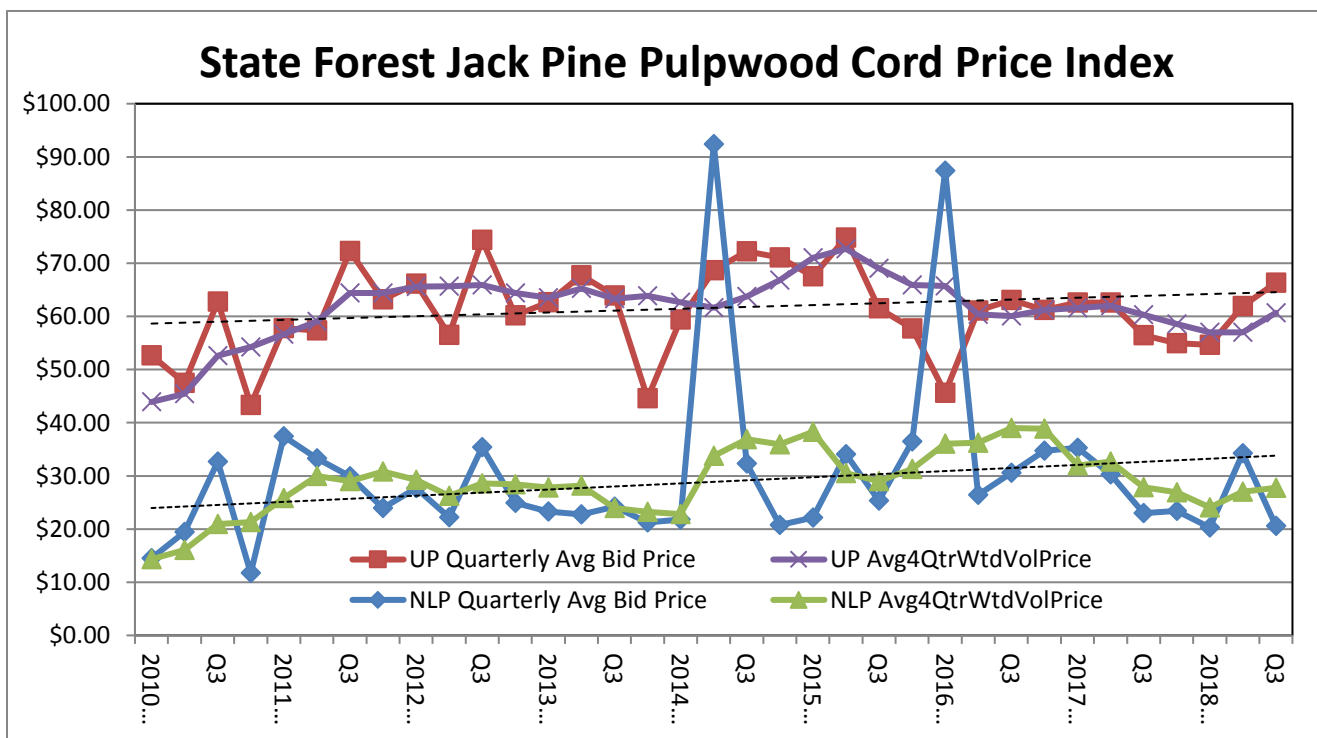
Ongoing quarter-by-quarter volatility with a long-term upward trend best describes the aspen pulpwood quarterly sale volumes, especially in the UP, which dived to just 11,000 cords in the 3<sup>rd</sup> quarter from a more typical 37,000 cords in the past one. A smaller but still significant drop was seen in the NLP, which saw a dip to 32,000 cords in this period cords from an anomalous 47,000 previously.



UP softwood pulpwood sale volumes fell dramatically to 9,500 cords in the 3<sup>rd</sup> quarter from 21,000 in the 2<sup>nd</sup> quarter while the average price per cord spiked to \$66.03 from \$26.92. The DNR attributed this unusual price hike to a single bid of over \$900 per cord, which skewed the quarterly average.

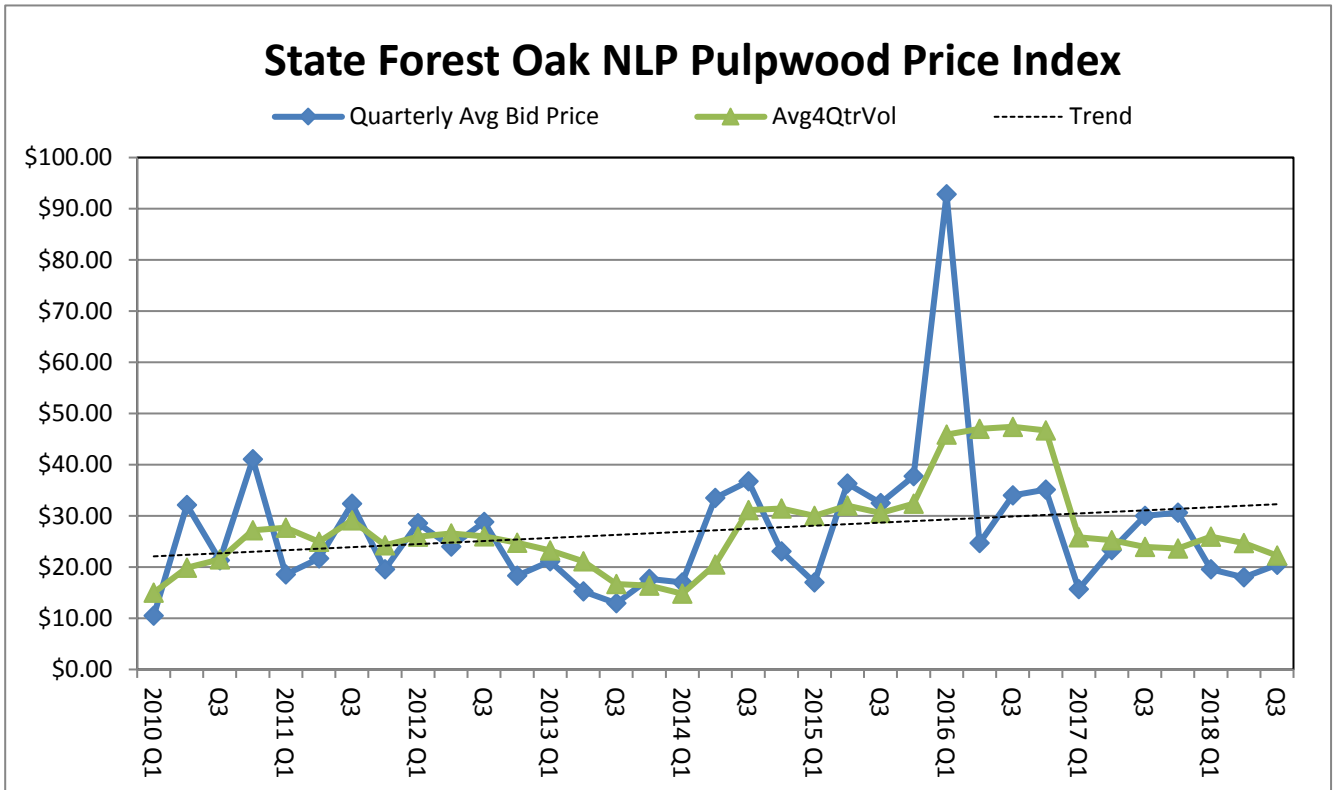


The FY 2018 3<sup>rd</sup> quarter NLP red pine pulpwood price dropped only slightly to \$55.38 from \$58.45 per cord despite a significant volume drop to 18,000 cords from last quarter's 35,000 cords. In the UP, the relatively higher prices (over NLP) for red pine pulpwood remained with an uptick to \$92.05 per cord in the 3<sup>rd</sup> quarter vs. last quarter's \$85.16. The strength in UP prices was matched by an even stronger volume tally, i.e. a record 28,000 cords besting last quarter's previous record of 21,000.

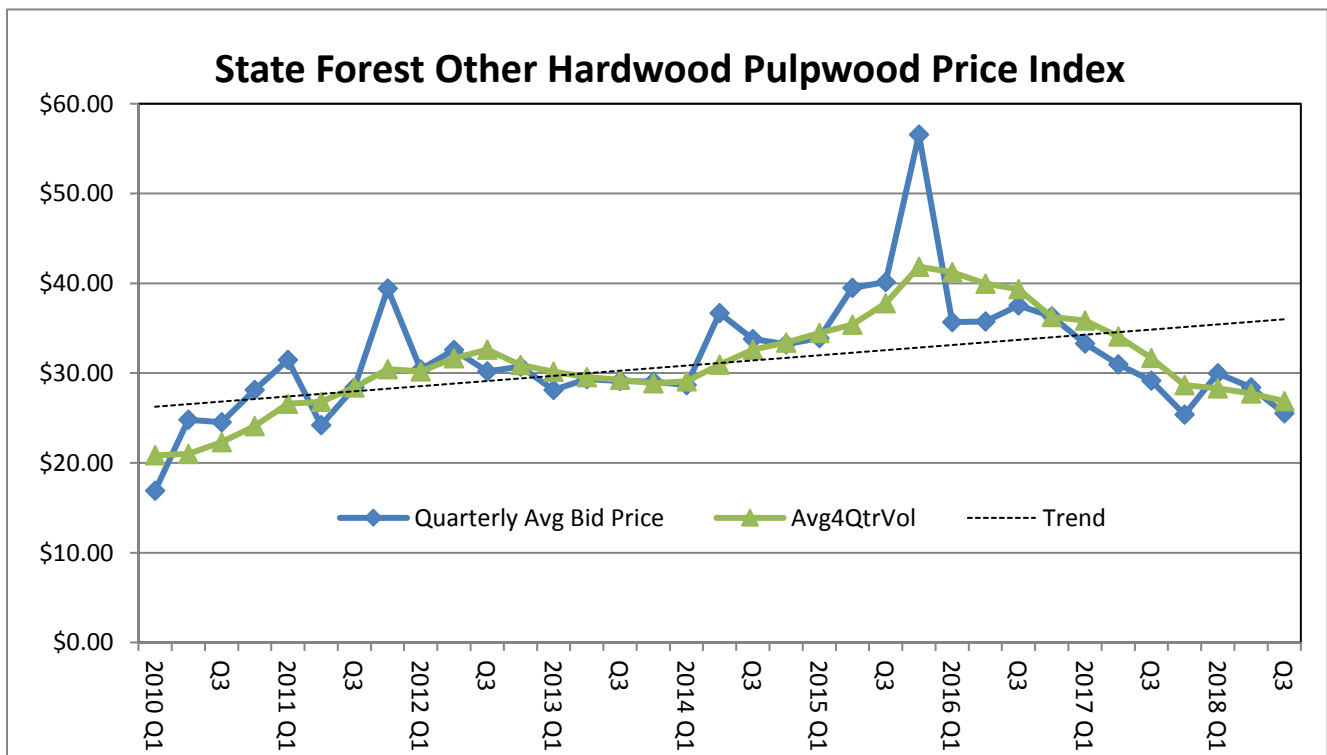




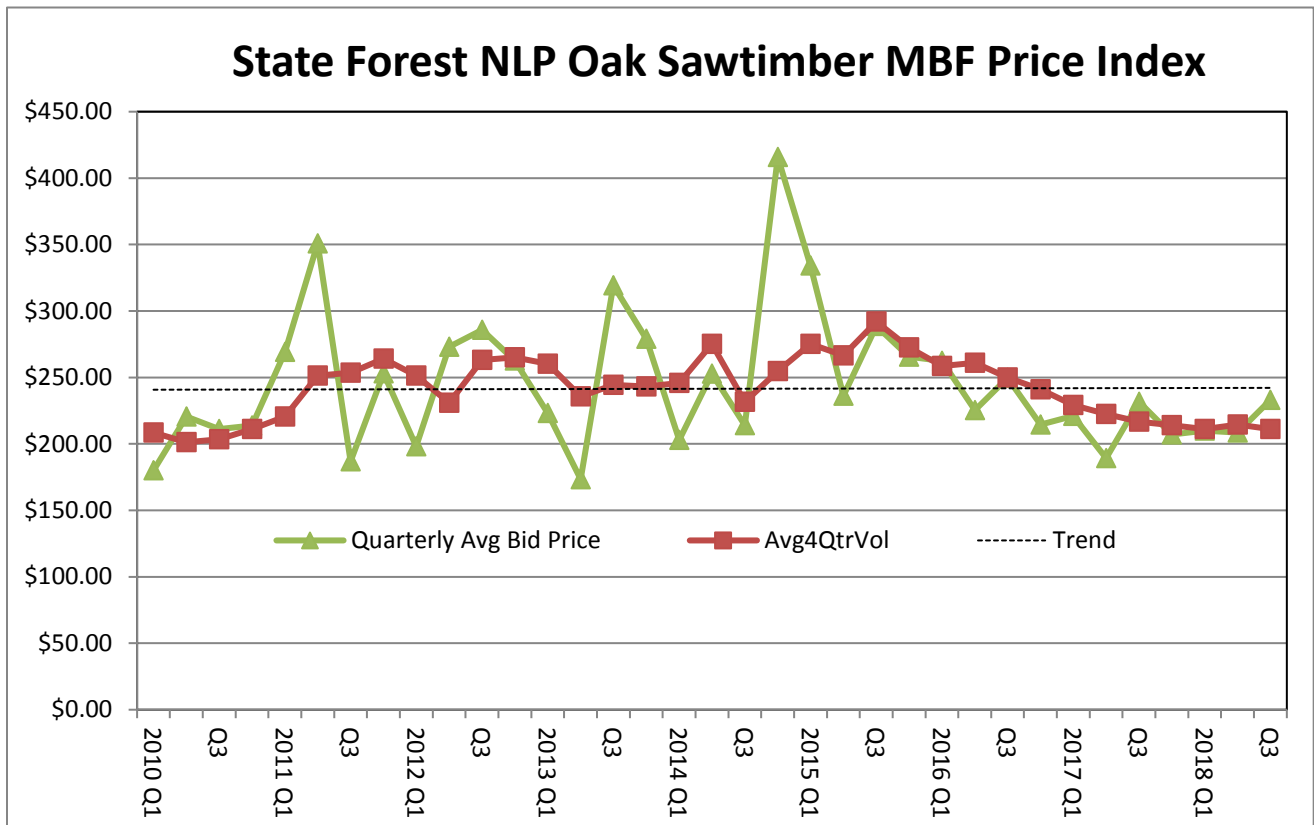
Jack pine 3rd quarter pulpwood cord prices rose in the UP – to \$66.32 from \$61.96 per cord – but fell in the NLP to \$20.59 from \$34.25 per cord. Quarter-to-quarter volume volatility continued in the 3<sup>rd</sup> quarter with UP sales shooting up to 8,300 cords from 4,700 and NLP sales tanking in a commensurate manner to 9,800 from 18,600.



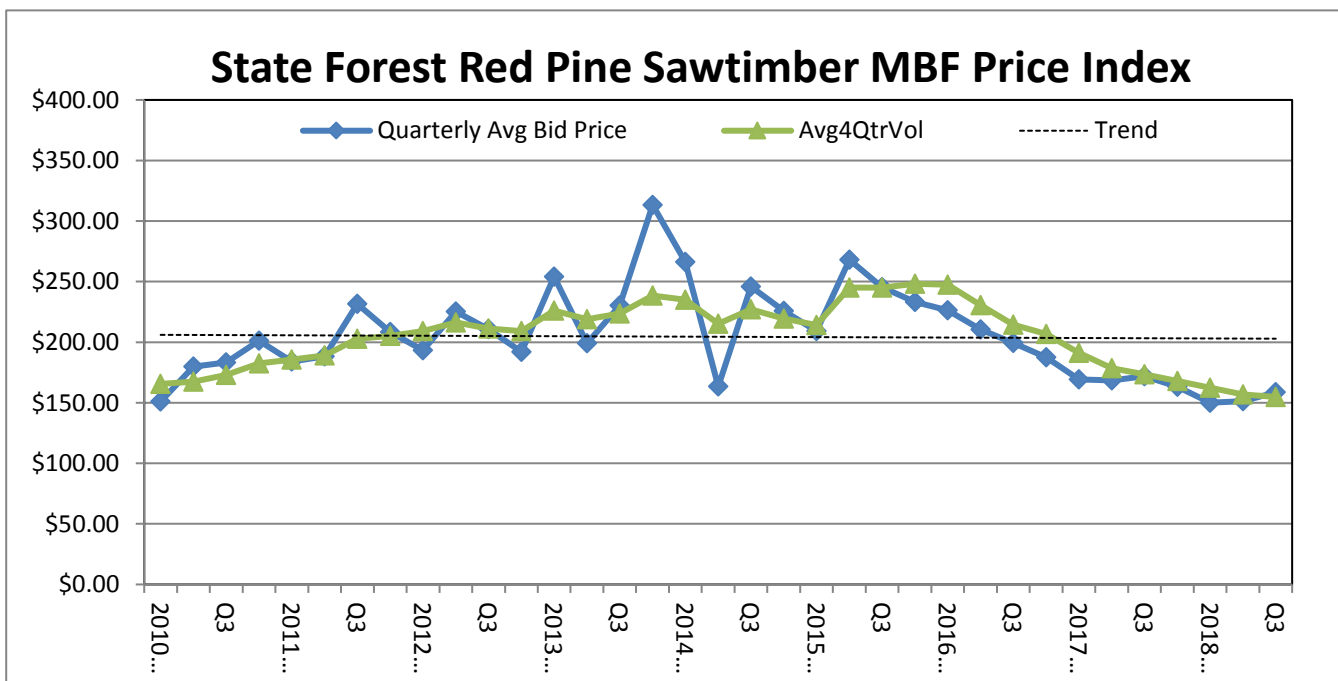
The NLP oak pulpwood price rose slightly in the 3<sup>rd</sup> quarter to \$20.47 per cord from an earlier \$18.03. This sector's 3<sup>rd</sup> quarter volume fell to 8,700 from 14,000 in the previous quarter. Both the current price and volumes lie below long-term trends for this market.



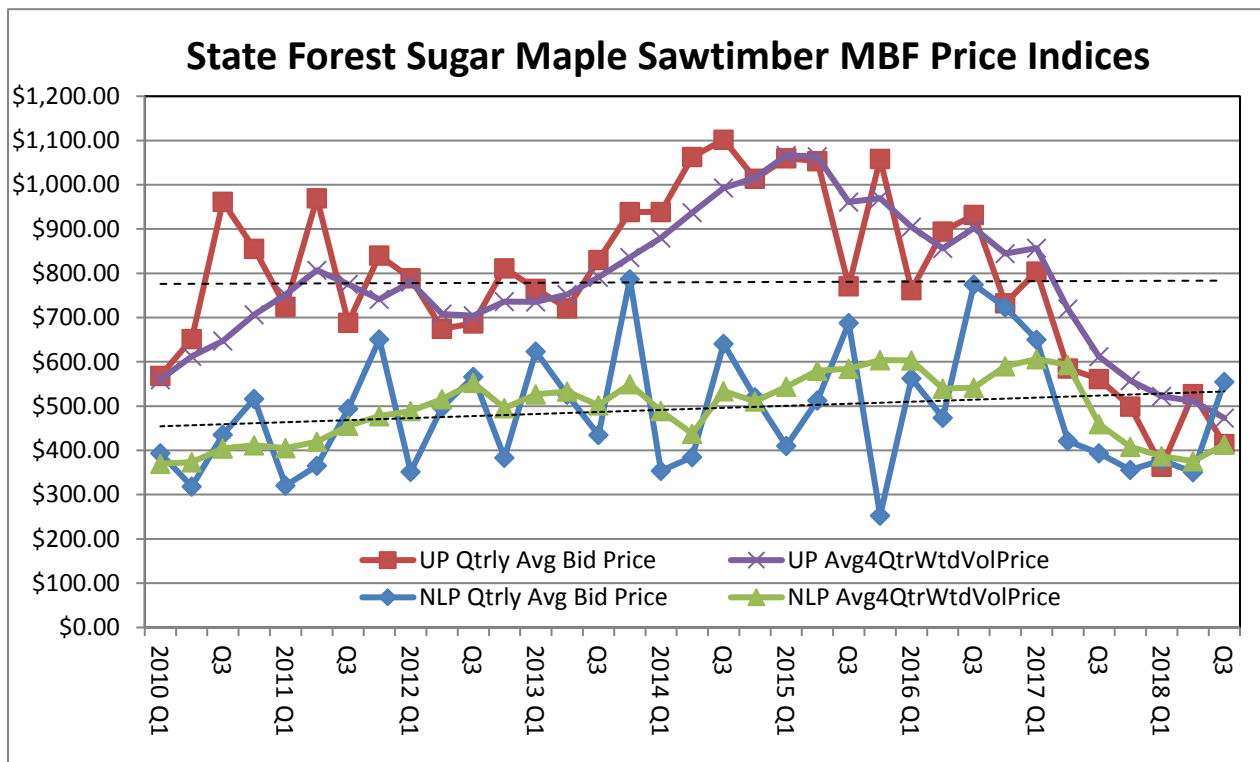
The "other hardwood pulpwood" per cord price fell for the second straight quarter, down to \$25.51 in the 3<sup>rd</sup> quarter from \$28.40 per cord. The record high average price of \$56.55 per cord in the 4<sup>th</sup> quarter of FY 2015 has proven short-lived with sub-\$30 the current norm. Bid species sale volume has mostly tracked the downward price trend as the 3<sup>rd</sup> quarter saw the exchange of 60,000 cords in this sector, compared with 79,000 cords in the 2<sup>nd</sup> quarter.



The NLP oak sawtimber prices bucked a general long-term downward trend by rising in the 3<sup>rd</sup> quarter to \$233.16 per mbf from \$208.52. Volume in this market was down nearly 50% in the quarter, however, with 1.6 mmbf sold in the 3<sup>rd</sup> quarter from 3.3 mmbf in the previous period.



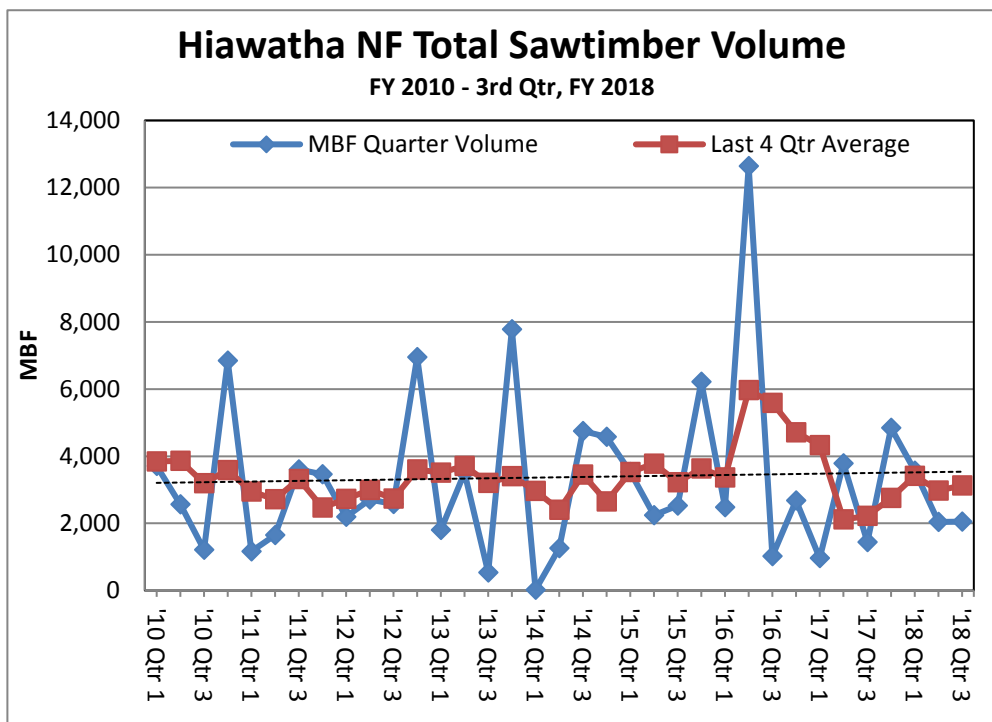
State Forest red pine sawtimber prices saw a slight gain in the 3<sup>rd</sup> quarter, going to \$158.65 from \$151.33 per mbf. This uptick lies below the long-term trend as it has now for 9 consecutive quarters. Volume for red pine sawtimber in the 3<sup>rd</sup> quarter declined significantly to 10.0 from 21.7 mmbf the quarter before. The current volume is close to the eight-year average around 8 mmbf.



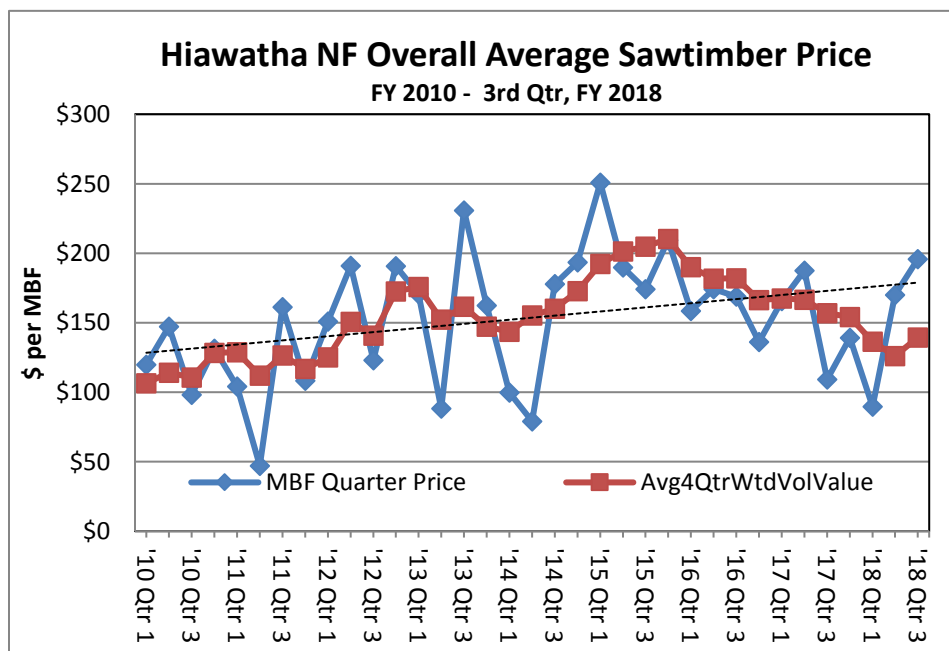
The average price for NLP sugar maple sawtimber experienced a significant increase in the 3<sup>rd</sup> quarter to \$554.83 from \$350.70 per mbf offsetting much of the sag in prices over the previous six quarters. This price increase mirrored a slight volume increase in NLP sugar maple sawtimber, i.e. to 1.62 from 1.56 mmbf. The average price for UP sugar maple sawtimber – at \$414.65 per mbf in the 3<sup>rd</sup> quarter, down from \$527.66 - follows the current trend of inter-peninsula price convergence for this species. The UP also saw a volume drop in sugar maple sawtimber to 1.0 mmbf in the 3<sup>rd</sup> quarter from 1.4 mmbf.

## Hiawatha National Forest Major Species Product Timber Sales, FY 2010 – 3<sup>rd</sup> Qtr, 2018

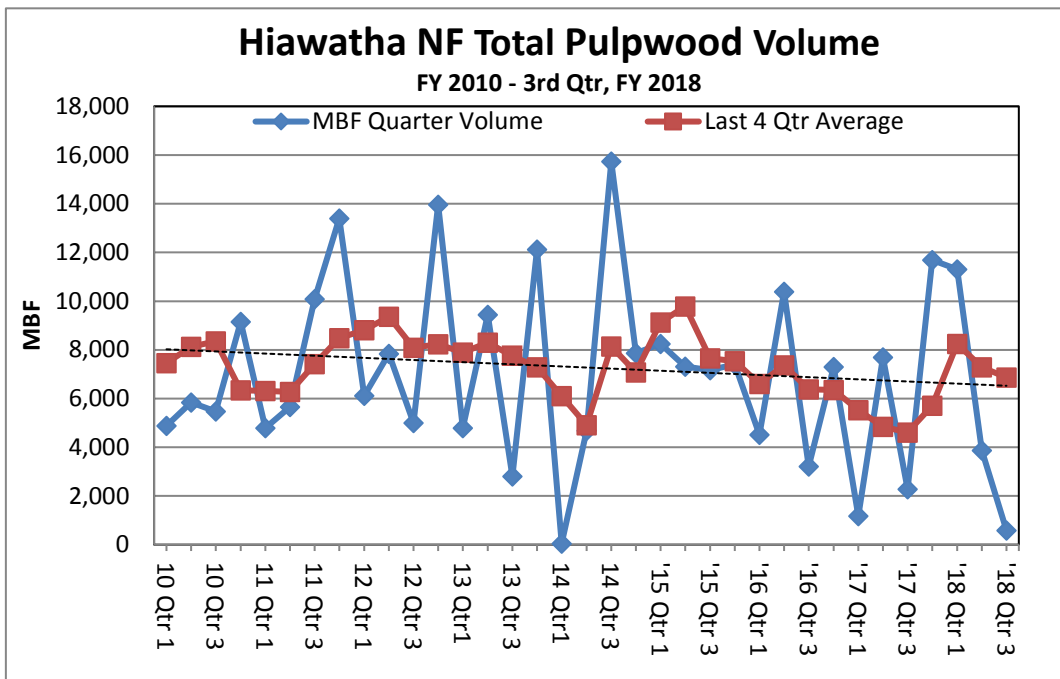
All graphs include a dotted trend line based upon the data set for the average of the most recent four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year (FY) from October 1 through September 30 (as does the MI DNR). The most recent data included here is for the 3<sup>rd</sup> quarter of FY 2018, covering April through June of 2018 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>



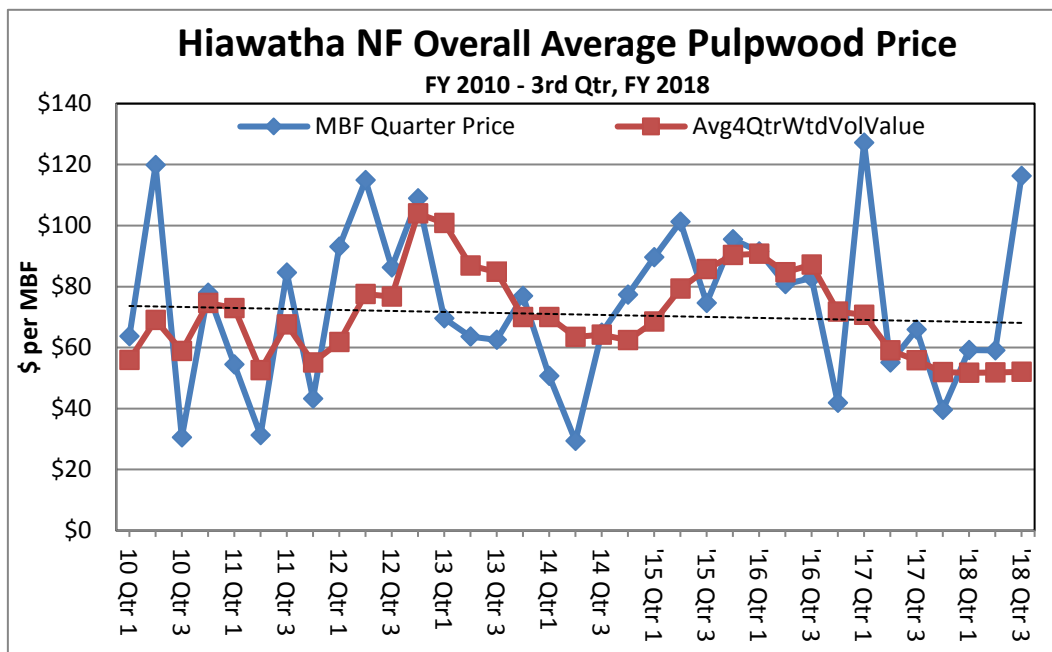
In the 3<sup>rd</sup> quarter, Hiawatha sawtimber sale volume was nearly unchanged at 2.052 mmbf, up a bit from 2.046 mmbf previously. This mark lies below the long-term volume trend of nearly 4.0 mmbf per quarter. Hiawatha has not experienced a quarter above 6.0 mmbf since the 2<sup>nd</sup> quarter of FY 2016, which was one of several sudden spikes in demand.



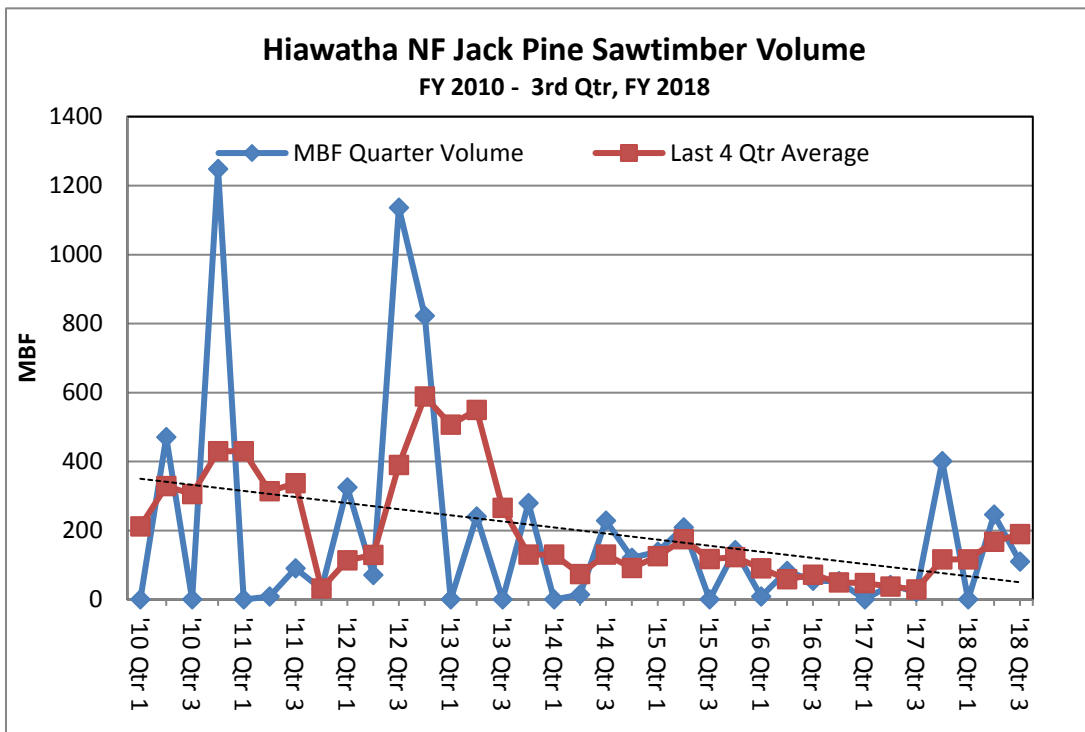
Although overall Hiawatha sawtimber demand has been sluggish, this unit's sawtimber prices were robust for the 2<sup>nd</sup> consecutive quarter and exceeded expectations. The average of \$196 per mbf puts the quarterly price back above the eight-year trend line and the four-quarter average back on an upward swing for the first time in 11 periods.



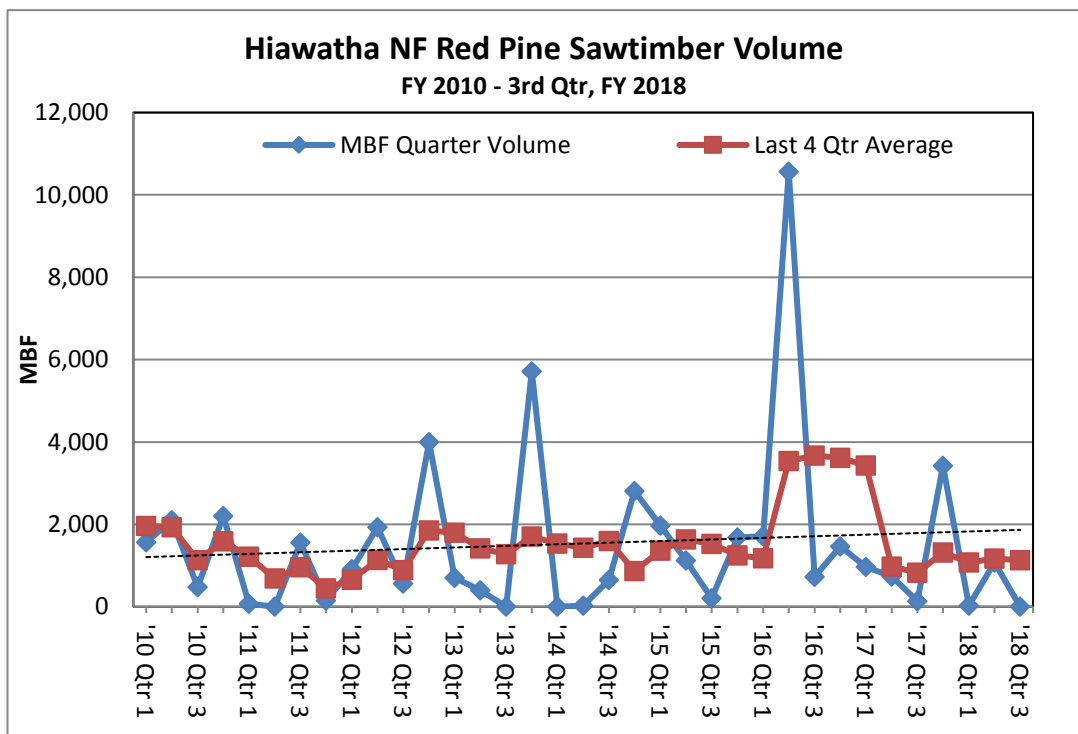
Total Hiawatha pulpwood volume tanked further in the 2nd quarter to a mere 590 mbf, flouting expectations for an upswing after such a steep tumble from 11.3 mmbf in Q1. Nevertheless, the swing-oriented history suggests that Hiawatha pulpwood volume will likely keep its cyclical nature and rebound in the near future.



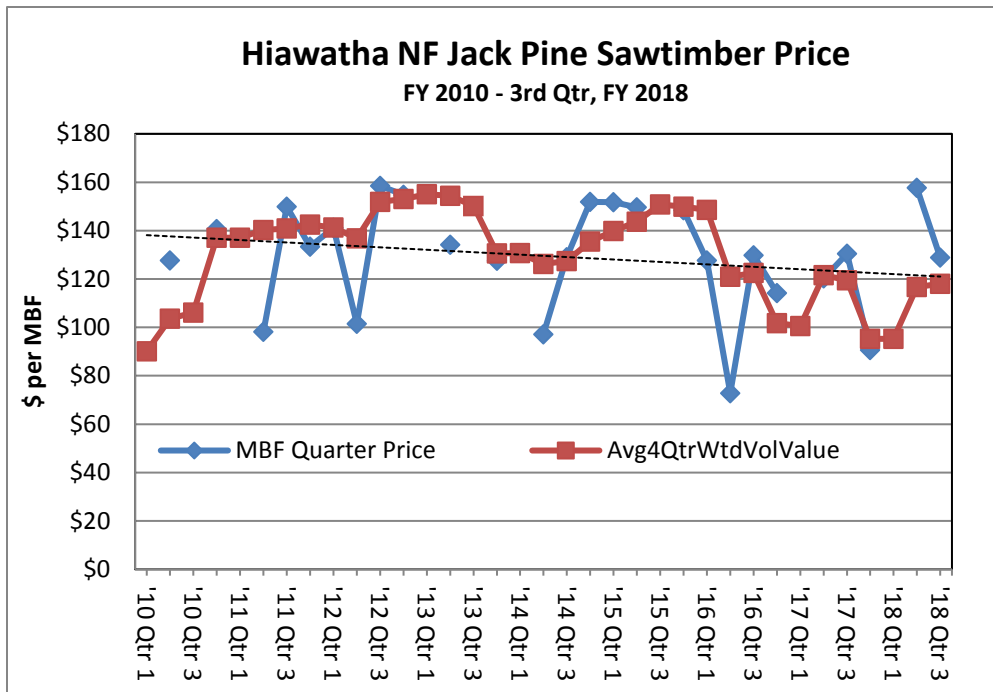
What little Hiawatha pulpwood did sell was at a decent price - \$116 per mbf, up from \$59 last quarter. This high price, though well above the eight-year trend line, is unlikely to bend the price curve upward too much due to the low volume involved and several recent quarters in the \$40-60 per mbf range.



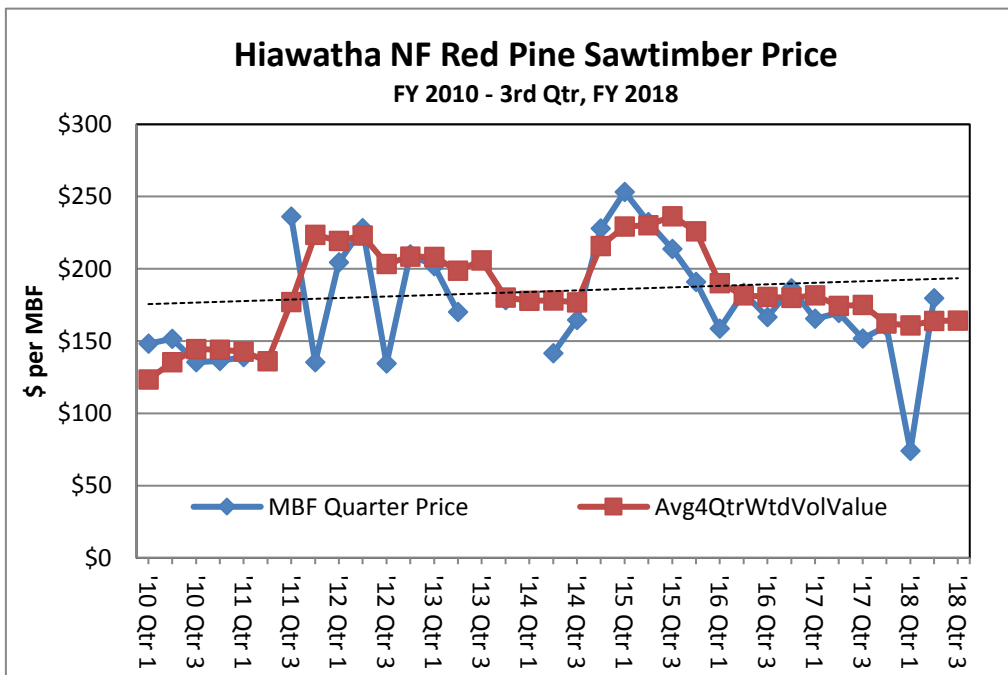
Jack pine sawtimber sale volume in the Hiawatha unit fell to 110 mbf in the 3<sup>rd</sup> quarter from the previous quarter's 246. After major volume increases in Q4 of FY 2010 and Q3 of FY 2012, jack pine volume has gradually declined to a situation with minimal or no sales in most quarters. The eight-year trend line is now below 100 mbf per quarter.



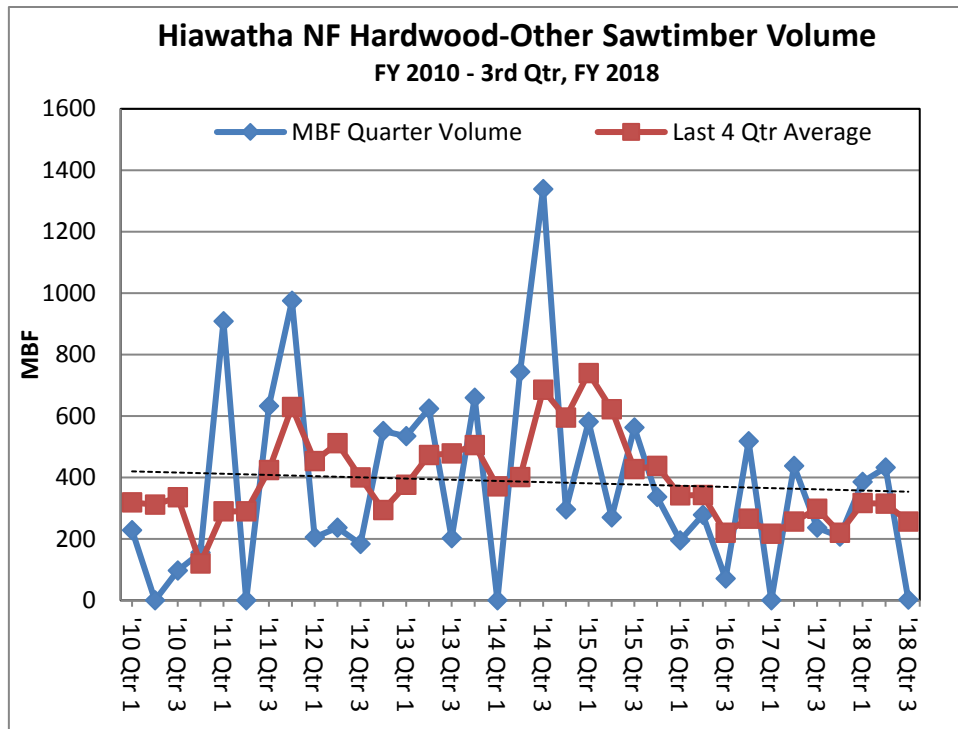
Although generally a more significant species in the Hiawatha than its jack pine counterpart, red pine sawtimber volume was exceptionally slow this quarter at 0 mbf, down sharply from 1.1 mmbf in the 2<sup>nd</sup> quarter. Sales continue to swing between extreme highs and lows, and with eight of the past nine quarters below the long-term average, an exceptionally strong quarter appears overdue.



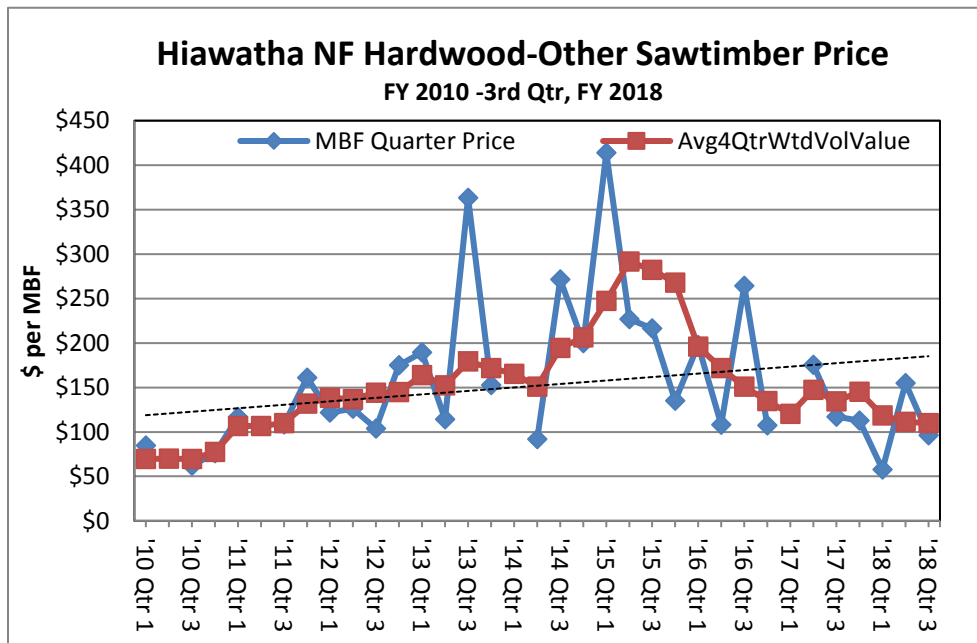
The 3rd quarter Hiawatha average jack pine sawtimber price was robust at \$129 per mbf but down from last quarter's \$158. Jack pine prices have remained solid, but the average has dropped due to minimal to zero sale volumes in numerous quarters.



Due to no sales in the 3<sup>rd</sup> quarter, there is no average price for Hiawatha red pine. Recent quarters since Q1 of FY 2016, including last quarter's \$180 per mbf, have all been below the eight-year trend price, and it remains to be seen if solid volumes and prices will return in the form of a Q4 spike.

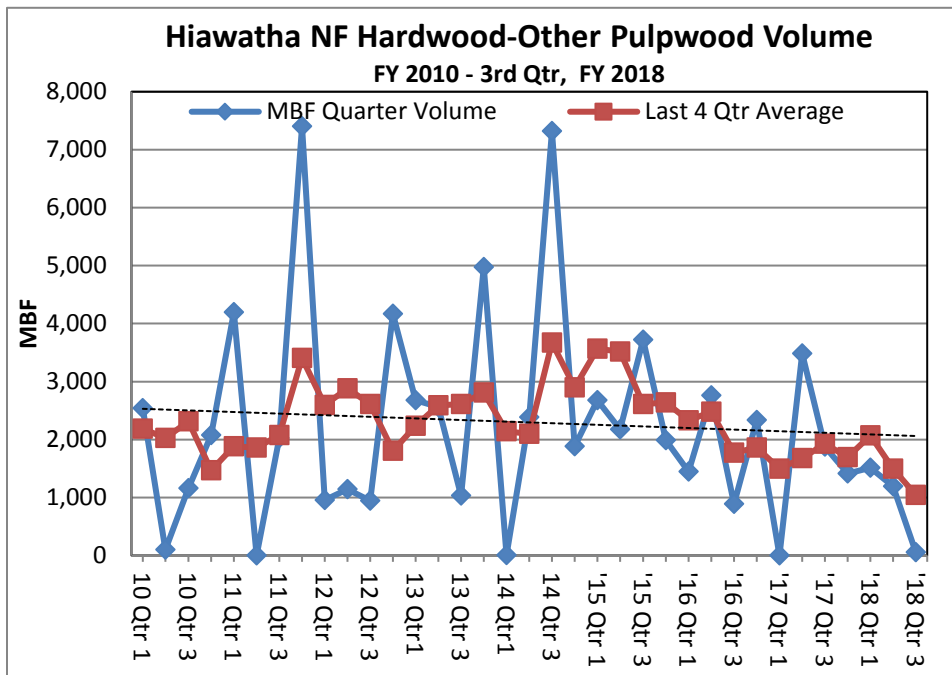


Like jack and red pine, the category Hiawatha hardwood-other sawtimber was not spared a slow quarter. Only 2 mbf were sold, following an above-average 432 mbf sold in the 2<sup>nd</sup> quarter. A string of low-volume quarters under 400 mbf in FY 2016 and 2017 turned the eight-year sale volume trend somewhat negative.

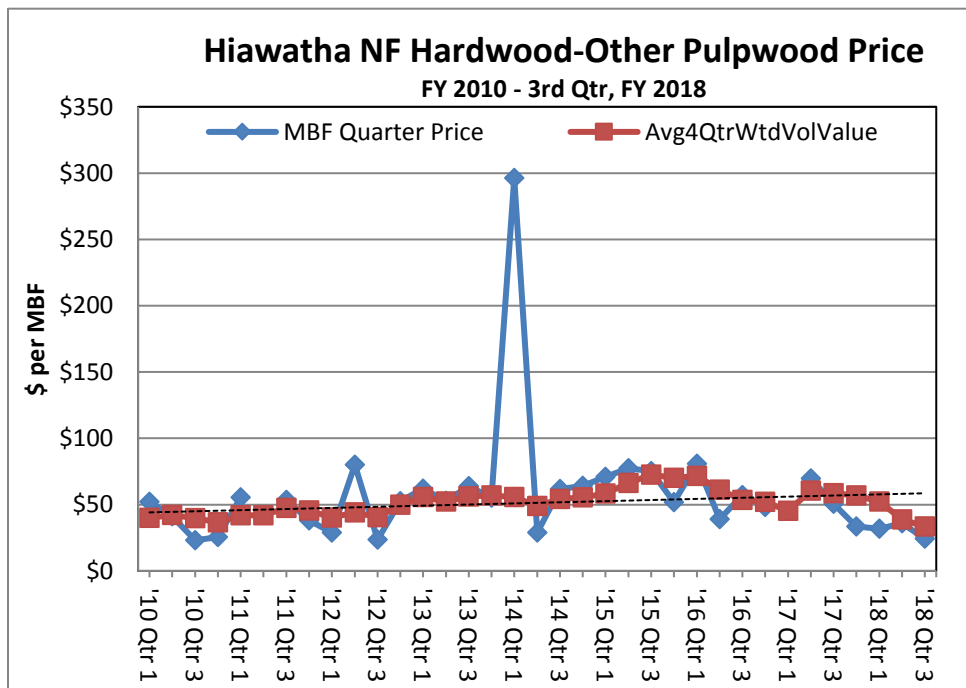


Hiawatha's hardwood-other sawtimber price adhered to the recent relatively low-price trend, falling to \$96 per mbf in the 3<sup>rd</sup> quarter from \$155. This is down from peaks of \$264 per mbf in Q3 of FY 2016 and \$414 per mbf in Q1 of FY 2015. Prices are likely to rise again once volume picks up from near zero.

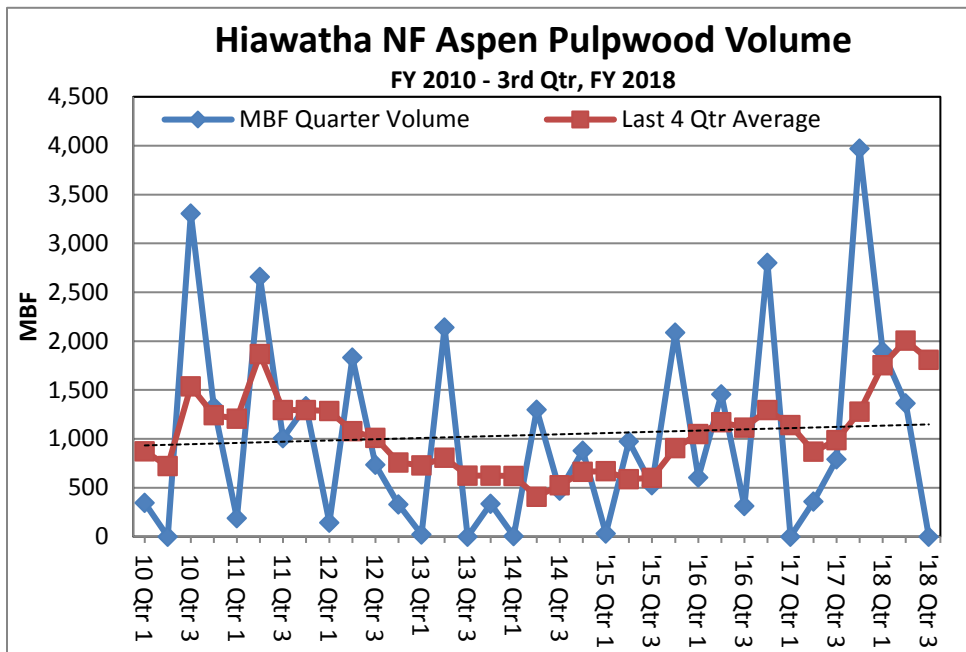




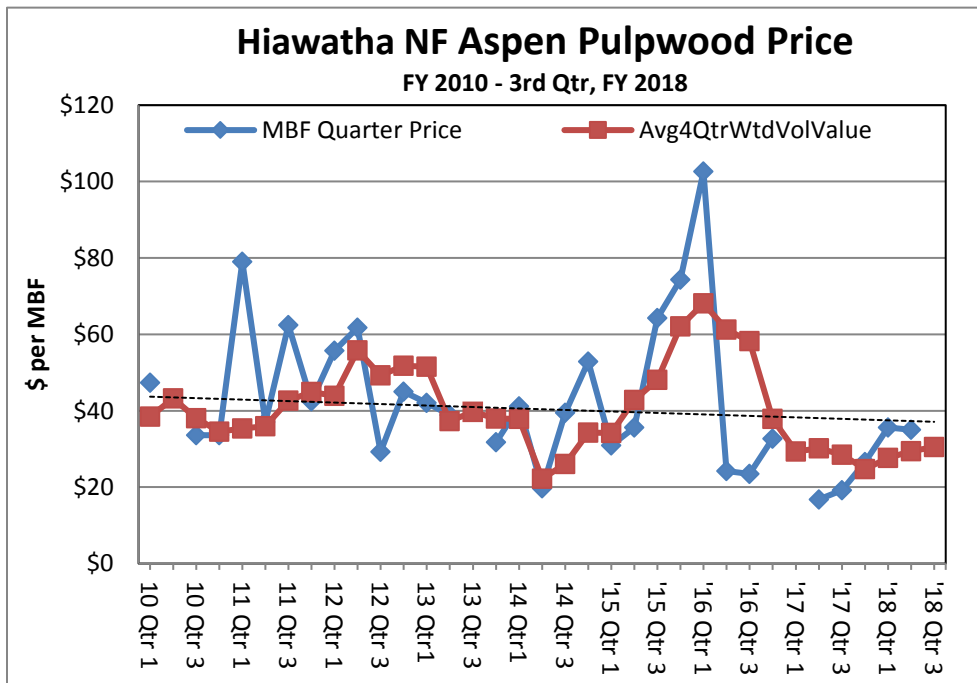
The Hiawatha hardwood-other pulpwood sale volume fared similar to its sawtimber counterpart, coming in at a miniscule 57 mbf in the 3<sup>rd</sup> quarter, sliding from 1.2 mmbf in the 2<sup>nd</sup> quarter. Before this quarter, market volatility had appeared to be flattening with fewer dramatic up- or downturns, but this is not the case. This month's low figure further depresses the recent downward volume trend.



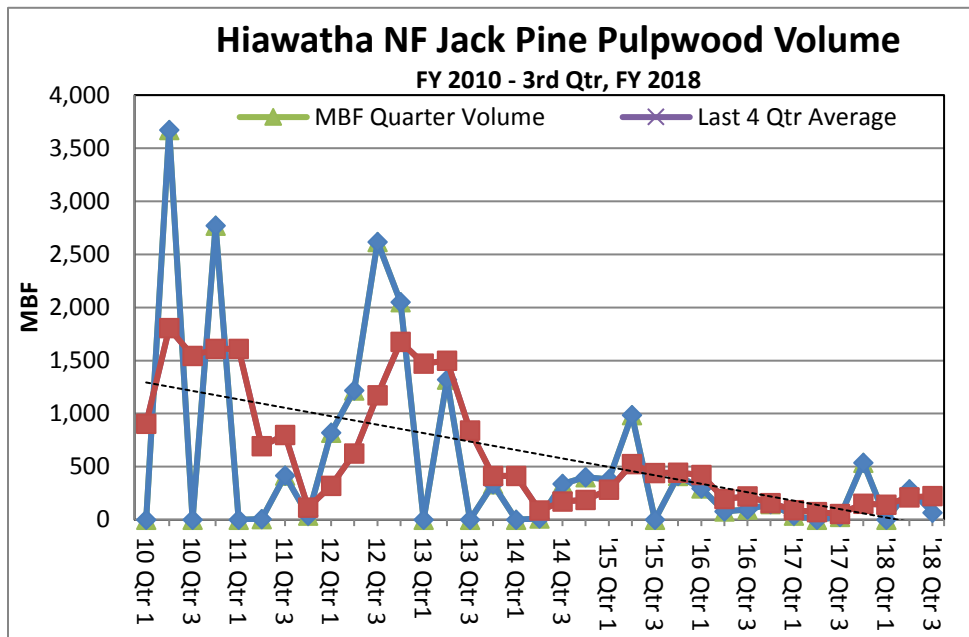
Lower volume in Hiawatha hardwood-other pulpwood also meant a lower average price in the category. The 3<sup>rd</sup> quarter price in this category fell \$12 per mbf from last quarter, resting at \$24. This is the 5<sup>th</sup> consecutive quarter below the eight-year price trend, which will pull the average lower.



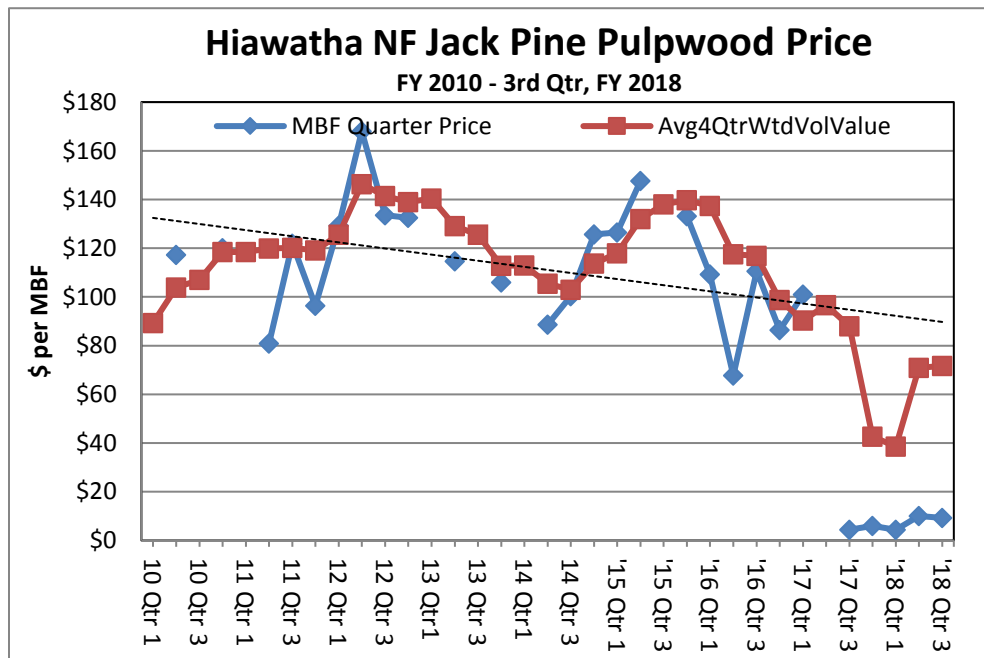
Nor was Hiawatha aspen pulpwood spared the big volume drop-off. This category had no sales in the 3<sup>rd</sup> quarter, surprising given the above average figure of 1.4 mmbf in the previous period and two strong periods before that, including a record of 4 mmbf in the 4<sup>th</sup> quarter of FY 2017. Aspen has a track record of strong 4<sup>th</sup> quarters, meaning that a strong result in the upcoming 4<sup>th</sup> quarter is probable.



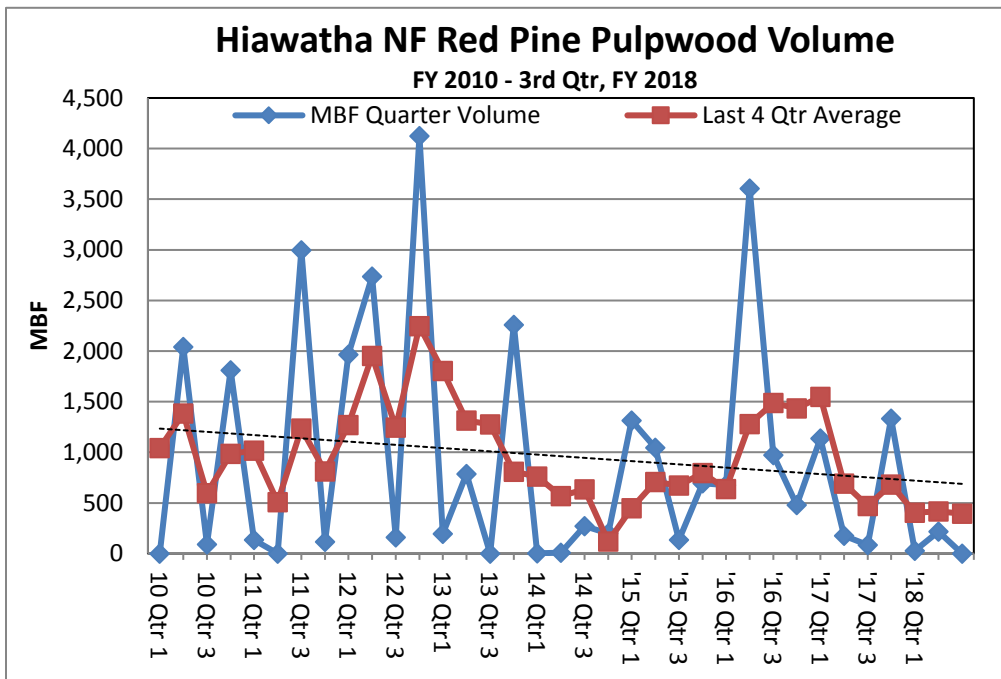
No sales for Hiawatha aspen pulpwood in the 3<sup>rd</sup> quarter meant no non-zero average price, of course. This breaks a generally upward trend over the past four quarters, which occurred against the backdrop of a longer downward trend in prices. A potential cyclical 4<sup>th</sup> quarter spike in sales may cause a rebound in prices.



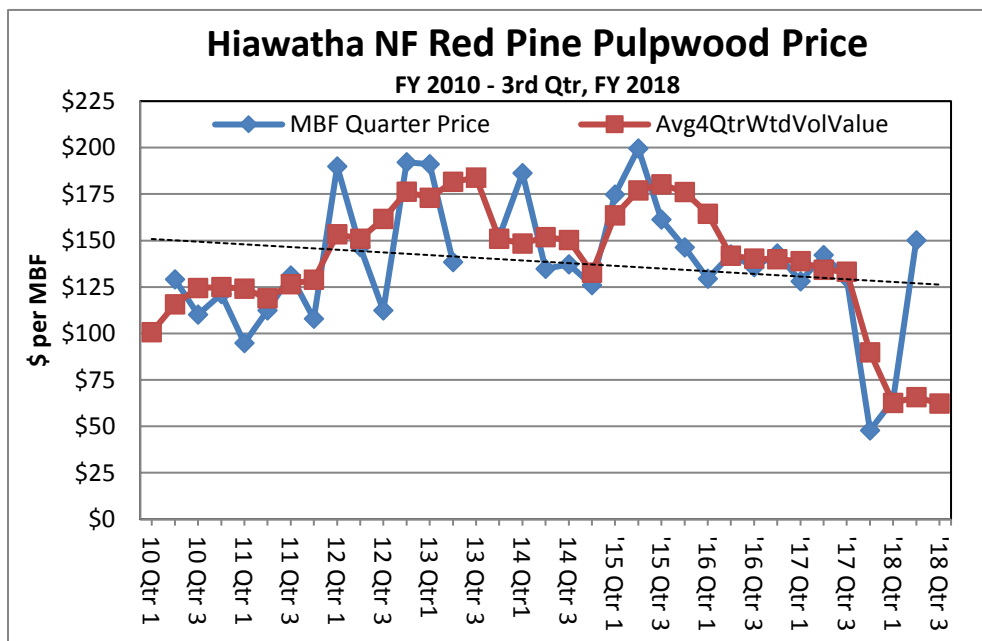
Hiawatha jack pine pulpwood sales sailed downward to a negligible 66 mbf in the 3<sup>rd</sup> quarter from a slightly less negligible figure of 287 mbf Jack pine's presence has been diminishing, nearly disappearing in both sawtimber and pulpwood categories. Besides two mini spikes, volume has been below 500 mbf per quarter since Q3 of FY 2013.



Hiawatha jack pine pulpwood prices have not maintained their high values as well as in the sawtimber sector. 3<sup>rd</sup> quarter prices held nearly steady at \$9 per mbf, down under \$1 from the previous quarter. The recent \$10 and under price trend has been ongoing for five straight quarters, a long way down from prices from \$68 to \$148 over the past three years. Because of this precipitous drop and low sale volumes, it is difficult to generalize about long-term price trends in this category.



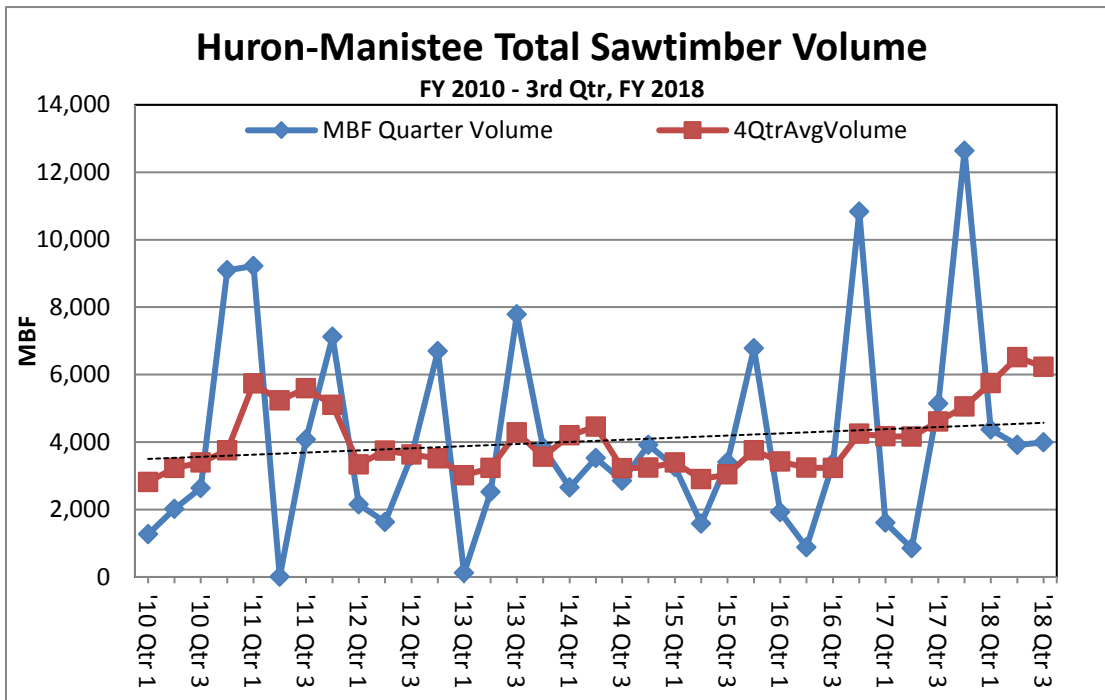
The Hiawatha unit's mainstay red pine tumbled – but not far – down to zero for this pulpwood sale volume category, just as it did in the sawtimber sector. Last month's figure was not much better, a negligible 26 mbf. It will be interesting to see if the market can go from bear to bull and show a rebound next quarter because high sales volume is not too far in the rearview mirror. Q2 of FY 2016 had red pine pulpwood volume up to a near-record 3.6 mmbf, a far cry from this period's result. Nevertheless, the eight-year trend is heading slightly downward, not a good sign for a potential market rebound.



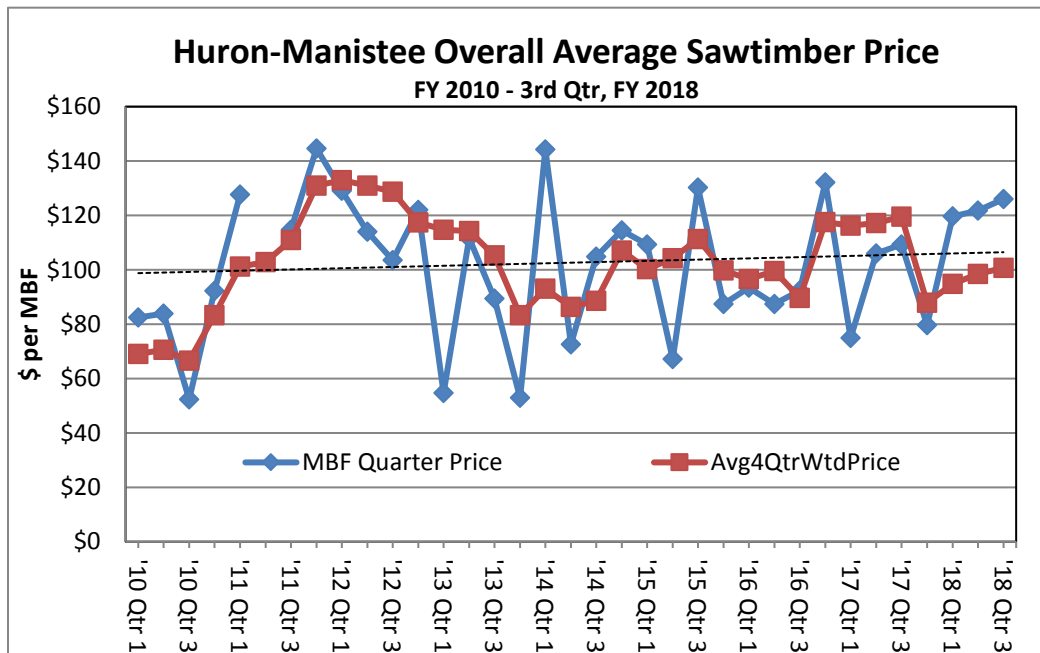
No Q3 sales in the Hiawatha red pine pulpwood market mean no price to report. Last month's price level – from a low-volume quarter – was a decent \$150 per mbf, but recent volatility has crept in on relatively low volumes as of late.

## Huron-Manistee National Forest Major Species Product Timber Sales, FY 2010 – 3rd Qtr, 2018

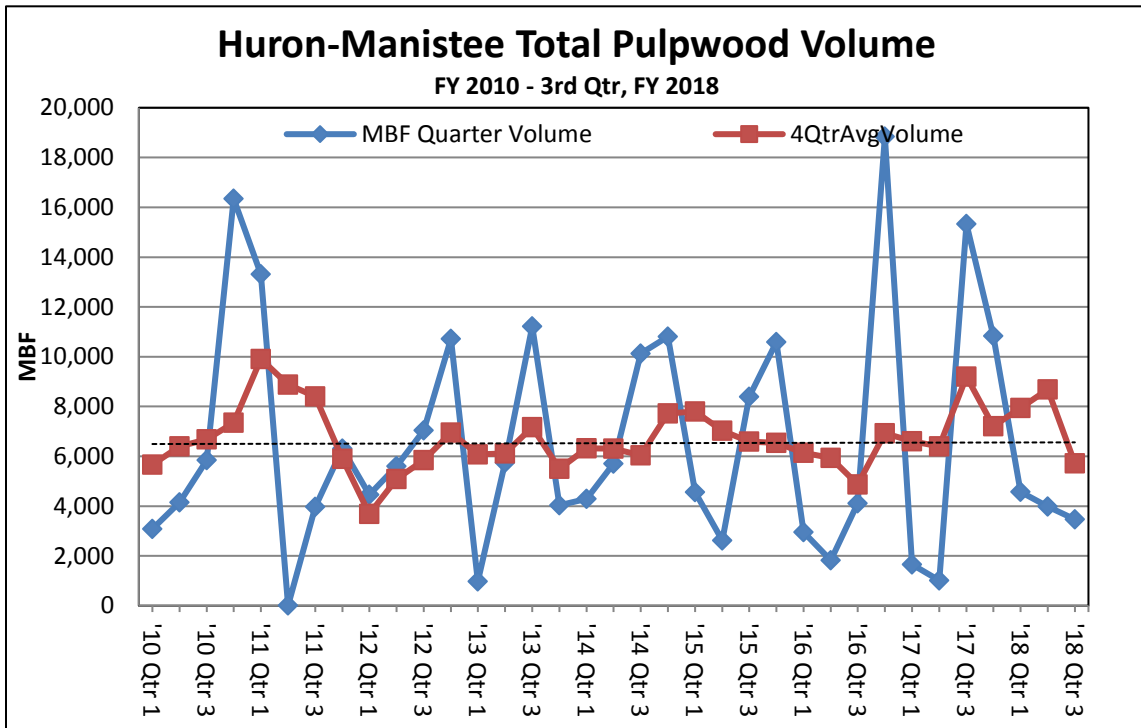
Graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter. The National Forests follow the federal fiscal year from October 1 through September 30. The most recent data included here is for the 3<sup>rd</sup> quarter of FY 2018 (April through June, 2018). 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>



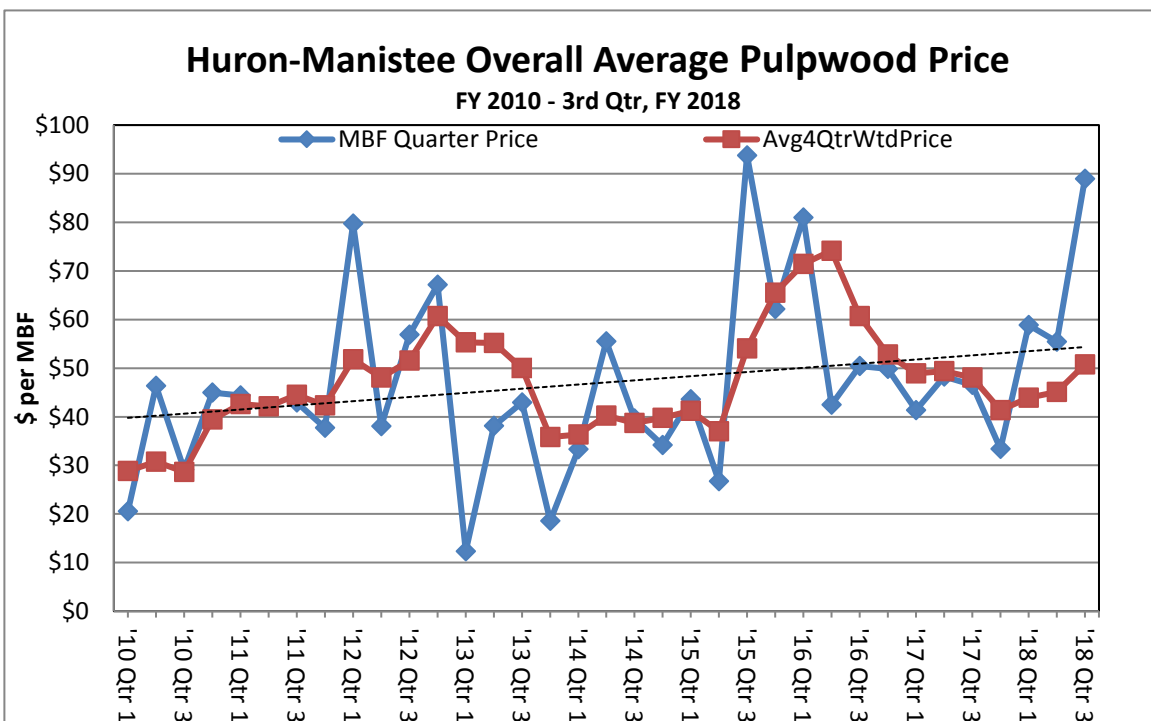
Although a larger increase was expected, the Huron-Manistee (H-M) sawtimber sale volume only rose marginally in the 3<sup>rd</sup> quarter to 3.99 mmbf from 3.91 mmbf in the 2<sup>nd</sup> quarter. Historically 4<sup>th</sup> quarter results are often the highest and sale volumes are cyclical.



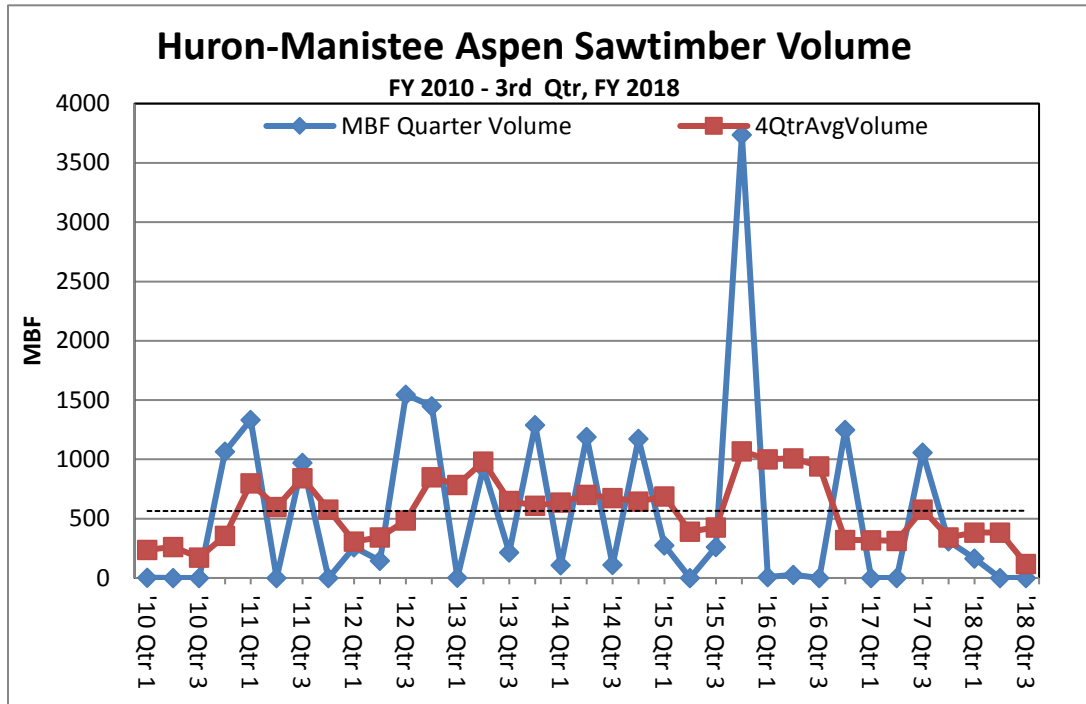
A slightly higher 3rd quarter H-M overall average sawtimber price - \$126.03 per mbf vs. \$121.72 previously - accompanied the just mentioned minor volume increase. In the final quarter of FY 2017, prices in this market averaged only \$80 per mbf, and the current average price is above the eight-year price average just over \$100. Generally, red pine accounts for well over half of the H-M sawtimber sale volume and is the major driver of the overall average sawtimber price.



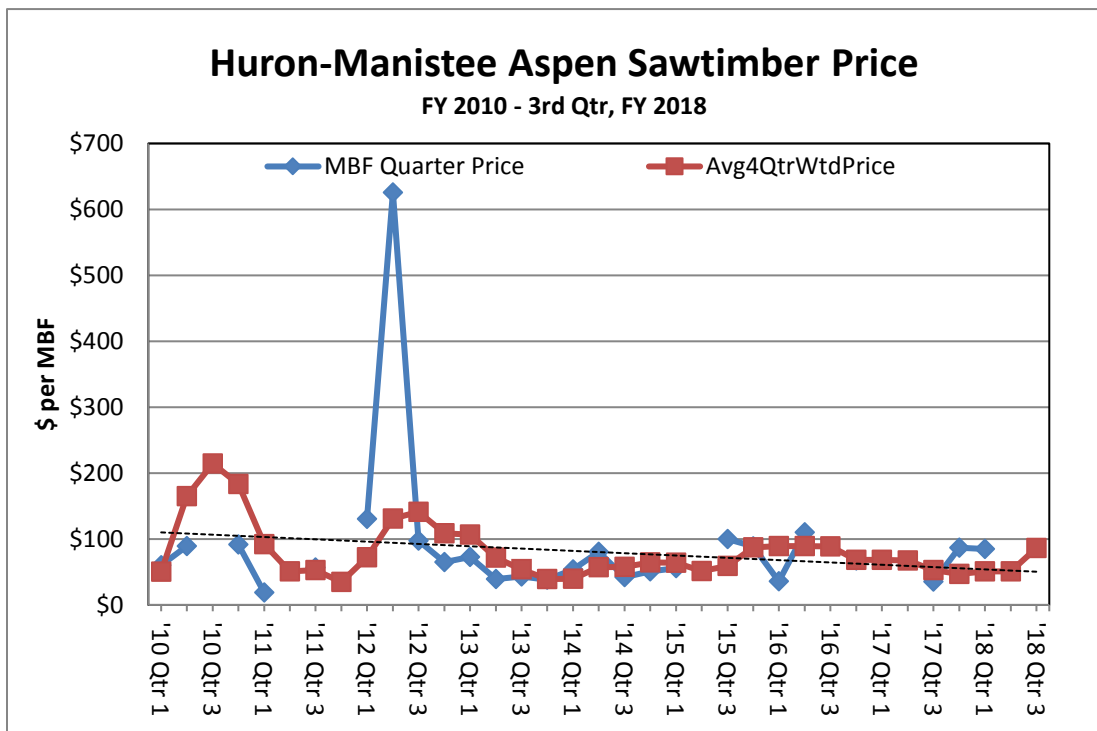
The 3<sup>rd</sup> quarter tally for H-M pulpwood sale volume shrunk for the 4<sup>th</sup> consecutive period to 3.5 from 4.0 mmbf. Over the past several years, this category has shown regular cycles, with the highest values in the 3<sup>rd</sup> or 4<sup>th</sup> quarter, meaning that the next quarter may see an upward trajectory once again. Despite the swings, the long-term trend remains quite flat and values have been commonly either well above or well below the long-term average price.



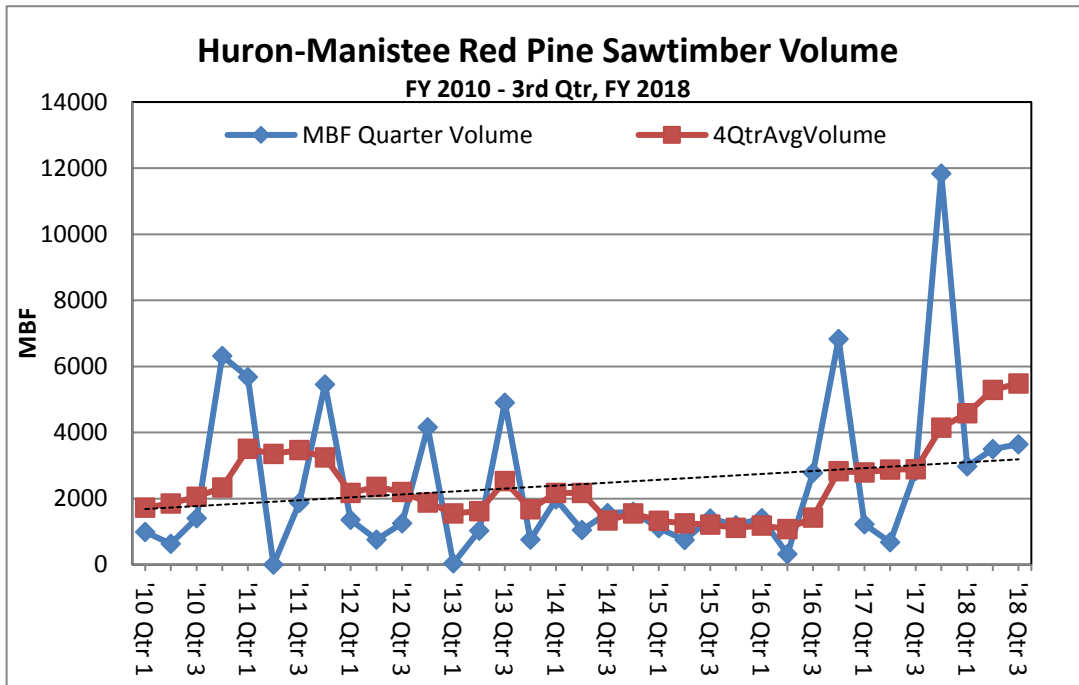
The H-M pulpwood prices fared nicely in the face of a volume decrease in the category. The average price in the 3<sup>rd</sup> quarter – thanks primarily to high bidding for red pine pulpwood - shot up to \$89 from \$55 per mbf. Average sale price in this category was as low as \$33 per mbf just three quarters ago but as high as \$94 per mbf in 2015. Nevertheless, H-M pulpwood prices are not as strongly cyclical with the distinctive quarterly pattern as are other forest products of the National Forests.



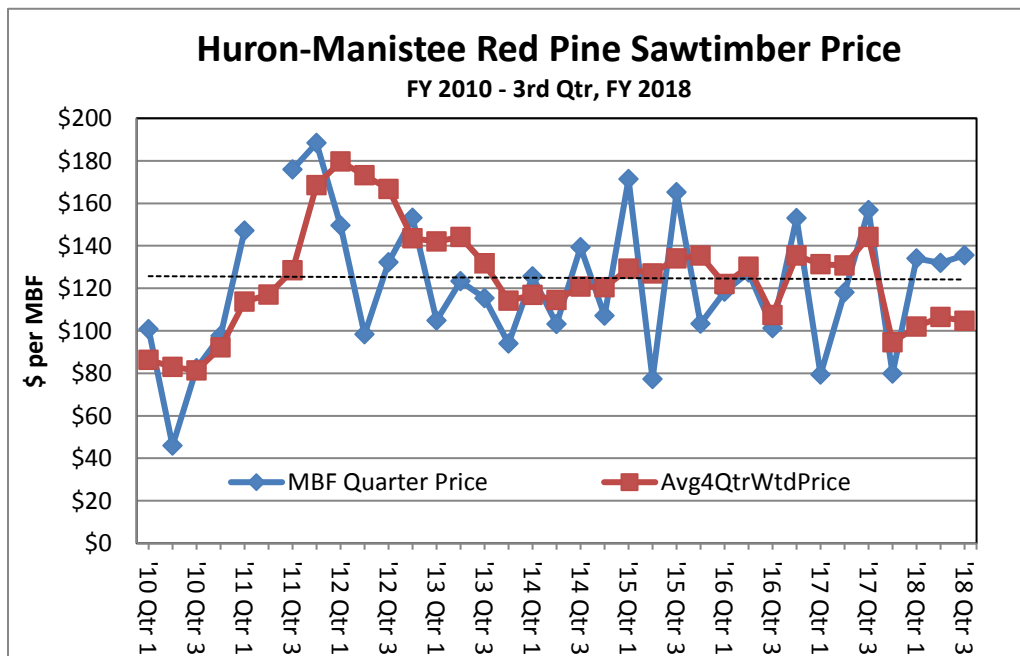
As in previous quarter, the 3<sup>rd</sup> quarter saw no sale volume in the H-M aspen sawtimber market. Since the 1<sup>st</sup> quarter of FY 2016, sale volume for aspen from H-M was at or near zero for three quarters, followed by minor spikes to 1250 mbf in the 4<sup>th</sup> quarter of 2016 and 1058 mbf in the 3<sup>rd</sup> quarter of 2017, and finally the recent decline to zero once again.



Because of no sales, aspen sawtimber has no price for the 3rd quarter. The period with notable sale volume was in the 4<sup>th</sup> quarter of FY 2015 when the volume jumped to 3.7mmbf and the price averaged close to \$89 per mbf. Because many of the quarters have had little or no sale volume, reported prices are insufficient to draw significant conclusions about the data.

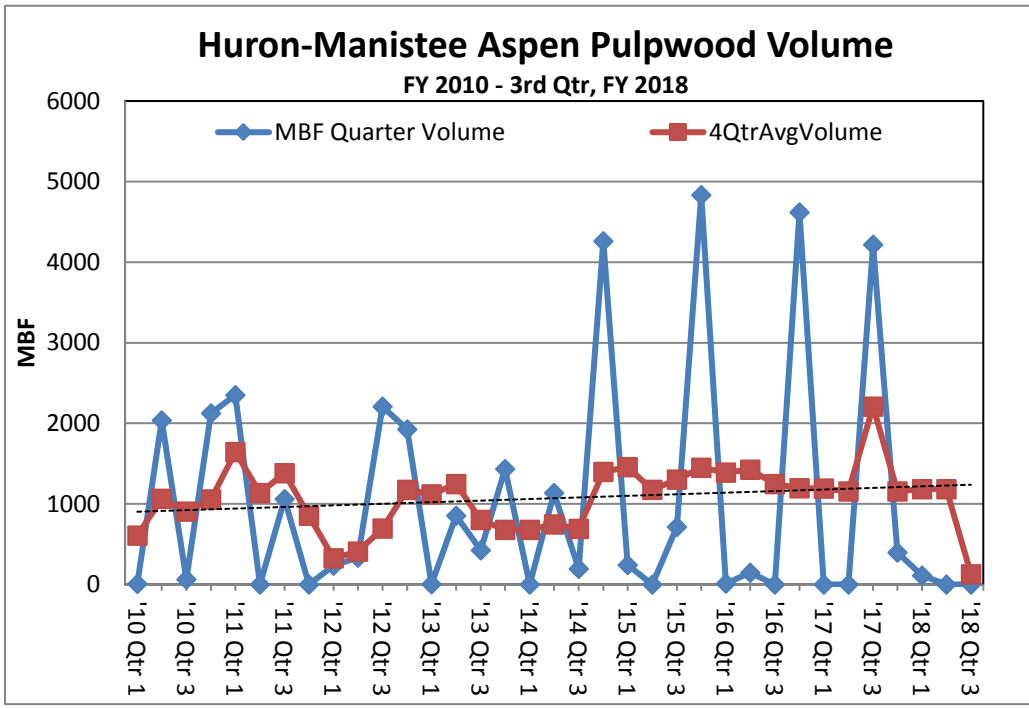


'Business as usual' best describes the 3<sup>rd</sup> quarter result of 3.6 mmbf for H-M red pine sawtimber volume. Climbing just slightly from last quarter's 3.5 mmbf and hugging the upward sloping long-term trend line, the past three quarters have been stable. Before the record 4th quarter FY 2017 sales, there had been a slight downward sale volume trend, but the 4th quarter flipped that to an increasing trend.

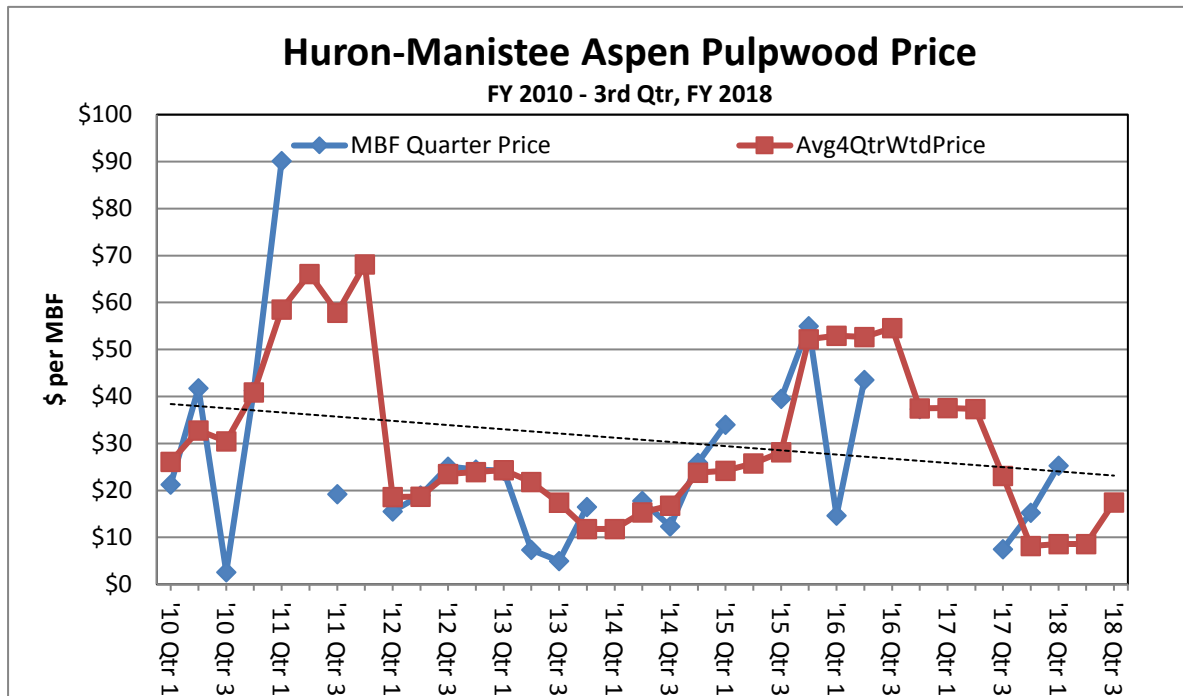


Stability in H-M red pine sawtimber volume was mirrored in the H-M Red pine sawtimber prices, which gained \$2 per mbf to \$136. After significant price volatility with quarters from between roughly \$80 and \$160 for several years now, a different trend toward stability has set in. It remains to be seen if the stability remains or if the previous volatility returns.

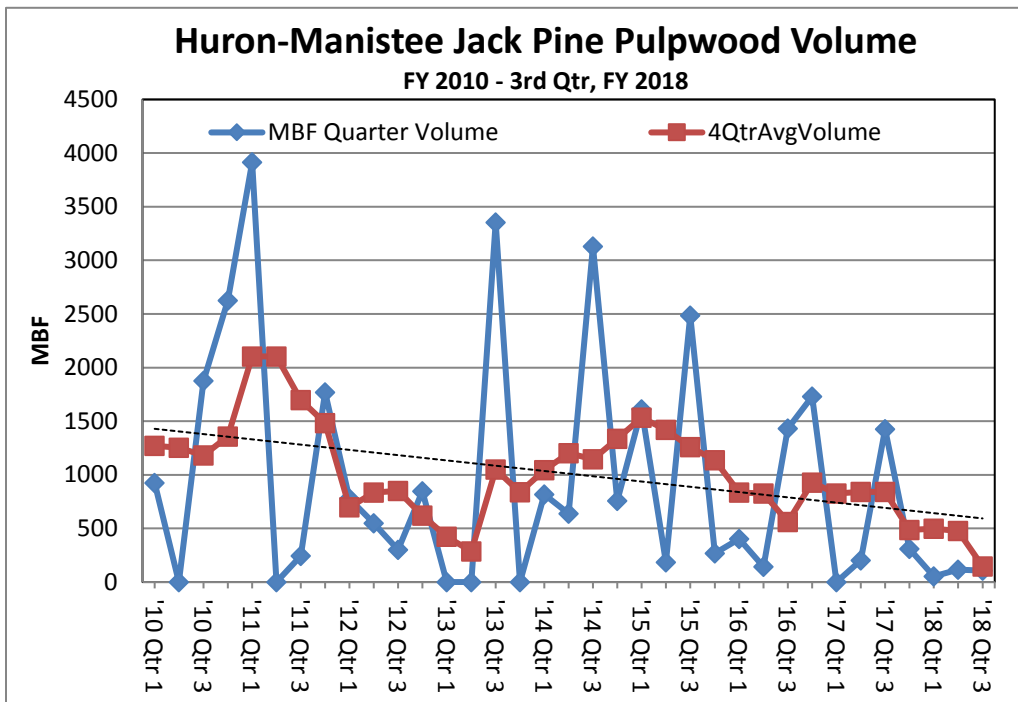




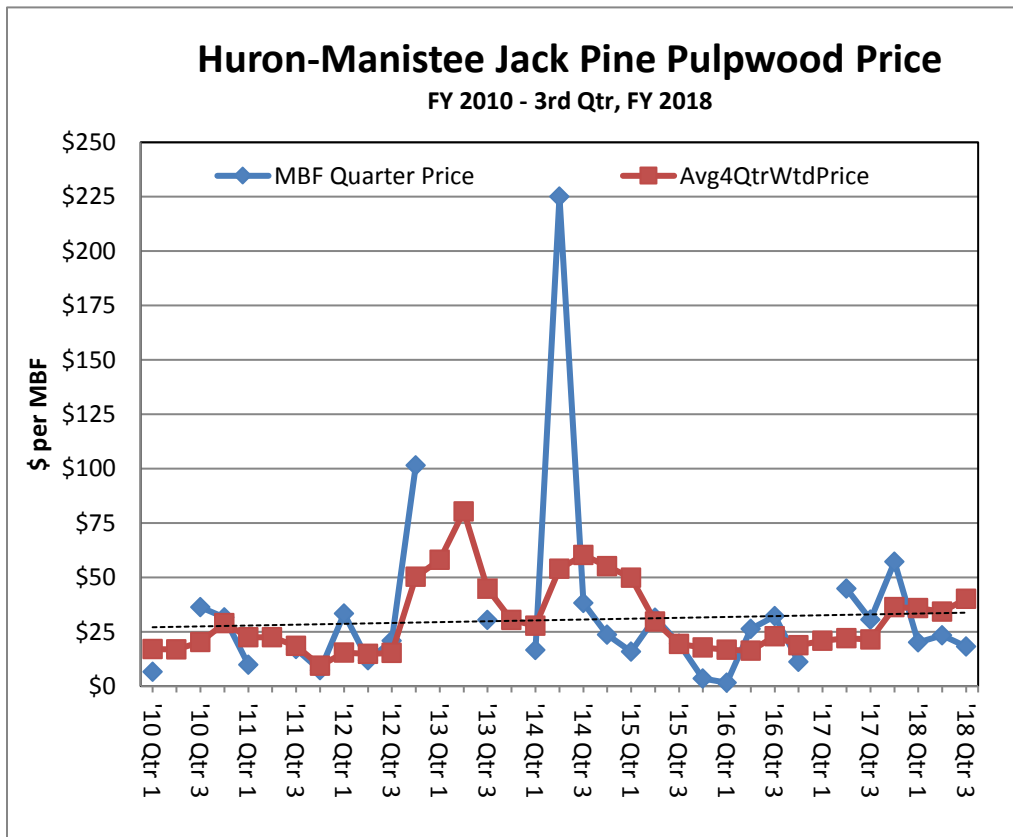
There were no sales of H-M aspen pulpwood in either the current 3<sup>rd</sup> or the previous the 2<sup>nd</sup> quarters. Since the 4<sup>th</sup> quarter of FY 2015, sale volume in this segment spiked each 4<sup>th</sup> (or 3<sup>rd</sup>) quarter for four years, followed by negligible volume, but that pattern broke in FY 2017. It will be surprising if the upcoming 4<sup>th</sup> quarter does not once again experience a sale volume in excess of 4 mmbf after four periods of sputtering demand.



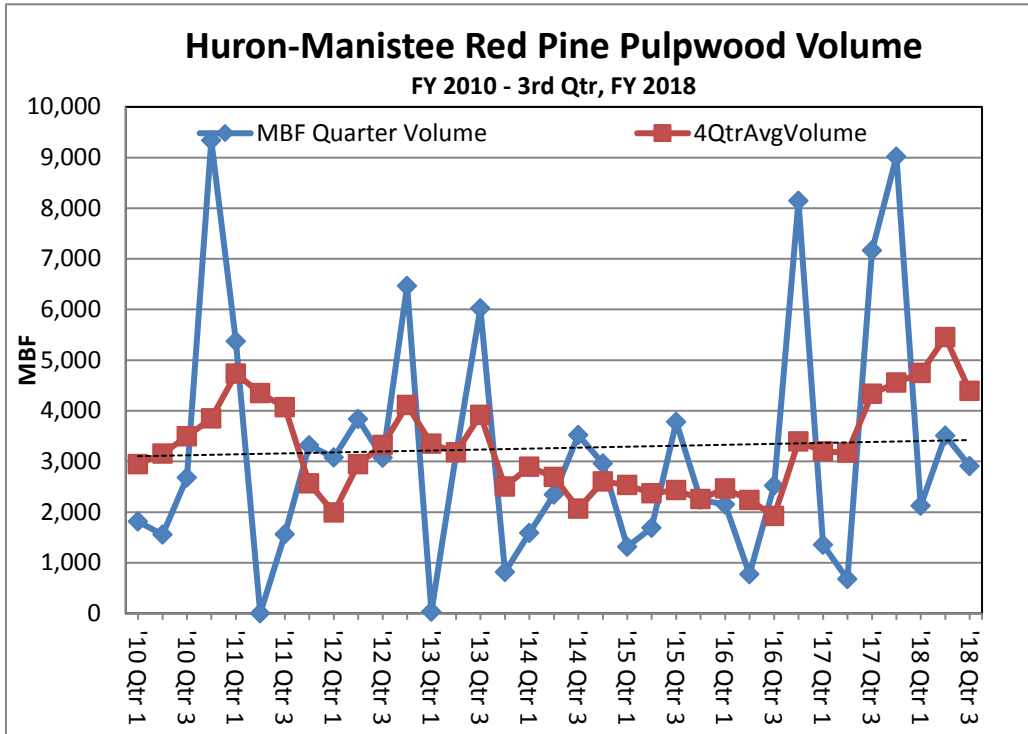
Because of lack of sales, H-M had no aspen pulpwood prices for the 3<sup>rd</sup> quarter. The eight-year price trend is sloping sharply downward after a string of quarters with low or no sale volumes.



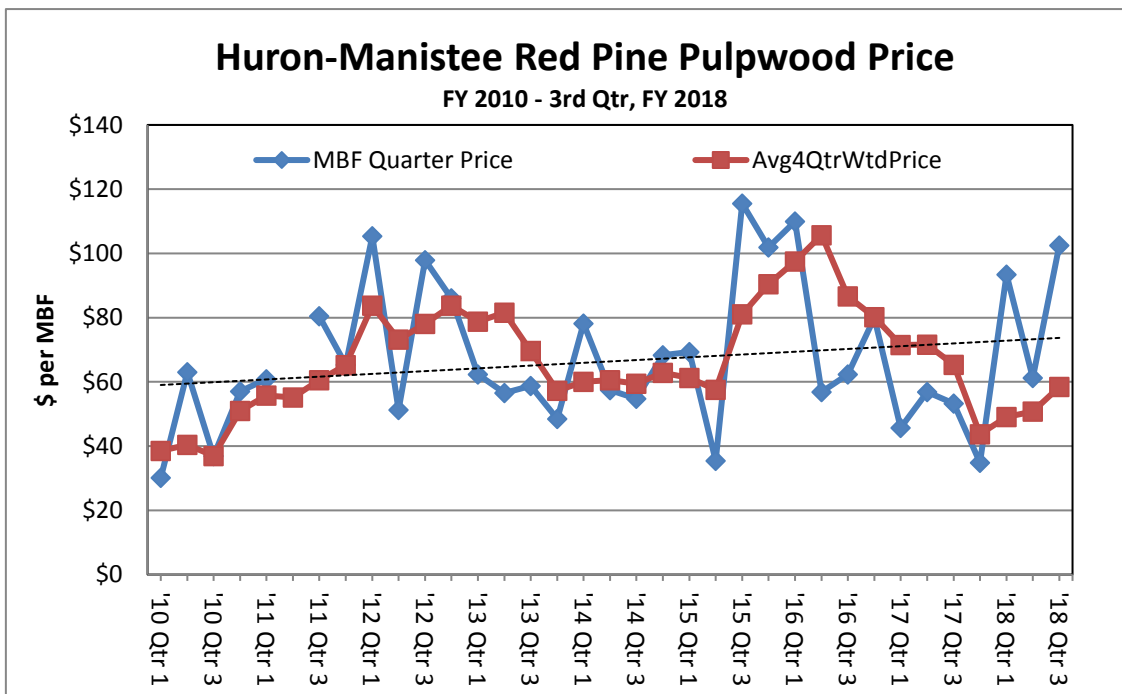
Like its H-M red pine counterpart, H-M jack pine pulpwood sale volume was a minor 147 mbf in the 3rd quarter. Both the eight-year trend line and the cyclical 3<sup>rd</sup> quarter sales spikes are declining gradually over time, and this 3<sup>rd</sup> quarter saw no spike occur. Part of the decline in recent years could be due to more jack pine being reported in the larger and more general “Softwood – Other” category.



In a low-volume scenario, H-M 3rd quarter jack pine pulpwood price fell back to \$18 from \$23 per mbf in the previous quarter. The actual price for this market is clearly closer to the \$20 per mbf range rather than the probable anomaly of \$225 from the 2nd quarter of FY 2014.



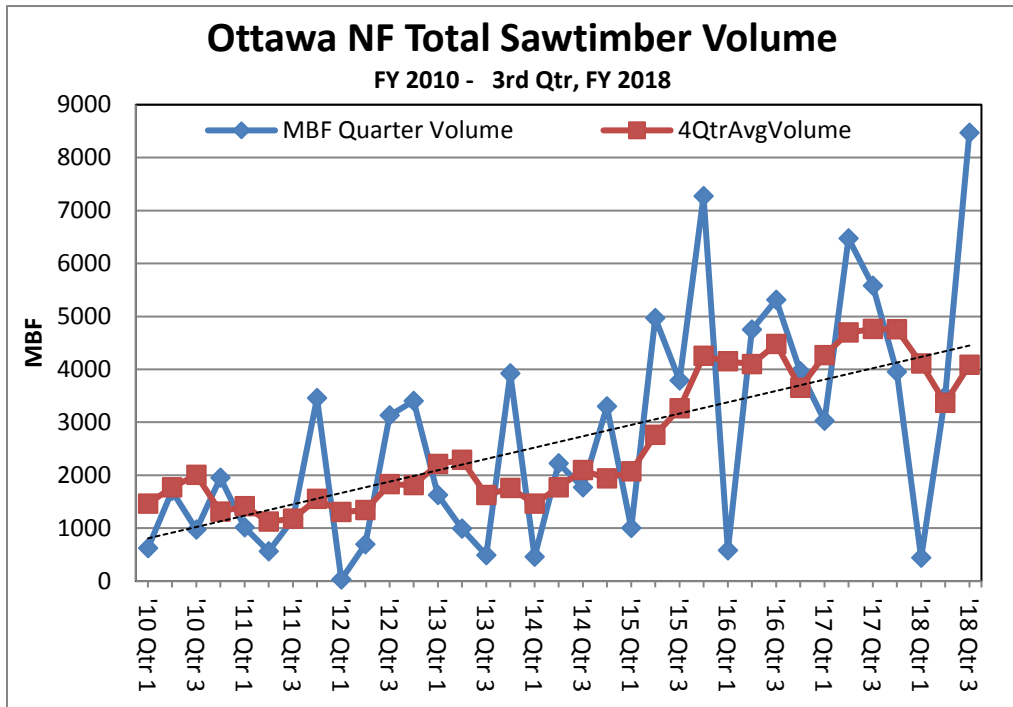
Red pine pulpwood – a key species in the H-M – saw a small volume downturn in the 3<sup>rd</sup> quarter to 2.9 from 3.5 mmbf. Because the volume remained somewhat stable this quarter, it is possible that the subsequent quarter will follow the end-of-FY spike as in previous years. For instance, the H-M red pine pulpwood volume reached nearly triple the current period in the 4<sup>th</sup> quarter of FY 2017.



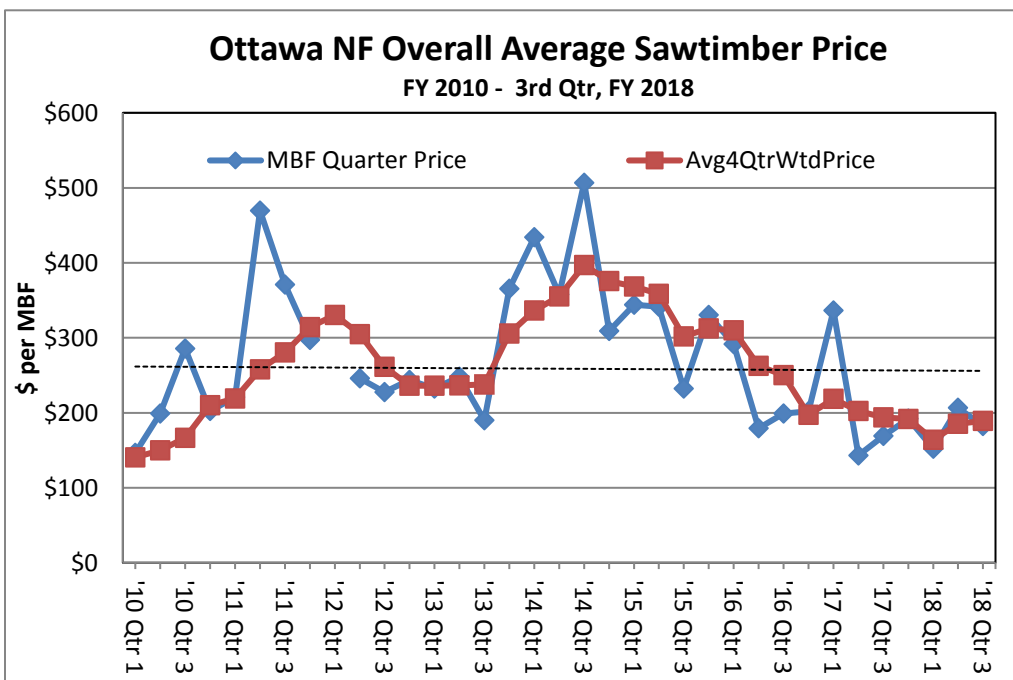
As predicted in this space last quarter, H-M red pine pulpwood price rebounded from a recent below-average trend. The \$103 per mbf mark is significantly above the trough of \$35 per mbf just three quarters ago, which was just one of seven below-average quarters over the previous nine.

## Ottawa National Forest Major Species/Product Timber Sales, FY 2010 – 3rd Qtr, 2018

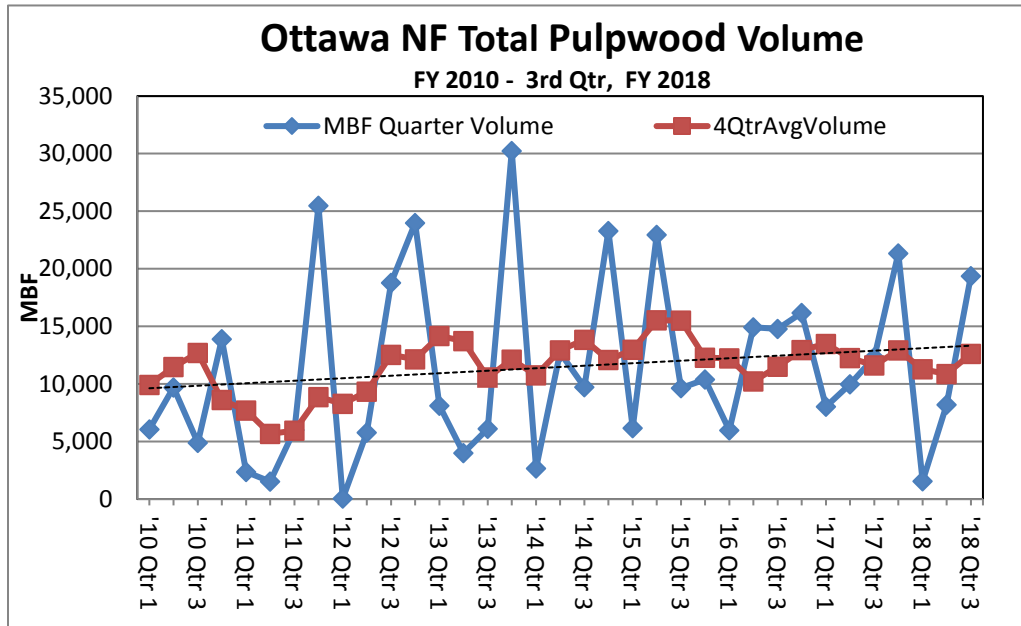
All graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year from October 1 through September 30. The sale data included here goes through the third quarter of FY 2018 (April - June, 2018). 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>



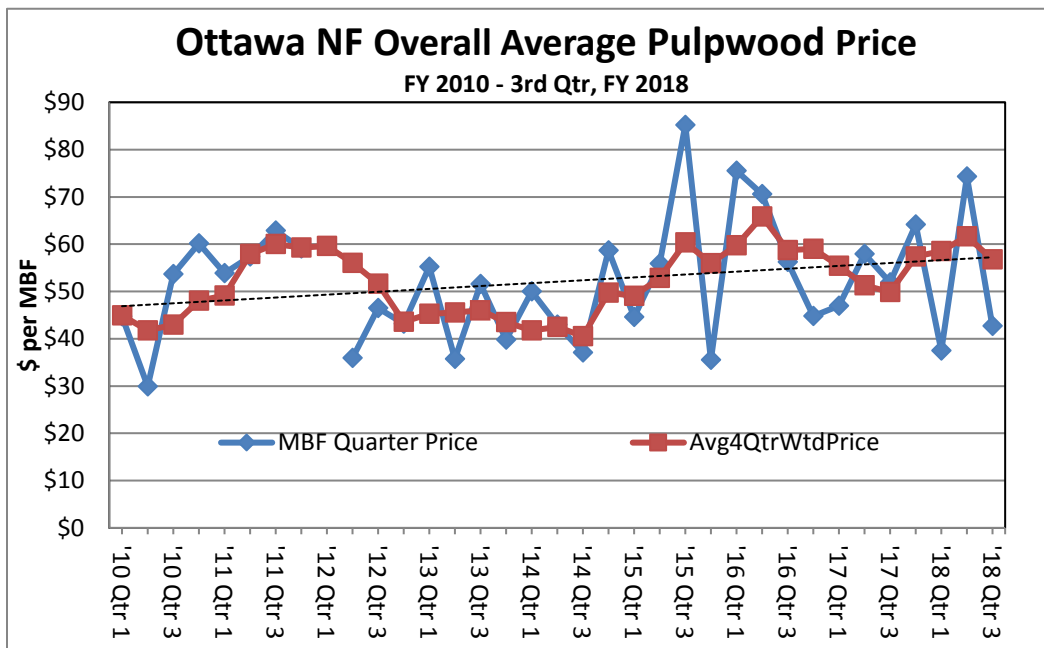
Ottawa sawtimber sale volume saw a continued rebound, climbing from a near record low just two quarters ago to 3.5 mmbf last quarter and now to an eight-year high of 8.5 mmbf. These vast swings mask a continued overall upward trend towards a quadrupling of average volume since FY 2010.



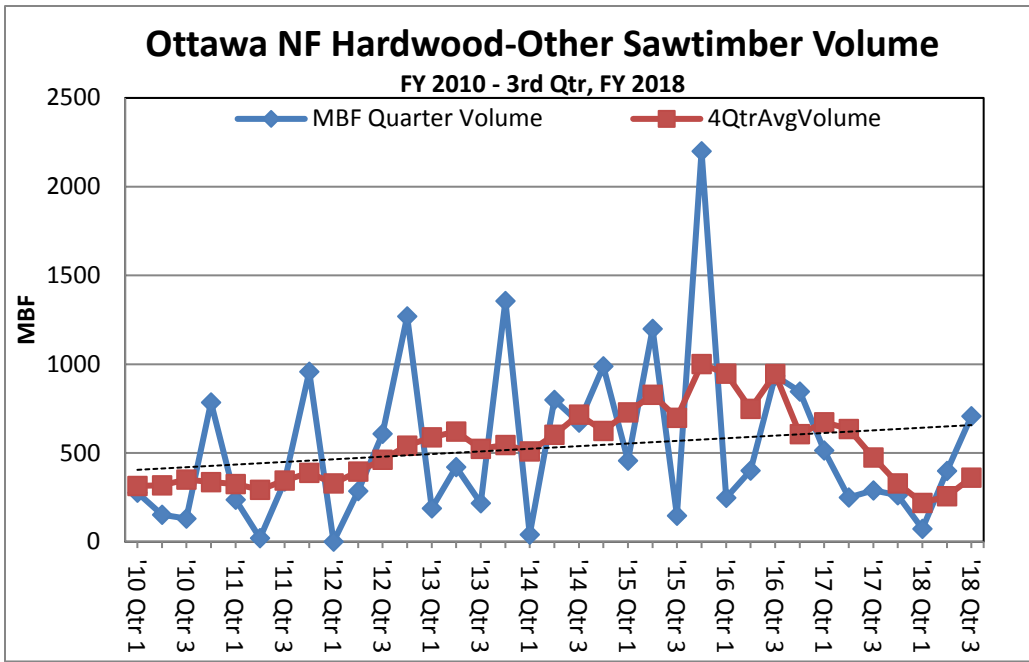
Ottawa overall average sawtimber prices are stable yet down from their eight-year peak in FY 2014. In the 3<sup>rd</sup> quarter, the average mbf was sold for \$189 per mbf, down a fraction from last quarter's \$207 figure. In the Ottawa, the market dynamics of sugar maple drive volumes and prices.



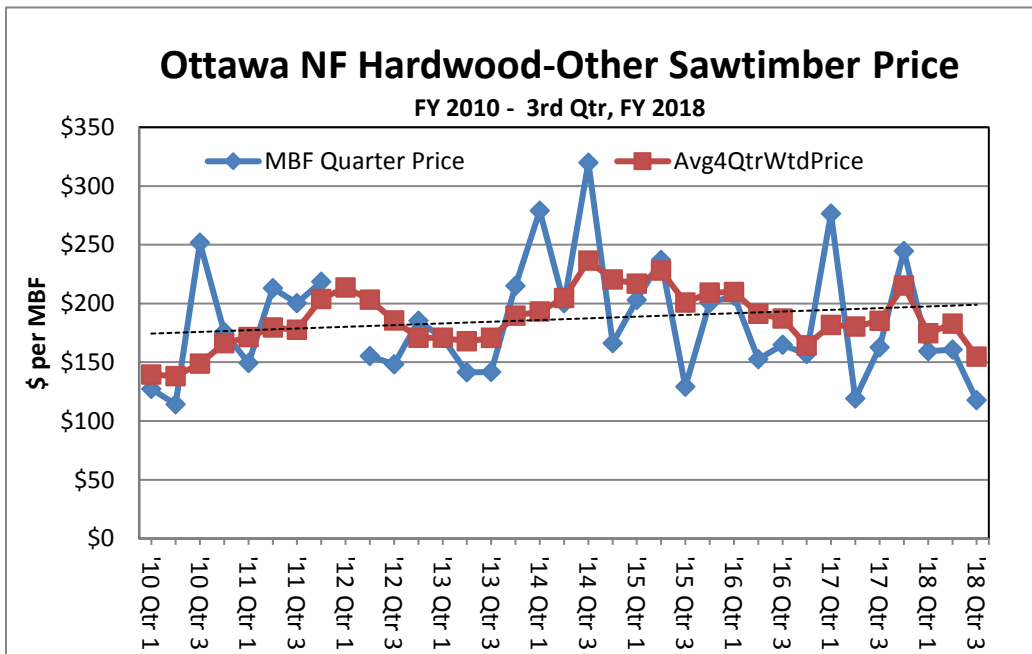
Total Ottawa pulpwood sale volume built on gains from the previous quarter, reaching 19.4 mmbf in this period. Yet again, the Ottawa pulpwood market may experience a fourth-quarter spike, though Q3-2018 was the strongest 3<sup>rd</sup> quarter over the period covered by these reports. Will this quarter steal momentum from the forthcoming 4<sup>th</sup> quarter, or will the typical strong-fourth-quarter pattern hold, followed by a Q1-2019 dip?



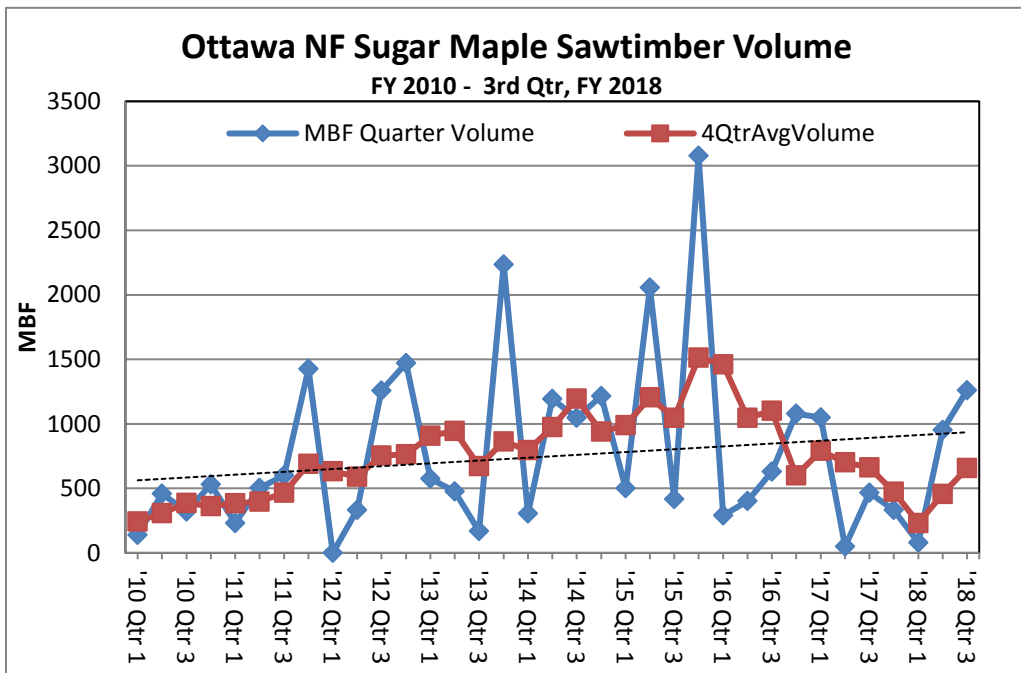
Weaker average pulpwood price in Ottawa accompanied the strong 3<sup>rd</sup> quarter volume gain. As expected, average prices dropped to \$43 in Q3 from \$74 in Q2. These swings in price are significant but not as volatile as volume statistics.



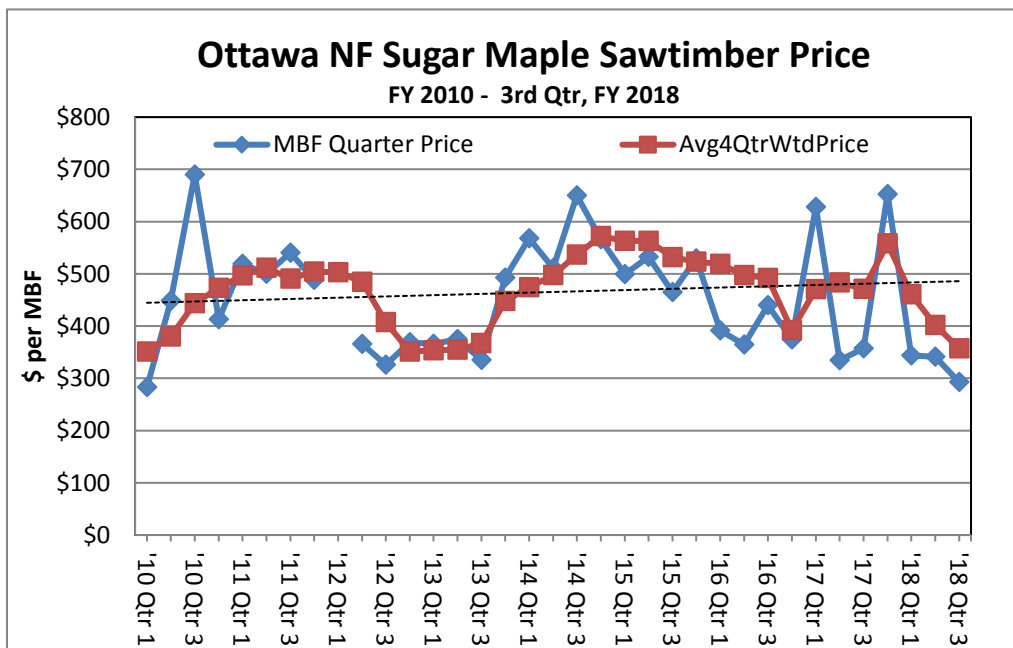
Ottawa hardwood-other sawtimber sale volume continued its climb from the basement in the 3<sup>rd</sup> quarter of FY 2018, driving to 707 mbf from 400 in the second quarter and a mere 72 in the 1<sup>st</sup> quarter. This three-quarter upward trajectory flipped a generally downward trajectory in the preceding five quarters. Next quarter it will be interesting to learn, as with other products, if the earlier tendency towards a fourth-quarter spike returns or if a new, less volatile normal has taken hold.



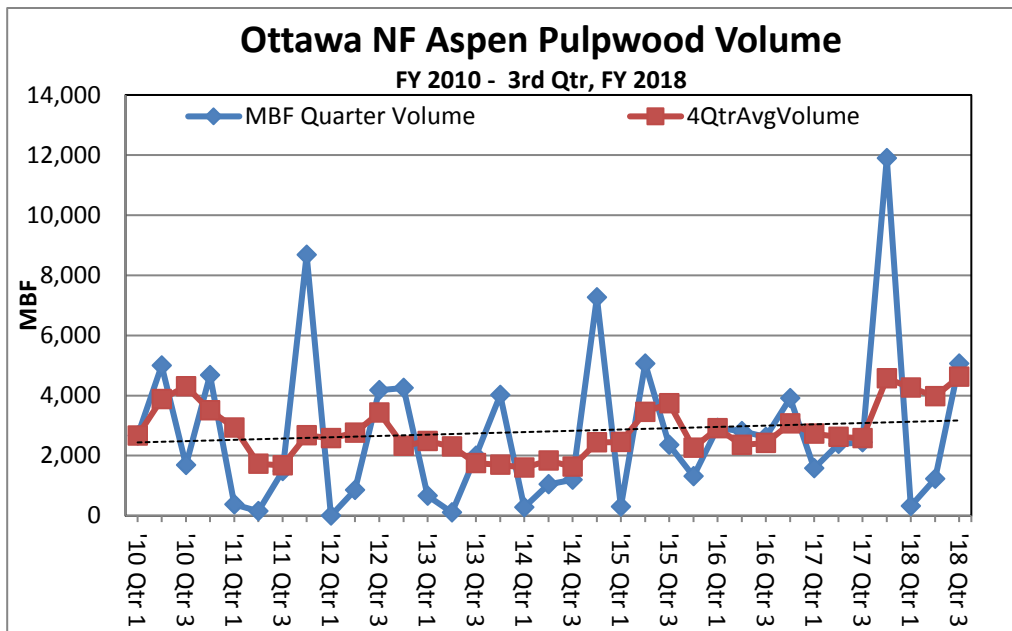
In defiance of predictions in this space, the 3<sup>rd</sup> quarter average Ottawa hardwood-other sawtimber price fell further below the long-term average, down to \$118 from \$161 per mbf. This amount is well below the recent record high of almost \$320 mbf in the 3<sup>rd</sup> quarter of FY 2014.



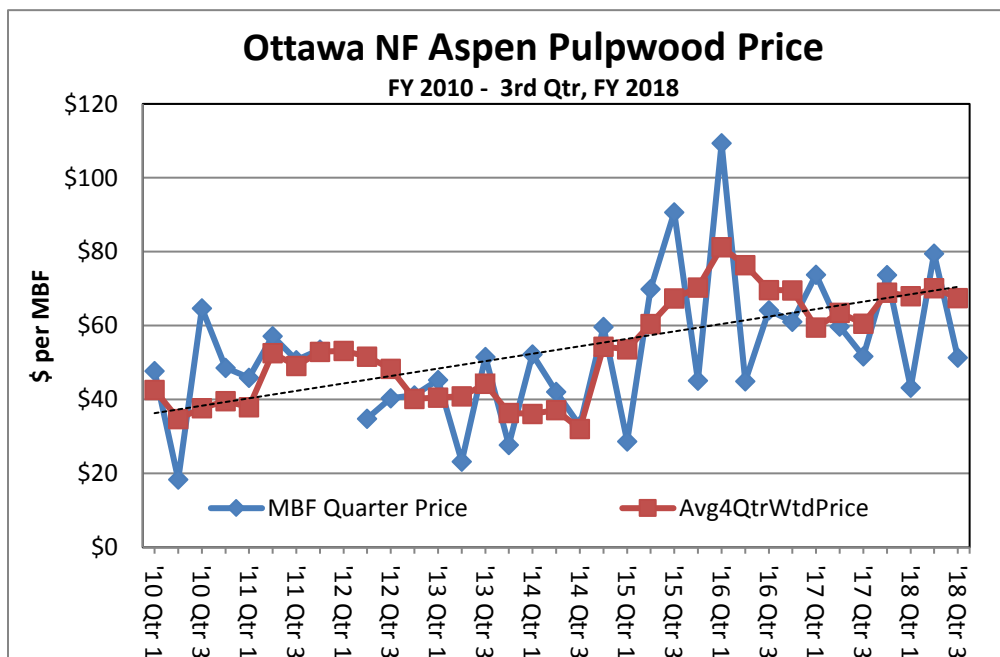
In Q1 of this FY and in Q2 of FY 2017, Ottawa sugar maple sawtimber sale volume was close to zero. Over the past two quarters volume has risen significantly to the current 1.3 mmbf, which is back above the long-term average for this species in Ottawa.



Average Ottawa sugar maple sawtimber price has seen a precipitous drop from a near record high in Q4 of 2017 of \$653 per mbf to a near-record low of \$293. This is the third straight quarter of declining prices, although more recent quarters have been below the long-term average than above it, with occasional, extreme one-quarter price spikes pulling up the long-term average.

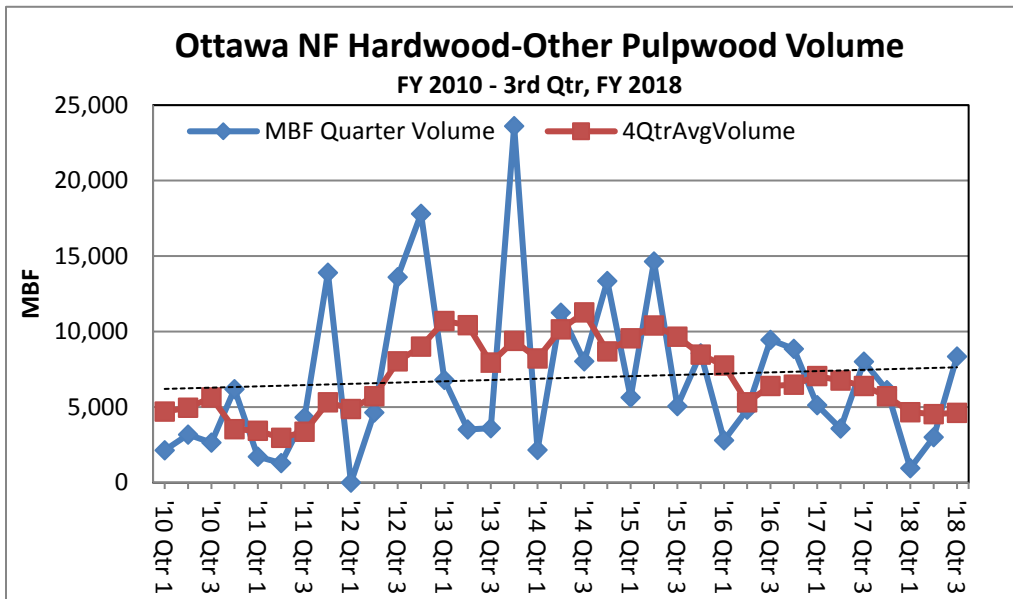


A strong 3<sup>rd</sup> quarter for Ottawa aspen pulpwood sale volume of 5.1 mmbf left behind the previous two quarters - .3 mmbf in the 1<sup>st</sup> to 1.2 mmbf in the 2<sup>nd</sup>. This result was well above the long-term average but less than half the recent record high of 11.9 mmbf in last year's 4<sup>th</sup> quarter. The upcoming 4<sup>th</sup> quarter will determine whether these year-end spikes remain inherent in this category.

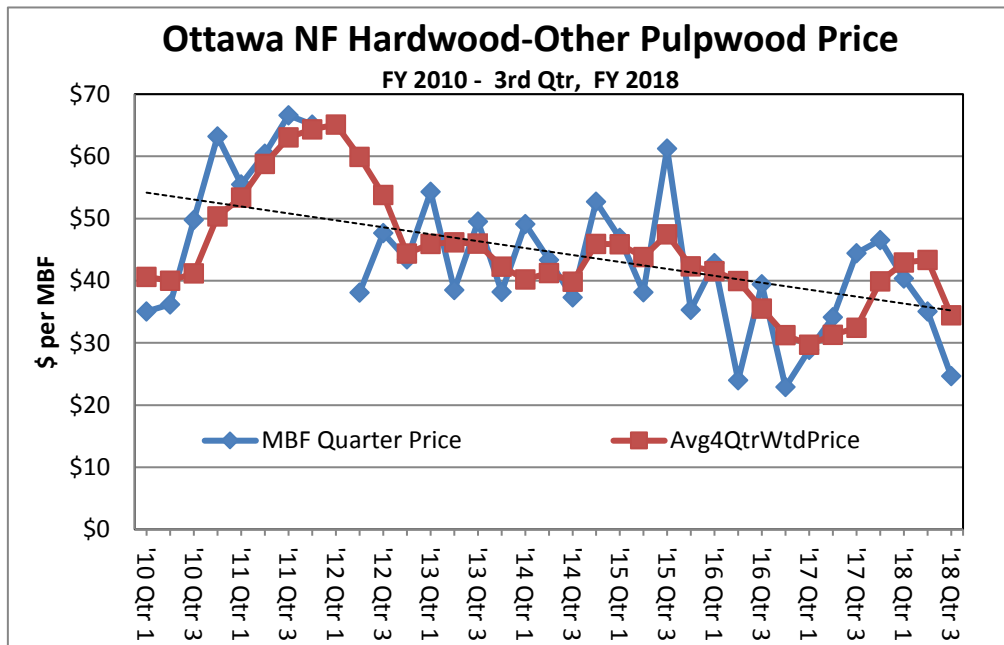


Price fluctuations remain the norm in the Ottawa aspen pulpwood prices. They dropped to \$51 per mbf in this 3<sup>rd</sup> quarter after showing strength in the previous quarter, i.e. \$80 per mbf, which in turn was up from \$43 in Q1. Behind this price noise is a general upward trend in aspen pulpwood prices. which is fed in part by erratic sale volume.





In the 3<sup>rd</sup> quarter, the category Ottawa hardwood-other pulpwood sale volume tracked the aspen pulpwood nicely with a climb from near zero to an above average tally, namely 8.4 mmbf for the period. FY 18 appears to be following the cycle of FYs 16 and 17: a climb from a very low volume to an above average one and back down to a very low volume.



The Ottawa hardwood-other pulpwood category is on a three-quarter slide, coming to rest in this 3<sup>rd</sup> quarter at a low \$25 per mbf. Prices are clearly on the decline long-term, as above-\$50 prices from the earlier part of the decade have not been reached since mid-FY 2015.