

IOWA MONTHLY WEATHER SUMMARY

December 2002

General Summary. December temperatures averaged 28.8° or 5.9° above normal while precipitation totaled 0.25 inch or 1.02 inches less than normal. This ranks as the 2nd driest and 24th warmest December among 130 years of state records. The only drier December was in 1876 when 0.24 inches of precipitation fell.

Temperatures. The cold weather pattern of October and November continued into early December with below normal temperatures recorded on 6 of the first 8 days of the month. The first subzero temperatures of the season were recorded late on the 4th in northwest Iowa with readings eventually falling to -10° at Primghar on the morning of the 5th. However, above normal temperatures prevailed on all but one (the 24th) of the remaining 23 days of the month. Temperatures averaged 10 or more degrees above normal from the 12th through the 19th and again from the 27th through the 30th. The month's highest temperatures were reported on the 15th with readings of 65° at Clarinda, Corning and Shenandoah.

Heating Degree Days. Home heating requirements, as estimated by heating degree day totals, averaged 5% greater than last December but were 15% less than normal. Thus far this season (Jul. 1 – Dec. 31) heating requirements are averaging 1% more than normal for this time of year and are 25% greater than at this point last season.

Precipitation. The very dry weather pattern that began in November persisted through all of December as well. No measurable precipitation (0.01 inch or more) has been recorded at either Des Moines or Jefferson since November 11. At Des Moines this 50 day period broke the previous record of 45 consecutive days without measurable precipitation set in the fall of 1952. Des Moines' December precipitation total of a trace was also a record low total for any month since records began in 1878 (previous record 0.03 inch in Oct. 1952 and Nov. 1969). There were numerous other locations in central and southwest Iowa reporting no measurable precipitation this month. Almost all of December's precipitation fell between the evening of the 17th and afternoon of the 18th when thunderstorms rumbled across the state. A few eastern Iowa locations received over an inch of rain with these storms with the greatest amount of 2.02 inches reported at Wapello. Only a handful of southeastern Iowa locations reported above normal precipitation for the month with the 2.02 inch total at Wapello being the greatest. Light snow (two inches or less) fell across the northwest one-quarter on the 4th while extreme eastern Iowa saw some very light accumulations on the 2nd and 20th. The statewide average snowfall was only 0.4 inch which ties with 1979 as the lowest December snowfall total among 116 years of Iowa snow records.

Annual Summary. Temperatures for 2002 averaged 49.1° or 0.8° above normal while precipitation totaled 29.97 inches or 3.14 inches below normal. This ranks as the 32nd warmest and 44th driest year among 130 years of state records. Precipitation varied from 20.31 inches at Sioux Center up to 45.52 inches at Cascade. Annual temperature extremes

varied from a low of -18° at Elkader on March 4 to a high of 104° at Glenwood on July 21.