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## Integrated Crop Management NEWS

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### August 2011 Iowa Corn Yield Forecast

Roger Elmore and Elwynn Taylor, Department of Agronomy

USDA released the [first corn yield forecast for 2011](#) on Aug. 11. Forecast U.S. yields of 153 bushels per acre are similar to last years' and six bushels below the 30-year trend line (Figure 1). This is not surprising.

On the other hand, Iowa's forecast of 177 bushels per acre matches that of the 30-year trend line and lies 12 bushels above last year's final yield estimate. This, if realized, would rank third highest behind 2004 (181) and 2009 (182) bushels per acre for Iowa. This seems unlikely.

Pollination issues like those shown in the recent ICM article, [Weather Impact on Midwest Corn 2011](#), are just part of the problem. The other issue is kernel weight reduction that will likely occur because of the high night temperatures during pollination which resulted in rapid crop development. This sounds like a [replay of 2010](#), at least for Iowa corn.

Remember these forecasts arise from meticulous late-July counts and measurements by the team at USDA-NASS and that each forecast is a "new" forecast – not simply an update. USDA-NASS use new and expanded observations from a large number of sample locations to formulate expected yields based on field observations for every subsequent [Crop Report](#). They assume that weather during the remainder of the grain filling season is normal. The September yield forecast is likely to be lower than the one just issued because ear size will be less than the average ear size. Later, when the forecast includes kernel counts the yield forecasts will again change.

Of course, it is possible that the weather could be better than average for crop yield and actually increase the yield forecast in subsequent months. This is usually associated with temperatures that extend the filling period beyond normal. Don't forget that when acres are dropped from the harvested area – due to flooding, etc., "yield" increases simply because "yield" means "yield per harvested acre."

Earlier this week [USDA-NASS reported](#) that about two-thirds of Iowa's corn was in or past the milk stage. At dent, the crop needs about a month of growing season to finish well. Kernels contain less than half of their final weight at dent. Much can change in a month.

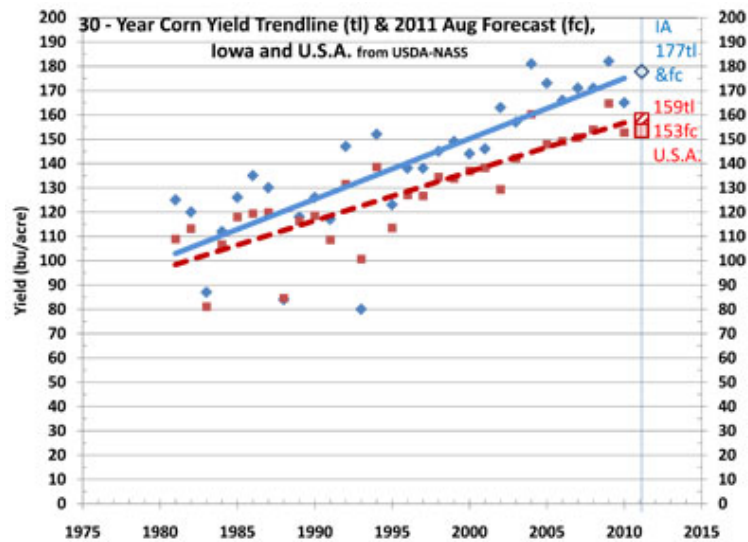


Figure 1. Corn yields over 30 years for Iowa and U.S. Trendline (tl) yields are shown in the open diamond (Iowa) and square with diagonal lines (U.S.). The August 2011 forecast (fc) yield for Iowa is the same as the trendline yield, 177 bu/acre. The forecast (fc) yield for the U.S. is shown in the square with vertical lines. Data is from [USDA-NASS](#).

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