IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

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IOWA PRELIMINARY MONTHLY WEATHER SUMMARY – MAY 2018

General Summary: After the coldest April in state history, Iowa experienced the third warmest May on record with an average temperature of 66.9°F, almost 7°F above normal. Average rainfall across the state was 4.67 inches, about 0.11 inches below normal, making it the 43rd wettest on record.

Temperatures: Above average temperatures blanketed the state during the first week of May. The state's southern third experienced temperatures between 6°F to 12°F above normal. Much of Iowa enjoyed highs in the 80s late in the week, which allowed soil temperatures to rise into the upper 50s and lower 60s by the 6th. The southern two-thirds saw temperatures anywhere from 4°F to 8°F above normal during the second week of May; the northern third of the state recorded near normal temperatures. Cresco had the lowest temperature of the week at 38°F on the 12th. Nearly all station across the state reached the 80s, with Clarinda and Shenandoah hitting 87 °F on the 9th. Towards the middle of the month, the southern border experienced highs in the upper 70s and 80s, which were above average. The highest reading of the week was 88°F, in Keokuk (15th) and De Soto (17th). Northern Iowa had multiple location with a low temperature of 45 °F. The end of the month had temperatures well above normal across much of the state. With the exception of the northeastern corner of Iowa, most of the state was covered in the 90s. Minimum temperatures gradually climbed from the 40s to the 60s by week's end. Sibley recorded the low temperature of the week, 47°F on the 21st. The last week of May capped off the month with temperatures 10°F -14°F above normal. Hawarden, Perry, and Pocahontas recorded the highest temperature of 102°F on the 28th. The 29th through 31st saw hot conditions across much of the state, with average high temperatures up to 14°F degrees above normal.

Heating Degree Days: Home heating requirements, as estimated by heating degree day totals, averaged 59% less than normal. Heating degree day totals so far this season (since July 1st, 2017) are running 20% more than last season at this time and 62% less compared to last May.

Precipitation: The month started off with above normal rainfall as thunderstorms made their way across Iowa between the 1st and the 3rd. More than 200% of the normal precipitation fell on parts of the state, with only the southeast corner having lower than average rainfall. Both the daily (4.42 inches) and weekly (6.46 inches) maximum precipitation fell at Waukon, in Allamakee County. Measureable precipitation was recorded for five days in the western extent of Iowa and two days in the southeast. The following week, the northern third of the state saw rainfall amounts two to three times the normal. Central Iowa had less than a quarter of expected rainfall, while the southern part of the state, near the border with Missouri saw near or below normal precipitation. Lake Park recorded 3.13 inches of rain, which was the highest total for the week. Northern Iowa continued to be wet, as more than a dozen stations recorded 0.1 inches of rain over 4-5 days. During the middle of the month, below normal conditions returned to the state, with northern, western and central Iowa receiving less than 25% of normal precipitation. East and east central Iowa reported above-average conditions, with Maquoketa receiving 3.61 inches of rain. The end of the month found much of the state with below normal precipitation, especially in the southwest corner. Northeastern Iowa recorded above-average precipitation, with

Estherville receiving 2.67 inches of rain, 2.39 inches of this total on the 23rd. Iowa saw thunderstorm activity on three days during the week, with widespread measurable precipitation totals on Memorial Day (28th), the 29th, and 30th. The northeast corner of Iowa received between 0.75 and 1.25 inches of rain on the 30th (about 125 – 300% above normal) as leftover moisture from Subtropical Storm Alberto filtered into the state.

Severe Weather: The month started off with multiple reports of high winds and large hail (1.00 – 1.75 inches) on the 1st and 2nd and five weak tornadoes on the 3rd. On the 8th, 1.77 inch diameter hail was reported in Dickinson County and 1.00 inch hail was reported on the 8th, 11th, and 13th along with straight-line winds. The following week, there was a lull in severe behavior, with only one report of severe hail (golf ball) on the 14th in Linn and Wayne Counties. Strong winds and hail returned to the state on the 25th, with wind reports in excess of 60 miles and hail up to 2.00 inches in diameter in central and northeastern Iowa. Large hail and severe straight-line winds caused tree damage in Mason City on the 28th. Weak land spouts briefly touched down in Pocahontas and Green Counties, while quarter size hail was reported in Maxwell and Collins (Story County). The 29th was the most active day of the week, with 35 severe weather reports; multiple severe straight-line wind events were observed in western Iowa, with a land spout in Story County.

Spring Summary: Temperatures for the three spring months of March, April, and May averaged 47.1°F, which was 3.8°F below normal. Precipitation totaled 8.55 inches or 1.67 inches below normal. This ranks as the 52nd warmest and 51nd driest on record.

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May 2018

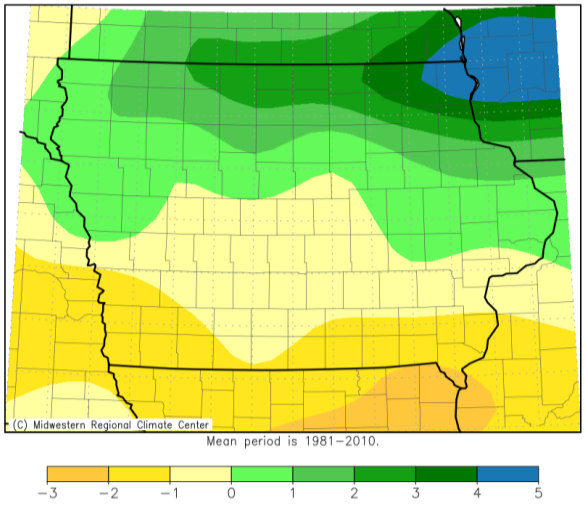
WEATHER BY DISTRICTS

DISTRICT	TEMPERATURE (F)		HEATING DEGREE DAYS				PRECIPITATION (inches)			
	May 2018		May 2018		Since Jul., 1, 2017		May 2018		Since Jan.1, 2017	
	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*	Average	Departure*
Northwest	64.8	+5.8	127	-111	7767	+313	4.67	+0.95	11.68	+1.58
North Central	65.0	+6.4	122	-122	7832	+319	5.95	+1.51	14.09	+2.62
Northeast	65.0	+6.2	116	-134	7573	+182	6.57	+2.28	13.79	+1.77
West Central	66.7	+6.5	93	-117	7055	+181	4.10	-0.40	9.86	-1.63
Central	67.4	+7.4	84	-127	7061	+202	4.59	-0.05	11.20	-0.98
East Central	67.4	+6.7	81	-124	6941	+264	4.65	+0.32	11.09	-1.38
Southwest	69.0	+7.6	59	-125	6470	+137	3.32	-1.85	7.84	-4.52
South Central	69.0	+8.4	58	-131	6467	+174	4.04	-1.05	9.37	-3.52
Southeast	69.1	+7.1	58	-120	6502	+339	4.67	-0.17	9.91	-3.46
STATE	66.9	+6.8	88	-125	7074	+232	4.67	+0.17	11.11	-0.86

* Departures are computed from 1981-2010 normals. Monthly estimates are preliminary and 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.

Accumulated Precipitation (in): Departure from Mean
May 1, 2018 to May 31, 2018



Average Temperature (°F): Departure from Mean
May 1, 2018 to May 31, 2018