How Poor Were 2010 Corn Yields in Illinois?

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The state corn yield for Illinois was below trend yield in 2010, with only 23 percent of the years since 1972 having a worst deviation from trend. However, the 2010 state yield was not as poor as yields in 1988 and 1983. Many counties in Illinois fared much worse than the state. For 16 counties, 2010 was the worst yielding year in the 2000s. For ten counties, 2010 ranked as the second or third worst year since 1972. Many of the low-yielding counties were located in western Illinois.

State yields

The state yield for Illinois in 2010 was 157 bushels per acre. The 2010 yield was below expectations according to a linear trend model. Based on a linear trend of yields from 1972 through 2009, the expected yield for 2010 was 166 bushels per acre. The 157 bushel actual yield was 9 bushels below the trend yield.

The 2010 yield was the first yield below trend since 2005. The 2005 yield was 14 bushels below trend. Since then, the 2006 yield was 4 bushels above trend, the 2007 yield was 14 bushels above trend, the 2008 yield was 16 bushels above trend, and the 2009 yield was 10 bushels above trend.

**County yields**

A number of counties had extremely poor yields in 2010. Thirteen counties had yields that were more than 30 bushels below their respective county trend yields. The four counties with the worst deviations were Hancock County (54 bushels below trend), Adams County (44 bushels below trend), McDonough County (43 bushels below trend), and Schuyler county (42 bushels below trend). All of these counties were located in western Illinois, where large amounts of rain early in the growing season delayed planting and caused water damage. In some areas, this wet weather then was followed by dry, hot weather which
further caused yield deterioration.

In terms of yield loss, the 2010 yield was the worst yield loss year in the 2000s for 16 counties: Adams, Brown, Cass, Ford, Fulton, Hancock, Henderson, Iroquois, Macoupin, McDonough, Mercer, Morgan, Pike, Sangamon, Schuyler, and Warren Counties.

Since 1972, the 2010 yield was not the worst deviation from trend for any county. However, there were four counties that only had one year with a more negative deviation: Adams, Brown, Hancock, and Schuyler Counties. For seven counties, there was only two years with more negative deviations: Fulton, Henderson, McDonough, Mercer, Morgan, Pike, and Sangamon Counties.

While corn yields were below trend in many counties, there were areas of the state that had above trend yields. These counties were located in the northern and southern parts of Illinois.