



IOWA MONTHLY WEATHER SUMMARY – OCTOBER 2016

General Summary. Iowa temperatures averaged 55.2° or 4.4° above normal while precipitation totaled 2.10 inches or 0.51 inches less than normal. This ranks as the 23rd warmest and 70th driest October among 144 years of records. A warmer October was last recorded in 2007.

Temperatures. Warmer than normal weather was the rule for most of October as only six days (7th-8th, 11th-12th and 20th-21st) during the month averaged cooler than usual. Temperatures averaged ten or more degrees above normal on the 4th, 11th, 15th-17th and 28th-29th while the most abnormally cool day was the 13th at nine degrees below normal. Burlington reported the highest temperature of the month with a 91° reading on the 17th when daily record high temperatures were recorded at numerous locations across the state. Meanwhile, Iowa's first freeze of the season was recorded at Little Sioux on the morning of the 7th. The first hard freeze of the fall occurred over much of the northwest two-thirds of Iowa on the morning of the 13th with the lowest temperature recorded at Battle Creek with 23°. However, by month's end 10% of the state, mostly in far eastern and southeastern Iowa, had yet to see a temperature of 32° or lower. Not since 1998 (32%) has more of the state entered November without a freeze.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged 31% less than normal and 17% less than last year. Thus far this heating season (since July 1) heating requirements are running 21% less than one year ago at this time and 39% less than normal.

Precipitation. A drier than normal weather pattern prevailed across most of Iowa during October. Greater than normal rain totals were mostly confined to about the northern two or three tiers of counties. Northeastern Iowa, which had been plagued with numerous heavy rain events in recent months finally got a break from the wet weather from the last week in September until October 25-26 when widespread rains of two to nearly three inches occurred. October rainfall was less than one-half of normal over much of central and south central Iowa with ISU Agronomy Farm in eastern Boone County reporting the least rain at 0.47 inches. Keokuk, thanks largely to a very isolated downpour of 4.98 inches of rain on the morning of the 5th, recorded the most rain during the month with 6.93 inches (however, the official Keokuk measurement site at the Lock & Dam partially missed this early month downpour and had a monthly rain total of 4.92 inches). River flows at month's end continue at well above seasonal normals along most of Iowa's major rivers with below normal flows confined to smaller watersheds in south central Iowa. While October precipitation was not excessive, it was enough to push the 2016 annual totals to new records at Osage and New Hampton. These two locations join Charles City, Decorah and Cresco which surpassed their previous annual records in September.

Station	2016 Total	Previous Annual Record	Period of Record
Charles City	54.82 inches	51.35 in 1999	133 years
Decorah	54.02 inches	48.74 in 2007	128 years
Cresco	53.51 inches	47.87 in 1951	110 years
New Hampton	53.14 inches	51.88 in 2007	110 years
Osage	48.97 inches	45.72 in 1999	112 years

Harry J. Hillaker, State Climatologist
Iowa Dept. of Agriculture & Land Stewardship
Wallace State Office Bldg.
Des Moines, IA 50319
Telephone: (515) 281-8981
E-mail: Harry.Hillaker@IowaAgriculture.gov

October 2016

WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Oct 2016 Average
	October 2016		October 2016		Since Jul., 1, 2016		October 2016		Since Jan.1, 2016		
	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	
Northwest	52.3	+3.3	388	-116	478	-214	2.76	+0.52	34.13	+6.17	T
North Central	52.6	+3.7	378	-128	459	-244	2.68	+0.31	42.81	+11.61	0.0
Northeast	53.9	+4.3	345	-139	400	-265	2.23	-0.35	42.24	+9.75	0.0
West Central	54.2	+3.7	330	-127	405	-207	1.96	-0.45	32.78	+2.53	0.0
Central	55.6	+4.9	297	-155	348	-256	1.26	-1.36	35.14	+2.25	0.0
East Central	56.7	+5.0	276	-147	312	-246	2.40	-0.49	36.56	+4.05	0.0
Southwest	57.1	+4.7	253	-150	299	-219	1.99	-0.62	38.76	+6.31	0.0
South Central	57.5	+5.2	248	-158	294	-238	1.41	-1.44	29.99	-4.08	0.0
Southeast	58.6	+5.0	230	-139	260	-211	2.22	-0.84	29.11	-5.15	0.0
STATE	55.2	+4.4	309	-140	367	-235	2.10	-0.51	35.76	+2.10	T

* 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, OCTOBER 2016 (inches)

