



Mid-Year Soybean Stocks

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The 2012 U.S. soybean crop was 79 million bushels smaller than the 2011 crop. Because of smaller beginning stocks, the 2012-13 marketing year supply was 121 million bushels (3.6 percent smaller) than the previous year supply. Consumption of U.S. soybeans during the first quarter of the marketing year, however, was record large and the pace of consumption remained high during much of the second quarter. The rapid pace of consumption reflected continued strong export demand for soybeans and soybean products and the drought reduced South American harvest in 2012.

The market was willing to let consumption proceed at such a rapid pace in anticipation of a seasonal slowdown in export demand during the last half of the marketing year when South American supplies become more abundant. With prospects of a sharp rebound in South American production to a record level in 2013, it has been anticipated that the slowdown in consumption of U.S. soybeans would be sharper than normal this year and that year ending stocks would be maintained at pipeline levels. The USDA's estimate of March 1 stocks of U.S. soybeans to be released on March 28 will reveal how large the seasonal slowdown in consumption needs to be. The magnitude of the required slowdown will in turn determine whether prices need to adjust higher in order to slow the pace of consumption more than normal or whether supplies are large enough to allow prices to continue to move lower.

Projecting the likely level of March 1, 2013 stocks is a bit complicated, but starts with the estimate of December 1, 2012 stocks of 1.9656 billion bushels. A small quantity of imports during the quarter is added to that estimate and the estimate of consumption during the quarter is subtracted to project the magnitude of March 1 stocks. Imports may have been near five million bushels. Consumption occurs in three categories: exports; domestic crush; and domestic feed, seed, and residual use. USDA's weekly export inspections report showed exports during the quarter totaled 539.3 million bushels. However, total Census Bureau export estimates for December and January were 13.7 million bushels less than export inspections reported for the two months. If that margin persisted through February, exports during the quarter would have been near 525.6 million bushels.

The Census Bureau discontinued making estimates of the size of the domestic soybean crush after June 2011. As a result, the USDA no longer makes estimates of the size of the crush on a quarterly basis, but instead reports total domestic consumption (includes feed, seed, and residual consumption) during the quarter. That consumption is estimated as total disappearance during the quarter minus exports during the quarter. The National Oilseed Processors Association (NOPA) estimates the size of the domestic

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crush for its members on a monthly basis and the USDA makes an estimate of the total domestic crush on an annual basis. For the last two marketing years, the USDA's estimate of the domestic crush for the year averaged 4.7 percent larger than the NOPA estimate. The NOPA estimate of the domestic crush in December 2012 and January 2013 was 10.4 percent larger than the crush in the previous year,

continuing the pattern of a very large crush during the first quarter of the marketing year. The estimate for February 2013 was equal to the crush in February 2012. For the quarter, the NOPA crush estimate for its members totaled 454.4 million bushels. Assuming the total crush was 4.7 percent larger than that estimate, the quarterly crush was likely near 475.8 million bushels.

Feed, seed, and residual use of soybeans during the quarter equals total consumption minus exports and crush. The magnitude of consumption in that category is relatively small, but highly variable. Using the process of estimating the quarterly domestic crush just described, the estimate of use in that category averaged 193.4 million bushels during the first half of the marketing year in 2010-11 and 2011-12. Use during the first quarter of the 2012-13 marketing year was estimated at 152.6 million bushels. If the pattern of the past two years is being followed this year, use during the second quarter totaled 40.8 million bushels. As a result, total consumption is projected at 1.0422 billion bushels, leaving March 1 stocks of 928.4 million bushels. Stocks at the level would be the smallest since March 1, 1989, following the extremely small harvest of 1988.

If year ending stocks cannot practically be reduced below about 125 million bushels and the USDA estimate of March 1 stocks is near the calculation presented here, consumption of U.S. soybeans during the last half of the marketing year would be limited to about 813 million bushels (assuming imports of 10 million bushels during the quarter). Consumption that was 17 percent larger than that of a year ago during the first half of the marketing year would have to be 33 percent smaller than that of last year during the last half of the year.

The USDA's estimate of March 1 stocks will provide the basis for evaluating the pace of consumption over the next few months. That estimate, along with the estimate of planting intentions to be released on the same day will set the tone for soybean prices into the planting and growing season.