

IOWA MONTHLY WEATHER SUMMARY – AUGUST 2007

General Summary. Iowa temperatures averaged 74.5° or 3.2° above normal while precipitation totaled 9.78 inches or 5.59 inches more than normal. This ranks as the wettest August among 135 years of records and 17th warmest August. The old August maximum statewide average precipitation amount was 8.24 inches set in 1993. Only July 1993 (10.50 inches) and June 1947 (10.33 inches) saw more rain in one calendar month.

Temperatures. August was a consistently warm month. Only six days averaged cooler than normal (3rd, 17th, 24th-25th and 30th-31st). The hottest period came from the 5th through the 16th. Keokuk reached 103° on the 15th for the month's highest temperature while Keosauqua and Fort Madison also recorded triple-digit heat during the month. Burlington recorded 16 days with high temperatures of 90° or higher (normal is 6 days of 90° or better in August) and only one cooler than normal day (the 26th, 1° below normal). The heat index reached 111° at Burlington on the 7th (a combination of 96° actual temperature and a dew point of 77°). Monthly temperatures averaged from about one degree warmer than normal in parts of northwestern Iowa to as much as six degrees above normal in the southeast. Spencer Airport and Sheldon reported the lowest temperatures of the month with 47° minimums on the morning of the 30th.

Cooling Degree Day Totals. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 27% greater than last August and 34% greater than normal. Air conditioning requirements for the year are now running 1% greater than last year at this time and 15% greater than normal.

Precipitation. Rain was the big weather story of the month. The month began with drought concerns over much of western and southern Iowa. However, Hawarden, Le Mars and Sioux Center all received rain on the afternoon of August 1st, ending a streak of 39 consecutive days without measurable rain at these locations (Rock Valley had to wait three more days). Rain fell somewhere in the state on every day of the month except the 26th, 30th and 31st. Overnight rain totals in excess of four inches fell on the 7th-8th (4.90 inches at Hamburg); 8th-9th (4.04 inches at Oskaloosa); 17th-18th (9.00 inches at Emmetsburg); 18th-19th (4.24 inches at Calmar); 19th-20th (6.08 inches at Independence); 21st-22nd (4.62 inches at Humboldt) and last, but certainly not the least, the 23rd-24th (12.34 inches at Lake Rathbun Dam). Monthly precipitation totals varied from 4.50 inches at Keokuk to 19.43 inches at Lake Rathbun Dam. Rathbun's total surpasses the previous Iowa record for August of 17.74 inches set at Woodburn in 1903. Although severe flooding occurred in many areas during the month flooding was not as widespread as in 1993 thanks to fairly dry conditions preceding this month and to much higher temperatures this year compared to 1993 (therefore allowing more rapid evaporation).

The following locations set records for greatest precipitation for any month:

Station	August 2007	Old Record	Period of Record
---------	-------------	------------	------------------

Algona	13.64 inches	11.49 Sep 1965	137 years
Decorah	15.11 inches	13.99 Jul 1883	121 years
Dorchester	17.61 inches	13.73 May 2004	59 years
Eldora	14.82 inches	13.74 Aug 1993	65 years
Emmetsburg	15.35 inches	11.80 May 1959	66 years
Fort Dodge	15.02 inches	13.65 Sep 1965	115 years
Humboldt	16.68 inches	13.27 Sep 1965	106 years
Lansing	18.46 inches	14.87 May 2004	102 years
Little Sioux	11.69 inches	9.77 Jun 1908	52 years
Oskaloosa	16.70 inches	15.49 Jun 2000	130 years
Pella	13.95 inches	13.05 Aug 1993	82 years
Pocahontas	13.01 inches	12.33 Sep 1965	102 years
Rockwell City	19.05 inches	14.48 Jun 1947	111 years
Waukon	19.11 inches	12.77 Jun 2000	86 years

Summer Summary. Iowa's summer temperatures averaged 73.0° or 1.4° above normal while precipitation totaled 16.77 inches or 3.70 inches above normal. This ranks as the 44th warmest and 8th wettest summer (despite below normal rain in June and July) among 135 years of state records. Year-to-date precipitation stands at 32.61 inches or 7.83 inches above normal. This ranks as the fifth highest total for the January through August period, behind only 1993, 1951, 1990 and 1902.

Harry J. Hillaker, State Climatologist
Iowa Dept. of Agriculture & Land Stewardship
Wallace State Office Bldg.; Des Moines, IA 50319
Phone: (515) 281-8981; E-mail: Harry.Hillaker@idals.state.ia.us