DEPARTMENT OF AGRICULTURE

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Bill Northey, Secretary of Agriculture

IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – JANUARY 2018

<u>General Summary</u>. Iowa temperatures averaged 17.7° or 1.7° below normal while precipitation totaled 1.06 inches or 0.14 inches greater than normal. This ranks as the 73^{rd} warmest* and 58^{th} wettest January among 146 years of records.

<u>Temperatures</u>. For the third consecutive month Iowans endured a wide range of temperature extremes as periods of very cold weather were nearly matched by equally warm episodes. Very cold weather prevailed for the first six days of the new year and again from the 12th through the 17th. Daily temperatures averaged more than 32 degrees below normal on New Year's Day while the statewide daily average temperature was above normal on all but one day of the final two weeks of the month. Overall there were ten days averaging more than ten degrees colder than normal and the same number of days averaging more than ten degrees above normal. Temperature extremes varied from lows of -28° at Battle Creek, Sheldon, Sioux City, Washta and Webster City on the morning of the 2nd to highs of 60° at Keosauqua and Ottumwa on the 26th. Wind chill readings dipped to -50° at Estherville on the 1st, the lowest wind chill in the state since a -53° value, also at Estherville, on January 2, 2010.

<u>Heating Degree Day Totals</u>. Home heating requirements, as estimated by heating degree day totals, averaged 14% greater than last January and 3% more than normal. Degree day totals for the winter season thus far have averaged 14% greater than last season at this time but 4% less than normal.

Precipitation. The very dry weather pattern that began in mid-October continued for the most part in January but was interrupted by a major storm system on the 21st-23rd. This event began with rain statewide, including some thunderstorms, and transitioned to a blizzard over far northwest Iowa on the 22nd. Snow totals reached as high as 14.4 inches at Spirit Lake while wind gusts reached 54 mph at Spencer. At Waterloo a January daily record rain amount of 2.01 inches fell on the 22nd. Meanwhile parts of southeast Iowa saw very little precipitation with this storm, such as at Washington where only a trace of rain was recorded. Overall this storm system accounted for nearly 80% of the state's January precipitation. Monthly precipitation amounts were well below normal over the southeast one-quarter of the state and well above normal over portions of northeast Iowa. Monthly precipitation totals varied from 2.49 inches at New Hampton to only 0.24 near Frytown in southwest Johnson County and between Riverside and Ainsworth in northeastern Washington County. Waterloo recorded their wettest January since 1949 while Washington had their driest January since 1986. Other than the major blizzard in far northwest Iowa, snowfall was notably lacking across Iowa during January. There was only one statewide snow event on the 14th-15th when most areas saw one to two inches of snow. January snow totals were under three inches over most of the southeast one-half of the state. Monthly totals varied from only 1.1 inches at Centerville and Sidney to 17.5 inches at Estherville. The statewide average snowfall was 4.4 inches or 3.3 inches below normal. This ranks as the 29th lowest January total among 131 years of records. The seasonto-date snow total through the end of January stands at only 9.8 inches or 9.3 inches below normal. This is the lowest snow total at this point in the season since 2003 and 19th lowest of record.

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^{*}The seeming disparity between the 'below normal' January temperature and slightly above median temperature ranking owes to normals being defined by international convention for the period of 1981 through 2010 while the rankings are based upon the period 1873 to 2018.

January 2018

WEATHER BY DISTRICTS												
	TEMPERA	TURE (F)	HEATING DEGREE DAYS			YS	PRECIPITATION (inches)					
											SNOWFALL	
	January 2018		January 2018		Since Jul., 1, 2017		January 2018		Since Nov.1, 2017		Jan 2018	
DISTRICT	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	
Northwest	15.2	-1.2	1529	+23	4350	-193	0.92	+0.25	1.39	-1.71	10.4	
North Central	14.7	-0.9	1550	+17	4364	-218	1.53	+0.70	2.12	-1.80	6.3	
Northeast	16.7	-0.3	1509	+22	4239	-151	1.47	+0.45	2.50	-2.29	3.4	
West Central	16.8	-2.6	1488	+73	4114	-114	0.93	+0.15	1.42	-2.08	5.7	
Central	17.4	-1.7	1463	+39	4000	-192	1.36	+0.44	2.08	-2.30	3.1	
East Central	19.3	-1.3	1363	-13	3851	-140	0.77	-0.39	2.17	-3.13	2.0	
Southwest	19.2	-3.2	1425	+104	3750	-115	0.73	-0.08	1.51	-2.48	2.8	
South Central	20.0	-2.3	1357	+34	3694	-169	1.06	+0.17	1.89	-2.65	2.6	
Southeast	21.4	-2.1	1323	+36	3594	-84	0.56	-0.71	1.90	-3.76	2.1	
STATE	17.7	-1.7	1451	+36	4017	-157	1.06	+0.14	1.89	-2.42	4.4	
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* Departures are computed from 1981-2010 normals.						I M	Monthly estimates are preliminary and are likely to change.					

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





