Weekly Outlook: Expectations for the March 1 Corn Stocks Estimate

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On March 31, the USDA will release the quarterly Grain Stocks report containing an estimate of the stocks of corn that were in storage as of March 1. The information in that report may be over shadowed by the estimate of producer planting intentions released in the Prospective Plantings report on the same day. Still, the corn stocks estimate will be important as it allows a calculation of the magnitude of feed and residual use of corn during the second quarter of the marketing year. In turn, that calculation will provide the basis for evaluating likely feed and residual use for the entire year and the likely magnitude of year-ending stocks.

Anticipating the magnitude of the March 1 stocks estimate begins with an estimate of the supply of corn available during the December 2015-February 2016 quarter. Stocks at the beginning of the quarter were estimated at 11.212 billion bushels in the December Grain Stocks report. Census Bureau estimates show imports during December 2015 and January 2016 totaling 14 million bushels. Imports for the quarter, then, may have been near 20 million bushels, resulting in a total available supply of 11.232 billion bushels.

Next, an estimate of exports and domestic processing uses of corn during the quarter can be made based on weekly and monthly data available to date. An estimate of exports is based on cumulative weekly export inspection estimates available for the entire quarter and Census Bureau estimates for the first two months of the quarter. Cumulative marketing year export inspections through the first half of the marketing year totaled about 603 million bushels. Through the first five months of the year, cumulative Census export estimates exceeded cumulative export inspections by 34 million bushels. If that margin persisted through February, exports in the first half of the year totaled 637 million bushels. Exports in the first quarter were reported at 303 million bushels, leaving 334 million bushels as an estimate of second quarter exports.

Domestically, the USDA’s Grain Crushings and Co-Products Production report estimated that a total of 893 million bushels of corn were used for ethanol and co-product production in December 2015 and January 2016. Based on weekly estimates from the U.S. Energy Information Administration (EIA), ethanol production during February 2016 was 3.3 percent larger than during February 2105. The increase was

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aided by an additional day in 2016. If corn used for ethanol-and co-product production in February 2016 also increased by 3.3 percent, use for the month totaled about 407 million bushels. Use for the quarter, then, is estimated at 1.3 billion bushels.

The USDA projects that 1.37 billion bushels of corn will be used to produce other food and industrial products during the 2015-16 marketing year. Typically, about 49 percent of that use occurs in the first half of the marketing year. If that pattern is followed this year, and the USDA projection is correct, use during the first half of the year likely totaled 671 million bushels. Use during the first quarter was reported at 331 million bushels, leaving the second quarter consumption estimate at 340 million bushels.

For feed and residual use, the question is how large should use have been during the second quarter of the marketing year if use is on track to reach the USDA’s projection of 5.3 billion bushels for the entire year? The historical seasonal pattern of feed and residual use should be helpful in answering that question, but that pattern has fluctuated over time. For example, during the 15 years ending with the 2009-10 marketing year, use during the first half of the year ranged from 61.6 percent to 70.3 percent of the marketing year total, with an average of 65 percent. For the four years ending with the 2013-14 marketing year, use during the first half of the year ranged from 72.9 percent to 75.6 percent of the marketing year total, with an average of 74 percent. Based on recent USDA revisions in the estimated amount of corn used for ethanol and co-product production during the 2014-15 marketing year, feed and residual use during the first half of that year accounted for about 69 percent of the marketing year total. What pattern is being followed this year?

If last year’s pattern is being repeated this year, and the USDA projection for the year is correct, feed and residual use during the first half of the year should have totaled about 3.657 billion bushels. Based on revised estimates of corn used for ethanol and co-product production during the first quarter of the 2015-16 marketing year, feed and residual use totaled 2.199 billion bushels during that quarter. Second quarter use, then would be projected at 1.458 billion bushels. Adding that use to the estimates of exports and domestic processing uses, results in a projection of total quarterly use of 3.432 billion bushels. That total would leave March 1 stocks at 7.8 billion bushels, 50 million bushels larger than stocks of a year earlier.

The dilemma in interpreting the March 1 corn stocks estimate to be released on March 31 is that the seasonal pattern of feed and residual use for the current year will not be known until the year is over. Based on the historical fluctuation in that pattern, a stocks estimate within 150 million bushels of 7.8 billion bushels probably should not change expectations that feed and residual use is on track to reach 5.3 billion bushels for the year. Nevertheless, the corn market will likely react to a stocks estimate that reveals a pace of feed and residual consumption that is much different than that of last year.