



UNIVERSITY OF ILLINOIS  
EXTENSION



# WEEKLY OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

**NOVEMBER 18, 2002**

## IS CORN UNDERVALUED?

Corn prices have declined significantly over the past two months. December 2002 corn futures traded to a high of \$2.96 on September 11, declined as low as \$2.34 on November 11, and recovered to \$2.42 at the close of trade on November 15. The average spot cash price of corn in central Illinois peaked at \$2.785 on September 11, declined to \$2.30 on November 11, and recovered to \$2.37 on November 15.

The sharp decline in prices occurred during a period when the USDA increased the projection of year ending stocks by a modest 100 million bushels. The price decline has led some to conclude that corn prices are "undervalued". In general, this conclusion is based on the observation that historically, prices have been higher than current prices when carryover stocks were small. However, trying to correlate price with stocks, or a ratio of stocks to annual use, is a shortcut that has a number of shortcomings. In particular, that type of analysis generally ignores the fact that price, consumption, and stocks are determined simultaneously, not independently. Similar stock levels can be associated with different price levels reflecting, for example, variation in the demand for consumption, the demand for stocks, and the total supply of the crop.

The best test of whether crop prices at this time of year are undervalued or overvalued is the rate of consumption in relation to available supplies. If consumption (seasonally adjusted) is occurring at a faster rate than can be sustained by available supplies, it would be safe to conclude that prices are undervalued, and vice versa. The difficulty in reaching such a conclusion is two-fold. First, the size of the 2002 corn crop is not known with certainty. Large changes in the crop estimate in the January report are not expected, but the magnitude of available supplies may be different than currently estimated. Some expect a smaller estimate due to a reduction in the estimate of harvested acreage. Second, complete, timely information on the rate of corn consumption is not available. Feed and residual use of corn is the largest category of use, but the rate of consumption is only revealed in the USDA's quarterly *Grain Stocks* reports. The first such report for the 2002-03 marketing year will be released on January 10. The magnitude of livestock slaughter and livestock inventory reports provide some insight on the likely rate of consumption, but the quarterly stocks reports provide the only hard information. The expectation this year is that declining numbers of cattle and hogs, along with low hog prices, will result in a decline in feed and residual use of corn. The year-over-year decline will likely be largest in the last half of the marketing year. The USDA currently projects a 3.4 percent decline for the year.

Domestic processing use of corn is partially revealed in monthly industry reports. The most important sector this year is the ethanol industry. Monthly reports confirm a record pace of ethanol

STATE • COUNTY • LOCAL GROUPS • U.S. DEPARTMENT OF AGRICULTURE COOPERATING

University of Illinois Extension and Purdue University Cooperative Extension Service provide equal opportunities in programs and employment.

production and the USDA projects a 15 percent year over year increase in the amount of corn used for ethanol production.

Weekly reports of corn export activity are available. Export inspections through the first 10 weeks of the 2002-03 marketing year totaled only 255 million bushels, 27 percent less than during the same period last year. Unshipped sales as of November 7, however, were reported at 314 million bushels, 17 percent larger than outstanding sales of a year ago. Total commitments stood at 569 million bushels, 6 percent less than commitments on the same date last year. For the year, the USDA projects exports at 1.925 billion bushels, about 2 percent larger than exports of a year ago. It is expected that larger sales to Canada, the entrance of Australia in the import market, and the tight supplies of grain sorghum will support U.S. exports at a higher level.

At this stage of the marketing year there is no evidence that corn is being used at a rate that cannot be sustained. Based on the current projections for the marketing year, stocks on September 1, 2003 will total 848 million bushels. That is a relatively low level of stocks, but is above the minimum pipeline inventory. There is room for the production estimate to be reduced and/or consumption to exceed current projections without running out of corn this year.

While there is always the need for more information, it now appears that current corn prices are significantly undervalued only if production does not rebound in 2003. In general, it is thought that current price prospects favor more corn acreage, at the expense of soybean acreage in 2003. The USDA's *Winter Wheat Seedings* report to be released on January 10 will provide some insight into prospects for spring planted crops, particularly in the plains states. The major unknown for 2003 is weather. A return to a trend line yield may be required to maintain consumption of U.S. corn at the current level.

Corn prices have the potential to add to last week's gains, but upward potential this winter may be limited if consumption patterns continue near the projected levels. As always, the USDA's January reports will provide information to reassess price potential.

Issued by Darrel Good  
Extension Economist  
University of Illinois