

Michigan Public Timber Markets, 4th Quarter (July - September), FY 2016

State Forest data – Sale volume increased in the 4th quarter of FY 2016. Bid-species-only volume grew from 189,238 to 207,703 cords while total sale (bid & non-bid species) volume grew from 213,383 to 238,945 cords. For the year, bid species only volume was about 786,500 cords and total volume close to 900,000 cords. For several years, there has been a pattern of lower 4th and 1st quarter sale volumes and higher sale volumes in the subsequent 2nd and 3rd quarters. If this pattern held, 4th quarter total sale volumes would have fallen short of 200,000 cords and the annual sum would have been between 825,000 and 850,000 cords. NLP bid species 4th quarter sale volume declined slightly again, from 115,165 to 107,500 cords. The UP bid species sale volume sharply increased, from 74,073 to 101,087 cords. The 4th quarter overall average bid price decreased again, from \$57.55 to \$51.92 per cord. The overall price index reached a record \$69.99 per cord in the 3rd quarter of FY 2015. The overall price level is not expected to fall much further in coming quarters and may instead see increases.

NLP aspen pulpwood bid species quarterly sale volumes were high throughout FY 2016, having been at 28,529, 27,599, 30,665 and now 28,739 cords in the 4th quarter. They were only 7,550 cords in the 4th quarter of FY 2015. The NLP 3rd quarter price dropped from \$32.80 to \$28.09 per cord. UP aspen pulpwood sale volume rose from 15,416 to 20,572 cords in the 4th quarter while prices dropped sharply from \$56.38 to \$41.58 per cord. UP red pine pulpwood bid species sale volumes dropped further from 8,965 to only 3,097 cords while the NLP volume went up from 11,121 to 14,547 cords. The NLP red pine pulpwood price rebounded from \$58.94 to \$64.19 per cord while the UP price dropped from \$91.48 to \$70.52 per cord. NLP jack pine pulpwood bid species volume dropped from 7,064 to 3,266 cords; it has been as high as 29,292 cords in the 2nd quarter of last year. UP jack pine pulpwood sale volume was only 221 cords in the 1st quarter; it jumped to 13,087 cords in the 2nd quarter before falling back to 2,780 cords in the 3rd quarter, then rebounded to 11,603 cords in the 4th quarter. UP jack pine pulpwood cord prices rose from \$45.60 to \$61.08 in the 2nd quarter, rose again in the 3rd quarter to \$63.05, and dipped slightly to \$61.23 in the 4th quarter. NLP jack pine cord prices were at a high \$87.42 price per cord in the 1st quarter, fell to \$26.42, rose to \$30.55, and averaged \$34.73 in the 4th quarter. UP softwood pulpwood sale volume more than doubled in the 4th quarter from 13,497 to 29,258 cords. Its price rose slightly from \$37.82 to \$40.48 per cord. NLP Oak pulpwood sale volume dropped back from 16,648 to 9,018 cords while its price rose slightly from \$34.01 to \$25.12 per cord. Other hardwood pulpwood volume fell back from 55,652 cords down to 38,248 cords in the 3rd quarter and dipped further to 37,785 cords in the 4th quarter. Its price also dipped further from \$37.53 to \$36.30 per cord. Statewide red pine sawtimber prices continued their gradual decline, down from \$199.40 to \$187.61 per mbf while volumes increased from 5.3 to 6.8mmbf. UP sugar maple sawtimber prices dropped back from \$932 to \$733 per mbf as volume was virtually unchanged, going from 544 to 528mbf. The NLP sugar maple sawtimber price jumped from \$474 to \$774 per mbf in the 3rd quarter and dropped back slightly to \$723 per mbf in the 4th quarter as the volume went from 1,252mbf down to 329mbf and then back up to 730mbf. NLP oak sawtimber volume increased from 2.74 to 4.6mmbf between the 2nd and 3rd quarters and then dropped back to 2.95mmbf in the 4th quarter while its price went from \$225 to \$250 and then to \$214 per mbf.

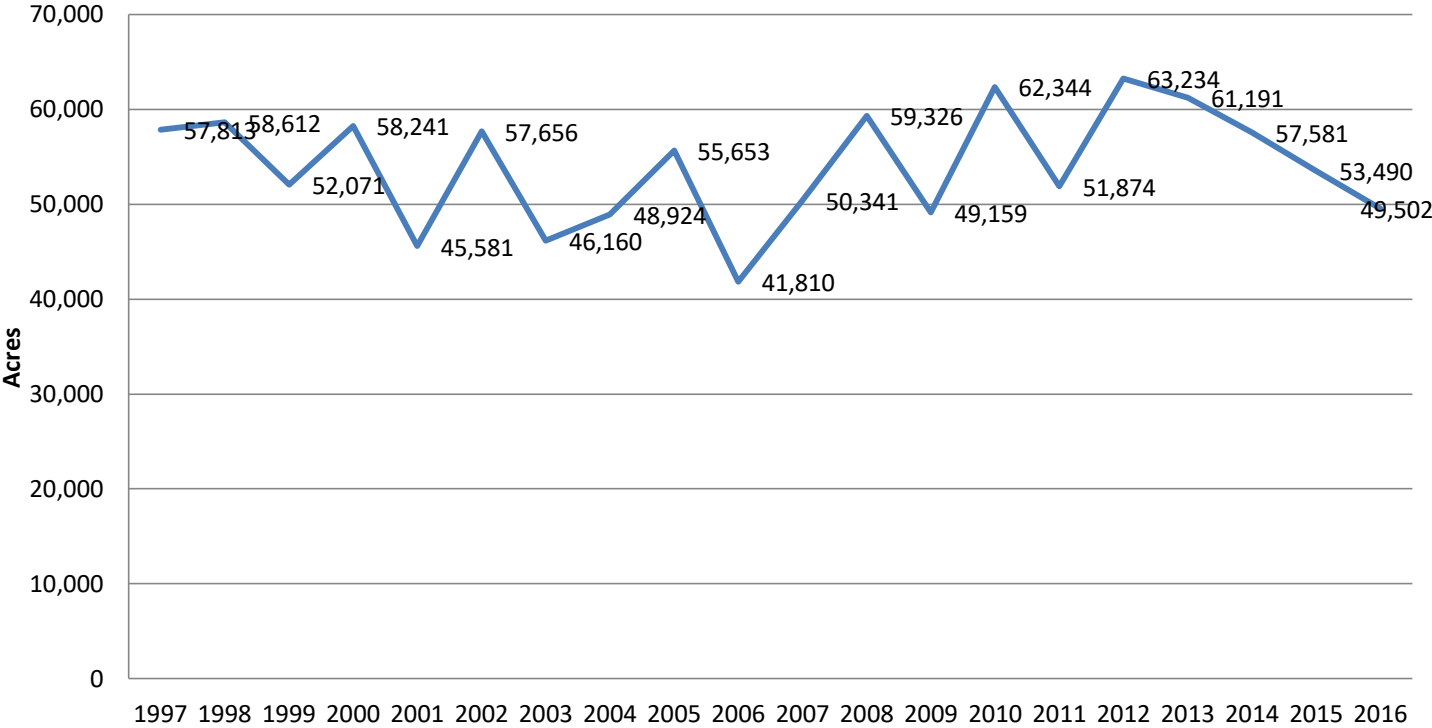
National Forest data – Huron-Manistee outputs greatly increased in the 4th quarter; sawtimber sale volume rose from 3.4 to 10.8mmbf and pulpwood sale volume went from 4.1 to 18.8mmbf. Sawtimber 4th quarter sale volume declined on the Ottawa from 5.3 to 4.0mmbf while it increased from 1 to 2.7mmbf on the Hiawatha. Total pulpwood sale volumes increased from 14.8 to 16.2mmbf on the Ottawa while rising from 3.2 to 7.3mmbf on the Hiawatha.

Ottawa's overall average sawtimber price increased slightly from \$199 to \$202 per mbf while its overall pulpwood mbf price went from \$70.60 in the 2nd quarter to \$56.25 in the 3rd quarter, down to \$44.83 in the 4th quarter. Ottawa sugar maple sawtimber sale volume rose from 630 to 1,080mbf in the 4th quarter while its price dropped back down from \$440 to \$374 per mbf. Its aspen pulpwood sale volume went up from 2.6 to 3.9mmbf as its price went from \$64 to \$61 per mbf. The "hardwood-other" pulpwood volume more than doubled to 9.5mmbf in the 3rd quarter and then went to 8.9mmbf in the 4th quarter; its 4th quarter price sharply dropped from \$39 back down to \$23 per mbf.

The Hiawatha's overall average sawtimber price dropped from \$169 to \$136 per mbf as its red pine sawtimber price rebounded from \$167 to \$186 per mbf. Its "hardwood-other" sawtimber price dropped by more than half, from \$264 to \$107 per mbf as sold volumes went from 71 to 518mbf. Hiawatha aspen pulpwood sale volumes increased from .3 to 2.8mmbf while the price also rose from \$23.50 to \$32.65 per mbf; it had been over \$102 in the 1st quarter (on only 605mbf volume). Jack pine pulpwood sale volume rose slightly as it went from 98 to 149mbf and its quarterly average prices for FY 2016 were revised; in quarterly order they were: \$109, \$68, \$111, and \$86. Red pine pulpwood sale volume dropped again, from 973 to 478mmbf, as its price went from \$136 to \$143 per mbf.

H-M average mbf sawtimber prices jumped up from \$92 to \$132 per mbf while average pulpwood prices were virtually unchanged at \$50 per mbf. After virtually no sales of aspen sawtimber in the prior three quarters, 1.25mmbf was sold in the 4th quarter at an average price of \$68 per mbf. Similarly, the 4th quarter's aspen pulpwood 4.6mmbf sale volume (at an average \$37 per mbf) followed three quarters of virtually no sales. Red pine sawtimber sale volume and prices rose sharply, from 2.8 to 6.8mmbf and from \$101 to \$153 per mbf. Jack pine pulpwood volume rose further, from 1.4 to 1.7mmbf, while its price plummeted from \$32 to \$11 per mbf. H-M red pine pulpwood sale volume rose very sharply from 2.5 to 8.1mmbf as its price also rose from \$62 to \$80 per mbf.

State Forest Timber Production Sold Acres, fiscal years 1997 - 2016

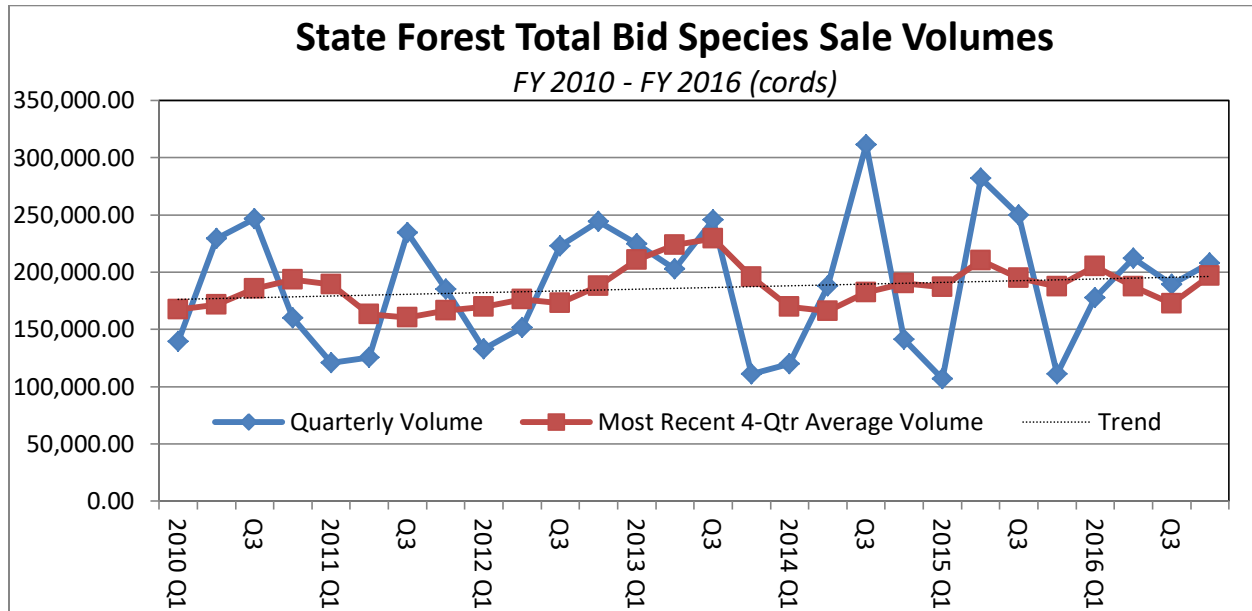


State Forest Quarterly Timber Sales for Major Species & Products

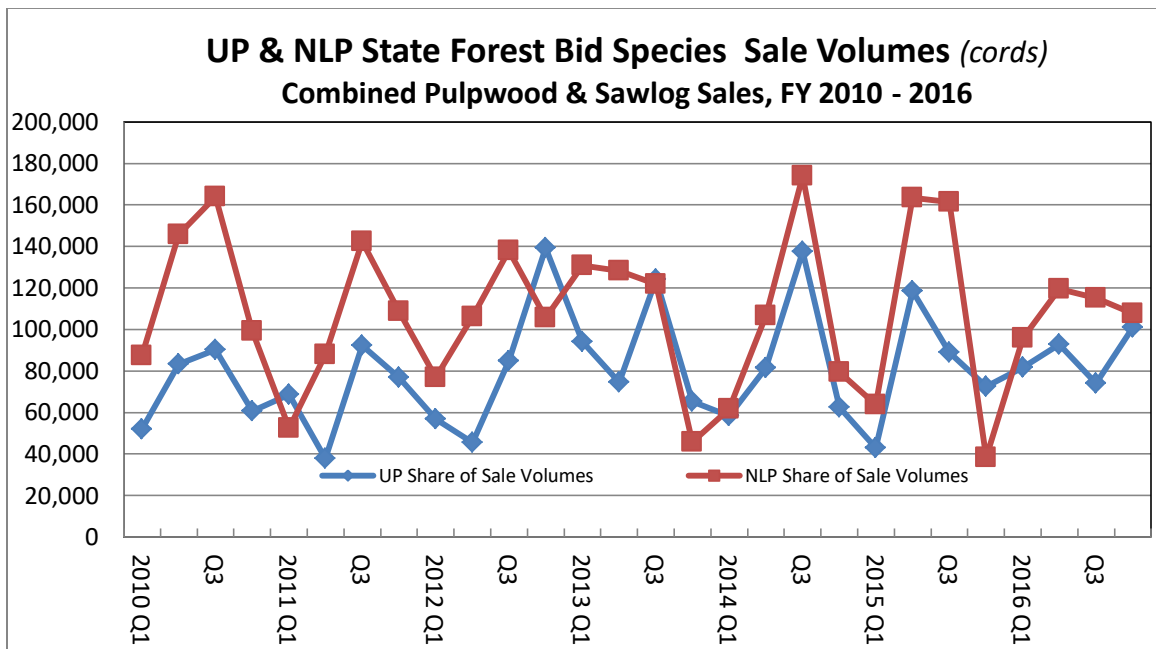
FY 2010 – FY 2016

Source: Michigan DNR, Forest Resources Division

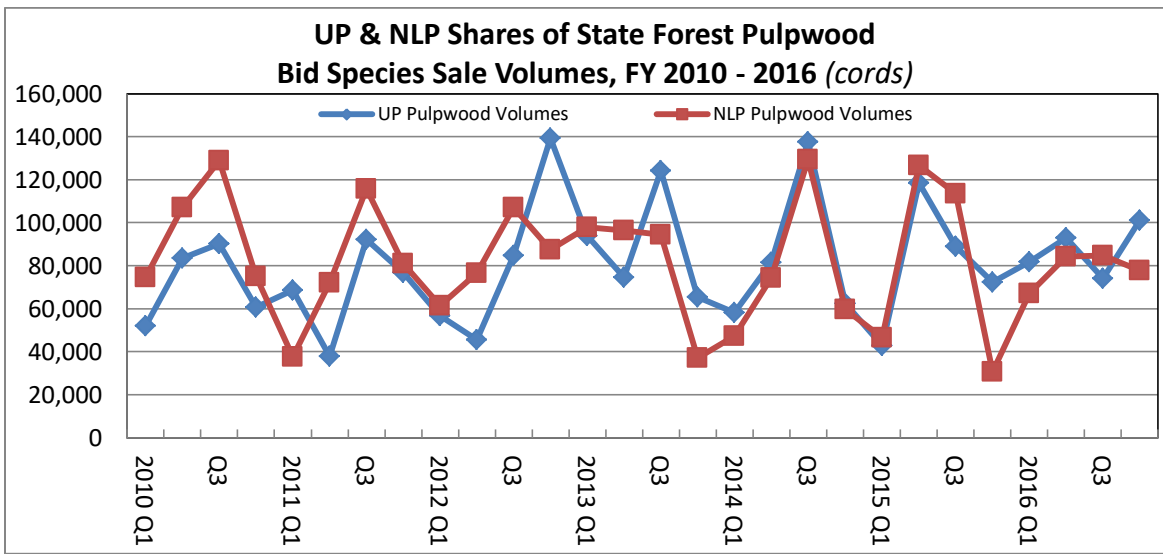
The State follows the federal fiscal year (October 1 through September 30). Graphs below show bid species sale volume and value data; total sale volumes and values are slightly more. The graphs often include a dotted trend line based upon data for the average of the most recent four quarters (labeled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



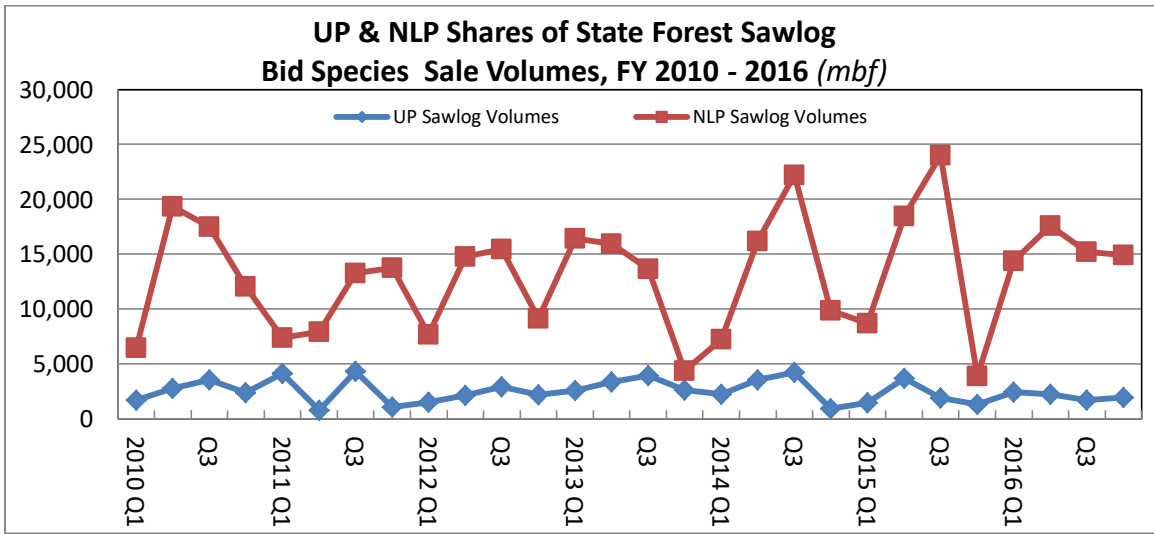
Total State Forest sale volume for bid species rose from 190,284 to 208,677 cords in the 4th quarter. The volume had dropped sharply in the 4th quarter of FY 2015 to 111,000 cords after being at 282,000 and 250,000 cords in the previous two quarters. The 4th and 1st quarters of every fiscal year have tended to have lower sales than the 2nd and 3rd quarters; the pattern was broken this fiscal year with relatively higher 4th quarter sale volume. Overall, there is a slight increasing trend over the past six years.



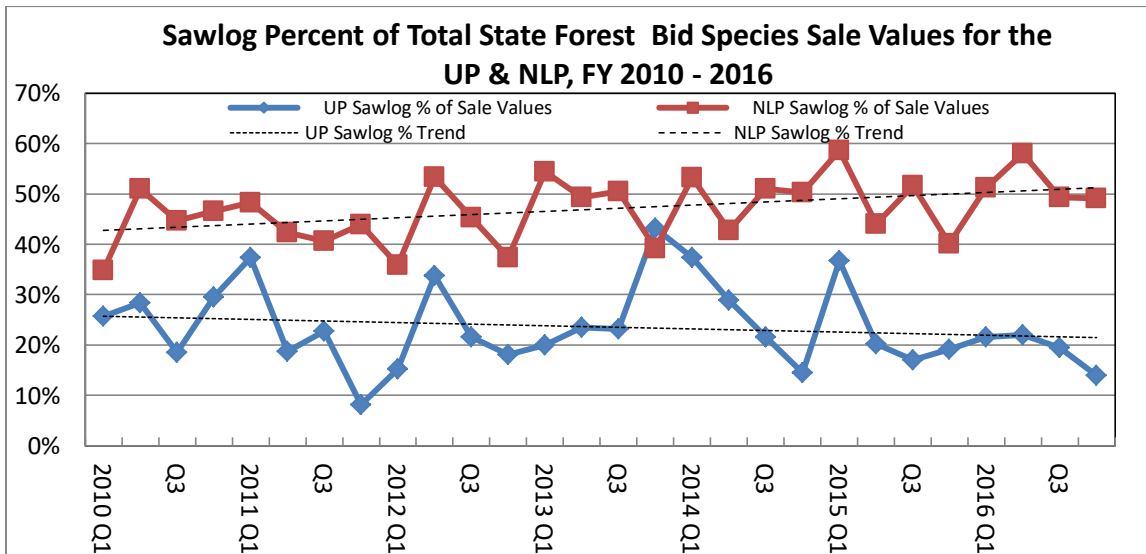
Bid species sale volumes rose in the 4th quarter of FY 2016, from 74,073 to 101,087 cords in the UP, but they declined again in the NLP from 116,211 to 107,591 cords. The FY 2015 4th quarter NLP volume was the lowest in the past six years; however, it followed back-to-back high sale volumes in the prior two quarters and was followed by much higher volumes in the first two quarters of FY 2016. The NLP generally has higher, but more extreme swings in its sale volumes.



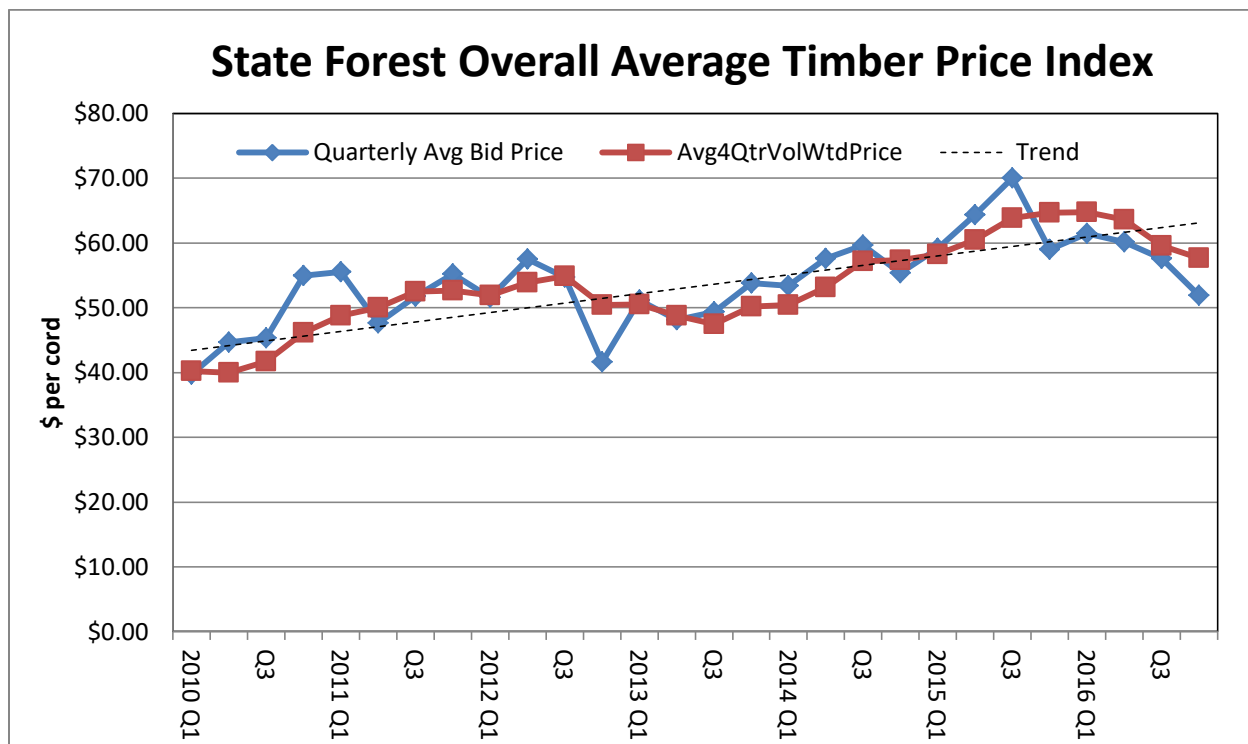
Pulpwood sale volume accounts for about 80% of total State Forest sale volume. UP pulpwood sale volumes increased appreciably in the 4th quarter (from 70,672 to 97,195 cords) while the NLP dropped a bit from 83,500 to 77,780 cords.



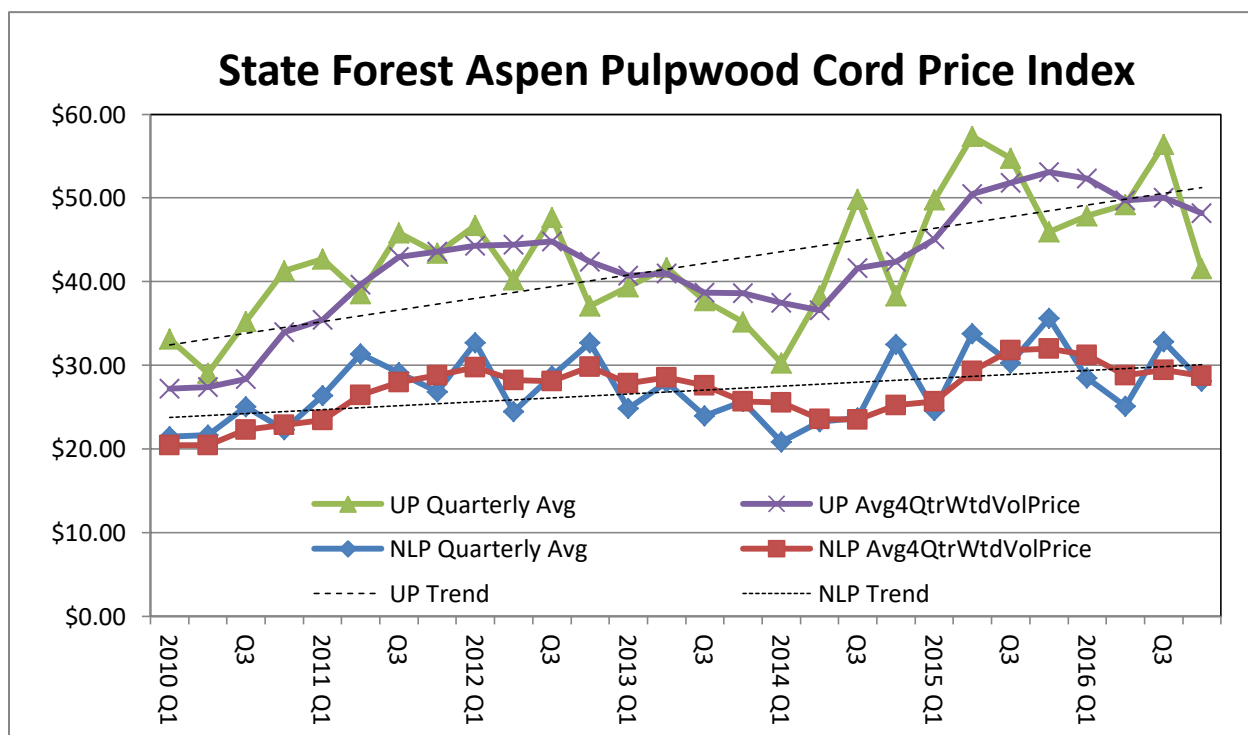
NLP sawlog volumes and values are generally much higher but more erratic than the UP's, but the NLP volume held steady in the 4th quarter at 15mmbf. UP sawlog volume also remained virtually unchanged at the 2mmbf level.



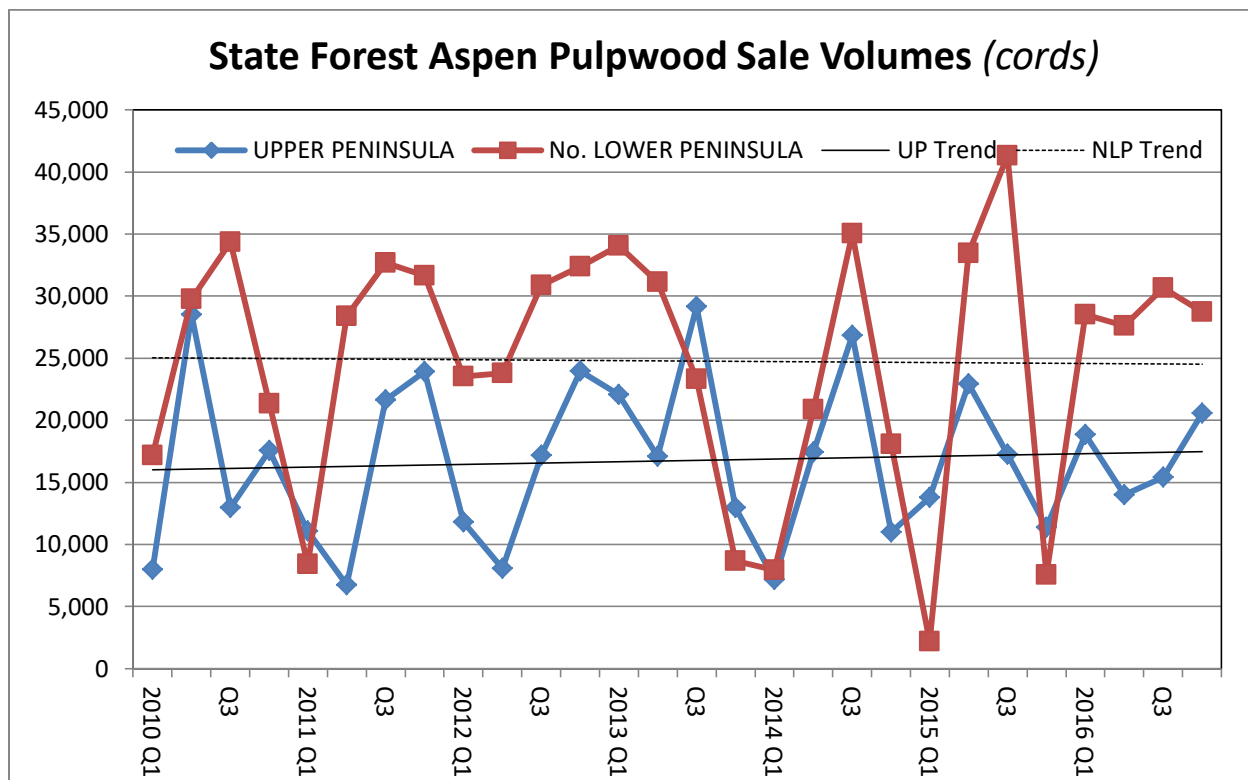
NLP and UP sawlog percent of bid species sale values decreased in the 4th quarter. The UP six-year trend line dropped sharply from 20% towards 12% while the NLP dipped slightly below 50%.



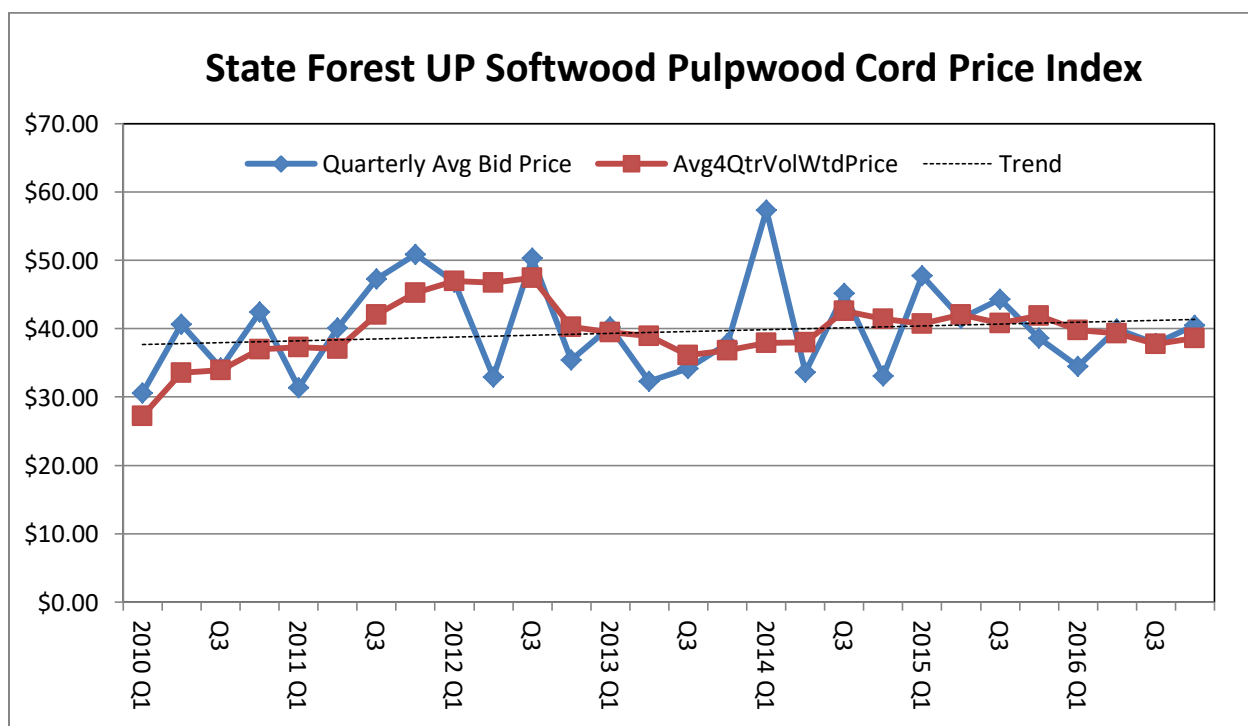
The 4th quarter overall average timber price index declined relatively sharply from \$57.55 to \$51.92 per cord. The index was at a record level of \$69.99 per cord five quarters ago, but it has fallen significantly since then. Despite the declines in recent quarters, quarterly prices have been increasing overall during the past six years. Price declines have often occurred in the 4th quarter in recent years. It would not be surprising if increases would be seen in upcoming quarters.



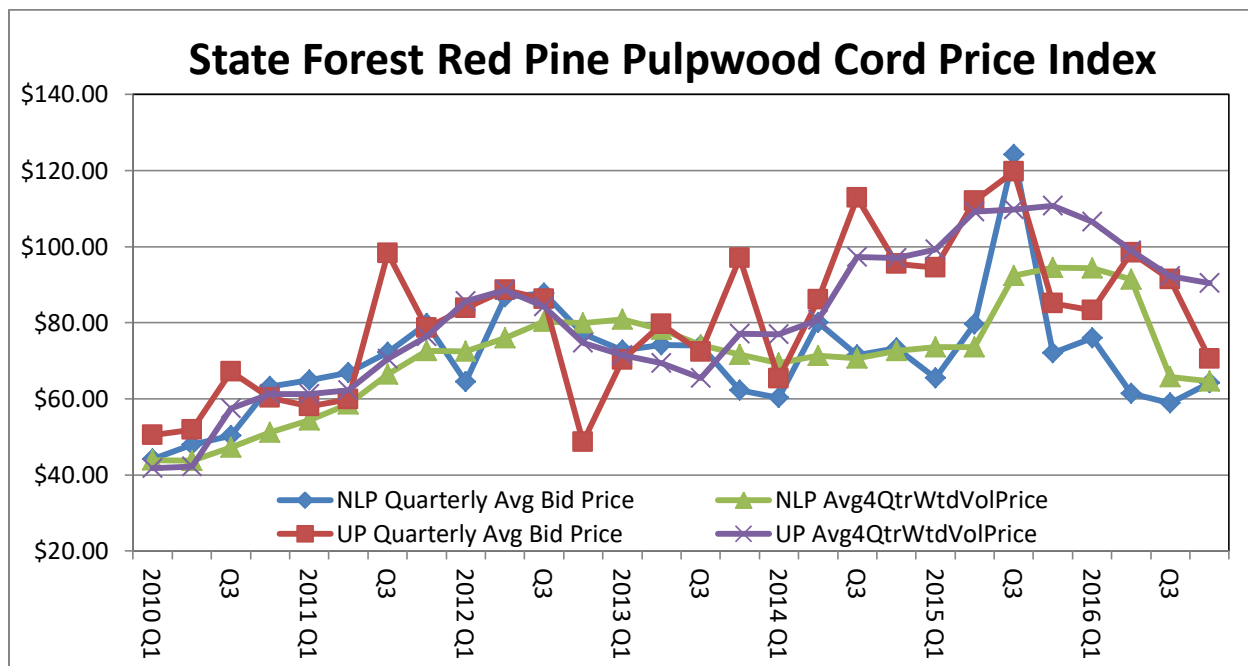
After four quarterly increases in a row, the UP average Aspen pulpwood cord prices plunged, from \$56.38 in the 3rd quarter down to \$41.58. In FY 2015, they had reached a record level of \$57.39 per cord in the second quarter before falling \$45.93 in the 4th quarter from where they started their march upward. The NLP aspen pulpwood cord price also fell, but not as dramatically. It dropped from \$32.80 to \$28.09. Due to the steeper UP decline, the average per cord price gap between the peninsulas closed from about \$24 to less than \$14. Both peninsulas have had increasing price trends over the past 6 years, but the UP price trend is steeper relative to the NLP price trend despite its most recent (4th) quarter steep price decline.



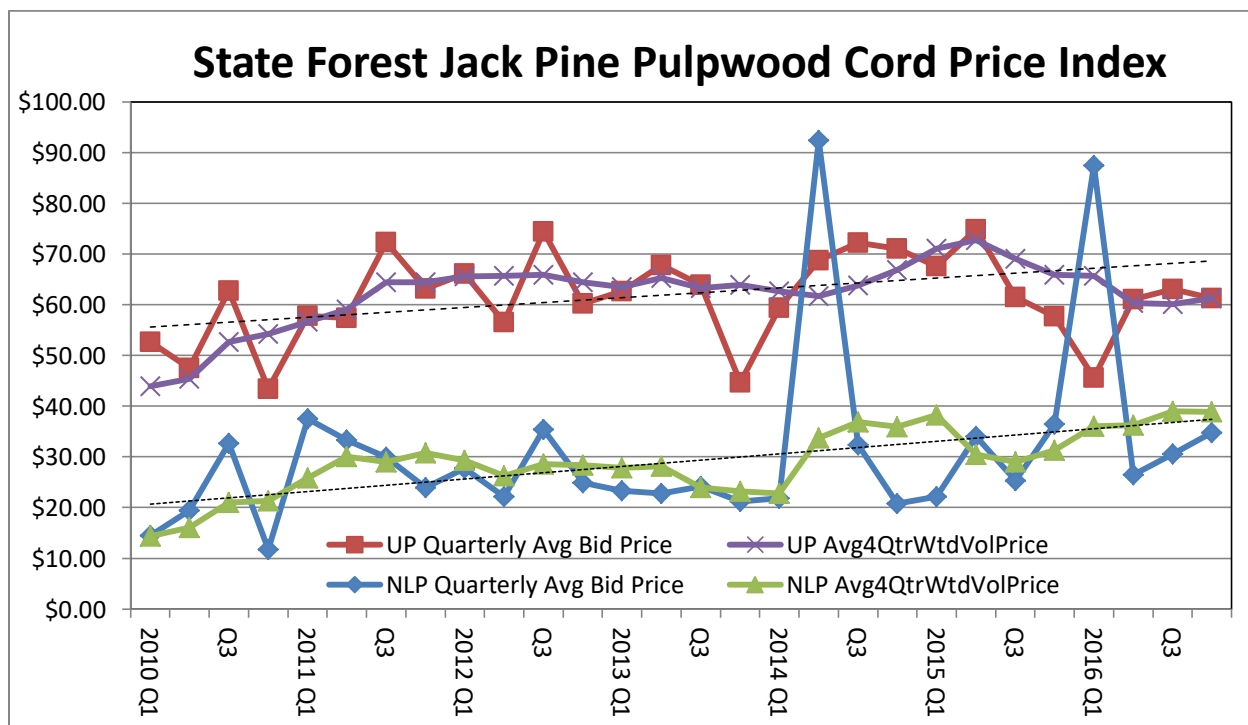
NLP aspen pulpwood bid sale volume dipped from 30,665 to 28,739 cords. It had plummeted from a record high of 41,328 cords down to only 7,553 cords between the 3rd and 4th quarters of FY 2015. The above graph shows how there were extreme swings in quarterly sale volumes for NLP aspen in FY 2014 and FY 2015, but FY 2016 quarterly volumes were very stable and above average. UP 4th quarter sale volume rose again, from 15,416 to 20,572 cords. The UP quarter-to-quarter sale volumes appear to also be moderating. The UP also has a slightly increasing sale volume six-year trend line while the NLP has had a very slightly declining trend over the same period despite the above average FY 2016 volumes.



The UP accounts for close to 90% of what is sold as "softwood pulpwood." The 4th quarter softwood pulpwood cord price rose from \$37.82 to \$40.48 per cord on 29,258 cords of sale volume. Prices do not fluctuate as much for UP softwood pulpwood as they do for other timber products. The quarterly price has seldom gone outside of a \$30 to \$50 range over the past six years. Quarterly sale volumes do fluctuate though, from under 10,000 cords to over 30,000 cords. A record level of 35,100 cords was sold in the 3rd quarter of FY 2014. There is a very slight upward price trend for the product.

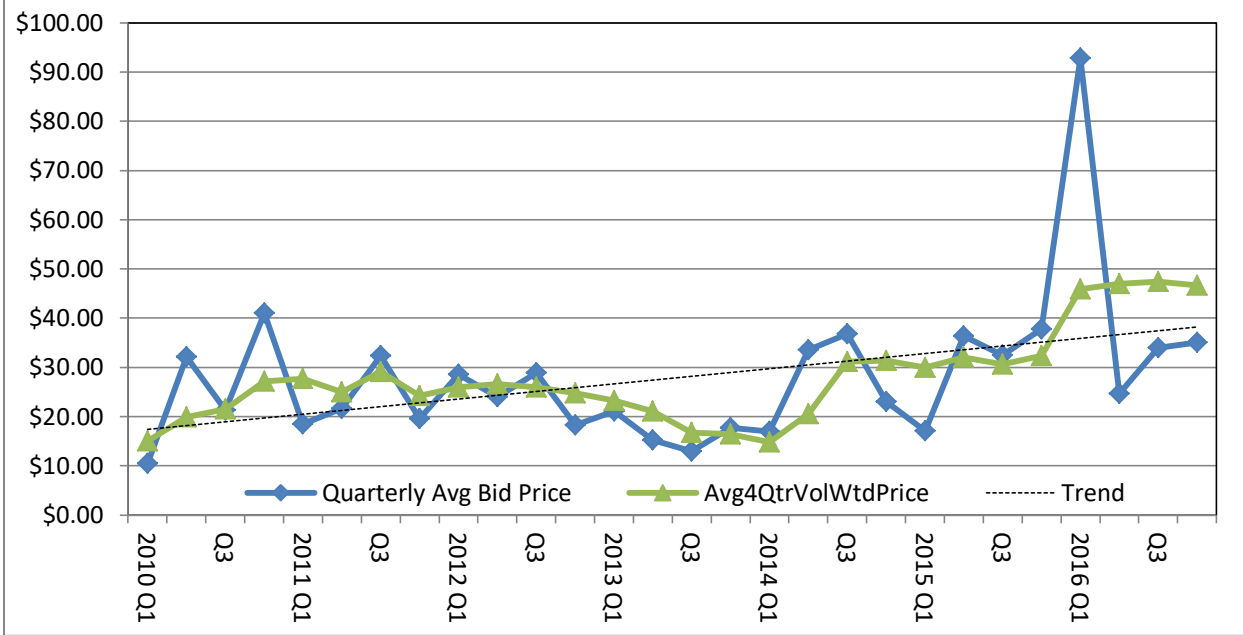


The FY 2016 4th quarter NLP red pine pulpwood price increased from \$58.94 to \$64.19 per cord. The price had shot up in the 3rd quarter of FY 2015 to over \$124 per cord before dropping back even more sharply in the 4th quarter to a \$72 price. It has been in the \$58 to \$78 range for all of FY 2016. The UP generally has higher RP pulpwood prices than the NLP. The UP price dropped sharply in the most recent 4th quarter from \$91.48 to \$72.52 per cord. It had reached \$119 per cord in the 3rd quarter of last year before falling to \$85 in the 4th quarter. UP sale volume declined from 12,394 cords in the 2nd quarter to 8,965 cords in the 3rd quarter and then fell again to only 3,097 in the most recent (4th) quarter. In contrast, NLP sale volume rose in the 4th quarter, from 11,121 to 14,547 cords.



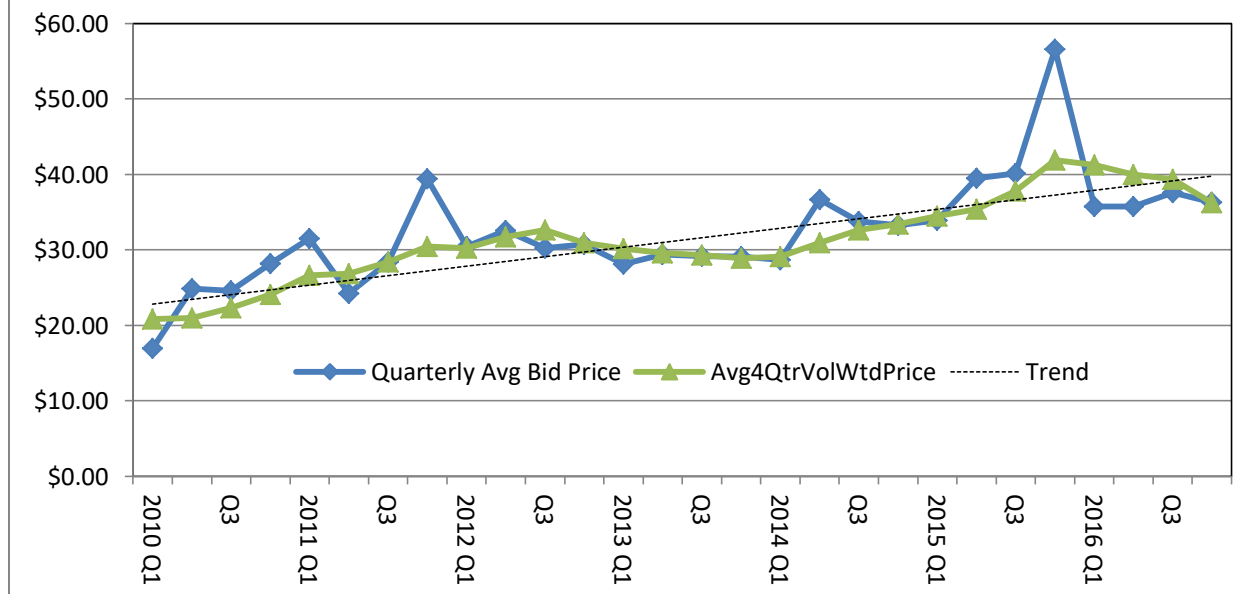
The NLP jack pine pulpwood cord price dropped sharply from \$87.42 to \$26.42 per cord in the 2nd quarter of FY 2016, rose slightly to \$30.55 per cord in the 3rd quarter, and rose again to \$34.73 in the 4th quarter. For the same period, the UP jack pine pulpwood cord price went from \$45.60 to \$61.08, then to \$63.05, and finally \$61.23. The UP price has generally been two to three times the NLP price, although there are exceptions. Jack pine sale volumes are highly volatile from quarter to quarter. UP 1st quarter sale volume was only 221 cords; it was 13,087 cords in the 2nd quarter, then 2,780 cords in the 3rd quarter and then back up to 11,603 in the 4th quarter. NLP sale volume reached 29,292 cords in the 2nd quarter of FY 2015. In contrast, for FY 2016 it was 2,933 cords in the 1st quarter, 5,628 cords in the 2nd quarter, 7,064 cords in the 3rd quarter, and 3,266 cords in the most recent 4th quarter.

State Forest Oak NLP Pulpwood Price Index

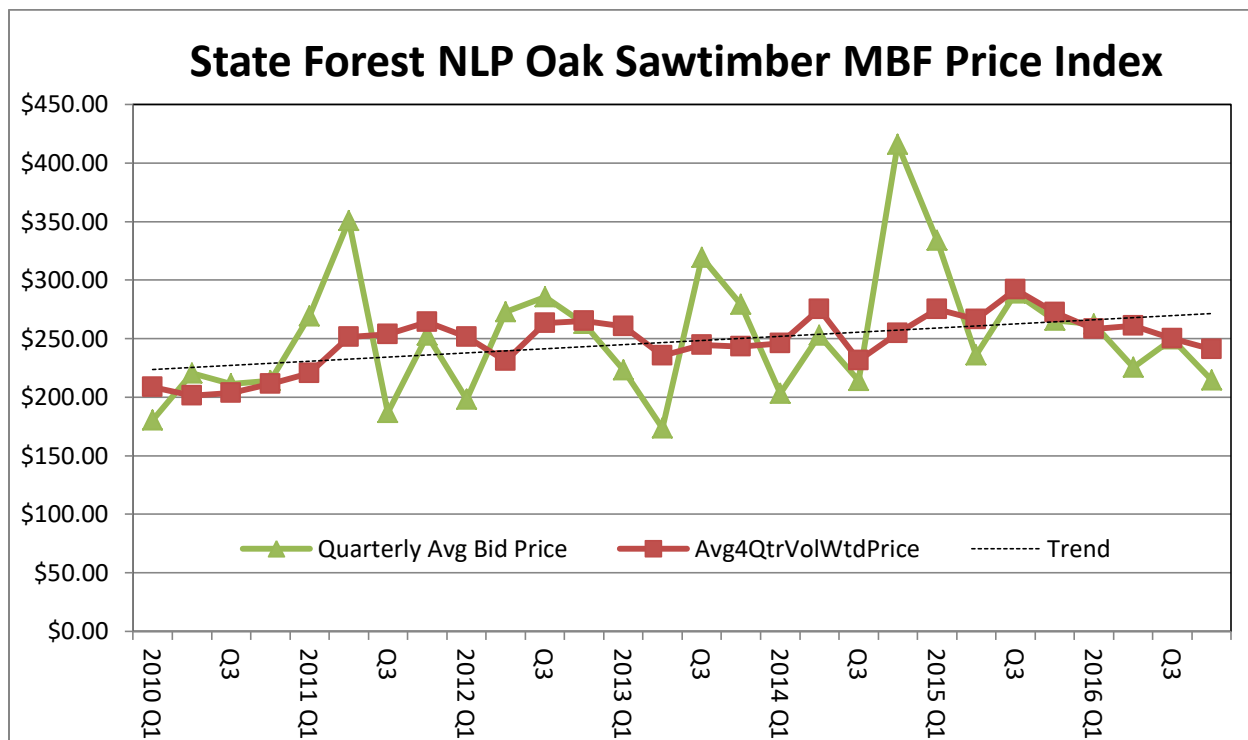


The FY 2016 1st quarter NLP oak pulpwood price shot up to a record \$92.84 per cord, more than double any price achieved in the past six years, but then it dropped to \$24.67 in the 2nd quarter, rose to \$34.01 in the 3rd quarter, and was little changed at \$35.12 in the 4th quarter. The price level is seldom maintained after a large spike in price and the decline in price is usually just as sharp as the spike in price - as was just seen in the 2nd quarter of FY 2016. The average price over the past six years was under \$30.00 per cord; the price was \$17.03 per cord in the 1st quarter of FY 2015. FY 2016 sale volumes were 10,904 cords in the 1st quarter, 8,526 cords in the 2nd quarter, 16,648 cords in the 3rd quarter, and 9,017 cords in the most recent 4th quarter.

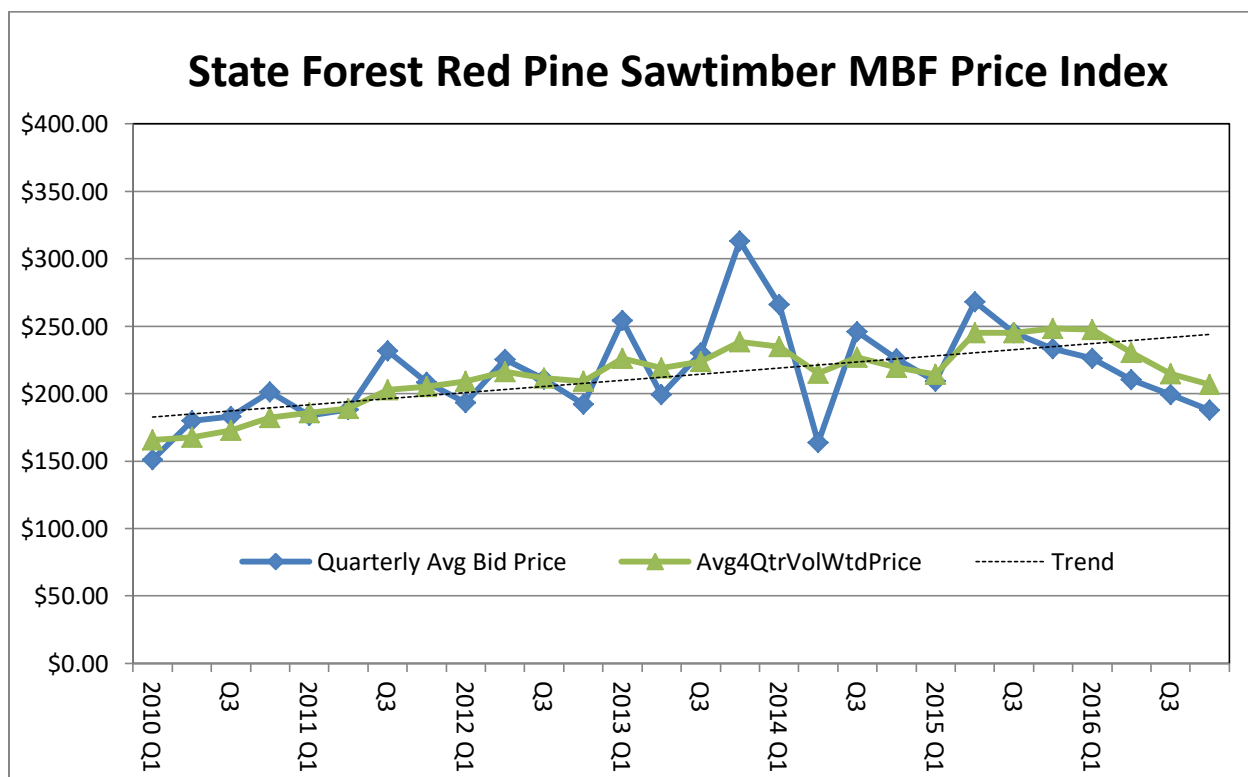
State Forest Other Hardwood Pulpwood Price Index



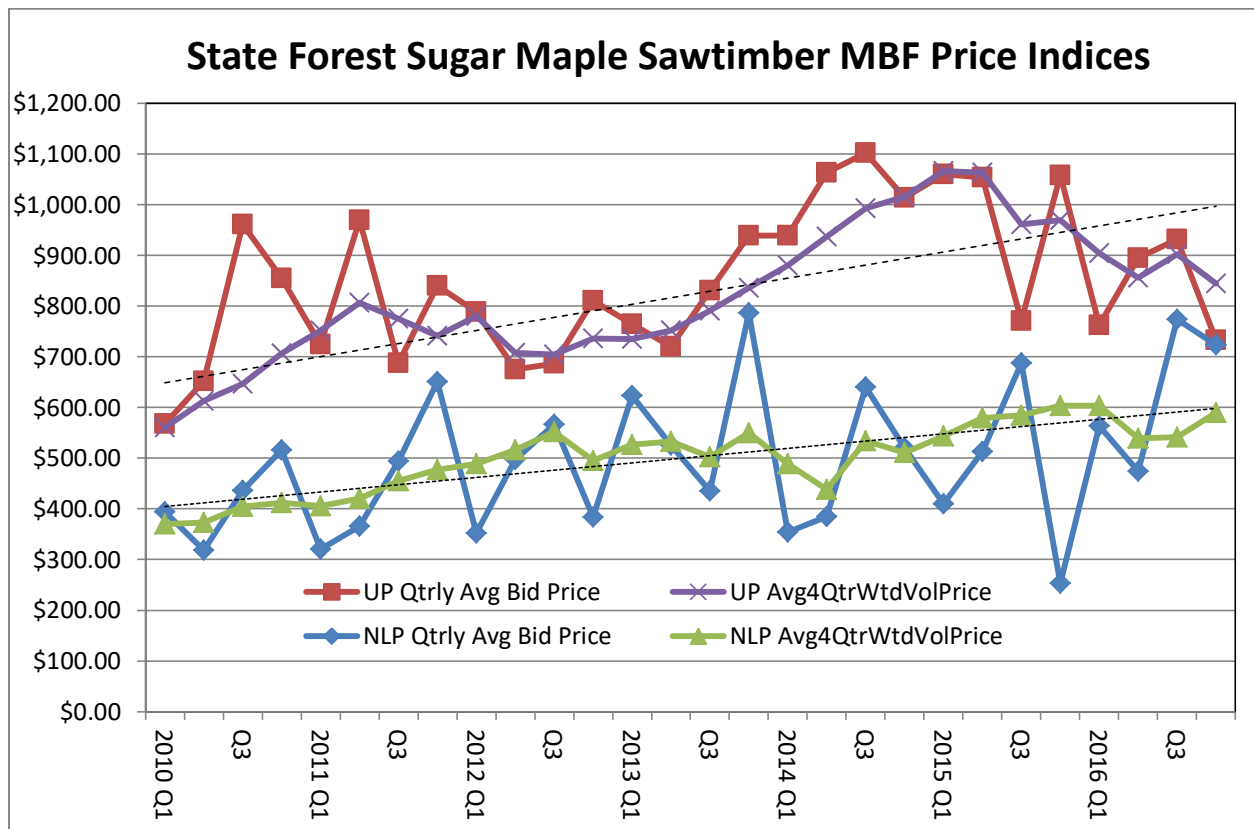
For the fourth quarter in a row, the "other hardwood pulpwood" cord price was virtually unchanged. It went from \$35.70 to \$35.76 per cord between the 1st and 2nd quarters and rose to \$37.53 in the 3rd quarter, and then declined slightly to \$36.30 in the 4th quarter. It reached a record high price of \$56.55 per cord in the 4th quarter of FY 2015. Bid species sale volume in the 3rd quarter was down from 55,652 to 38,248 cords, and dipped to 37,785 cords in the 4th quarter. Average quarterly volume for the past six years is close to 40,000 cords. The product has an increasing price trend.



NLP oak sawtimber prices declined in the 4th quarter, from \$249.74 to \$214.43 per mbf. Prices reached a high of \$415 per mbf in the 4th quarter of FY 2014 before falling back to \$236 per mbf in the 2nd quarter of FY 2015. Overall, there has been a modestly increasing price trend for the past six years. Sale volumes average about 2.7mmbf per quarter. Sale volume decreased from 4.64 to 2.95mmbf in the most recent 4th quarter. In FY 2015, sale volume reached 5.3mmbf in the 2nd quarter before falling to only 1.28mmbf in the 4th quarter.

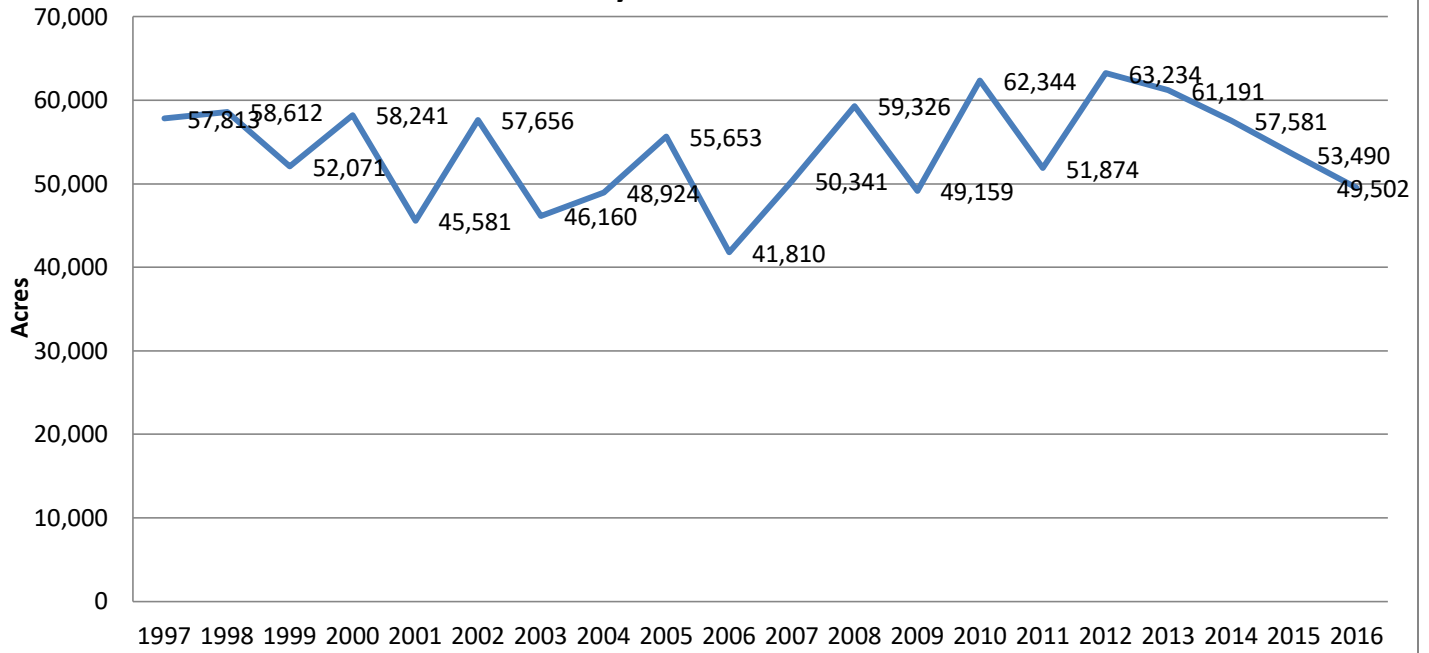


Red pine sawtimber prices had their sixth quarterly decline in a row; the price is now just below \$188 per mbf. Prices have been moderately increasing over the past 6 years and have averaged over \$215 per mbf. Sale volume reached 13.14mmbf in the 3rd quarter of FY 2015 and then fell to 1.79mmbf the next quarter. In FY 2016 volumes were fairly stable, going from 6.97mmbf in the 1st quarter to 8.354mmbf in the 2nd quarter, declining to 5.335mmbf in the 3rd quarter, and finishing at 6,815 in the 4th quarter. The average quarterly volume for the past six years is slightly over 7mmbf.



Most quarters the UP Sugar Maple sawtimber price is significantly higher than the NLP's; the most recent quarter is a notable exception. Sugar maple sawtimber peninsula prices dropped in both peninsulas in the 4th quarter. The UP price dropped sharply from \$932 to \$732.54 per mbf. It had been \$1058 per mbf in the 4th quarter of FY 2015. Sale volume had increased from 534mbf to 1,125mbf in the 2nd quarter, but it fell back down to 544mbf in the 3rd quarter and dipped further in the most recent 4th quarter to 528mbf. The NLP 3rd quarter price shot up from \$474 to \$774 per mbf; it declined moderately in the 4th quarter to \$723 per mbf. At the same time, NLP sale volume fell sharply from 1,252 to only 329mbf between the 2nd and 3rd quarters and then increased in the 4th quarter to 730mbf. The UP price has a fairly steep six-year trend; the NLP's price trend is slightly less steep. Most quarters the UP sells more sugar maple sawtimber sale volume than the NLP; the UP's six-year quarterly average is just over 700mbf while the NLP's average is just over 450mbf.

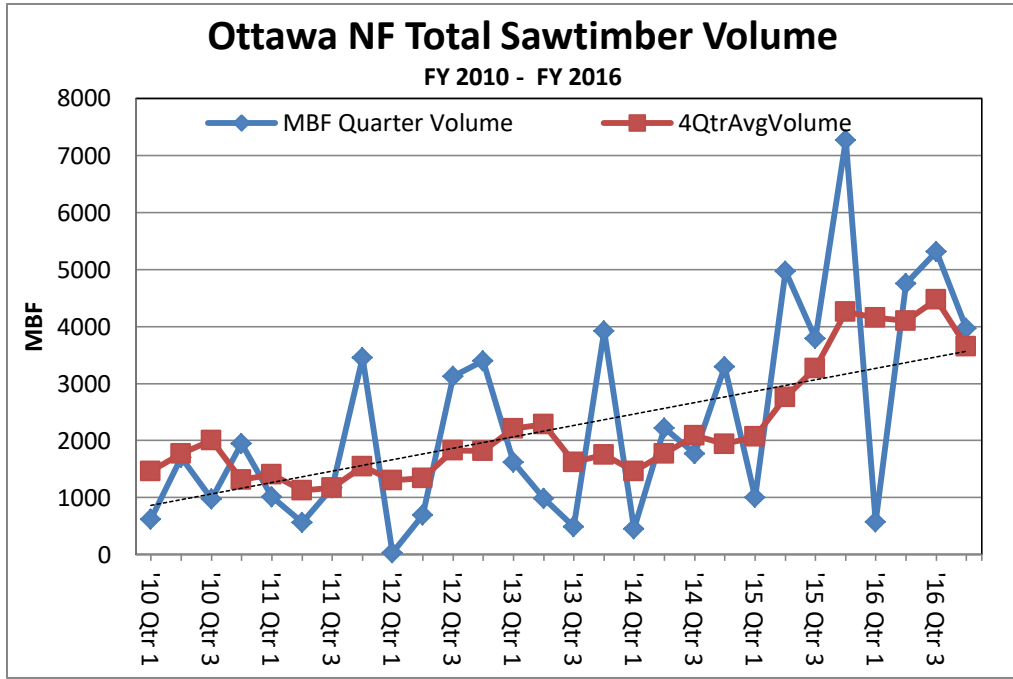
State Forest Timber Production Sold Acres, fiscal years 1997 - 2016



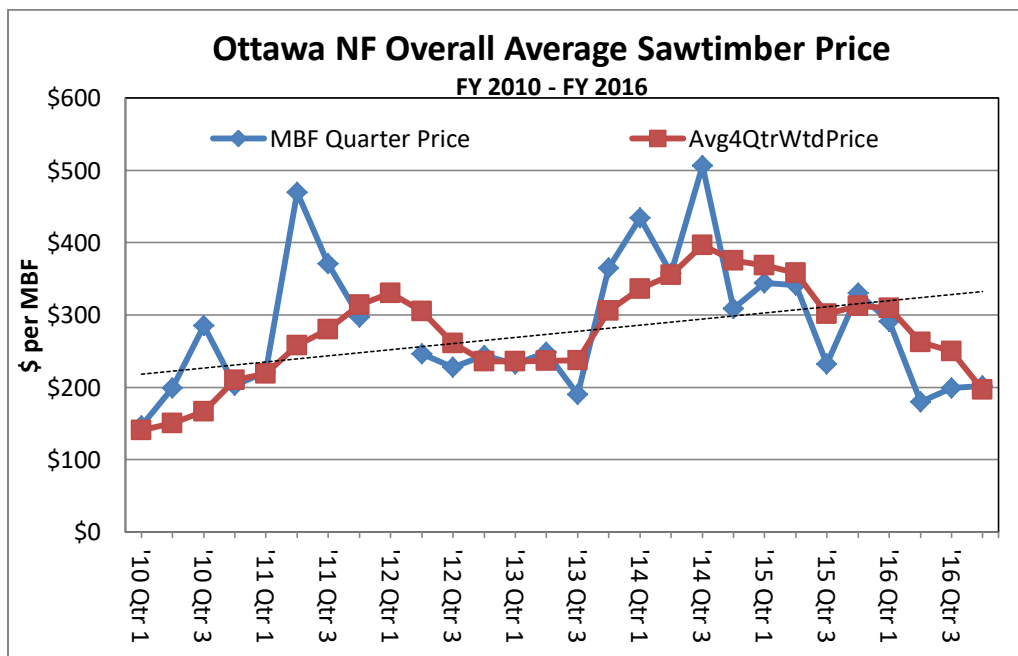
Ottawa National Forest Major Species/Product Timber Sales, FY 2010 – 2016

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

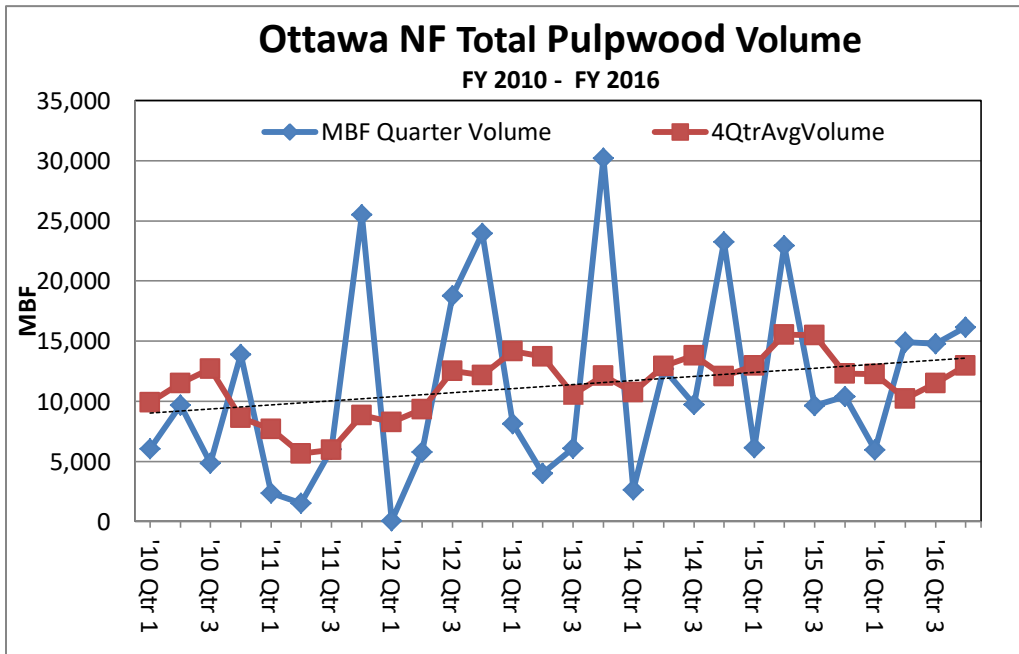
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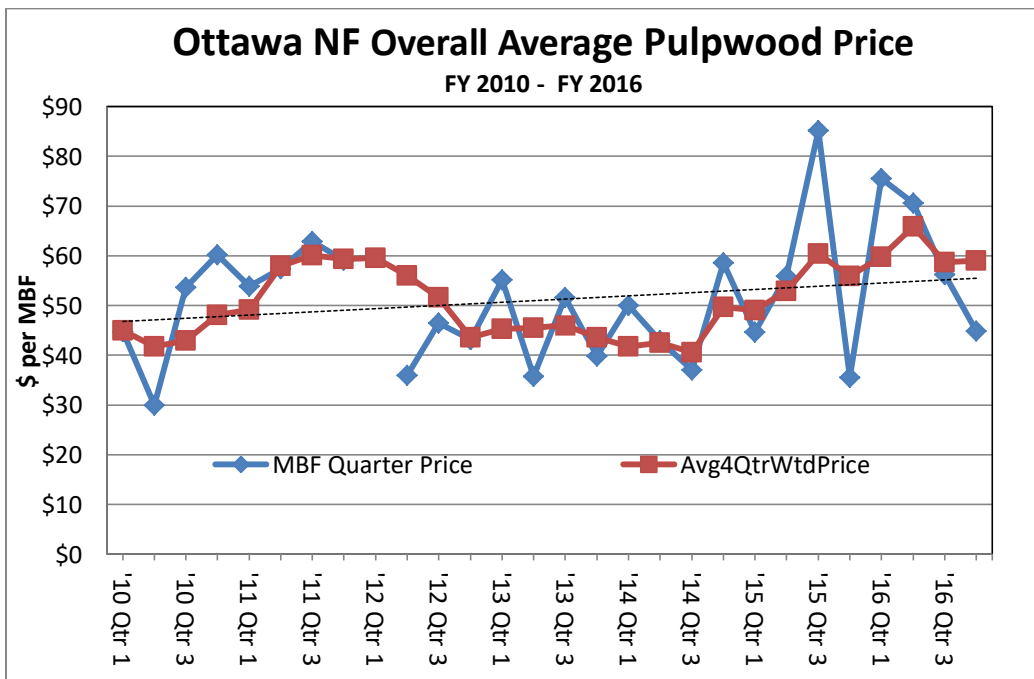
Total Ottawa sawtimber sale volume dropped from 5.3 to almost 4.0mmbf in the 4th quarter. It was only 577mbf in the 1st quarter of FY 2016 after achieving a record 7.3mmbf in the 4th quarter of FY 2015. There is a sharply increasing six-year sale volume trend for Ottawa sawtimber sale volume, although volumes from quarter-to-quarter are somewhat erratic.



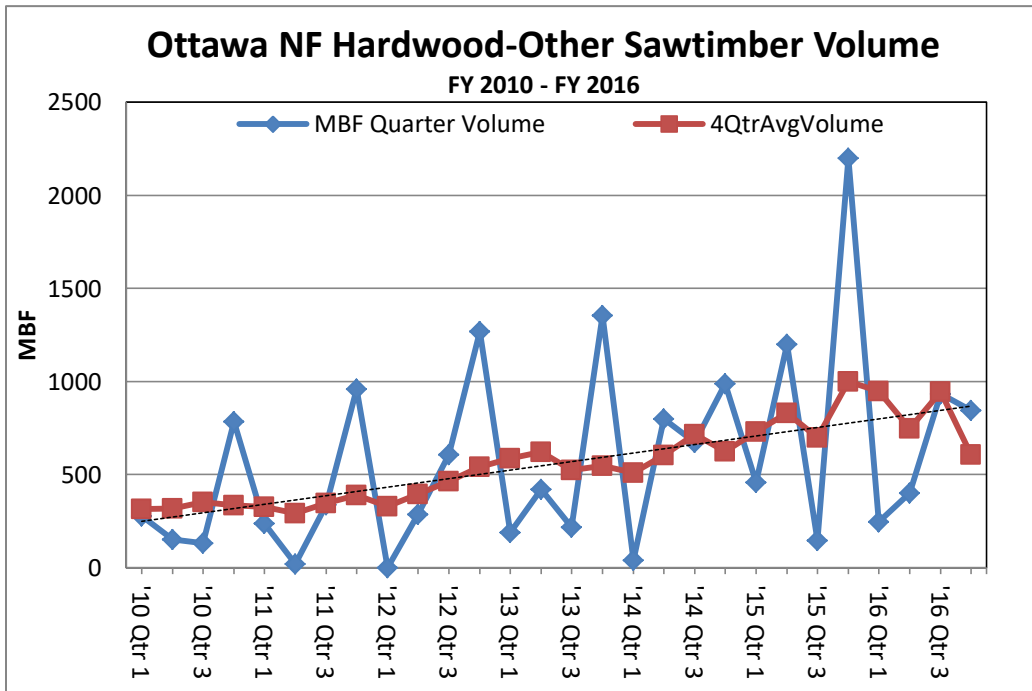
The 4th quarter overall average sawtimber price was virtually unchanged, going from \$199 to \$202 per mbf. It peaked at \$507 per mbf in the 3rd quarter of FY 2014. There is an increasing six-year price trend although the price has fallen over the past two years and is well below the 6-year trend line. Average prices are impacted by the mix of sold species and products. The Ottawa sawtimber price trend is greatly influenced by sugar maple volumes and prices.



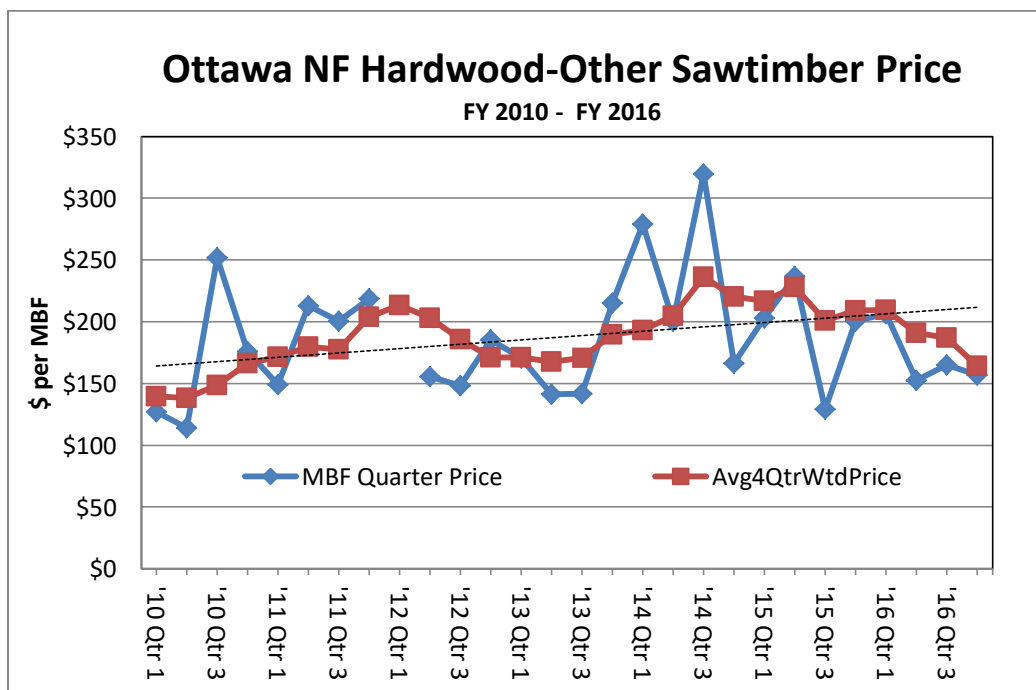
The 4th quarter total pulpwood sale volume increased slightly, from 14.8 to 16.2mmbf. From FY 2011 through the beginning of FY 2015, Ottawa pulpwood sale volumes have seesawed back and forth from one quarter to the next, going from 5mmbf or less one quarter to close to or above 25mmbf the next quarter. However, sale volumes for the past six quarters have not been as erratic. The record high level for the past six years was over 30mmbf reached in the 4th quarter of FY 2013. Overall, there has been a modest increasing sale volume trend during the past six years. Ottawa sawtimber and pulpwood volumes have been generally highest in the 4th quarter and have often dropped sharply in the 1st quarter. Next quarter's sale volume is expected to decline, given the most recent three quarter's above average sales and the pattern of lower 1st quarter sales.



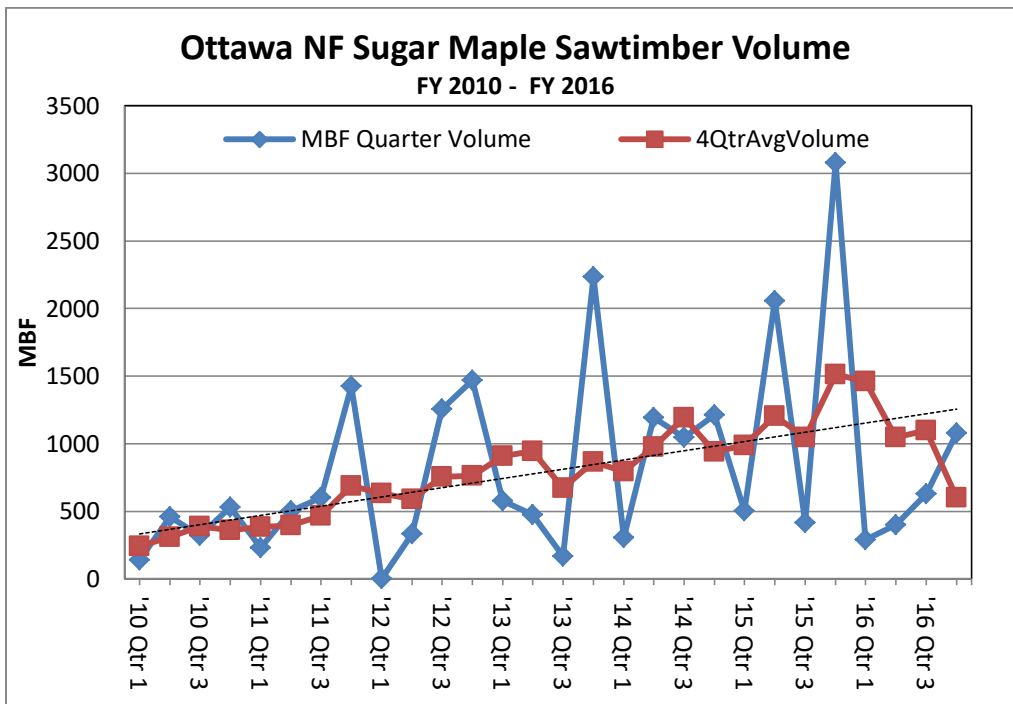
For the third quarter in a row, the 4th quarter overall average pulpwood price dropped again, from \$56.25 to \$44.83 per mbf. This latest price is below the 6-year average and mildly increasing 6-year time line. Prices had fallen from a six-year peak of \$85.22 to \$35.56 per mbf between the 3rd and 4th quarters of FY 2015 before rebounding to \$75.52 in the 1st quarter of FY 2016. Barring major negative economic events, prices are likely to increase moderately in coming quarters.



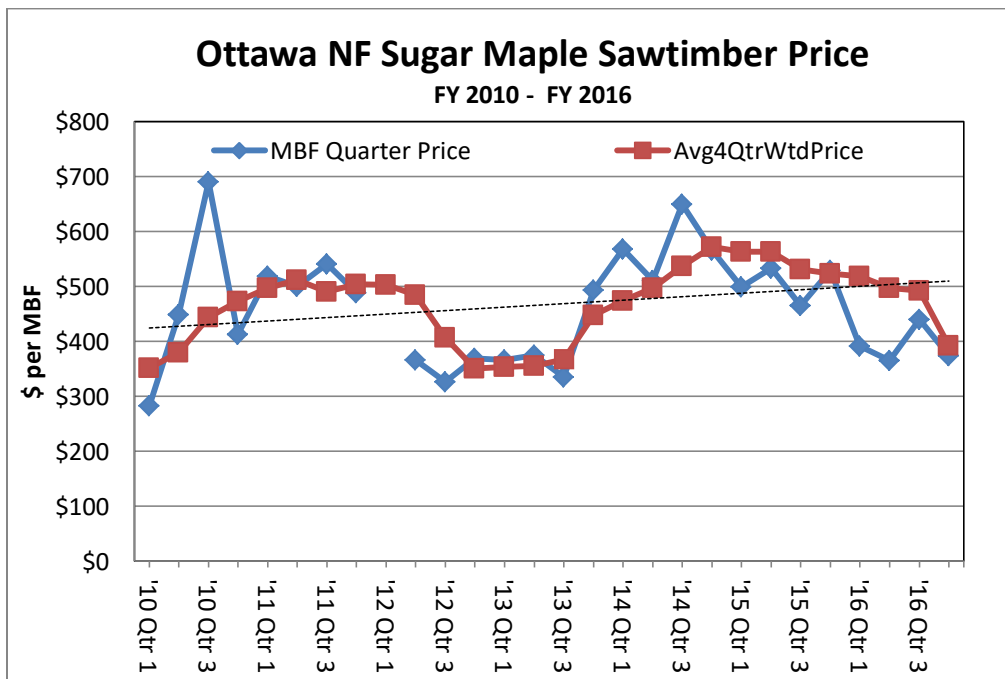
The FY 2016 4th quarter hardwood-other sawtimber sale volume dipped from 934 to 846 mbf. It reached a record 2.2mmbf level in the 4th quarter of FY 2015. This level was achieved after being at only a 146mbf level in the 3rd quarter of last year. The sale volume trend has been sharply increasing over the past six years, but sales have been erratic from one quarter to the next. There had been a fairly consistent seasonal pattern with distinctive, higher-volume peaks in the 4th quarter of most years and lower volumes otherwise. Given this pattern, it was expected that sale volumes would increase in the 4th quarter, but that did not occur this year. Perhaps a typical sharp decline in 1st quarter sales will also not occur in FY 2017.



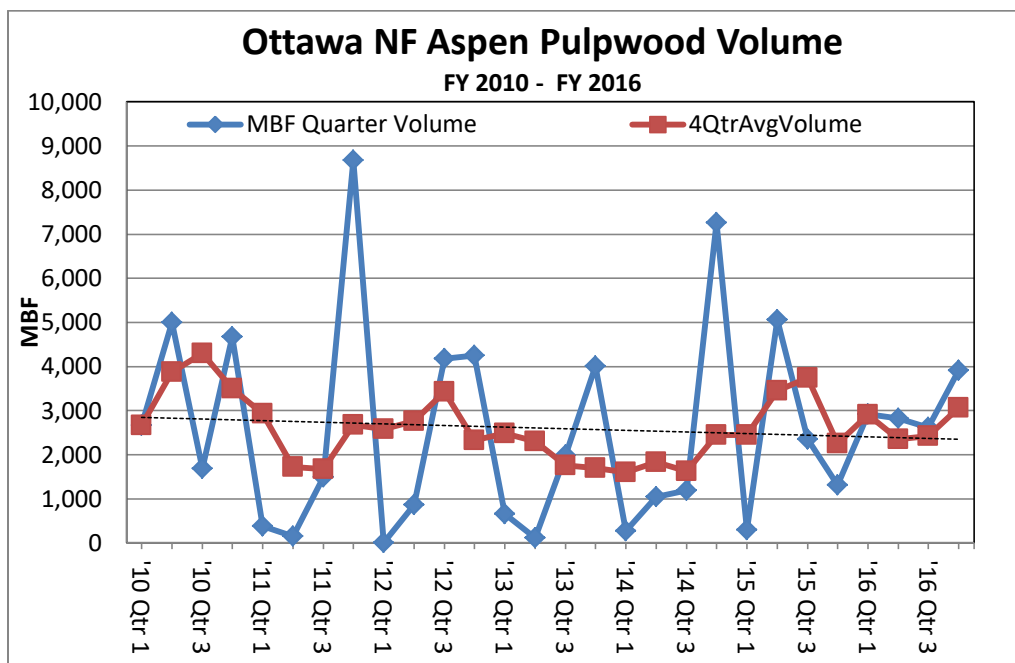
Hardwood-other sawtimber prices dipped in the 4th quarter, from almost \$165 to \$157 per mbf. This is the third quarter in a row that they are appreciably below the 6-year trend line. They had been close to \$200 per mbf in late FY 2015. They were at a record high of almost \$320 mbf in the 3rd quarter of FY 2014 before dropping sharply to \$166 in the following quarter. Overall, there has been an increasing price trend line for the past six years.



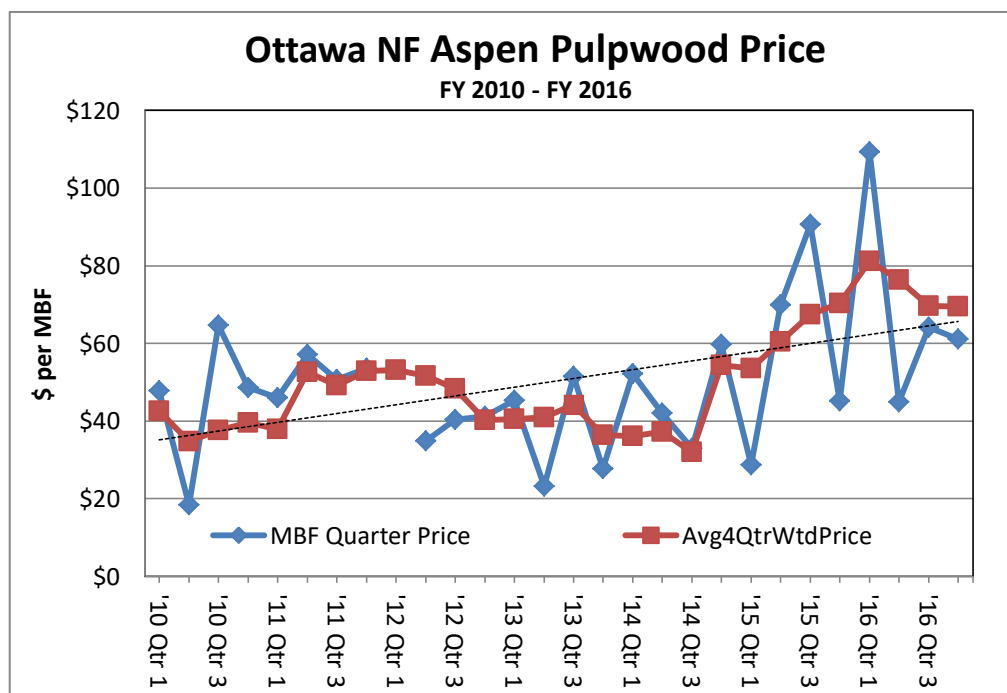
The 4th quarter Ottawa sugar maple sawtimber sale volume rose again, from 630 to 1,080 mbf. Given the low sale volume of the prior three quarters, the increase was expected to be larger than it was. Sugar maple sawtimber sale volumes hit a six-year record one year ago, going from 417mbf in the 3rd quarter to 3.1mmbf in the 4th quarter, before falling back to 290mbf in the 1st quarter of this fiscal year. As with most Ottawa timber products, it is not unusual for the 1st quarter to have the lowest sale volume and the 4th quarter to have the highest volume. However, with the low volumes in the past four quarters, perhaps the upcoming 1st quarter sales will break from this pattern. The sales volume trend for the past six years is still sharply increasing.



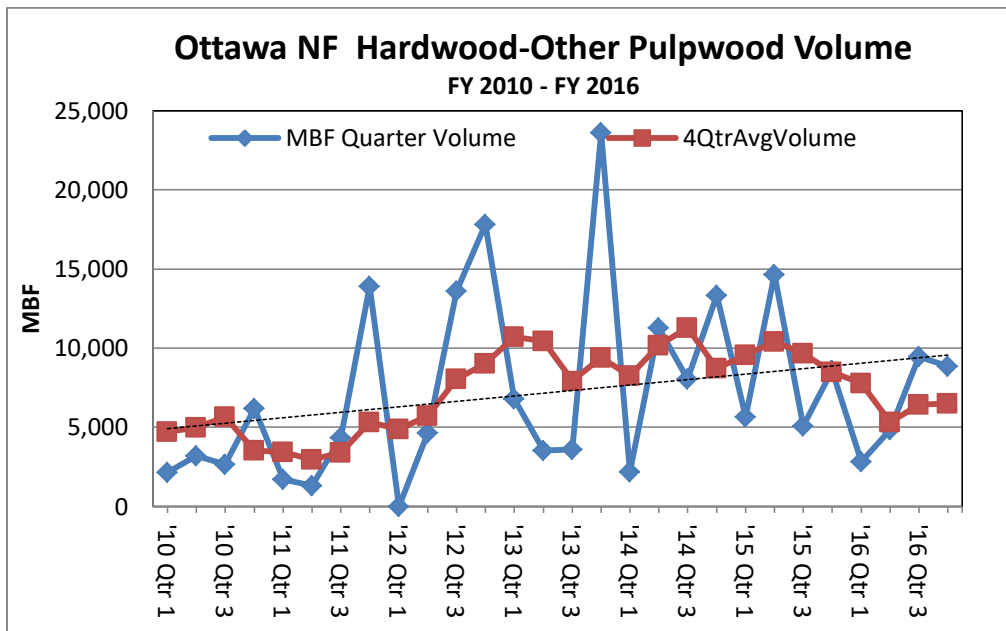
The average sugar maple sawtimber price dropped back from \$440 to \$374 per mbf in the 4th quarter. It had risen from \$465 per mbf in the 3rd quarter of FY 2015 to \$529 in the 4th quarter before falling to \$391 in the 1st quarter of this year. It had previously peaked at \$650 per mbf in the 3rd quarter of FY 2014. There is a moderately increasing price trend over the past six years despite lower prices in all FY 2016 quarters. A shorter-term trend for the past two years would imply that prices will not change much in coming quarters or may even decline further.



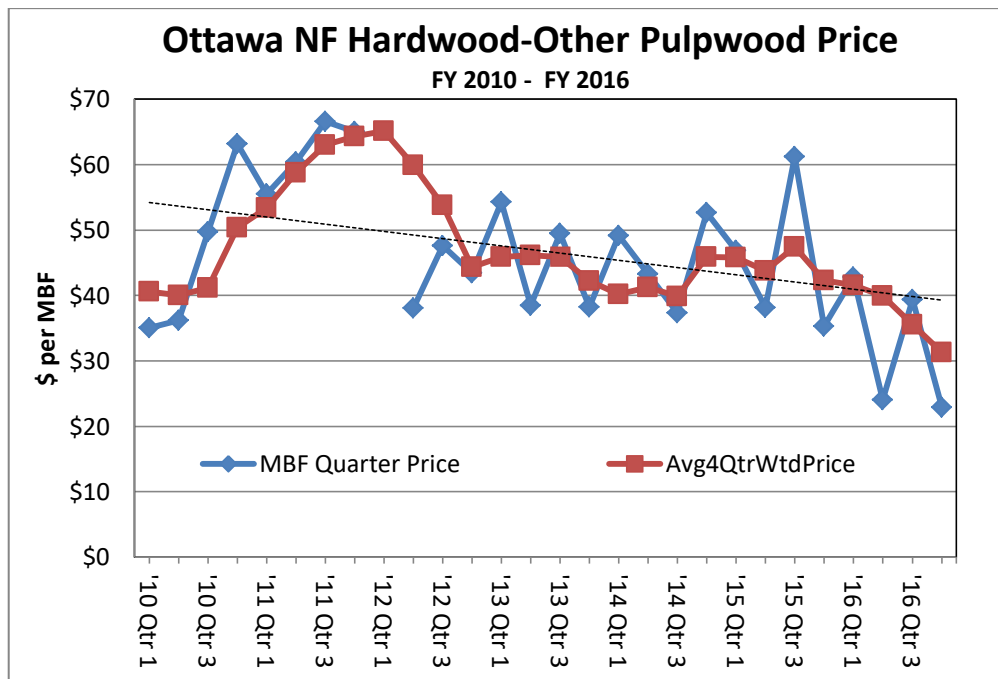
Aspen pulpwood sale volume rose in the 4th quarter, from 2.6 to 3.9mmbf. Sale levels have been at slightly above average levels for all of FY 2016. Previously, sale volumes had been quite erratic from quarter to quarter, with volumes at the extremes (under 1,000 mbf or over 4,000 mbf) more frequent than sales in the middle range. Sales have been as high as 8.7mmbf in the 4th quarter of FY 2011 and 7.3mmbf in the 4th quarter of FY 2014. They reached 5.1mmbf in the 2nd quarter of last year. There is a slight downward sale volume trend. Generally aspen pulpwood sales fall off in the 1st quarter and it would not be surprising if they did so in the coming 1st quarter given recent above-average sales.



The 4th quarter aspen pulpwood price dipped from \$64 to \$61 per mbf. The 1st quarter FY 2016 aspen pulpwood price shot up to a record \$109 per mbf from a previous quarter price of \$45, but the price came right back down to \$45 again in the 2nd quarter of this year. The price had been at what was then a record high of \$91 per mbf in the 3rd quarter of FY 2015. With erratic sale volumes and many quarters with low or no volume as a backdrop, the overall price trend for the past six years has been increasing.



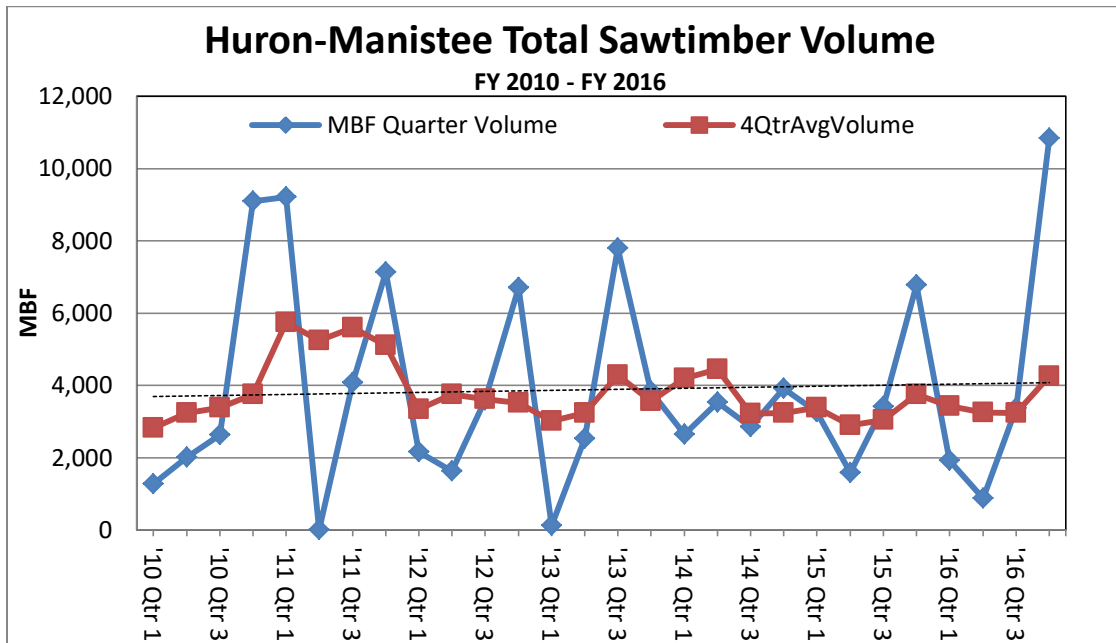
After two quarters of increasing volumes, Hardwood-Other pulpwood 4th quarter sale volume dipped, from 9.5 to 8.9mmbf. It was only 2.8mmbf in the 1st quarter of FY 2016. It had been 8.6mmbf in the 4th quarter of FY 2015. Sale volume hit a record high 23.6mmbf in the 4th quarter of FY 2013. Sale volume swings appear to have moderated over the past two or three years. Volumes have trended upward and have more than doubled in the past six years, but the upward trend also appears to be moderating. First quarter sale volumes generally are down substantially from 4th quarter volumes, but with fewer large swings in sale volumes from quarter to quarter, the change is expected to be more moderate than in the past.



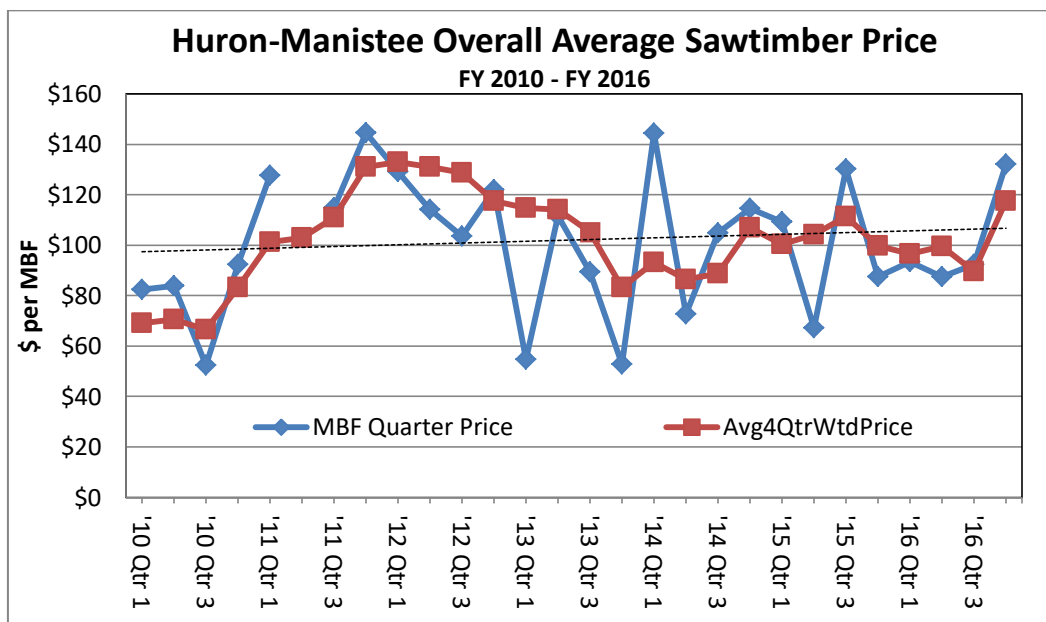
The 4th quarter hardwood-other pulpwood price fell back down from \$39 to \$23 per mbf. It had decreased significantly from \$43 to \$24 per mbf in the 2nd quarter, its lowest level in six years – now it is slightly lower. It was over \$61 per mbf before falling in the 4th quarter of FY 2015 to \$35. The product had been selling in a fairly narrow \$38 to \$55 range between FY 2012 and FY 2014. Prices peaked in FY 2011 at over \$65 per mbf. The six-year price trend is declining, particularly influenced by higher prices in FY 2010 and FY 2011 and reinforced by the 2nd and 4th quarters of FY 2016.

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

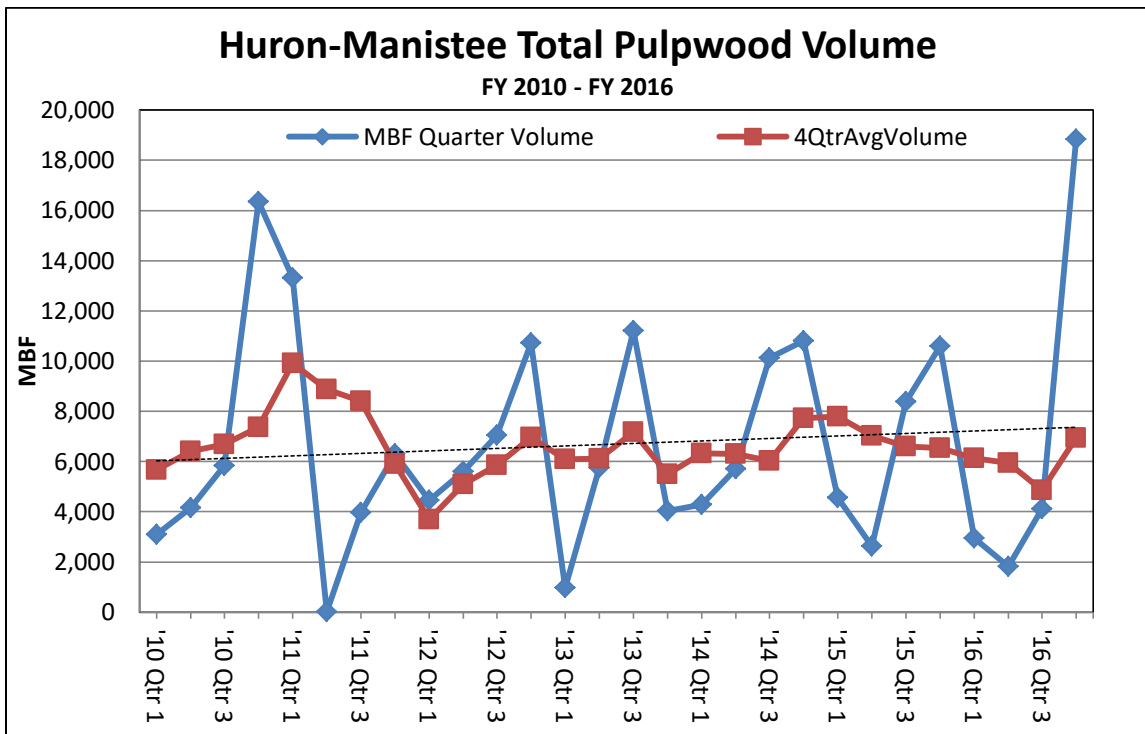
All graphs include a dotted trend line based upon the data set for the average of the last four quarters. Gaps in the blue quarter line indicate no sales in the quarter. The National Forests follow the federal fiscal year from October 1 through September 30. The most recent data included here is for the 4th quarter of FY 2016 (July through September, 2016). Only certain major categories of timber sales are shown; more information is available through the Region 9 pdf reports posted on the Forest Service website: <http://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml>



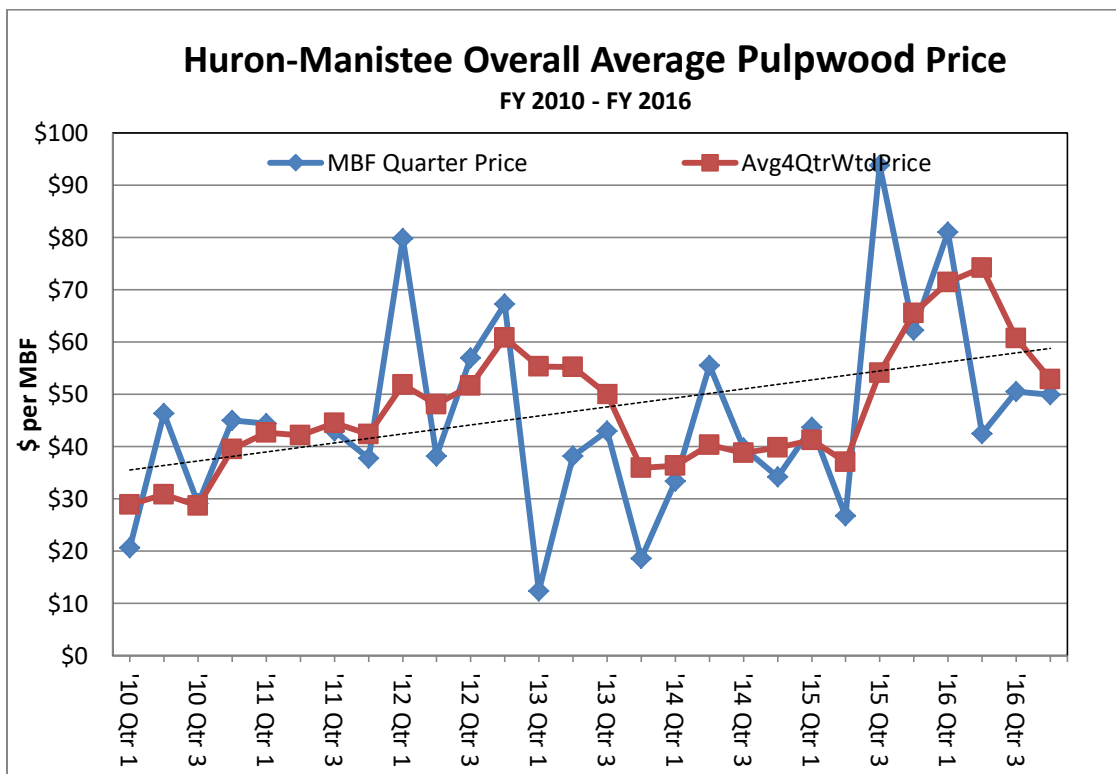
The Huron-Manistee (H-M) sawtimber sale volume rose from 874mbf to 3.375mmbf in the 3rd quarter and then hit a record 10.832mmbf in the 4th quarter. This record flipped a slight downward volume trend over the past six years to a slight upward trend. H-M sawtimber sale volume tends to peak in the fourth quarter and be lower in the 1st quarter and 2nd quarters. Given this pattern and the record high 4th quarter sales, volumes will be lower next (1st) quarter.



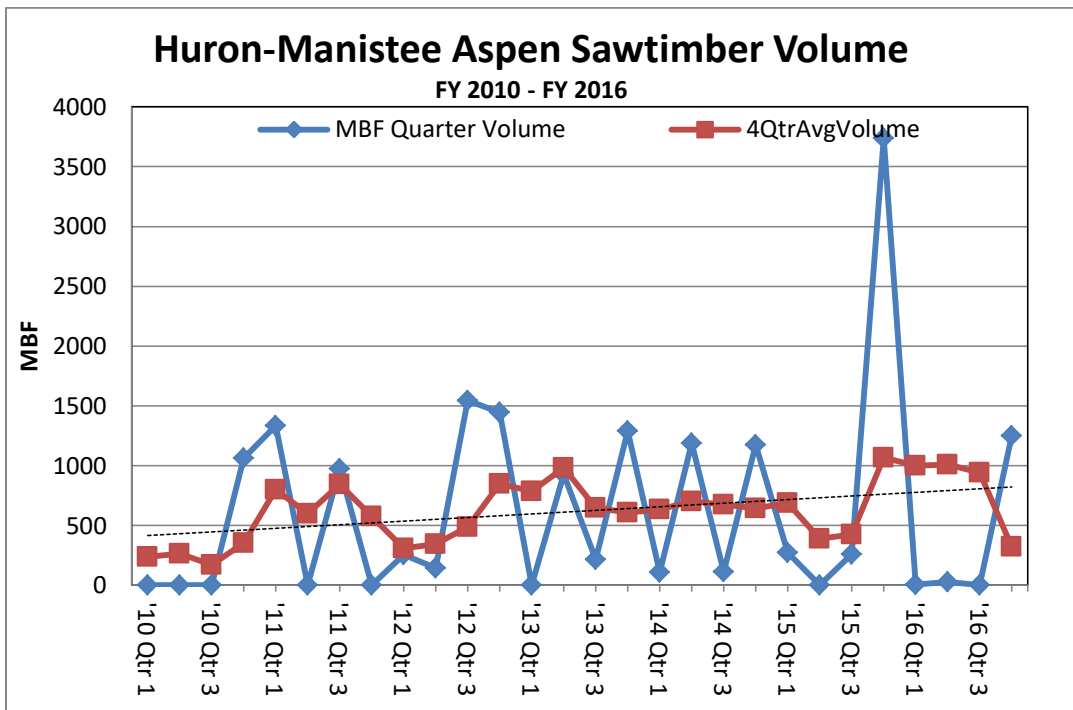
The overall average sawtimber price also shot up in the 4th quarter, from \$92 to \$132 per mbf. Until the 4th quarter, prices had been relatively stable for four quarters. Sawtimber prices are greatly influenced by the mix of species and quality of products sold. Generally, red pine accounts for over half of the H-M sawtimber sale volume and it is the major influence on the overall average sawtimber price. It accounted for over 60% of the volume in the 4th quarter. Next (1st) quarter's price can be expected to fall back down appreciably, to at least the 6-year trend line, if not below it.



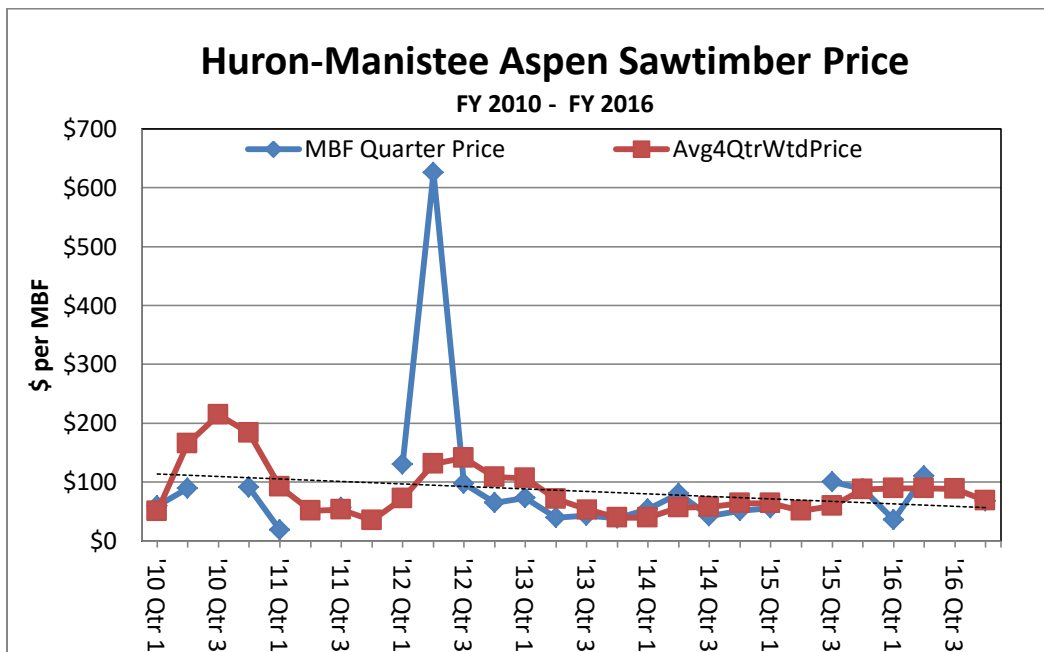
Similar to the sawtimber volume, 4th quarter pulpwood volume increased dramatically, from 4.1 to a record 18.84mmbf. A sharp increase was expected due to the relatively low sales in the prior three quarters and a pattern of higher 4th quarter sales. The sale volume was at 10.6mmbf in the 4th quarter of FY 2015. The six-year sale volume trend has gone from slightly declining to slightly increasing. A dramatic drop in sales is expected for the coming (1st) quarter.



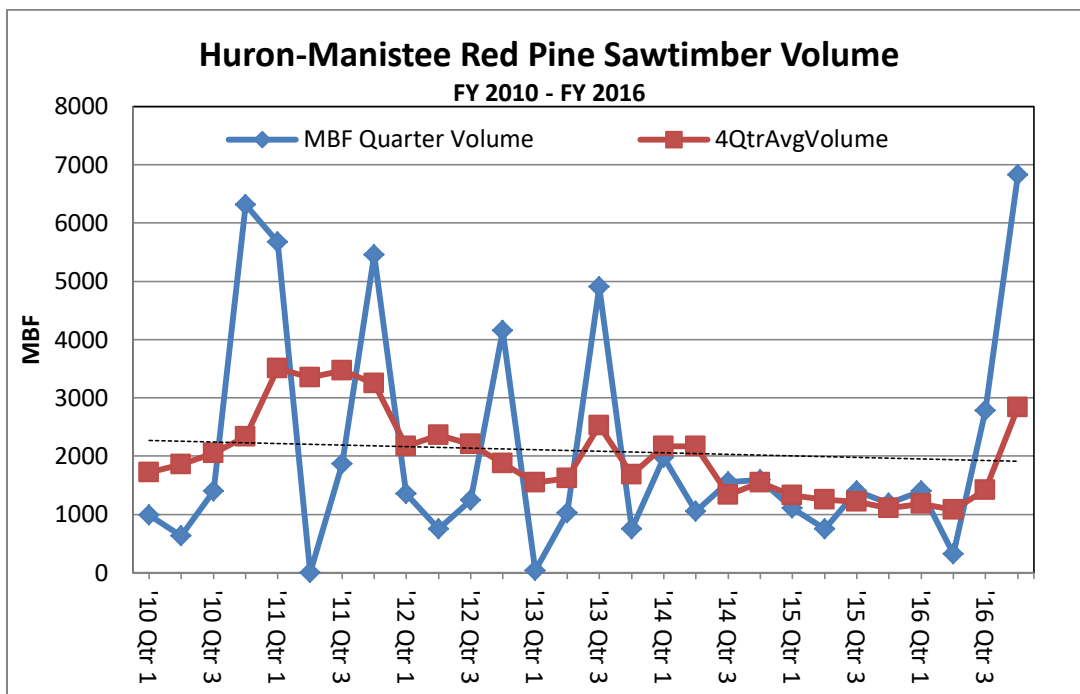
Prices were expected to in the 4th quarter, but they essentially didn't change. The overall average pulpwood price dipped just slightly in the 4th quarter from \$50.44 to \$49.87 per mbf. The 3rd quarter FY 2015 average over \$93 was largely a result of skewed bids on one large oak sale and was not viewed as being truly indicative of overall prices and trends. However, the subsequent 4th and 1st quarter prices reinforce an upward trend in average H-M pulpwood prices despite the lower prices in the most recent three quarters. Upcoming prices are expected to change only modestly.



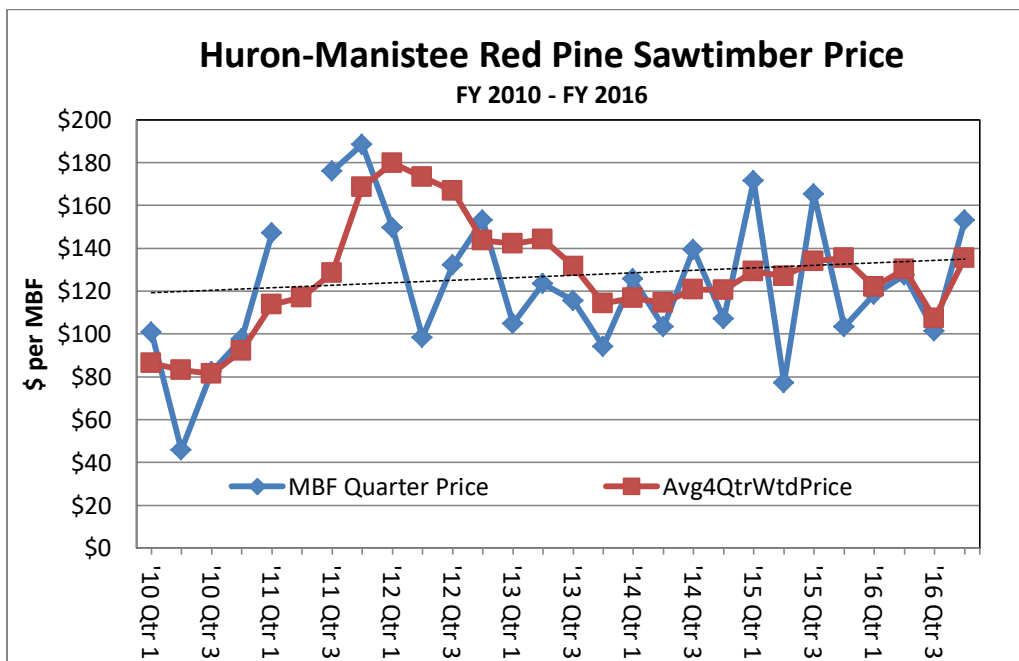
Aspen sawtimber sales were only 8mbf in the 1st quarter, 27mbf in the 2nd quarter, zero in the 3rd quarter, and then 1.25mmbf in the 4th quarter. The six-year average quarterly volume is in the neighborhood of 500mbf. There has been three years with three quarters of no or low sale volumes like there was in FY 2016; the other two were in FY 2015 and FY 2010. FY 2015 saw three quarters of below average sales and then a record 3.74mmbf sale volume in the 4th quarter. Last quarter it was said that FY 2016 might be repeating the FY 2015 pattern “and the coming 4th quarter will see sale volume at least above 1mmbf.” The increasing sale trend over the past six years was reinforced by sale volumes in the 4th quarters of FY 2015 and FY 2016.



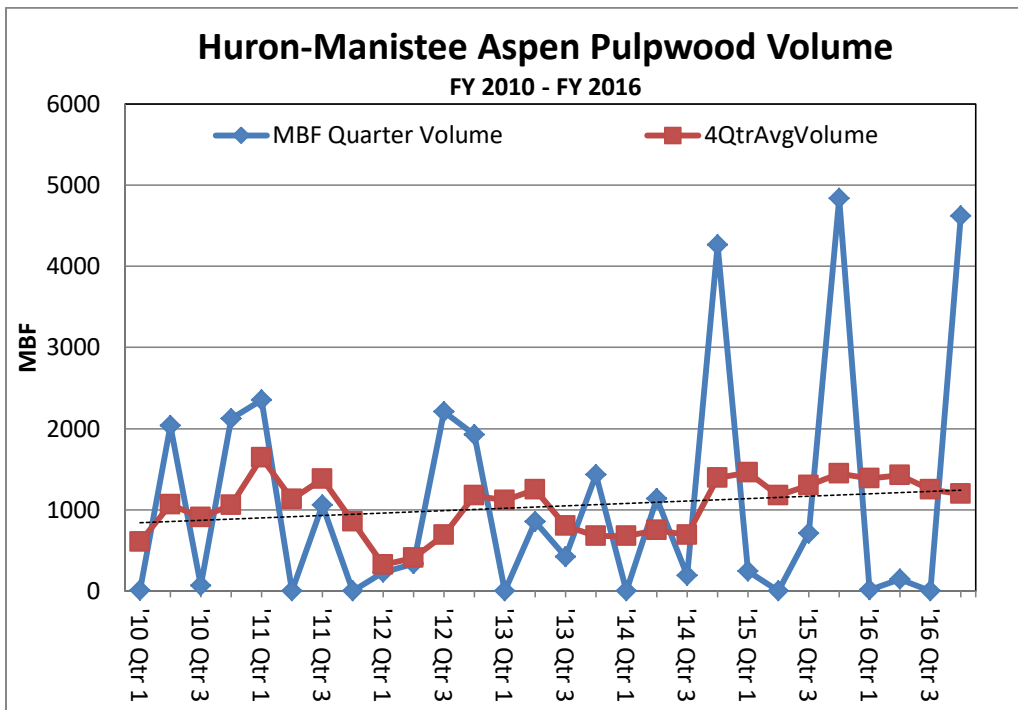
The 4th quarter aspen sawtimber price was \$67.59 per mbf (it is hidden by the red “Avg4QtrWtdPrice” in the above graph). There was no 3rd quarter price for aspen sawtimber as there was no volume sold; for that matter, there is little basis for a price since the 4th quarter of FY 2015 when the price averaged close to \$89 per mbf.



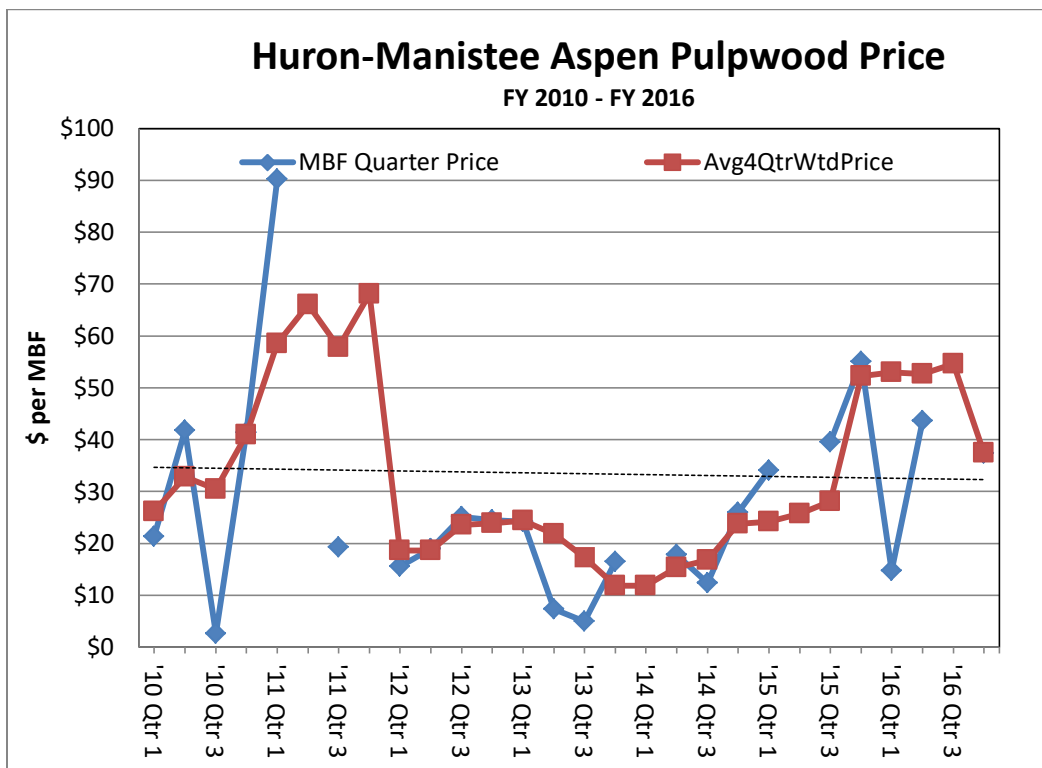
Red pine often accounts for the majority of the sawtimber volume sold on the Huron-Manistee. Red pine sawtimber volume increased sharply from 322mbf to 2.784mmbf in the 3rd quarter, but then jumped even more to 6.825mmbf in the 4th quarter. Before the most recent two quarters, there had been 10 quarters with lower but more stable volume relative to earlier more erratic sales. As the above graph shows, the 3rd quarter sale volume did not reach the peak levels achieved in fiscal years 2010 through 2013. With this in mind, it was expected that the 4th quarter would have higher sales than those in the 3rd quarter despite a declining six-year sales trend. The 4th quarter sales did not disappoint this expectation.



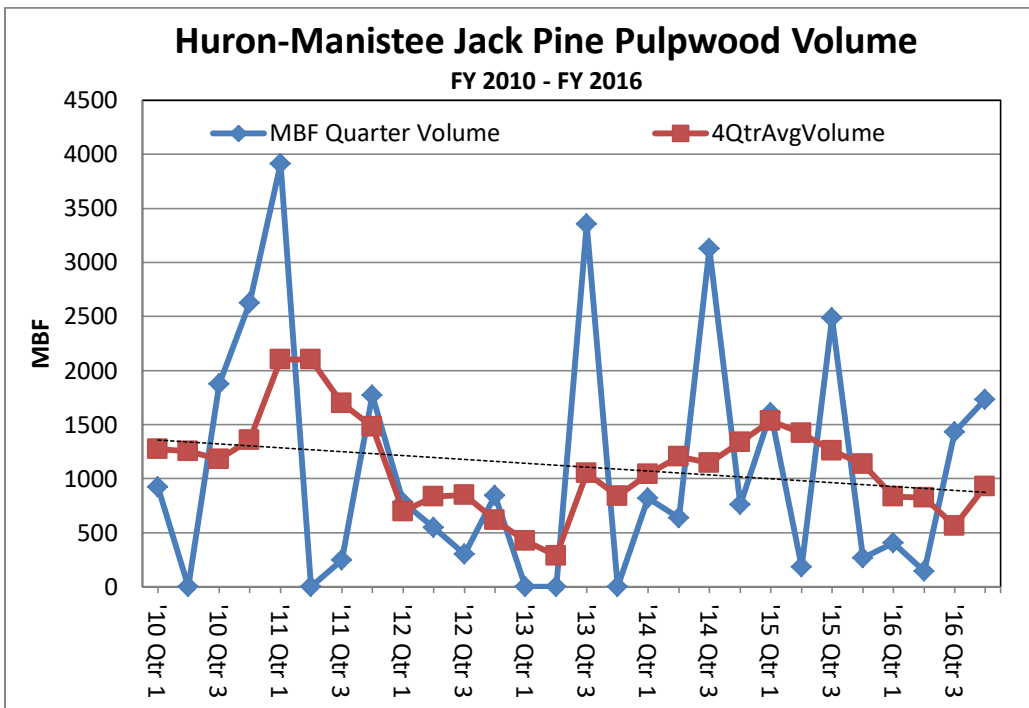
Red pine prices were expected to rebound moderately after falling back further than expected in the 3rd quarter, from \$127 to \$101 per mbf. And they did, rising to \$153 per mbf. They had seesawed in FY 2015, from \$171 in the 1st quarter to \$77 in the 2nd quarter, back to \$165 in the 3rd quarter and then down to \$103 in the 4th quarter. There is a slight increasing price trend over the past six years. Prices for the 1st quarter of FY 2017 should retreat from the 4th quarter level.



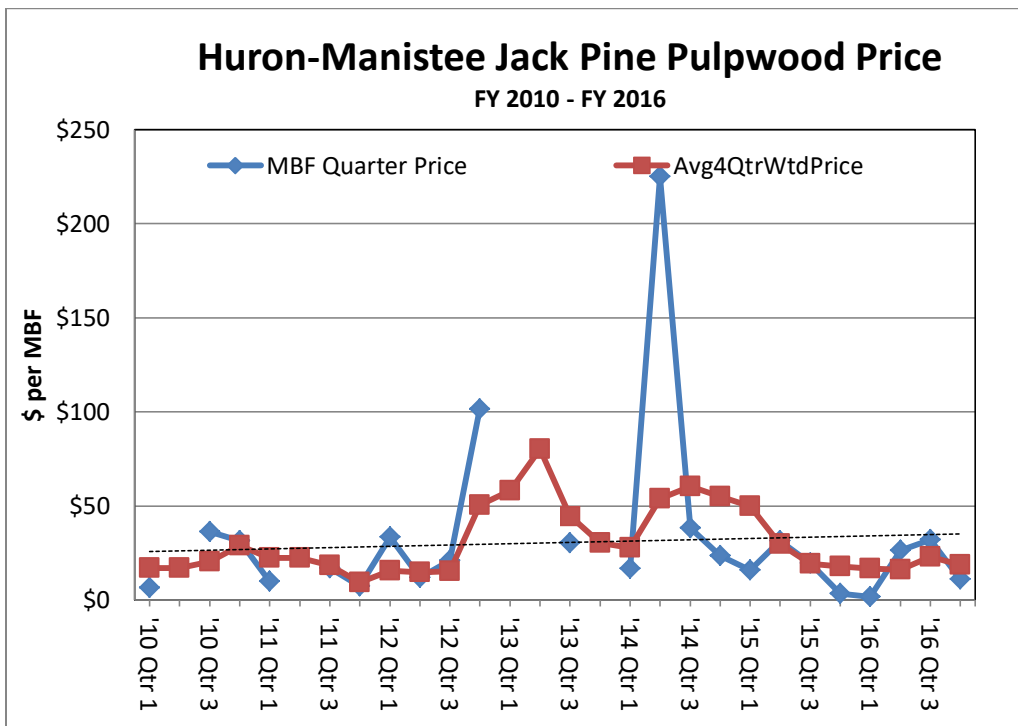
Following three quarters of no or low aspen pulpwood sale volume, the 4th quarter level jumped up to 4.6mmbf. This is the third 4th quarter in a row that had many times more volume than the previous three quarters. It rose steeply from 713mbf in the 3rd quarter of FY 2015 to a record level over 4.8mmbf in the 4th quarter and fell just as sharply to only 13mbf in the 1st quarter of FY 2016. The 4th quarter of FY 2014 also had a record level of sales (4.3mmbf), but often other quarterly sale volumes are or at or below 1mmbf. Next quarter's sale volume is likely to be under 1mmbf, especially given the only significant volumes in recent years have come in the 4th quarter.



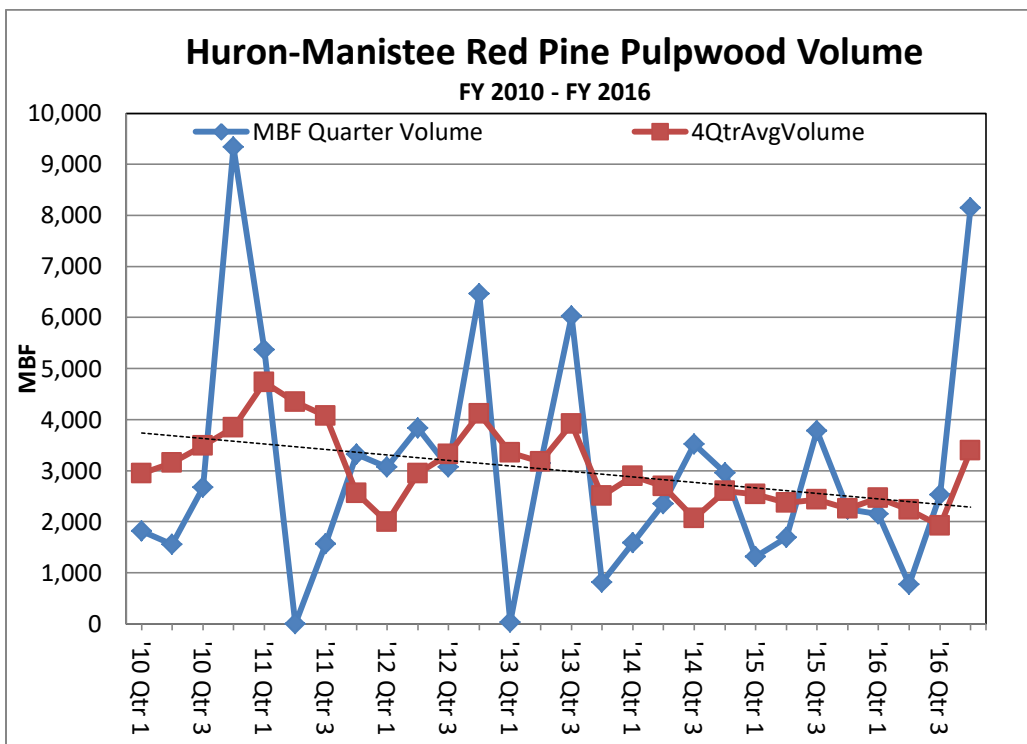
The 4th quarter aspen pulpwood price is \$37.35 per mbf (it is hidden by the red "Avg4QtrWtdPrice" value in the above graph). There is no 3rd quarter aspen pulpwood price as there was no sale volume. The 2nd quarter aspen pulpwood price rebounded to \$43.57 on low (147mbf) volume. It was at \$55 in the 4th quarter on high volume, up from about \$40 per mbf in the 3rd quarter. Prices have been increasing since the 3rd quarter of FY 2014 when they were only \$12 per mbf, but the 6-year price trend is slightly declining; however, prices for many quarters are based on low or no sale volumes.



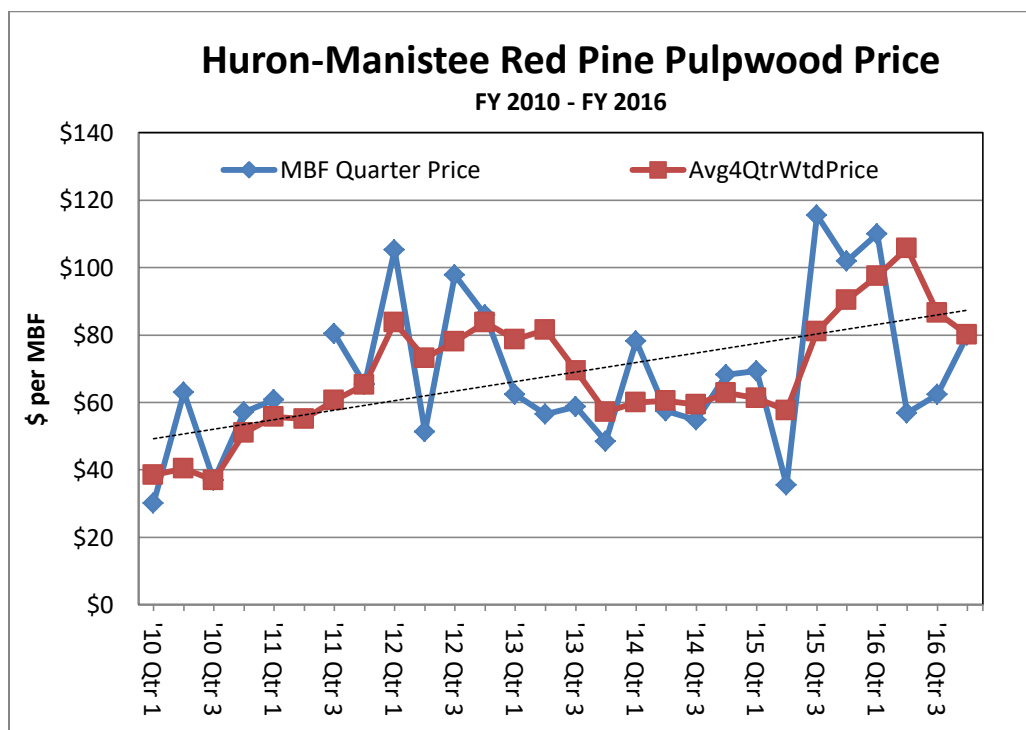
Following three very low sale quarters, jack pine pulpwood sale volume rose from 143mbf to 1.433mbf in the 3rd quarter and then rose again in the 4th quarter to 1.73mbf. . It had dropped back to 268mbf in the 4th quarter of FY 2015 from 2.5mbf in the 3rd quarter. Overall, jack pine pulpwood sale volume has been on a downward trend over the past six years and many quarters have sale volume well below 1mbf or zero. Part of the jack pine sale volume decline in recent years may be due to more jack pine being included in a combined sale category with red and white pine. Given the two recent quarterly sale increases, It would not be surprising if the sale volume declined in the coming 1st quarter.



The 4th quarter jack pine pulpwood price fell from \$32 to only \$11per mbf. In FY 2015, the price was \$15.80 in the 1st quarter, \$31.50 in the 2nd quarter, \$19.47 in the 3rd quarter, and \$3.50 in the 4th quarter. The price for the FY 2014 2nd quarter is a mistake or an anomaly and should not be considered a reliable price for the product. The six-year price line is relatively flat, but there are many quarters with low or no sales and a few quarters with price anomalies which inhibit establishing a reliable price trend line.



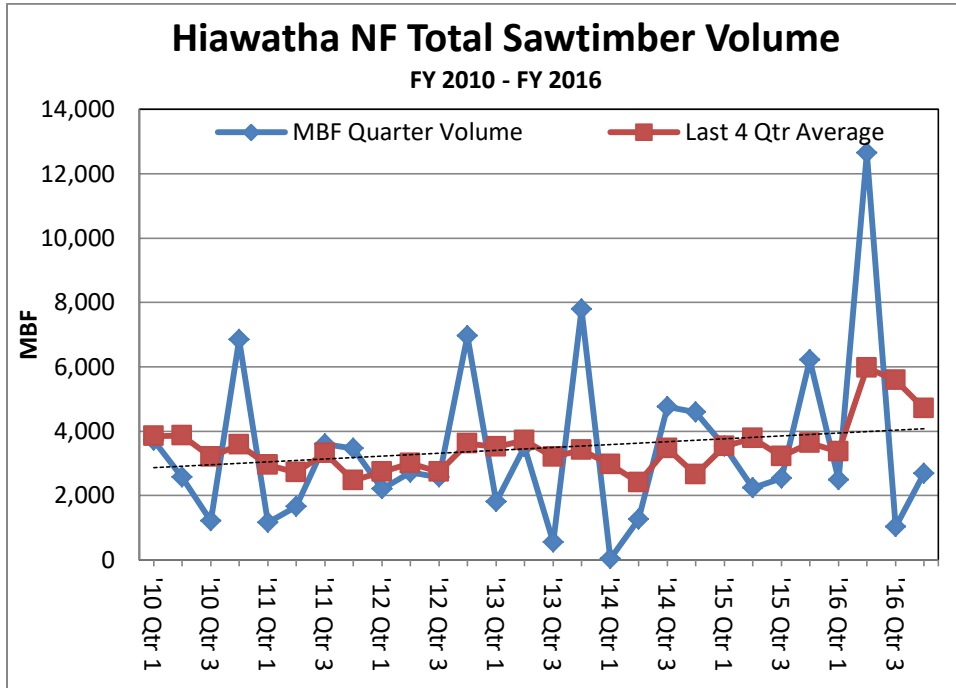
Red pine pulpwood sale volume rebounded from 770mbf to 2.5mmbf in the 3rd quarter and then shot up to 8.14mmbf in the 4th quarter. It had dropped from 3.78mmbf in the 3rd quarter of FY 2015 to 2.25mmbf in the 4th quarter and then dipped further to 2.15mmbf in the 1st quarter of FY 2016. There were some large swings in volumes in the past six years, from quarters with over 6mmbf to subsequent quarters with no or negligible sale volume. Until the most recent 4th quarter, volume swings appeared to have moderated in the past two years with lower highs and higher lows. There has been a declining sale volume trend over the past six years. Sales will almost certainly drop sharply in the coming 1st quarter.



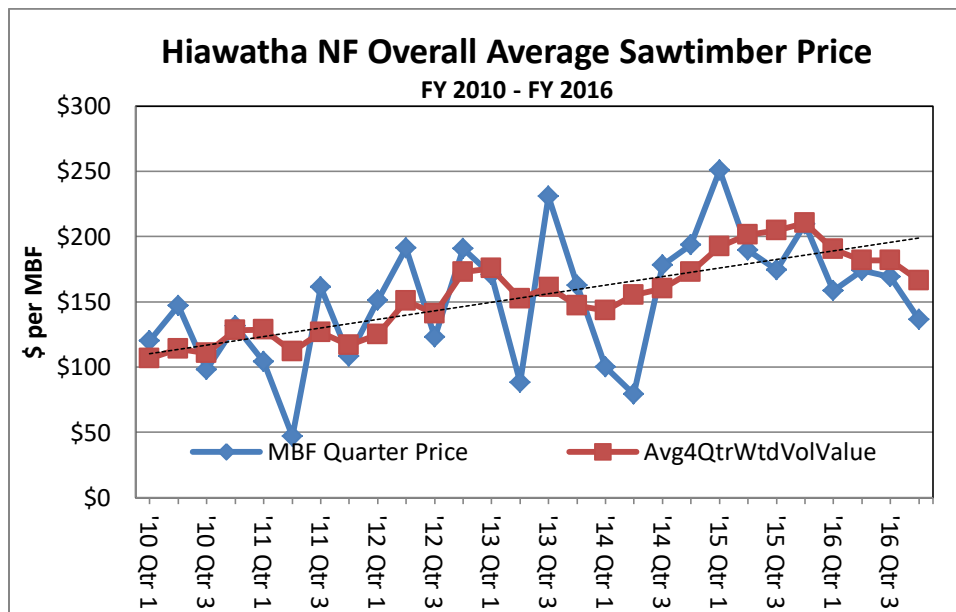
The 4th quarter red pine pulpwood price rose again, going from \$62 to \$80 per mbf. The price had been at record levels over \$100 per mbf in the last three quarters of FY 2015. Overall, prices for the past six years have seen a fairly steep increasing trend. Given that there have been moderate price increases in the most recent two quarters, but that prices remain below the trend line, prices are expected to not change much in the coming 1st quarter.

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

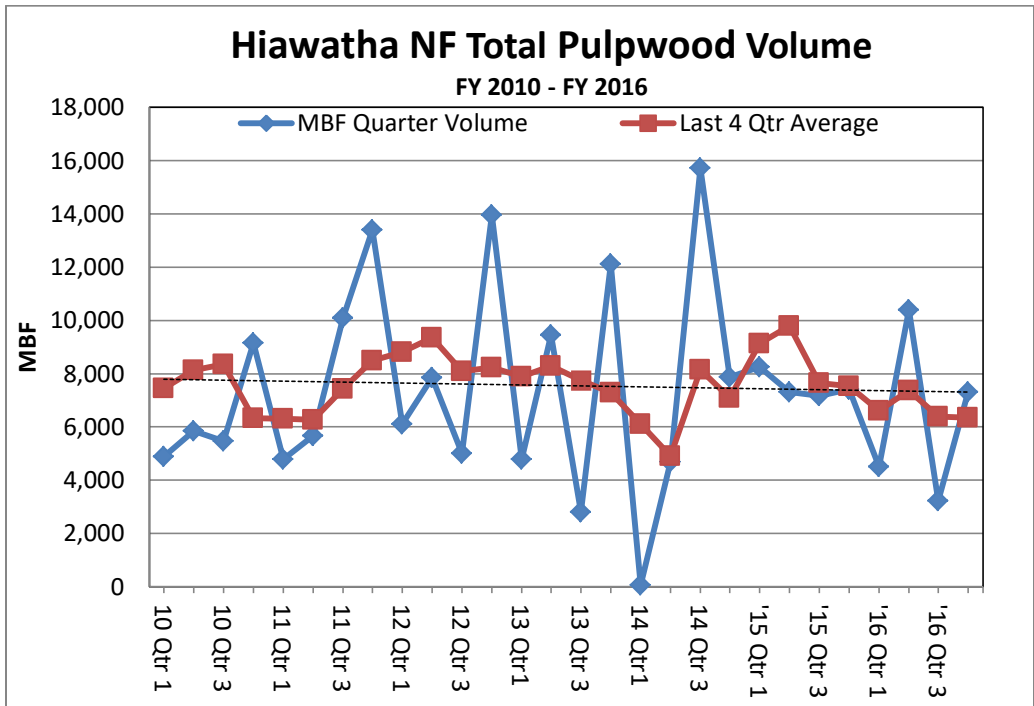
All graphs include a dotted trend line based upon the data set for the average of the most recent four quarters. Gaps in the blue quarter line indicate no sales in the quarter where the gap occurs. The National Forests follow the federal fiscal year (FY) from October 1 through September 30 (as does the MI DNR). The most recent data included here is for the 4th quarter of FY 2016, covering July through September of 2016 sales. Only certain major categories of timber sales are shown; more information is available through the Region 9 pdf reports posted on the Forest Service website: <http://www.fs.fed.us/forestmanagement/products/cut-sold/index.shtml>



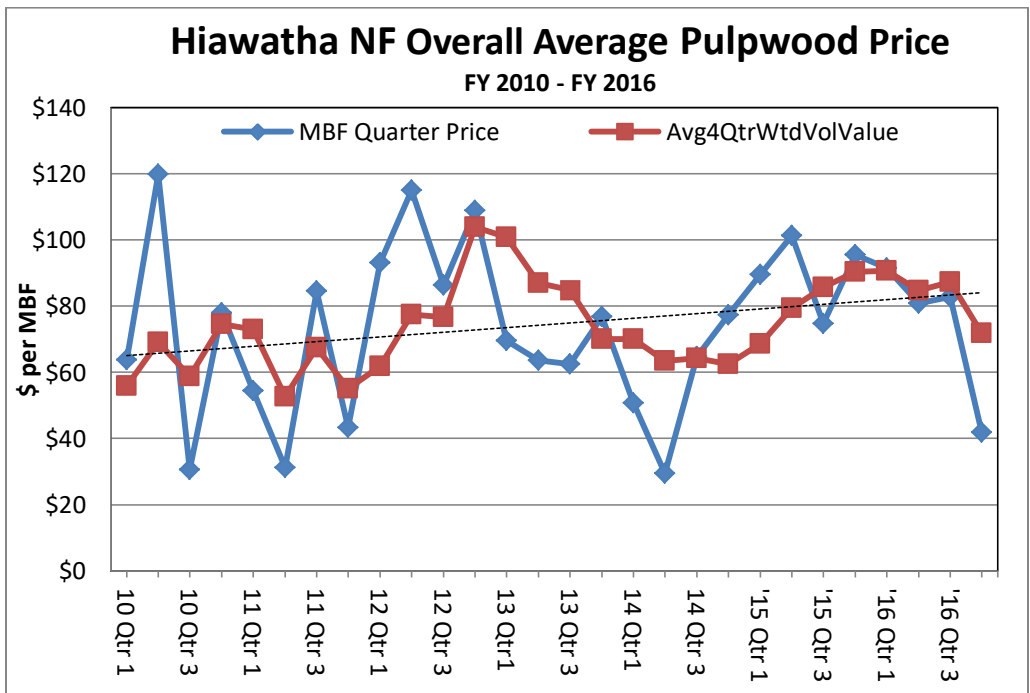
Hiawatha sawtimber sale volume increased from 1.025mmbf to 2.677mmbf in the 4th quarter. Sales were at a record 12.6mmbf volume in the 2nd quarter. The 6-year trend of sawtimber sale volume is slightly increasing, in large part due to the 2nd quarter record volume. Sale volumes are likely to increase in future quarters as 4th quarter sales were still appreciably below average and the 6-year trend.



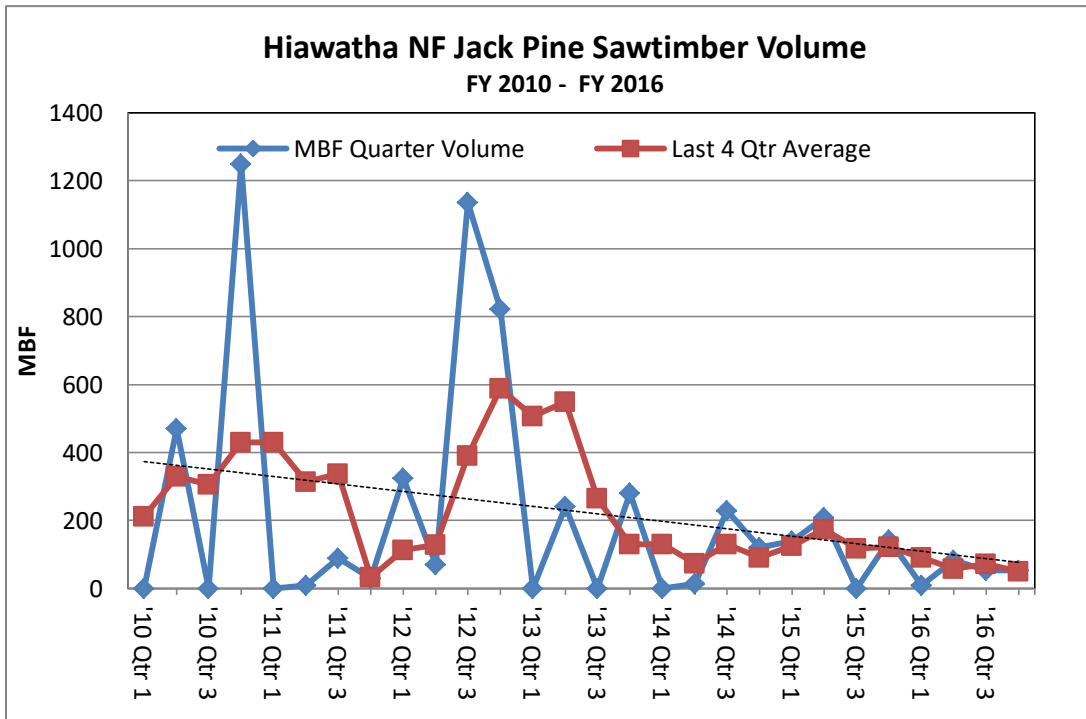
Average Hiawatha sawtimber prices dropped, from \$168.90 to \$136.25 per mbf in the 4th quarter. They peaked at \$250 in the 1st quarter of FY 2015 then fell for two quarters before rising to \$209 per mbf in the 4th quarter of FY 2015. The average sawtimber price is strongly influenced by the mix of species and products offered. The six-year price trend has been increasing, with almost a doubling of the nominal price. The four most recent quarters (FY 2016 quarters) have all been below the 6-year average and trend line.



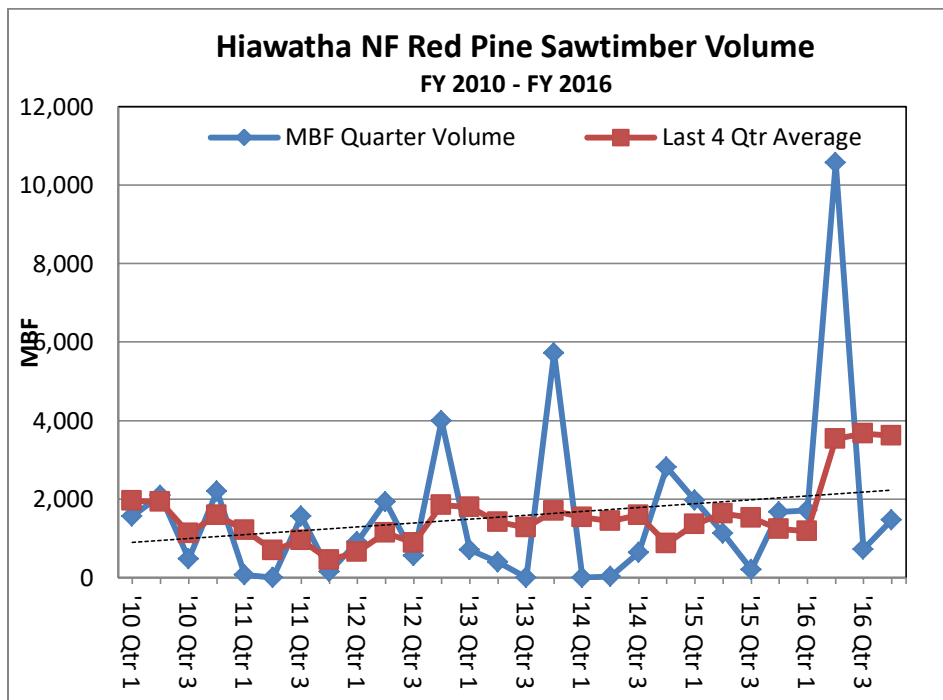
As expected, Hiawatha 4th quarter pulpwood sale volume rebounded from 3.2 to 7.3mmbf. The highest sale volume in the past six years was 15.73mmbf in the 3rd quarter of FY 2014. The six-year quarterly sales trend is virtually flat overall. Quarterly pulpwood sales have been highly erratic on the Hiawatha, especially in FY 2013 and FY 2014.



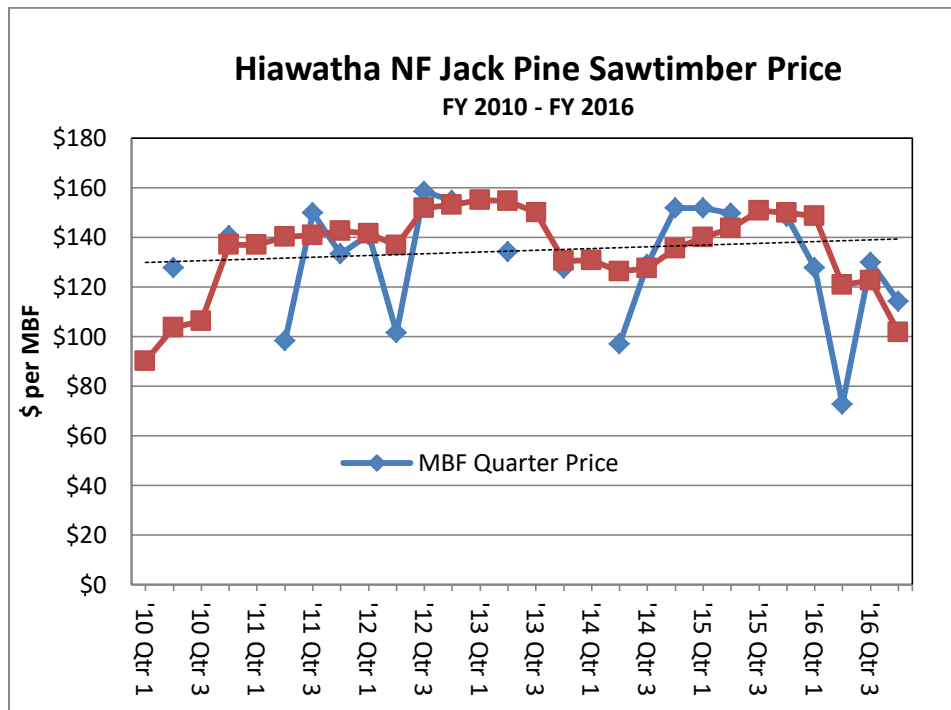
The 4th quarter FY 2016 average pulpwood price dropped sharply from \$83 to \$42per mbf. It had been \$95 per mbf in the 4th quarter of FY 2015. It had peaked at \$101 per mbf in the 2nd quarter of FY 2015 after rising four quarters from a low of under \$30 in the second quarter of FY 2014. The six-year trend line shows a moderately increasing price trend since the beginning of FY 2010. Less change in the 4th quarter price was expected based upon the greater stability in sale volumes from quarter to quarter in recent years. Given the magnitude of the price decline in the 4th quarter, it is relatively safe to assume prices will be higher in upcoming quarters.



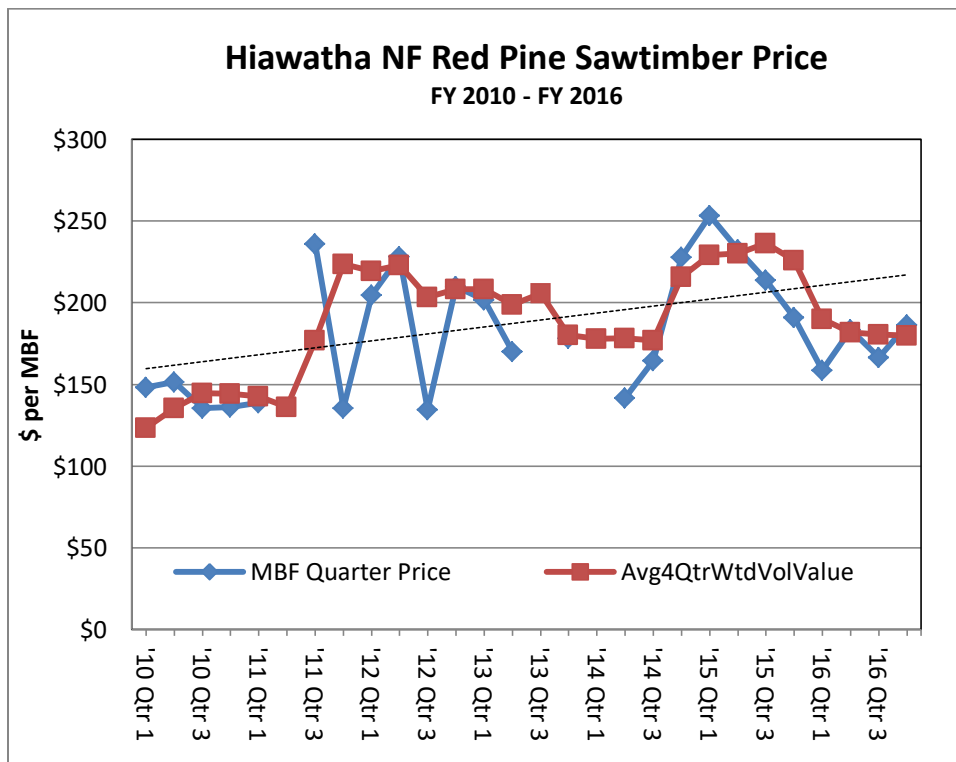
Hiawatha sale volumes of jack pine sawtimber remained virtually unchanged in the 4th quarter at a low 53mbf. Sale volumes have been negligible for over three years. No volume was sold in the 3rd quarter of FY 2015, volume was only 143mbf in the 4th quarter of FY 2015 and only 9mbf were reported sold for the 1st quarter of FY 2016. The highest volume sold in the past six years (1.25mmbf) was way back in the 4th quarter of FY 2010; sales also exceeded 800mbf twice in 2012. 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.



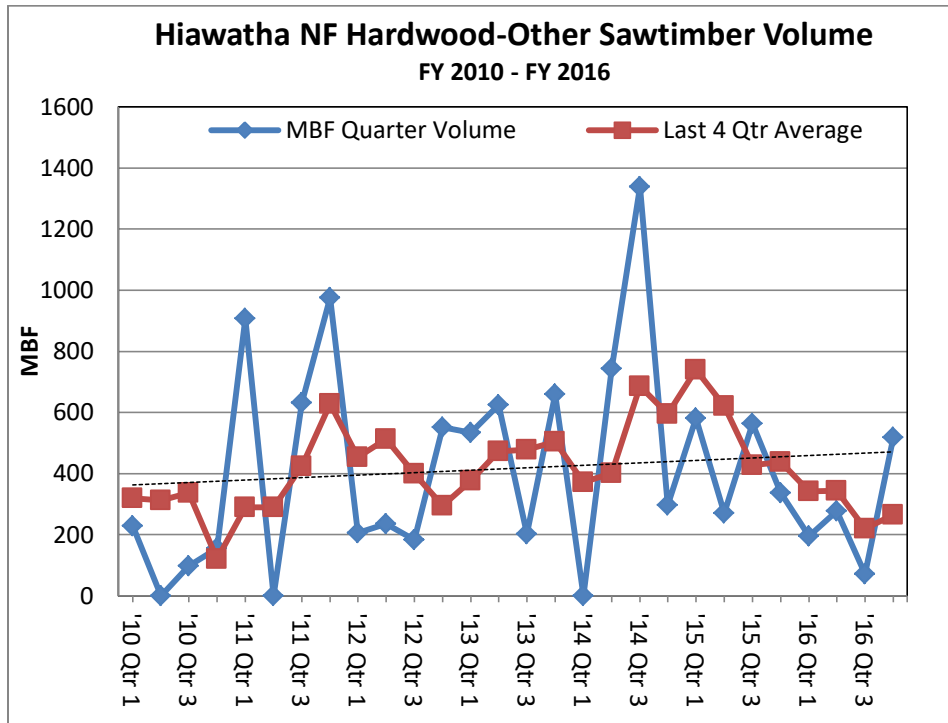
Red pine sawtimber sale volume tumbled to 726mbf in the 3rd quarter after hitting a record level of 10.56mmbf in the 2nd quarter. As expected, it increased modestly in the just completed 4th quarter, but only to 1.462mmbf. The six-year sale average before the 2nd quarter was 1.3mmbf and the previous high was 5.7mmbf in the 4th quarter of FY 2013. Over the past six years, three times as much red pine sawtimber as jack pine sawtimber has been sold on the Hiawatha.



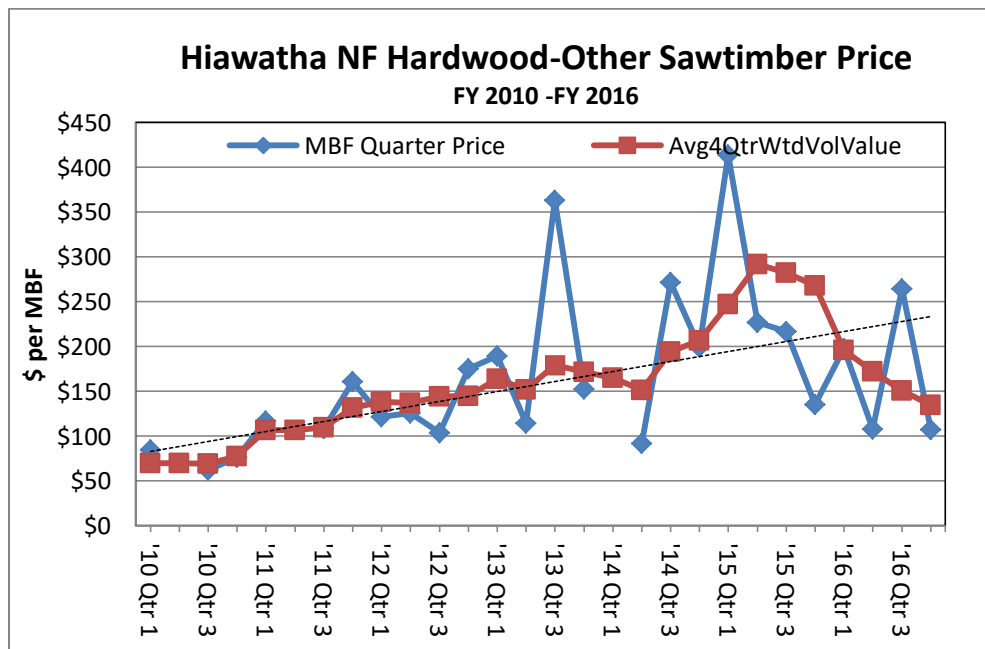
The 3rd quarter jack pine sawtimber price rebounded from the 2nd quarter price of \$73 per mbf up to \$130 per mbf, but then fell slightly in the 4th quarter to \$114 per mbf. The 4th quarter FY 2015 jack pine sawtimber price was \$148 per mbf. Prices have been based upon negligible volumes sold for the past three years. There is a moderate increasing price trend over the past six years, but this price trend is based upon many quarters with negligible or no sales.



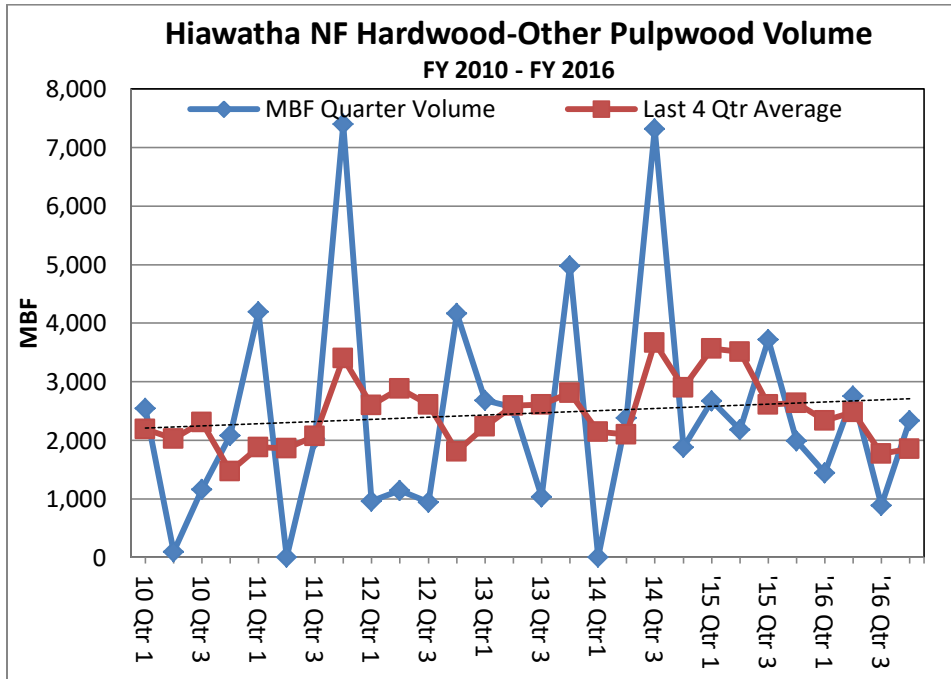
The red pine sawtimber price decreased from \$183 to \$167 per mbf in the 3rd quarter and then rose back to \$186 per mbf in the 4th quarter. The price reached \$253 per mbf in the 1st quarter of FY 2015, its highest level in years, before declining for four straight quarters. It was \$142 in the 2nd quarter of FY 2014 before beginning its ascent to the \$253 price. The overall six-year price trend has been increasing. The 4th quarter price was expected to not change much, with a caveat that it was more likely to increase moderately than decline. The same holds true for the 1st quarter of FY 2017.



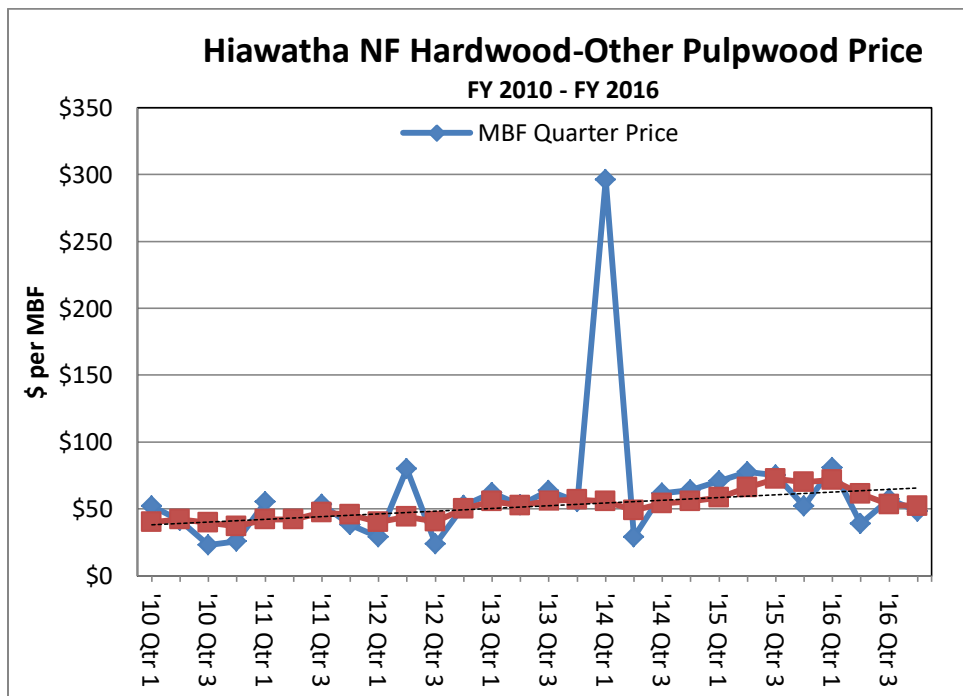
Hiawatha's "hardwood-other" sawtimber sale volume increased from 71 to 518mbf in the 4th quarter. Quarterly sale volume reached a six-year record level of 1.3mmbf in the 3rd quarter of FY 2014 and while sale volumes have seesawed back and forth since then, they had largely been on a downward decline until the most recent 4th quarter. There is a modestly increasing six-year sale volume trend, but this is strongly influenced by the high 2nd and 3rd quarter sale volumes of FY 2014; without these the trend would be flat.



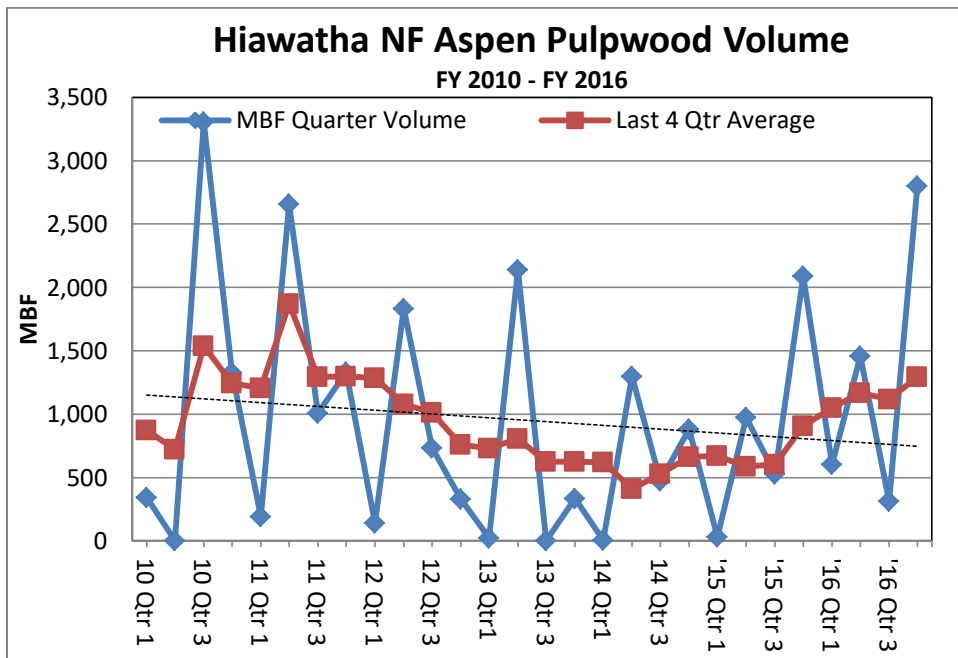
The "hardwood-other" sawtimber price per mbf increased sharply from \$108 to \$264 and then fell back to \$107 in the 4th quarter. The decline was steeper than expected and puts the price well below the 6-year trend line. In the 2nd quarter FY 2014, the price was below \$92 per mbf. Despite some relatively low prices in recent quarters, the quarterly price trend has risen fairly steeply over the past six years, from under \$70 to just below \$250 per mbf. It would be surprising if future quarters did not predominantly have price increases.



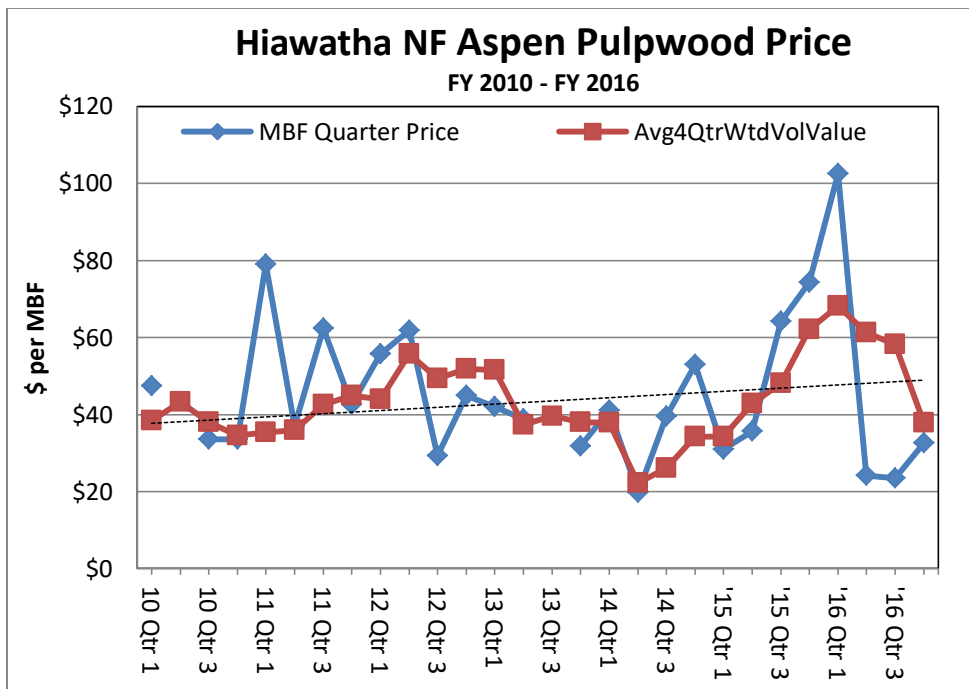
Prices rebounded from just under .9 to over 2.3mmbf in the 4th quarter. They had reached a peak over 7.3mmbf in the 3^d quarter of FY 2014 before dropping to under 2mmbf the next quarter. Generally, sales are highest in the 4th quarter, but annual peak sales were in the 3^d quarter the last two fiscal years. There is a very slight increasing sale volume trend over the past six years, but this is disappearing due to the moderate sales of the last eight quarters. The erratic nature of earlier sale volumes from quarter-to-quarter appears to be moderating based upon the past eight quarters..



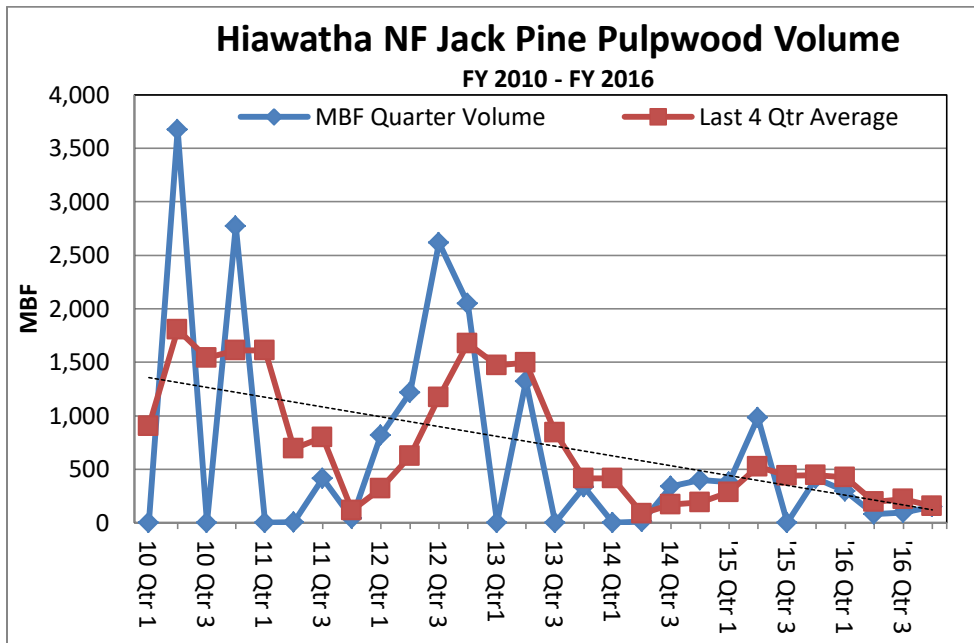
Prices fell from \$57 to \$48 per mbf in the 4th quarter for “hardwood-other” pulpwood. Prices had risen gradually from \$29 in the 2nd quarter of FY 2014 before dropping back down to \$52 in the 4th quarter of FY 2015. The 1st quarter FY 2014 price is an anomaly or error. Other than this major exception and a few minor ones, the price has fluctuated in a fairly narrow range around \$50 over the past six years. There has been a relatively modest increasing price trend for the period.



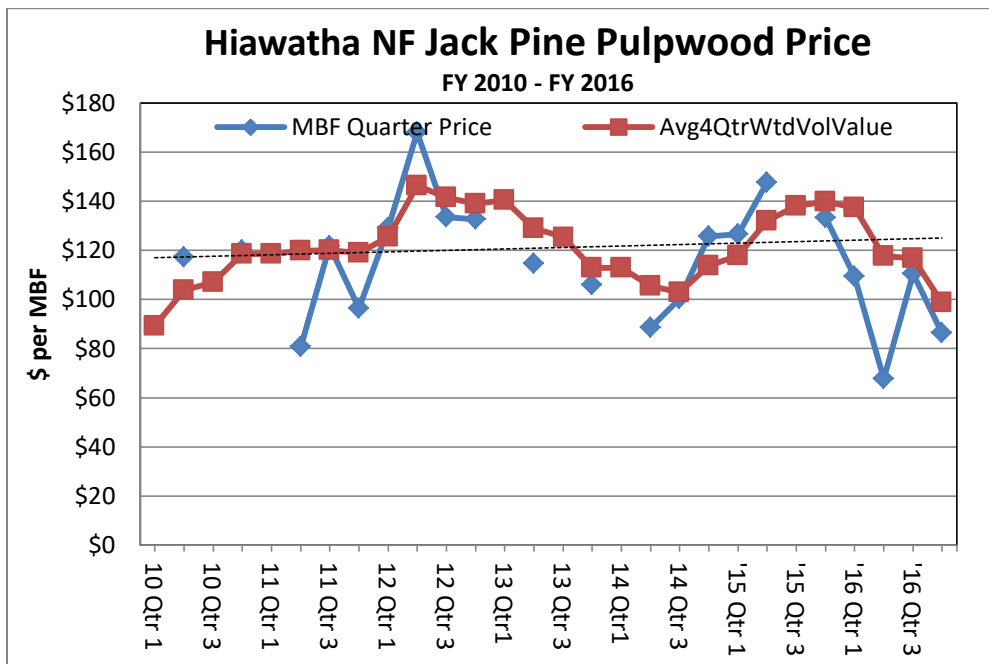
The aspen pulpwood volume decreased from 1,457mbf to only 314mbf between the 2nd and 3rd quarters, but then shot up to 2.8mmbf in the 4th quarter. It was at 2.1mmbf in the 4th quarter of FY 2015 before dropping to 695mbf the next quarter. Aspen pulpwood sale volumes have been erratic; often there has been low or no sales in the 1st quarter of every fiscal year, followed by higher sales in the 2nd quarter. There also has been a downward sale volume trend over the past six years. Next quarter's volume will almost certainly be down, the question is how sharply will it be down?



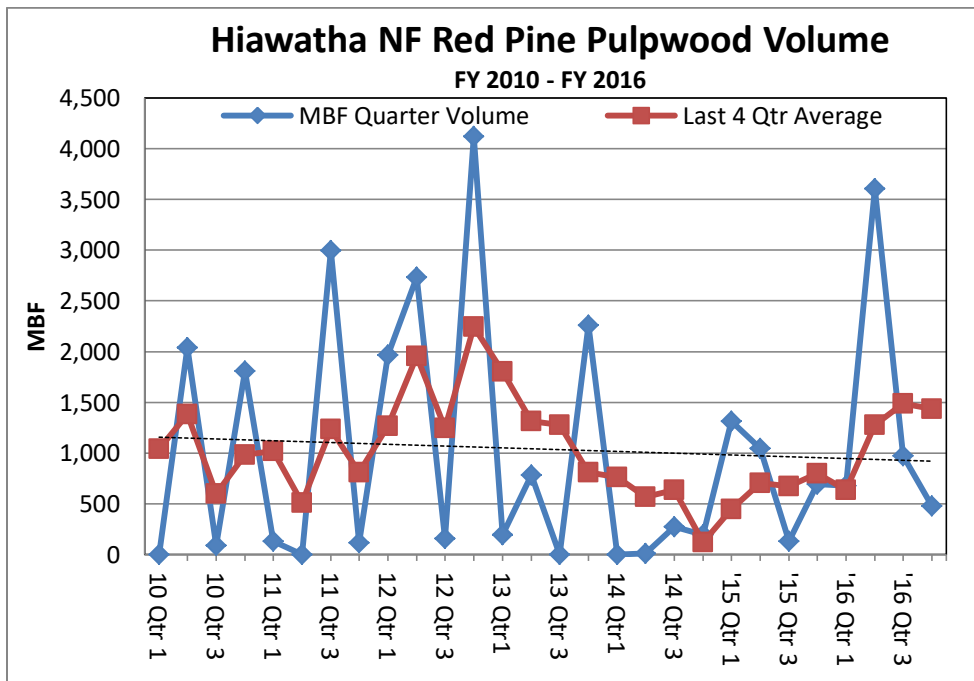
The 4th quarter aspen pulpwood price blipped up to \$32.65 per mbf after being close to \$24 for two quarters. It had hit a record \$103 per mbf price in the 1st quarter of FY 2016. The subsequent sharp drop in prices was not surprising, but it was very steep. Additional increases in coming quarters can be expected.



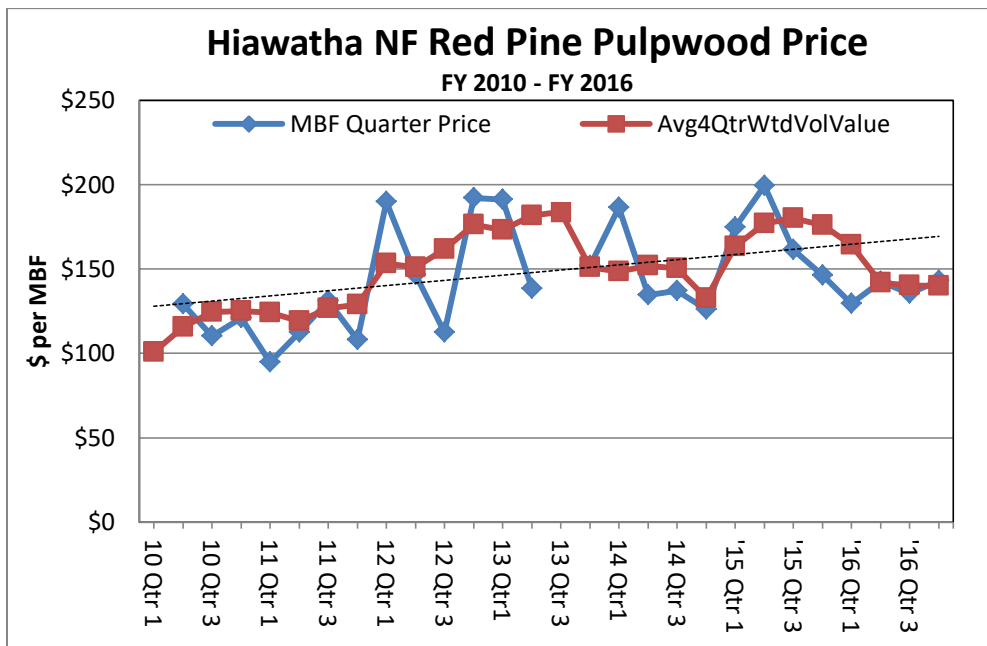
As can be seen in the graph, jack pine has had a diminishing role in Hiawatha timber sales. Jack pine pulpwood sales have been consistently at a very low level throughout FY 2016. Sales were only 297mbf in the 1st quarter, followed by 80mbf in the 2nd quarter, 98mbf in the 3rd quarter, and they closed out the year at 149mbf in the 4th quarter. Sales have been below 500mbf each quarter for three years except for the 2nd quarter of FY 2015 when they reached 985mbf. Sales have been on a steep downward trend over the past six years. Sales in some upcoming quarter might exceed 1,000mbf; however, most quarters are likely to have very negligible or no volumes.



Jack pine pulpwood prices per mbf for FY 2016 are based upon very little volume and have been revised this quarter. They were \$109.32 in the 1st quarter, dropped to \$67.70 in the 2nd quarter, rose to \$110.54 in the third quarter, and then wound up at \$86.37 in the 4th quarter. The 2nd quarter FY 2015 jack pine pulpwood price was at \$146 per mbf. Previous higher prices influence the slightly increasing six-year price trend shown above, but this trend line is misleading given that there have been about as many quarters without sales of jack pine as there have been quarters with sales over the past six years.



Red pine pulpwood sale volume shot up to over 3.6mmbf in the 2nd quarter of FY 2016 and then dropped almost as much to .97mmbf in the 3rd quarter and dipped further to .47mmbf in the 4th quarter. FY 2014 had no sales in the first two quarters followed by only 270mmbf sold in the 3rd quarter and 197mmbf in the 4th quarter. FY 2015's sale volume was higher, but well below most earlier years which often had quarters with more than 2mmbf in sale volume. The very high FY 2016 2nd quarter volume did not reverse a slightly declining six-year volume trend which is not nearly as steep as the jack pine pulpwood volume trend.



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

Number of Sales, Volume, Value & Price Per MBF of Convertible Timber Cut & Sold - Forest Service Wide

Fiscal Year	Number of Sales	TIMBER SOLD ¹			TIMBER HARVESTED ¹			Comments
		Volume (MBF)	Value (Dollars)	Price Per MBF ²	Volume (MBF)	Value (Dollars)	Price Per MBF ²	
1905					68,475	\$85,597	\$1.25	
1906					138,665	\$203,333	\$1.47	
1907					194,872	\$337,952	\$1.73	
1908					392,792	\$794,252	\$2.02	
1909					352,434	\$677,784	\$1.92	
1910					379,616	\$906,308	\$2.39	
1911					374,678	\$842,993	\$2.25	
1912					431,492	\$942,819	\$2.19	
1913					495,668	\$1,075,185	\$2.17	
1914					626,306	\$1,271,060	\$2.03	
1915					565,754	\$1,179,449	\$2.08	
1916					594,767	\$1,254,562	\$2.11	
1917					736,430	\$1,533,349	\$2.08	
1918					730,179	\$1,526,981	\$2.09	
1919					705,399	\$1,514,567	\$2.15	
1920					805,375	\$1,763,927	\$2.19	
1921					800,452	\$1,896,047	\$2.37	
1922					722,779	\$1,752,424	\$2.42	
1923					994,605	\$2,570,300	\$2.58	
1924					1,143,654	\$3,094,738	\$2.71	
1925					1,021,879	\$2,808,005	\$2.75	
1926					1,192,517	\$3,370,616	\$2.83	
1927					1,360,242	\$3,846,441	\$2.83	
1928					1,271,562	\$3,507,999	\$2.76	
1929					1,496,725	\$4,328,395	\$2.89	
1930					1,653,265	\$4,789,803	\$2.90	
1931					1,222,361	\$3,347,969	\$2.74	Depression
1932					611,751	\$1,519,141	\$2.48	
1933					473,922	\$1,077,185	\$2.27	
1934					674,542	\$1,609,288	\$2.39	
1935					752,368	\$1,938,057	\$2.58	
1936					1,021,156	\$2,589,731	\$2.54	
1937					1,290,623	\$3,188,672	\$2.47	
1938					1,287,917	\$3,208,507	\$2.49	
1939					1,290,561	\$2,275,284	\$2.62	
1940		1,779,209	\$4,671,541	\$2.63	1,740,271	\$4,806,729	\$2.76	
1941		1,464,523	\$4,769,348	\$3.26	2,067,279	\$5,761,819	\$2.79	
1942		2,839,416	\$8,195,727	\$2.89	2,204,749	\$6,109,097	\$2.77	
1943		3,693,048	\$16,171,529	\$4.38	2,359,473	\$8,671,729	\$3.68	
1944		2,858,465	\$12,121,348	\$4.24	3,333,167	\$14,154,983	\$4.25	
1945		2,391,449	\$10,465,748	\$4.38	3,144,789	\$13,016,232	\$4.14	
1946		2,687,018	\$10,626,293	\$3.95	2,729,708	\$11,490,318	\$4.21	
1947		3,786,231	\$21,954,920	\$5.80	3,834,588	\$16,399,890	\$4.28	
1948		3,741,856	\$30,275,736	\$8.09	3,758,885	\$21,054,111	\$5.60	
1949		2,614,701	\$29,122,287	\$11.14	3,740,810	\$28,749,007	\$7.69	
1950	24,248	3,434,114	\$20,329,017	\$5.92	3,501,568	\$29,111,440	\$8.31	
1951	22,399	4,912,958	\$60,482,569	\$12.31	4,688,280	\$46,752,531	\$9.97	
1952	21,148	4,731,337	\$80,002,439	\$16.91	4,806,230	\$58,256,920	\$12.12	
1953	22,020	4,714,321	\$56,928,928	\$12.08	5,359,919	\$69,709,032	\$13.01	
1954	21,044	6,432,421	\$59,860,296	\$9.31	5,853,807	\$64,148,673	\$10.96	
1955	23,402	10,068,058	\$94,062,121	\$9.34	6,577,535	\$70,104,927	\$10.66	Ketchikan Pulp Co. Sale, Alaska
1956	21,842	6,837,262	\$135,550,245	\$19.83	6,898,043	\$96,864,795	\$14.04	
1957	21,687	6,533,375	\$111,247,544	\$17.03	6,998,185	\$115,092,649	\$16.45	
1958	22,495	13,292,643	\$103,330,896	\$7.77	6,420,701	\$93,807,167	\$14.61	Alaska Pulp Corp. Sale
1959	24,277	9,359,065	\$129,424,837	\$13.83	8,340,518	\$113,509,134	\$13.61	
1960	23,852	12,167,180	\$170,892,642	\$14.05	9,366,897	\$156,423,791	\$16.70	3 BBF sale in R3
1961	24,779	8,856,904	\$125,145,413	\$14.13	8,380,689	\$123,893,902	\$14.78	
1962	23,030	10,325,872	\$133,660,089	\$12.94	9,032,237	\$128,514,023	\$14.23	
1963	27,020	12,175,253	\$158,567,600	\$13.02	10,026,242	\$134,147,839	\$13.38	
1964	26,976	11,681,508	\$171,895,104	\$14.72	10,954,193	\$150,711,558	\$13.76	
1965	25,706	11,510,150	\$199,134,903	\$17.30	11,243,725	\$160,759,474	\$14.30	
1966	23,923	11,294,440	\$222,403,062	\$19.69	12,138,401	\$195,590,802	\$16.11	
1967	23,266	11,640,532	\$209,673,441	\$18.01	10,759,041	\$188,711,969	\$17.54	
1968	22,479	11,683,952	\$274,253,980	\$23.47	12,128,225	\$239,341,589	\$19.73	
1969	23,418	19,482,529	\$502,140,808	\$25.77	11,863,473	\$326,996,862	\$27.56	8 BBF Sale in Alaska, later cancelled
1970	26,610	13,382,026	\$317,302,594	\$23.71	11,526,725	\$307,609,817	\$26.69	
1971	23,243	10,636,387	\$215,299,552	\$20.24	10,341,204	\$257,020,185	\$24.85	
1972	25,419	10,339,486	\$328,446,311	\$31.77	11,700,364	\$381,956,590	\$32.64	
1973	28,851	10,199,250	\$636,151,669	\$62.37	12,357,023	\$479,233,003	\$38.78	
1974	34,429	10,241,085	\$902,608,483	\$88.14	10,958,393	\$508,615,356	\$46.41	
1975	35,977	10,823,549	\$657,185,830	\$60.72	9,173,785	\$365,951,687	\$39.89	Economic recession
1976	43,012	10,287,270	\$707,832,690	\$68.81	9,575,455	\$492,029,190	\$51.38	

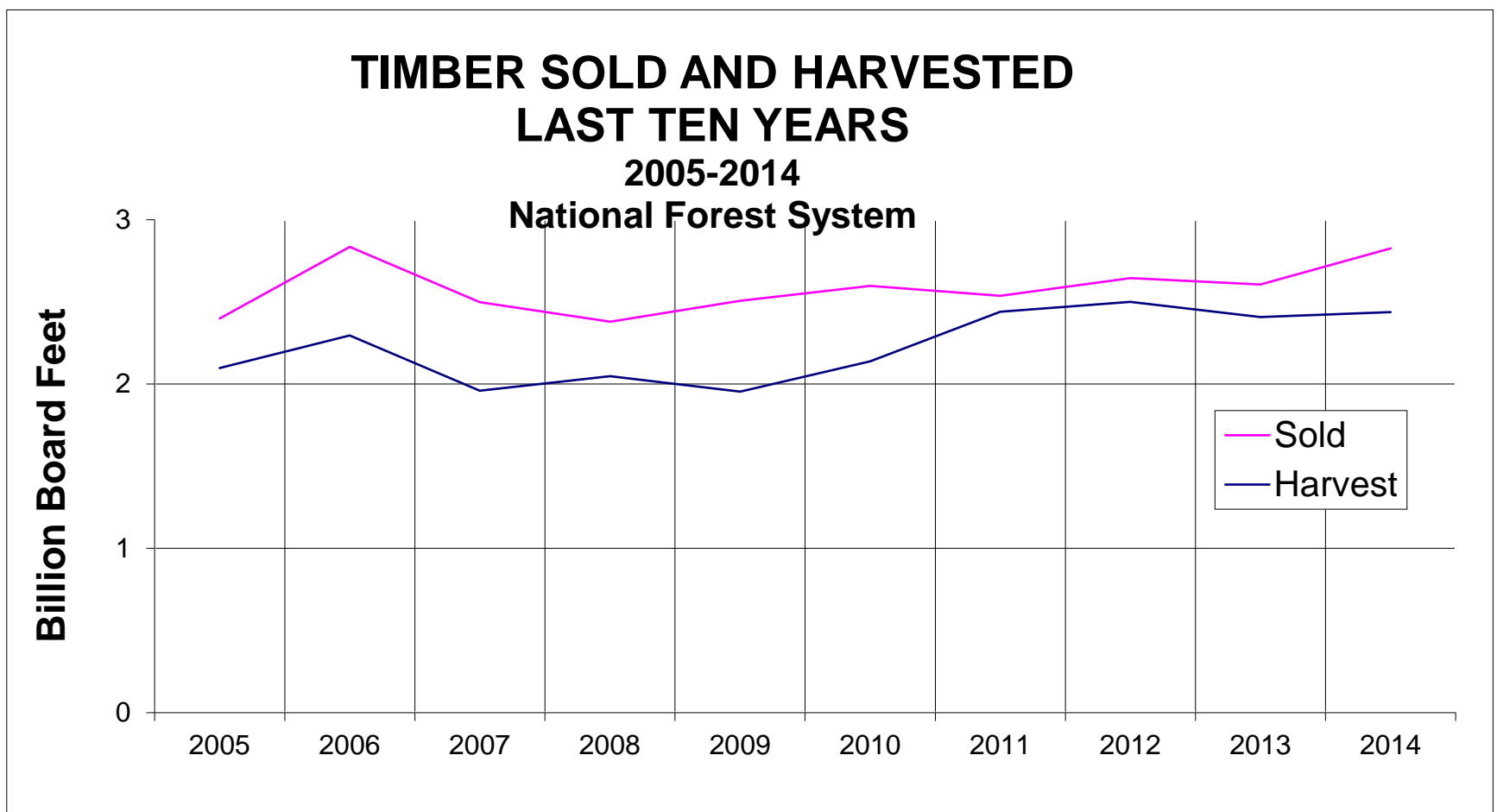
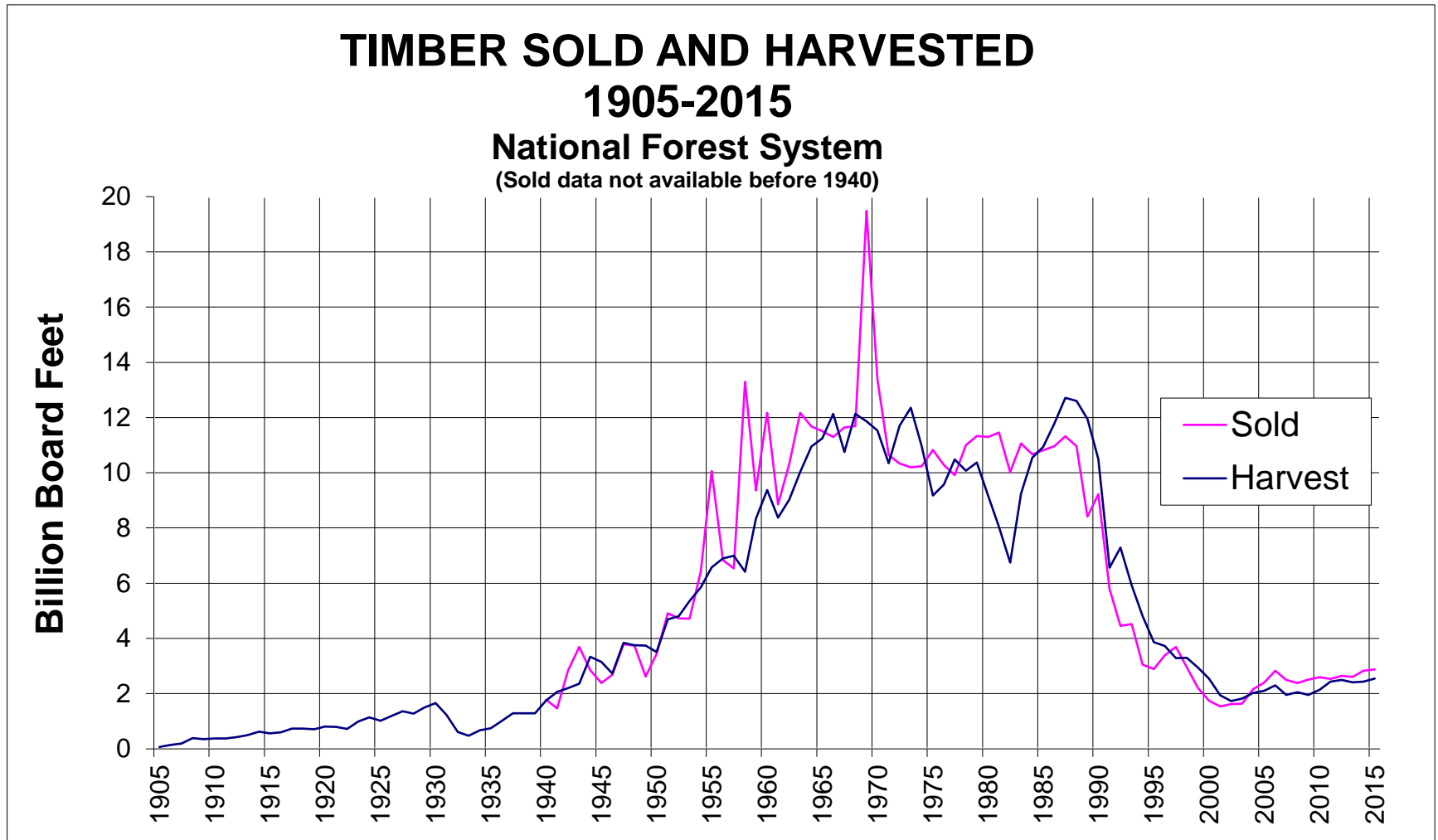
FY 1905-2015 National Summary Cut and Sold Data and Graphs
 USDA Forest Service

Fiscal Year	Number of Sales	TIMBER SOLD ¹			TIMBER HARVESTED ¹			Comments
		Volume (MBF)	Value (Dollars)	Price Per MBF ²	Volume (MBF)	Value (Dollars)	Price Per MBF ²	
1976 TQ	N.A.	1,535,301	\$94,005,949	\$61.23	3,431,964	\$209,937,583	\$61.17	Transition Quarter: FY 1976 ended 6/30/76 and FY 1977 began 10/1/76
1977	44,466	9,919,695	\$987,416,476	\$99.54	10,481,536	\$732,556,790	\$69.89	
1978	54,373	10,995,851	\$1,328,415,687	\$120.81	10,079,524	\$854,682,200	\$84.79	Began limiting sale contracts to 3 years
1979	64,135	11,330,376	\$1,962,624,421	\$173.22	10,376,955	\$967,923,445	\$93.28	
1980	89,337	11,290,029	\$1,948,657,998	\$172.60	9,178,209	\$729,829,429	\$79.52	Economic recession; eliminated free use
1981	92,041	11,456,802	\$1,767,749,387	\$154.30	8,036,240	\$714,922,395	\$88.96	
1982	143,723	10,029,636	\$614,187,924	\$61.24	6,747,260	\$339,214,989	\$50.27	Began limiting sale contracts to 3 years
1983	235,585	11,061,397	\$775,170,480	\$70.08	9,244,037	\$649,622,237	\$70.27	
1984	343,006	10,661,697	\$698,718,203	\$65.54	10,548,687	\$759,577,198	\$72.01	Economic recession; eliminated free use
1985	366,874	10,818,990	\$558,132,137	\$51.59	10,941,266	\$720,636,166	\$65.86	
1986	349,977	10,966,577	\$757,022,983	\$69.03	11,786,490	\$786,881,222	\$66.76	Began limiting sale contracts to 3 years
1987	289,043	11,318,987	\$1,003,389,792	\$88.65	12,712,103	\$1,015,995,028	\$79.92	
1988	251,557	10,968,233	\$1,254,387,610	\$114.37	12,596,361	\$1,235,734,207	\$98.10	Economic recession; eliminated free use
1989	275,895	8,414,587	\$1,077,534,474	\$128.06	11,950,937	\$1,316,841,207	\$110.19	
1990	262,781	9,229,693	\$1,609,925,538	\$174.43	10,500,278	\$1,187,384,520	\$113.08	Began limiting sale contracts to 3 years
1991	271,963	5,786,287	\$686,645,684	\$118.67	6,558,889	\$845,694,147	\$128.94	
1992	250,852	4,458,452	\$575,921,207	\$129.18	7,289,632	\$934,504,178	\$128.20	Economic recession; eliminated free use
1993	255,825	4,515,324	\$774,887,925	\$171.61	5,916,937	\$914,646,052	\$154.58	
1994	215,268	3,056,348	\$508,903,659	\$166.51	4,815,329	\$783,038,256	\$162.61	Began limiting sale contracts to 3 years
1995	216,272	2,885,262	\$369,736,307	\$128.15	3,865,913	\$616,117,347	\$159.37	
1996	190,123	3,384,448	\$450,452,674	\$133.09	3,724,552	\$544,349,011	\$146.15	Rescissions Act supports salvage - 1995-97
1997	198,110	3,687,683	\$494,025,135	\$133.97	3,285,294	\$497,956,596	\$151.57	
1998	165,697	2,955,292	\$365,554,063	\$123.69	3,297,834	\$445,773,656	\$135.17	Rescissions Act supports salvage - 1995-97
1999	155,888	2,200,407	\$224,160,027	\$101.87	2,938,571	\$339,470,621	\$115.52	
2000	114,351	1,744,502	\$187,551,212	\$107.51	2,542,427	\$302,933,984	\$119.15	Rescissions Act supports salvage - 1995-97
2001	133,919	1,534,115	\$140,813,639	\$91.79	1,938,198	\$177,633,842	\$91.65	
2002	130,248	1,620,954	\$149,696,581	\$92.44	1,727,556	\$164,050,835	\$95.04	Rescissions Act supports salvage - 1995-97
2003	121,689	1,637,633	\$141,212,915	\$86.23	1,817,751	\$157,323,242	\$86.55	
2004	120,203	2,163,943	\$196,234,804	\$90.68	2,031,607	\$217,534,158	\$107.07	Rescissions Act supports salvage - 1995-97
2005	116,957	2,399,540	\$248,194,085	\$103.43	2,097,611	\$224,142,724	\$106.86	
2006	131,536	2,835,056	\$249,379,873	\$87.96	2,296,491	\$221,390,371	\$96.40	Began reporting timber volume awarded
2007	131,856	2,499,327	\$197,455,406	\$79.00	1,960,363	\$166,641,434	\$85.01	
2008	162,090	2,379,597	\$156,787,741	\$65.89	2,048,928	\$138,119,022	\$67.41	Financial collapse; recession
2009	178,188	2,507,672	\$103,362,812	\$41.22	1,954,052	\$94,963,141	\$48.60	
2010	184,953	2,597,108	\$136,371,886	\$52.51	2,137,859	\$104,809,312	\$49.03	Continued recession
2011	183,368	2,536,704	\$152,008,206	\$59.92	2,440,432	\$129,301,131	\$52.98	
2012	171,500	2,644,223	\$155,076,706	\$58.65	2,500,321	\$137,680,446	\$55.07	Continued recession
2013	169,130	2,607,122	\$159,248,725	\$61.08	2,408,161	\$140,532,940	\$58.36	
2014	157,816	2,824,953	\$199,135,963	\$70.49	2,437,488	\$146,361,204	\$60.05	Continued recession
2015	250,160	2,873,109	\$202,721,031	\$70.56	2,543,144	\$162,650,907	\$63.96	

N.A. = Not available

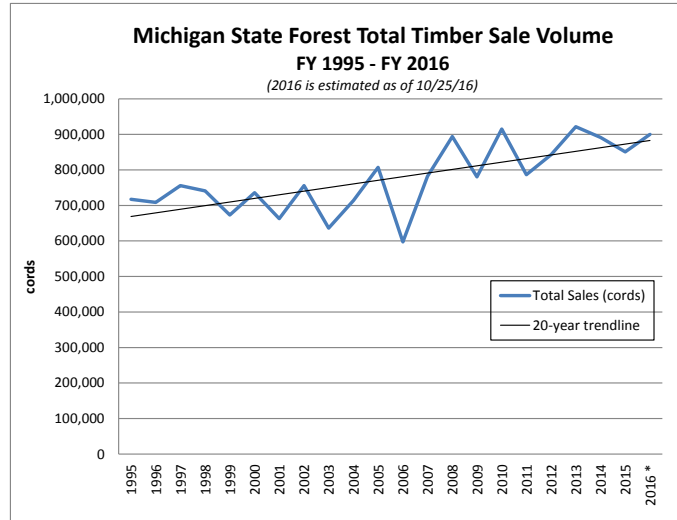
¹ Data derived from Cut and Sold Reports. PTSAR reports are the official source of Timber Volume Sold reported to Congress.

² Price per MBF = total value divided by total volume.



State Forest Timber Sales *

Fiscal Year (Oct.1- Sep.30)	Total Sales, All Volume (In cords)
1995	717,224
1996	708,530
1997	755,940
1998	740,855
1999	673,395
2000	735,637
2001	662,740
2002	755,635
2003	636,272
2004	713,730
2005	807,245
2006	597,359
2007	781,882
2008	893,726
2009	780,378
2010	915,035
2011	786,488
2012	842,874
2013	921,603
2014	891,488
2015	851,079
2016 *	900,000



Trend in State Forest Timber Volumes and Values Sold
(volume in cords)

Fiscal Year	Volume Sold	Value Sold	Value/Vol. Sold
2006	597,263	\$29,467,234	\$49.34
2007	782,433	\$32,457,474	\$41.48
2008	893,002	\$32,660,056	\$36.57
2009	780,490	\$30,000,238	\$38.44
2010	915,035	\$38,481,320	\$42.05
2011	786,464	\$37,159,439	\$47.25
2012	843,685	\$39,807,703	\$47.18
2013	921,603	\$42,414,411	\$46.02
2014	891,488	\$46,572,406	\$52.24
2015	851,079	\$51,553,894	\$60.57
2016 *	900,000	\$48,000,000	\$53.33

* FY 2016 sales estimate is preliminary as of 10/25/16; final number should be within 25,000 cords of this estimate

* FY 2016 estimates are preliminary as of 10/25/16; final number will change slightly