



IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Bill Northey, Secretary of Agriculture

PRELIMINARY IOWA MONTHLY WEATHER SUMMARY – NOVEMBER 2015

General Summary. Temperatures averaged 41.9° or 5.3° above normal while precipitation totaled 4.08 inches or 2.03 inches above normal. This ranks as the 10th warmest and 7th wettest November among 143 years of Iowa records. A warmer November was last recorded in 2009 and a wetter one in 1992.

Temperatures. Temperatures were above normal during all of the first 19 days of the month, averaging 8.5 degrees above normal for the period. Much more seasonal temperatures prevailed for the remainder of the month with readings averaging 0.7 degrees below normal for the final 11 days of November. Daytime highs reached into the mid-seventies somewhere in the state on each of the first five days of the month with Des Moines, Glenwood and Shenandoah recording the highest temperatures of the month with 79° readings on the 2nd. At the Des Moines Airport the first freeze (32°) of the season was finally recorded on the morning of the 13th. This was the latest 'first' freeze among 138 years of records at Des Moines (old record November 11, 1882). However, the Des Moines Airport freeze date was not representative of the state as a whole as only two other official measurement points recorded their first freeze of the 2015 fall season in November (the others were NWS-Johnston on Nov. 7 and Keokuk Lock & Dam on Nov.9). The statewide record for latest first freeze was set in Keokuk on November 24, 1944. Very cold weather did arrive following the major snowstorm of the 20th with Spencer Airport recording a low of -4° on the 21st while Waterloo Airport and Stanley recorded lows of -5° on the 22nd.

Heating Degree Day Totals. Home heating requirements, as estimated by heating degree day totals, averaged 36% less than last November (which was the 4th coldest November on record) and 20% less than normal. Heating degree day totals so far this heating season are running 30% less than last year at this time and 21% less than normal.

Precipitation. November began with relatively dry weather until Veteran's Day when the first of a parade of five storm systems brought widespread precipitation to Iowa. The Veteran's Day event saw thunderstorms develop statewide with unseasonably heavy rain over far northwest Iowa and high winds and tornadoes over southern Iowa. The tail-end of this first storm system also brought the state's first accumulating snow to portions of west central Iowa. Additional storm systems came through at about four day intervals on the 16th-18th, 20th-21st, 25th-27th and 29th-30th. The most widespread rain came with storm #2 on the 16th-18th with a statewide average of 1.32 inches of rain. The third storm was noteworthy owing to the heavy snow that fell across much of the state. More than ten inches of snow fell across a wide area of northern Iowa with 15 inches reported at Rock Rapids and 16 inches near Kesley. This event brought Iowa's most widespread heavy snowfall for so early in the winter season since November 17-18, 1957. The fourth storm system brought light snow to northwest Iowa and 1.5 to 2.5 inches of rain to the southeast one-third of the state. Finally, the last storm brought rain heavy snow to northwest Iowa with 9.5 inches reported at Hawarden and one-half to an inch of rain elsewhere. Much of the snow on November 30 fell after the final measurements for the month (the daily measurements are made at 7 or 8 a.m. at most locations), thus will be included in the December totals. Monthly precipitation totals were above normal at all reporting points and varied from 2.52 inches at Glenwood to 7.56 inches at Eldridge. Record precipitation totals for November were set at several locations:

Table with 4 columns: Station, Nov 2015, Old November Record, and Period of Record. Lists precipitation data for various Iowa locations.

Monthly snow totals varied from only trace amounts at several far southwest Iowa locations to 21.0 inches at Sioux Center. The statewide average snowfall was 6.1 inches or 3.4 inches above normal. This is the 13th highest November snow total among 129 years of record and the highest for the month since 1991.

Severe Weather. The National Weather Service preliminarily has reported a total of 13 tornadoes across southern Iowa on Veteran's Day with damaging winds reported from 41 counties in central and southern Iowa. The tornado total slightly exceeds the previous November record of 12 set on November 12, 2005.

Fall Summary. Temperatures for the three fall months of September, October and November averaged 54.5° or 4.3° above normal while precipitation totaled 9.90 inches or 1.87 inches above normal. This ranks as the 5th warmest and 24th wettest fall among 143 years of records. A warmer fall was last recorded in 1963 and a wetter one in 1992.

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

Henry A. Wallace Building • Des Moines, Iowa 50319 • 515-281-5321 • agri@iowaagriculture.gov
The Iowa Department of Agriculture and Land Stewardship is an equal opportunity employer and provider

November 2015

WEATHER BY DISTRICTS

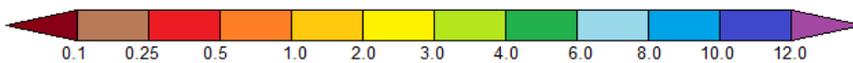
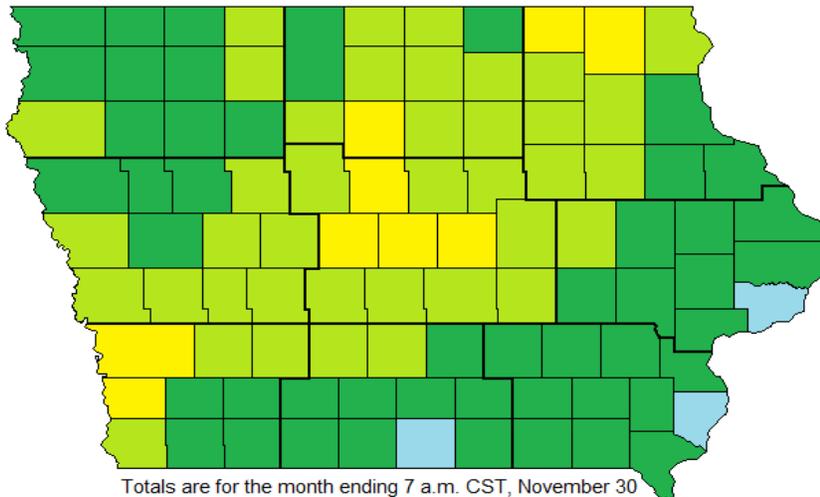
DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Nov 2015 Average
	November 2015 Average	Departure*	November 2015 Average	Departure*	Since Jan., 1, 2015 Average	Departure*	November 2015 Average	Departure*	Since Jan.1, 2015 Average	Departure*	
Northwest	39.1	+5.5	775	-166	1279	-354	4.54	+3.01	32.41	+2.92	11.4
North Central	39.3	+5.5	750	-186	1302	-337	3.43	+1.58	35.52	+2.47	8.4
Northeast	40.6	+5.1	731	-154	1267	-283	3.59	+1.31	31.97	-2.82	8.2
West Central	41.3	+5.5	713	-164	1179	-310	3.90	+2.27	40.68	+8.79	5.0
Central	42.0	+5.5	677	-178	1151	-308	3.17	+1.03	40.08	+5.04	5.9
East Central	42.3	+4.1	665	-138	1090	-271	4.88	+2.47	38.81	+3.88	6.5
Southwest	44.3	+5.9	624	-175	1015	-302	3.73	+1.79	44.13	+9.73	0.9
South Central	44.6	+5.9	609	-180	949	-372	4.67	+2.41	43.57	+7.24	2.9
Southeast	45.0	+4.8	579	-164	889	-325	5.11	+2.54	39.25	+2.42	3.5
STATE	41.9	+5.3	686	-167	1150	-305	4.08	+2.03	38.27	+4.32	6.1

* 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 2015 (inches)



State Climatologist, Iowa Dept. of Agriculture & Land Stewardship
 PRELIMINARY COUNTY SNOWFALL ESTIMATES, NOVEMBER 2015 (inches)

