A larger percentage of the U.S. corn grain acreage was harvested in August this year than is typically the case. The availability of large new crop corn supplies during the last month of the previous marketing year makes it more difficult to anticipate the magnitude of old crop stocks on September 1.

According to the USDA’s weekly Crop Progress report, 6 percent of the corn acreage in the 18 major producing states was harvested as of August 26 and 10 percent was harvested as of September 2, implying about 9 percent of the acreage was harvested by the end of August. Harvest progress by the end of August last year, and the average for the previous 5 years, was about 2.5 percent. If the average yield of the harvested acreage this year was near the average of 122.8 bushels forecast for the U.S, then about 965 million bushels were likely harvested in August, compared to about 310 million bushels likely harvested in August last year. However, this year the most advanced harvest progress relative to average and to that of last year was in Kansas, Kentucky, Missouri, and Tennessee where state average yields are projected to range from 70 to 91 bushels, or 36 to 53 bushels below the national average yield. Harvest progress in southern states not included in the 18-state report was well advanced by the end of August, but with progress well ahead of last year’s pace only in Arkansas and to a lesser extent in Louisiana. Progress was behind that of last year in the other southern states. It seems likely that new crop corn available before September 1 this year was about 600 million bushels larger than the availability of a year ago.

The question is how much of the newly harvested crop was actually consumed in August. The degree of substitution of new crop for old crop corn in August has implications for the magnitude of old crop corn still in inventory on September 1. Regardless of how new crop corn was consumed in August (feed, export, or domestic processing) it will be reflected in the balance sheet in the feed and residual category. The USDA has forecast the September 1 inventory of old crop corn at 1.181 billion bushels, implying consumption of old crop corn during the fourth quarter of the 2011-12 marketing year of 1.974 billion bushels. Based on weekly export inspections through August and Census Bureau export estimates through July, we estimate fourth quarter exports at 285 million bushels. That compares to 290 million bushels implied by USDA’s forecast of marketing year exports.

Based on weekly estimates from the U.S. Energy Information Administration, ethanol production during the fourth quarter of the 2011-12 marketing year was about 6 percent less than in the previous year,
implying corn consumption for ethanol and by-product production during the quarter of 1.193 billion bushels. If consumption for other processing uses was near the 331 million bushels implied by the USDA’s projection of use for the year, total processing uses of corn during the quarter was near 1.524 billion bushels. If the USDA projection of year-ending old crop inventories of 1.181 billion bushels is correct, implied feed and residual use during the quarter was between 160 and 165 million bushels. That compares to implied use of 448 million bushels last year and 495 million bushels in 2010. The implication is that at least one-third of the crop harvested before September 1 was used in place of old crop corn, mostly during the last half of August.

A second issue associated with the early corn harvest is whether respondents to the USDA’s survey will correctly report old crop inventories. The USDA specifically asks respondents to report inventories of corn harvested in 2011 or earlier years. For the most part, producers should have little difficulty differentiating between new and old crop stocks stored on the farm. In some cases, however, commercial facilities storing corn received in late August may not be able to differentiate between old and new crop, but errors should be mostly offsetting. Reporting errors, then, should be the result of respondents who incorrectly report total inventories rather than old crop inventories only.

The September 1 estimate of old crop corn stocks can have important price implications in some years, particularly when stocks are relatively small and the new crop is also expected to be small, like this year. This year, however, the market will have some difficulty interpreting the stocks number as it will reflect both the total magnitude of consumption during the quarter and the degree of substitution of new crop for old crop corn in August, without revealing the magnitude of either. That mystery will be at least partially solved with the December 1 stocks estimate to be released in January 2013.