

IOWA PRELIMINARY WEATHER SUMMARY – AUGUST 2011

General Summary. Iowa temperatures averaged 72.8° or 1.5° above normal while precipitation totaled 3.02 inches or 1.16 inches less than normal. This ranks as the 52nd warmest and 49th driest August among 139 years of state records.

Temperatures. August began with very hot weather on the 1st and 2nd and a continuation of above normal temperatures through the 9th. Numerous locations reached an even 100° on the 1st with official heat indices as high as 115° at Ames. A cool front moved across the state on the 2nd but not before temperatures soared well above 100 degrees over parts of southeast Iowa. Official temperatures peaked at 106° at Fairfield with a heat index of 117° at Iowa City. Fairfield's reading was the highest temperature recorded in Iowa since Washta reached 106 on July 19, 2006 and equaled three dates in 1983 for Fairfield's highest temperature since 1940. Iowa received a welcome break from the heat with cooler than usual weather prevailing from the 10th through the 16th. However, above normal temperatures were again the rule for 10 of the final 15 days of the month. The month's lowest temperatures were 46° readings at Sibley on the 10th and at Battle Creek on the 25th. Far southeast Iowa easily experienced the most extreme heat during the month with Donnellson reporting 16 days at or above 90 degrees with Fort Madison up to 101° on the 24th and Keokuk up to 98° on the 31st. Meanwhile parts of central and northern Iowa did not record any more 90 degree weather after the 2nd (but were to see more in September).

Cooling Degree Day Totals. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 19% less than last August but 11% more than normal. Cooling degree day totals thus far this year are running 5% more than last year and 23% more than normal. A higher seasonal total through the end of August has not been recorded since 1991.

Precipitation. The dry weather pattern that began in late June intensified over most of Iowa during August. Precipitation totals were less than normal over all but the southwest one-quarter of the state. Generally rain fell often, but coverage was limited, with only one day (30th) bringing a statewide average of greater than one-third of an inch. As was the case in July, southeast Iowa was the driest portion of Iowa with Burlington recording only 0.44 inches of rain (their driest August since 1920). However, rain totals of under an inch were also recorded over parts of northwest and central Iowa. Meanwhile, moderate to heavy rainfall was frequent over far southwestern Iowa where Clarinda reported 9.88 inches of rain. Parts of southeastern Iowa was classified as being in severe drought by August 30, while moderate drought overspread much of central Iowa. Fairfield recorded 1.49 inches of rain in July and August, second only to a 0.82 inch total in 1947, for the lowest July-August total at that location among 132 years of records. Hot and dry weather has resulted in reduced corn and soybean yields in many areas but has yet to cause major hydrologic concerns owing to the relatively short duration of drought (southeast Iowa had been very wet as recently as June).

Severe Weather. After a very active start to the 2011 severe weather season in Iowa there have been no tornadoes reported since June 26. However, there were two notable severe weather events during August. Thunderstorms brought damaging winds to 21 southern Iowa counties on the night of the 6th while hail, up to baseball size, and high winds caused reported damage in 11 southwest Iowa counties on the evening of the 18th.

Summer Summary. Iowa temperatures averaged 74.0° or 2.4° above normal while precipitation totaled 12.64 inches or 0.44 inches less than normal for the three summer months of June, July and August. This ranks as the 18th warmest and 60th wettest summer among 139 years of state records. A warmer summer has not been recorded since 1988.

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