Yield Uncertainty Despite the September Objective Yield Survey

The USDA September corn production estimate came in at 13.799 billion bushels, down 102 million bushels from August. Harvested acres were unchanged at 82 million acres. Yield per harvested acre fell 1.3 bu/A, and was pegged at 168.2 bu/A. If realized, this would be the lowest average corn yield number since the 2013 crop which came in at 158.1 bu/A.

USDA’s initial Objective Yield Survey (OYS) for the 10 major corn production states estimated ear counts down 3.1% as compared to 2018. Note that ear counts have declined each of the past five years from September to the final production report by an average of 0.6%. In addition, expect lower ear weights as NASS uses a 5-year simple average in late maturing crops deemed the implied ear weight.

Soybean Yield Estimates

USDA’s September soybean production estimate came in at 3.633 billion bushels, down 47 million bushels from the August. Yield per harvested acre fell by 0.6 bushels per acre to 47.9. Harvested acres were unchanged. The 2019 U.S. soybean crop is potentially the smallest crop since 2013.

The September soybean estimates showed a decline in pod counts of 20.1% as compared to 2018. If realized, this would be the lowest soybean pod count since 2012 for the 11-states in the OYS. However, in each of the last five years, pod counts increased from the September report to the final production number.

Source: USDA NASS, Sept. 12, 2019
At 1,561 pods per 18-square feet, the September pod count estimate for the OYS led to an implied pod weight near 0.35 grams per pod. This level is the highest in a decade and could lead to speculation about potential lower pod weights in subsequent reports.

According to the Sept. 14, 2019, ProFarmer newsletter, this soybean pod weight looks way too high. Shorter soybeans may compensate somewhat with larger pods. The editors make the following points about upcoming U.S. soybean production estimates:

First, don’t be surprised if both pod counts and implied pod weights for soybeans drift down this year. This could be an offsetting impact of increasing pod counts based on recent history.

Second, remember this is an implied pod weight as NASS uses a historical average pod weight for the OYS. This could explain the high implied pod weight reported in September. We likely won’t know for sure until the combines run.

**Comparable Years**

If you’re looking for comparable years for late-planted crops, try 2009 and 2013. These are the two most recent late years when the corn and soybean crops were planted late. In both of those years, corn ear weights increased but ear counts declined from September to the final production number.

Both 2009 and 2013 had extra weeks added to the end of those growing seasons that allowed crops to finish well. Corn yields in 2009 rose from September to the final report by 2.8 bu/A. For 2013, the corn yield increased by 3.5 bu/A over that same time frame.

In both of those years, the soybean pod weights dropped sharply, and pod counts increased. The soybean yields rose from September to the final number in 2009 by 1.7 bu/A in 2009 and 2.8 bu/A in 2013.

**Planted Acreage & Crop Maturity**

ProFarmer editors don’t expect corn and soybean planted acreage to change much. Their analysis of the September Farm Service Agency (FSA) certified planted acreage data suggests NASS’s planted acreage estimates will be adjusted less than 100,000 acres each for the 2019 corn and soybean crops.

As of Sept. 8, the NASS Weekly Crop Progress & Condition Report indicated there was still 11% (9.9 million acres) of the U.S. corn crop that wasn’t in the drought stage. For soybeans, 8% (6.1 million acres) of the crop wasn’t yet setting pods. Those acres remain at extreme risk of an early frost, especially if the growing season isn’t extended into at least mid-October.

**Have a Harvest Marketing Plan**

With the uncertainty of the U.S. crop yield and maturity, expect that short-covering by speculative funds is likely. Target the early October through mid-November price to sell additional new crop bushels.

Farmers should set reasonable futures price objectives and sell bushels incrementally as the futures market moves higher. Consider a price objective of $3.86 to $3.92 per bushel for December ’19 corn futures. The top of the gap left on Aug. 12 in that chart should provide stiff resistance.

For November ’19 soybean futures, use a rally above $9 per bushel with strong resistance expected around $9.20. Consider using the January ’20 soybean futures contract where an additional 13¢ to 14¢ carry exists. This will allow two additional months for the processor and perhaps elevator basis improvements and avoid long-term on-farm or commercial storage costs.