



## IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – JUNE 2017

**General Summary.** Iowa temperatures averaged 71.2° or 1.5° above normal while precipitation totaled 3.53 inches or 1.49 inches less than normal. This ranks as the 23<sup>rd</sup> warmest and 37<sup>th</sup> driest June among 145 years of records. A lower June rain total was last recorded in 2012 while June of 2016 averaged 1.9° warmer.

**Temperatures.** An unseasonably cool period prevailing for the two weeks from May 18<sup>th</sup> to June 1<sup>st</sup> came to an abrupt end on June 2<sup>nd</sup> when a string of sixteen consecutive warmer than normal days began. Temperatures averaged more than ten degrees above normal on the 3<sup>rd</sup> - 4<sup>th</sup> and 10<sup>th</sup> - 13<sup>th</sup>. Daytime highs in the nineties were recorded somewhere in Iowa every day from the 2<sup>nd</sup> through the 16<sup>th</sup>. A welcome respite from the hot weather began late on the 17<sup>th</sup> with only one day (22<sup>nd</sup>) bringing widespread hot weather for the remainder of the month. Temperature extremes varied from highs of 97° at Little Sioux on the 13<sup>th</sup>, Lamoni on the 15<sup>th</sup> and Little Sioux on the 21<sup>st</sup> to lows of 40° at Cresco, Elkader and Grinnell on the 1<sup>st</sup> and again at Battle Creek and Grinnell on the morning of the 27<sup>th</sup>.

**Cooling Degree Day Totals.** Home air conditioning requirements, as estimated by cooling degree day totals, averaged 23% greater than normal but 17% less than seen during the very hot June of 2016. Cooling degree day totals are running 13% more than normal so far in 2017, but 19% less than last year at this time.

**Precipitation.** A very dry weather pattern prevailed from May 28 through June 12 with a statewide average of only 0.09 inches of rain falling compared to a normal for the period of 2.47 inches. Rain fell almost daily somewhere in the state for the remainder of June but rain amounts and areal coverage were frequently limited. Monthly rain totals were below normal over the southwest two-thirds of Iowa with the exception of the far southwest corner. Lowest totals were over the far southeast where Donnellson (0.87 inches), Fairfield (0.88) and Ottumwa Airport (0.97) recorded under an inch of rain in what is usually the most reliable month of the year for rainfall. At Ottumwa this was the third driest June among 130 years of records (1911: 0.24"; 1992: 0.78"; 1913: 0.90"). At Fairfield it is the fifth lowest June total among 137 years of records (lowest June total since 1963). Finally, at Donnellson this ranks as the third lowest June total among 76 years of record, with just last June being drier with 0.53 inches. On the other extreme very wet conditions prevailed over portions of north central and northeast Iowa. New Hampton was the wet spot with 9.79 inches of rain where there were four dates during the second one-half of the month with 1.5 inches or more of rain.

**Severe Weather.** Severe thunderstorms were reported somewhere in the state on twelve dates during the month with the bulk of the activity coming on the 15<sup>th</sup> (23 counties impacted), 28<sup>th</sup> (19 counties) and 29<sup>th</sup> (20 counties). The National Weather Service (NWS) confirmed at least 13 tornadoes on the afternoon and evening of the 28<sup>th</sup> with greatest damage reported at Prairieburg in Linn County.

**Outlook.** Drought conditions have been developing over most of the southwestern two-thirds of Iowa with the exception of the far southwest corner of the state. This pattern is nearly identical to what was seen last year at this time. In comparing this year with 2016 one positive is that June 2017, though warmer than usual, was not nearly as warm as June of last year. On the negative side, crop development is not quite as far along as last year, particularly in south central Iowa, where planting was later than in 2016, thus resulting in a larger percentage of crops (particularly soybeans) that have had less time to develop an extensive root system to reach moisture available deeper in the soil. Additionally, soil moisture levels coming into the 2017 growing season were lower in central, south central and especially southeast Iowa compared to the beginning of the 2016 season. Overall corn and pasture conditions as of early July, according to the USDA/NASS weekly reports are very similar to this point last year with the soybean condition slightly worse than a year ago. In 2017 temperatures moderated in early July and rain became much more frequent and substantial by the second week of July. However, the current NWS forecasts favor warmer and drier than usual weather for at least the next two weeks.

# June 2017

## WEATHER BY DISTRICTS

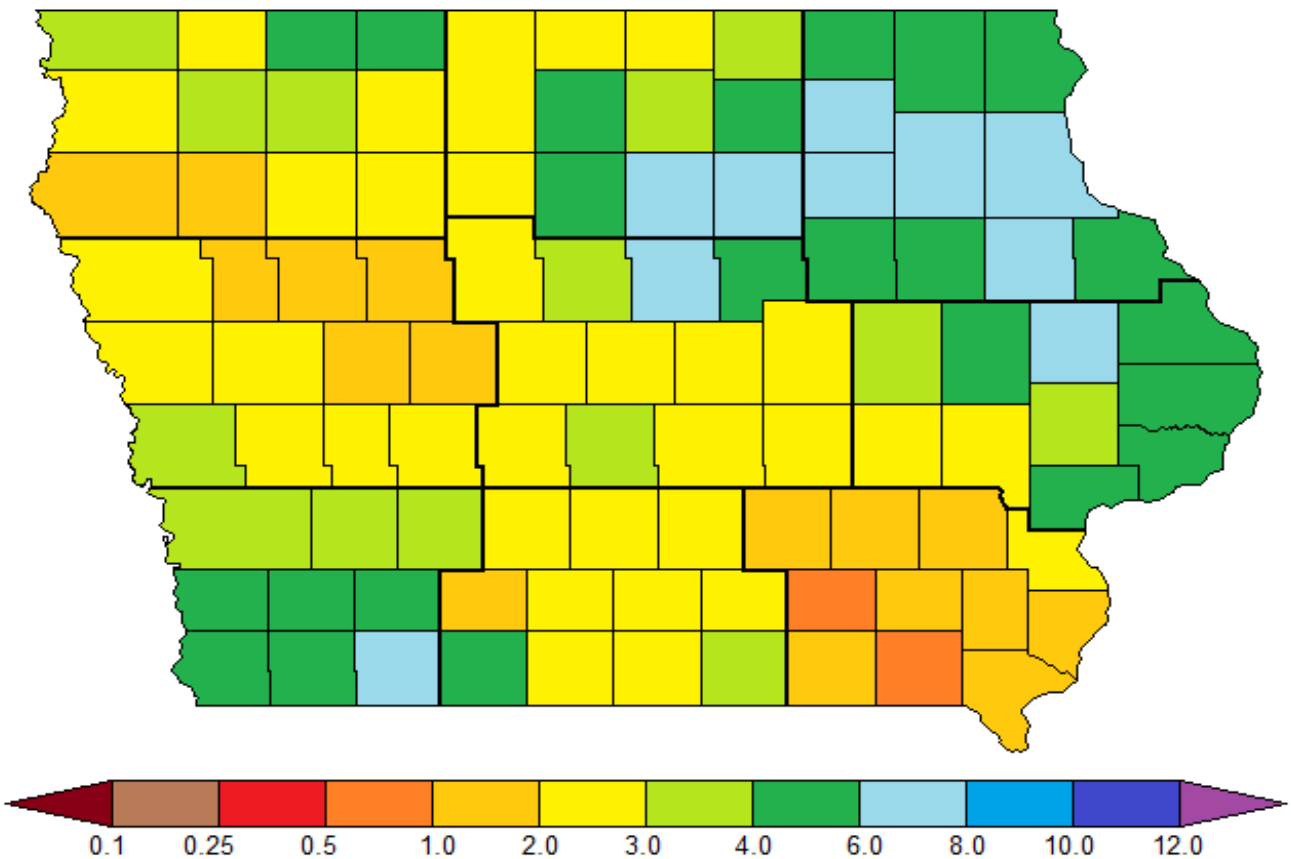
DISTRICT	TEMPERATURE (F)		COOLING DEGREE DAYS				PRECIPITATION (inches)			
	June 2017 Average	Departure*	June 2017 Average	Departure*	Since Jan., 1, 2017 Average	Departure*	June 2017 Average	Departure*	Since Jan.1, 2017 Average	Departure*
Northwest	70.6	+1.8	201	+46	232	+31	3.11	-1.62	15.01	+0.15
North Central	69.5	+1.2	176	+34	203	+23	4.04	-1.15	18.78	+1.89
Northeast	69.8	+1.3	171	+27	198	+17	6.15	+1.05	20.40	+3.13
West Central	71.7	+1.8	216	+41	252	+23	2.32	-2.59	15.95	-0.58
Central	71.5	+1.9	224	+55	267	+48	2.94	-2.42	16.98	-0.81
East Central	71.5	+1.3	226	+44	267	+28	4.39	-0.56	18.39	+0.94
Southwest	72.3	+1.3	231	+32	291	+28	4.43	-0.70	18.41	+0.52
South Central	71.8	+1.6	222	+42	276	+43	3.24	-1.70	17.59	-0.54
Southeast	72.6	+1.1	246	+34	307	+23	1.27	-3.55	14.57	-4.12
STATE	71.2	+1.5	211	+39	252	+29	3.53	-1.49	17.30	+0.10

\* 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 AVERAGES, JUNE 2017 (inches)**



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