

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Bill Northey, Secretary of Agriculture

IOWA MONTHLY WEATHER SUMMARY – FEBRUARY 2017

<u>General Summary</u>. Temperatures averaged 33.8° or 9.8° above normal while precipitation averaged 1.01 inches or just 0.04 inches less than normal. This ranks as the 3^{rd} warmest and 72^{nd} wettest February among 145 years of records. Only 1954 and 1998 brought a warmer February than this year.

Temperatures. Temperatures averaged near seasonal norms for the first nine days of the month. However, warmer than normal weather prevailed for all but one (25th) of the remaining days of February with an exceptionally mild period from the 16th through the 22nd when temperatures averaged 23.7° above normal. A look at the Iowa record books back to 1891 found 62 February dates when temperatures reached 70 degrees or higher somewhere in the state. Prior to this year no single February brought more than four days of 70 degree weather (1930, 1981 and 1996) with the longest streak of 70° weather being three consecutive days in 1996 (24th-25th-26th). However, this February brought eight days of 70° weather with seven of those coming consecutively from the 16th through the 22nd with one more on the last day of the month. Ottumwa recorded the highest temperature of the month with a 79° reading on the 22nd. This reading has been exceeded only three times previously in February in Iowa (82° at Sidney on 2/29/1972 and 80° at Clarinda and Mount Ayr on 2/24/1930). Daily record high temperatures were recorded somewhere in the state every day from the 16th through the 22nd, primarily across the southeast one-half of the state, with Ottumwa setting or tying daily records on each of these seven days. On the other extreme Little Sioux recorded the only subzero temperature of the month with a -3° reading on the morning of the 9th.

<u>Heating Degree Day Totals</u>. Home heating requirement, as estimated by heating degree day totals, averaged 25% less than normal and 19% less than last February. Heating degree day totals thus far this winter season are running 17% less than normal and 5% less than last season through the end of February. A warmer heating season was last recorded in the winter of 2001-2002.

Precipitation. There were only two measureable snow events during the month. The first one on the 8th brought snow to about the southern two-thirds of the state with greatest amounts falling across west central and south central Iowa where Indianola picked up 6.1 inches. The second, and much more intense event, brought snow to all of the state on the 23th-24th. Heaviest snow fell across the northwest where 12.5 inches fell near West Bend and 12.0 inches at Algona. An inch or less of snow fell across east central Iowa and the southern one-quarter of the state. Wind gusts up to 48 mph brought blizzard conditions across about the northwest one-third of the state with this late month storm. Monthly snow totals varied from only 0.3 inches at Manchester to 13.6 inches at Little Sioux. A statewide average of 4.5 inches of snow fell during the month, 2.3 inches less than normal and the lowest February total since 2009. This ranks as the 43rd lowest February snow total among 130 years of records. There were also several rain events during the month with the largest coming on the 20th when rain fell statewide with totals of an inch or more falling over parts of north central and northeast Iowa. Monthly precipitation totals varied from only 0.20 inches at Allerton where this was the driest February since 1970 to 2.78 inches at Nashua or more than 2.5 times their normal amount for February.

Severe Weather. Thunderstorms developed across eastern Iowa during the late afternoon of the 28^{th} and brought one brief tornado in Clinton County and large hail reports from eleven east central and southeast Iowa counties. Only two other February tornadoes have been recorded in Iowa (Feb. 1, 1922 at Monticello and Feb. 23, 1977 at Mason City). Thunderstorms were also fairly widespread on the 6^{th} - 7^{th} , 20^{th} and 23^{rd} - 24^{th} but with only a few very isolated large hail occurrences on the 7^{th} and 20^{th} .

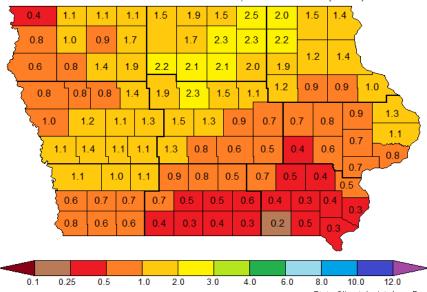
<u>Winter Summary</u>. Temperatures over the three mid-winters months averaged 26.8° or 4.7° above normal while precipitation totaled 4.17 inches or 0.83 inches above normal. This ranks as the 9th warmest and 31st wettest winter among 144 years of records. Six of the top ten warmest winters have come within the past 20 years.

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February 2017 WEATHER BY DISTRICTS PRECIPITATION (inches) TEMPERATURE (F) **HEATING DEGREE DAYS** SNOWFALL February 2017 February 2017 Since Jul., 1, 2016 February 2017 Since Jan.1, 2017 Feb 2017 Average Departure* Average Departure* Average Departure Average Departure DISTRICT Average Departure Average 30.9 +9.6 949 -274 4833 -933 0.97 +0.33 2.15 7.6 Northwest +0.84 +9.5 29.9 976 4838 -992 -272 2.03 4.06 +2.37 North Central +1.17 8.1 31.7 +9.9 928 -280 4617 -981 1.31 Northeast +0.21 3.74 +1.62 1.7 32.9 +9.0 893 -258 4542 -837 1.04 +0.51 West Central +0.22 2.11 8.9 Central 34.1 +10.3 -1016 1.10 +0.08 3.00 2.9 857 -298 4331 +1.06 East Central 35.3 4201 -903 0.82 1.3 +10.1 825 -288 -0.52 2.39 -0.10 Southwest 36.4 +9.5 795 -271 4099 -832 0.78 -0.26 2.10 +0.25 3.1 South Central +10.6 -304 4018 -920 0.44 37.2 771 -0.80 1.87 -0.26 3.1 Southeast 38.3 +10.4 742 -296 3823 -893 0.41 -1.15 1.97 -0.86 2.3 STATE 33.8 +9.8 866 -282 4394 -928 -0.04 2.62 +0.65 4.5 1.01 * Departures are computed from 1981-2010 normals The weather data in this report are based upon information collected by the U. S. Dept. of Commerce, NOAA National Weather Service

State Climatologist, Iowa Dept. of Agriculture & Land Stewardship COUNTY PRECIPITATION ESTIMATES, FEBRUARY 2017 (inches)



State Climatologist, Iowa Dept. of Agriculture & Land Stewardship COUNTY SNOWFALL ESTIMATES, FEBRUARY 2017 (inches)

