



IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – NOVEMBER 2017

General Summary. Iowa temperatures averaged 36.2° or 0.4° below normal while precipitation totaled 0.43 inches or 1.62 inches less than normal. This ranks as the 68<sup>th</sup> warmest and 15<sup>th</sup> driest November among 145 years of records. A lower precipitation total has not been recorded for any month of the year since November 2007.

Temperatures. The first one-half of November was unusually cold and cloudy with the highest temperature during this period being only 57° at Keokuk on the 15<sup>th</sup>. Afternoon high temperatures reached only 23° at Estherville and Spirit Lake on the 9<sup>th</sup> while the morning low fell to 6° at Swea City on the 10<sup>th</sup>, this being the lowest temperature recorded in Iowa for so early in the season since 2003. Sidney finally brought Iowa's first 60 degree temperature of the month on the 17<sup>th</sup>. However, temperatures again fell to 6° on the morning of the 22<sup>nd</sup> at Estherville and Little Sioux. Finally, the remainder of the month was unseasonably mild. Sioux City set a daily record high temperature on the 23<sup>rd</sup> of 63° while nearly all of the state set records on the 24<sup>th</sup> with Iowa City Airport the hot spot at 74°.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged the same as normal but 43% more than seen during the exceptionally mild November of 2016. Heating degree totals thus far this heating season are running 11% less than normal, but 35% more than at this time last year when Iowa recorded its warmest fall since 1931.

Precipitation. The dry weather pattern that began in mid-October persisted through all of November. Holstein and Washta in northwest Iowa reported no measurable precipitation (less than 0.01 inches) during the month, tying November record lows for these locations last seen in 2007. Lost Nation in Clinton County reported the most rain with 1.51 inches, nearly an inch less than normal for November. Most of the month's precipitation fell on the 11<sup>th</sup>-12<sup>th</sup> when up to 0.65 inches fell at Muscatine and on the 17<sup>th</sup>-18<sup>th</sup> when Keokuk picked up the most rain with 0.83 inches. The dry weather was great for finishing up the fall harvest. However, combined with a very dry growing season across southeastern portions of the state, this resulted in subsoil moisture levels being rated 72% short to very short in the south central district with 61% in the same categories across the southeast district according to the final USDA/NASS crop report of the season. The winter months on average are by far the driest months of the year thus prospects for improving soil moisture levels will be minimal between the typical freeze-up of the ground during the second week of December and the usual thaw of soils in March. There were three dates (1<sup>st</sup>, 7<sup>th</sup> and 12<sup>th</sup>) when light snow briefly accumulated over very small areas of the state. Maquoketa reported the greatest accumulation with just 0.3 inches. The statewide average snowfall was a trace, tying with seven other years for the lowest November snowfall total (the others were in 1912, 1914, 1939, 1960, 1963, 2009 and 2012) among 131 years of records.

Fall Summary. Temperatures over the three autumn months averaged 52.1° or 1.9° above normal while precipitation totaled 8.11 inches or 0.08 inches above normal. This ranks as the 23<sup>rd</sup> warmest and 58<sup>th</sup> wettest fall among 145 years of records.

Outlook. The first four days of December are expected to average much warmer than normal, however, lower than normal temperatures are expected to dominate the month as a whole according to the National Weather Service outlook issued on November 30. Less than normal precipitation is slightly favored for the month, continuing the pattern of the past month and one-half.

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# November 2017

## WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Nov 2017 Average
	November 2017 Average	Departure*	November 2017 Average	Departure*	Since Jul., 1, 2017 Average	Departure*	November 2017 Average	Departure*	Since Jan.1, 2017 Average	Departure*	
Northwest	34.1	+0.5	913	-28	1467	-166	0.12	-1.41	29.67	+0.18	T
North Central	33.6	-0.2	928	-8	1456	-183	0.28	-1.57	33.92	+0.87	T
Northeast	34.6	-0.9	909	+24	1406	-144	0.63	-1.65	37.40	+2.63	T
West Central	36.1	+0.3	850	-27	1341	-148	0.15	-1.48	34.67	+2.79	T
Central	36.3	-0.2	851	-4	1275	-184	0.39	-1.75	31.26	-3.77	T
East Central	36.8	-1.4	845	+42	1255	-106	0.80	-1.61	32.92	-2.01	T
Southwest	38.6	+0.2	786	-13	1158	-159	0.39	-1.55	35.85	+1.45	T
South Central	38.2	-0.5	799	+10	1169	-152	0.39	-1.87	29.82	-6.52	T
Southeast	39.0	-1.2	759	+16	1081	-133	0.82	-1.75	28.25	-8.58	0.0
STATE	36.2	-0.4	853	0	1300	-155	0.43	-1.62	32.67	-1.26	T

\* Departures are computed from 1981-2010 normals.

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

### PRELIMINARY COUNTY PRECIPITATION ESTIMATES, NOVEMBER 2017 (inches)

