

IOWA MONTHLY WEATHER SUMMARY – AUGUST 2010

General Summary. August temperatures averaged 74.7° or 3.4° above normal while precipitation averaged 4.80 inches or 0.61 inches above normal. This ranks as the 17th warmest and 31st wettest August among 138 years of state records. A warmer August has not been recorded since 1995.

Temperatures. Iowa temperatures averaged above the long-term normal for the third consecutive month. As has been the case all summer the heat was more persistent than extreme. Temperatures averaged above normal on all but nine days of the month. The month's highest temperatures were 97° maximums on the 3rd at Burlington and Keokuk and also at Onawa on the 11th. The combination of high humidity and high temperatures brought official heat indices above 110° on several dates with Burlington reaching 112° on the 3rd and 10th and Omaha-Council Bluffs 114° on the 8th and 112° on the 9th. On the other end of the spectrum morning lows fell to 44° at Cresco, Elkader, Mason City and Postville on the 26th.

Cooling Degree Day Totals. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 113% greater than last August and 37% more than normal. Degree day totals for the season-to-date are running 91% greater than last year at this time and 17% more than normal.

Precipitation. The very wet weather pattern of June and July continued into the first two weeks of August. Central Iowa was hardest hit by rainfall with three consecutive nights of torrential rains on the 8th, 9th and 10th. Ankeny recorded 9.86 inches of rain over these three nights while Ames had 9.61 inches. Record flooding impacted much of Story, Polk, Jasper and Mahaska counties. Iowa received a much needed break from the heavy rainfall for most of the second half of the month with a statewide average of only 0.90 inches between 14th and morning of the 31st. Moderate to heavy rain fell on the night of the 31st into early September 1st over the southeast two-thirds of Iowa with Ames Airport recording 4.13 inches. Most official reporting points record rainfall once daily at about 7 a.m. CDT, thus in many cases the rain of late August 31 will go into the record books for September 1. Monthly rain totals for August (through 7 a.m. August 31) varied from only 1.03 inches at Guttenberg to 16.07 inches at Urbandale. Guttenberg's total was the 6th lowest for August at that location among 80 years of records. August rainfall was well below normal over much of north central, northeast and far southwest Iowa. Ankeny (13.71 inches) and Ottumwa (12.52 inches) set new record maximum totals for the month of August. At Ankeny the old record was 12.87 inches in 1993 among 60 years of records and at Ottumwa 10.82 inches in 1932 among 122 years of records. Interestingly, the only higher calendar month total at Ankeny was a 14.24 inch amount recorded just two months ago in June 2010.

Summer Summary. Temperatures over the three summer months averaged 73.5° or 1.9° above normal while precipitation totaled 23.30 inches or 10.22 inches above normal. This ranks as the 26th warmest and 2nd wettest summer among 138 years of records. Despite the lack of extreme heat (highest official temperature of 98°) the persistence of

high temperatures resulted in this being Iowa's hottest summer since 2002. The hot summer was in major contrast to last year when Iowa recorded the fourth coolest summer of record. The summer rainfall total was second only to 1993's 26.83 inch total (when Iowa had its 5th wettest June, wettest ever July and 2nd wettest August). The year-to-date precipitation in 2010 (35.53 inches) is also a distant second to 1993 (41.22 inches) for the January through August period.

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