

IOWA WEATHER SUMMARY – DECEMBER 2006

General Summary. Temperatures averaged 31.0° or 8.4° above normal while precipitation totaled 2.14 inches or 0.91 inches more than normal. This ranks as the 13th warmest and ties with 1984 for the 11th wettest December among 134 years of state records. A warmer December has not been recorded since 1965 and a wetter one since 1982.

Temperatures. The month began with colder than normal weather for the first 8 days of the month. Actual temperatures fell as low as -5° at Sanborn on the morning of the 7th while wind chill readings dipped to -24° at Mason City. Temperatures edged back above normal on the 9th and were well above normal for the remainder of the month. Temperatures averaged more than 20° above normal on the 14th, 16th, 28th, 29th and 30th. Keosauqua reported the highest temperature of the month with a 63° reading on the afternoon of the 16th. There were no subzero temperatures after the 8th, in fact no readings even in the single digits after that point.

Heating Degree Days Totals. Home heating requirements, as estimated by heating degree day totals, averaged 25% less than last December and 20% less than normal. So far this heating season (since July 1) heating requirements are running 5% less than last year at this time and 10% less than normal.

Precipitation. The month began and ended with snowfall but featured practically none in between. Far southeast Iowa caught the northwest edge of a massive snowstorm on the 1st with 9 to 12 inches reported in the Keokuk area. Other than a light dusting in a few areas on the 6th there was no other measurable snow until the 31st when snow accumulated across the northwest one-half of the state. Galva and Estherville reported the most snow during this last event with 6 inches. However, there was plentiful moisture in the state coming in the form of rain. Showers and thunderstorms brought light to moderate rain on the night of the 11th (and even some large hail). However, a pair of storm systems on the 20th-22nd and 29th-31st brought unseasonably heavy rainfall to much of Iowa. The first of these storms (the one that paralyzed the Denver Airport with snow) brought a statewide average rainfall of 1.12 inches with Williamsburg recording 3.01 inches. The second event brought an average of 1.11 inches of precipitation with the most at Little Sioux (Harrison Co.) where 2.07 inches fell. The mild weather of mid and late December thawed soils over much of Iowa, allowing much of the late month precipitation to soak into the ground and replenish soil moisture. Snowfall for the month will officially go into the record books with a statewide average of 0.5 inches, 6.8 inches less than normal, and third lowest December total among 120 years of records.

Almost a new snowfall record? The final official statewide average snowfall for the month of December 2006 is 0.5 inches. This ranks just behind 0.4 inch totals in 1979 and 2002. However, actual statewide average snowfall for December 2006 is estimated to be 1.6 inches (which would rank 12th lowest for the month). Why the discrepancy? There are 173 'official' snowfall reporting points in Iowa. With the exception of a handful of reporting points in major cities with paid weather observers each station measures snowfall only one time per day. Most of these once daily measurements (148 to be specific) are made during the morning, typically about 7 a.m. Snow or rain falling after 7 a.m. at these sites are recorded the next morning. Most of the snow falling on December 31st came after 7 a.m. (but before midnight). However, these snowfall amounts will officially go into the record books for January 1, 2007. Historically, until the late 1940's, virtually all of the once daily measurements were made during the evening hours, thus more closely mimicking the midnight-to-midnight calendar day. The trend has been increasingly toward morning observations since the late 1940's. Most of the time this practice causes no major statistical problems, the rain or snow does get counted; however, the timing of the December 31 storm results in most of the snow being officially recorded in a different month and year from when it actually fell. The accompanying precipitation and snowfall maps, however, reflect the 'real' storm totals.

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