# Marketing Hay at Lower Prices

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ower hay prices pressure profit levels, but there are some aspects to consider as farmers plan for any remaining tons to be sold from the 2016 hay crop. The national situation has several improved demand indicators presenting sales opportunities. Seasonally, prices are expected to increase in the region because of returns to storage. Early indications suggest prices may stabilize or increase next year.

#### U.S. Situation

National hay acreage levels have been fairly steady in recent years. However, higher yields and higher carryover stocks have resulted in the highest supply of hay available since 2009. The result has been another year of lower prices with the 2016/17 marketing year price being down about 10% from a year earlier.

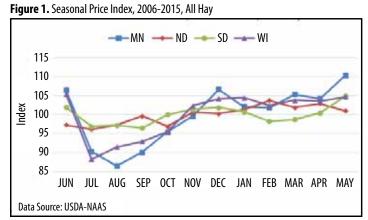
The lower prices have improved the trade situation. Imports of hay have slowed in recent years, while exports have been steady to increasing. Thus, hay is not always going where it once was as ripple effects of exports shift domestic movement and influence markets. Exports are not always accounted for when looking at disappearance nationally; trade is often attributed to domestic consumption changes. With a slowly expanding beef herd and a larger dairy herd, there should be ample feed demand for hay.

Why is the price of hay not higher? The price of hay has been squeezed by its position as an input. Price levels of finished goods, for example beef and milk, have fallen in recent years, as have the price levels for substitute goods, corn for example. The farmer price index of all farm products was above 200.0 as recently as 2014 and has been closer to 150.0 in recent months. As a result, the price of hay is much lower than several years ago and such pressure on price will continue until some related sector improves.

#### Seasonal Trends

Hay is similar to other commodities in the post-harvest period. After harvest, someone has to pay to store the crop until it is used. This is readily seen as carry in futures markets, as was evident in the fall of 2016 for corn and

soybean. Deferred futures prices for corn and soybean were at higher levels than the harvest contract prices, reflecting additional returns to those willing and able to store the crops. Absent a futures market, the same pattern can be observed with the seasonal pattern of cash prices for hay. A price index can be prepared by comparing the monthly prices within a marketing year to the average for that marketing year, with the monthly levels then averaged over a period of time. Thus, a price index level of 100.0 (which happens around November for hay) indicates the November price has historically been 100% of the marketing year price level.



The ten-year hay price index has been at its lowest level during the peak harvest months of July and August across Minnesota, Wisconsin, North Dakota, and South Dakota (Figure 1). Prices tend to rise until the end of the marketing year – reflecting returns to storage. Thus, hay sellers should expect a higher price later in the marketing year. The absence of large hay supplies and the presence of carry in other markets this year suggest the seasonal pattern will hold for the 2016/17 marketing year. The seasonal pattern has historically been more pronounced in Minnesota. Prices there also have a more obvious double hump, with a price rally reflecting demand by end-users before December and then a less pronounced increase through the end of the marketing year.

Prices can also be affected after harvest by unusual shifts in use or supplies (i.e., fluctuating based on length and intensity of the feeding season). Major changes after the marketing year mid-point usually need to be national in scope to significantly affect prices. With the 2016 national supply, typical fall disappearance would imply December 1, 2016, stocks of 100 million tons vs. 95 million tons in 2015. A stocks level below 100 million tons suggests prices would move higher to limit winter disappearance. By December 1, two-thirds of hay is typically marketed at the national level. The percent marketed tends to be less in Minnesota and South Dakota by that time.

### 2017 and Beyond

What will the future bring? There is no major pressure for either contraction or expansion of hay acres. The returns from other crops have largely fallen with the lower returns from hay. The soybean-to-corn price ratio using new crop 2017 futures suggests a shift to more soybean acres and fewer corn acres. The change in soybean and corn acres would have a two-fold impact on hay prices. More soybean would mean more protein available, dampening alfalfa prices. Lower corn supplies would mean less roughage available, strengthening hay prices in general. With stable hay acres, production projections hinge on yield forecasts. Historically, hay yield has had stretches at both higher and lower levels than observed recently.

The larger expected December 1, 2016, stocks nationally may still result in lower May 1, 2017, stocks compared to last year when winter use was unusually low. With stronger exports, higher livestock inventory levels, and lower prices so far in 2016, disappearance will likely increase this marketing year. A tighter ending stocks situation, combined with limited additional production in 2017, suggest a stabilization of prices will occur, and the potential for higher prices exists. A rebound in any sector of cattle prices or improved milk prices would easily change the price outlook for hay.