Weekly Outlook: Assessing the Prospects for 2017 Corn Production

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The August Crop Production report surprised many market observers by forecasting 2017 corn production at 14.153 billion bushels. In particular, the corn yield forecast of 169.5 bushels per acre came under scrutiny due to higher than expected yield forecasts in major producing states. The question is whether the corn production forecast will change enough to result in higher prices than those currently reflected the market.

A lower prediction for corn production can occur from a combination of lower estimates of harvested acreage or a reduced yield forecast. The National Agricultural Statistical Service (NASS) forecast of the 2017 U.S. average corn yield in August at 169.5 bushels, approximately one bushel larger than the estimated linear trend from 1960 to 2016. For the week ending August 13, 62 percent of the corn crop was reported in good to excellent condition, 12 percent below last year and one percent above the five-year average. The latest crop condition report showed an increase of 2 percent for corn in good to excellent condition over the previous week.

Historical data suggests the forecast will change in future Crop Production reports. Since the August forecast came in higher than expected this year, many observers think that subsequent forecasts will be lower. Using data from 1990-2016, the change in the yield forecast from August to September declined in 14 of those years. The decline exceeded one bushel in nine of those years and exceeded two bushels in six years. The 2010 and 2011 crop years, in particular, are notable in that the August forecast declined relative to the final yield estimate by 12.4 and 6.2 bushels respectively. The change in the yield forecast from August to September declined 2.5 bushels in 2010 and 4.9 in 2011. During the last two years, USDA August forecasts of corn yield came in within a bushel of the final yield estimate.

Currently, there is no indication of a significant change in planted or harvested acreage for corn in 2017. NASS estimates will become more precise in October as acreage data reported to the Farm Service Agency (FSA) by producers enrolled in federal farm programs become available for review. FSA released the first report for 2017 on August 10. Producers reported 86.8 million acres of planted corn, which is lower than the 90.9 million acres currently used by NASS. The FSA figures should grow as we move through the year as reporting is completed. Since not all producers must report to FSA, the final FSA figure will be less than the eventual NASS estimate. The FSA report indicated that 950,634 acres of prevent planting in corn had been certified thus far in 2017. Last August, prevented corn acreage was reported at 1.0 million acres and the final 2016 report totaled 1.052 million acres. Prevented acreage of all crops for 2017 came in at 2.565 million acres, lower than the 3.368 million acres reported in August of 2016.
The states with the largest prevented corn acreage in the August report totaled 119,963 acres in Kansas, 101,562 in New York, and 97,803 in Wisconsin. Prevented corn acres in the eastern Corn Belt were relatively small. Prevented acres totaled 26,183 in Illinois, 32,243 in Indiana, and 27,811 in Ohio despite significant amounts of precipitation during the planting period in many regions of those states. It is possible that these acreage levels will grow as we move through the rest of the year. Nationally, the current forecast for the difference between planted and harvested acreage for grain is 7.39 million acres. The difference between planted acres and acreage harvested for grain is 76,000 acres smaller than the average difference between 1996 and 2016.

The NASS August yield forecast assumes normal weather conditions for the remainder of the growing season. Over the last two weeks, temperatures in the Corn Belt have been lower than normal, but precipitation has been less than normal over large areas of Iowa and Missouri. The current 8-14 day outlook provided by the National Weather Service Climate Prediction Center indicates cooler than normal temperature for major growing regions and normal precipitation for most of the Corn Belt except for regions of Minnesota, South Dakota, and North Dakota. August weather conditions do not appear to deviate enough from normal to adjust corn yield expectations. However, recent crop tours in Illinois provided some support for the notion that the current crop does not meet the current yield forecast expectations provided by the USDA.

Currently, a case for lower corn production in 2017 relies on the USDA forecast to be substantially higher than actual yields in major producing regions. With current 2017-18 ending stocks forecast at 2.27 billion bushels, a decline in the corn yield forecast similar to 2010 or 2011 may be necessary to move prices higher in the upcoming marketing year.