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Weekly Farm Economics: Near Trend-line Yields Needed in Illinois and Iowa to Meet 12.9 Million Projected Production

Gary Schnitkey

Department of Agricultural and Consumer Economics
University of Illinois

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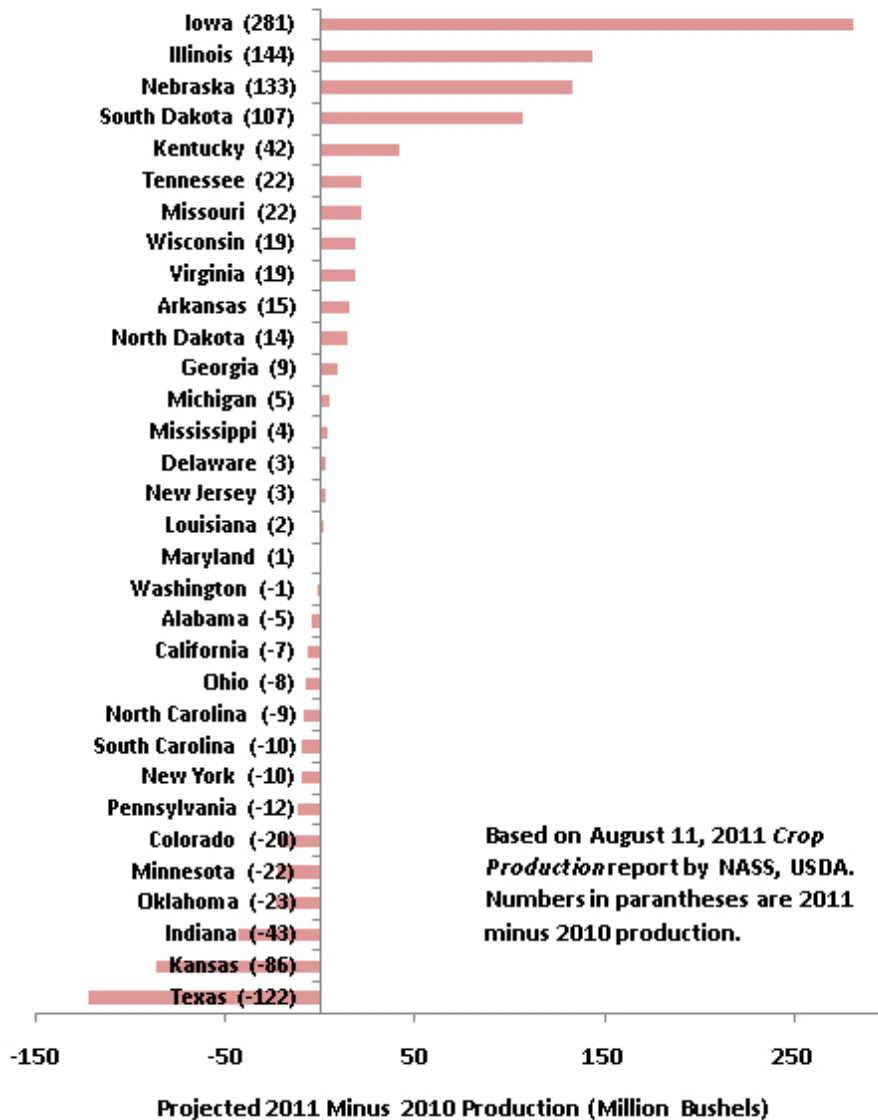
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In its August 12th report, the National Agricultural Statistical Service (NASS) forecast 12,914 million bushels of corn production in 2011, up by 4 percent from 2010 levels. To meet this production level, corn yields in Illinois and Iowa need to be near the average of historic, trend-adjusted yields.

If NASS projections contained in the August 12 Crop Production report hold true, there will be a change in composition of total production across states (see Figure 1). States projected to gain over 100 million bushels are Iowa (281 million), Illinois (144 million), Nebraska (133 million), and South Dakota (107 million). Except for Illinois, these states are centered in the western corn-belt. States that are projected to have large losses are Indiana (-43 million), Kansas (-86 million), and Texas (-122 million). Losing states have had weather related issues. Indiana has been hampered by a wet spring, followed by dry weather in July. Kansas and Texas are having a major drought.

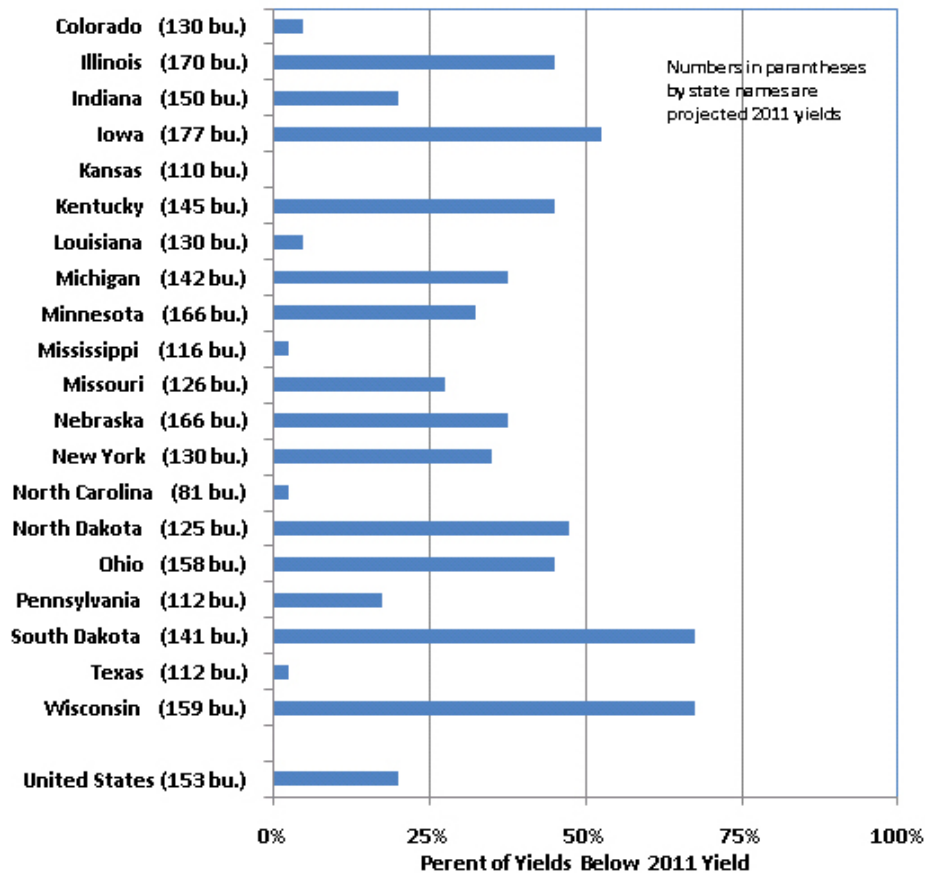
Figure 1. Increase or Decrease in 2011 Corn Production over 2010 Production by State.



NASS projections include state yield estimates. To put 2011 projected yields in perspective, the 2011 projected yields are compared to trend-adjusted yields from 1972 through 2010. Each yield from 1972 through 2010 has been adjusted by the linear trend. This puts each previous yield in terms of today's bushels. The 2011 yield is then ranked compared to the trend adjusted yields.

Results of these comparisons are shown in Figure 2. Take Illinois for example. Illinois has a projected 2011 yield of 170 bushels. This 170 bushel projection has 45 percent of the trend-adjusted yields from 1972 through 2010 below it. The 45 percent is near 50 percent, suggesting that the 2011 projected yield is near the average the average of historic, trend-adjusted yields.

Figure 2. Projected 2011 Corn Yield Compared to Trend-Adjusted Yields from 1972 through 2010.



Note the following for the four states projected to gain over 100 million bushels:

1. Iowa's 177 bushel projected yield for 2011 is near the historic average as 54 percent of the trend-adjusted historical yields are below the 2011 projected yield. The 2011 yield is 12 bushels above the 2010 yield of 165 bushels.
2. Illinois' 170 bushel projected yield for 2011 is near the historical average as 45 percent of the trend-adjusted yields are below the 2011 projected yields. The 2011 yield is 13 bushels higher than the 2010 yield of 157 bushels.
3. Nebraska's 166 bushel projected yield for 2011 is below the historical average as only 38 percent of the trend-adjusted historical yields are below the 2011 projected yield. The 2011 yield is the same as the 2010 yield.
4. South Dakota's 141 bushel projected yield for 2011 is above average as 68 percent of the trend-adjusted yields are below it. The 2011 yield is 6 bushels above the 2010 yield of 135 bushels.

Further note the poor yields for Texas and Kansas. Texas' 122 bushel yield for 2011 only has 3 percent of the trend-adjusted yields below it and Kansas' yield of 110 bushels will be the lowest trend-adjusted yield since 1972.

Overall, the U.S. has a projected yield of 153 bushels. The 153 bushel yield has 20 percent of the trend-adjusted yields below it, indicating that the 2011 projected yield is below the average of trend-adjusted yields. The yield is below average because of the poor yields in many states, but particularly the drought stricken areas of the southern Great Plains. The national yields would be much worse had not yields in other areas been closer to average. In particular, the close to the trend-adjusted yields in Iowa and Illinois yields are needed for there not to be further erosion in the national yield.