



## IOWA ANNUAL WEATHER SUMMARY – 2017

**General Summary.** 2017 temperatures averaged 49.9° or 1.8° above normal while precipitation totaled 33.10 inches or 2.17 inches less than normal. This ranks as the 9<sup>th</sup> warmest and 61<sup>st</sup> wettest year among 145 years of records. A warmer year was recorded just last year while a drier one in 2012. Snowfall averaged 18.9 inches or 13.3 inches less than normal. This was the least snowy calendar year since 2006 and ranks 11<sup>th</sup> least among 130 years of records.

**Temperatures.** Above normal temperatures were persistent through 2017 with only two calendar months (May and August) falling below the historical median. The most unusual temperatures arrived in February when readings reached seventy degrees or higher somewhere in the state on eight days during the month, double the previous maximum frequency of such temperatures for February. Temperatures averaged an amazing 18.3 degrees above normal for the two weeks ending February 23<sup>rd</sup>. The most noteworthy streak of unseasonably cool weather came from July 28 through September 8 when only six days averaged warmer than normal (and just barely at that) over this 43 day period. This cool spell helped crops cope with a rather dry summer with surprisingly high yields in most areas. Despite this extended late summer cool spell the year averaged 19 days with daily temperatures above 90 degrees, three more days than normal and the highest total since 2013. Subzero cold occurred an average of just 10 days, eight less than normal and the smallest annual total since 2012. Annual temperature extremes varied from highs of 101° at Ottumwa on July 20 and at Des Moines the next day to a low of -24° recorded at midnight on New Year's Eve at Sioux City. Overall, warmer than normal days outnumbered cooler ones by a count of 220 to 145.

**Precipitation.** Precipitation totals were generally near to slightly above normal for the first five months of the year. Hefty April rainfall resulted in considerable planting delays in some areas, particularly in south central Iowa. Much drier weather began in late May and persisted across most of Iowa through mid-August. Drought conditions began to appear in south central Iowa in mid-June, spread to west central and southeast Iowa in early July and reached its maximum extent in mid-August when 45% of the state (a diagonal area from northwest, to central, to southeast Iowa) was classified as in drought. Portions of 13 south central and southeast Iowa counties were classified as 'extreme' drought in August and/or September. Rain became much more frequent over western Iowa in mid-August with short-term dryness becoming most apparent in far eastern Iowa by September. The first two weeks of October were very wet across most of the state and greatly slowed early harvest progress. However, a very dry weather pattern prevailed statewide from mid-October through the end of the year with only about one-third of normal precipitation falling in this period. Annual precipitation totals were more than ten inches below normal over much of south central and southeast Iowa, covering much the same area that was unusually dry in 2016. Annual precipitation totals varied 47.21 inches at Fayette (9.48 inches above normal) to only 24.33 inches at Oskaloosa (13.89 inches less than normal and their lowest annual total since 1988). Above normal annual precipitation totals were mostly confined to west central and northeast Iowa. There were some very heavy rains in 2017 with the largest event coming



# IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Mike Naig, Secretary of Agriculture  
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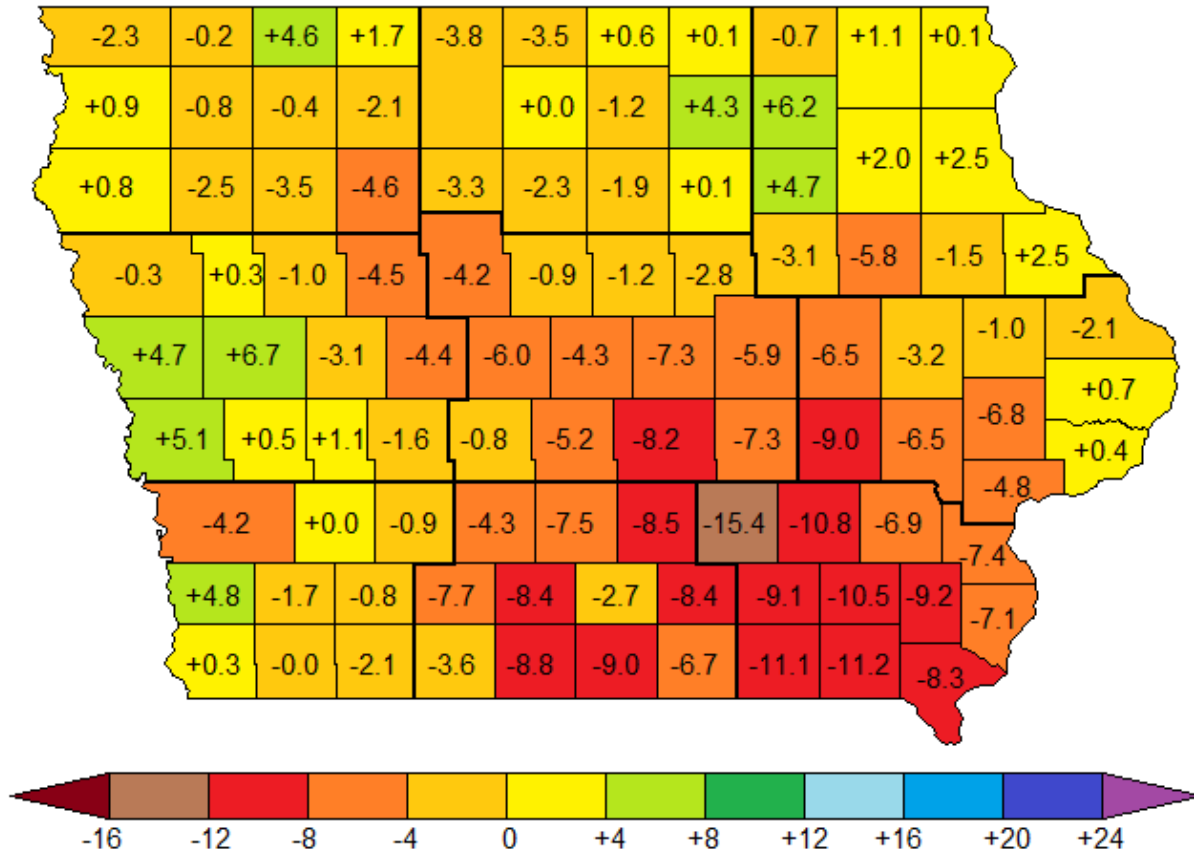
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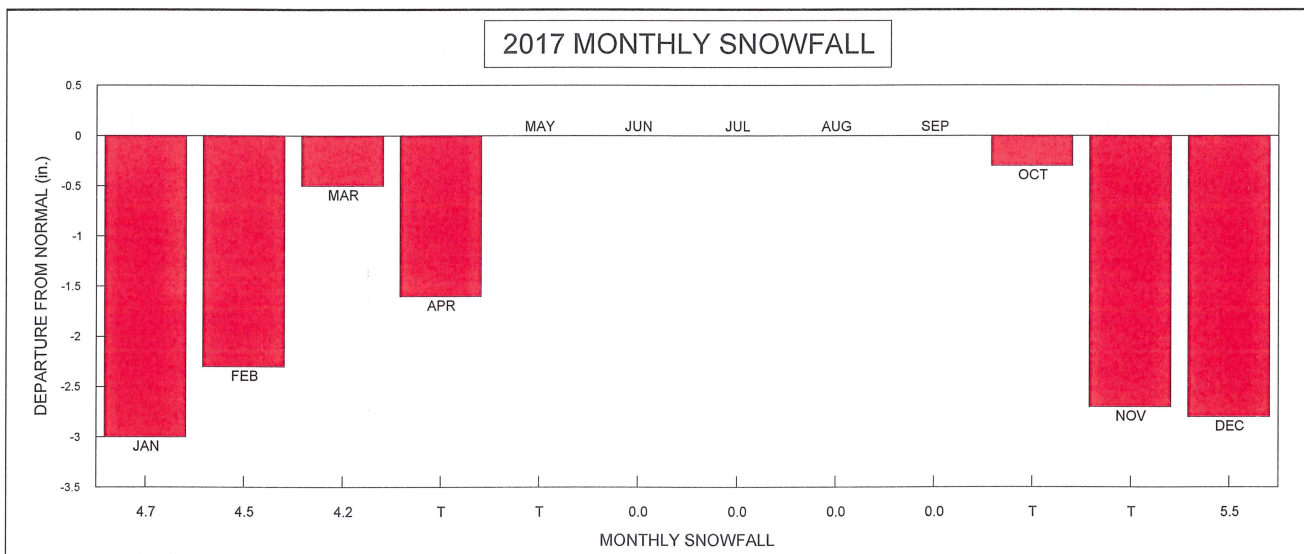
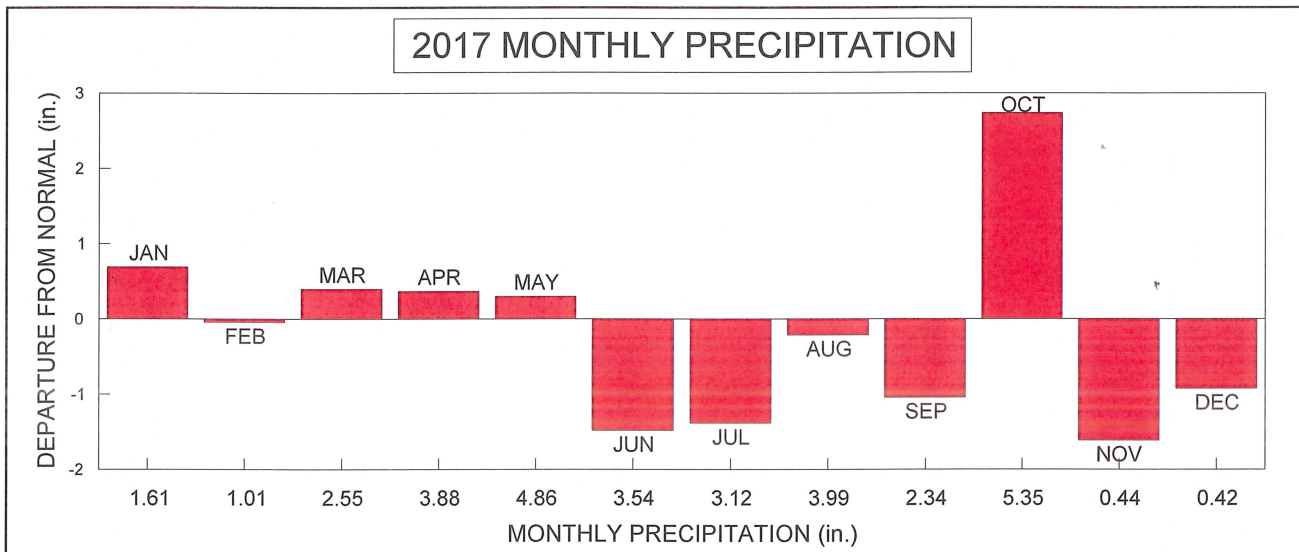
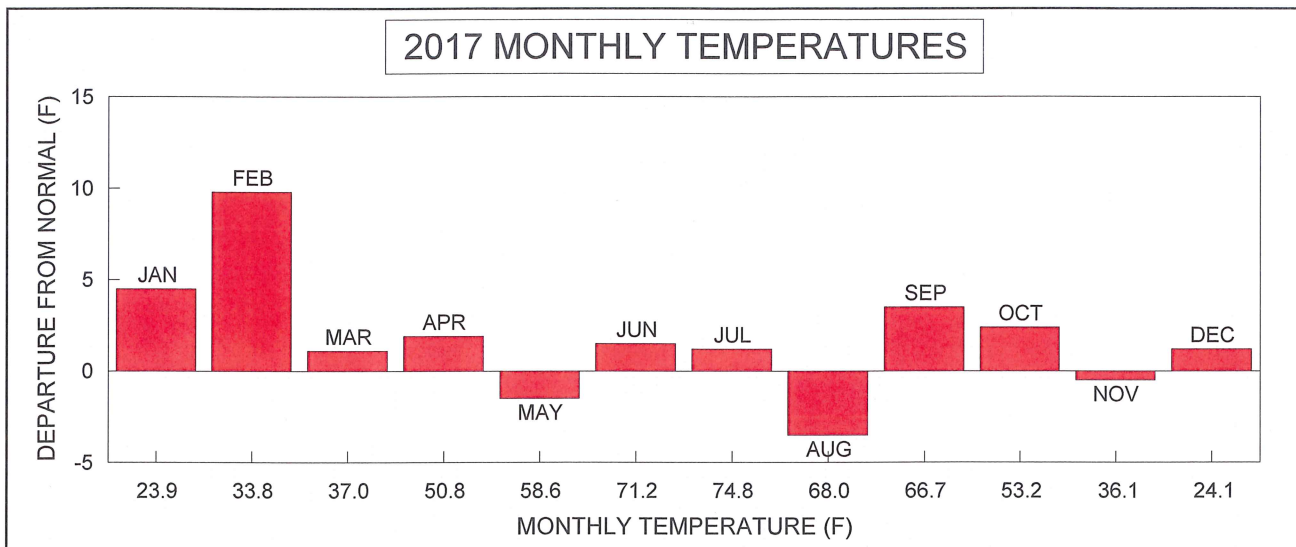
on the night of July 21 when 9.52 inches of rain (nearly six inches of which fell in just two hours) fell overnight at Ionia in Chickasaw County.

Severe Weather. Severe thunderstorm activity got off to a very early start with one short-lived tornado in Clinton County on the evening of February 28. A March record of 18 tornadoes touched down on the evening of March 6 with greatest damage resulting from an EF-2 tornado at Seymour in Wayne County. However, no strong tornadoes (EF-2 or stronger) occurred again in the state until June 28. Overall the National Weather Service reports a preliminary annual tornado count of 55 storms, slightly more than the recent annual average of 47.

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](mailto:Harry.Hillaker@IowaAgriculture.gov)

State Climatologist, Iowa Dept. of Agriculture & Land Stewardship  
PRECIPITATION TOTALS, DEPARTURE FROM NORMAL, 2017 (inches)





IOWA PRELIMINARY ANNUAL WEATHER SUMMARY - 2017

2017 STATEWIDE MONTHLY TEMPERATURE EXTREMES							STATEWIDE MONTHLY RANK*	
MONTH	MAX TEMP	DAY	LOCATION	MIN TEMP	DAY	LOCATION	TEMPERATURE	PRECIPITATION
JANUARY	58	30th	Shenandoah	-14	6th	Cresco	28th warmest	23rd wettest
				-14	6th	Northwood		
				-14	6th	Postville		
				-14	8th	Cresco		
FEBRUARY	79	22nd	Ottumwa Arpt	-3	9th	Little Sioux	3rd warmest	72nd wettest
MARCH	84	19th	Sidney	-9	15th	Estherville	37th warmest	40th wettest
				-9	15th	Forest City		
				-9	15th	Spencer Arpt		
				-9	15th	Stanley		
APRIL	84	19th	Lamoni	20	7th	Battle Creek	23rd warmest	35th wettest
MAY	94	8th	Little Sioux	27	2nd	Cherokee	69th coolest	44th wettest
	94	15th	Shenandoah					
JUNE	97	13th	Little Sioux	40	1st	Cresco	23rd warmest	38th driest
	97	15th	Lamoni	40	1st	Elkader		
	97	21st	Little Sioux	40	1st	Grinnell		
				40	27th	Battle Creek		
JULY	101	20th	Ottumwa Arpt	46	1st	Sheldon	44th warmest	51st driest
	101	21st	Des Moines AP					
AUGUST	93	2nd	Donnellson	44	12th	Chariton	15th coolest	61st wettest
	93	10th	Keosauqua	44	23rd	Stanley		
SEPTEMBER	95	23rd	Iowa City AP	35	7th	Stanley	15th warmest	45th driest
				35	30th	Cresco		
OCTOBER	88	2nd	Burlington	14	28th	Little Sioux	34th warmest	4th wettest
	88	2nd	Indianola	14	31st	Sheldon		
	88	2nd	Iowa City AP	14	31st	Spencer Arpt		
	88	2nd	Oskaloosa					
NOVEMBER	74	24th	Iowa City AP	6	22nd	Estherville	68th warmest	15th driest
				6	22nd	Little Sioux		
DECEMBER	70	4th	Indianola	-24	31st	Sioux City AP	61st warmest	12th driest
	70	4th	Lamoni					

\*Rankings based upon 145 years of data.

State Climatologist, Iowa Dept. of Agriculture & Land Stewardship  
**COUNTY PRECIPITATION TOTALS, 2017 (inches)**

