



Bill Northey, Secretary of Agriculture

IOWA MONTHLY WEATHER SUMMARY – DECEMBER 2015

General Summary. Temperatures averaged 32.9° or 10.0° above normal while precipitation totaled 4.90 inches or 3.56 inches above normal. This ranks as the wettest and 7th warmest December among 143 years of records. The previous wettest December was recorded in 1982 with 3.43 inches. The last warmer December was recorded in 1965.

Temperatures. Unseasonably warm weather was the rule through nearly all of December. Only one day (the 31st) brought a statewide average temperature that was below normal. This warm pattern began on August 31 with only 25 of the last 123 days of 2015 averaging below normal. The final one-third of the year averaged 5.6° above normal. Only 1931 was warmer for this late year period (when September, November and December all ranked in the top 5 warmest for their respective months). Temperature extremes for the month ranged from highs of 64° at Donnellson and Keokuk on the 12th, Bloomfield and Keosauqua on the 13th and Keosauqua again on the 23rd while Sheldon, Sioux Center and Spencer recorded the lowest temperatures with -6° readings on the morning of the 31st. There were five days (10th, 12th, 13th, 14th and 23rd) during the month when temperatures exceeded 60° somewhere in the state while only two days (3rd and 31st) brought sub-zero readings.

Heating Degree Days. Home heating requirements, as estimated by heating degree day totals, averaged 24% less than normal and 13% less than last December. Degree day totals so far this season are running 23% less than last year and 22% below normal.

Precipitation. A storm system brought heavy snow to far northwest Iowa on the last day of November with light rain and snow persisting over much of Iowa into the first two days of December. There was a welcome mostly dry period from the 3rd through the 11th. However, an unseasonably warm and humid air mass brought widespread heavy rainfall from the evening of the 12th through the morning of the 14th. An amazing statewide average of 2.82 inches of rain fell during this event. Only three winter months (December 1982, February 1881 and February 1915) have brought more precipitation to Iowa than this one storm system. Grundy Center recorded 5.98 inches of rain during this storm which easily exceeded their December monthly record precipitation total of 3.74 inches. Another storm system brought widespread rain on the 23rd with some central and northeast Iowa locations receiving over an inch of rain. The extended period of unseasonably warm and wet weather appeared to make a White Christmas impossible. However, a compact Christmas Eve storm system brought snow from southwest, through central and into northeast Iowa. Heavy snow fell from Council Bluffs to Ames with 14 inches reported at Persia in Harrison County. Finally, another large storm system brought heavy winter precipitation to much of Iowa on the 28th into the morning of the 29th. Heavy snow fell across the northern one-third of Iowa where 6 to 10 inch amounts were common. Meanwhile copious amounts of sleet and freezing rain fell over much of east central and southeast Iowa. Monthly precipitation totals (rain plus the liquid equivalent of snow and sleet) varied from 1.72 inches at Rock Rapids to 8.20 inches at Grundy Center. Grundy Center's total has been exceeded only once in Iowa during December when Keokuk recorded 8.56 inches in 1873. Dozens of cities set records for greatest December precipitation totals with a partial list below. Cherokee, Shenandoah and Storm Lake set record maximum totals for both November and December. Only two locations, Rock Rapids and Fort Madison failed to record at least double their normal December precipitation total.

Table with 4 columns: City, Dec. 2015 (inches), Previous Dec. Record, Period of Record. Lists cities like Grundy Center, Denison, Glenwood, etc., with their precipitation records.

December snow totals varied from only 0.4 inches at Fort Madison to 24.9 inches at Rock Rapids. The statewide average snowfall was 9.8 inches or 1.5 inches above normal and ranks as the 29th highest December total among 129 years of records.

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# December 2015

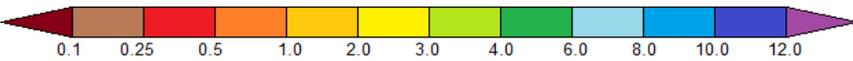
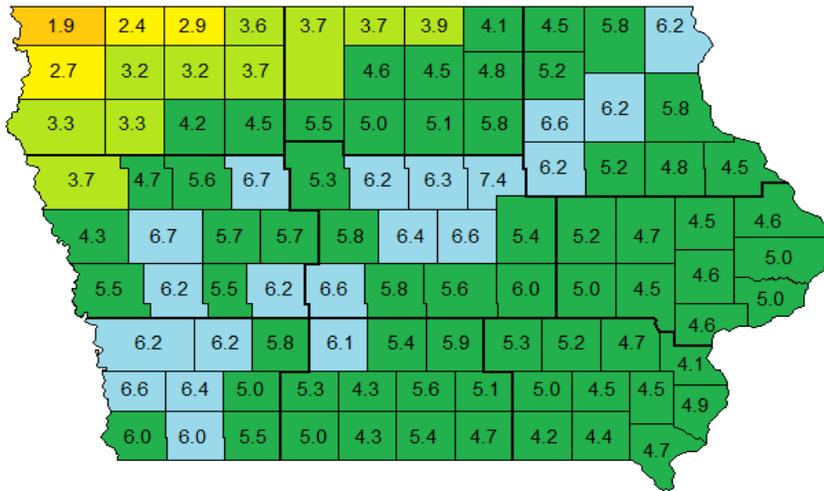
## WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)				SNOWFALL Dec 2015 Average
	December 2015		December 2015		Since Jan., 1, 2015		December 2015		Since Jan. 1, 2015		
	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	
Northwest	27.4	+7.7	1160	-244	2446	-591	2.96	+2.06	36.08	+5.69	16.8
North Central	30.0	+10.5	1079	-331	2390	-659	4.31	+3.07	39.74	+5.45	11.8
Northeast	33.7	+12.4	963	-390	2223	-680	5.34	+3.85	37.49	+1.23	10.3
West Central	30.3	+8.0	1070	-254	2253	-560	5.27	+4.18	46.29	+13.32	14.2
Central	33.2	+10.4	980	-329	2141	-627	5.90	+4.58	46.29	+9.94	9.7
East Central	36.4	+11.9	878	-376	1968	-647	4.71	+2.97	44.14	+7.48	5.1
Southwest	33.2	+7.8	979	-248	1982	-562	6.19	+4.95	50.79	+15.16	7.4
South Central	35.3	+9.6	914	-305	1948	-592	5.02	+3.64	48.15	+10.43	6.6
Southeast	38.2	+11.2	826	-351	1813	-578	4.64	+2.83	43.93	+5.29	3.1
STATE	32.9	+10.0	990	-314	2146	-613	4.91	+3.57	43.43	+8.16	9.8

\* 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, DECEMBER 2015 (inches)



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

