

8-3-2012

Corn Crop Development and Conditions at the End of July 2012

Roger W. Elmore

Iowa State University, relmore@iastate.edu

Follow this and additional works at: <http://lib.dr.iastate.edu/cropnews>

 Part of the [Agricultural Science Commons](#), [Agriculture Commons](#), and the [Agronomy and Crop Sciences Commons](#)

Recommended Citation

Elmore, Roger W., "Corn Crop Development and Conditions at the End of July 2012" (2012). *Integrated Crop Management News*. 155.
<http://lib.dr.iastate.edu/cropnews/155>

The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit <https://crops.extension.iastate.edu/>.

Corn Crop Development and Conditions at the End of July 2012

Abstract

To no one's surprise, Iowa corn conditions declined throughout the month of July. Dry hot weather hammered the crop to the point where some crops were written off as unproductive several weeks ago and others are seemingly hanging by a thread. Some producers are salvaging what remains as silage.

Nevertheless, some Iowa producers are quite satisfied with their crop's potential. They are among the fortunate few perhaps with a bit better soils and more rain at critical periods. Undoubtedly, this group may also have an edge on management practices: excellent hybrid selection, less soil compaction, timely planting dates, better seed placement, uniform seedling emergence, optimum plant populations, top-notch weed control, wise insect and disease management, etc. This will be the year where the management differences among fields and producers - and their skills - will come to light.

Keywords

Agronomy

Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

search

Subscribe to Crop News

Archives

2014

2013

2012

2011

2010

2009

2008

Previous Years

ISU Crop Resources

Extension Field Agronomists

Crop & Soils Info

Pesticide Applicator Training

Agronomy Extension

Entomology Extension

Plant Pathology Extension

Ag and Biosystems Engineering Extension

Agribusiness Education Program

Iowa Grain Quality Initiative

College of Agriculture and Life Sciences

ISU Extension

Integrated Crop Management NEWS

- PRINT STORY
- EMAIL STORY
- ADD TO DELICIOUS
- ATOM FEED
- FOLLOW ON TWITTER

Corn Crop Development and Conditions at the End of July 2012

By Roger Elmore, Department of Agronomy

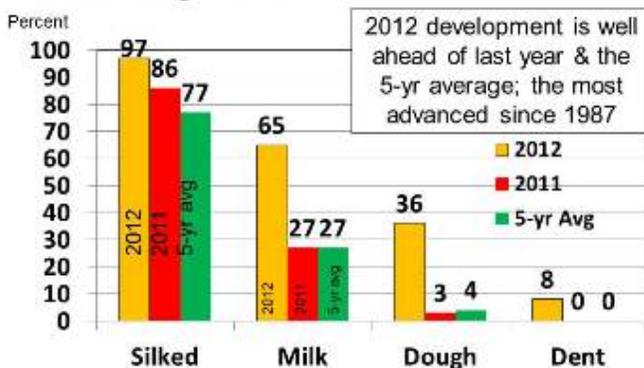
To no one's surprise, Iowa corn conditions declined throughout the month of July. Dry hot weather hammered the crop to the point where some crops were written off as unproductive several weeks ago and others are seemingly hanging by a thread. Some producers are salvaging what remains as silage.

Nevertheless, some Iowa producers are quite satisfied with their crop's potential. They are among the fortunate few perhaps with a bit better soils and more rain at critical periods. Undoubtedly, this group may also have an edge on management practices: excellent hybrid selection, less soil compaction, timely planting dates, better seed placement, uniform seedling emergence, optimum plant populations, top-notch weed control, wise insect and disease management, etc. This will be the year where the management differences among fields and producers - and their skills - will come to light.

Rapid 2012 corn development stages, July 29, 2012

USDA-NASS reports [corn development stages](#) weekly during the growing season. As of July 27th, 8 percent of Iowa's corn was denting – R6 (Figure 1). Crop development in 2012 is well ahead of both that of last year and the five-year average. Eight percent dented is the most advanced development stage we've had since 1987 when 10 percent of the crop was at that stage by the end of July. [We've learned the hard way that fast progression through development stages is not conducive to higher yields.](#)

Figure 1. Iowa Corn Development – as of July 29th



IOWA STATE UNIVERSITY Extension and Outreach Adapted from USDA-NASS

Figure 1.

Crop condition declines– July 2012

In the same weekly report as the development stages, USDA-NASS also publishes crop conditions. Corn condition began to decline in early July from 62 percent 'Good to Excellent' on the 1st to only 20 percent in that category on July 29th (Figure 2). Of course, on the other end, the percent of the crop in 'Poor or Very Poor' condition escalated to 46 percent. The remaining 34 percent was rated as 'Fair.'

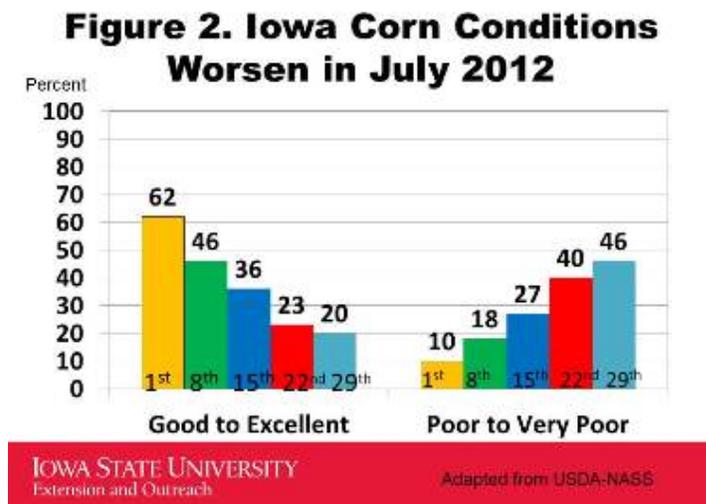


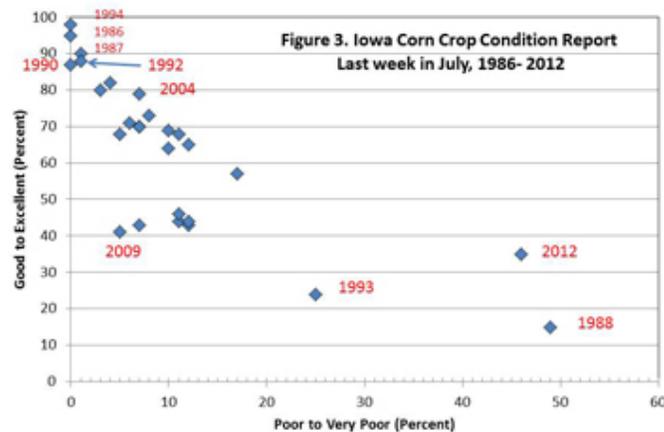
Figure 2.

For comparison, at the end of July in 1988 - one of the worst years for corn that some of us remember - only 15 percent of the crop was rated 'Good to Excellent,' 36 percent 'Fair' and 49 percent was rated 'Poor or Very Poor.' These are records we don't like to emulate.

Remember, though, crop condition reports like these are subjective. "The Crop progress and condition surveys are non-probability surveys that include a sample of more than 5,000 reporters [nationwide] whose occupations provide them opportunities to make visual observations and frequently bring them in contact with farmers in their counties. Based on standard definitions, these reporters ... provide subjective evaluations of crop conditions." [USDA-NASS](#)

Crop condition reports and yield

Figure 3 presents another way to look at crop condition report data. The chart includes crop condition reports for the last week of July from 1986 to 2012. I highlighted several years in the chart as reference points. Obviously, 2012 is not in good company! Yields in 1988 were 29 percent below the 30-year trend line, and those of 1993 were 39 percent below trend line. You must know, though, that high 'good to excellent' ratings the last week of July usually - but not always - foretell good news about yields.



IOWA STATE UNIVERSITY
Extension and Outreach

Adapted from USDA-NASS

Figure 3.

To explain that further, 1994, 1986, 1987, 1992 and 2004 all had yields considerably higher (9 to 15 percent) than trend line yields. But 1990 yield was only 0.5 percent above the trend line although the crop condition the last week of July was one of the five best since 1986.

On the other hand, 2009, the year of our best yield ever, had 5 percent of the crop rated poor or very poor in late July and yielded only 5 percent above trend line yields. Of the five other years clustered with 2009 between 40 and 50 percent 'good to excellent' yields ranged between 2 percent above trend line yield to 9 percent below. It appears that if less than half of the crop is rated in the 'good to excellent' category the last week in July, historic yields were at or below the trend line. 2012 clearly - and not surprisingly - falls into that category. Obviously, as we proceed through August, the crop condition reports should reflect yields with more precision than they do the last week in July.

Declining corn crop conditions, rapid progression through later development stages, and the short-term and long-term forecast for more hot and dry conditions are not encouraging for corn yields.

Roger Elmore is a professor of agronomy with research and extension responsibilities in corn production. He can be contacted by email at relmore@iastate.edu or (515) 294-6655.

This article was published originally on 8/3/2012. The information contained within the article may or may not be up to date depending on when you are accessing the information.

Links to this material are strongly encouraged. This article may be republished without further permission if it is published as written and includes credit to the author, Integrated Crop Management News and Iowa State University Extension. Prior permission from the author is required if this article is republished in any other manner.