



# Market Advisor

► by **Tim Petry**, North Dakota State University Extension Service

## Record hay prices caused by low supplies

*Most of us in the cattle business are aware that hay prices have been increasing. That is especially true for producers who have endured severe drought in the last couple of years and have had to purchase hay. As a livestock-marketing economist, I spend most of my time analyzing supply and demand fundamentals for livestock. I thought it might be interesting to take a closer look at hay fundamentals, which are the underlying cause of the increasing hay prices.*

### Hay price comparisons

In its monthly *Agricultural Prices* report, the USDA National Agricultural Statistics Service (NASS) ([www.nass.usda.gov](http://www.nass.usda.gov)) reports the average monthly prices for alfalfa hay, other hay, and a combined all-hay category by state with a U.S. average. Indeed, 2012 was a record-high year for hay prices in the United States. Alfalfa averaged \$205 per ton for the calendar year (annual hay prices are sometimes quoted on a May-April crop year basis), and other hay averaged \$139 per ton. Alfalfa prices started the year at \$192 per ton in January, increased to \$215 in May, declined to \$198 in July, and then rose to an all-time record monthly high of \$217 in December.

On a state basis, Ohio recorded the highest December average price for alfalfa at \$262 per ton, and North Dakota had the lowest price at \$134. North Dakota typically has the lowest hay prices in the United States. Other hay prices started 2012 at \$127 per ton, increased to a record \$146 per ton in May, declined to \$133 in June, increased back up to the record high of \$146 in October,

and then fell to \$142 in December.

The \$205-per-ton yearly U.S. average price for alfalfa in 2012 compares to \$175 in 2011, \$116 in 2010 and the previous five-year (2007-2011) average of \$131. The \$139-per-ton 2012 average price for other hay compares to \$116 in 2011, \$96 in 2010 and the five-year average of \$106.

### Hay supplies

Hay supplies in the United States have been declining for the last several years. The competition for land due to historically high crop prices, the 2011 drought in the Southern Plains and the more widespread drought across the United States in 2012 were major causes of the decline. NASS releases an annual *Crop Production Summary* each January, reporting both state and total U.S. hay area harvested; yield per acre; and production for alfalfa, other hay and all hay

**Hay supplies in the United States have been declining for the last several years.**

categories. The 2012 summary was released Jan. 11, 2013.

All hay area harvested in the United States, at 56.26 million acres in 2012, actually increased over the 55.65 million harvested in 2011, which was historically low. Texas and Oklahoma producers were able to harvest more than 2 million more acres in 2012 with drought conditions moderating somewhat there, but were still 140,000 acres below 2010 harvested acres. U.S. hay acres harvested in 2005 were 61.73 million.

The yield per acre for all hay in 2012, at 2.13 tons per acre, was the lowest since 1.94 tons were recorded in the severe drought year of 1988. Hay yields were 2.36 tons in 2011 and 2.43 tons in 2010. All hay production in 2012, at 119.9 million

tons, was the lowest number since the 120.1 million reported in 1976. For comparison, 125.7 million tons were produced in the 1988 drought year. Several years of declining hay production are evident, with 147.7 million tons produced in 2009, 145.6 million produced in 2010, and 131.2 million in 2011.

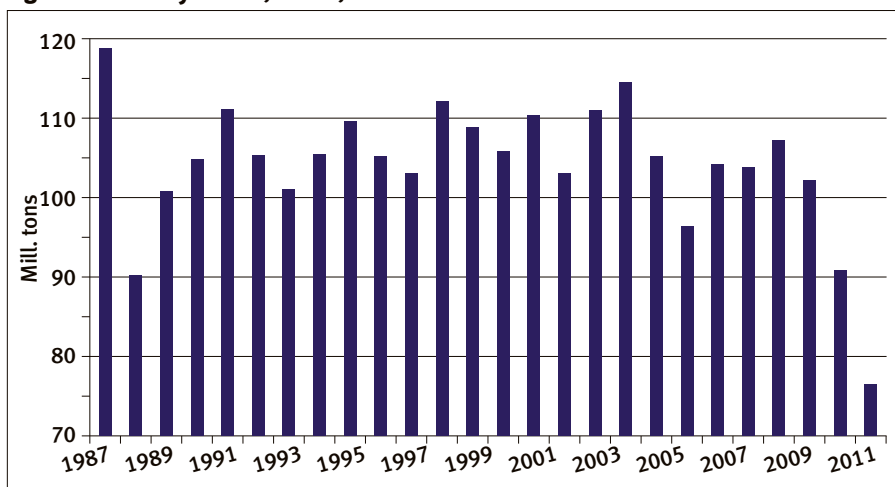
NASS also reports May 1 and Dec. 1 hay stocks on U.S. farms in its monthly *Crop Production* report. Dec. 1, 2012, hay stocks were reported at 76.5 million tons, which was the lowest level on record. Record-low stocks were not surprising given the low production and increased demand for hay due to the widespread drought. 2012 stocks were 28% below the 2001-2010 average of 106 million tons. Again, for comparison, December hay stocks in the 1988 drought year were 90.3 million tons, about 13.8 million more than in 2012.

Hay prices will likely stay at historically high levels until the potential for new crop production starts to materialize. A return to more normal precipitation patterns would certainly be beneficial to the cattle industry, not only for improved hay production, but also for improving pasture and range conditions and producing a better corn crop.

*Tim Petry*  
EMAIL: [Tim.Petry@ndsu.edu](mailto:Tim.Petry@ndsu.edu)

**Editor's Note:** *Tim Petry is a livestock-marketing economist with the NDSU Extension Service and the NDSU Agribusiness and Applied Economics Department.*

**Fig. 1: U.S. all hay stocks, Dec. 1, 2012**



**Data Source:** USDA NASS, compiled and forecast by the Livestock Marketing Information Center.

G-NP-22, 01/11/13.