

Incredible Warmth Shatters Records at Des Moines

by Jim Lee and Craig Cogil

Unusually warm weather that has prevailed across Iowa since last autumn intensified in March with unprecedented temperatures annihilating records at most locations in the state. The following is a summary of some of the records that have been broken at Des Moines not only in March, but over the course of the winter and spring so far. Temperature records at Des Moines date back to August of 1878.

Last month was by far the warmest March on record. The average temperature of 55.7 bested the old record of 51.5 (set in 1910) by fully 4.2 degrees. This is the widest margin by which a monthly temperature record has ever been broken at Des Moines, besting December of 1889 which is the warmest on record by a margin of 3.7 degrees. March was 16.4 degrees above normal, which is the greatest departure above normal of any month on record, besting the mark of the greatest margin above normal of 15.5 in January of 1880 (greatest absolute margin occurred February 1936 which was 17.2 below normal). In fact, the average temperature for March was so far above normal that it would rank 11th on the list of the warmest Aprils on record.

The number of warm days in March was completely unprecedented in the climate record. The last freeze of the month occurred on the 9th, with the remaining 22 days of the month shattering the record for the most consecutive March days above freezing, which was previously 16 days set in 1884 and 1910. The temperature rose to 70 degrees or higher on 13 days in March, besting the previous record of 11 days set in 1910, and rose to 80 degrees or higher on 7 days, crushing the record of 4 days also set in 1910. In fact the temperature rose into the 80s on 6 consecutive days from March 14-19, the earliest in the spring that this has ever occurred by a margin of more than a month (the next-earliest occurrence being from April 15-20 in 1915).

The warmth on the seven days from March 14-20 of this year was historic, with the average temperature of 68.8 degrees being fully 24 degrees above normal for that week. In fact this was the warmest week ever recorded at Des Moines in the months of November through March, besting the previous record of 67.0 degrees set from March 23-29 in 1910. The earliest week of the spring to achieve a higher average temperature occurred a full month later, from April 14-20 in 1977.

As mentioned above, record-breaking warmth was most intense in March but has actually prevailed for much of the time since last autumn. Des Moines is experiencing its warmest year-to-date (January through March) on record with an average temperature of 39.7 degrees, crushing the previous record of 36.1 degrees set in 1921. There have been 27 days so far this year on which the temperature has reached 60 degrees or higher, shattering the previous record of 21 days set in 1981. Amazingly, the lowest temperature recorded during the entire winter was 1 degree, making this the first winter on record in which the temperature at Des Moines has failed to reach zero. Previously the closest this had come to occurring was in the winter of 1930-1931 when the lowest temperature was exactly zero on January 14, 1931.

In fact the unusual warmth has been so prevalent that the past year, from April of 2011 through March of 2012, is the warmest such stretch on record with an average temperature of 55.1 degrees, topping the previous record of 53.6 degrees set from April of 1934 through March of 1935.

Daily Records Broken

Record Max Temperature

March 6	74	Tied Previous Record also set in 2005
March 13	77	Tied Previous Record also set in 2007
March 14	81	Broke Previous Record of 75 set in 1977
March 15	81	Broke Previous Record of 77 set in 2003
March 16	84	Broke Previous Record of 77 set in 1930
March 17	83	Broke Previous Record of 81 set in 1894
March 18	83	Broke Previous Record of 80 set in 1918
March 19	81	Broke Previous Record of 80 set in 1921
March 27	80	Tied Previous Record also set in 1989 and 1895

Record High Minimum Temperature

March 14	57	Broke Previous Record of 49 set in 1945
March 16	58	Broke Previous Record of 48 set in 2003 and 1946
March 17	63	Broke Previous Record of 56 set in 1894
March 18	62	Broke Previous Record of 58 set in 1903
March 20	57	Broke Previous Record of 48 set in 2011
March 21	59	Broke Previous Record of 56 set in 1938
March 22	51	Tied Previous Record also set in 1935 and 1910