

IOWA MONTHLY WEATHER SUMMARY – JANUARY 2003

General Summary. January temperatures averaged 18.8° or 1.0° above normal while precipitation totaled 0.41 inches or 0.54 inches less than normal. This ranks as the 63rd coolest and 14th driest January among 131 years of state records.

Temperatures. January got off to a very mild start with temperatures averaging well above normal through the first nine days of the month. The mildest day was on the 8th when afternoon temperatures reached into the 60's across the southern two-thirds of the state with Indianola climbing all the way to 70°. However, 15 of the final 22 days of the month averaged colder than normal. The coldest weather arrived on the 23rd when temperatures of -5° or lower overspread the entire state. Sibley and Primghar reported the month's lowest temperatures with -18° readings. Wind chills dipped to a low of -38° (-53° under the old wind chill formula that was in use prior to last winter) at Mason City on the morning of the 23rd.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged 26% greater than last January but were 3% less than normal. Thus far this heating season (since July 1, 2002), degree day totals are running 25% greater than last season and 3% less than normal.

Precipitation. The very dry weather pattern of recent months persisted through January as all Iowa reporting points recorded less precipitation than usual. The largest snow event thus far this winter occurred on the 15th-16th when 8.0 inches of snow was recorded at Randolph. However, snowfall with this mid-month storm was restricted to the southwest one-half of the state and produced a state average of only 1.5 inches. Snowfall for the month averaged 4.0 inches across Iowa. This amount doubles the season-to-date snowfall amount for Iowa but is still the lowest January total since 1989. The season-to-date snowfall total of 7.9 inches is 11.5 inches less than usual for this point in the winter and is the 8th lowest seasonal total among 116 years of statewide snowfall data. The statewide average precipitation total over the past 3 months (Nov 1, 2002 to Jan 31, 2003) was only 0.87 inch. This is Iowa's lowest precipitation total for any three month period in 130 years of state records (old record 0.94 inch Nov 1976 to Jan 1977). However, this record low total is only 3.45 inches less than the 4.32 inch normal for this time period. Growing season precipitation deficits have been much higher. The largest three-month precipitation shortfall came in the June to August 1886 period when the actual precipitation of 4.64 inches was 8.83 inches less than normal for that time of year (13.47 inches). January's precipitation totals varied from 0.15 inches at Fort Dodge up to 0.70 inches at Knoxville and Oskaloosa. Snowfall totals ranged from 0.9 inches at Conrad to 10.0 inches at Randolph.

New normals in effect. Effective with the January 2003 data the new 1971-2000 normals are being used in all State Climatologist's reports. Normals are routinely updated once every 10 years. The new normals include the 1991-2000 period and drop the 1961-1970 period. Overall, compared to the old 1961-1990 normals, Iowa's precipitation normal increased 0.95 inches to 34.08 inches per year; snowfall normals increased 1.2 inches to 32.4 inches and annual temperatures declined by 0.5°.

Harry 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