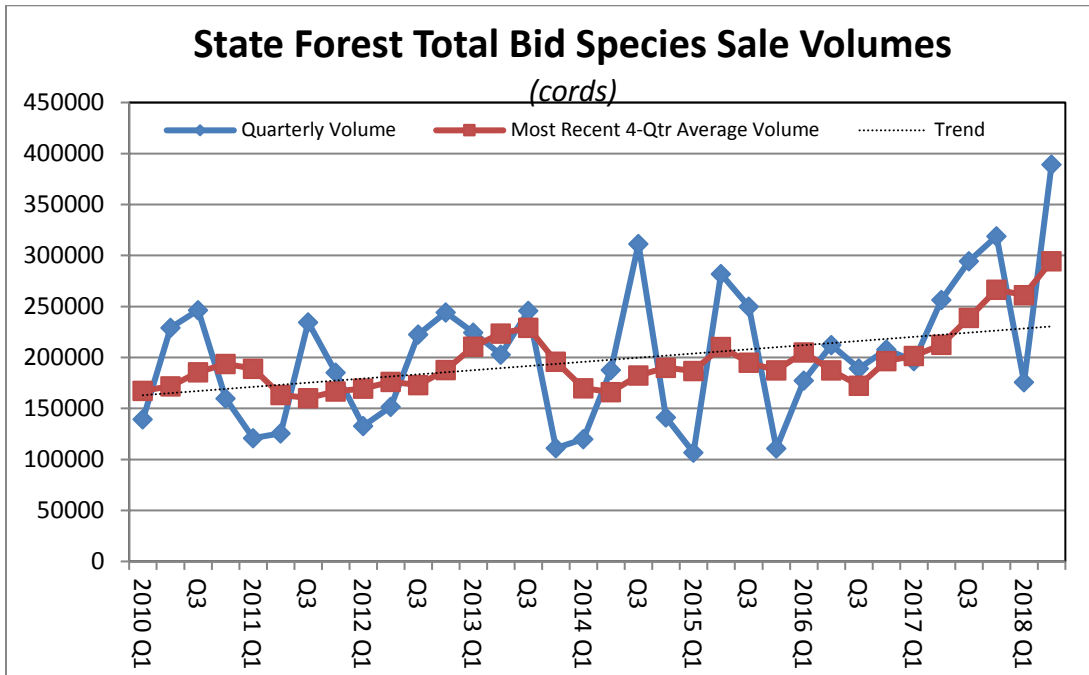


State Forest Quarterly Timber Sales for Major Species & Products

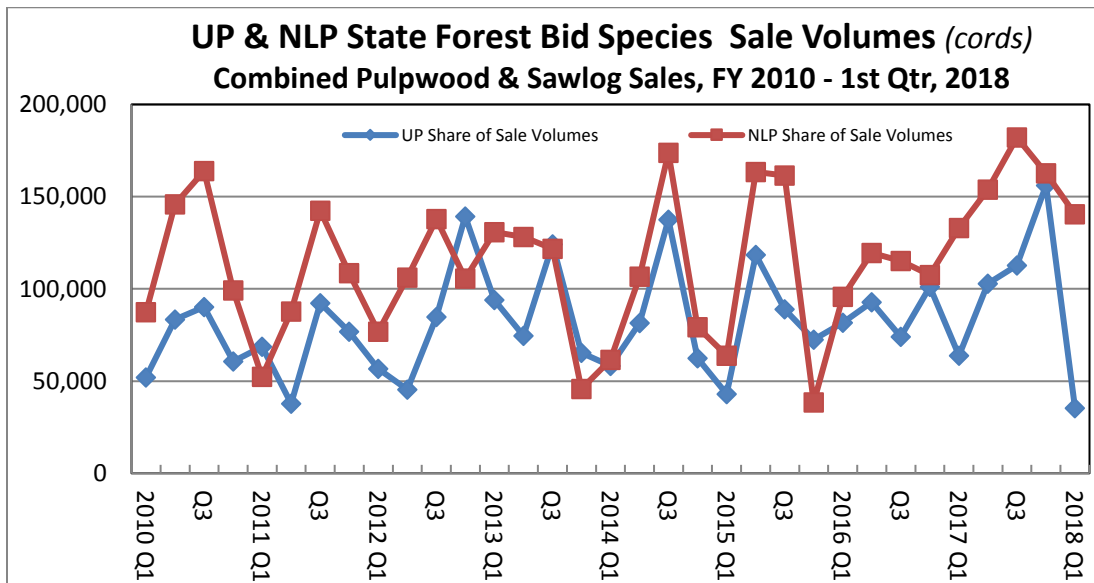
FY 2010 – 2nd Quarter, FY 2018

Source: Michigan DNR, Forest Resources Division

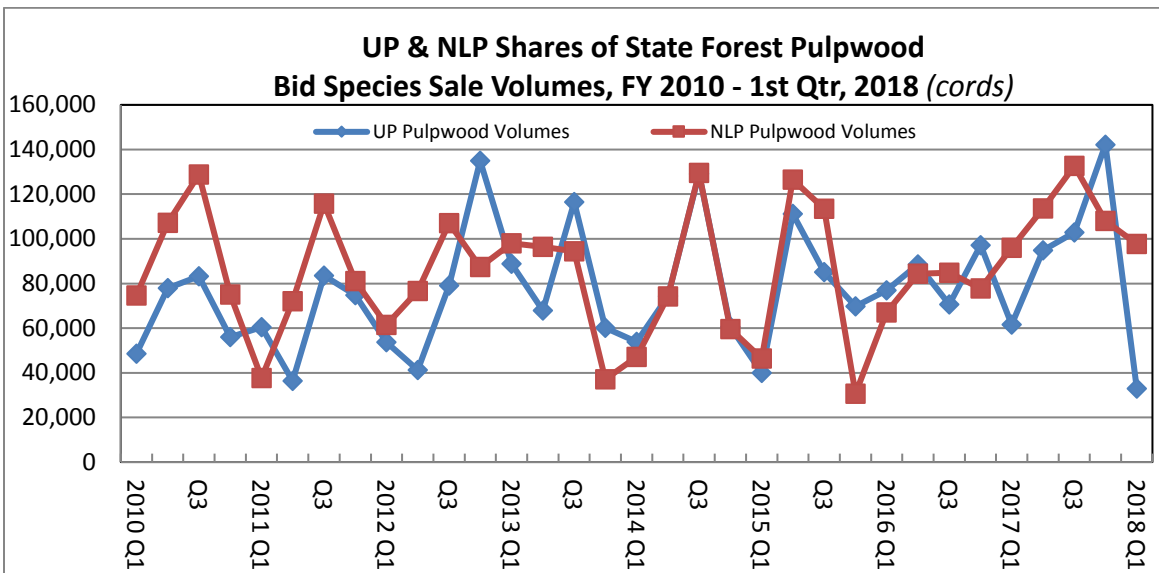
The State follows the federal fiscal year (October 1 through September 30). Most graphs below show **bid species** sale volume and value data; total sale volumes and values are slightly more. The graphs often include a dotted trend line based upon data for the average of the most recent four quarters (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.



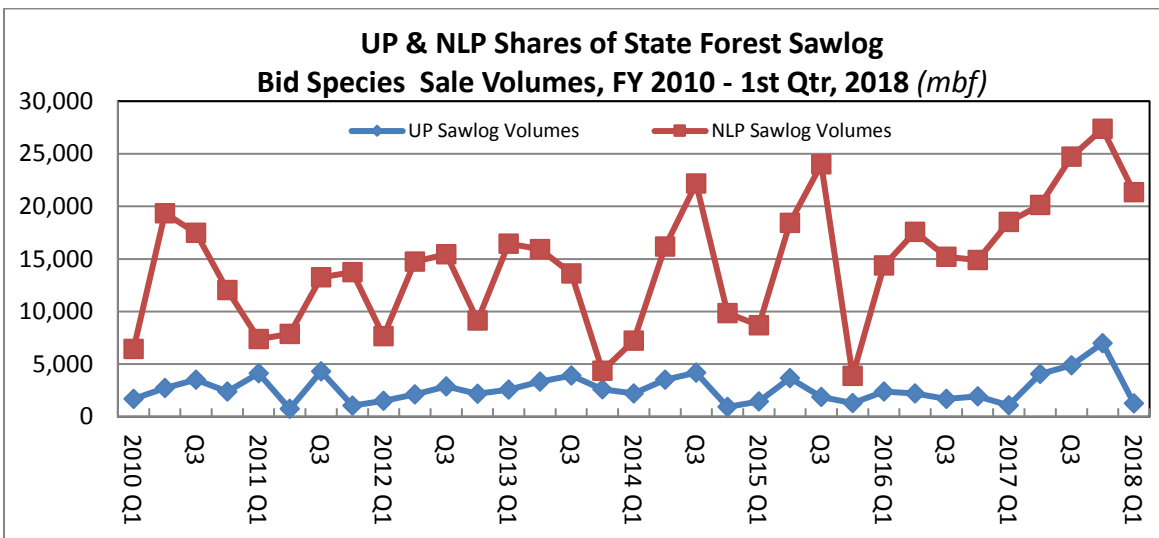
Large 2017 increases in quarterly volume were sharply reversed in the 1st quarter and then leaped to record levels in the 2nd quarter. Total State Forest sale volume for bid species more than doubled from 176,000 to 389,000 cords. Total sale volume for all bid and nonbid species more than doubled from 181,000 to 429,000 cords. Total offered sales rose from 261,000 to 339,000 cords. Both the 1st quarter declines and 2nd quarter increases were greater than usual.



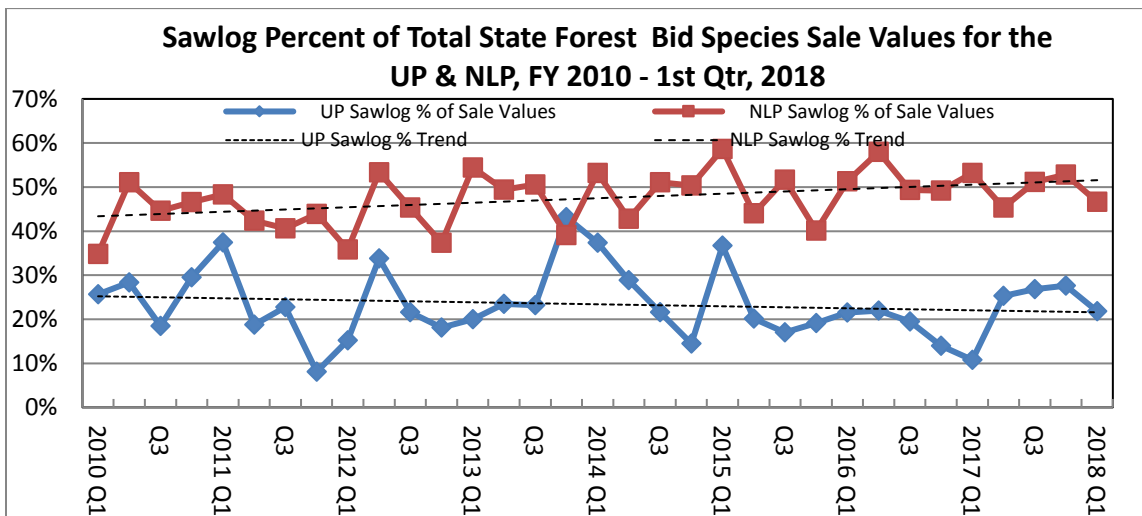
UP bid species sale volumes plummeted to their lowest levels in over eight years, from 156,000 to 35,000 cords. The NLP declined from 163,000 to 140,000 cords. The NLP generally has higher, more variable sale volumes from quarter to quarter, but the dramatic UP drop this quarter matches or exceeds most quarterly changes in the NLP. The high amount of offered sales in excess of total sale volume (261,000 vs. 176,000 cords) will contribute to higher sales in future quarters.



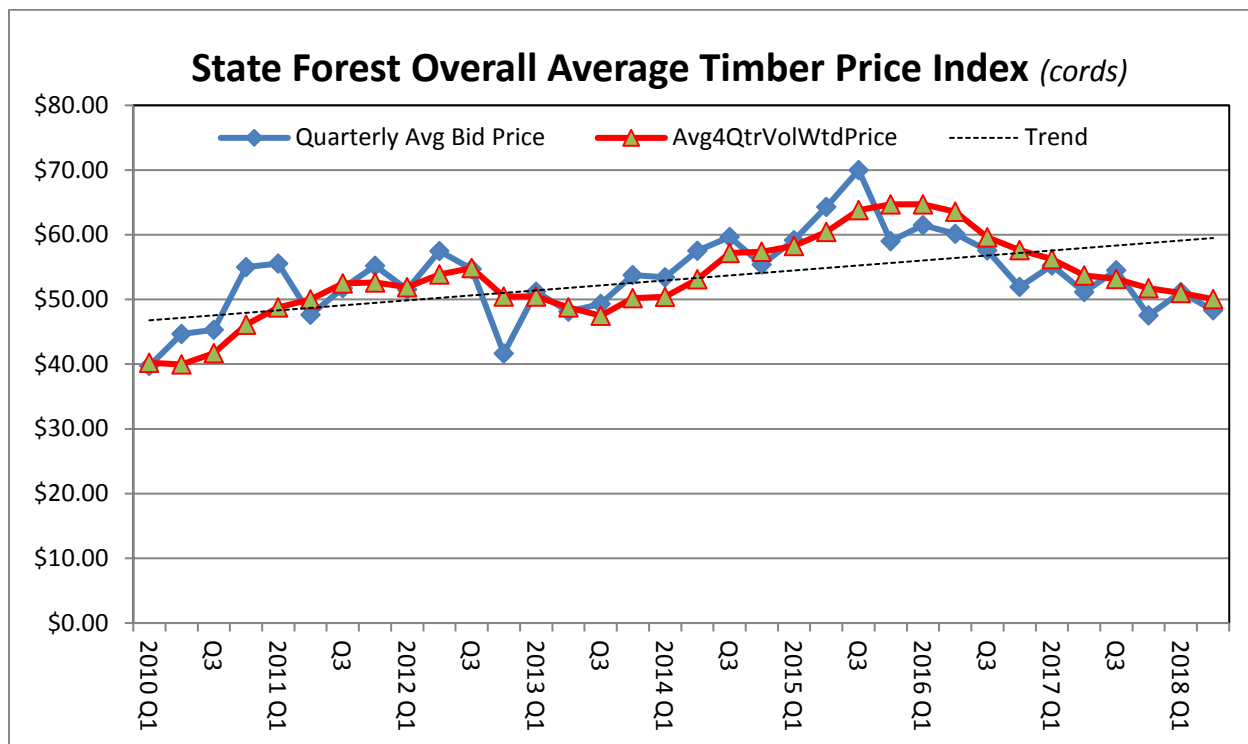
Pulpwood accounts for about 80% of total State Forest bid species sale volume. UP pulpwood sale volumes crashed in the 1st quarter, from a record 142,200 cords to 33,000 cords while NLP volume fell from 108,000 to 98,000 cords.



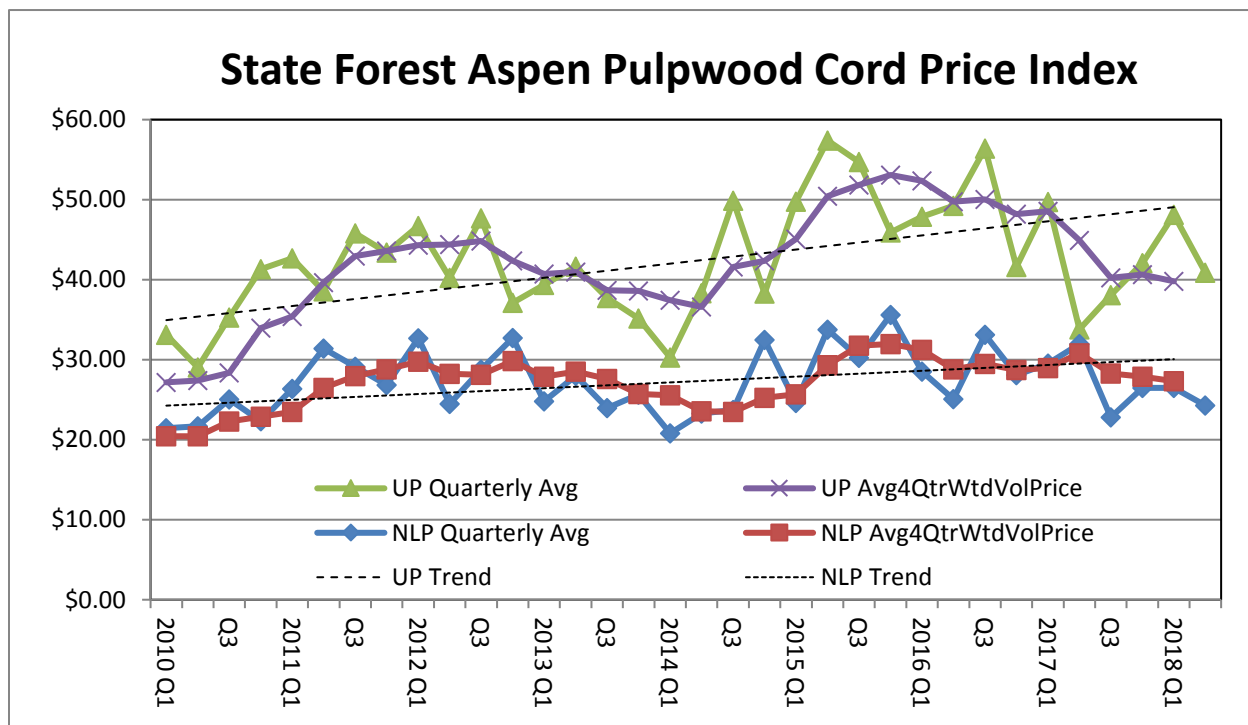
Both peninsulas had record sawlog output in FY 2017. NLP sawlog volumes are often much higher than the UP's; its 4th quarter record volume of 27.4mmbf fell to 21.4mmbf while the UP record sawlog volume of 6.9mmbf fell to 1.3mmbf.



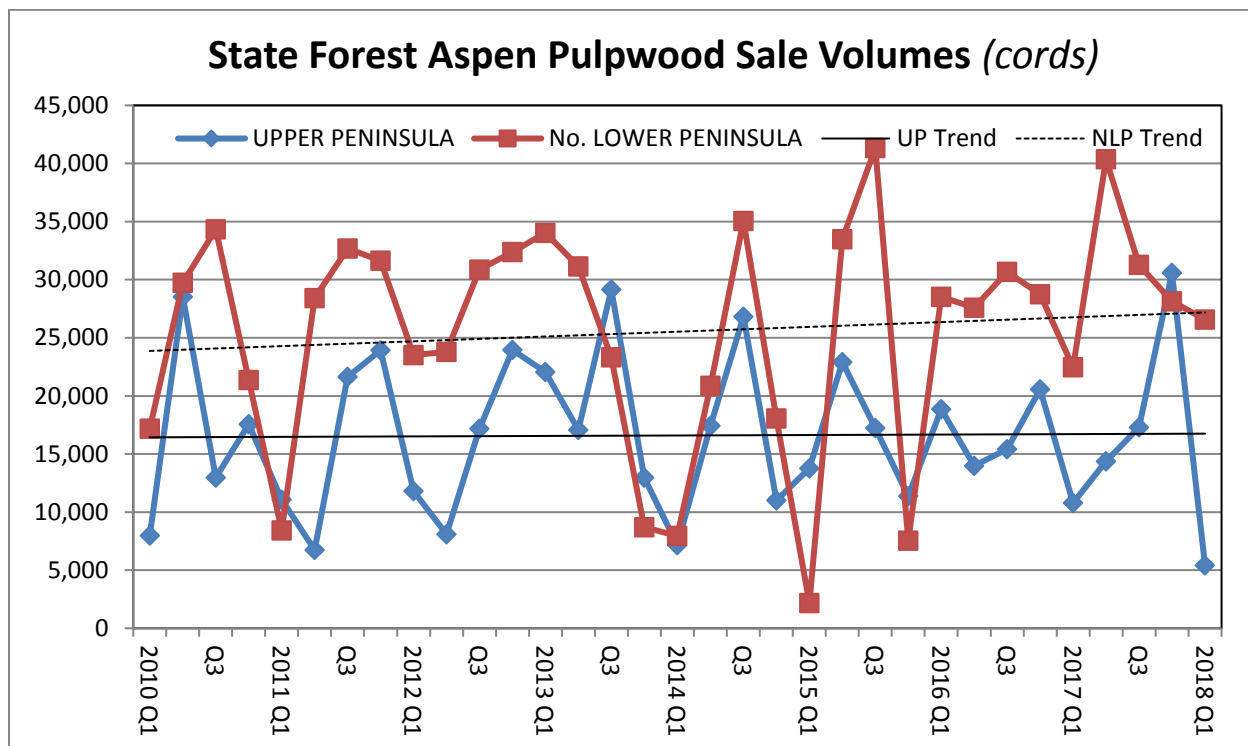
The sawlog percent of NLP bid species sale values dipped below 50% in the 1st quarter. The UP sawlog percent of sale values also dropped from 28% to 22%; it hit a low of 11% in the 1st quarter of FY 2017 before jumping above 25%.



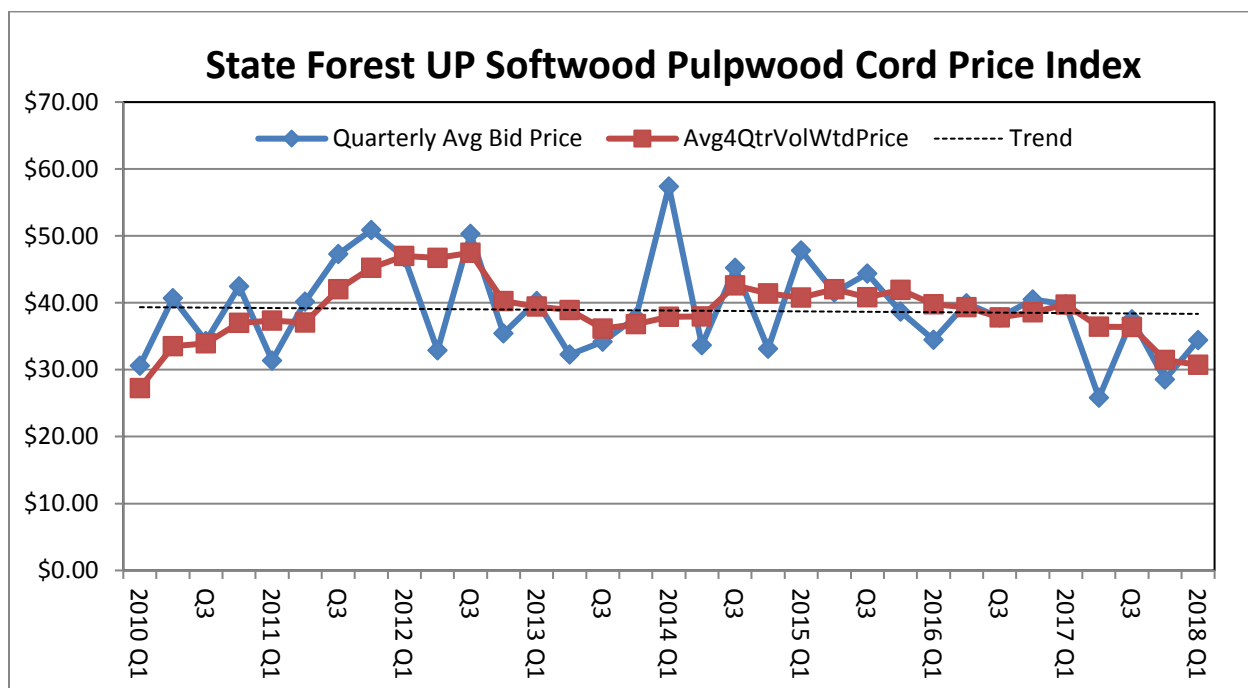
After rebounding from a four-year low of \$47.53 to \$51.15 per cord, the overall average timber price fell to \$47.91 per cord in the 2nd quarter. The quarterly price was at a record level of \$69.99 per cord in the 3rd quarter of FY 2015 and has been mostly declining since then. This is in contrast to the eight-year quarterly price trend shown above which has been mildly increasing. With this being the seventh quarter in a row that the price has fallen below the eight-year quarterly price trend, higher prices might be expected in upcoming quarters; however, higher levels of sales, sales without bids, and proportionately more lower-value product sales appear to be keeping prices from the straight line eight-year trend values.



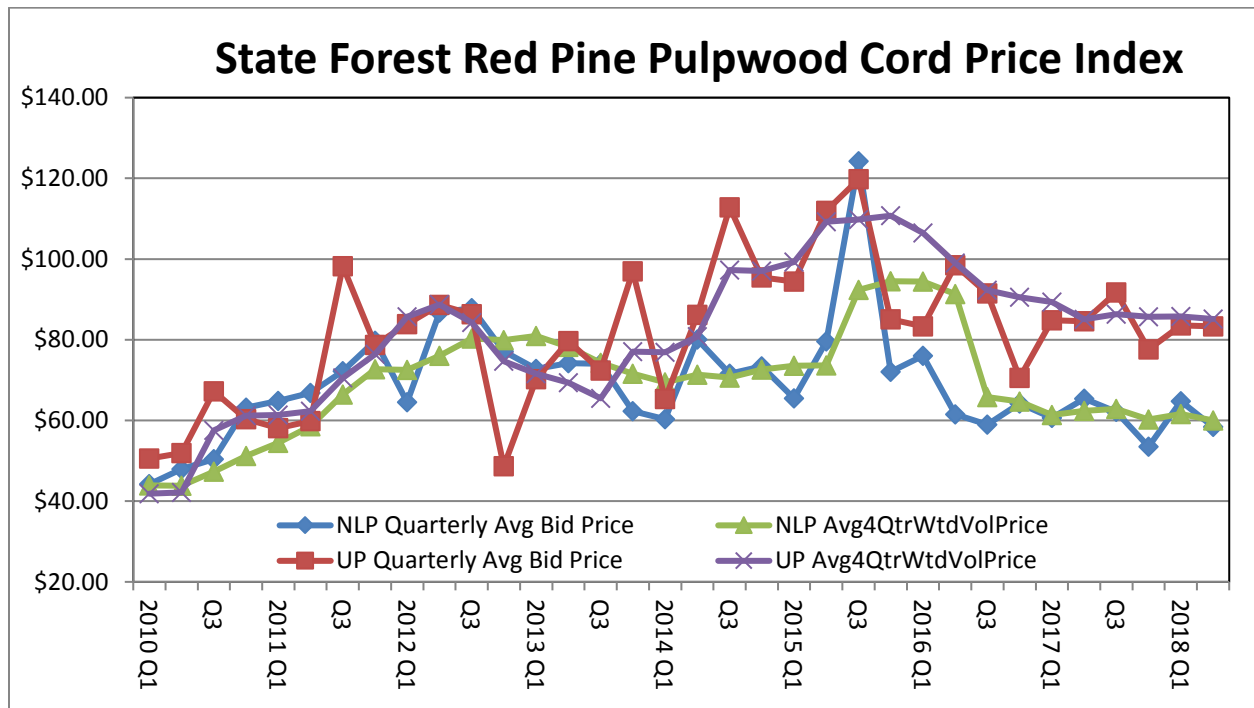
After rising for three quarters in a row, the UP average cord price fell in the 2nd quarter, from \$48.13 to \$40.88 per cord. It had fallen to \$33.80 per cord in the 2nd quarter of FY 2017 before starting its climb. The average NLP aspen pulpwood cord price dipped in the 2nd quarter to \$24.26. The FY 2017 2nd quarter saw very close prices across the two peninsulas, but a sizable gap has been in place since then. Both peninsulas have had increasing price trends over the past eight years, but the UP price trend is steeper relative to the NLP price trend.



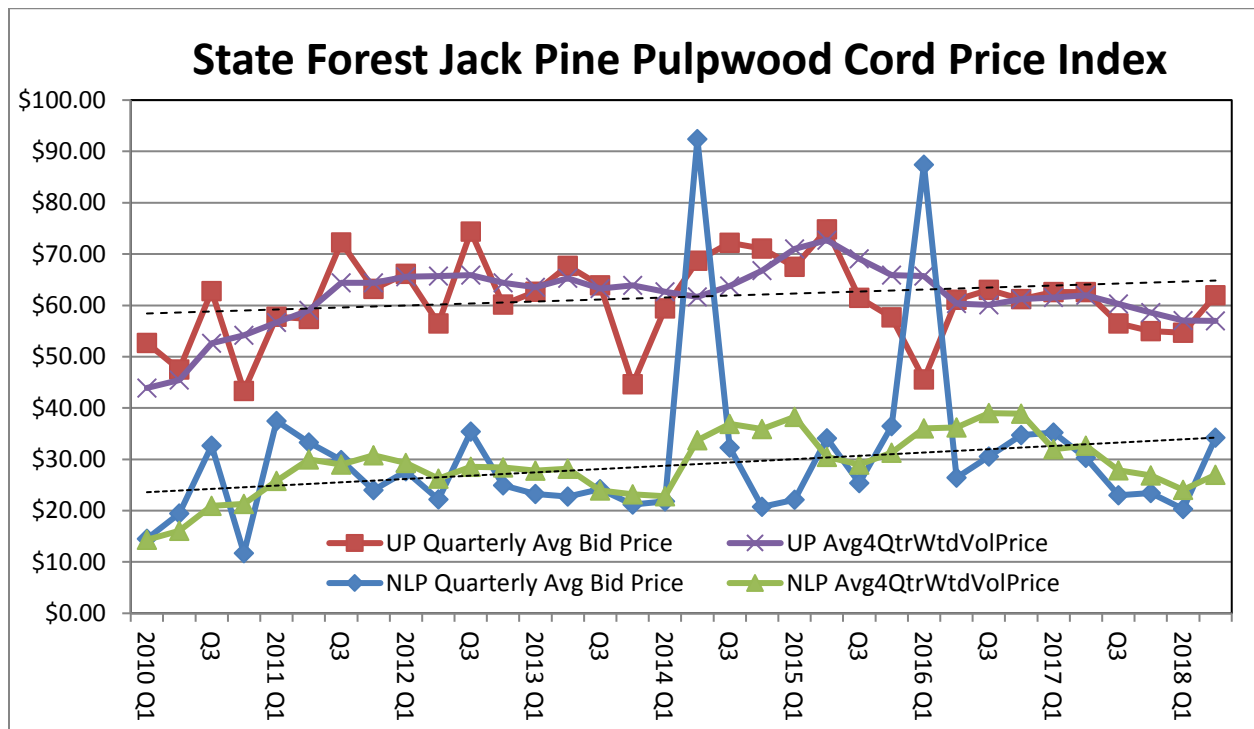
The NLP has tended to have wider swings in aspen pulpwood quarterly sale volumes over the past seven years, but this quarter saw a much bigger swing in UP sales. 4th quarter UP volume shot up from 17,290 cords to a UP quarterly record of 30,583 cords, but then sales plummeted more than they have in a long while – down to an 8-year record low of 5,412 cords. The NLP volume declined from 28,126 to 26,578 cords. This new NLP level is in line with its eight-year trend line; while the UP level is dramatically below its trend line. Sale volumes will certainly rise somewhat in the UP in coming quarters while it is hoped that the NLP volumes remain relatively steady unlike its erratic quarterly sale pattern between FY 2014 and FY 2016.



The UP normally accounts for close to 90% of what is sold as “softwood pulpwood,” but that dropped to 76% in the 1st quarter as UP pulpwood sale volumes fell. The UP softwood pulpwood cord price rose from \$28.53 to \$34.43 per cord in the 1st quarter as volume fell from 22,921 to 7,584 cords. Generally, prices do not fluctuate as much for UP softwood pulpwood as they do for most other timber products. The quarterly price has seldom gone outside of a \$30 to \$50 range over the past eight years; the recent 2nd and 4th quarter FY 2017 prices are rare exceptions to this range. Quarterly sale volumes often do fluctuate though, from under 10,000 cords to over 30,000 cords. The eight-year price trend is quite flat.

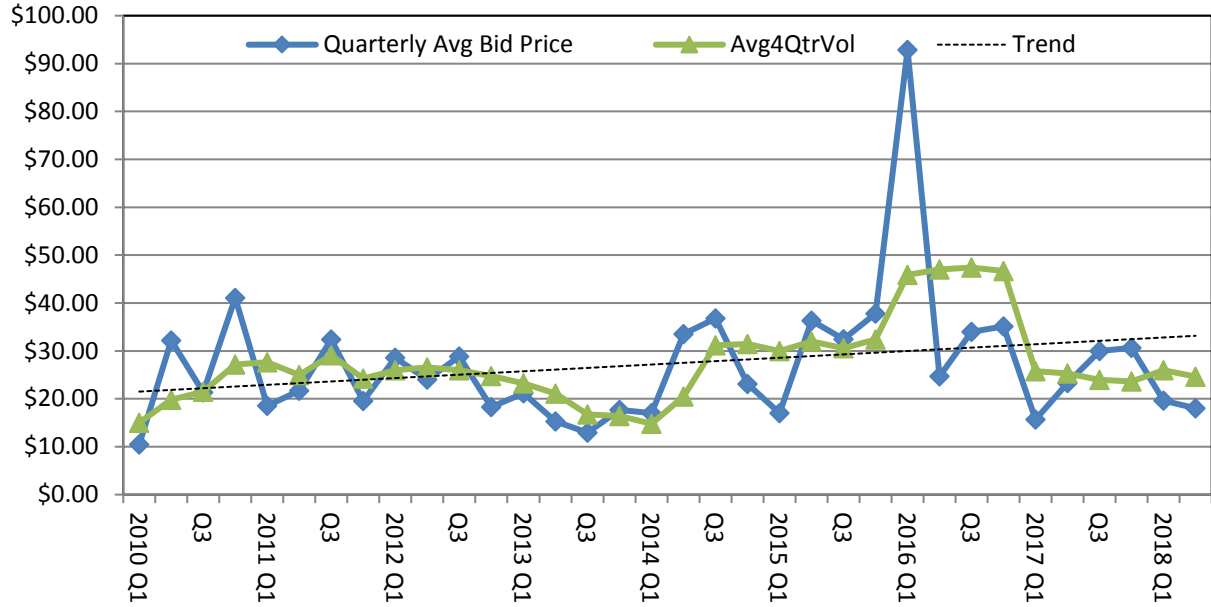


The FY 2018 2nd quarter NLP red pine pulpwood price fell back from \$64.79 to \$58.45 per cord as sale volume went up further from 27,725 to just over 35,000 cords, a quarterly volume high not seen since 2010. The price has been relatively stable for over two years. It reached \$124 per cord in the 3rd quarter of FY 2015 before dropping back to \$72 the next quarter. The UP generally has higher RP pulpwood prices than the NLP. The UP price was little changed in the 2nd quarter at \$83.28 as volume shot up from a low 3,958 cords to a quarterly record of 20,725 cords.



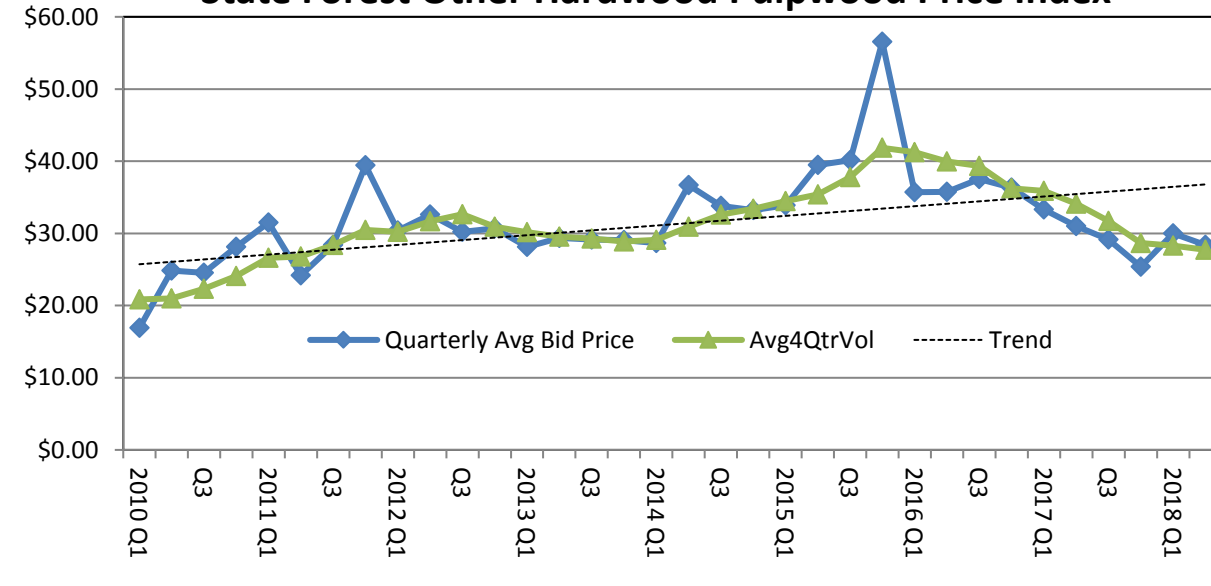
Jack pine pulpwood 2nd quarter cord prices rose in both peninsulas, from \$54.65 to \$61.96 per cord in the UP and from \$20.31 to \$34.25 per cord in the NLP. The UP price has often been two to three times the NLP price, but the gap was narrowed in the 2nd quarter by the larger NLP price increase. Jack pine sale volumes are often highly volatile from quarter to quarter in both peninsulas. In the most recent quarter, they rose from 3,346 to 4,772 cords in the UP while leaping to 18,607 cords in the NLP after two quarters of less than 5,000 cords. The sold volume was at 22,702 cords in the NLP in the 3rd quarter of FY 2017. Both peninsulas have slightly increasing seven-year price trends.

State Forest Oak NLP Pulpwood Price Index

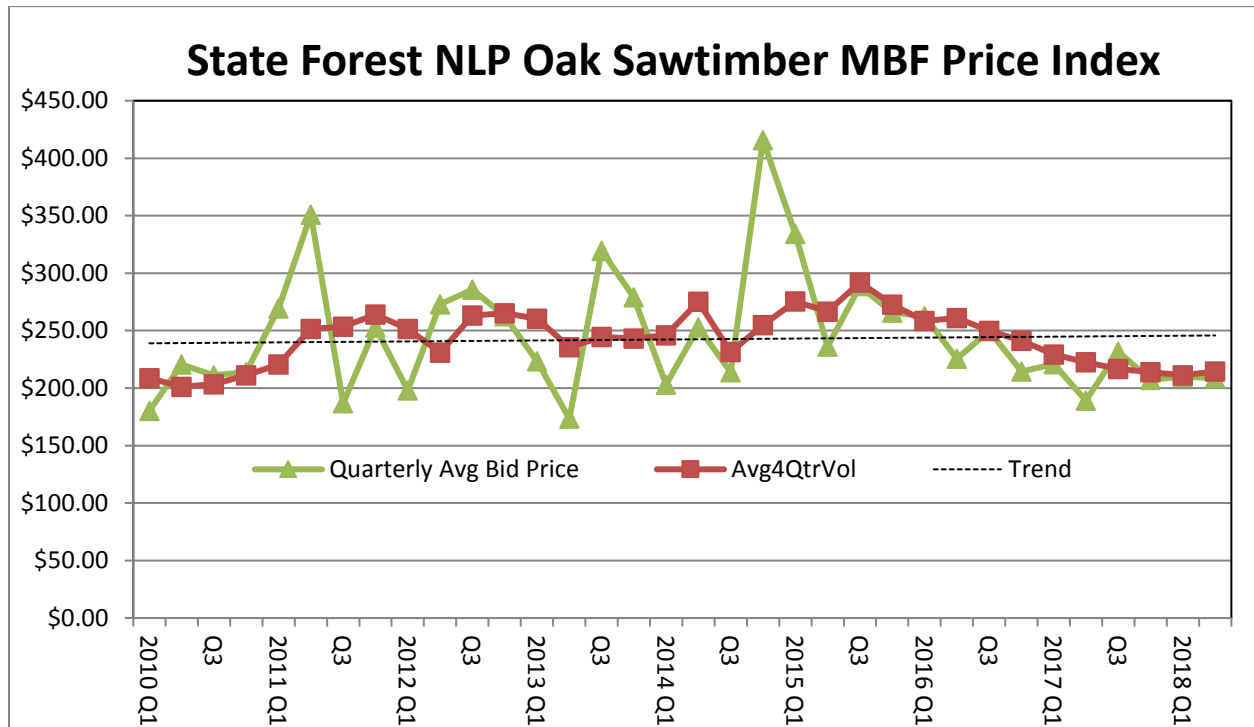


The NLP oak pulpwood price fell sharply in the 1st quarter of FY 2018, from \$30.62 to \$19.59 per cord and then dipped further in the 2nd quarter to \$18.03 per cord on a volume of 13,979 cords. It was at a low \$15.69 per cord in the 1st quarter of FY 2017. The price hit a peak in the FY 2016 1st quarter at \$92.84 per cord, more than double any price achieved in the past eight years, but then it dropped to \$24.67 the next quarter. The average price over the past eight years has been under \$30.00 per cord. There is an increasing eight-year price trend, in large part due to the price peak in the 1st quarter of FY 2016; without that quarter, the trend would be almost flat and very close to \$25 throughout the period.

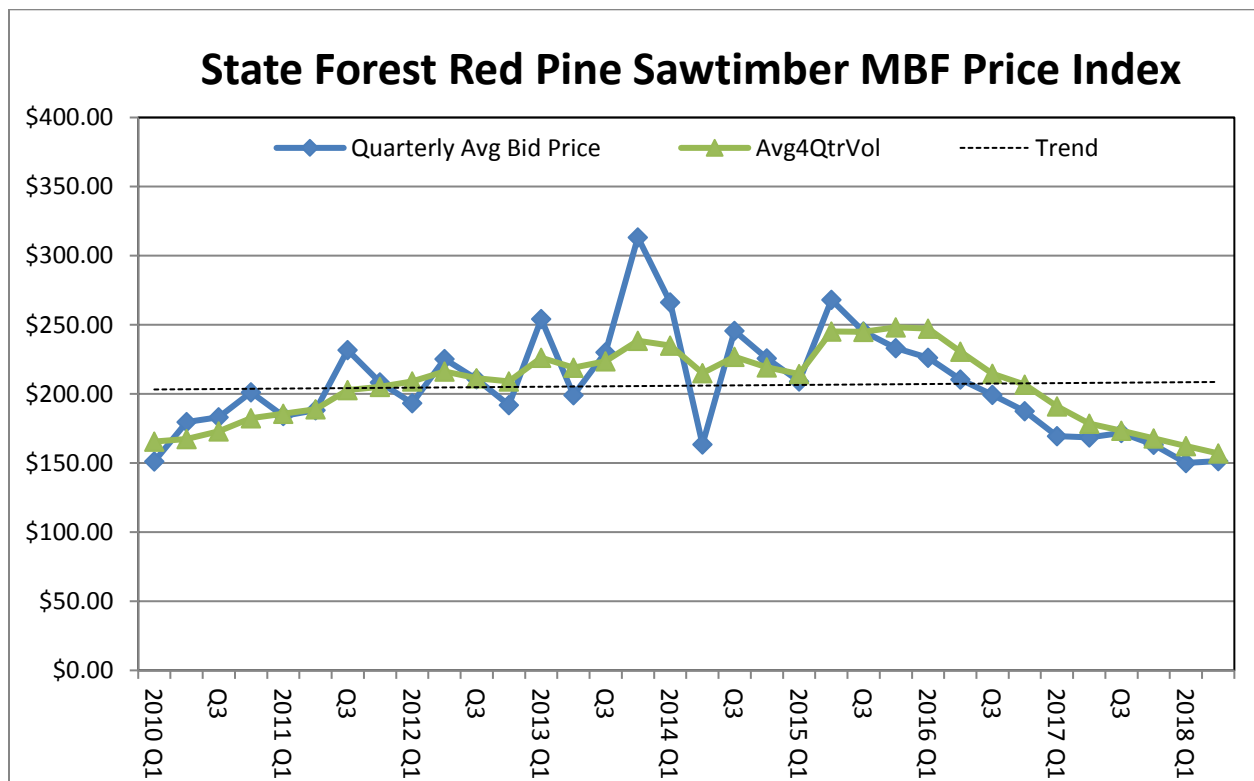
State Forest Other Hardwood Pulpwood Price Index



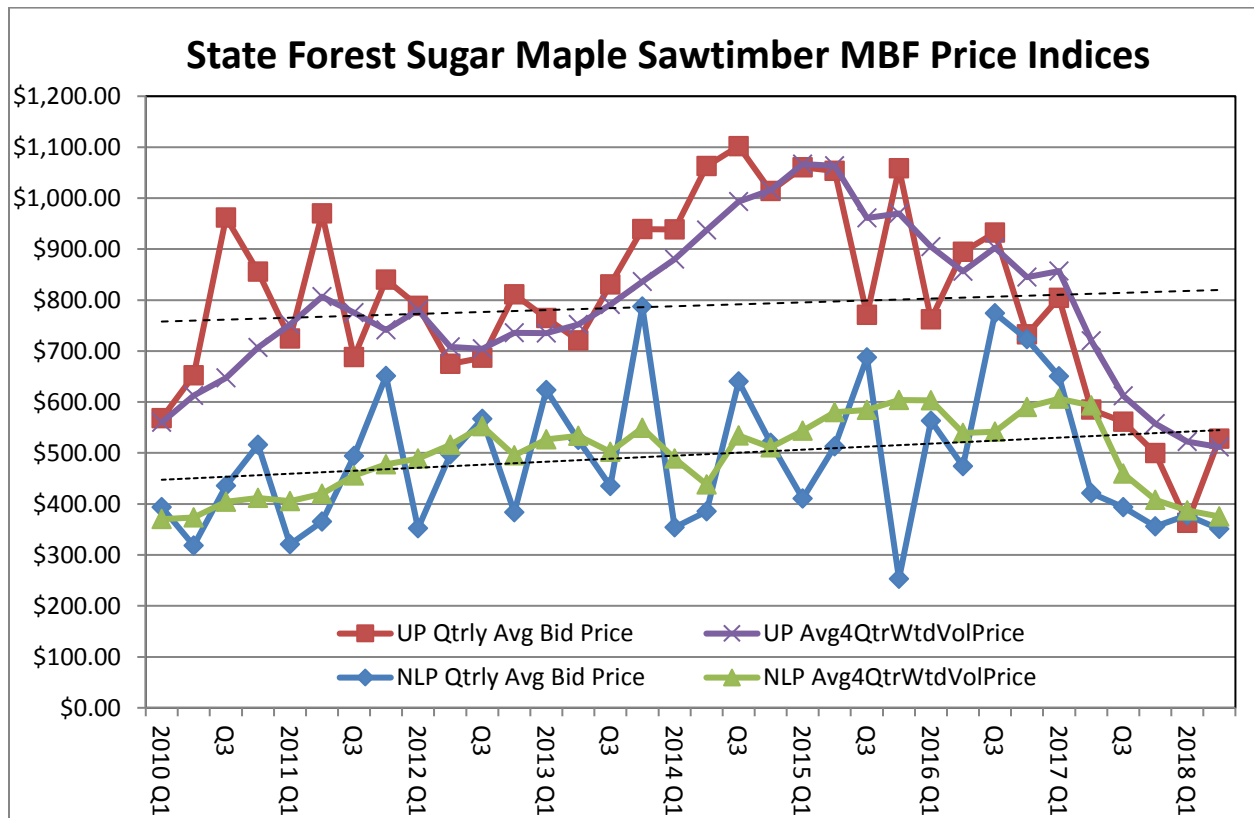
The “other hardwood pulpwood” cord price dipped from \$30.00 to \$28.40 per cord in the 2nd quarter. It hit a record high average price of \$56.55 per cord in the 4th quarter of FY 2015. Bid species sale volume more than doubled from 28,537 to 61,933 cords in the 2nd quarter of FY 2017, then hit a 69,233 cord record volume in the 3rd quarter, only to be topped by 94,332 cords in the 4th quarter before falling back to 33,400 cords and rising again to 79,318 cords in the most recent (2nd) quarter. The average quarterly volume for the past eight years is 43,000 cords, but the average is over 65,000 cords for the past five quarters. It has an eight-year increasing price trend, but the quarterly trend has been decreasing for the past several years.



NLP oak sawtimber prices were again little changed, dipping slightly from \$210 to \$208.52 per mbf in the 2nd quarter as sale volume rose from 2.3 to 3.3mmbf. Sale volumes over the past eight years have averaged about 3mmbf per quarter. Sale volumes were at a record 6.1mmbf in the last quarter of FY 2017. Overall, the eight-year price trend is quite flat. However, prices have been mostly trending downward since reaching a high of \$415 per mbf in the FY 2014 4th quarter.



State Forest red pine sawtimber prices were virtually unchanged, going from \$150 to \$151 per mbf in the 2nd quarter. They have been fairly steadily, but modestly declining for almost three years since reaching \$268 per mbf in the 2nd quarter of FY 2015. The eight-year price trend is just very slightly increasing and the average price for the period is just above \$200 per mbf. As with red pine pulpwood, sale volume hit a quarterly record in the 2nd quarter, rising to 21.7mmbf. The average quarterly sale volume for the past eight years is close to 8mmbf.



NLP sugar maple sawtimber prices dropped back down from \$377.68 to \$350.70 per mbf as volume more than doubled from .73 to 1.6mmbf. The price was \$774.24 per mbf in the 3rd quarter of FY 2016 before prices began their descent for five quarters. The 2nd quarter UP price rebounded from \$363.07 all the way up to \$527.66 per mbf, as sale volumes also more than doubled there from .63 to 1.4mmbf. Most quarters the UP sugar maple sawtimber price is significantly higher than the NLP's, but that has often not been the case over the past two years. The UP average price reached \$1058 per mbf in the 4th quarter of FY 2015 and had been above \$1000 per mbf for a string of five quarters before that. The NLP price reached a six-year peak of \$787 in the 4th quarter of FY 2013 and a price of \$774 per mbf more recently in the 3rd quarter of FY 2016. With the recent narrowing of price differences, the slope of the UP and NLP eight-year increasing price trends look similar, with the UP price trend almost \$300 per mbf above the NLP price trend. The UP's eight-year average sale volume is close to 750mbf while the NLP's is closer to 600mbf; both peninsulas had quarterly sale volumes well above these averages for four of the last five quarters.

Observations on Why the State Forest FY 2018 2nd Quarter Sale Volumes Were at Record Levels
by Larry Pedersen, 5/17/18

The record sold volumes in the 2nd quarter of FY 2018 are due to a number of factors. Three interrelated reasons that appear to have contributed to record volumes include the timing of sales, low sales in the last (1st) quarter, and a backlog of unsold sales (sales offered but not sold) leading up to the 2nd quarter. Given how high the sold volume was, it is likely that sales in upcoming quarters will decline from their 2nd quarter record levels. (However, FY 2017 was a banner year for sale volumes and the next two quarterly volume levels may still leave total FY 2018 above FY 2017.)

With respect to the timing of sales, significantly more or less volume can be sold in any given quarter due to weather conditions, mill operations expanding or contracting, and pure coincidence that more or less sales are processed as sales are not highly coordinated across DNR offices. Sales in any given quarter may just happen to be higher or lower than usual.

Practically speaking, related to this issue in the current circumstances is that there were low sale volumes in the 1st quarter (October through December of 2017). This in turn, could be related to when sales were offered and when they were sold. Sold data is based on contract issue dates which are variable with respect to how soon after the bid date they occur (often up to 21 days – or more than half a month - after the bid date). In contrast, “Offered” data is based upon the month in which the bid date falls.

Generally, “offered” sales exceed “sold” sales as sales tend to be only sold once (there may be rare exceptions where a sale is cancelled and then resold some time later), whereas “offered” sales may be offered more than once and double counted (when they are pulled or do not receive any bids and then offered again later). The table below comes from the “Major Species Spreadsheet” posted online. It shows offered and sold volumes and the cord volume differences between them for the past ten quarters.

Product	Species Group by Market Area	2016	Q2	Q3	Q4	2017	Q2	Q3	Q4	2018	Q2
		Q1	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume	Volume
SAW	OAK NLP	3,771	2,739	4,638	2,952	4,920	2,837	4,366	6,063	2,298	3,262
SAW	RED PINE SAWTIMBER	6,971	8,354	5,335	6,815	8,407	9,655	9,353	11,647	12,913	21,744
SAW	SUGAR MAPLE UP	534	1,125	544	528	336	1,117	1,953	2,072	632	1,379
SAW	SUGAR MAPLE NLP	482	1,252	329	730	568	1,093	3,947	1,848	730	1,559
PULP	ASPEN STATEWIDE	47,379	41,587	46,081	49,311	33,241	54,720	48,562	58,709	31,990	84,008
PULP	OAK NLP	10,904	8,526	16,648	9,017	20,865	17,232	13,700	12,212	10,410	13,979
PULP	OTHER HW STATEWIDE	44,085	55,652	38,248	37,785	28,537	61,933	69,233	94,332	33,400	79,318
PULP	RED PINE UP	6,335	12,394	8,965	3,097	16,460	15,335	18,473	10,008	3,958	20,725
PULP	RED PINE NLP	9,817	12,114	11,121	14,547	20,486	15,663	22,082	19,662	27,726	35,009
PULP	JACK PINE UP	221	13,087	2,780	11,603	5,327	4,417	8,603	5,833	3,346	4,772
PULP	JACK PINE NLP	2,933	5,628	7,064	3,266	9,773	6,878	22,702	4,991	3,951	18,607
TOTAL	ALL BID SPECIES SOLD*	177,468	212,095	189,238	207,703	196,568	256,347	294,382	318,789	175,784	389,294
TOTAL	ALL BID & NON-BID SPECIES SOLD*	207,164	239,695	213,383	238,945	230,196	323,512	333,282	370,965	181,210	428,724
TOTAL	ALL SPECIES OFFERED**	207,208	262,967	263,224	253,018	366,531	310,322	390,004	380,458	297,700	338,906

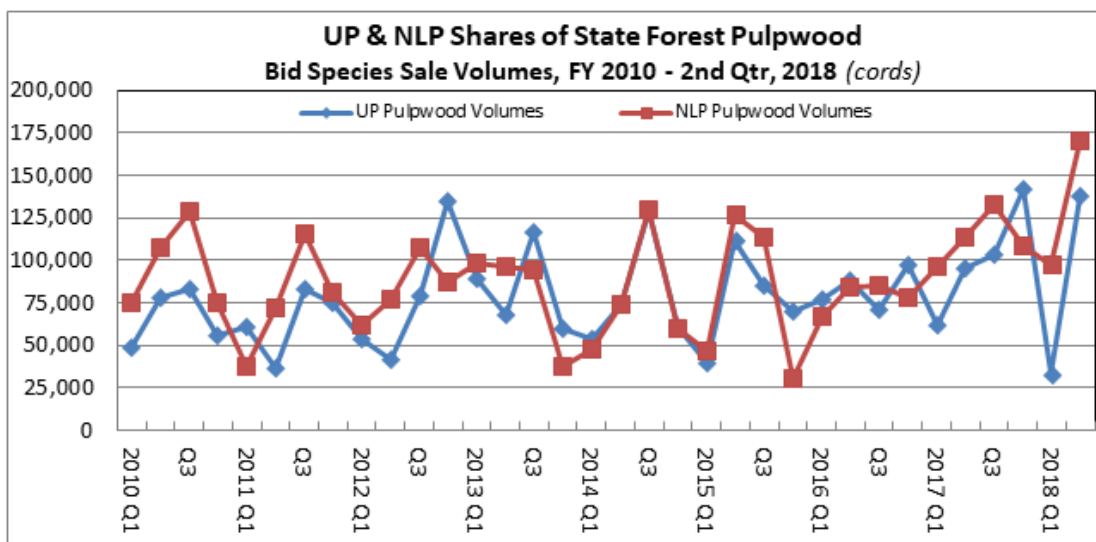
Offered minus All Bid Species Sold	29,740	50,873	73,986	45,315	169,963	53,975	95,621	61,670	121,916	-50,388
Offered minus All Species Sold	44	23,272	49,842	14,073	136,335	-13,190	56,722	9,494	116,490	-89,818

The table shows the record total sold volumes for the 2nd quarter (in the far right column) following low sale volumes in the first quarter. It also shows how what was offered in the 1st quarter exceeded what was sold by over 110,000 cords (297,700 minus 181,210 or 175,784). Much of that excess 1st quarter offered volume may have wound up being sold, but contracts may not have been signed (hence the sale volume not counted) until the 2nd quarter. Interestingly, the

differences shown below the table reveal the same pattern for the 1st and 2nd quarters of FY 2017. Large amounts of offered volumes in excess over sold sales in the 1st quarter were followed up by large increases in sold sales and lower offered volumes in the 2nd quarter. A major difference though is that the sold volumes in the FY 2018 2nd quarter exceed the FY 2017 2nd quarter sold volumes by more than 100,000 cords (389,294 vs. 256,347 for bid species only and 428,724 vs. 323,512 for all bid and non-bid species). Also the most recent 2nd quarter sold volumes exceed what was offered by so much that there is likely not nearly as much offered volume to spill over into the FY 2018 3rd quarter's sold volumes. For these reasons, 3rd and 4th quarter sale volumes are likely to drop towards the 300,000 cord level.

It will be interesting to see if FY 2018 offered volumes are as high as they were for the four quarters of FY 2017, but again, there is some double counting in these values.

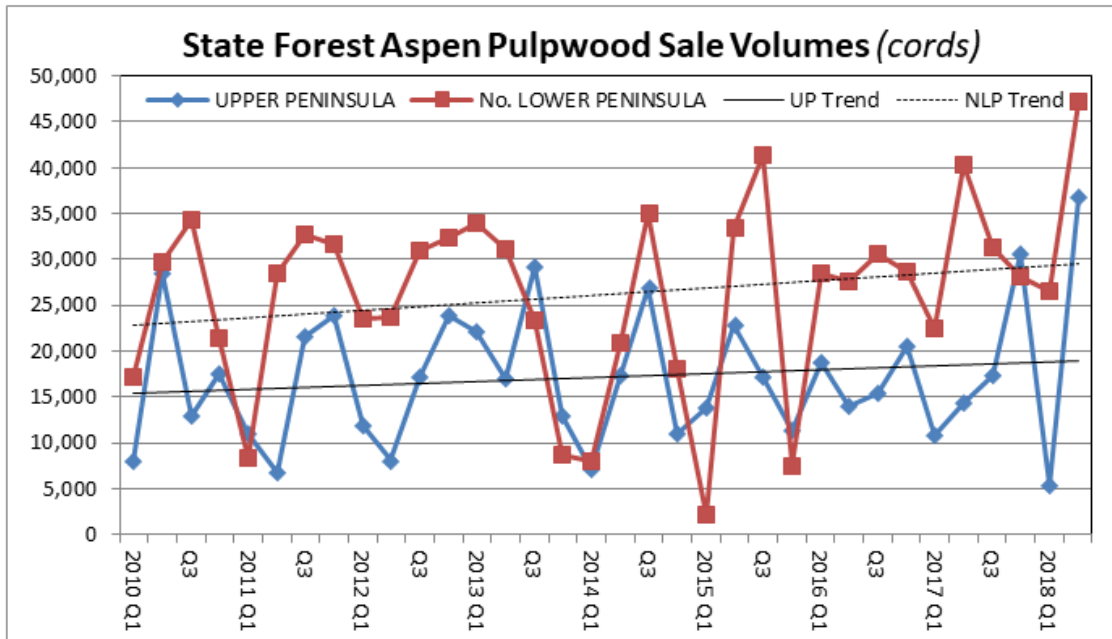
Below are some details and examples of where the much higher sale volumes occurred, based upon information included in the MFPC's 2nd quarter State Forest report.



Pulpwood accounts for about 80% of total State Forest bid species sale volume. UP pulpwood sale volumes rebounded in the 2nd quarter, from 33,000 to almost 138,000 cords while the NLP volume went from 98,000 to over 170,000 cords.

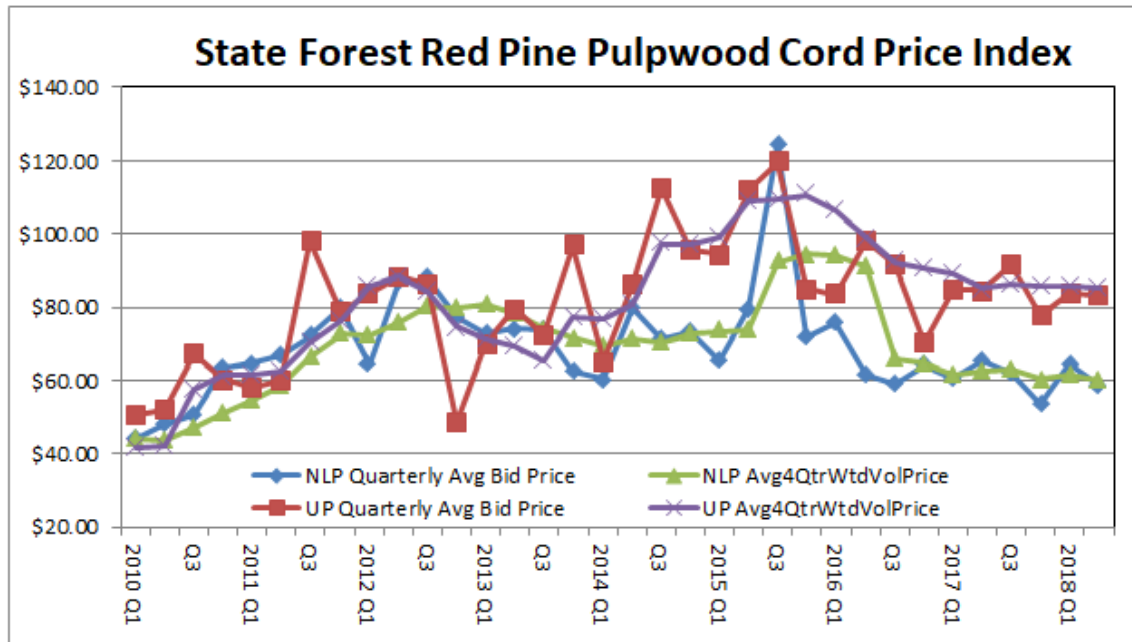
Note the largest increase in pulpwood was in the UP, where it increased 105,000 cords from a really low 1st quarter. The NLP only increased 72,000 cords.

The NLP is more responsible for a large increase in jack pine volume. In the most recent 2nd quarter, the volume rose from 3,346 to 4,772 cords in the UP while leaping to 18,607 cords in the NLP after two quarters of less than 5,000 cords. Most of this increase was in the AuSable District where the volume went from 973 cords in the 1st quarter up to 12,733 cords in the 2nd quarter.



The NLP has had wider swings in aspen pulpwood quarterly sale volumes over the past seven years than the UP, but not in the last three quarters. FY 2017 4th quarter UP volume shot up from 17,290 cords to a UP quarterly record of 30,583 cords, but then sales plummeted down to an 8-year record low of 5,412 cords in the 1st quarter of this year, only to shoot back up to 36,797 cords. Meanwhile, the NLP volume had been steadily declining for three quarters before it also spiked to 47,211 cords. Sale volumes were expected to rise this quarter, but due to the timing of sales (more sales falling in the 2nd quarter than the 1st or 3rd quarters) and the re-issuance of no-bid sales, the increases were more than anticipated. Volumes in future quarters are expected to fall back somewhat from their record 2nd quarter highs, but both peninsulas' eight-year sale volume trends are increasing.

While the NLP sold more, again, the 2nd quarter increase in the UP was much more dramatic, from a record low of 5,400 cords to 36,800 cords, over 30,000 cords more. The NLP hit a new record over 47,200 cords, but that was only up 20,633 cords over the 1st quarter level of 26,578 cords. The UP Districts increased as follows: Copper Country: up from 3,473 cords to 11,435 or about 8,000 cords, Escanaba shot up from 1,214 to 15,396 cords or about 14,180 cords, and Lake Superior went from 725 to 9,966 cords or about 9,240 cords. Interestingly, just to put these in perspective, Lake Superior sold 12,063 cords in the 4th quarter of FY 2017, Escanaba sold 6,405 cords then, and the Copper Country District sold 12,115. So, it appears that while all three Districts were up, all three were also quite low in the 1st quarter. Escanaba's 2nd quarter had the most extreme aspen volume increase. A look at Escanaba District sales for the 2nd quarter reveals the volume came a bit more from Gwinn, but the Escanaba office also had an appreciable amount.

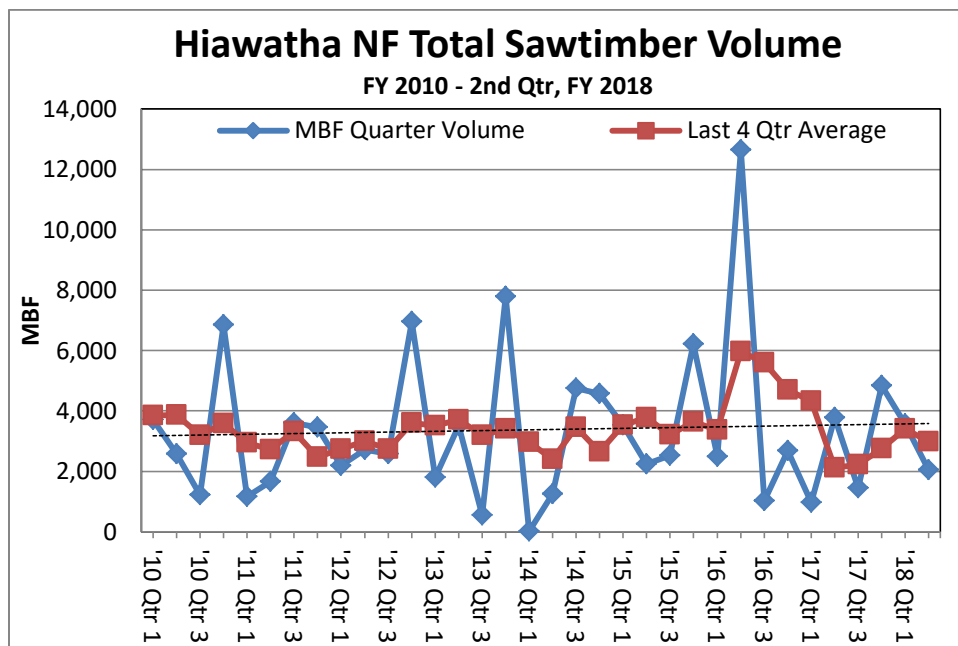


The FY 2018 2nd quarter NLP red pine pulpwood price fell back from \$64.79 to \$58.45 per cord as sale volume went up further from 27,725 to just over 35,000 cords, a quarterly volume high not seen since 2010. The price has been relatively stable for over two years. It reached \$124 per cord in the 3rd quarter of FY 2015 before dropping back to \$72 the next quarter. The UP generally has higher RP pulpwood prices than the NLP. The UP price was little changed in the 2nd quarter at \$83.28 as volume shot up from a low 3,958 cords to a quarterly record of 20,725 cords.

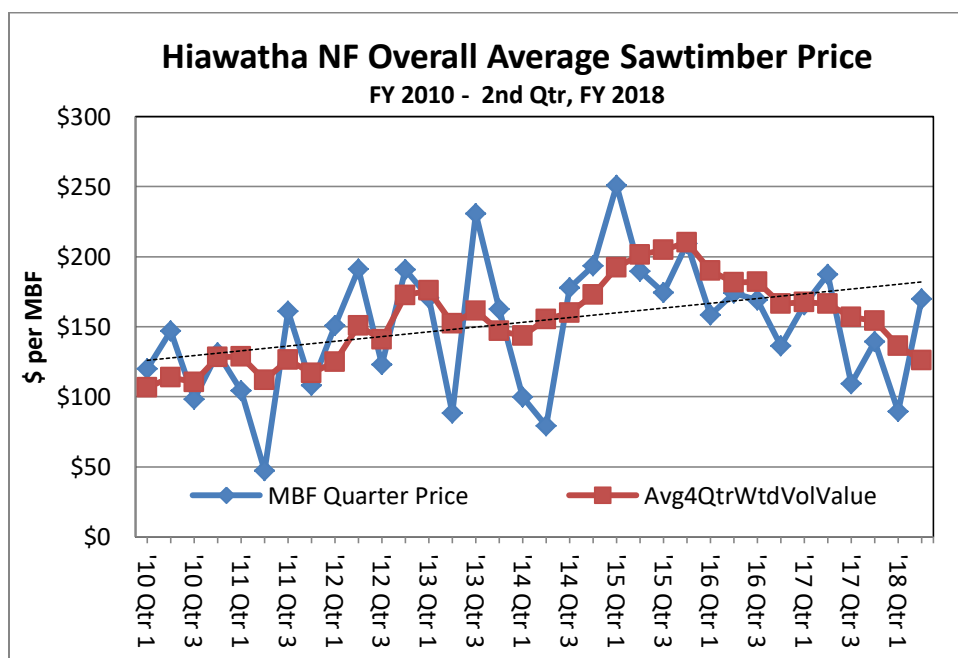
The UP also is responsible for the greatest growth in red pine pulpwood volume, despite the much higher NLP sale volume. The UP leaped from 3,958 cords in the 1st quarter to 20,725 cords – an increase of 16,767 cords - in the 2nd quarter while the NLP went from 27,725 to 35,009 cords – an increase of only 7,284 cords. So while the NLP had the much higher red pine sales, its increase wasn't as dramatic. The Copper Country accounted for about half of the UP increase, reportedly going from 505 to 10,074 cords while Escanaba went from 6 to 513 cords and Lake Superior went from 3,447 to 10,138 cords. Looking back over the stumpage bid reports for the 2nd quarter, Crystal Falls had a "Mucho Pine" sale in the middle of February that had an estimated 5,163 cords of red pine pulpwood, another sale in the quarter with over 1,000 cords, and several with more than 500 cords.

Hiawatha National Forest Major Species Product Timber Sales, FY 2010 – 2nd Qtr, 2018

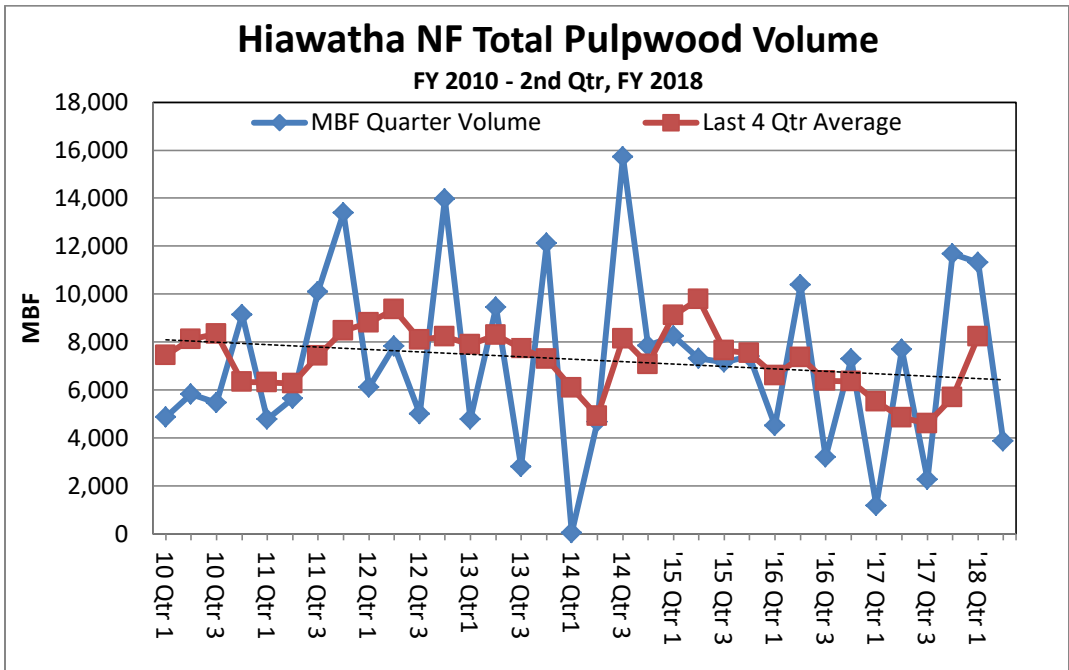
All graphs include a dotted trend line based upon the data set for the average of the most recent four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year (FY) from October 1 through September 30 (as does the MI DNR). The most recent data included here is for the 2nd quarter of FY 2018, covering January through March 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>



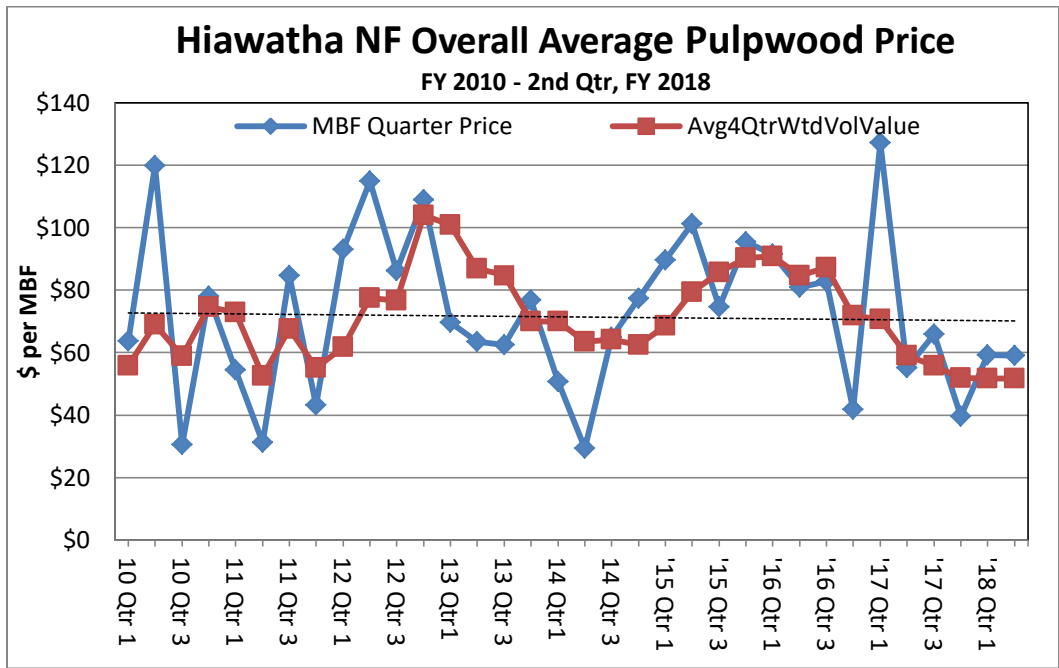
Hiawatha sawtimber sale volume fell further from 3.57 to 2.05mmbf in the 2nd quarter. Sale volumes most often are highest in the 4th quarter, drop in the 1st quarter, and then rebound a bit in the 2nd quarter. Sales were at a record 12.6mmbf volume in the 2nd quarter of FY 2016; this was followed by eight quarters of sale volumes under 5mmbf. Sales will almost certainly increase in one or both of the next two quarters. The 8-year trend of sawtimber sale volume is very slightly increasing, in large part due to that record 2nd quarter volume in 2016.



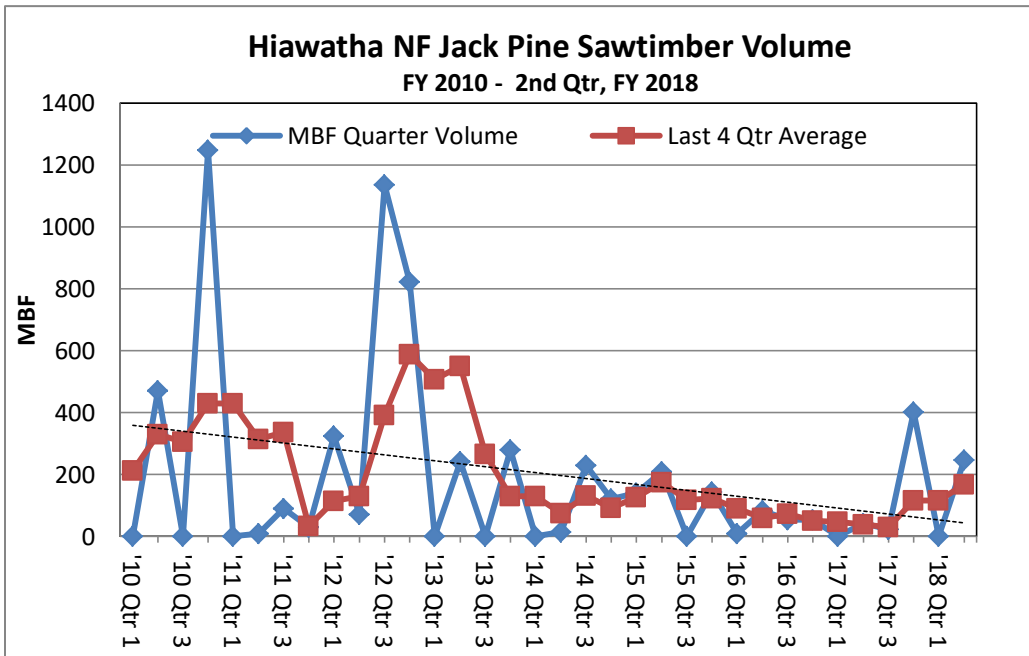
Average Hiawatha sawtimber prices nearly doubled - from \$90 to \$170 per mbf - in the 2nd quarter. They had been on somewhat of a downhill slide since they peaked at \$250 in the 1st quarter of FY 2015. The average sawtimber price is strongly influenced by the mix of species and products offered. The 2nd quarter price remains below the eight-year trend line; next quarter's price change is not expected to be nearly as dramatic.



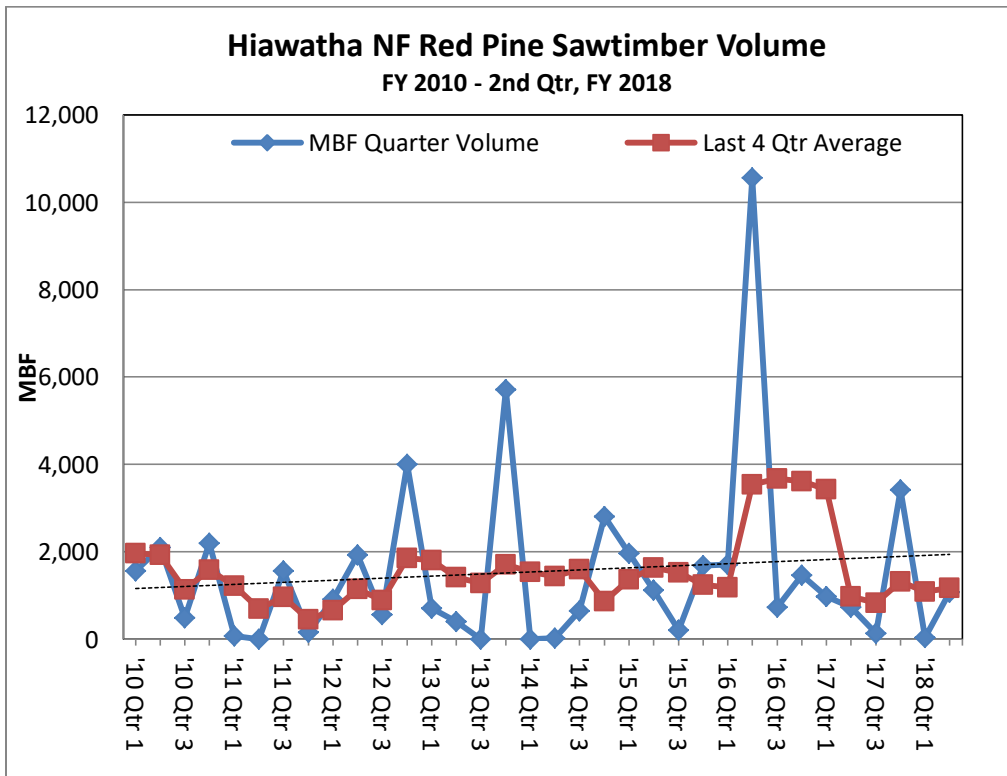
Total Hiawatha pulpwood volume fell steeply in the 2nd quarter to 3.9mmbf. This follows two quarters with high sale volumes in excess of 11mmbf, so the decline was somewhat expected. Hiawatha pulpwood sale volume had been zigging and zagging up and down for the past two years similar to what it did between fiscal years 2012 and 2014. For the past eight years, the highest sale volume was 15.73mmbf in the 3rd quarter of FY 2014. The eight-year quarterly sales trend is slightly falling. Next (3rd) quarter's sales volume are expected to rebound from the sharp decline in the 2nd quarter.



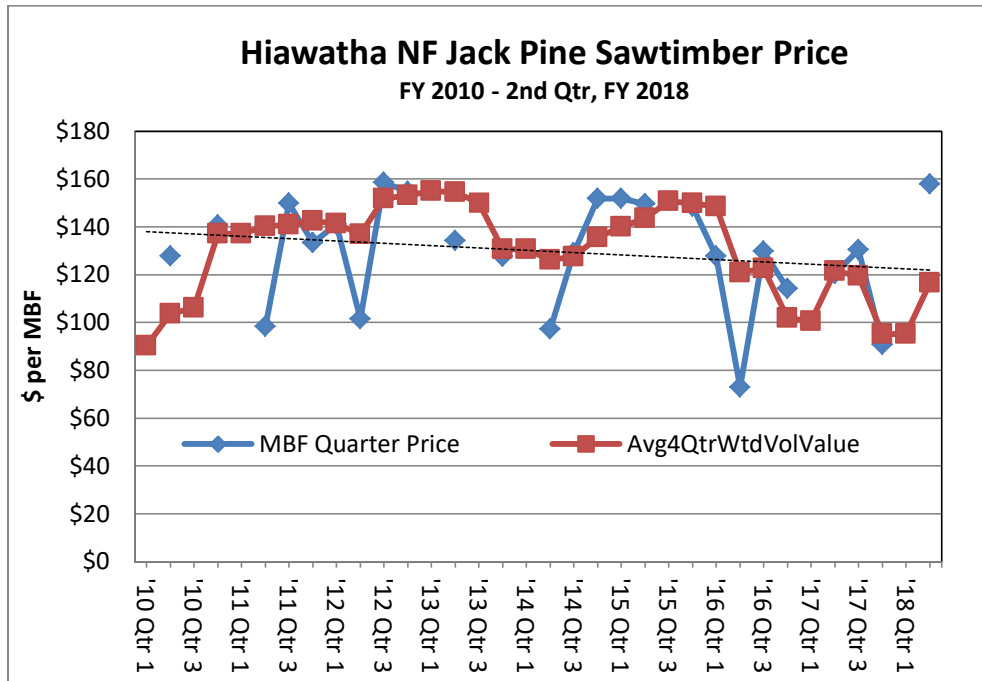
In contrast to the sharp decline in sale volume, the 2nd quarter overall average Hiawatha pulpwood price was very little changed, going from \$59.16 to \$59.04 per mbf. A sharp rise in the 1st quarter FY 2017 to a record average pulpwood price of \$127 per mbf was followed by almost as sharp a decline in the 2nd quarter to \$55.07 per mbf. With the lower values for the past three quarters, the eight-year trend line is virtually flat. Prices were expected to increase at least slightly in the 1st quarter - and they did, but recent high sale volumes have moderated further price increases.



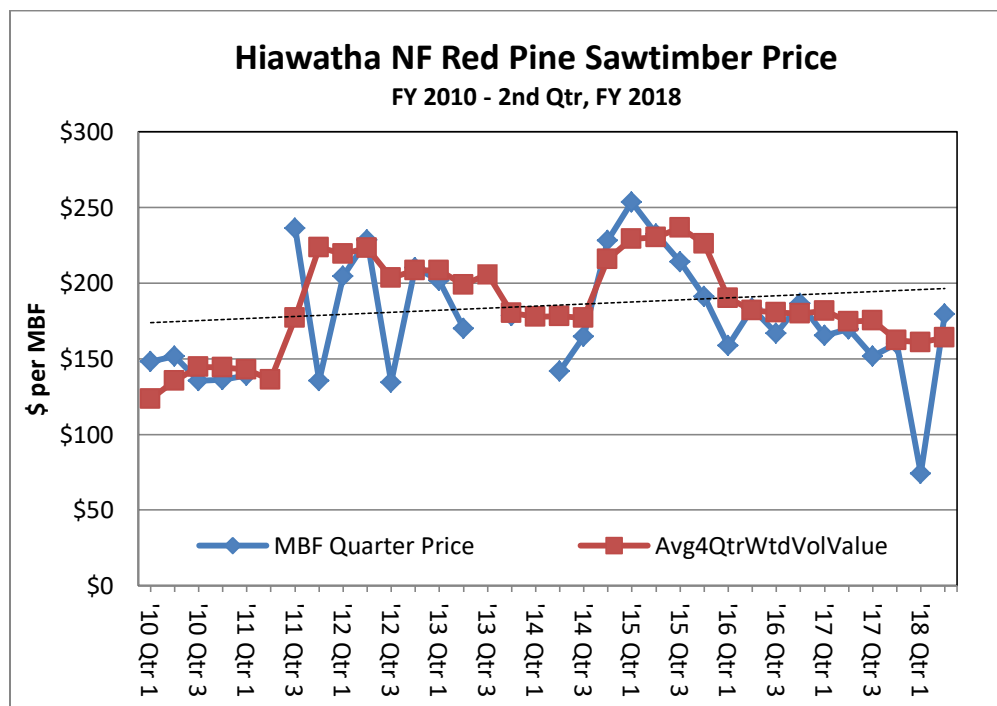
Hiawatha jack pine sawtimber sale volume was 246mbf in the 2nd quarter. This followed no sales of jack pine sawtimber in the 1st quarter. Sales reached 401mbf in the 4th quarter of FY 2017, but that was after more than two years of negligible (less than 200mbf) sales. The highest volume sold in the past eight years (1.25mmbf) was in the 4th quarter of FY 2010; sales also exceeded 800mbf twice in 2012. There is a steep declining eight-year sale trend. As with jack pine pulpwood, there are almost as many quarters without sales - or only incidental sales less than 10mbf - as there are quarters with sales. Sale volumes are likely to continue to be under 200mbf in most upcoming quarters.



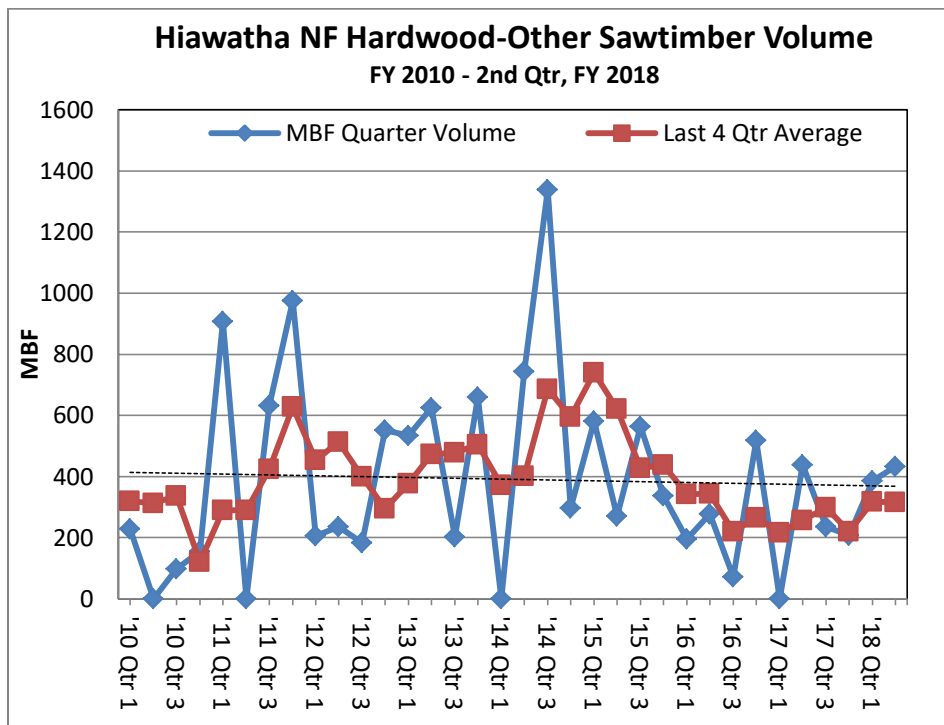
Eight times as much red pine sawtimber as jack pine sawtimber has been sold on the Hiawatha since FY 2010. Hiawatha red pine sawtimber rose from 28mbf to 1,076mbf in the 2nd quarter. Over 3.4mmbf was sold in the 4th quarter of FY 2017. Sales hit a record level of 10.56mmbf in the 2nd quarter of FY 2016, but then there were five quarters under 2mmbf. There is a slightly increasing eight-year sale trend, but without the record FY 2016 2nd quarter volume, the trend would be flat.



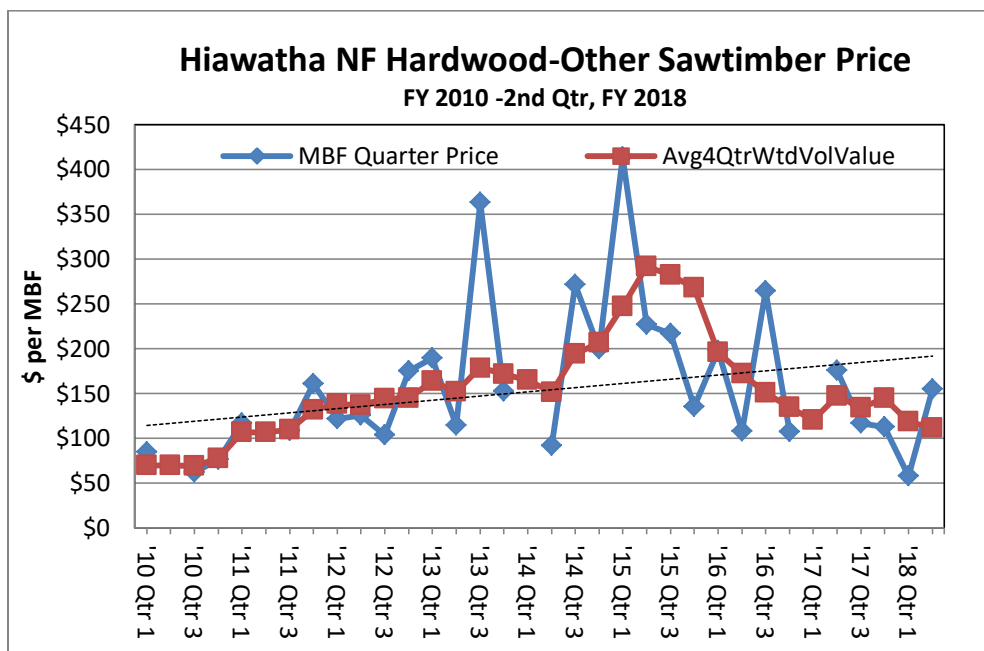
The 2nd quarter average jack pine sawtimber price was \$157.72 per mbf. There is no 1st quarter price for jack pine sawtimber as there were no sales. The 4th quarter FY 2017 price for jack pine sawtimber was at \$90.69 per mbf on 400mbf volume. There is a mildly declining eight-year price trend; however, the trend is based upon many quarters with negligible or no sales.



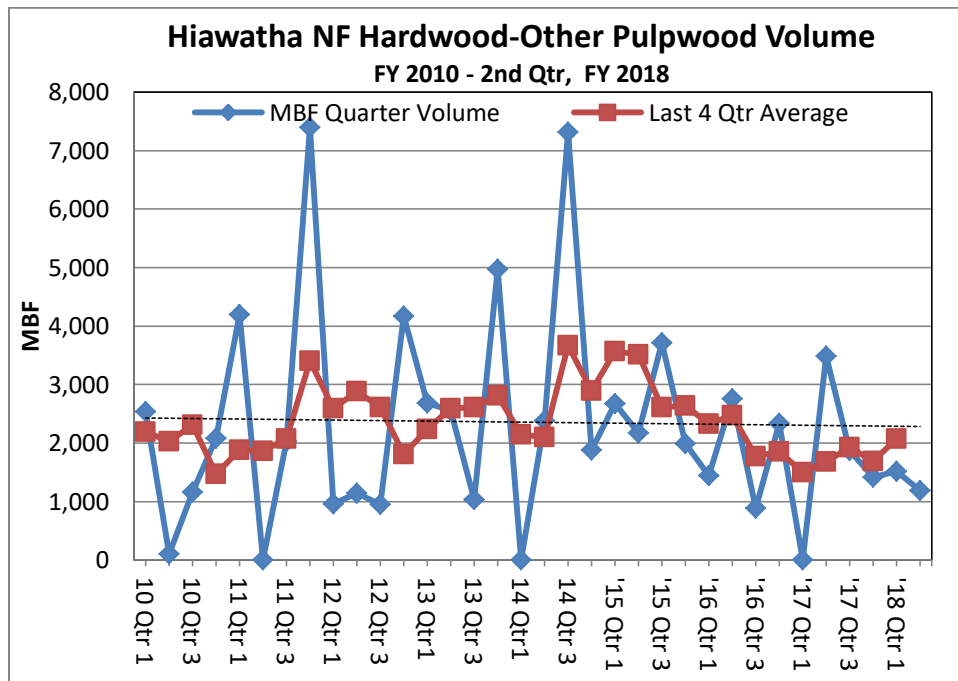
The average red pine sawtimber price more than doubled to \$180 per mbf, but the prior quarter's \$74 price was based upon very negligible (28mbf) volume. It was at \$160 per mbf in the 4th quarter of FY 2017 with 3.4mmbf of sale volume. The price reached \$253 per mbf in the 1st quarter of FY 2015, its highest level in years. It then declined for four straight quarters before stabilizing in a range between \$150 and \$190 until the 1st quarter of FY 2018. The overall eight-year price trend has been moderately increasing; however, the trend is based upon many quarters with little or no sales.



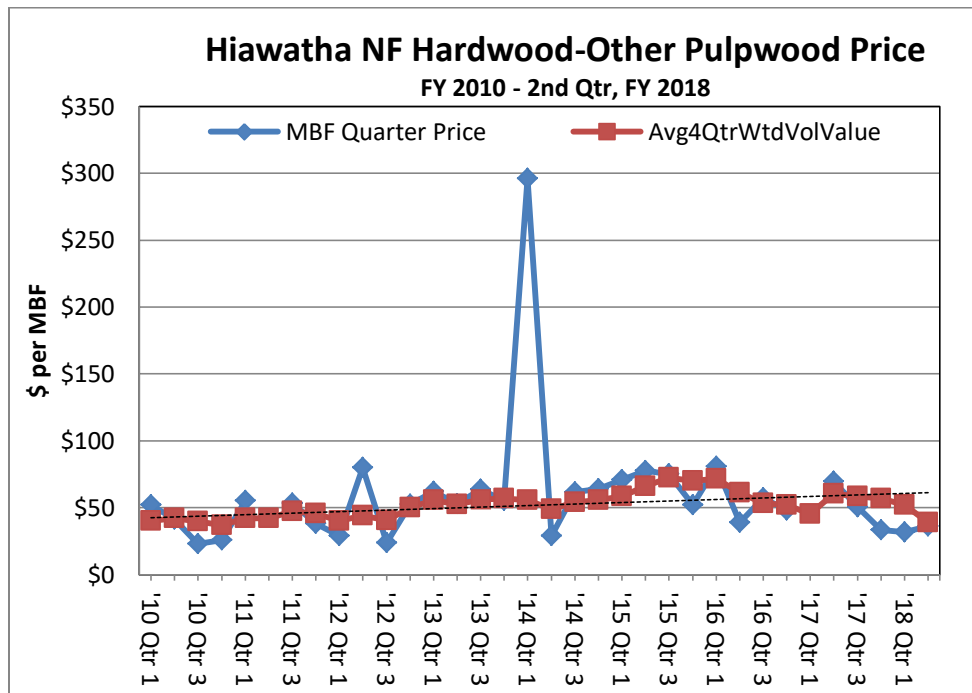
Hiawatha’s “hardwood-other” sawtimber sale volume rose slightly from 385 to 432mbf in the 2nd quarter. Quarterly sale volume reached a seven-year record level of 1.3mmbf in the 3rd quarter of FY 2014, but no quarter has reached even 600mbf since then. With many low volume quarters under 400mbf in FY 2016 and 2017, the eight-year sale volume trend has become slightly negative. The most current 2nd quarter is just above the eight-year trend line.



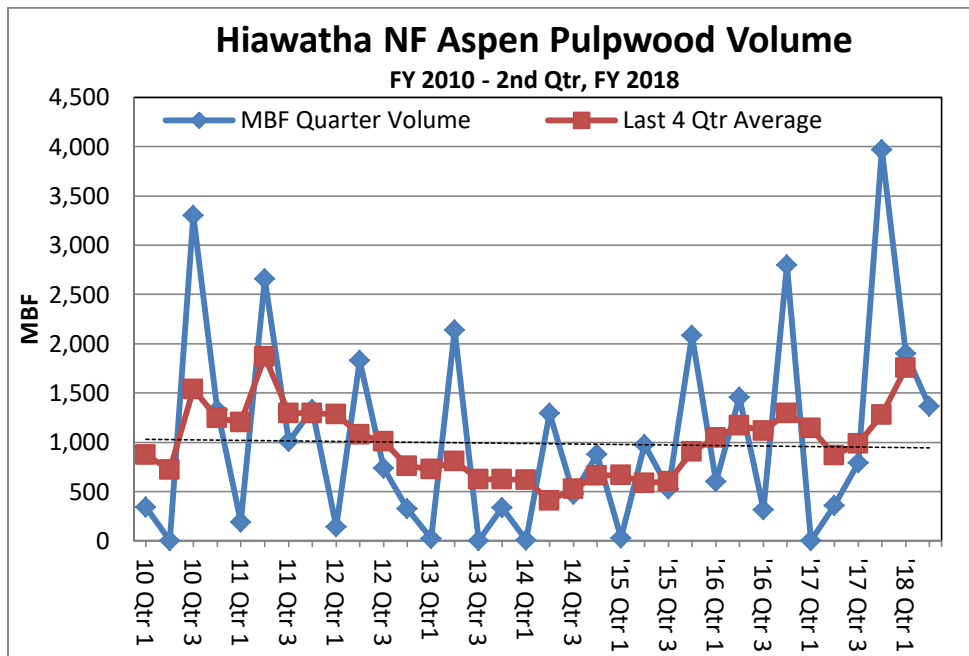
The 2nd quarter “hardwood-other” sawtimber price reversed three quarters of declining prices and rose fairly sharply, from an eight-year record low of \$57.85 per mbf up to \$155 per mbf. Despite some relatively low prices in recent quarters, there is an increasing eight-year quarterly price trend. However, there has been a fairly sharp declining trend over the past three years through the 1st quarter of FY 2018. Future quarters with sale volumes are likely to be associated with increasing prices.



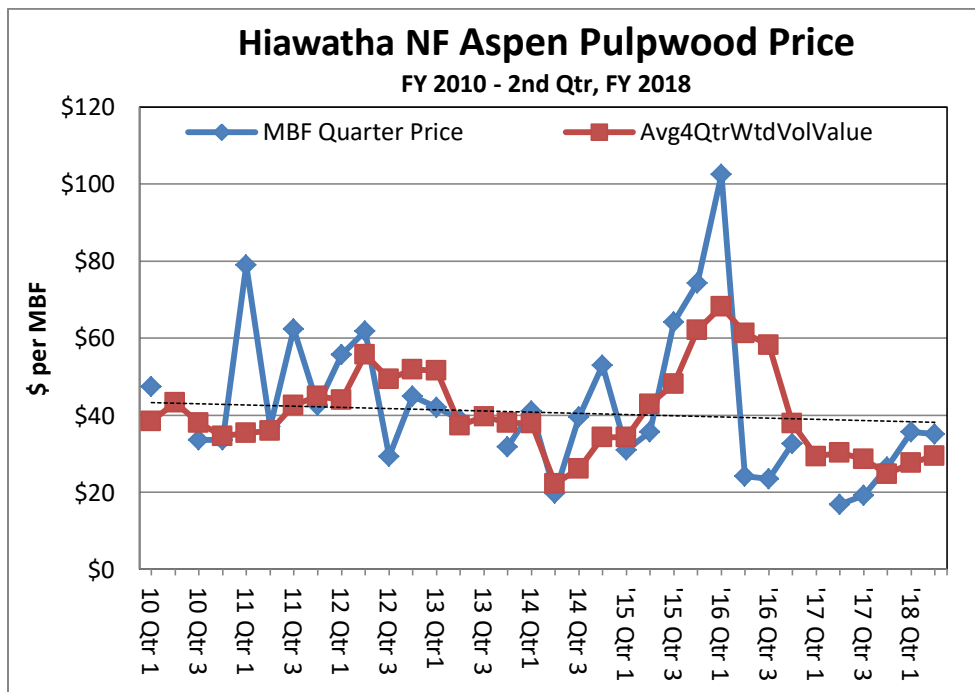
Hardwood-other pulpwood sale volume fell back from 1.5 to 1.2mmbf in the 2nd quarter. Sale volumes have been close to 7.5mmbf twice in the last eight years. Like so many other Hiawatha timber products, the eight-year sale volume trend has turned slightly negative due to lower volumes in recent quarters. Like hardwood-other sawtimber, the shorter three to four-year trend has been quite negative. The erratic nature of volumes from quarter-to-quarter appears to be moderating.



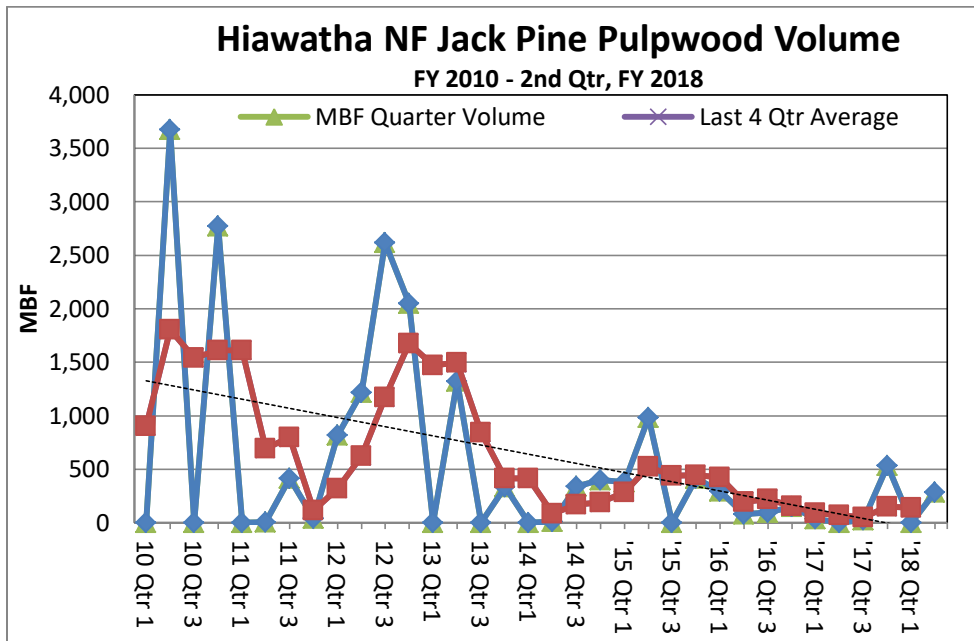
The price for “hardwood-other” pulpwood rose from \$32 to \$36 per mbf in the 2nd quarter. It had been \$50.64 per mbf in the 3rd quarter of FY 2017 before declining to \$33.46 in the 4th quarter. The 1st quarter FY 2014 price is an anomaly or error. Other than this exception, the price has largely fluctuated in a fairly narrow range around \$50 over the past eight years, dropping as low as \$30 and rising as high as \$80. There is a very modest increasing price trend for the period.



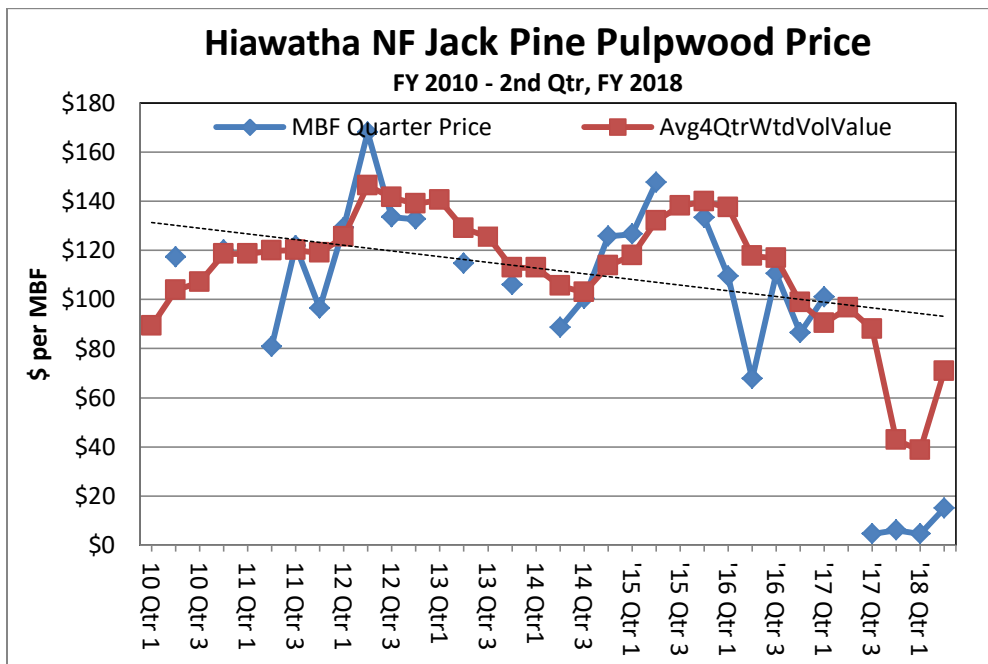
Sales of aspen pulpwood fell from an eight-year quarterly record of 4mmbf in the 4th quarter of FY 2017 to 1.9mmbf in the 1st quarter of FY 2018 and then fell again in the most recent quarter to 1.4mmbf. There was no sale volume in the 1st quarter of FY 2017 after which there were two modest increases. Aspen pulpwood sale volumes have been erratic, although sales have peaked in the 4th quarter for the past three years. There has been a slight downward sale volume trend over the past eight years.



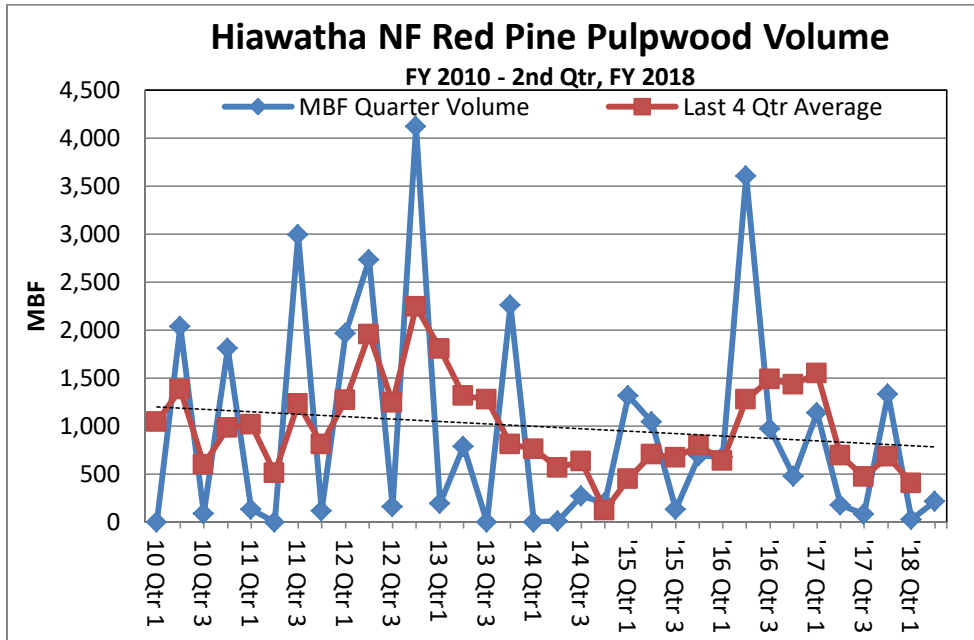
The 2nd quarter aspen pulpwood price was practically unchanged, going from \$35.59 to \$35.05 per mbf. The price hit a record \$103 per mbf in the 1st quarter of FY 2016. The subsequent drop in prices was not surprising, but was steeper than expected and prices have been below \$40 per mbf ever since then. The eight-year price trend is almost flat and very close to \$40 per mbf.



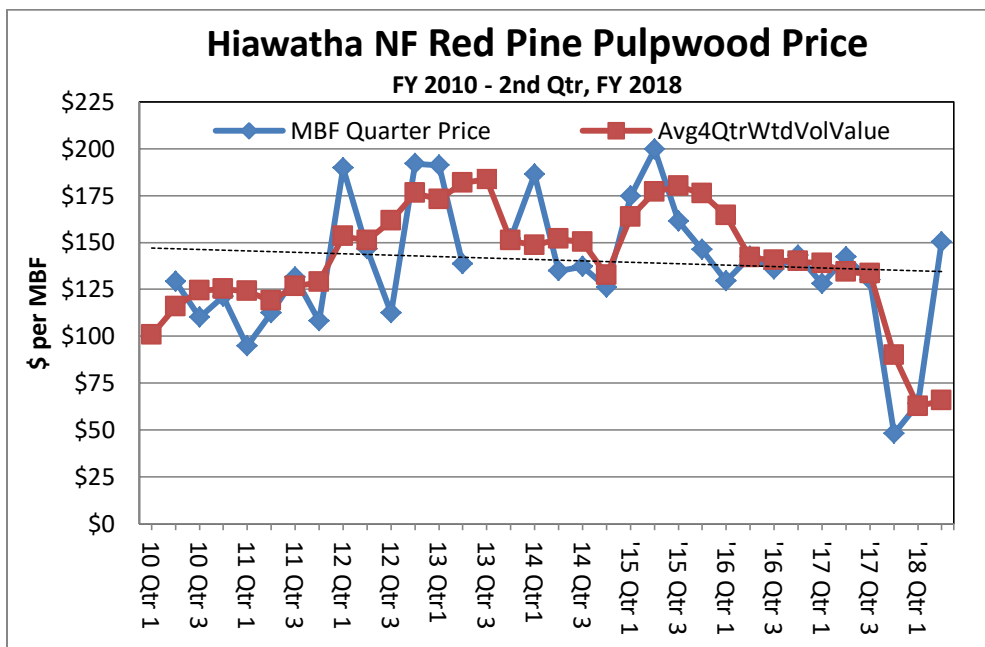
There was 287mbf of jack pine pulpwood sold in the 2nd quarter; there were no sales in the 1st quarter. The jack pine pulpwood volume graph is very similar to the jack pine sawtimber graph – there frequently are no or negligible sales. Jack pine has had a diminishing - almost disappearing - presence in both sawtimber and pulpwood Hiawatha timber sales. There were 536mbf of jack pine pulpwood sales in the 4th quarter of FY 2017. Up until then, quarterly sales had been below 500mbf for four years except for the 2nd quarter of FY 2015 when they reached 985mbf. Sales in some upcoming quarter might reach or exceed that level; however, most quarters are likely to continue to see negligible or no volumes.



Jack pine pulpwood prices rose to \$15 per mbf in the 2nd quarter. With no sales, practically speaking, there is no 1st quarter jack pine pulpwood price although a price of \$4.45 per cord was reported. This follows on prices of \$4.43 and \$6.01 per mbf in the 3rd and 4th quarters, respectively. The jack pine sale volume has been so low for so many quarters that any associated prices are quite suspect. The eight-year trend line is declining, but there really is not much of a basis for a trend line as there are as many quarters with no or negligible sales of jack pine as there have been quarters with credible levels of sales over the past six years.



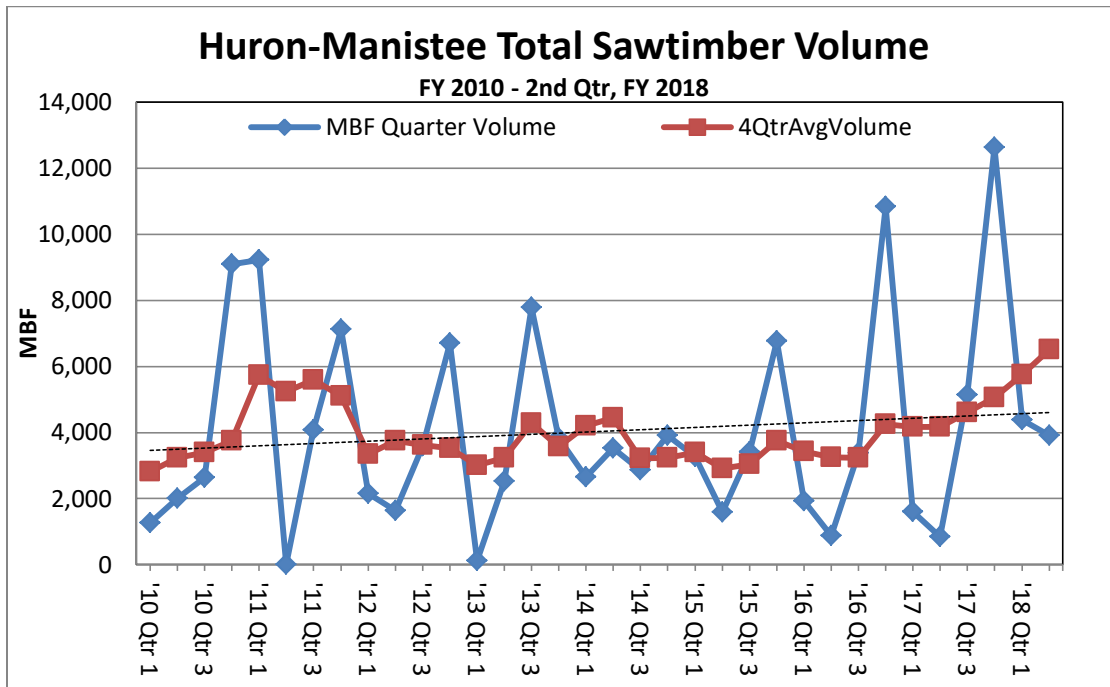
Red pine pulpwood sale volume remained very low, from a negligible 26mbf to 218mbf in the 2nd quarter. Sale volume reached 3.6mmbf in the 2nd quarter of FY 2016, but that quarter's volume is an outlier in comparison to other quarterly sales in the past four years. The high FY 2016 2nd quarter and most recent 4th quarter volumes did not reverse a slightly declining eight-year volume trend. Although this trend is not nearly as negative as jack pine pulpwood's, it does portend limited volumes (under 1mmbf) are likely in many - and probably most - upcoming quarters



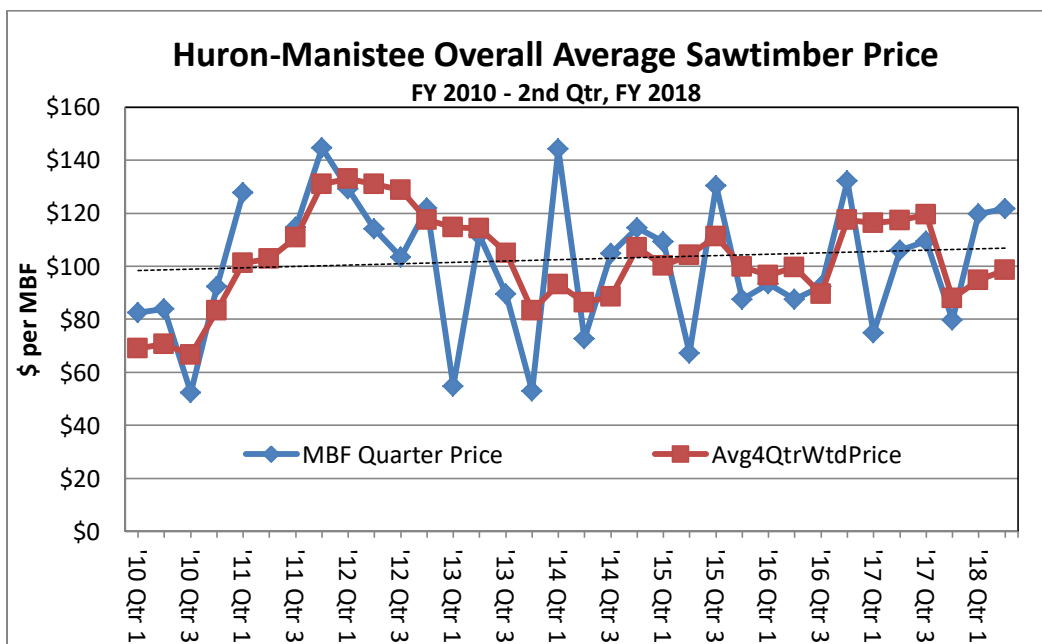
The 2nd quarter red pine pulpwood price jumped from \$64 to \$150 per mbf. Before falling to \$47.89 in the 4th quarter of FY 2017, the price had been relatively stable for two years, fluctuating between \$125 and \$140. Before that, it went from \$175 to \$200 per mbf between the 1st and 2nd quarters of FY 2015. The eight-year price trend from FY 2010 through the most recent quarter is just slightly decreasing. The highest prices were reached between 2012 and 2015 in the middle of this eight-year period. It also should be noted that there has been very low or no sale volumes in many quarters over the past eight years, which undercuts the significance of the price trend.

Huron-Manistee National Forest Major Species Product Timber Sales, FY 2010 – 2nd Qtr, 2018

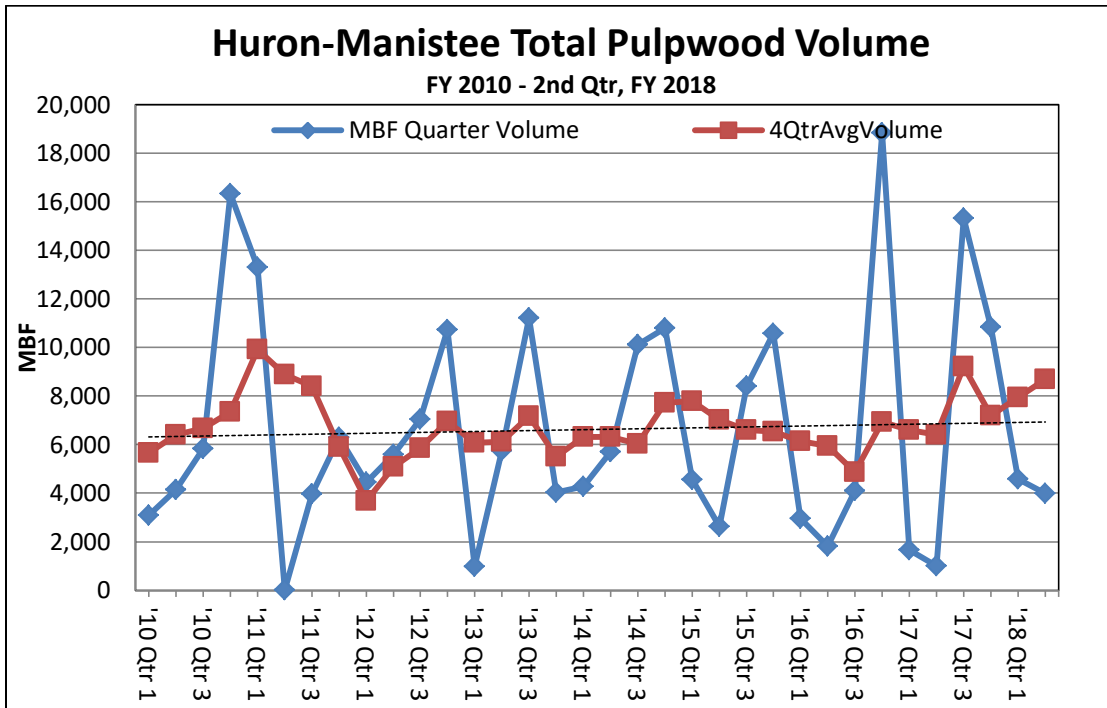
Graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter. The National Forests follow the federal fiscal year from October 1 through September 30. The most recent data included here is for the 2nd quarter of FY 2018 (January through March, 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>



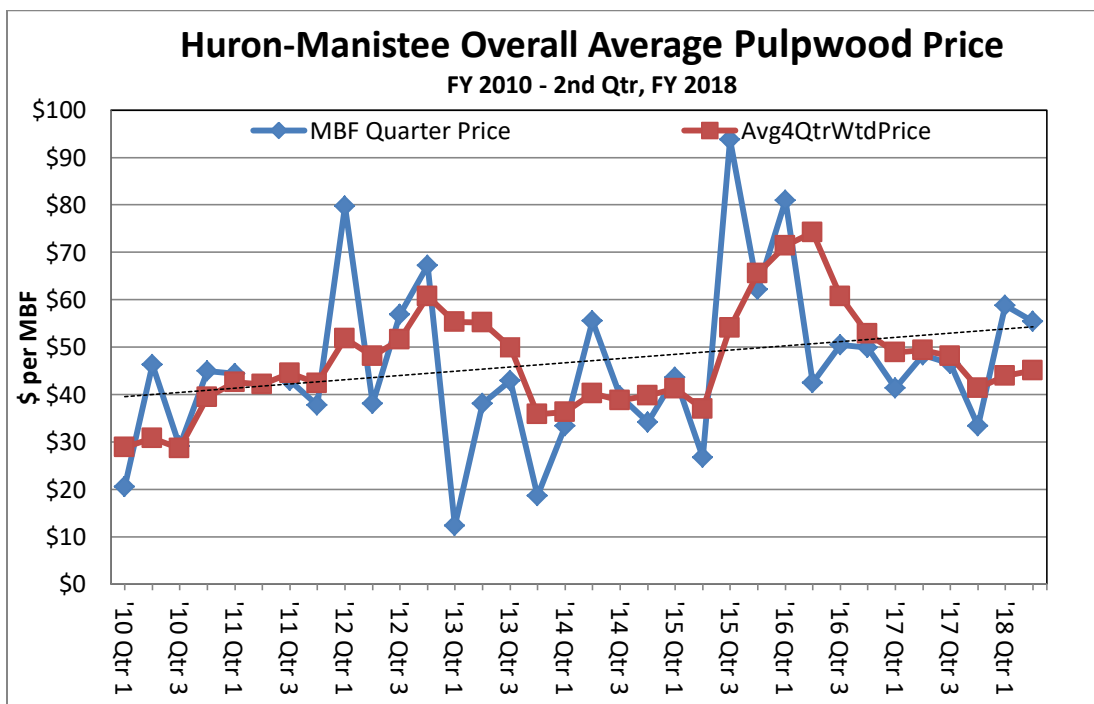
As expected, the Huron-Manistee (H-M) sawtimber sale volume dipped further in the 2nd quarter to 3.91mmbf. It hit an eight-year record of 12.64mmbf two quarters ago and then dropped to 4.37mmbf in the 1st quarter. The eight-year volume trend is slightly increasing. H-M sawtimber sale volume often peaks in the fourth quarter and then is lower in the 1st and 2nd quarters. Sale volumes should rise again in the upcoming quarters.



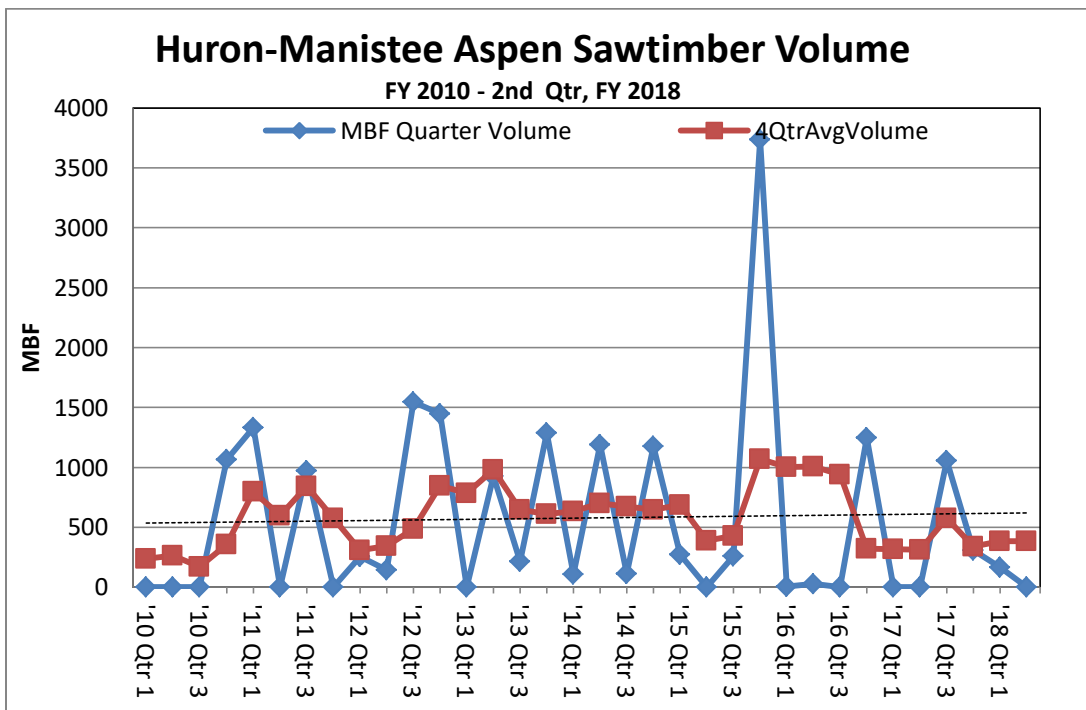
The 2nd quarter overall average sawtimber price continued to rise, going from \$120 to \$122 per mbf. Two quarters ago the price was at \$80 per mbf. Generally, red pine accounts for over half of the H-M sawtimber sale volume and it is the major influence on the overall average sawtimber price. The eight-year price average is just over \$100 per mbf and the eight-year price trend line is slightly increasing.



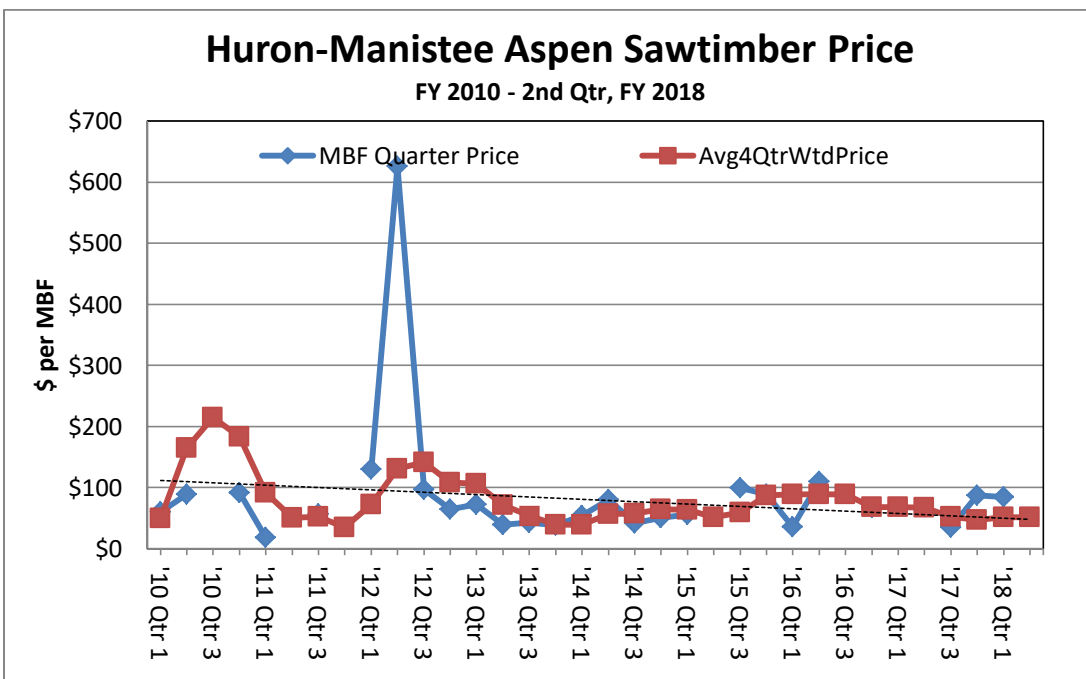
H-M quarterly pulpwood sale volume continued to drop, going from 4.6 to 4.0mmbf in the 2nd quarter. The sale volume seesawed dramatically from almost 19mmbf in the 4th quarter of FY 2016 to under 2mmbf in the first two quarters of last year and then to over 15mmbf in the 3rd quarter. There has been a distinct pattern of higher 4th quarter sales. The eight-year trend line is deceptively flat, in contrast to frequent large swings in volumes from quarter to quarter. Higher sales are expected in upcoming quarters given the recent large swings in volumes and the most recent two quarters' volumes being below the eight-year trend line.



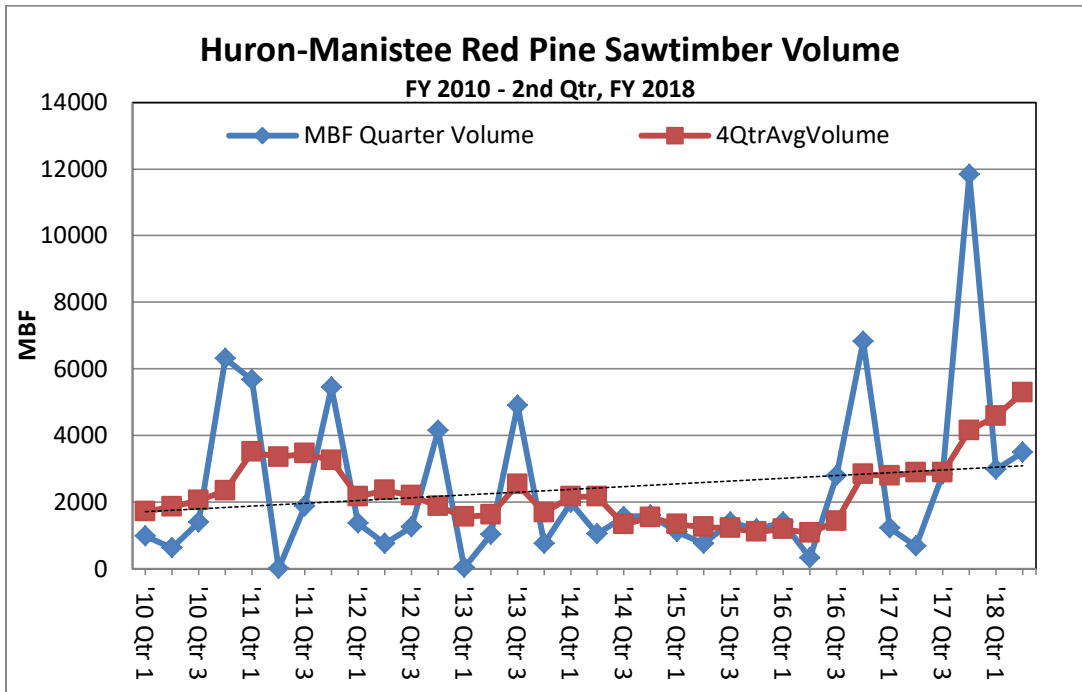
Average H-M pulpwood prices dipped to \$55.46 per mbf in the 2nd quarter, virtually intersecting the increasing eight-year price trend line. They had jumped up from \$33.39 to \$58.84 per mbf in the 1st quarter. Before then, prices had remained relatively stable, bouncing back and forth between \$40 and \$50 per mbf before falling to \$33.39. H-M pulpwood prices do not have a distinctive quarterly pattern and are not as seasonally predictable as other forest products of the National Forests.



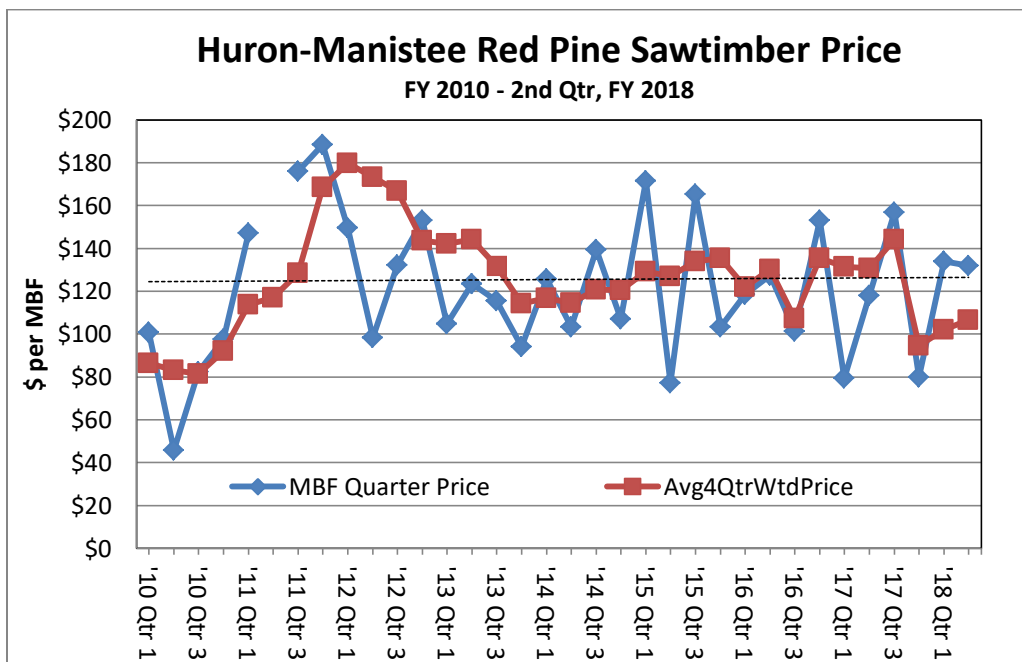
There were no H-M quarterly aspen sawtimber sale volumes in the 2nd quarter. In the prior three quarters, sales had fallen from 1,058mbf to 310mbf and then to 165mbf in the 1st quarter. This followed no aspen sawtimber sales in the 1st or 2nd quarters of FY 2017. Low or no aspen sawtimber volume in the first two or three quarters of the fiscal year has been typical for the H-M. FY 2015 saw three quarters of below average sales and then a record 3.74mmbf sale volume in the 4th quarter. The eight-year sale trend is quite flat and is just above 500mbf.



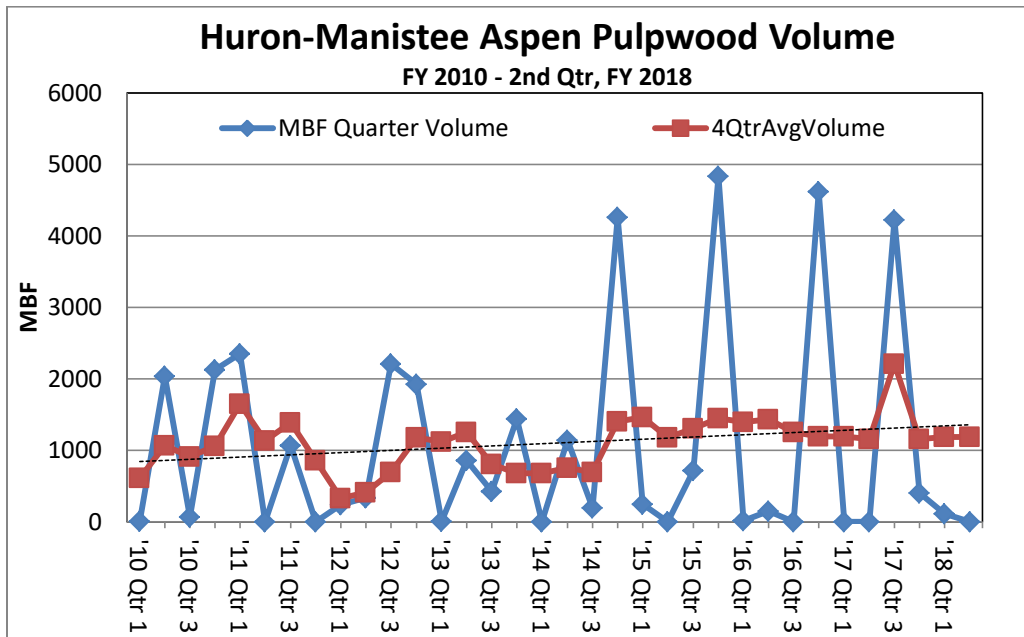
With no sales, there is no aspen sawtimber price for the 2nd quarter. The 1st quarter aspen sawtimber prices was virtually unchanged at \$85 per mbf. There was no aspen sawtimber price in the 1st or 2nd quarters of FY 2017 as there were no sales. The last time there was appreciable sale volume was in the 4th quarter of FY 2015 when the volume was over 3.7mmbf and the price averaged close to \$89 per mbf. Many of the quarters have had little or no sale volume, so reported prices are somewhat suspect.



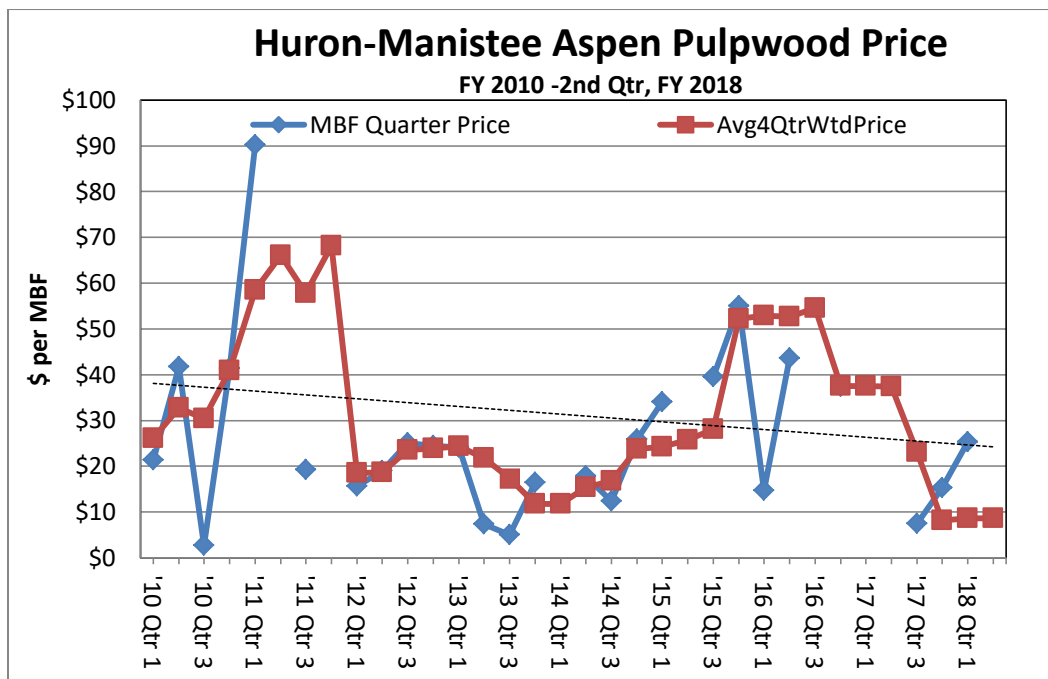
Red pine sawtimber volume rose slightly in the 2nd quarter, from 3 to 3.5mmbf, to slightly above the eight-year trend line. It was at a record 11.8mmbf in the 4th quarter of FY 2017. Sale volumes had been quite low and stable for almost three years between the end of FY 2013 and the middle of FY 2016. While the most recent two quarters were down sharply from the FY 2017 4th quarter record volume, they are more than double the volumes of most quarters between FY 2014 and FY 2016. 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. Upcoming quarters are likely to see a mixed bag of both some lower volume quarters and some higher volume quarters.



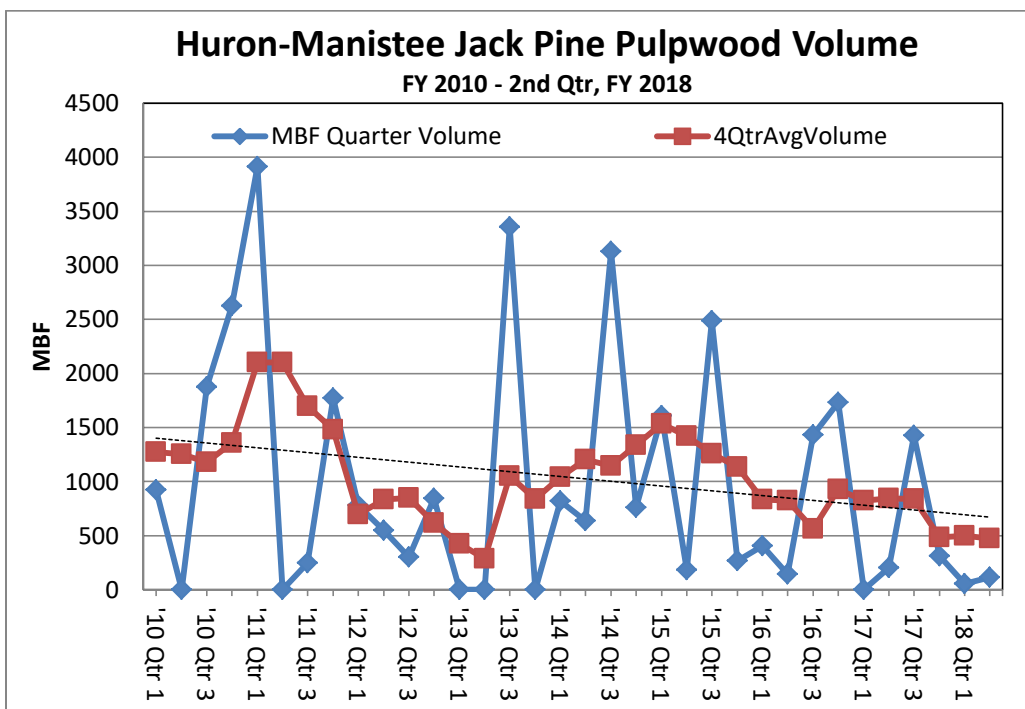
Red pine sawtimber prices dipped from \$134 to \$132 per mbf in the 2nd quarter. They fell back from \$157 to \$80 per mbf in the 4th quarter on record sale volume. The quarterly prices have been jumping back and forth between roughly \$80 and \$160 for several years now. Based upon this pattern, it was predicted that the price was likely to rebound upward in the 1st quarter of FY 2018 and it did. The 2nd quarter decline was less than expected, but in line with the eight-year price trend.



There were no sales of aspen pulpwood in the 2nd quarter. There are huge swings in these pulpwood volumes from one quarter to the next; H-M's quarterly aspen pulpwood sales are probably the most erratic of any major timber product sales for the three Michigan National Forests. The FY 2017 4th quarter sale volume plummeted from a 3rd quarter level of 4.2mmbf down to .4mmbf and then the 1st quarter volume fell further to .1mmbf, followed by no sales in the most recent quarter. The prior three fiscal years saw high sales in the 4th quarter and negligible or no sales the other three quarters, but high sales took place in the 3rd quarter of FY 2017. It will be surprising if an upcoming quarter does not once again see a sale volume in excess of 4mmbf.

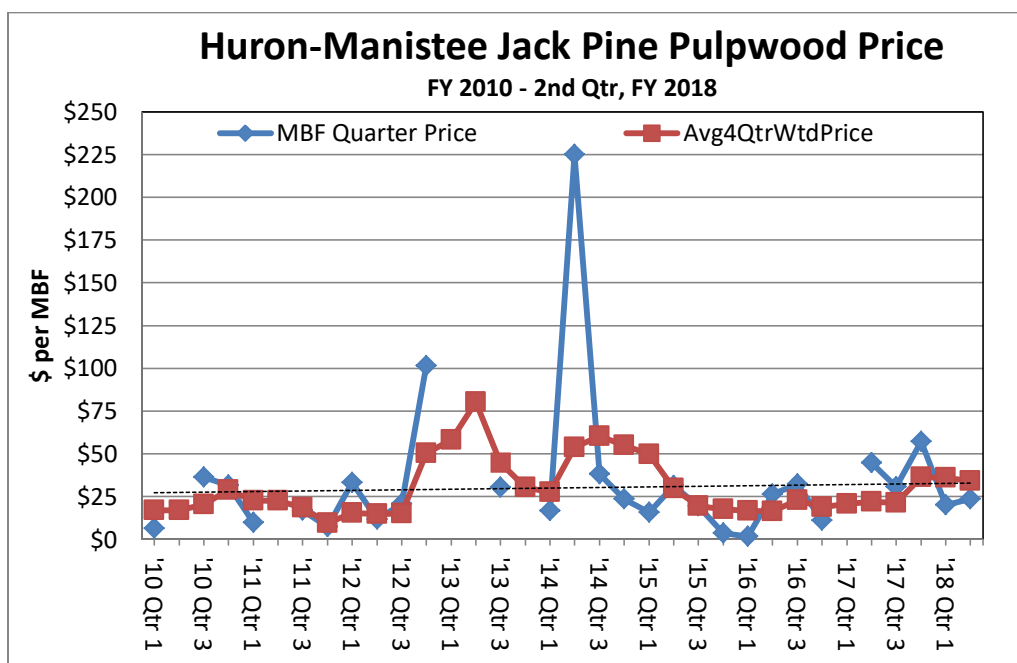


With no sales, there were no aspen pulpwood prices for the 2nd quarter. The 1st quarter aspen pulpwood price rose to \$25.29 per mbf. It had been at \$7.49 in the 3rd quarter of FY 2017 with high sale volumes. There are no 1st or 2nd quarter FY 2017 prices as there were no sale volumes then. The 4th quarter, FY 2016 aspen pulpwood price was \$37.35 per mbf (it is hidden by the red "Avg4QtrWtdPrice" value in the above graph). It was at \$55 in the 4th quarter of FY 2015 on high volume, up from about \$40 per mbf in the 3rd quarter. The eight-year price trend is declining; however, prices for many quarters are based on low or no sale volumes.

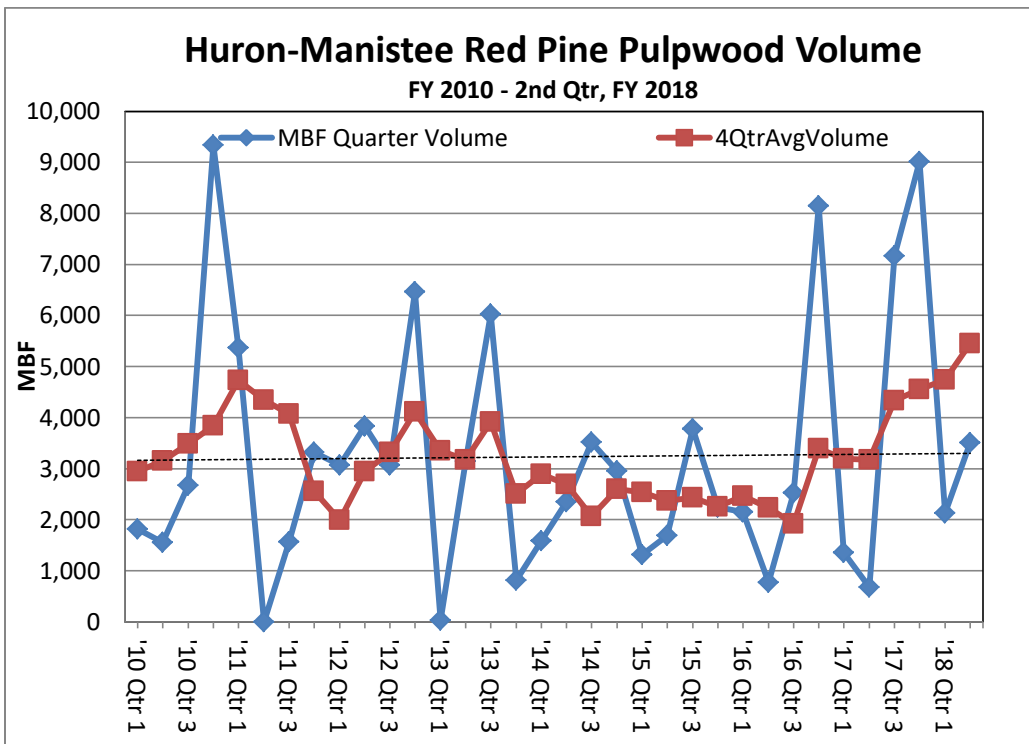


Jack pine pulpwood sale volume was a negligible 116mbf in the 2nd quarter. It had dropped in the 1st quarter, from 311 to 53mbf. There was no jack pine pulpwood sale volume in the 1st quarter of FY 2017 and only 203mbf in the 2nd quarter.

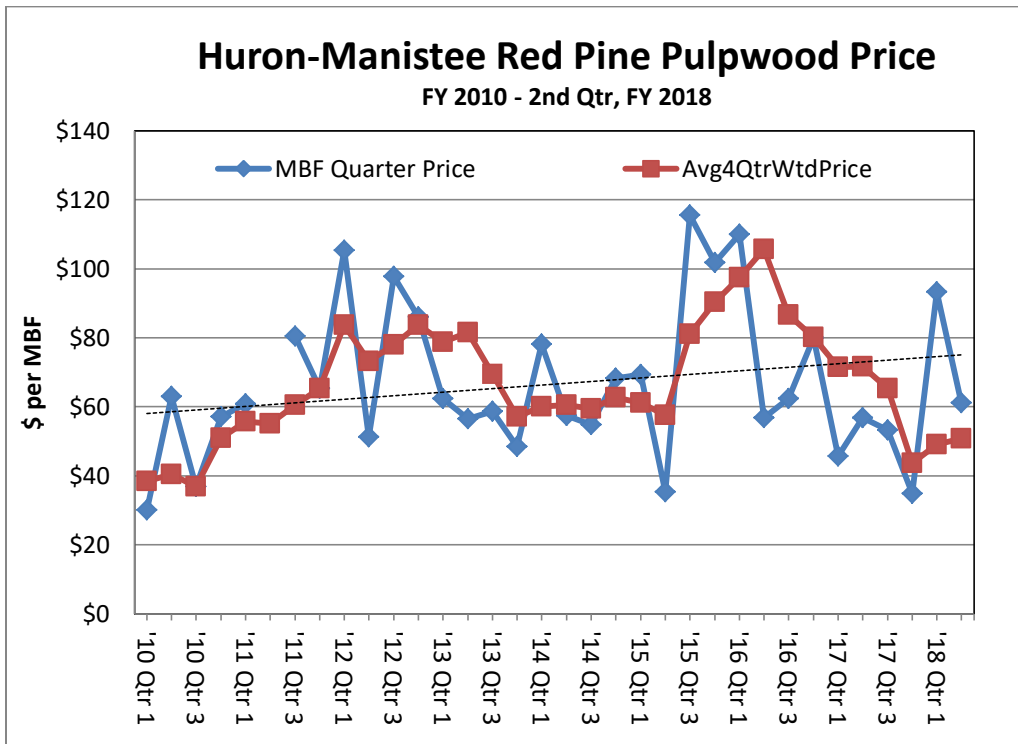
Overall, jack pine pulpwood sale volume has been on a downward trend and a majority of quarters have sale volume below 1mmbf. Also, as can be seen in the graph above, each successive year's peak tends to be lower than prior year peaks. Unlike many other products' sale volumes which peak in the 4th quarter, most of the peaks for jack pine sale volume have occurred in the 3rd quarter. Part of the decline in recent years may be due to more jack pine being reported in a combined sale category with red and white pine.



The 1st quarter jack pine pulpwood price fell back from over \$57 to just \$20 per mbf on very low volume; it rose to \$23 in the 2nd quarter on slightly more - but still low - volume. The price for the FY 2014 2nd quarter is a mistake or an anomaly and should not be considered a reliable price for the product. The eight-year price line is relatively flat, but there are many quarters with low or no sales and a few quarters with price anomalies which inhibit establishing a reliable price trend line.



Quarterly red pine pulpwood sale volumes experience similar, but larger swings to those seen with red pine sawtimber. Sale volumes went 2.1 to 3.5mmbf in the 2nd quarter. Sale volume hit a record 9mmbf in the 4th quarter of FY 2017, but it had been at .7mmbf in the 2nd quarter of last year. There had been a slight declining sale volume trend over the past eight years, but this flipped to slightly increasing trend with the most recent (2nd) quarter. Due to the erratic nature of volumes in recent quarters, it is difficult to predict what direction the volume will go in for the upcoming 3rd quarter, but the following 4th quarter volume will likely be much higher than the past two quarters' volumes.

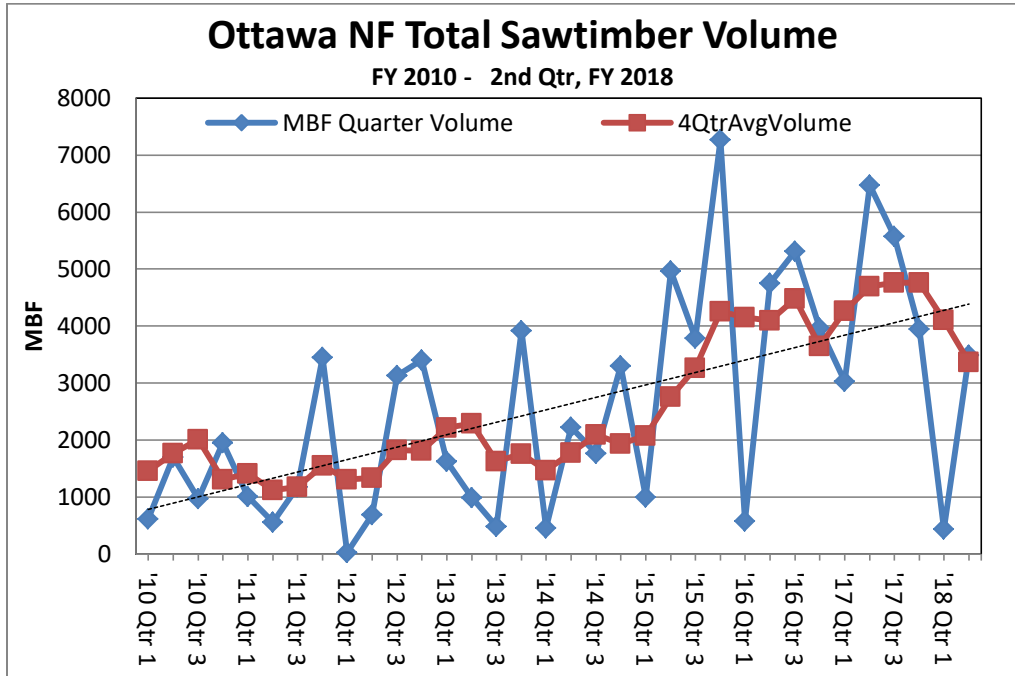


The H-M red pine pulpwood price dropped from \$93.38 to \$61.19 per mbf in the 2nd quarter. It had dropped from \$53.21 down to \$34.81 per mbf in the 4th quarter of FY 2017. The price reached record levels over \$100 per mbf in 2015. Overall, prices for the past eight years have been on an increasing trend. Prices are likely to rebound over the next several quarters.

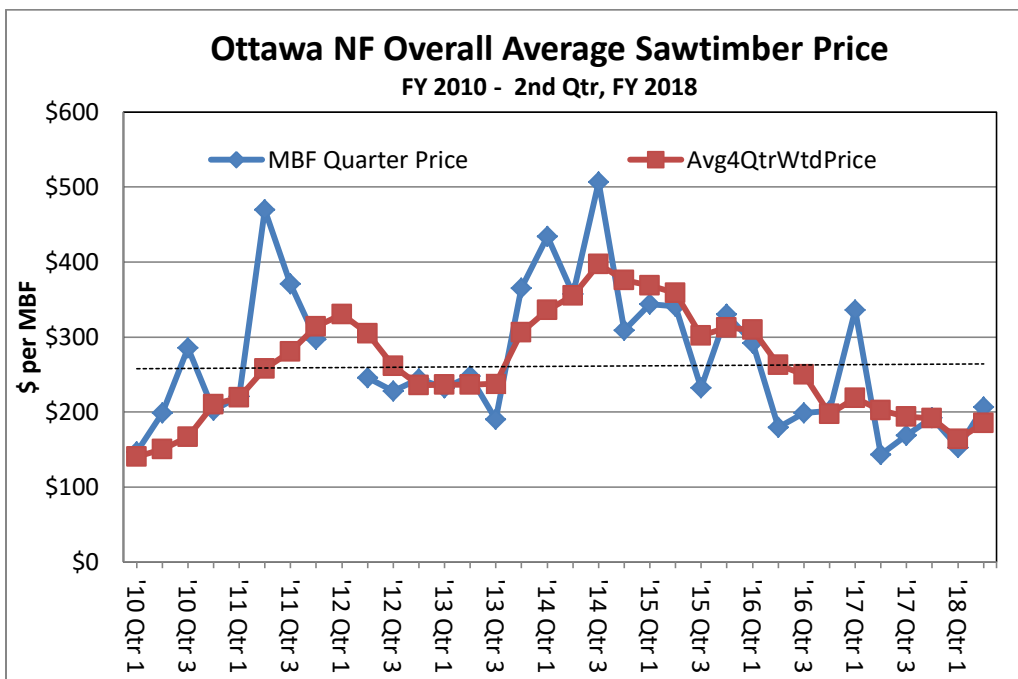
Ottawa National Forest Major Species/Product Timber Sales, FY 2010 – 2nd Qtr, 2018

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 second quarter of FY 2018 (January - March, 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:

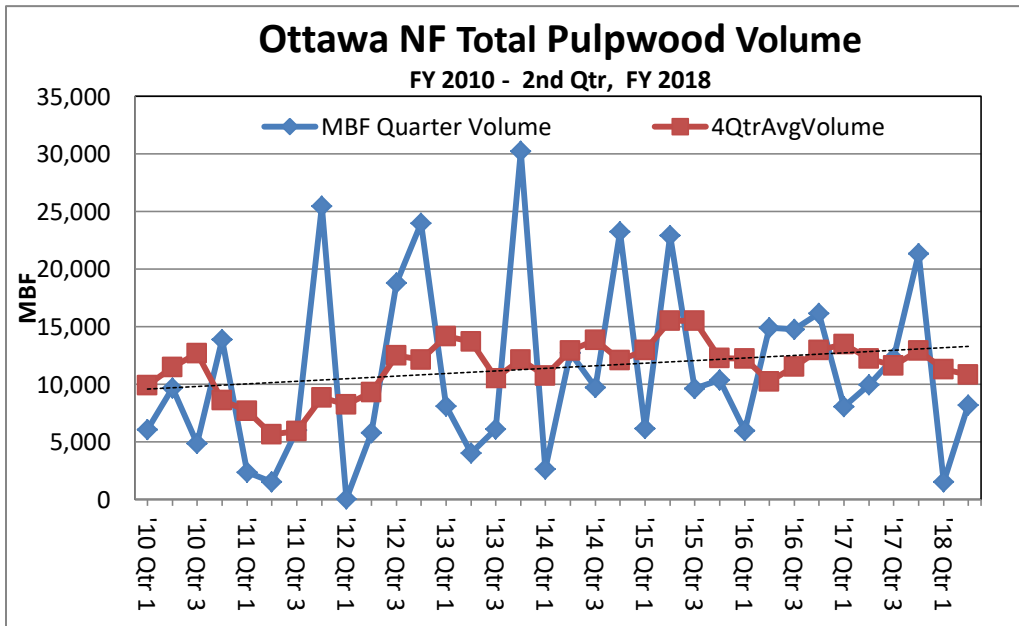
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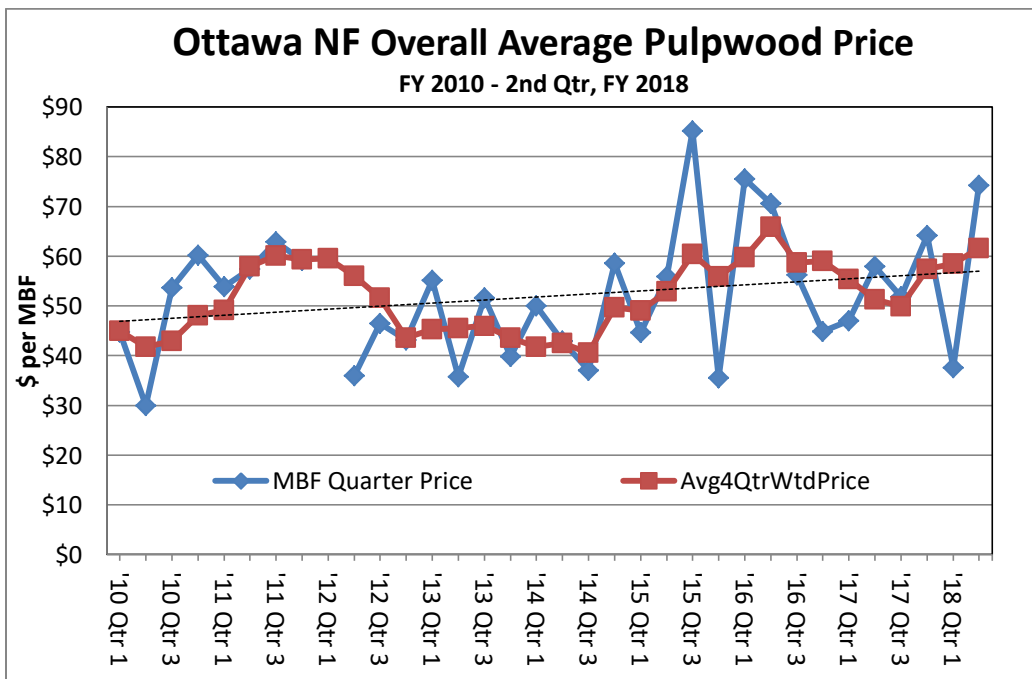
Total Ottawa sawtimber sale volume rebounded from .44 to 3.5mmbf in the 2nd quarter. It was at 6.4mmbf in the 2nd quarter of FY 2017 before falling three quarters in a row. It was at a similar low of .6mmbf in the 1st quarter of FY 2016, but then it was above 3mmbf for seven quarters. Ottawa's sawtimber eight-year sale volume trend is increasing much more than the Hiawatha's or Huron-Manistee's, although Ottawa's volumes from quarter-to-quarter are somewhat erratic.



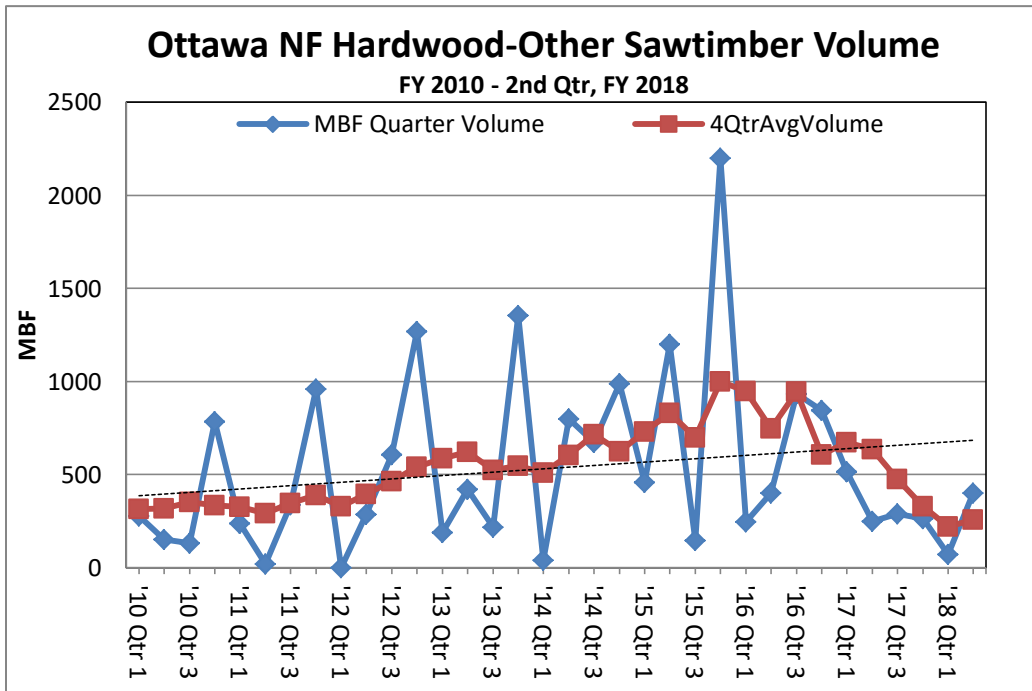
The overall average sawtimber price also rebounded from \$164 to \$207 per mbf in the 2nd quarter. There is a very slight increasing eight-year price trend, but the trend over the past three-plus years is decidedly downward. The Ottawa sawtimber price trend is greatly influenced by sugar maple volumes and prices.



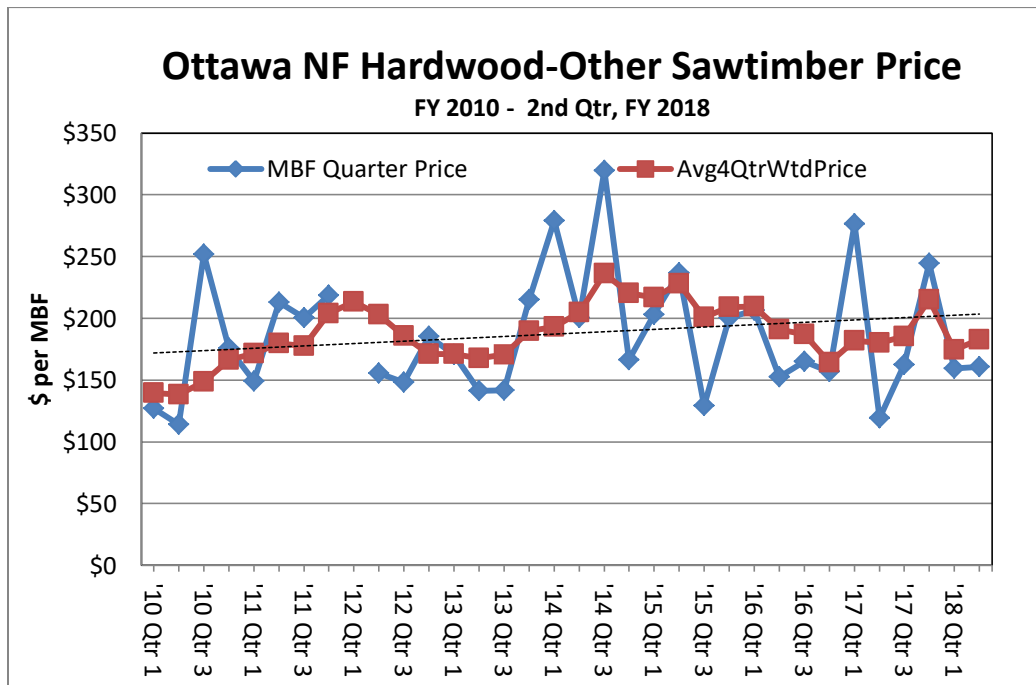
Total pulpwood sale volume in the 2nd quarter was up from its lowest quarterly level in six years, going from 1.6 to 8.2mmbf. It rose every quarter in FY 2017, before falling in the 1st quarter of FY 2018. The record high level for the past eight years was over 30mmbf reached in the 4th quarter of FY 2013. The eight-year sale volume trend has been on a modest incline. Ottawa sawtimber and pulpwood volumes have been generally highest in the 4th quarter and have often dropped sharply in the 1st quarter. Pulpwood sale volumes for the 2nd and 3rd quarters generally fall between the other two quarters' volumes.



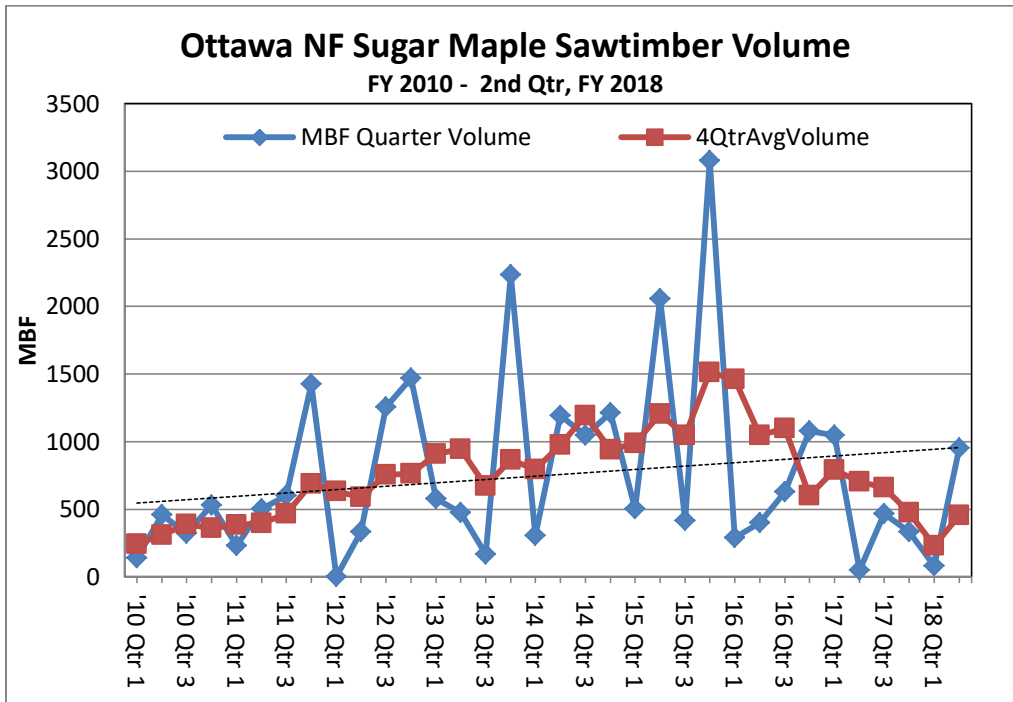
The 2nd quarter overall average pulpwood price almost doubled in value, going from \$37.51 to 74.28 per mbf. Prices had plunged from a six-year peak of \$85.22 to \$35.56 per mbf between the 3rd and 4th quarters of FY 2015 before rebounding to \$75.52 in the 1st quarter of FY 2016. But fairly large swings in pulpwood prices are the exception, not the rule. From quarter-to-quarter, swings in pulpwood volumes have been much greater than price swings. There is a mildly increasing eight-year price trend. After the substantial increase in the 2nd quarter's overall average pulpwood price, the 3rd quarter price is likely to decline somewhat.



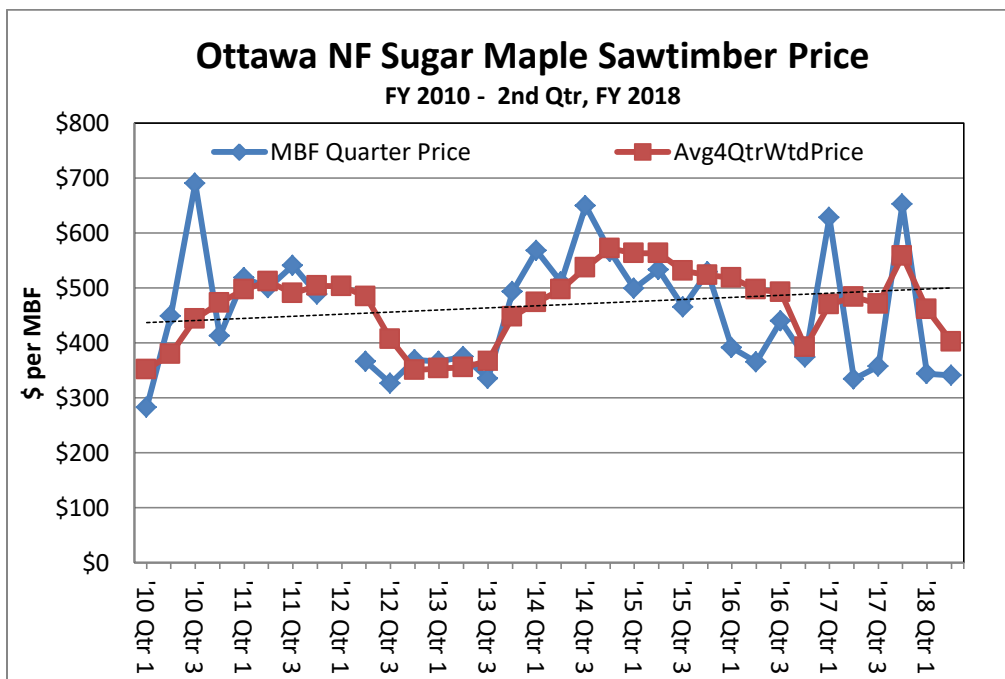
The hardwood-other sawtimber sale volume increased from a very low 72mbf in the 1st quarter up to 400mbf in the second quarter. This latest sale volume level is still well below the eight-year trend line. Sale volume reached a record 2.2mmbf level in the 4th quarter of FY 2015. The sale volume trend has been increasing over the past eight years, greatly influenced by the FY 2015 4th quarter. There has been a steep declining short term trend since then. Another recent trend is that sales have been less erratic than what they were a few years ago when sales consistently spiked in the 4th quarter.



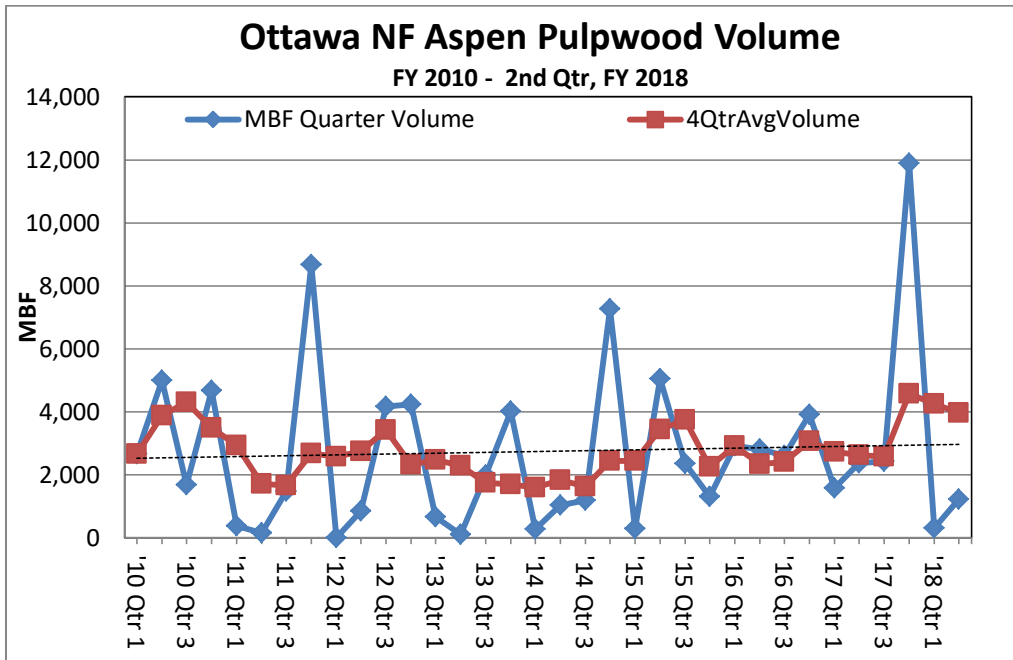
The 2nd quarter average hardwood-other mbf sawtimber price was virtually unchanged, going from \$159 to \$161 per mbf. Prices had fallen from \$276 per mbf in the 1st quarter of FY 2017 to a low \$119 per mbf in the 2nd quarter and climbed to \$245 by the 4th quarter. They were at a record high of almost \$320 mbf in the 3rd quarter of FY 2014 before dropping sharply to \$166 the following quarter. There is a modestly increasing price trend line for the past eight years. The price is not expected to change drastically in upcoming quarters, but with the 2nd quarter price below the trend line, it is viewed as more likely to increase than decrease.



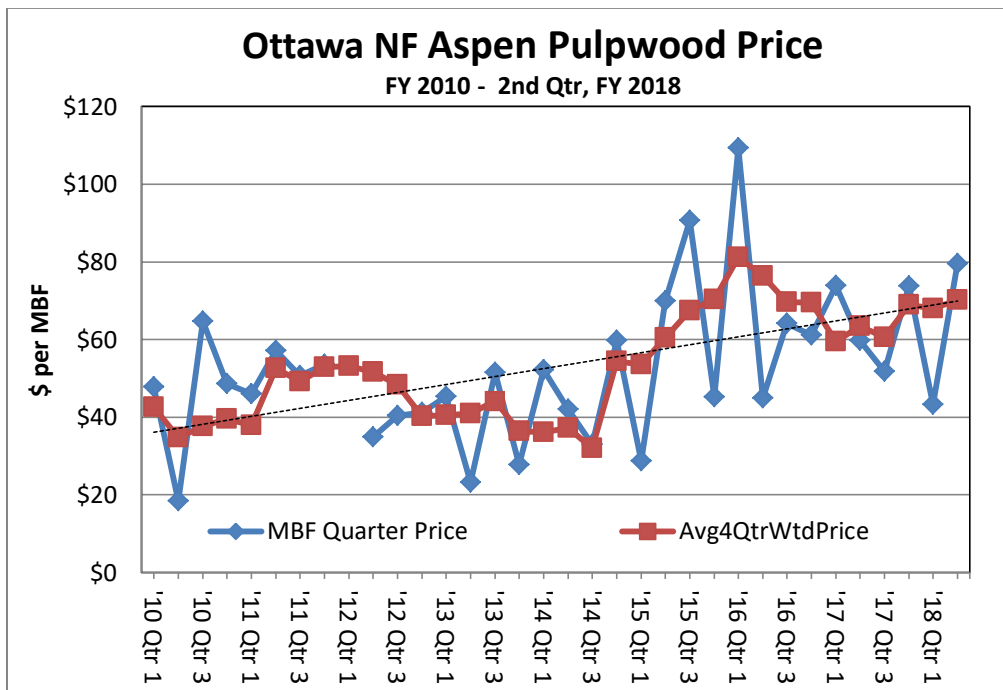
Ottawa sugar maple sawtimber sale volume rose from 79 to 952 mbf. The previous four quarters have been unexpectedly low, comprising the four lowest consecutive quarters in the past eight years. The most recent (2nd) quarter volume is right on the eight-year trend line. As with most Ottawa timber products, it is typical for the 1st quarter to have the lowest sale volume and the 4th quarter to have the highest volume. Sugar maple sawtimber sale volumes hit an eight-year record of 3.1mmbf in the 4th quarter of FY 2015 after which most FY 2016 and 2017 sawtimber quarterly volumes were quite low.



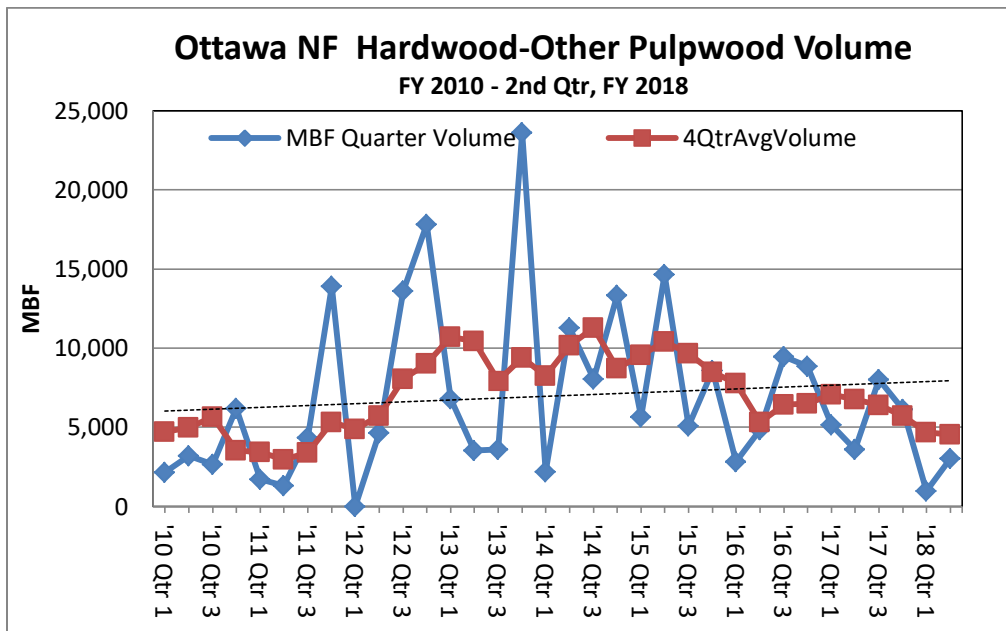
Like the hardwood-other sawtimber price, the sugar maple sawtimber price was little changed in the 2nd quarter, going from \$344 to \$341 per mbf. It reached \$652 in the 4th quarter of FY 2017, but this was still below the peak price of \$690 back in the 3rd quarter of FY 2010. There is a mildly increasing price trend over the past eight years. It is very likely prices will increase again in upcoming quarters.



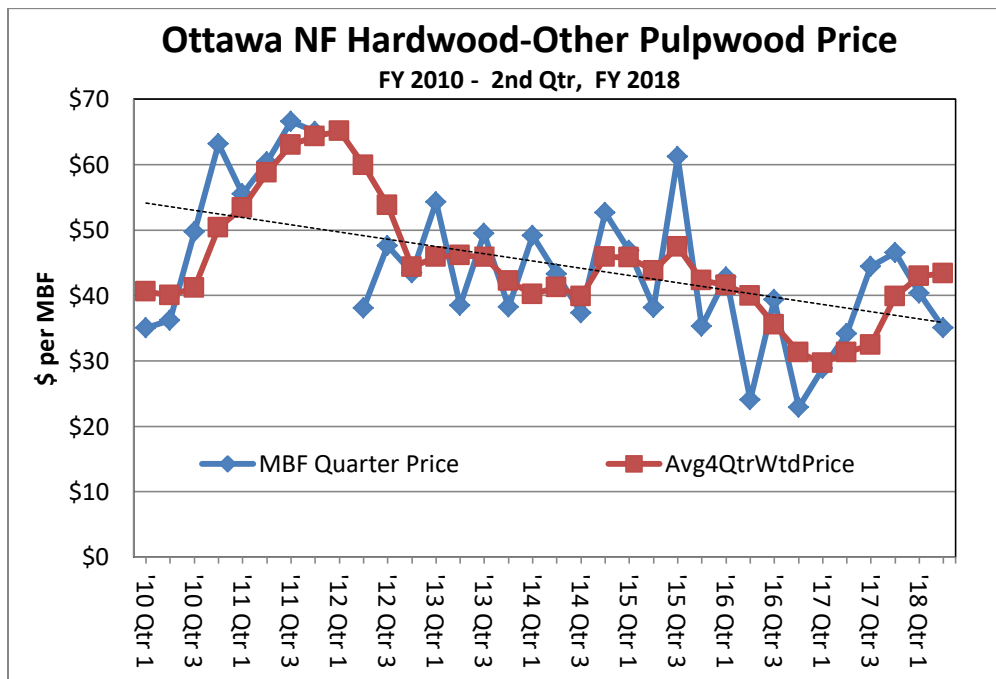
Aspen pulpwood sale volume edged up from a negligible .3mmbf in the 1st quarter to 1.2mmbf in the 2nd quarter. It hit a record 11.9mmbf in the 4th quarter. Before then, it had been fluctuating in a fairly narrow range between 1.3 and 4mmbf for nine quarters. Prior to those nine quarters, sale volumes had been quite erratic from quarter-to-quarter, with volumes at the extremes (under 1,000 mbf or over 4,000 mbf) more frequently than at sale levels in a middle range. The eight-year average sale volume trend is quite flat. Sales should recover to above a 2mmbf level in an upcoming quarter.



The 2nd quarter aspen pulpwood price rebounded again from \$43 to almost \$80 per mbf. The price hit a peak of \$109 per mbf in the 1st quarter FY 2016, but the price dropped right back down to \$45 again in the 2nd quarter of FY 2016. The following six quarters – through the 4th quarter of FY 2017 – saw prices fluctuate within a \$50 to \$75 range. With erratic sale volumes and many quarters with low or no volume as a backdrop, the overall price trend for the past eight years has been increasing fairly sharply. Prices will likely continue to bounce around in upcoming quarters, dropping below \$50 some quarters and reaching as high or higher than \$100 a few quarters.



Hardwood-Other pulpwood 4th quarter sale volume increased moderately from only 1mmbf up to 3mmbf in the 2nd quarter. To put that in context, sale volume hit a record high 23.6mmbf in the 4th quarter of FY 2013 and has averaged 6.7mmbf since then. Volume changes from quarter-to-quarter have moderated in recent years compared to what they were in FY 2011 through FY 2013. Volumes have trended upward in the past eight years, but the trend for the past four years has been distinctly downward. As the increase in the most recent quarter was quite modest, it is hoped that more increases will be seen in upcoming quarters.



As predicted, the 4th quarter FY 2017 hardwood-other pulpwood mbf price decreased modestly again, from \$40 to \$35 per mbf. It is now right on the eight-year trend line. The prior quarter's decrease was expected because there had been four quarterly price increases in a row and the price was well above the eight-year price trend line. The price was over \$61 per mbf before falling in the 4th quarter of FY 2015 to \$35. The eight-year price trend is declining, particularly influenced by higher prices in FY 2010 and FY 2011 and the low prices in the 2nd and 4th quarters of FY 2016. Next (3rd) quarter's price is not likely to change much up or down.

Michigan Public Timber Markets, 2nd Quarter (January – March), FY 2018

State Forest data – Quarterly Sale volume grew throughout 2017 then fell very sharply in the 1st quarter of FY 2018. The volume rebounded to record levels in the 2nd quarter. Bid-species-only volume went from 176,000 to 389,000 cords, while total sale (bid & non-bid species) volume also more than doubled from 181,000 to a record 429,000 cords. Offered sales rose from 261,000 to 339,000 cords. (Offered sales are based upon bid dates while sold sales are based upon later contract issue dates). NLP bid species 1st quarter sale volume increased from 140,000 to a record 240,000 cords. UP bid species sale volume increased even more, from a low 35,000 cords level in the 1st quarter to over 150,000 cords. (More background on the 2nd quarter sale volumes is provided in a separate four-page report.) The overall State Forest average timber price fell to \$47.91 per cord. Since reaching a high of \$70 per cord in the 3rd quarter of 2015, this overall price index has been declining.

After declining for three quarters, NLP aspen pulpwood bid species sale volumes shot up from 26,578 to a record 47,211 cords. The 2nd quarter NLP aspen pulpwood price dipped from \$26.46 to \$24.26 per cord. UP aspen pulpwood sale volume seesawed from 30,583 to 5,412 cords - a record low – and then to a record high of 36,797 cords in the 2nd quarter. Meanwhile, its price went from \$42.06 to \$48.13 and then back down to \$40.88 per cord. UP quarterly red pine pulpwood bid species sale volumes also have seesawed from 10,008 to 3,958 cords and then way up to 20,725 cords in the 2nd quarter. NLP volume rose from 19,662 to 27,725 and then to 35,009 cords. The NLP quarterly red pine pulpwood price rebounded from \$53.50 to \$64.79 and then dropped back to \$58.45 per cord in the 2nd quarter while the UP price went from \$77.59 to \$83.53 to \$83.28 per cord. NLP jack pine pulpwood bid species volume reached 22,702 three quarters ago, but fell to 4,991 cords and then to 3,951 before shooting up to 18,607 cords in the 2nd quarter. UP jack pine pulpwood sale volume dropped back from 8,603 to 5,833 and then to 3,346 cords before rising to 4,772 cords in the 2nd quarter. Jack pine pulpwood cord prices rose in both peninsulas, from \$54.65 to \$61.96 in the UP and from a three-year low of \$20.31 to \$34.25 per cord in the NLP. UP softwood pulpwood sale volume has also seesawed, going from 22,921 to 7,584 and then to 21,131 cords in the 2nd quarter while its price went from \$28.53 to \$34.43 and then to \$26.92 per cord. NLP Oak quarterly pulpwood sale volumes went from 12,212 to 10,410 and then to 13,979 cords in the 2nd quarter while its average price declined from \$29.98 to \$19.59 and then dipped further to \$18.03 per cord. Other hardwood pulpwood volume sharply fell from a reported record of 94,332 cords in the 4th quarter of FY 2017 down to 33,400 cords in the 1st quarter and then climbed back to 79,318 cords. Its price rose from \$25.37 to almost \$30 per cord in the 1st quarter and then dropped back to \$28.40. Statewide red pine sawtimber prices rose slightly to \$151 per as volumes hit a quarterly record of 21.7mmbf. UP sugar maple sawtimber prices shot up from a record low of \$363 to almost \$528 per mbf as sale volume also shot up from .63mmbf to 1.4mmbf. The NLP sugar maple sawtimber price dropped back from \$378 to \$351 per mbf as its volume moved in tandem with the UP from .73 to 1.6mmbf. NLP oak sawtimber volume rose from 2.3 to 3.3mmbf while its price remained close to \$210 per mbf.

National Forest data – Ottawa sawtimber sale volumes bounced back from .44 to 3.5mmbf while its pulpwood volume rose from 1.6 to 8.2mmbf. Hiawatha sawtimber sale volume declined further from 3.57 to 2.05mmbf while its pulpwood volume dropped sharply from 11.3 to 3.9mmbf. Huron-Manistee (H-M) sawtimber volume dipped further from a 4.37 to 3.91mmbf while its pulpwood volume also dipped from 4.6 to 4.0mmbf.

The Ottawa's overall average sawtimber mbf price rebounded from \$164 to \$207 per mbf while its overall pulpwood mbf price almost doubled from \$37.51 to \$74.28 per mbf. Ottawa sugar maple sawtimber sale volume increased from only 79mbf in the 1st quarter to 952mbf in the 2nd quarter, but its price was little changed, going from \$344 to \$341 per mbf. Its aspen pulpwood sale volume fell from a record 11.9mmbf to practically nothing in the 1st quarter and then was 1.2mmbf in the 2nd quarter while the price went from \$74 to \$43 and then \$80 per mbf. Hardwood-other pulpwood volume went from 1 to 3mmbf as its price dropped again from \$40 to \$35 per mbf.

The Hiawatha's overall average sawtimber price nearly doubled from \$90 to \$170 per mbf in the 2nd quarter. Its red pine sawtimber mbf price rose to \$180 while its jack pine sawtimber price jumped to \$158 per mbf. "Hardwood-other" sawtimber sale volume increased again, from 385 to 432mbf, as its price jumped from a low \$58 to \$155 per mbf. "Hardwood-other" pulpwood volume dipped from 1.5 to 1.2mmbf while its average price was rose from \$32 to \$36 per mbf. Aspen pulpwood sale volume had fallen from a record 3.97 to 1.9mmbf in the 1st quarter and then dropped further to 1.4mmbf as its price dipped from \$35.59 to to \$35.05 per mbf. Jack pine pulpwood volume was 287mbf and its average price was only \$15 per mbf. Red pine pulpwood sale volume was at 218mbf while its price shot up to \$150 per mbf.

H-M average prices changed only slightly. Average sawtimber prices rose from \$120 to \$122 per mbf while average pulpwood prices dipped from \$58.84 to \$55.46 per mbf. There were no sales of aspen sawtimber. Red pine sawtimber sale volume had fallen from a record high volume of 11.8 to 3mmbf in the 1st quarter and rose to 3.5mmbf in the 2nd quarter as its price fell slightly from \$134 to \$132 per mbf. Jack pine pulpwood sale volume was at 116mbf in the 2nd quarter as the price was at \$23 per mbf. H-M red pine pulpwood sale volume rose from 2.1 to 3.5mmbf. Its price dropped back from \$93.38 down to \$61.19 per mbf.