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## **Weekly Outlook: Anticipating March 1 Corn Stocks**

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March 25, 2019

farmdoc daily (9): 52

Recommended citation format: Hubbs, T. " Anticipating March 1 Corn Stocks." *farmdoc daily* (9): 52, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, March 25, 2019.

Permalink: https://farmdocdaily.illinois.edu/2019/03/anticipating-march-1-corn-stocks.html

The USDA releases an estimate of corn stocks in storage as of March 1. The *Quarterly Grain Stocks* estimate provides insight into the pace of feed and residual use and information on the potential size of corn ending stocks this marketing year. Weaker use levels, particularly in exports and ethanol use, generate an expectation of lower consumption than last year's 3.683 billion bushels during the second quarter of the marketing year.

Estimating March 1 corn stocks begins with calculating supply available during the second quarter. Beginning stocks of corn for the second quarter totaled 11.9524 billion bushels in the December *Grain Stocks* report. A forecast for second quarter corn imports of five million bushels appears reasonable. A combination of imports with beginning stocks indicates a total available supply for the second quarter of 11.958 billion bushels.

Except for feed and residual use, information for many corn consumption categories are available from a variety of sources. An estimate of corn exports during the second quarter uses the cumulative weekly export inspections estimate available through February for the marketing year. Cumulative export inspections through February totaled 1.012 billion bushels. During the first four months of the marketing year, total Census Bureau corn exports exceeded cumulative export inspections by 89 million bushels. Assuming the margin stayed consistent through February, corn exports during the first half of the year equaled 1.102 billion bushels. Since exports in the first quarter totaled 633 million bushels, the estimate for second quarter corn exports equals 469 million bushels.

The *Grain Crushing and Co-Products Production* report released on March 1 estimated corn used for ethanol and co-product production during December and January at 906 million bushels. Weekly estimates of ethanol production provided by the Energy Information Administration indicates ethanol production decreased by almost three percent in February from the preceding year. By calculating the amount of corn used to produce ethanol from these February numbers and including recent conversion margins, corn used for ethanol production in February was approximately 415 million bushels. At 1.321

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billion bushels, total use for ethanol production during the second quarter lags last year's use by 66 million bushels.

Corn used to produce other food and industrial products during the current marketing year is projected at 1.45 billion bushels by the USDA. Using historical corn use data, typically around 49 percent of the final food and industrial products use occurs during the first half of the marketing year. If this historical pattern holds and the USDA projection is correct, corn use for the first half of the marketing year totaled 718 million bushels. Corn use during the first quarter equaled 346 million bushels which set the second quarter use estimate at 372 million bushels.

The current USDA projection for feed and residual use sits at 5.375 billion bushels. Feed and residual use projections fell by 200 million bushels since last September. In February, the forecast was lowered by 125 million bushels due to the disappearance associated with the December 1 stocks report. The historical pattern of feed and residual use in corn may provide some indication of the second quarter use. For the four previous marketing years, use during the first half of the marketing year ranged from 69.5 – 70.7 percent with an average of 70 percent. Second quarter feed and residual use ranged from 27-28 percent of the total use over this period. For this analysis, the 70 percent average during the first half of the previous four marketing years is used to calculate expected feed and residual use during the second quarter. If the USDA projection is correct, feed and residual use during the first half of the marketing year totaled 3.763 billion bushels. Feed and residual use equaled 2.275 billion bushels in the first quarter. Therefore, the second quarter estimate totals 1.488 billion bushels. Strong livestock herd levels and lower distiller's grain production open up the possibility of expanded corn use for feed in the second quarter.

By adding the estimates for exports and domestic uses, the total use of corn during the second quarter is 3.650 billion bushels. The total use estimate for the second quarter places March 1 corn stocks at 8.308 billion bushels. At this level, March 1 stocks come in 584 million bushels below last year's corn stocks estimate.

The *Prospective Plantings* report looks to attract more attention than the information provided in the *Quarterly Grain Stocks* report. Despite being eclipsed by acreage numbers, the quarterly stocks report establishes a basis for the magnitude of stocks that are considered neutral for corn prices. A corn stocks estimate that supports the USDA projection of 5.375 billion bushels of feed and residual use is neutral.

YouTube Video: Discussion and graphs associated with this article at https://youtu.be/kohx6li8q8s