

PRELIMINARY IOWA WEATHER SUMMARY – AUGUST 2012

General Summary. Temperatures averaged 71.2° or 0.3° below normal while precipitation totaled 2.95 inches or 1.25 inches less than usual. This ranks as the 52nd coolest and 48th driest August among 140 years of state records. The slightly cooler than usual weather breaks a string of ten consecutive warmer than normal months. This tied with Apr. 1941-Jan. 1942 as the second longest warmer than normal streak behind Dec. 1920-Oct. 1921. Nevertheless, the year-to-date temperature average remains the highest among 140 years of record (0.5° above the previous record warm start set in 1987).

Temperatures. The persistent heat characterizing 2012 continued into August with temperatures averaging above normal for the first four days of the month. Bedford and Osceola reached 101° on the 1st and Osceola 100° on the 3rd. A strong, but brief cool down on the 5th and 6th brought a few daily record low temperatures on the morning of the 6th with Belle Plaine falling to 43°. The heat returned rapidly on the 7th with Keosauqua reporting 103°. However, a very welcome prolonged period of milder weather brought below normal temperatures for all but one day from the 9th through the 21st. Daily record lows were set or tied at some Iowa locations on the 11th, 17th, 18th and 19th. Battle Creek and Sibley reported the month's lowest temperatures were 38° readings on the morning of the 17th. This was Iowa's lowest temperature for so early in the season since Atlantic and Independence reported 38° on August 4, 1978. Unfortunately above normal temperatures returned for the final ten days of the month with a few daily record high temperatures set on the 29th and 30th. Hawarden reported the highest temperature with 104° on the 30th. This was Iowa's highest temperature for so late in the season since Glenwood reached 104 on September 2, 2000. Unusually dry air, a reflection of the persistent drought, prevailed for most of August and allowed for very wide swings in temperature with diurnal ranges sometimes exceeding 40 degrees.

Cooling Degree Day Totals. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 5% less than last August and 2% more than normal. Cooling degree day totals so far this year are running 19% greater than last year and 47% more than normal. This is the highest year-to-date total since 1988.

Precipitation. Rainfall was more frequent and substantial than in July but remained below normal across most of Iowa. The largest rain events were centered on the 4th (0.60 inches Iowa average) and 26th-27th (1.23 inches). Rain totals of more than two inches fell on the 4th over parts of east central Iowa while four inches or more fell across parts of far southern/southwest Iowa with the second event. Monthly rain totals varied from only 0.73 inches at Pocahontas to 9.97 inches at Lamoni Airport (where 7.85 inches fell on the morning of the 26th). A lower August total has been recorded at Pocahontas only once in 107 years of records (0.55 in 1976). The relatively cooler and wetter August greatly slowed the rate of decline of crop conditions but failed to improve them.

Summer Summary. Temperatures for the three summer months averaged 74.2° or 2.6° above normal while precipitation totaled 7.10 inches or 6.61 inches less than normal. This ranks as the 14th hottest and fifth driest summer among 140 years of records. A

warmer summer was last recorded in 1988 and a drier one in 1936. Record low summer precipitation totals were recorded at three northwest Iowa locations:

Location	Summer 2012	Old Record	Period of Record
Orange City	3.06 inches	3.57 in 1976	108 years
Sioux Center	3.64	4.25 in 1976	110 years
Sheldon	3.70	4.35 in 1970	100 years

Harry J. Hillaker
State Climatologist
Iowa Dept. of Agriculture & Land Stewardship
Wallace State Office Bldg.
Des Moines, IA 50319
Telephone: (515) 281-8981
E-mail: Harry.Hillaker@IowaAgriculture.gov