

## PRELIMINARY IOWA WEATHER SUMMARY – MARCH 2012

General Summary. March 2012 temperatures averaged 51.1° or 15.2° above normal while precipitation averaged 1.95 inches or 0.20 inch below normal. This ranks as the warmest and 57<sup>th</sup> wettest March among 140 years of records.

Temperatures. March temperatures were phenomenal by any measure. The month averaged 2.4° warmer than the previous warmest March (1910) and 2.2° warmer than the typical April. The monthly average of 15.2° above the 1981-2010 normal is a record for any calendar month (+13.7° in December 1877 was the previous record but there are three other months with larger negative departures). Having such a larger positive departure allowed a multitude of other maximum temperature records to be broken or approached for various time scales (NOTE: All data remain preliminary for the July 2011 to present time period, thus the current time period average may change when all of the final data processing has been completed).

Time Period	Period ending Mar. 2012	Rank	Record Prior to 2011-12
Feb.-Mar.	40.0	1	39.8 in 1878
Jan.-Mar.	35.3	1	34.9 in 1878
Dec.-Mar.	34.0	2	35.3 in 1877-1878
Nov.-Mar.	35.1	1	34.9 in 1877-1878
Oct.-Mar.	38.2	1	37.3 in 1877-1878
Sep.-Mar.	41.4	1	41.3 in 1877-1878
Aug.-Mar.	45.3	1	45.1 in 1877-1878
Jul.-Mar.	49.1	1	48.3 in 1930-1931
Jun.-Mar.	51.1	1	50.8 in 1931-1932
May-Mar.	51.9	1	51.7 in 1934-1935
Apr.-Mar.*	51.5	2	51.6 in 1934-1935

\*If not confined to the 12 months ending with March there have been five warmer twelve consecutive month periods, the warmest of which is Jan. 1931 through Dec. 1931 at 53.0°.

The early portion of March 2012 was fairly ‘typical’ and even saw three days averaging cooler than normal (3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup>). Daytime highs were only in the 20’s in some areas on the 3<sup>rd</sup> and 4<sup>th</sup> while Estherville reported a morning low temperature of -1° on the 5<sup>th</sup>. However, the final 26 days of the month were all warmer than normal with every day from the 10<sup>th</sup> through the end of March averaging at least ten degrees above normal. The most exceptional days were the 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> which all averaged more than 30 degrees warmer than normal. Daily high temperatures reached into the 80’s somewhere in the state on 14 days during March, topping off at 90° at Sioux City and Little Sioux on the 31<sup>st</sup>. However, the 90° maximums were not a state record for March and were exceeded in 1907 (92° at Clarinda and Massena on the 25<sup>th</sup>), 1910 (92° at Clarinda on the 22<sup>nd</sup>), 1968 (91° at Sioux City on the 30<sup>th</sup>) and 1986 (92° at Glenwood on the 29<sup>th</sup>).

Heating Degree Days. Home heating requirements, as estimated by heating degree day totals, averaged only 47% of last March's total and 49% of normal. Degree day totals so far this heating season (since July 1, 2011) are running 21% less than last season at this time and 19% less than normal.

Precipitation. Monthly precipitation totals varied from 0.63 inch at Hawarden to 5.49 inches at Bedford. Amounts were above normal over much of southwest Iowa and portions of central and northeast Iowa but were well below normal across the northwest and southeast corners of the state. Low soil moisture reserves continue to be a worry, especially over northwest and north central Iowa, owing primarily to the lingering impact of very dry weather last fall and late last summer. The bulk of the month's rain fell from events on the 11<sup>th</sup>-12<sup>th</sup>, 19<sup>th</sup>-23<sup>rd</sup> and 29<sup>th</sup>-30<sup>th</sup>. There were a pair of snow events early in the month with 2 to 4 inches falling over the east one-third of the state on the 2<sup>nd</sup> with a band of about 1 to 3 inches of snow falling diagonally from northwest, through central, to southeast Iowa on the 4<sup>th</sup>. Kanawha reported the most snow during the month with 5.5 inches. The statewide average snowfall was 1.6 inches or 3.1 inches less than normal, ranking 17<sup>th</sup> lowest March total among 125 years of records.

Severe Weather. There were scattered reports of severe thunderstorms on the 19<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup> and 31<sup>st</sup> but overall activity was fairly normal for this early point in the season and was much less than seen in March 2011.

Outlook. The first few days of April also have been exceptionally warm; however, forecast models are indicating a gradual return to near normal temperatures for the second and third weeks of the month. Although the sample size is very small, most of the occurrences of prolonged very warm March weather in Iowa were followed by below normal temperatures in May, June and July. Historically the odds remain high that freezing temperatures will occur yet this spring. The average date of the last 32° temperature varies from about April 30 in northern Iowa to about April 17 across the southeast. However, there is a large amount of localized variability in these freeze averages with Keokuk typically seeing its last freeze on April 8 while Elkader's average last freeze is on May 9. While snowfall has not visited the state since March 4 one would have to go back to 1890 to find an April without some snow in Iowa.

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