

# Focus On Yield Potential



## grain outlook

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**P**rices of corn and soybeans declined sharply during the last half of June into early July. December 2009 corn futures declined from the \$4.70 area to under \$3.30 while November 2009 soybean futures dropped from \$11.00 to about \$8.80.

The sharp decline in prices reflected a number of factors. Improving weather conditions reduced concerns about the potential yield impact of late planting in the eastern corn belt. For corn, the larger than expected planted acreage estimate was especially negative. Weakness in financial and energy markets also contributed to weakness in corn and soybean prices. These factors outweighed prospects for larger exports this year and next and the potential for extremely small year ending stocks of soybeans. Prices traded in a relatively narrow range for the past two weeks, with strength in the financial and energy markets, along with weakness in the U.S. dollar providing some support.

For the next several weeks, yield and production prospects will likely determine if a low in corn and soybean prices has been established. Weather conditions have been viewed as generally favorable for both corn and soybeans. Extreme heat has remained south and west of major production areas, with the Midwest experiencing generally below normal temperature in July. Moisture concerns are minimal. Overall crop condition ratings are relatively high as of July 12, the USDA reported 71 percent of the corn crop and 66 percent of the soybean crop in either good or excellent condition. The highest ratings are generally in the western corn belt. A year ago, 64 percent of the corn crop and 59 percent of the soybean crop was rated in good or excellent condition. There is an extremely high correlation between the percent of the crop rated good or excellent at the end of the season and the U.S. average trend adjusted yield. For corn, for example, the crop condition model based on observations from 1986 through 2008 would project a 2009 U.S. average yield of 163.2

bushels per acre IF 71 percent of the crop is rated good or excellent at the end of the season. Each 1 percent change in the proportion of the crop rated good or excellent would alter the yield forecast by about 0.66 bushels per acre. Our crop weather model forecasts a U.S. average yield of 161.9 bushels if growing conditions through August are favorable. The yield expectations based on current crop ratings or the assumption of favorable weather for the rest of the season are well above the long term trend calculation for 2009 of 154.9 bushels per acre.

For soybeans, favorable weather through August would point to a U.S. average yield of 44.7 bushels per acre, well above the long term trend calculation of 42.2 bushels per acre. For both corn and soybeans, yield projections based on the crop weather model assume that frost/freezing dates are not earlier than normal.

Based on current acreage estimates, yields at levels projected by either current crop condition ratings or by a crop weather model assuming favorable weather for the remainder of the season, point to prospects of large supplies and further price weakness into harvest. Using USDA's most recent projections of 2009-10 marketing year consumption, a U.S. average corn yield of 162 bushels, for example, would result in year ending stocks of 2.236 billion bushels. Use might well exceed current projections due to lower prices under this yield scenario, but stocks could exceed 2 billion bushels. For soybeans, a U.S. average yield of 44.1 bushels and use at the level current projected would result in year ending stock of 410 million bushels.

The USDA will release the first corn and soybean yield estimates of the year on August 12. Due to the lateness of the crop, objective yield estimates for the eastern corn belt states included in that portion of the survey, will be biased heavily on plant populations, suggesting more uncertainty about yield estimate than would normally be the case. Estimates of planted and harvested acreage of corn and soybeans will be updated in October as acreage certification information from the Farm Service Agency becomes available.

Corn and soybean markets have prices in relatively large crops, but considerable production and price uncertainty remains. The November soybean futures are now about \$.50 above the spring price guarantee for crop revenue insurance products offering an opportunity for some additional pricing of the 2009 crop. In contrast, December corn futures remain well below the crop revenue insurance price guarantees. Δ

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