IOWA MONTHLY WEATHER SUMMARY – JULY 2003

<u>General Summary</u>. Temperatures averaged 73.2° or 0.6° below normal while precipitation averaged 4.23 inches or 0.02 inches less than normal. This ranks as the 49^{th} coolest and 46^{th} wettest July among 131 years of state records.

Temperatures. July began with hot weather as temperatures averaged above normal on each of these first seven days of the month. The hottest of the early month weather arrived on the 3rd when 98° temperatures were reported at Ankeny, Mapleton and Shenandoah. Mild weather was the rule for most of the second week of July with afternoon temperatures only in the 70's over much of the state from the 8th through the 12th. Temperatures during the second half of the month were much more variable. Afternoon highs reached 97° at Glenwood, Logan and Sidney on the 17th while Lowden reported a morning low of 47° on the 19th. Hot weather returned to southwest Iowa on the 20th with a 97° maximum at Shenandoah. However, unseasonably cool weather was the rule from the 21st through the 24th with Cresco reporting the month's lowest temperature on the 24th with 46°. Finally, the hottest weather so far this year blanketed western Iowa on the 26th with official temperatures reaching 101° at Shenandoah and Sidney while Sioux City reported a heat index of 114° (actual temperature of 96° with a dew point temperature of 79°). For the month as a whole, temperatures averaged above normal across about the southwest one-half of Iowa and were below normal across the north and east.

<u>Cooling Degree Days</u>. Home air conditioning requirements, as estimated by cooling degree day totals, averaged 7% less than normal and 29% less than last July. So far this season cooling degree day totals are running 22% less than normal and 38% less than last year at this time.

<u>Precipitation</u>. Wet weather was the rule over most of Iowa during the first nine days of July as an average of just over three inches of rain fell across the state. However, much drier weather prevailed for the remainder of the month. An average of only 0.98 inches of rain fell over the last 22 days of the month with unusually dry conditions in portions of south central and southwest Iowa. Monthly rain totals were near or above normal across most of the northern two-thirds of the state and well below normal over parts of southwest and south central Iowa. July rainfall totals varied from only 0.98 inches at Creston up to 9.30 inches at Donnellson.

Severe Weather (based upon preliminary sources). The relatively tranquil 2003 severe weather season that Iowa had been experiencing came to an end in early July. High winds were reported from 32 Iowa counties (mostly north one-third) during the early morning of the 3rd. High winds and large hail were reported from another 25 Iowa counties from east to west across the central one-third of the state on the night of the 4th. Another 18 counties, mostly in the south and southwest, report high winds and hail on the night of the 5th with 15 more reporting severe weather (mostly in the northeast) on the night of the 6th. Severe weather continued on the 7th, 8th and 9th although it was not as widespread. However, very large hail pelted Jasper and eastern Polk counties on the afternoon and evening of the 7th. The wild weather quieted down until the 20th when severe weather was reported from 22 counties. A pair of tornadoes touched down on the night of the 20th in Linn County resulting in significant damage to nearly 200 homes in Covington and Cedar Rapids while associated winds knocked out power to 35,000 Alliant Energy customers. Finally, large hail was reported from 12 northern and eastern Iowa counties on the 31st. Additionally there were isolated reports of severe weather on the 14th, 18th and 27th.

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