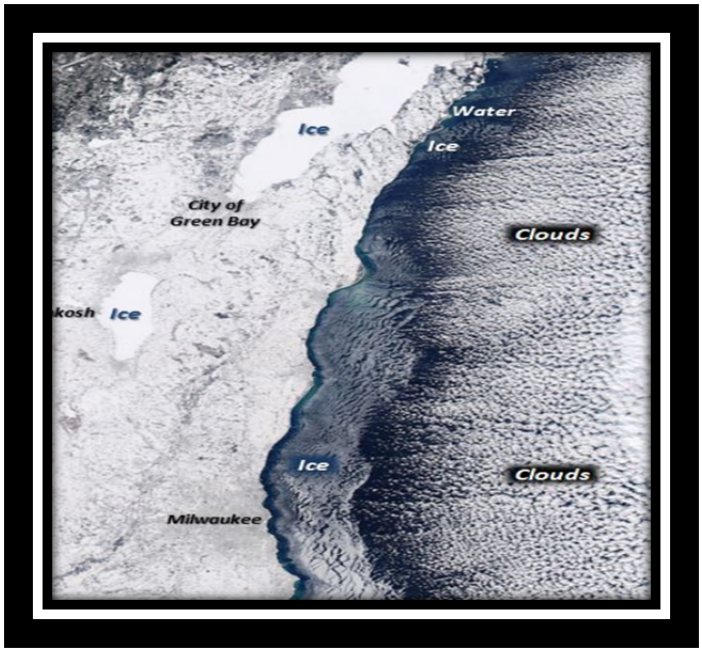
2014 YEAR IN REVIEW

(NWS Green Bay Forecast Area Serving NC & NE Wisconsin)



Note: Photo top right courtesy of Mary Karoly Franke. Bottom photo courtesy Door County Sheriff Department.

2014 YEAR IN REVIEW

2014 will go down in the record books as one of the top 7 coldest years on record across north-central and northeast Wisconsin.

Location	2014		Coldest	
	Average		Or Previous	
Location	Temperature	Ranking	Coldest Year	Year(s)
Antigo	36.9	Coldest	37.6	1989
Appleton	42.2	4th Coldest	40.4	1917
Brillion *	41.6	Coldest	42.5	2008
Chilton	42.3	Tied Coldest	42.3	1904
Clintonville	41.2	Tied Coldest	41.2	1989
Green Bay	41.8	Tied 6th Coldest	40.2	1917
Hancock	41.6	Tied 5th Coldest	41.3	1951
Kewaunee	40.0	Coldest	40.1	1917
Laona	36.0	Coldest	36.6	1996
Manitowoc	41.9	5th Coldest	40.8	1917
Marinette	40.4	Coldest	42.4	1996
Marshfield (coop)	40.0	5th Coldest	38.0	1917
Merrill	38.0	Coldest	38.3	1917
New London	41.3	3rd Coldest	40.3	1917
Oconto	39.8	Coldest	40.5	1972
Oshkosh (coop)	42.9	2nd Coldest	42.2	1917
Peshtigo **	39.5	Coldest	40.9	2009
Rhinelander	36.5	2nd Coldest	35.9	1917
Shawano	40.1	Coldest	40.6	1926
Stevens Point	40.5	2nd Coldest	40.3	1917
Sturgeon Bay	40.4	3rd Coldest	39.3	1917
Two Rivers	40.3	Coldest	41.8	1996
Washington Island	38.7	Coldest	40.1	1972
Waupaca	41.2	2nd Coldest	41.0	1917
Wausau	40.0	6th Coldest	37.8	1917
Wisconsin Rapids (coop)	41.4	7th Coldest	39.9	1929

(*) Brillion records only date back to 1999 (**) Peshtigo records date back to 2000

Note: Merrill data for December was not available at the time of publication of this document to compute the yearly average.

2014 COMPARED TO 2012

Location	2014		2012		Ave Temp
	Average		Average		Difference
Location	Temperature	Ranking	Temperature	Ranking	2014 vs 2012
Antigo	36.9	Coldest	46.4	Warmest	-9.5
Appleton	42.2	4th Coldest	49.3	Warmest	-7.1
Brillion **	41.6	Coldest	48.2	Warmest	-6.6
Chilton	42.3	Tied Coldest	49.1	2nd Warmest	-6.8
Clintonville	41.2	Tied Coldest	48.4	Tied Warmest	-7.2
Green Bay	41.8	Tied 6th Coldest	49.1	Tied Warmest	-7.3
Hancock	41.6	Tied 5th Coldest	49.0	Warmest	-7.4
Kewaunee	40.0	Coldest	47.4	2nd Warmest	-7.4
Laona	36.0	Coldest	43.2	5th Warmest	-7.2
Manitowoc	41.9	5th Coldest	48.8	3rd Warmest	-6.9
Marinette	40.4	Coldest	48.7	3rd Warmest	-8.3
Marshfield (coop site)	40.0	5th Coldest	47.0	4th Warmest	-7.0
Merrill	38.0	Coldest	46.2	Warmest	-8.2
New London	41.3	3rd Coldest	48.3	3rd Warmest	-7.0
Oconto	39.8	Coldest	47.4	3rd Warmest	-7.6
Oshkosh (coop site)	42.9	2nd Coldest	50.4	Warmest	-7.5
Peshtigo **	39.5	Coldest	46.2	Warmest	-6.7
Rhinelander	36.5	2nd Coldest	44.2	4th Warmest	-7.7
Shawano	40.1	Coldest	47.8	Tied Warmest	-7.7
Stevens Point	40.5	2nd Coldest	47.6	4th Warmest	-7.1
Sturgeon Bay	40.4	3rd Coldest	47.6	Tied 3rd Warmest	-7.2
Two Rivers	40.3	Coldest	47.8	Warmest	-7.5
Washington Island	38.7	Coldest	46.2	3rd Warmest	-7.5
Waupaca	41.2	2nd Coldest	48.9	3rd Warmest	-7.7
Wausau	40.0	6th Coldest	47.9	2nd Warmest	-7.9
Wisconsin Rapids (coop site)	41.4	7th Coldest	47.8	4th Warmest	-6.4

(*) Brillion records only date back to 1999 (**) Peshtigo records date back to 2000

Note: Merrill data for December was not available at the time of publication of this document to compute the yearly average.

JANUARY

Jan 1 The year started out bitterly cold. Low temperatures ranged from 5 below to 10 below zero along the lakeshore to 20 to 25 below zero across north-central Wisconsin. High temperatures struggled into the single digits above zero during the day, with the warmest high of 10 at Shawano, Waupaca and Manitowoc.

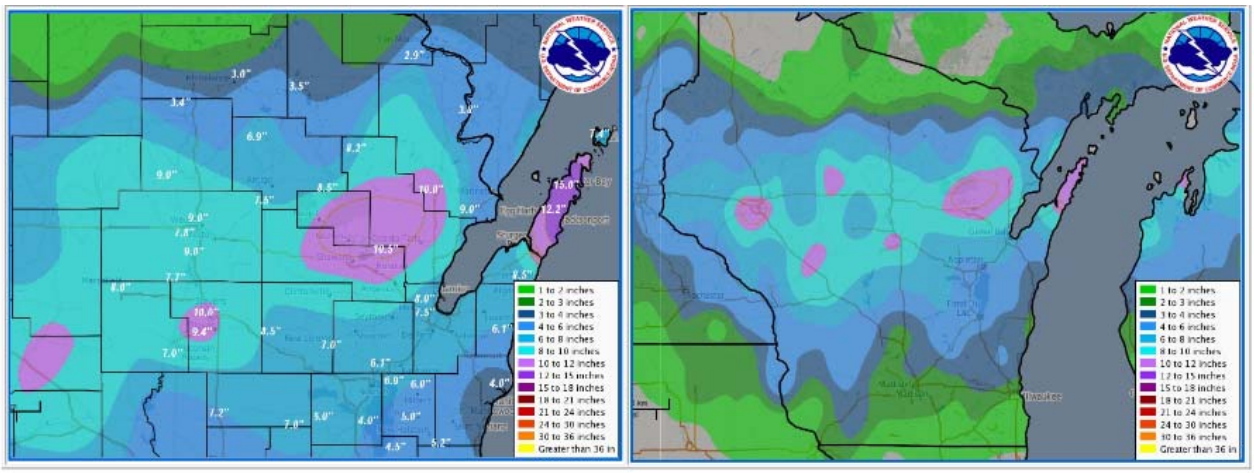
Jan 3 Antigo set a new record low of 26 below, breaking the old record of 22 below set in 1979. Green Bay also set a new record low for the date of 18 below zero, breaking the old record of 17 below zero set in 1887, 1911 and 1979.

Jan 4 A brief warmup occurred with highs in the 20s to lower 30s ahead of the next surge of arctic air. Manitowoc was the warm spot at 33 degrees.

Jan 6 Bitterly cold temperatures and wind chills noted across the region. Morning lows include: 31 below at Minocqua, 30 below at the Rhinelander Airport, 29 below at Tomahawk-Rice Reservoir and Manitowish Waters, and 28 below four miles northeast of Rhinelander. High temperatures only reached 17 below at Rhinelander and 14 below at Wausau. Temperatures were 5 to 10 degrees warmer along the Lake Michigan shoreline. Record low maximum temperatures set on this date include: 17 below at Rhinelander and Merrill, 16 below at Marshfield and Stevens Point, 14 below at Antigo and 12 below at Sturgeon Bay.

Jan 12-13 January thaw noted across the region, with the warmest temperatures of the month noted on the 12th. High temperatures on the 12th include: 42 at Waupaca, 41 at Marshfield and 40 at Wisconsin Rapids and Shawano.

Jan 14 A winter storm that intensified as it moved across Wisconsin produced a large area of heavy snow across central and northeast portions of the state. A widespread snowfall of 6 to 12 inches occurred across the region with frequent gusts over 30 mph in the Fox Valley. The following locations broke their daily snowfall record: 11.0 inches at Sturgeon Bay, 9.5 inches at Merrill, 9.0 inches at Marshfield, 7.5 inches at Antigo, 7.0 inches at Wisconsin Rapids and 6.1 inches at Appleton.



The heaviest amounts were over Door County, where as much as 15" was measured north of Sturgeon Bay. The NWS Green Bay office measured 7.5" of snow, along with a peak wind of 48 mph.

Jan 20-24 Arctic air invaded north-central and northeast Wisconsin, where temperatures averaged five to twenty degrees below normal each day.

JANUARY

Jan 26-28 Temperatures averaged ten to twenty-five degrees below normal each day from the 26th through the 28th. Record low maximum temperatures were set on the 27th, including: 7 below at Merrill and 4 below at Sturgeon Bay.

Jan 30 Snowfall totals of 5.2 inches at Rhinelander and 4.5 inches at Merrill set new daily records at these two sites.

Jan 30 Bitter cold continued to expand the ice coverage on Lake Michigan, which would reach record levels by the end of the winter and early spring.

Ice on the Great Lakes, including Lake Michigan, continues to develop and expand. In fact, the lor cold this winter has produced a higher-than-average amount of ice on the lakes.

Here's the high-resolution satellite image of Lake Michigan and surrounding land from January 2

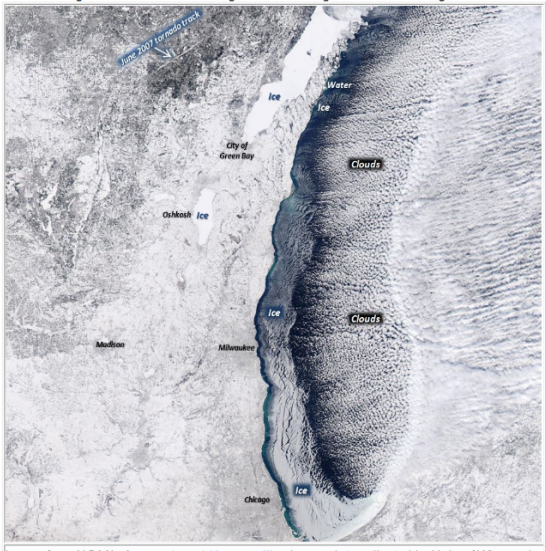
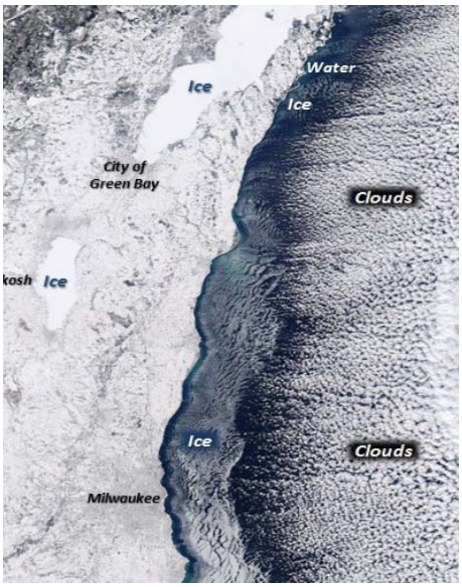
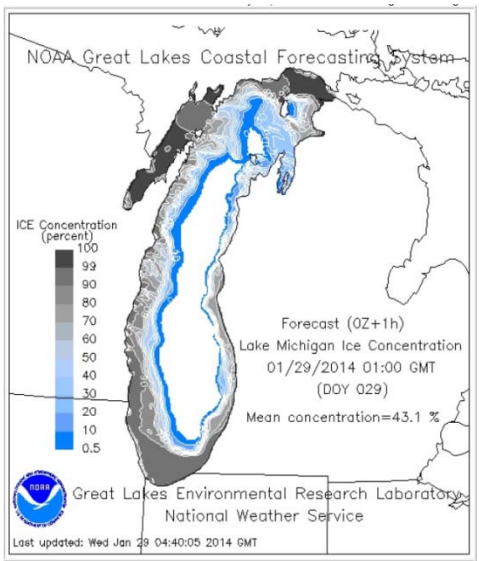


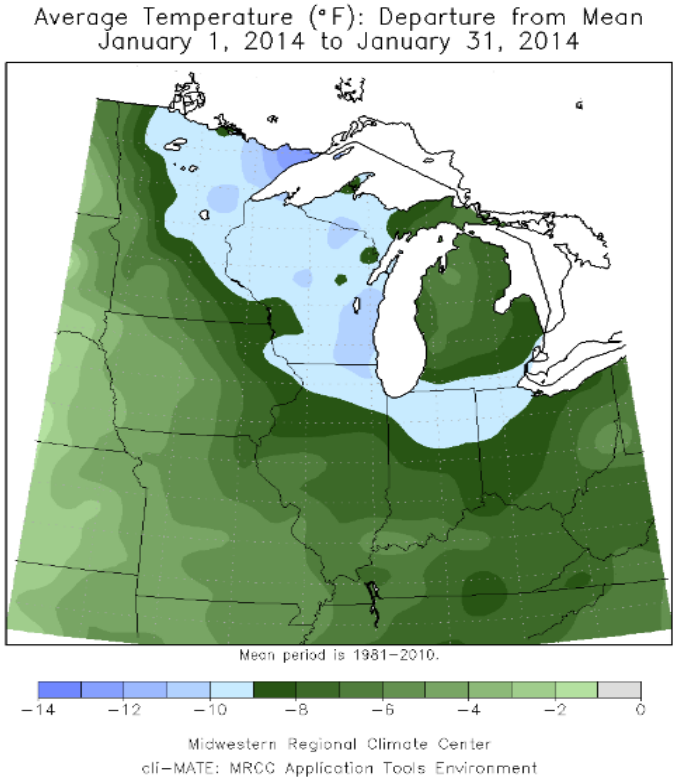
Image from NOAA's Aqua polar orbiting satellite. Image data collected by Univ. of Wisconsin SSEC. Click image for larger view.





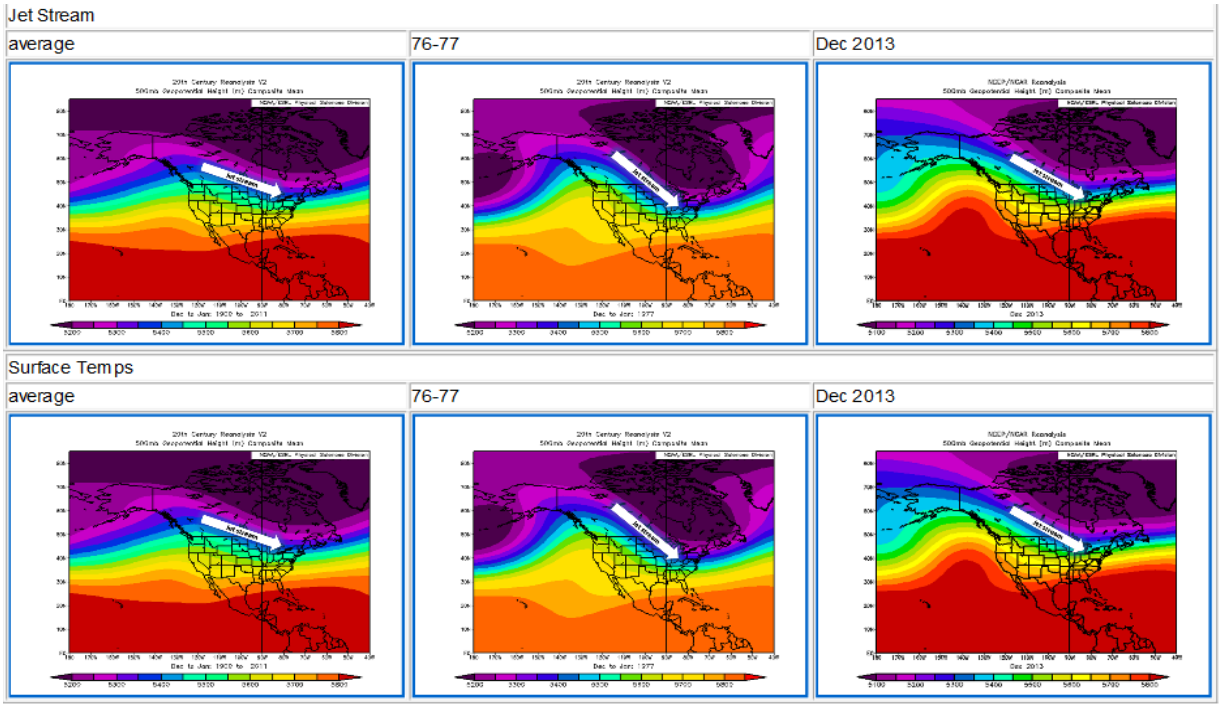
Lake Michigan ice concentration on January 28, 2014. Click image for larger view.

Overall, January 2014 went down in the record books six to ten degrees below normal across much of the region (See figure to the right).



FEBRUARY

Feb 1 The prolong cold spell brought back memories for old timers of the area of the late 1970's with the duration and severity of the cold. The winter of 2013-14 ended up colder than several winters of the late 1970's. Below is a comparison of the jetstream of the winter of 1976-77 compared to December 2013.



Feb 1 The first two months of meteorogical winter (December 1 – February 28/29) ranked in the top ten coldest two month start to winter at Green Bay and Wausau.

Green Bay		
December-January		
Rank	Winter	Avg Temp °F
1	1976-1977	6.1
2	1886-1887	10.4
3	1917-1918	10.5
4	1919-1920	10.6
5	2008-2009	11.3
6	1983-1984	11.6
7	1903-1904	11.7
8T	2013-2014	11.9
8T	1958-1959	11.9
10	1978-1979	12.0
11	1892-1893	12.1
12	1950-1951	12.7
13	1985-1986	13.1
14	1970-1971	13.3
Data back to 1886		

Wausau		
December-January		
Rank	Winter	Avg Temp °F
1	1976-1977	5.3
2	1919-1920	6.9
3	1917-1918	7.2
4	2013-2014	8.3
5	2008-2009	8.7
6	1958-1959	8.8
7	1978-1979	9.6
8T	1983-1984	10.1
8T	1962-1963	10.1
10	1950-1951	10.2
11	1916-1917	10.4
12	1958-1959	11.1
13	1985-1986	11.5
14	1981-1982	11.9
(Preliminary data)		
Data back to 1895		

FEBRUARY

Feb 1-17 The daily average temperature ranged from five to twenty-five degrees below normal each day.

Feb 15 Green Bay tied their daily snowfall record of 3.9 inches, originally set in 1979.

Feb 17 Merrill broke their daily snowfall record of 5.9 inches, eclipsing the old record of 4.2 inches set in 1932. Wausau tied their daily record snowfall with 6.0 inches, first set in 1942.

Feb 18-19 Mild weather briefly returns to the area. High temperatures on the 18th include: 42 at Wautoma, 41 at Oshkosh and 40 at Wisconsin Rapids. On the 19th, high temperatures warmed to 46 at Waupaca, 45 at Shawano, 44 at Wisconsin Rapids and 43 at Appleton.

Feb 25 Record low maximum temperatures were set on this date, including: 7 above at Antigo and Marshfield, 7 above at Merrill and 8 above at Wisconsin Rapids.

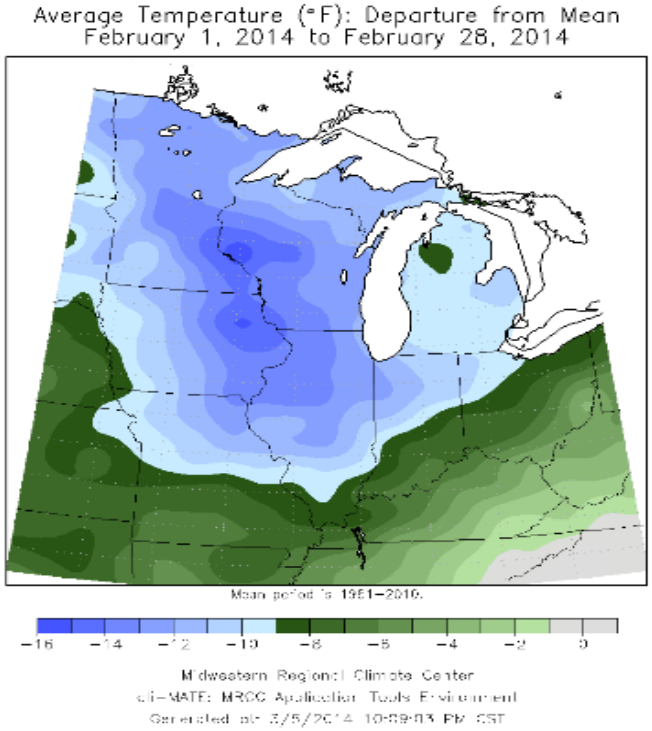
Feb 26 Record low maximum temperature of 8 above was set at Merrill.

Feb 27 Several record lows set on this date: 17 below at Antigo and Wausau, 15 below at Green Bay and 11 below at Oshkosh. Many locations set record low maximum temperatures for the date, including: 1 below at Rhinelander, zero at Stevens Point, 1 above at Wausau, Merrill and Antigo, 4 above at Antigo and Wisconsin Rapids, 6 above at Sturgeon Bay and 8 above at Green Bay.

Feb 28 The bitter cold continues with record low temperatures set at many locations including: 30 below at Antigo, 26 below at Merrill, 26 below at Merrill, 25 below at Rhinelander, 23 below at Wausau, 21 below at Green Bay, 20 below at Wisconsin Rapids, 18 below at Marshfield, 17 below at Stevens Point, 14 below at Oshkosh and 12 at Sturgeon Bay. New record low maximum temperature were set: 6 above at Rhinelander, 8 above at Antigo and Merrill, and 10 above at Marshfield.

Feb 28 Snowfall record broken at Appleton with 3.6 inches, breaking old record 3.5 inches in 1972.

February Will go down in the record books as the coldest February since 1936 across north-central and northeast Wisconsin. Temperatures for the month averaged nine to fourteen degrees below normal (see image below).



FEBRUARY

At Green Bay:

The average temperature for the month was 8.0 degrees or 12.3 degrees below normal. February 2014 will go down in the record books as the 3rd coldest February on record and the coldest February since 1936. Records at Green Bay date back to 1886.

Rank	Coldest Average February Temperature	Year
1	4.6	1936
2	6.6	1904
3	8.0	2014
4	8.1	1917
5	9.0	1979
6	9.8	1914

At Rhinelander:

The average temperature for the month was 4.3 degrees or 12.1 degrees below normal. February 2014 will go down in the record books as the 4th coldest February on record and the coldest February since 1936. Records at Rhinelander date back to 1908.

Rank	Coldest Average February Temperature	Year
1	-0.8	1936
2	1.3	1917
3	3.2	1923
4	4.3	2014
5	5.7	1933
6	6.3	1929

At Wausau:

The average temperature for the month was 6.3 degrees or 12.8 degrees below normal. February 2014 will go down in the record books as the 5th coldest February on record and the coldest February since 1936. Records at Wausau date back to 1895.

Rank	Coldest Average February Temperature	Year
1	3.7	1936
2	4.6	1917
3	5.3	1914
4	5.8	1904
5	6.3	2014
6	7.7	1899

FEBRUARY

February 2014 Temperature Rankings and Departure From Normal

Other locations across north-central and northeast Wisconsin (based on best available data).

Location	Records Date Back to:	February Ave Temp	Rank	Coldest or Previous Coldest	February
Appleton	1901	10.3	6th	3.3	1936
Clintonville	1952	7.5	1st	9.1	1936
Hancock	1903	9.1	6th	1.6	1936
Kewaunee	1909	10.6	3rd	8.0	1936
Laona	1927	5.3	2nd	-5.0	1936
Manitowoc	1893	14.4	10th	7.7	1936
Marinette	1919	9.8	2nd	7.9	1936
Marshfield (coop site)	1912	5.6	3rd	0.6	1936
Merrill	1906	2.9	2nd	-1.5	1936
New London	1896	8.2	5th	2.5	1904
Oconto	1893	7.1	3rd	3.4	1936
Oshkosh (coop site)	1893	10.0	5th	4.2	1936
Shawano	1925	5.4	2nd	3.5	1936
Stevens Point	1893	6.9	5th	3.4	1936
Sturgeon Bay	1905	9.2	3rd	4.7	1936
Two Rivers	1950	11.1	1st	14.2	1979
Washington Island	1944	9.0	1st	10.4	1979
Waupaca	1896	8.4	5th	4.1	1936
Wisconsin Rapids (coop site)	1903	NA	NA	-1.4	1936

MARCH

Mar 1-6 Temperatures each day averaged 15 to 30 degrees below normal.

Mar 1 Record low maximum temperature of 5 above set at Rhinelander, breaking the old record 7 set in 1925.

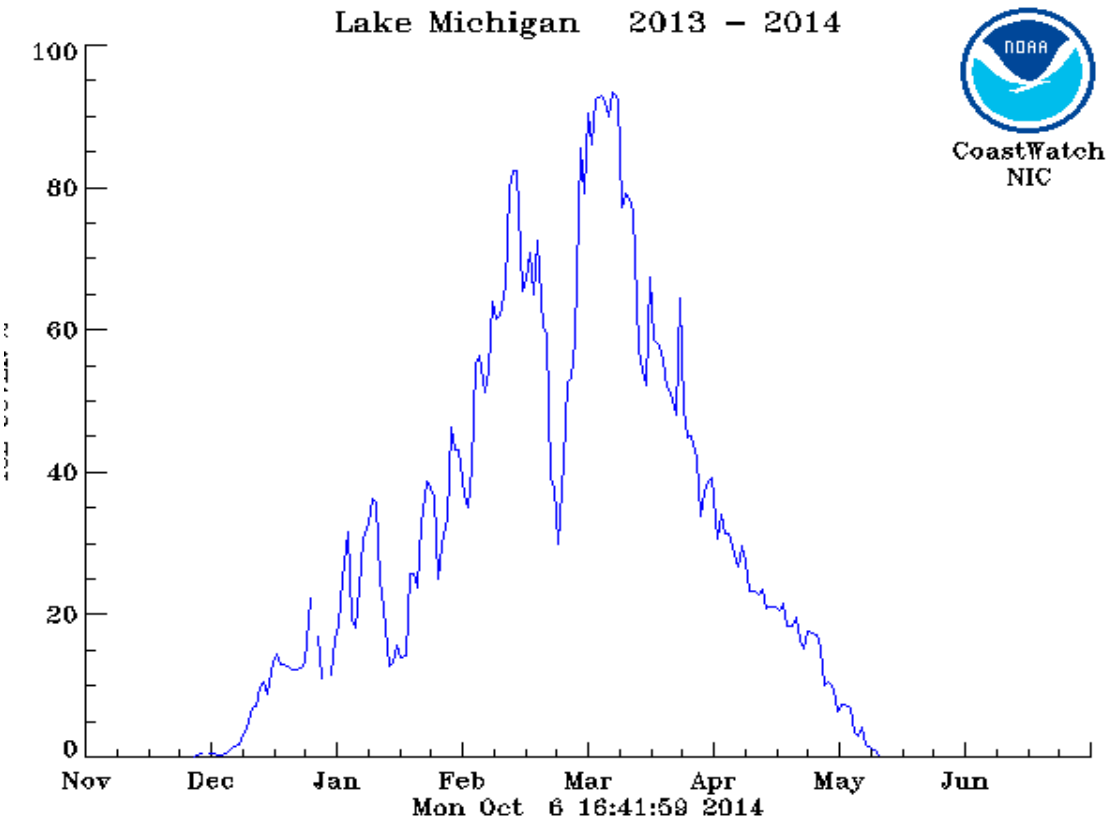
Mar 2 Record low maximum temperature of 2 above set at Stevens Point, breaking the old record of 6 set in 1943.

Mar 3 Record low temperatures were set on this date: 29 below at Antigo, 28 below at Rhinelander, 25 below at Merrill, 24 below at Green Bay, 23 at Wisconsin Rapids, 21 below at Stevens Point, 20 below at Marshfield, 15 below at Oshkosh, 12 below at Appleton and 6 below at Manitowoc. Record low maximum temperatures were also set: 6 above at Merrill, 10 at Wausau and 12 at Appleton.

Mar 5 Record low maximum temperatures of 15 tied at Appleton. The record was originally set in 1917, 1936 and 1943.

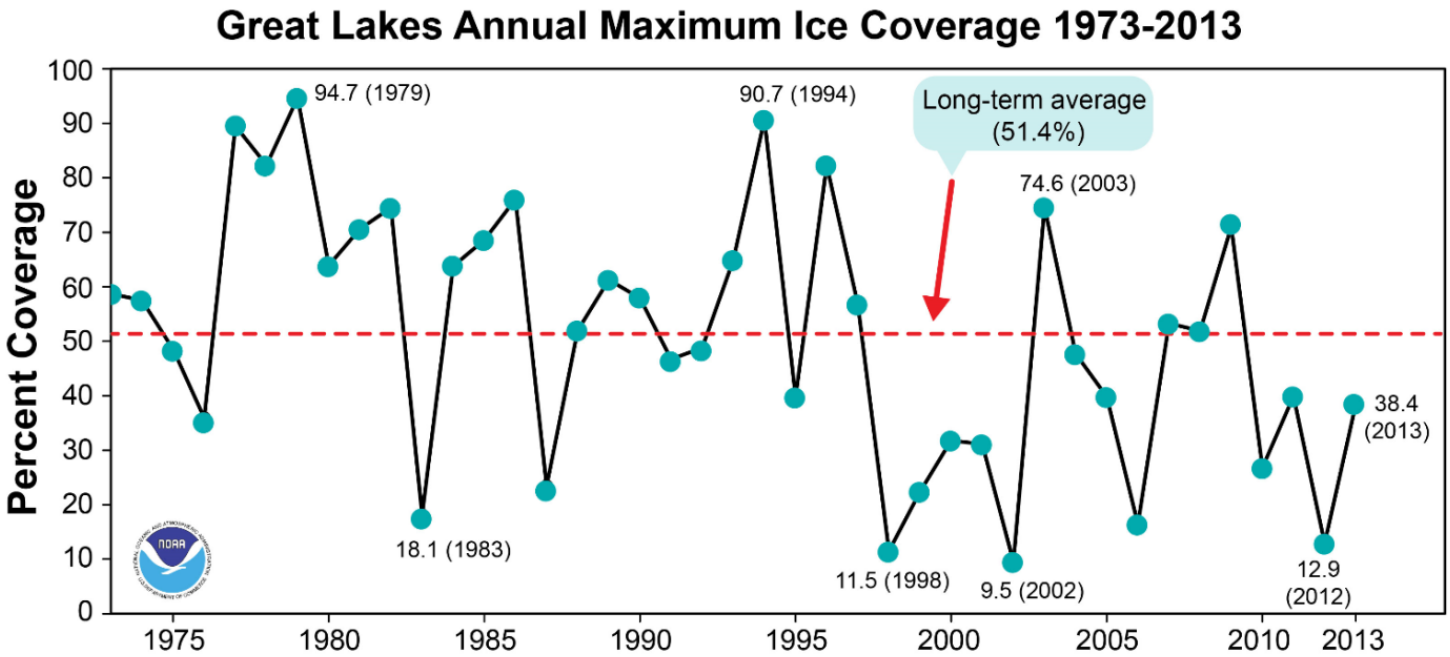
Mar 10 High temperatures reached the 50s for the first time this year.

Mar 1-15 Ice coverage (see image below) on Lake Michigan approaches 95% during the first half of March.



MARCH

March 1-15 Ice coverage on the Great Lakes peaked around 92% during the first two weeks of March. The unusually cold February led to the expansion of the ice. The chart below indicates the variability of ice coverage on the Great Lakes each winter.



Mar 11-31 The average temperature on most days continued to run below normal, with the greatest departures from average occurring from the 15th-17th and again from the 22nd through the 26th.

Mar 25 Marshfield set a new record low maximum of 17 for the date, breaking the old record of 18 in 1955.

Mar 27 0.68 inches of preciptation was recorded at Oshkosh, breaking the old record of 0.61 inches set in 1976. At Sturgeon Bay, the 6.0 inches of snow broke the old daily record of 3.0 inches set in 1908.

MARCH

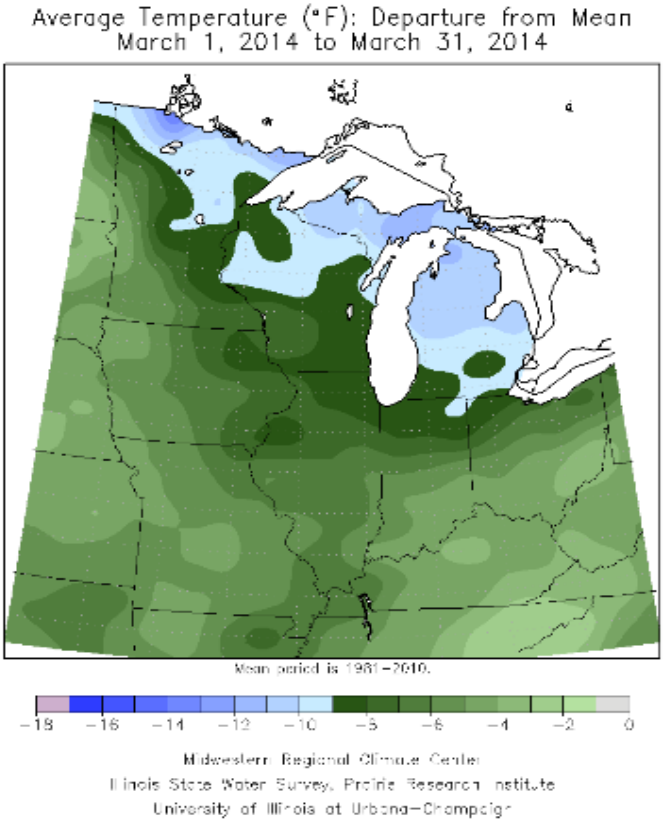
March It was just two years ago that north-central and northeast Wisconsin experienced the warmest March on record and one of the warmest years on record. March 2014 will go down in the record books fifteen to twenty-five degrees colder than March 2012.

Here is how March 2014 compared to normal and March 2012.

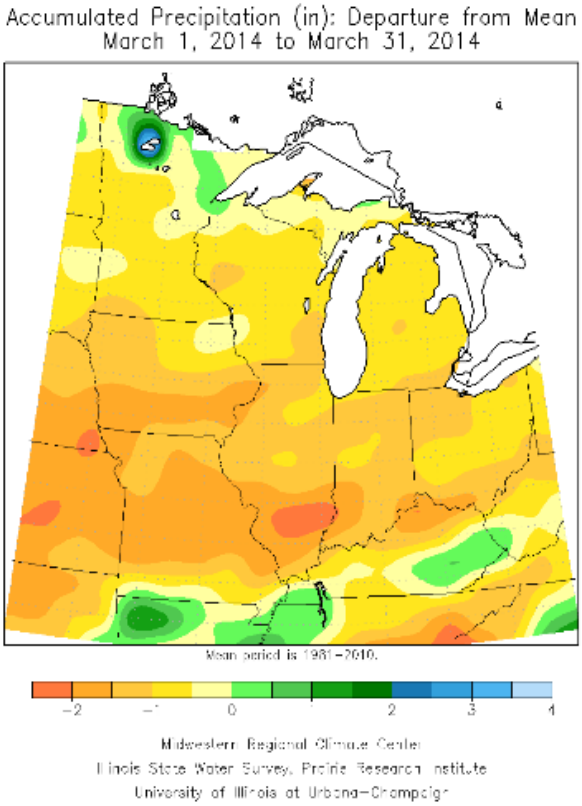
Location	March Normal	2014 March Average	Departure From Normal	March Ranking	2012 March Average	March 2014 Difference from March 2012
Antigo	26.5	18.1	-8.4	3rd Coldest	42.1	-24.0
Appleton	31.3	22.5	-8.8	2nd Coldest	46.4	-23.9
Brillion	31.0	22.1	-8.9	Coldest	44.7	-22.6
Chilton	31.6	22.6	-9.0	3rd Coldest	46.2	-23.6
Clintonville	29.9	20.7	-9.2	Coldest	45.6	-24.9
Green Bay	30.8	22.9	-7.9	8th Coldest	46.4	-23.5
Kewaunee	30.6	20.8	-9.8	Coldest	42.3	-21.5
Laona	26.2	16.7	-9.5	3rd Coldest	41.1	-24.4
Manitowoc	31.8	25.8	-6.0	10th Coldest	42.6	-16.8
Marinette	30.4	20.1	-10.3	Coldest	43.1	-23.0
Marshfield	30.4	18.1	-12.3	Coldest	46.3	-28.2
Merrill	28.0	17.9	-10.1	2nd Coldest	43.7	-25.8
New London	30.5	21.7	-8.8	3rd Coldest	46.1	-24.4
Oshkosh Coop	32.3	22.7	-6.9	3rd Coldest	47.4	-24.7
Peshtigo	27.6	18.1	-9.5	Coldest	42.6	-24.5
Rhinelander	27.1	18.3	-8.8	3rd Coldest	42.9	-24.6
Shawano	30.0	19.3	-10.7	2nd Coldest	44.1	-24.8
Stevens Point	30.3	21.3	-9.0	3rd Coldest	46.0	-24.7
Sturgeon Bay	30.3	20.6	-9.7	3rd Coldest	42.0	-21.4
Two Rivers	31.0	22.0	-9.0	Coldest	41.1	-19.1
Washington Island	28.6	17.6	-11.0	Coldest	38.9	-21.3
Waupaca	31.3	22.1	-9.2	4th Coldest	46.4	-24.3
Wausau	30.0	21.8	-8.2	9th Coldest	45.8	-24.0
Wisc Rapids Airport	31.0	23.6	-7.4	13th Coldest	47.7	-24.1

MARCH

March Overall, March was cold and dry with well below normal snowfall across the region. The month ended up eight to thirteen degrees colder than average with precipitation well below normal for the month



Mar 1

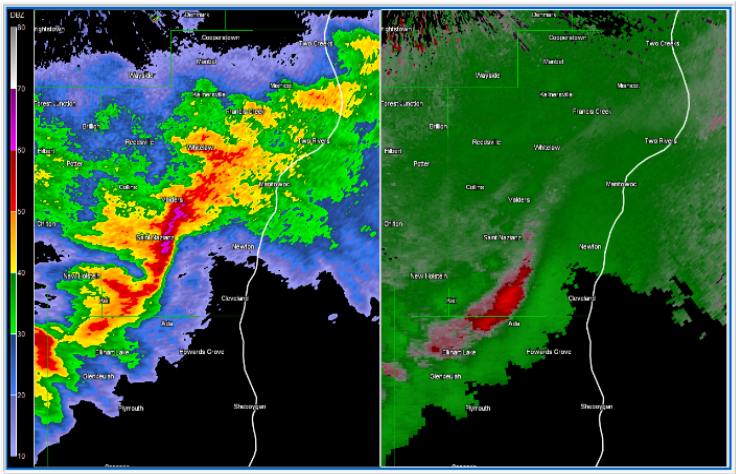


APRIL

Apr 4 A new daily snowfall record was established at Rhinelander with 7.3 inches, breaking the old record of 5.5 inches set in 1945.

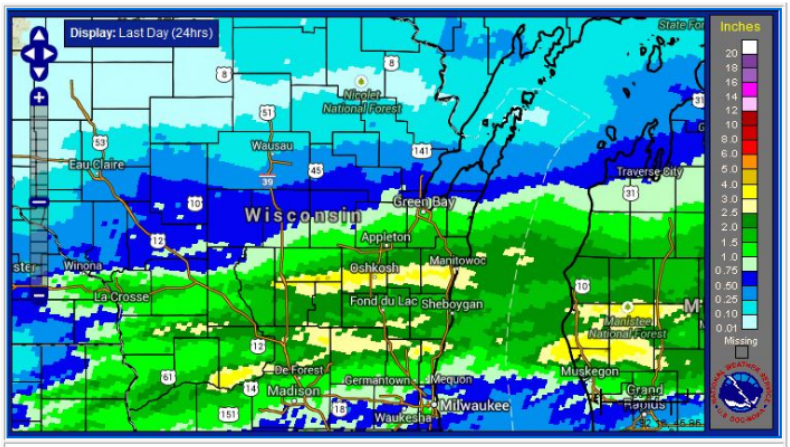
Apr 5 Rhinelander dropped to 2 above zero, breaking the old record low of 4 set in 1972 and 1996.

Apr 12 Thunderstorms with heavy rain, hail, and strong winds moved across east-central Wisconsin. Hail up to one inch in diameter was reported in southern Winnebago County and wind damage occurred in southeast Calumet and southern Manitowoc Counties (reflectivie and velocity image below). Thunderstorm winds in excess of 60 mph damaged several trees and an outbuilding near New Hostein. The thunderstorm produced a wind gust that caused part of an elementary school to be blown off in Cleveland in southern Manitowoc County. Rain in excess of 2.5 inches fell in a band (see Figure 2 below) from Wautoma in Waushara County east to Oshkosh and Manitowoc.



Radar image (reflectivity and velocity) **at 4:48 pm CDT Saturday showing the thunderstorm as it moved across Manitowoc County.**

The heavy rain caused urban flooding in Oshkosh as several roads were closed due to high water.



Rainfall analysis Saturday-Sunday morning.

Apr 12 Oshkosh set a new daily precipitation record with 1.72 inches of rain.

Apr 13 Several daily precipitation records were set on this date: 2.16 inches at Oshkosh, 1.51 inches at Appleton and 1.05 inches at Sturgeon Bay.

Apr 14 Several daily precipitation records were set on this date: 1.61 inches at Appleton, 1.58 inches at Stevens Point and 1.20 inches at Wisconsin Rapids. Snowfall records set on this date include: 4.5 inches at Rhinelander and 3.2 inches at Wisconsin Rapids. Rhinelander dropped to 2 above zero, breaking the old record of 4 above set in 1972 and 1996. At Wisconsin Rapids, the high temperature of 34 degrees set a new daily record low maximum, breaking the old record of 35 set in 1943.

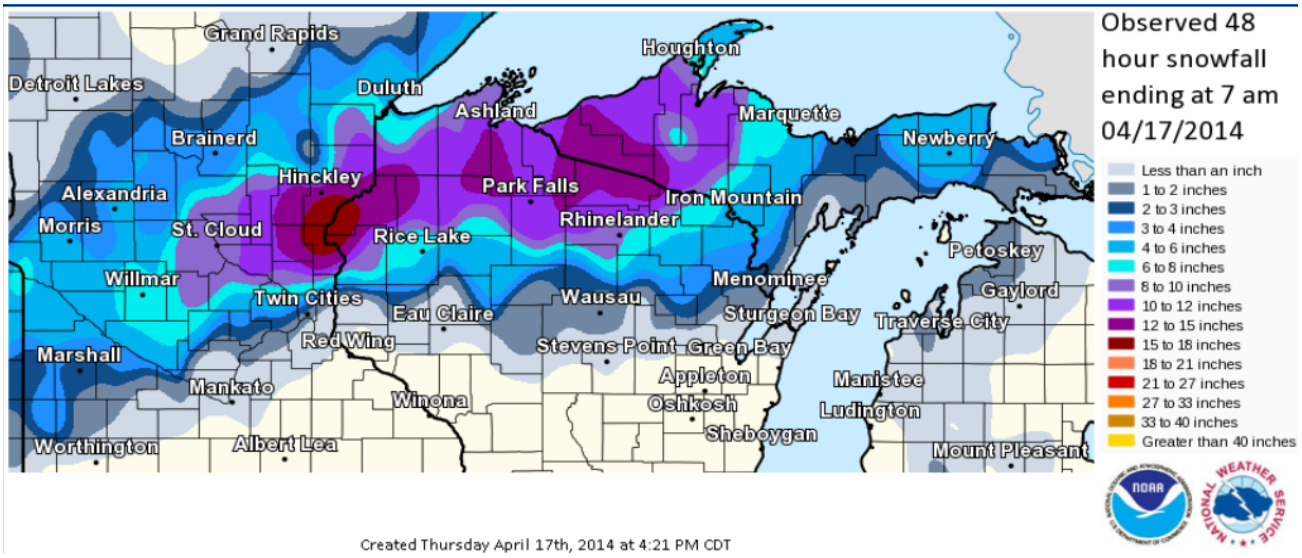
Apr 15 The low temperature of 3 above at Antigo and 12 at Wisconsin Rapids set new record lows for the date. Several record low maximum temperatures for the date were broken, including: 28 at Merrill and Rhinelander, 29 at Antigo, 32 at Marshfield and Stevens Point, 33 at Oshkosh and 34 at Manitowoc.

Apr 16 New record lows for the date include: 9 above at Rhinelander and 12 at Merrill. Merrill also tied their record low maximum temperature of 32 for the date. At Rhinelander, the 3.7 set inches of snow set a new record for the date, breaking the old record of 3.3 inches set in 1985.

APRIL

Apr 16-17 A late season snowstorm brought a band of heavy snow from central Minnesota to northern Wisconsin and western Upper Michigan. The heavy snow created travel difficulties and scattered power outages. Very little snow was noted south of a Wausau to Marinette line. On the 17th, snowfall totals of 7.5 inches at Rhinelander and 3.2 inches at Merrill established new snowfall records for the date.

Location	County	Snow Amount (inches)
2 N Lac Du Flambeau	Vilas	19.0
Conover	Vilas	16.0
St. Germain	Vilas	14.4
3 NE Winchester	Vilas	14.0
Alvin	Forest	14.0
Eagle River	Vilas	13.5
8 N Tomahawk	Oneida	12.0
Rhinelander	Oneida	11.2
3 N Spread Eagle	Florence	9.0



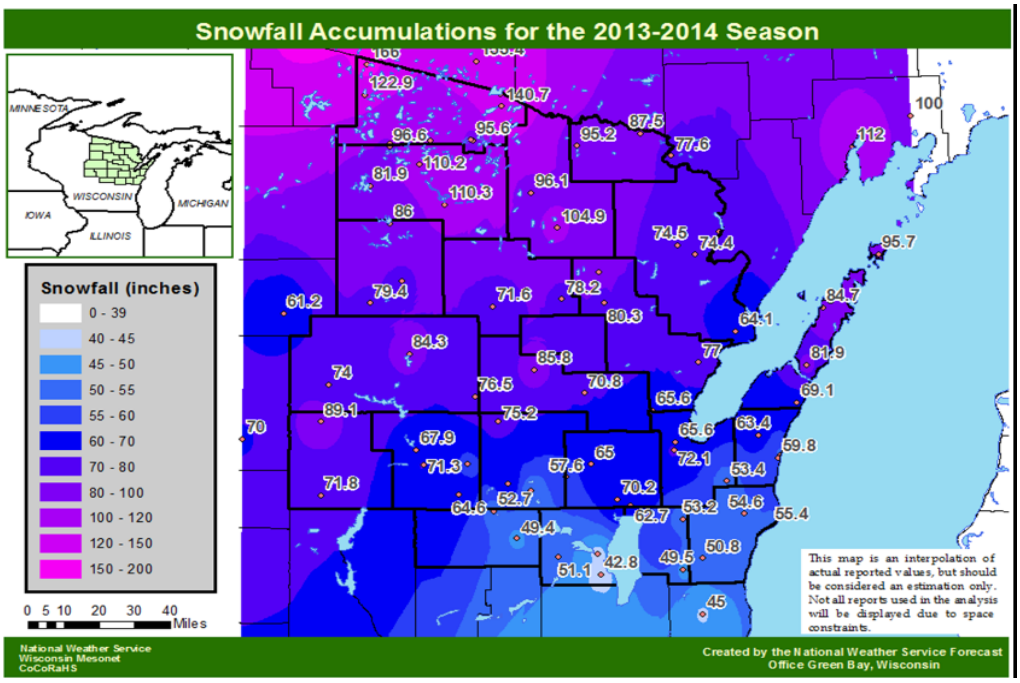
Apr 24 Rhinelander set a daily snowfall record with 1.4 inches.

MAY

May 1 The final snowfall totals of the season were compiled. Ten locations received over 100 inches of snow for the season with Winchester (Vilas County) leading the way with 166.0 inches.

...2013-14 SEASONAL SNOWFALL TOTALS FOR CENTRAL, NORTH-CENTRAL AND NORTHEAST WISCONSIN...

LOCATION	AMOUNT (INCHES)	LOCATION	AMOUNT (INCHES)
WINCHESTER (VILAS CO)	166.0	SHAWANO	70.8
LAC VIEUX DESERT	147.4	APPLETON	70.2
PHELPS	140.7	FORESTVILLE	69.1
REST LAKE	122.9	STEVENS POINT	67.9
ST. GERMAIN	113.6	SPENCER	66.5
RHINELANDER - TV 12	110.3	WAUPACA	66.4
LAKE TOMAHAWK	110.2	PULASKI	65.6
LAONA	104.9	SHIOCTON	65.0
ARBOR VITAE	101.8	ALMOND - 5NE	64.6
EAGLE RIVER	100.7	PESHTIGO	64.1
MINOCQUA	96.6	CASCO	63.4
ARGONNE	96.1	APPLETON - WHBY	62.7
WASHINGTON ISLAND	95.7	MARINETTE	62.4
EAGLE RIVER SOUTH	95.6	PLOVER	61.4
LONG LAKE	95.2	CHILTON	60.6
MARSHFIELD	89.1	KEWAUNEE - SW	59.8
FLORENCE	87.5	AMHERST - 3SE	58.1
EPHRAIM	87.4	NEW LONDON	57.6
RICE RESERVOIR	86.0	ALVIN	55.7
BOWLER	85.8	TWO RIVERS	55.4
FISH CREEK	84.7	FRANCIS CREEK	54.6
WAUSAU - WSAW TV	84.3	DENMARK	53.4
STURGEON BAY	81.9	BRILLION	53.2
WILLOW RESERVOIR	81.9	KEWAUNEE	52.6
LAKEWOOD	80.6	OMRO - SE	51.1
MOUNTAIN - 1SW	80.3	ST. NAZIANZ	50.8
MERRILL - 8W	79.4	WEYAUWEGA	50.4
WHITE LAKE	78.2	NEW HOSTEIN	49.5
MERRILL	77.3	POY SIPPI	49.4
OCONTO - 4W	77.0	HANCOCK	48.6
ROSHOLT	76.5	OSHKOSH	44.4
BIG FALLS - 5NW	75.2	OSHKOSH - 6S	42.8
ATHELSTANE - 2SE	74.5		
WAUSAUKEE	74.4		
STRATFORD	74.0		
AMBERG - 9E	72.2		
GREEN BAY - NWS	72.1		
BABCOCK	71.8		
ANTIGO	71.6		
PLOVER - SOUTH	71.3		



MAY

May 12 Several precipitation records were broken on this date: 2.30 inches at Appleton, 1.11 inches at Merrill and 1.05 inches at Green Bay.

May 16 Record low of 24 was set at Rhinelander, breaking the old record of 25 set in 1929. Later that afternoon, Stevens Point tied their record low maximum for the date at 49 which was set in 1970 and 2009.

May 19 The rainfall total of 1.71 inches at Marshfield broke the previous daily record of 1.56 inches set in 1940.

May 26 Record high minimum temperatures were tied at Marshfield at 63 (first set in 1978 and 2010), and at Wausau with 64 (first set in 1978).

May 27 Record high minimum temperature of 64 at Marshfield broke the old record of 62 set in 1939,1941 and 1981. Merrill tied their record high minimum temperature of 63 first set in 1948.

JUNE

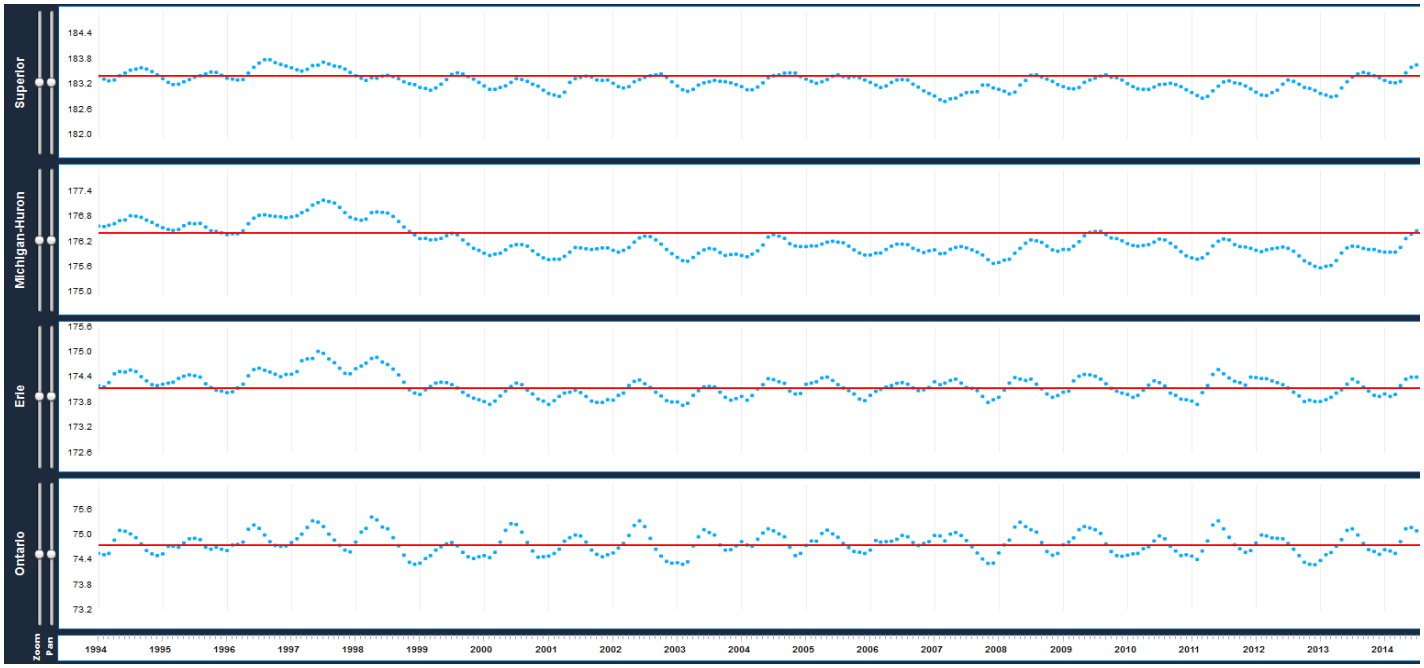
Jun 2 Antigo tied their record high minimum for the date at 64, first established in 1934. Record high minimum temperatures were tied at Marshfield at 63, and broken at Wisconsin Rapids with 66 (old record of 63 set in 1991). Over in Manitowoc, rainfall totaled 1.69 inches breaking the old record of 1.40 inches set in 1999.

Jun 14 Record low maximum temperature was established at Manitowoc with 53, breaking the old record of 54 set in 1980.

Jun 15 The high of 65 at Merrill broke the previoius daily record low maximum of 68 set in 1990.

Jun 21 The high temperature of 57 at Manitowoc broke the previous record low maximum of 59 set in 1992.

June By June, notable rises in the water levels were noted on area lakes and rivers, along with the Bay of Green Bay and the Great Lakes. Image below are waters levels on the Great Lakes (starting at the top Superior, Michigan-Huron, Erie and Ontario.

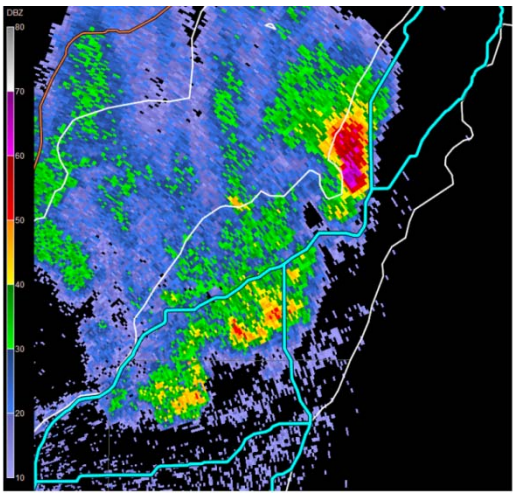


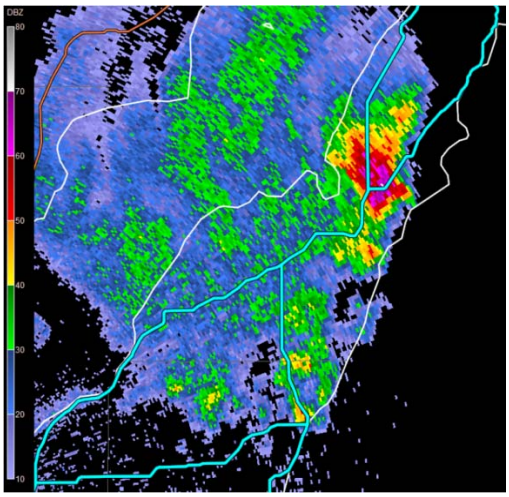
JULY

Jul 3 Appleton sets a new record low for the date at 46 degrees.

Jul 9 A new record low of 42 degrees was set at Rhinelander.

July 14 A localized severe hailstorm struck near the town of Institute, north of Sturgeon Bay. The severe storm generated golf ball size hail that pummeled cherry trees, grapevines, winter what and corn crops. Many area crop fields were reported as destroyed. The storm also piled hail three to four inches deep, resembling a scene from a winter snowstorm. Below are radar images as the storm moved across central Door County. Sturgeon Bay set a daily precipitation record with 3.05 inches, breaking the old record of 0.82 inches set in 1933.





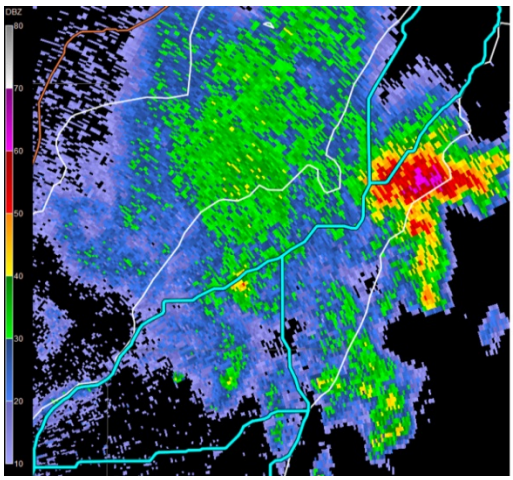


Photo from: WBAY TV.

Photo from WLUK TV.

Growing corn shorn from its stalks along Walker Road in the town of Sevastopol after a localized hailstorm ravaged crops Monday night. *(Photo: Samantha Hernandez/Door County Advocate)*

Photo from WLUK TV.

A photo posted on Facebook by the Door County Sheriff's Department shows 3-4 inches of hail on West Dunn Road after a storm passed through the town of Sevastopol north of Sturgeon Bay on Monday night. *(Photo: Submitted)*

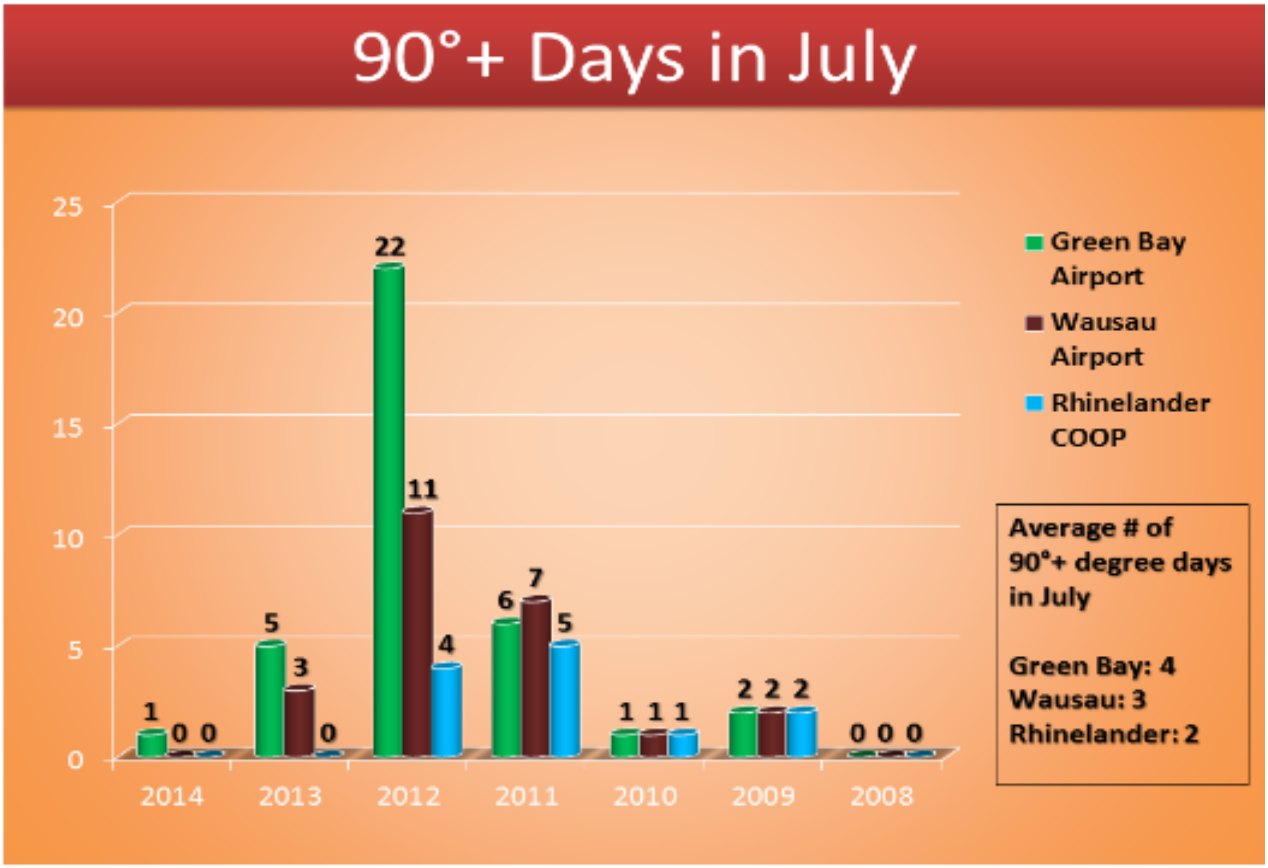
JULY

Jul 15 New record low maximum temperatues set for the date include: 62 at Rhinelander, 66 at Appleton, 68 at Marshfield and 69 at Oshkosh.

Jul 16 The low of 40 at Rhinelander and 46 at Appleton set new record lows for the date.

Jul 17 The low of 42 at Rhinelander set a new record low for the date.

Jul 23 The first and for some the only 90 degree temperature of season was reported across portions of central and northeast Wisconsin. High temperatures warmed to: 91 at Appleton, Green Bay and Oshkosh; and 90 at Manitowoc, Sturgeon Bay and Wisconsin Rapids.

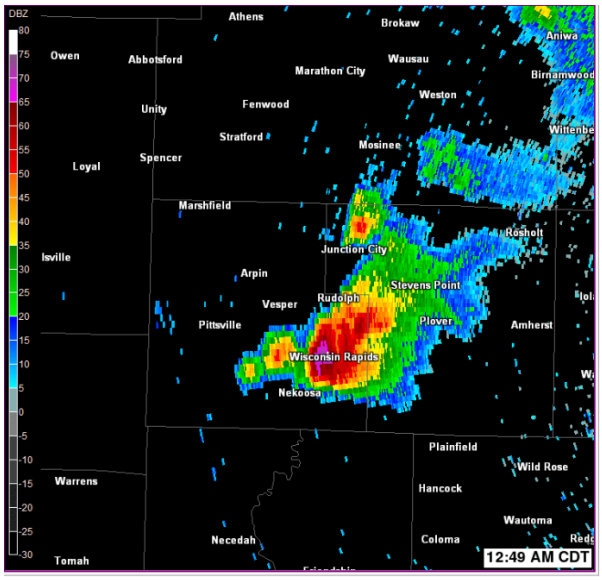


JULY

Jul 24 A new record low maximum of 63 was set at Manitowoc, breaking the old record of 64 in 1914.

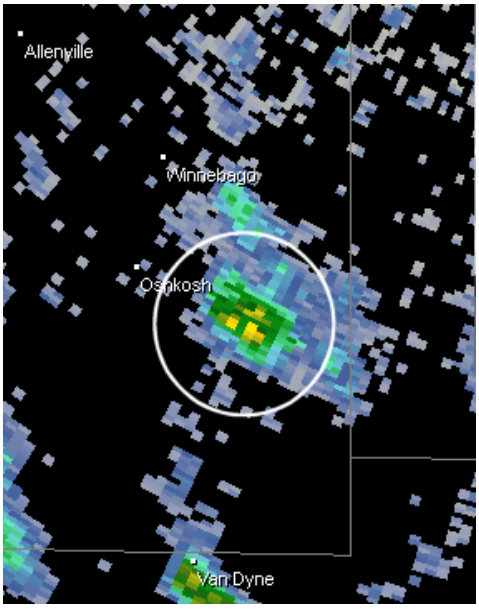
Jul 25 Record low maximum of 70 tied at Marshfield, first set in 1915.

Jul 26 A severe thunderstorm (radar image below – left image) produced large hail at Wisconsin Rapids shortly before 1 am.

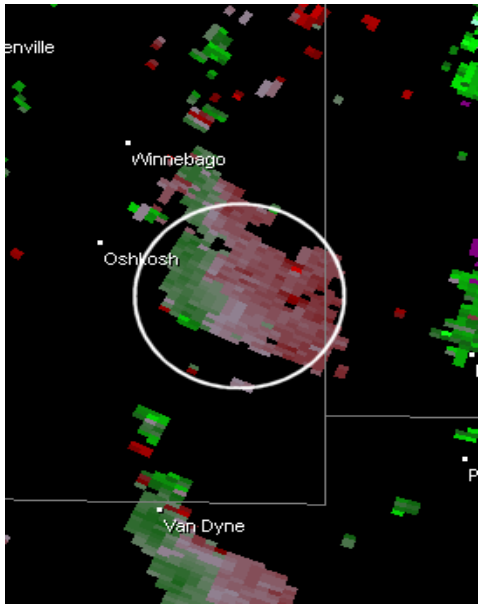


Jul 27 A very weak and brief waterspout formed under a rain shower over southern Lake Winnebago, about 5 miles southeast of Oshkosh. The waterspout was on the water for a just a few seconds and then dissipated. The parent funnel was seen by hundreds of people across the area. No damage occurred.

Photograph submitted to NWS.



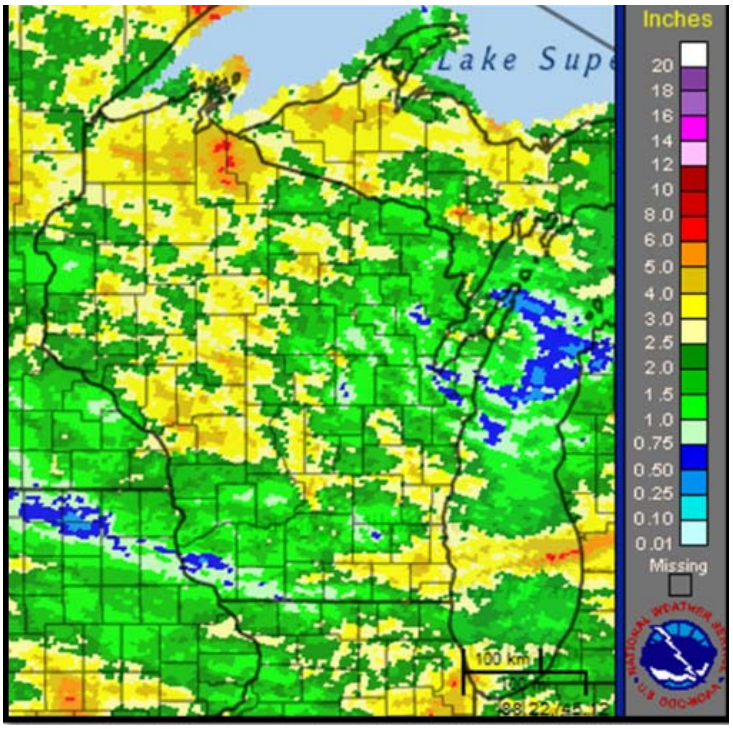
Radar image: Green Bay radar.

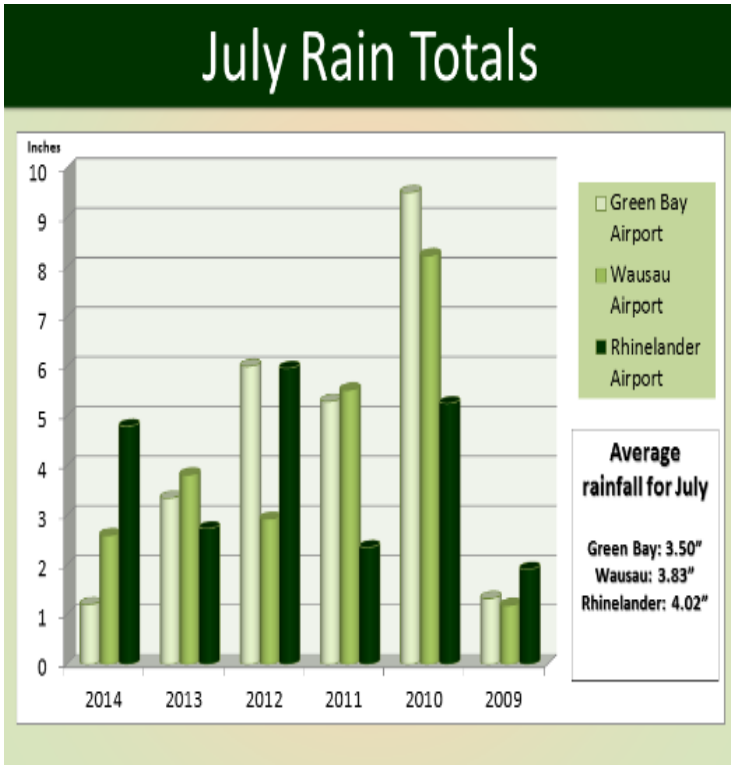


Velocity image: Green Bay radar.

JULY

July 31 July ended up much drier than normal across northeast and east-central Wisconsin where rainfall amounts were under an inch at some locations (left image below). Normal July rainfall across the area is between 3.50 and 4.50 inches. At Green Bay, it was the driest July since 2009.

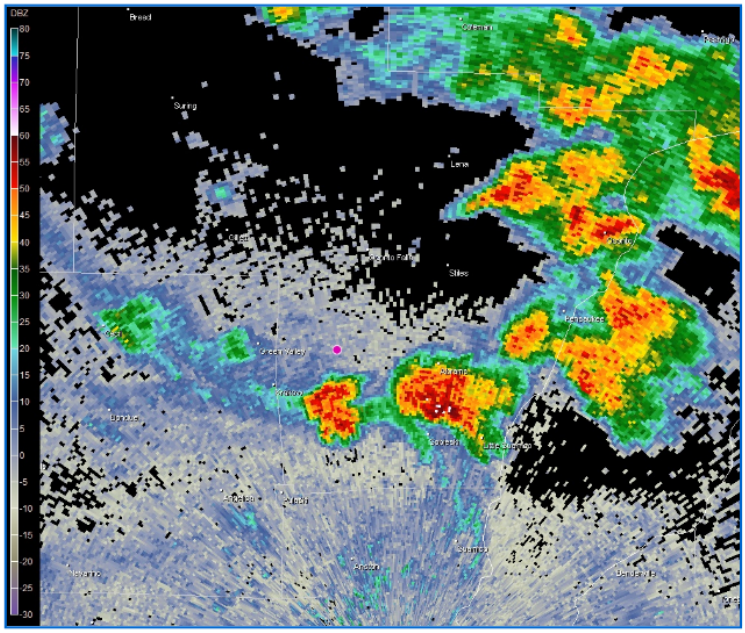




AUGUST

Aug 3 Two people were killed by lightning when a storm rapidly developed during the early evening of August 3rd in southern Oconto County. Both men were working on a treehouse about five miles west of Abrams. One man was killed instantly. The second succumbed to his injuries August 6th. The lightning likely occurred with a thunderstorm about two miles south of the property. Below is a radar image at about the time the lightning struck.

Below is a radar image at about the time the lightning struck. The location of the fatalities is highlighted.



Aug 12 Sturgeon Bay set a new daily rainfall record with 3.10 inches, breaking the old record of 1.57 inches set in 1962.

Aug 18 A tornado developed and caused minor damage as it moved east near Shady Lane, a little over three miles northeast of Winchester in northern Winnebago County. The weak tornado (EF-0) caused two single wood power poles to partially lean in saturated soil and knocked over a few trees and limbs. Swirl marks could be seen in a field of tall grass. The tornado was not in contact with the ground during the entire path (a little over two miles). The maximum width of the tornado was 50 yards with estimated winds of 65 to 75. In the Green Bay County Warning Area that comprises twenty-two counties in north-central and northeast Wisconsin, there was one waterspout and one tornado which both occurred in Winnebago County in 2014.

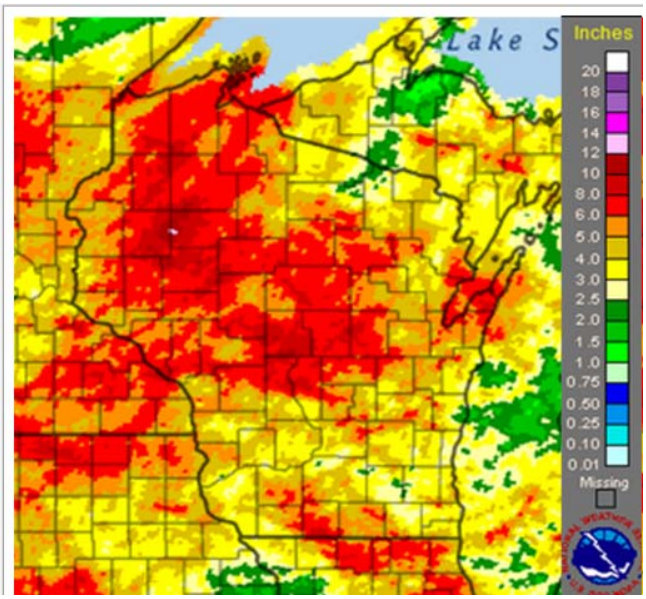
Aug 18 Wisconsin Rapids received 3.61 inches of rain, breaking the old daily record of 1.85 inches set in 1990.

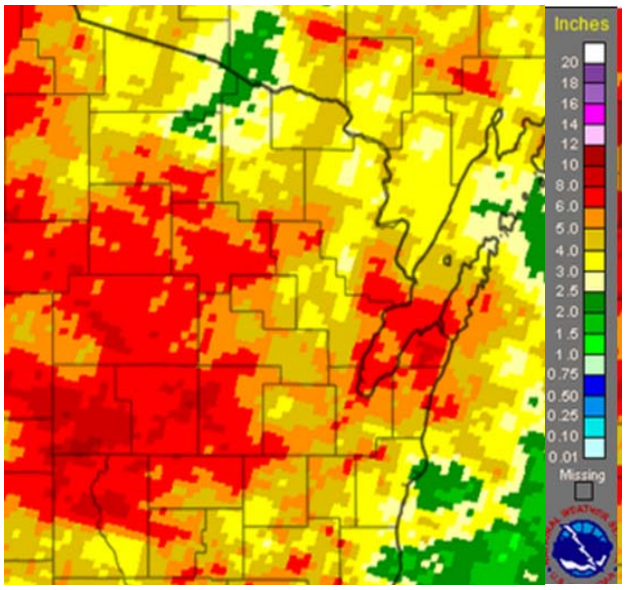
Aug 23 Record high minimum tied at Marshifeld at 71, first set in 1968.

Aug 29 Antigo set a daily precipitation record with 2.12 inches of rain.

AUGUST

August Portions of northeast Wisconsin received 7 to 12 inches of rain for the month, or 3 to 5 inches above normal.





Location	2014 August Rainfall (inches)	Normal August Rainfall (inches)	Departure from Normal (inches)
Iola	12.30	MSG	MSG
Eau Pleine Reservoir	9.08	4.32	+4.76
Wisconsin Rapids Airport	8.87	4.08	+4.79
Dancy - 1 NE	8.41	MSG	MSG
Amherst	8.36	MSG	MSG
Babcock	8.32	4.35	+3.97
Waupaca	8.16	4.05	+4.11
New London	7.93	3.91	+4.02
Antigo	7.45	3.85	+3.60
Wild Rose	7.44	MSG	MSG
Babcock	7.44	MSG	MSG
Stevens Point	7.38	3.91	+3.47
Wausau	7.10	4.16	+2.94
Chilton	7.00	3.50	+3.50
Marshfield (coop site)	6.91	4.29	+2.62
Hancock	6.50	4.17	+2.33
Peshtigo	6.19	3.58	+2.61
Stratford	5.67	4.28	+1.39
Clintonville	5.40	3.97	+1.43
Brillion	5.39	3.29	+1.10
Kewaunee	5.26	3.27	+1.99
Oconto	5.10	3.46	+1.64
Oshkosh (coop site)	5.06	3.75	+1.31
Green Bay	4.80	3.37	+1.43
Laona	4.75	3.03	+1.72
Appleton	4.70	3.79	+0.91
Shawano	4.12	3.60	+0.52
Ephraim	4.02	3.39	+0.63

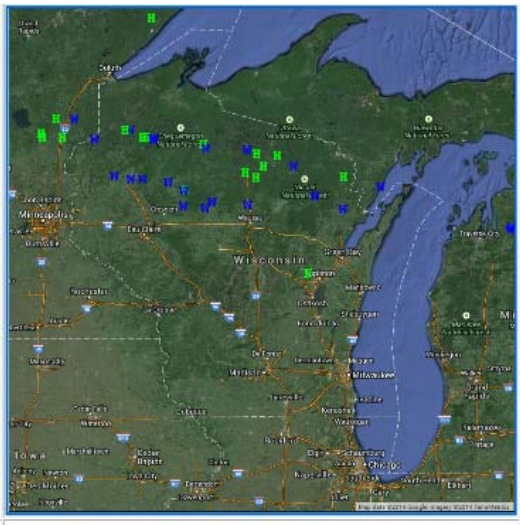
SEPTEMBER

Sep 2 Record high mimimum temperatures tied (1967) at Wisconsin Rapids with a low temperature of 67.

Sep 4 Several daily precipitation records were set on this date, including: 2.40 inches at Sturgeon Bay, 1.89 inches at Antigo, 1.55 inches at Stevens Point and 1.45 inches at Merrill.

Sep 4-5 Severe thunderstorms produced very large hail and high winds during the morning of the 4th across parts of north-central and northeast Wisconsin. Later during the night of September 4-5, additional storms produced very heavy rain over saturated soil (see image at the bottom of page), resulting in urban and localized flash flooding in northeast Wisconsin. The first batch of thunderstorms hit north-central and far northeast Wisconsin between 9 am and noon. The storms formed north of a warm front that was slowly moving north across the region. The severe storms produced hail up to 2.5 inches in diameter (image below) and wind gusts over 60 mph. In addition, urban flooding was reported in Eagle River and Woodruff

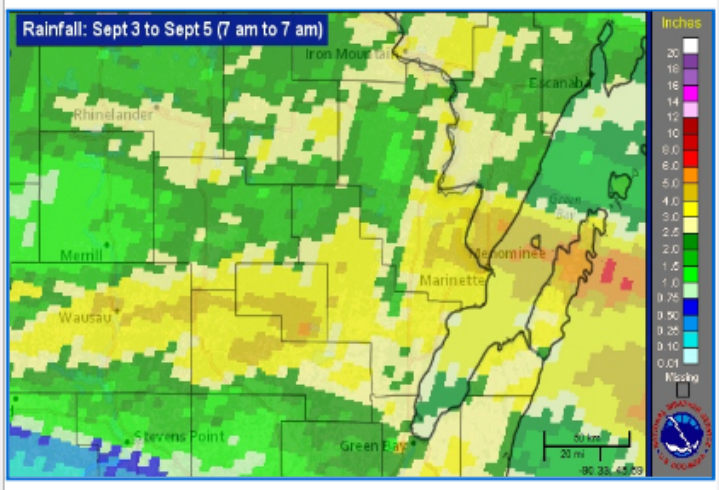
Picture of large hail near Lake Tomahawk. Courtesy MaryKarolyFranke.



Map showing location of large hail (H) and wind damage (W) that occurred on September 4.

...48 HOUR RAINFALL REPORTS...

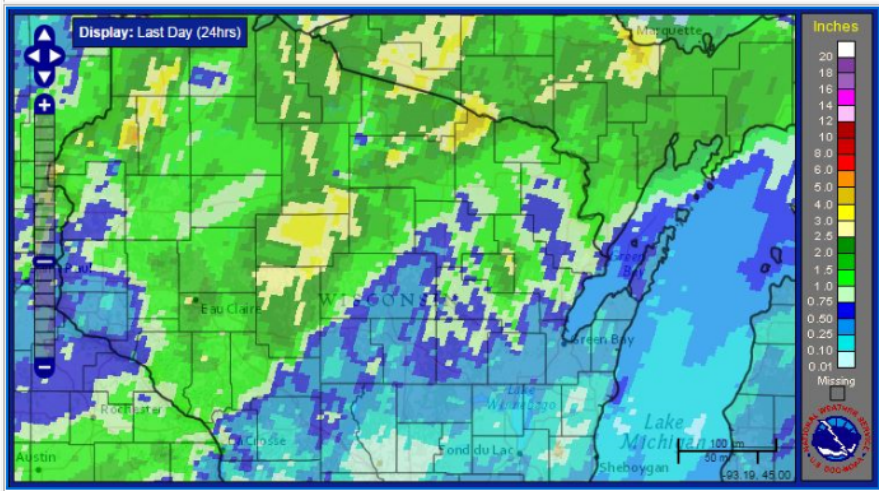
LOCATION	AMOUNT
EPHRAIM 5 SE - NORTH BAY	7.00 IN
FISH CREEK 3 S - JUDDVILLE	5.61 IN
FISH CREEK 1 E	5.42 IN
EGG HARBOR	5.29 IN
2 WNW KESHENA	5.03 IN
STOCKBRIDGE-MUNSEE RESERVATION	4.89 IN
LAKE TOMAHAWK 2 SE	4.83 IN
2 NW MOUNTAIN	4.66 IN
PELLA 3 SE	4.61 IN
AURORA - 4 W	4.38 IN
BEAVER - 2 W	4.26 IN
WAUSAU-NORTHEAST	4.20 IN
WAUSAU DAM - WVIC	4.17 IN
SHAWANO 4 SE	4.04 IN
SHAWANO 2 SSW	4.04 IN
SURING	4.03 IN
MOUNTAIN 1 SW	3.71 IN
OCONTO 4 W	3.59 IN
3 NE WAUSAU	3.56 IN
LAONA 6 SW	3.53 IN
ST GERMAIN	3.52 IN
EAGLE RIVER	3.50 IN
MINOCQUA	3.49 IN
WAUSAU MUNICIPAL AIRPORT	3.47 IN
RHINELANDER	3.47 IN
WAUSAUKEE	3.27 IN
FORESTVILLE-4E	3.22 IN
CRANDON	3.16 IN
PULASKI	3.05 IN
GREEN BAY	2.82 IN
NWS GREEN BAY	2.75 IN
SHAWANO MUNICIPAL AIRPORT	2.70 IN



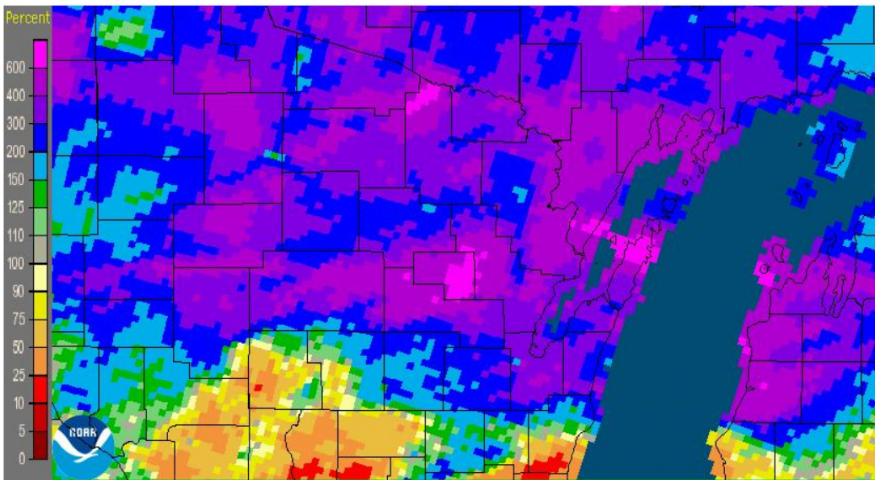
SEPTEMBER

Sep 9-10 More heavy rains across northern Wisconsin, with amounts over 2 inches noted across Vilas, Oneida, Lincoln, Forest and Florence counties.

September 9-10 rainfall map. Amounts are from observers and radar estimates.



Green Bay, WI (GRB): Current 7-Day Percent of Normal Precipitation
Valid at 9/11/2014 1200 UTC- Created 9/11/14 16:19 UTC



LOCATION	AMOUNT	TIME/DATE
...FLORENCE...		
AURORA-4W	2.55 IN	0600 AM 09/11
COMMONWEALTH	2.48 IN	0715 AM 09/11
AURORA	2.07 IN	0753 AM 09/11
...FOREST...		
ALVIN 4 NW	2.35 IN	0700 AM 09/11
ARGONNE-1.5 NW	1.95 IN	0701 AM 09/11
ALVIN-3NW	1.86 IN	0700 AM 09/11
CRANDON	1.77 IN	0600 AM 09/11
LAONA 6 SW	1.51 IN	0700 AM 09/11
4 SE CRANDON	1.50 IN	1003 AM 09/11
...LANGLADE...		
SUMMIT LAKE	1.68 IN	0530 AM 09/11
WHITE LAKE 1 SE	1.53 IN	0800 AM 09/11
...LINCOLN...		
TOMAHAWK	2.62 IN	0655 AM 09/11
7 NNE HAMBURG	2.33 IN	0600 AM 09/11
MERRILL 8W	2.33 IN	0600 AM 09/11
RICE RESERVOIR NO. 2	2.05 IN	0700 AM 09/11
RICE RESERVOR - TOMAHAWK	2.05 IN	0700 AM 09/11
MERRILL	1.98 IN	0655 AM 09/11
...MARATHON...		
STRATFORD 1NW	2.24 IN	0602 AM 09/11
2 NE WESTON	1.54 IN	0700 AM 09/11
...MARINETTE...		
CRIVITZ HIGH FALLS	1.70 IN	0800 AM 09/11
2 SW ATHELSTANE	1.46 IN	1050 AM 09/11
...OCONTO...		
LAKEWOOD SANITARY DISTRICT	1.90 IN	0730 AM 09/11
...ONEIDA...		
MINOCQUA	2.37 IN	0700 AM 09/11
1 ENE RHINELANDER	2.26 IN	1031 AM 09/11
RHINELANDER 4NE	2.19 IN	0800 AM 09/11
2 S ARBOR VITAE - WOODRUFF	2.12 IN	1010 AM 09/11
LAKE TOMAHAWK 2 SE	2.06 IN	0600 AM 09/11
2 NNW BRADLEY	2.05 IN	1044 AM 09/11
5 N RHINELANDER	2.02 IN	0900 AM 09/11
4 SSE MC NAUGHTON	2.00 IN	0700 AM 09/11
RESERVOIR	1.92 IN	0700 AM 09/11
RHINELANDER-ONEIDA COUNTY AIRP	1.91 IN	0653 AM 09/11
...VILAS...		
3 SW THOUSAND ISLAND LAKE	2.90 IN	0800 AM 09/11
LAC VIEUX DESERT	2.03 IN	0750 AM 09/11
4 ESE LAND O LAKES	2.02 IN	1000 AM 09/11
ST GERMAIN	1.91 IN	0600 AM 09/11
EAGLE RIVER-SOUTH	1.84 IN	0659 AM 09/11
2 SW PHELPS	1.65 IN	1002 AM 09/11
EAGLE RIVER	1.65 IN	0655 AM 09/11
LAKELAND/NORLE E LEE MEM FD AP	1.63 IN	0655 AM 09/11

Sep 10 A trace of snow was reported at Rhinelander and several sites across Vilas County.

Sep 11 Record low maximum temperatures were estabished on this date, including: 50 at Antigo, 51 at Rhinelander and Appleton, 52 at Merrill, 53 at Green Bay and Oshkosh, 53 at Stevens Point , 55 at Stevens Point and 56 at Manitowoc.

Sep 12 Record low tied at Rhinelander at 29, first set in 1946.

Sep 12 Record low maximum temperatures set on this date: 47 Antigo and Stevens Point, 48 at Wisconsin Rapids and Rhinelander, 49 at Marshfield and Merrill, 50 at Antigo and Wausau, 53 at Sturgeon Bay.

Sep 12 New record low maximum temperatues set on this date: 48 at Oshkosh, 49 at Appleton and 51 at Manitowoc.

Sep 13 Record low tied at Rhinelander at 29, first set in 1995.

OCTOBER

Oct 2 Daily precipitation records were established on this date: 1.70 inches at Wausau, 1.61 inches at Merrill and 1.19 inches at Antigo.

Oct 4 High temperature of 41 at Antigo and Rhinelander established a new record low maximum for the date. A trace of snow was reported at Marshfield, Stevens Point, Wausau and Wisconsin Rapids set a new snowfall record for the date.

Oct 14 Manitowoc recorded 1.95 inches of rain, breaking the Oct 14th precipitation record of 1.60 inches set in 1886 and 2012. Other daily precipitation records set include: 1.63 inches at Sturgeon Bay and 1.43 inches at Merrill.

Oct 30 Marshfield tied their daily snowfall record of a trace, first set in 1923 and 1962.

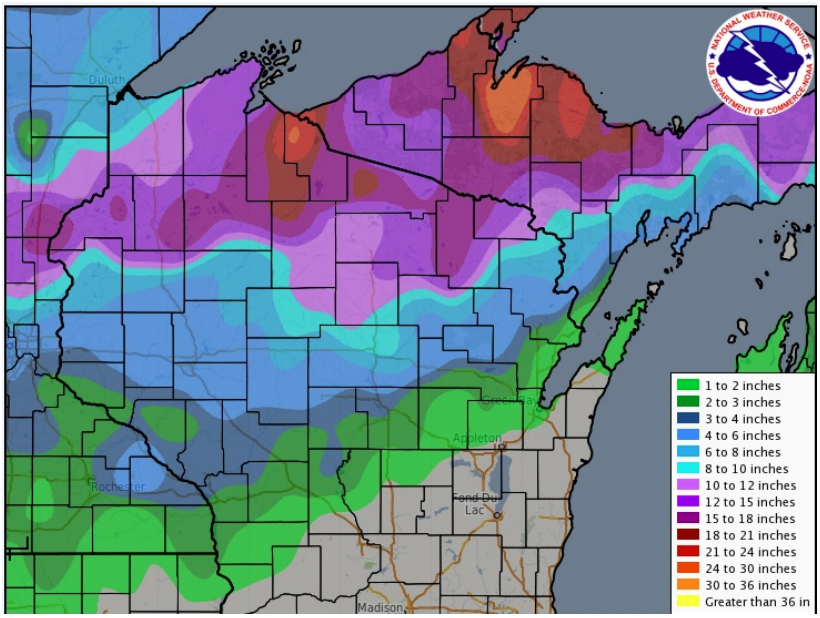
Oct 31 Snowfall records were established on this date: 2.3 inches at Rhinelander (0.8 inches in 1939), 1.7 inches at Wausau (1.6 inches in 1932) and a trace at Wisconsin Rapids (trace in 1918, 1951 and 1966, 1970 and 1996).

NEXT PAGE

NOVEMBER

Nov 11 Daily snowfall records established: 8.3 inches at Rhinelander, 7.0 inches at Antigo, 6.1 inches at Merrill and 4.5 inches at Wausau.

Nov 10-11 A complex winter storm moved across the region. The first round of snow moved across the region on the 10th. A gap of 6 to 12 hours in the heavier precipitation across during the afternoon and evening hours; although freezing drizzle developed across central, north-central and far northeast Wisconsin.



Nov 15 Record low established at Antigo at 9 below zero, eclipsing the old record of 5 below set in 1916. A record low maximum of 21 was set at Merrill, breaking the old record of 25 set in 1916.

Nov 16 Record low maximum tied at Rhinelander at 21, first set in 1932.

Nov 17 The high temperature of 12 above set a new record low maximum at Stevens Point.

Nov 18 Several locations set new record low maximum temperatures for the date: 10 above at Rhinelander, 11 at Antigo, 13 at Wausau and Merrill, 14 at Marshfield, 15 at Wisconsin Rapids and Stevens Point, 19 (tied) at Appleton and 22 (tied) at Sturgeon Bay.

Nov 19 Manitowoc tied their record low maximum of 10 for the date, first set in 1914. Several record low maximum temperatures were set, including: 13 at Antigo, 17 at Rhinelander, 21 at Stevens Point and Wisconsin Rapids (tied), and 23 at Appleton.

Nov 20 New record low temperature of 2 below at Wisconsin Rapids, breaking the old record of one below set in 1921. Several record low maximum temperatures were set: 11 at Rhinelander, 12 at Merrill, 13 at Antigo, 15 at Stevens Point, 16 (tied) at Wausau, 19 at Green Bay, 20 at Oshkosh and Manitowoc, and 20 at Appleton and 20 (tied) at Sturgeon Bay.

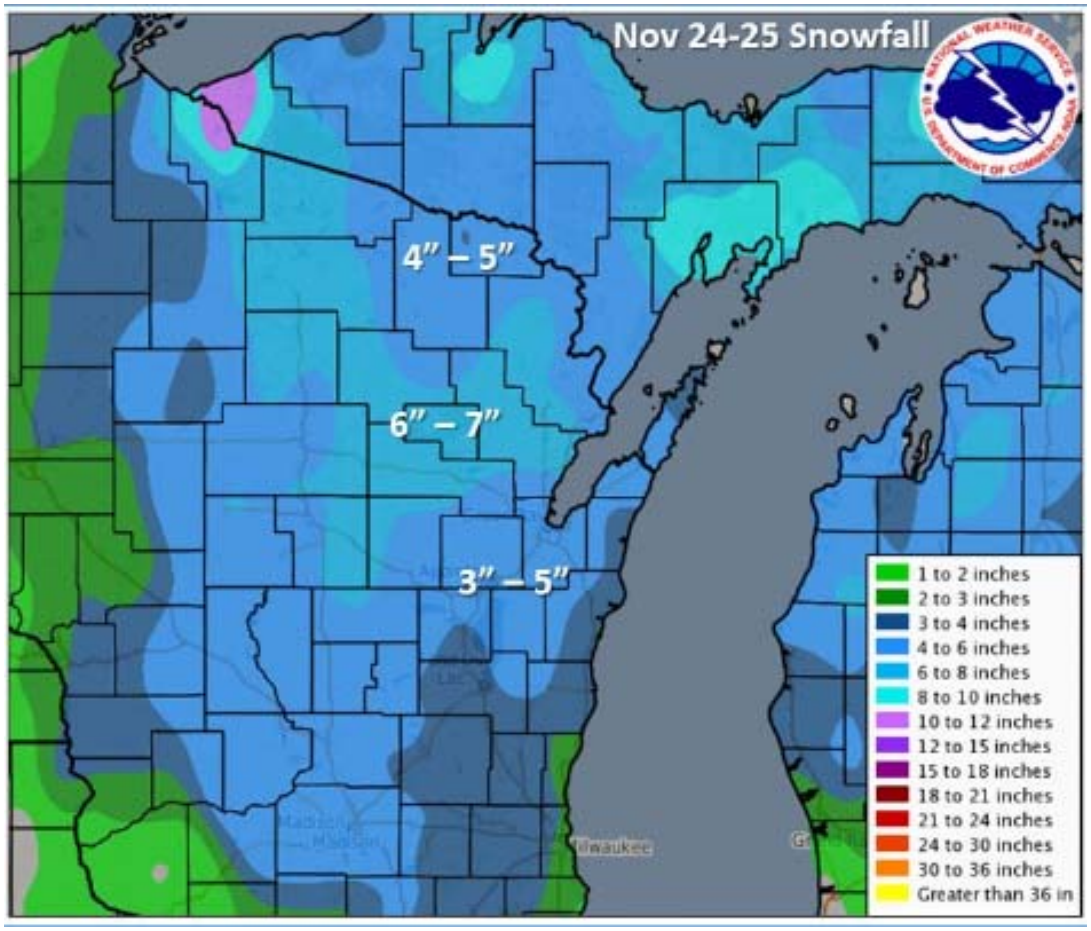
Nov 21 Record low temperatures were set 11 below at Antigo, 9 below at Merrill, 8 below at Rhinelander, 7 below at Wisconsin Rapids, 5 below at Marshfield, 2 below at Wausau and Stevens Point, zero at Sturgeon Bay, 1 above at Oshkosh, 3 above at Green Bay and Appleton.

NOVEMBER

Nov 22 Green Bay ended a streak of 10 consecutive with high temperatures below freezing in November. The previous longest stretch of sub-freezing high temperatures in November was 9 consecutive days set in 1956.

Nov 24 Manitowoc establishes new daily precipitation record of 0.84 inches, breaking the old record of 0.78 inches set in 1908. At Oshkosh, the precipitation total of 0.72 inches eclipsed the previous record of 0.65 inches in 1908. Numerous snowfall records were set: 6.0 inches at Oshkosh , 5.9 inches at Rhinelander, 5.5 inches at Antigo, 4.8 inches at Wausau and Stevens Point and Wisconsin Rapids, 4.5 inches at Sturgeon Bay and 4.0 inches at Appleton.

Nov 24-25 A fast moving weather system dumped 4 to 7 inches of snow across the area. Snowfall amounts were lower across east-central and northeast Wisconsin due a slower change over to snow.



Nov 27 Rhinelander sets new record low for the date of 11 below, eclipsing the old record of 4 below set in 1976 and 1985.

Nov 27 Antigo sets a new record low for the date of 13 below, breaking the old record of 5 below set in 1903.

Nov 28 Antigo at 14 below and Sturgeon Bay at zero sets a new record low for the date. A record low maximum temperature of 13 was set at Merrill, breaking the old record of 15 set in 1967 and 1976.

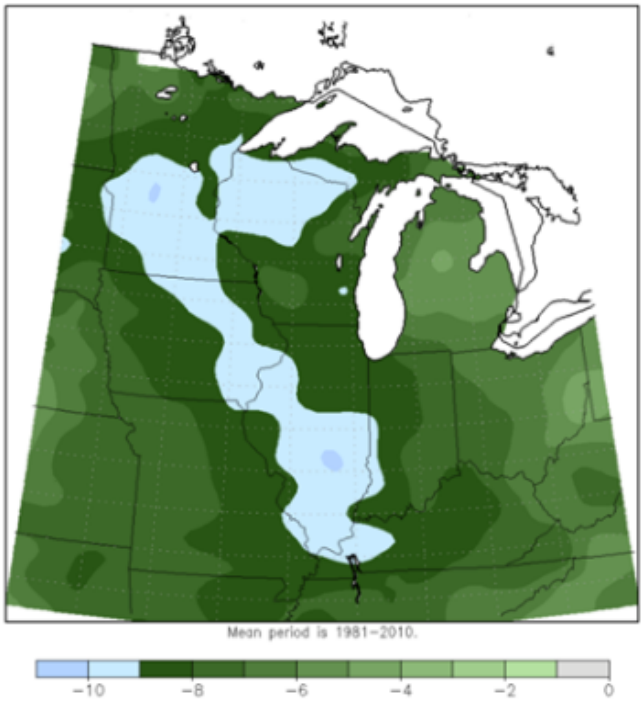
NOVEMBER

Location	Average November Temp	Departure From Normal	November Ranking	November Snowfall	Departure From Normal	November Ranking
Green Bay	28.5°	-6.1°	T-5th Coldest	8.2"	+4.2"	44th Snowiest
Rhinelander	20.6°	-9.7°	**Coldest**	32.4"	+25.2"	**Snowiest**
Wausau	24.2°	-8.3°	3rd Coldest	18.5"	+6.9"	3rd Snowiest

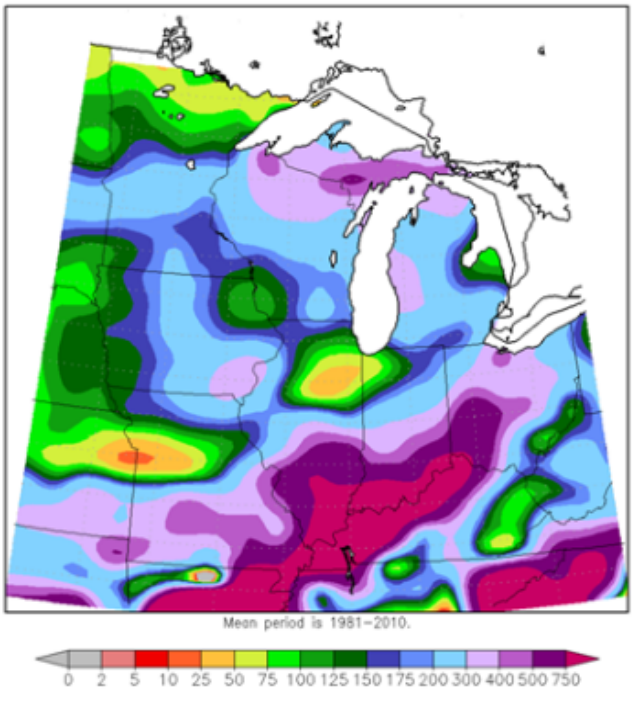
It was a cold and snowy November, with daily temperatures averaging five to twenty-five degrees below normal from the 12th through the 21st, and again from the 25th through the 28th. Overall, November 2014 will go down in the record books as one of the top ten coldest Novembers on record. The weather was so cold so early in the season, some rivers across north-central and northeast Wisconsin were experiencing fluctuations in the river levels due to ice jams, something you usually see during the spring!

The greatest temperature departures from normal occurred from northwest Wisconsin into the southern half of Minnesota, and then southeast across eastern Iowa into the southern half of Illinois. Although Buffalo received the national headlines with the record breaking lake effect snow event, snowfall was abundant across northern Wisconsin and Upper Michigan. Gile in Iron County received over 120 inches of snow for the month. Winchestern in Vilas county received over 50 inches of snow for the month. At Rhinelander, the snowfall total for the month was 32.4 inches, breaking the previous November record of 21.5 inches set in 1957. November snowfall totals were 150 to 400 percent of normal across the northern half of Wisconsin.

November 2014 Temperature Departure From Normal



November 2014 Percent of Normal Snowfall



DECEMBER

Dec 1 The high temperature of 4 above at Rhinelander set a new daily record low maximum, breaking the old record of 5 above set in 1919. At Antigo, the low temperature of 16 below establishes a new record low for the date, breaking the old record of 15 below set in 1919.

Dec 13-15 A mild pacific air mass moving across the cold ground and snowpack caused widespread dense fog. Fog was a contributing factor in a car accident in Shawano County that left seven people injured.

Dec 14 Many record high minimum temperatures were set on this date, including: 41 at Manitowoc, 40 at Merrill and Sturgeon Bay, 39 at Marshfield and Oshkosh, 38 at Appleton, 38 at Stevens Point and Wisconsin Rapids, 37 at Antigo and 36 at Rhinelander.

Dec 15 Record high minimum temperatures set include: 41 at Marshfield and Wisconsin Rapids, 40 at Oshkosh, 39 at Green Bay and Wausau, 38 at Appleton, 37 at Rhinelander and Stevens Point, and 36 at Antigo.

Dec 10-18 Ice jams on the Wolf River caused flooding in Keshena. The flood waters closed Highway 47/55 on the 16th. Crews tried to break up the ice jam, but it was too large to reduce flooding in Keshena.

Sandbags form a barrier between the rising Wolf River and a gas station in Keshena, Dec. 11, 2014. (WLUK/Andrew LaCombe)

Photo by: Andrew La Combe (WLUK)

Photo submitted to NWS

DECEMBER

Dec 22-23 Unusually mild air and gusty easterly winds caused ice shoves on Lake Winnebago near Oshkosh, more typically seen during the spring.

Photos courtesy: WBAY TV – Green Bay

Dec 23 Record high minimum temperature of 33 set at Wausau, breaking the old record of 32 set in 1931 and 1952. Appleton recorded 0.80 inches of precipitation, breaking the old record of 0.58 inches set in 2007.

Dec 24 Appleton established a new record high minimum temperature of 34 degrees for the date, breaking the old record of 33 set in 1931 and again in 1982. Other record high minimum temperatues set on this date: 33 at Marshfield and Wisconsin Rapids, and 32 (tied) at Stevens Point.

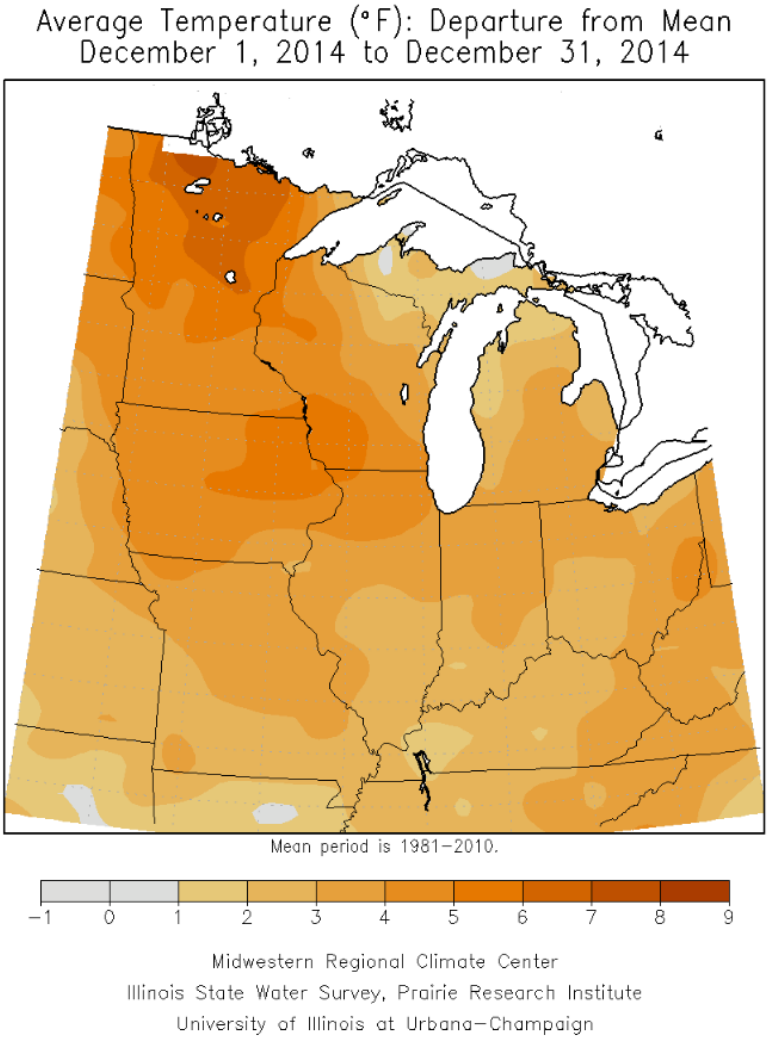
Dec 25 A "brown" Christmas was noted across the Fox Valley and lakeshore region due the recent rains and mild temperatures.

Dec 27-28 Heavy snow was reported across north-central and far northeast Wisconsin on the 27-28th.

LOCATION	AMOUNT
FLORENCE 5.6 ESE	9.5 IN
6 SW LAONA	8.8 IN
EAGLE RIVER - SOUTH	8.5 IN
CRANDON	8.3 IN
LAND O` LAKES 11.7 W	8.0 IN
WINCHESTER-3 NE	8.0 IN
RHINELANDER 2.7 WNW	7.7 IN
1.5 NW ARGONNE	7.7 IN
8 W MERRILL	7.5 IN
RICE RESERVOIR NO. 2	7.4 IN
RHINELANDER WJFW TV-12	7.4 IN
EAGLE RIVER-4 E	7.2 IN
4 NE RHINELANDER	7.0 IN
RHINELANDER	7.0 IN
LONG LAKE 3-NE	7.0 IN
ST GERMAIN	6.8 IN
2 SE LAKE TOMAHAWK	6.8 IN
SUMMIT LAKE	6.5 IN
ARBOR VITAE-JOHNSON LAKE	6.0 IN
ALVIN 4 NW	5.9 IN
MINOCQUA	5.5 IN
WHITE LAKE 1 SE	5.5 IN

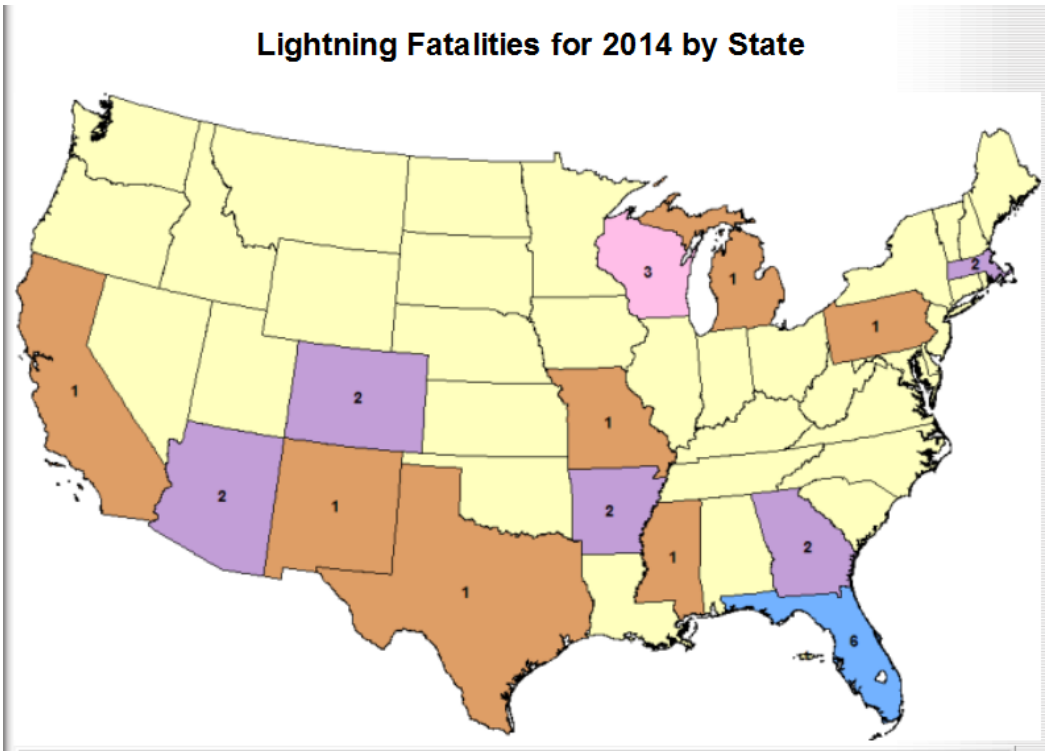
DECEMBER

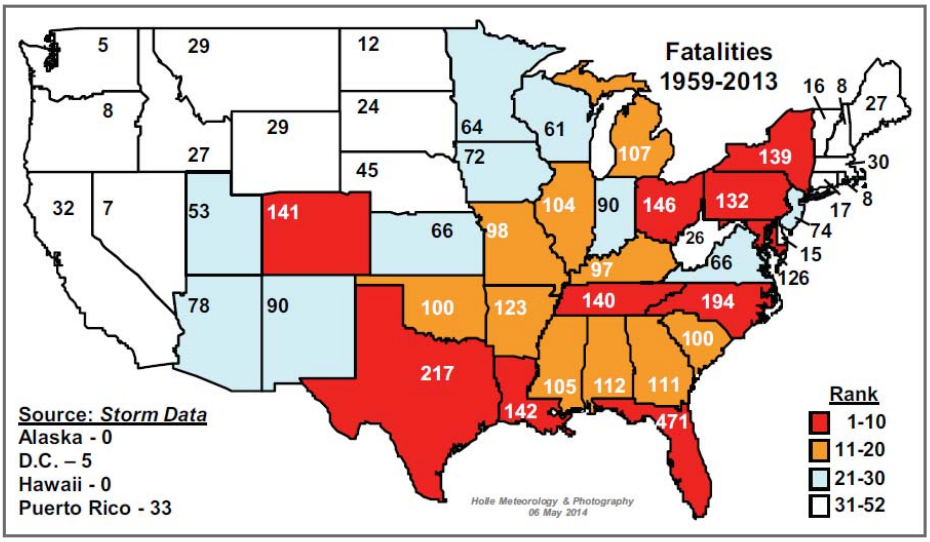
What a stark contrast to the bitter cold of November, and one of the coldest November's in recent memory. December ended up 1 to 5 degrees above normal (see graphic below). Snow was abundant across north-central Wisconsin,, but more rain than snow fell across the Fox Valley and lakeshore region.



2014: Wisconsin 2nd in the Nation with 3 Lightning Deaths

Wisconsin was 2nd in the nation with 3 lightning deaths in 2014. Two deaths occurred in Morgan in Oconto County while the 3rd death occurred in Janesville. On average, Wisconsin averages about one lightning death per year based on the 1959 to 2013 statistics in the graphic below. Florida led the nation with 6 lightning deaths. There were 26 deaths due to lightning in 2014 across the United States (preliminary data).

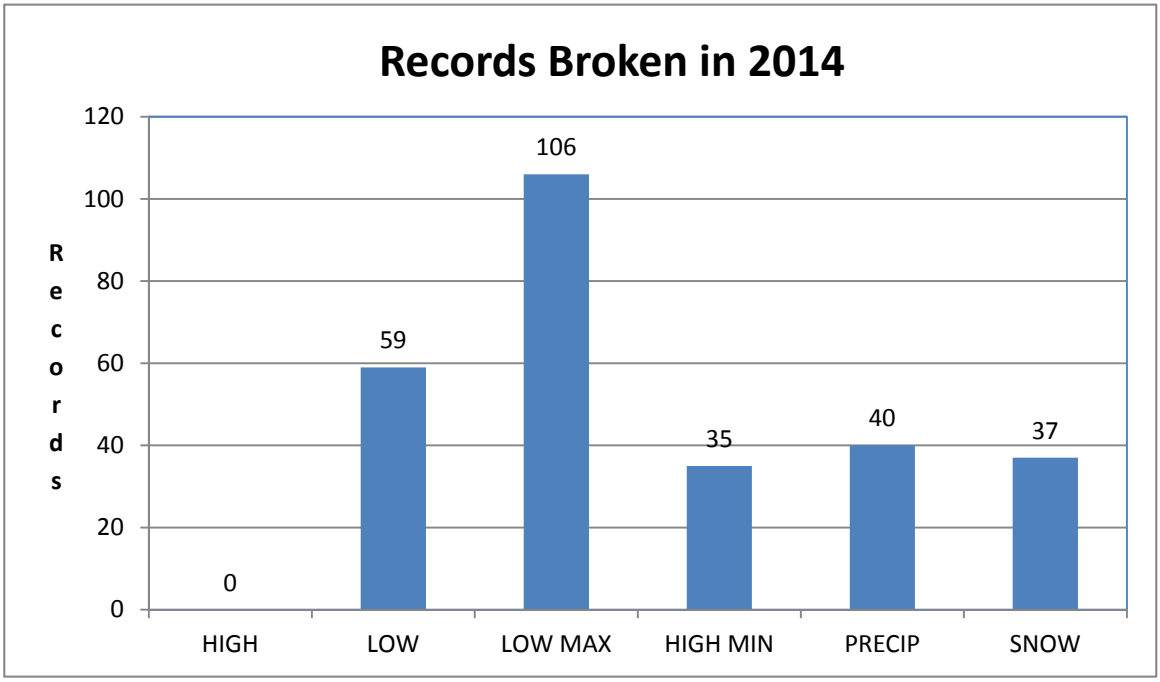




2014

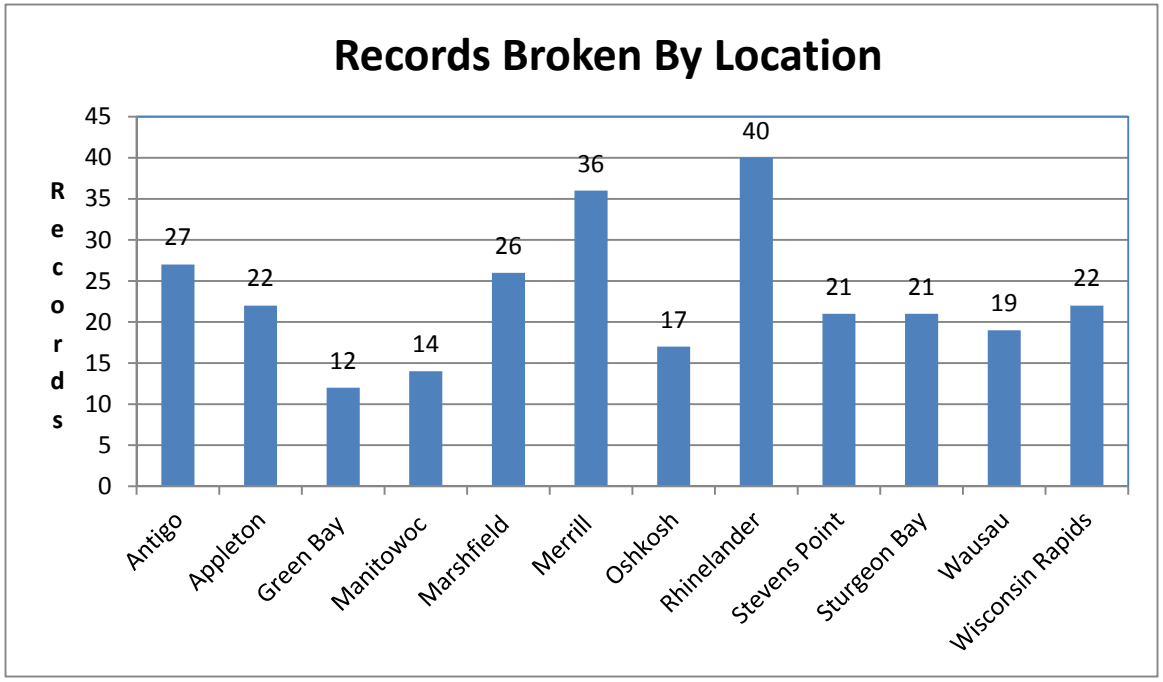
It was only two years ago, northeast Wisconsin experienced one of the warmest years on record. In stark contrast, 2014 went down in the record books as one of the top seven coldest years on record depending on your location. The cold bias was definitely seen in the numbers of records broken by type.

During 2014, there were a total of 277 records broken or tied (see chart below) which included the following locations: Antigo, Appleton, Green Bay, Manitowoc, Marshfield, Merrill, Oshkosh, Rhinelander, Stevens Point, Sturgeon Bay, Wausau and Wisconsin Rapids. Of the 200 temperature records broken during the year, 165 of the temperature records (83%) were cold temperatures (record lows and record low maximum) records.

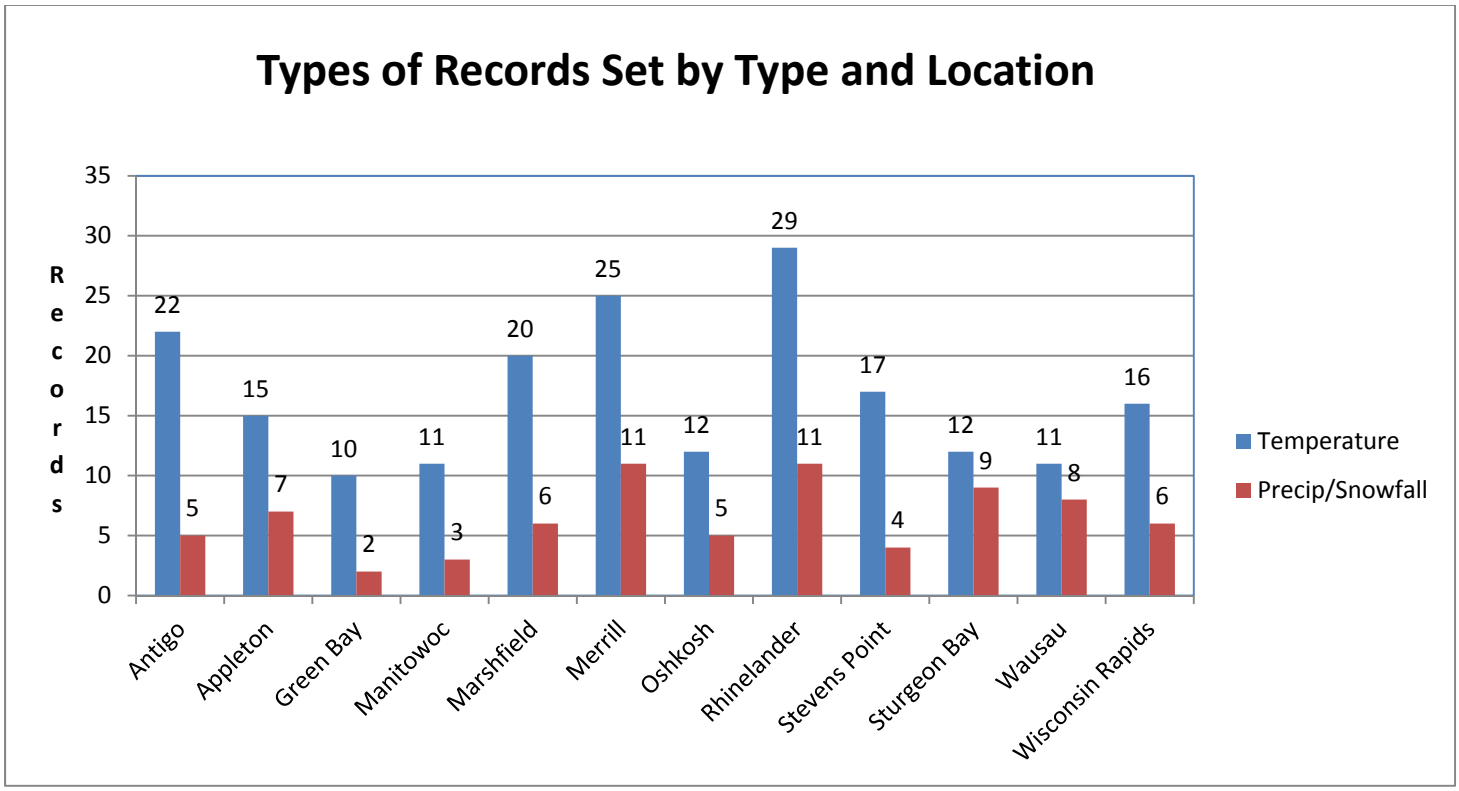


2014

North-central Wisconsin experienced the most records broken in 2014, with Rhinelander leading the way with 40 records broken, followed by Merrill with 36. The longest period of record stations set the least amount of new records during the year, Green Bay with 12 and Manitowoc with 14 new records.



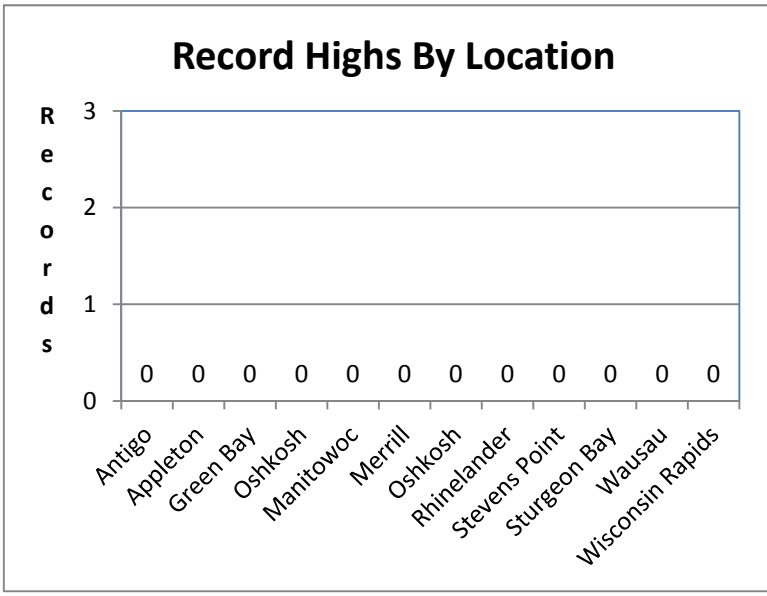
The chart below depicts the type of records broken for the ten sites in this study. It should be noted that longer period (of record) stations like Green Bay, came close on several additional days with respect to setting daily record low or record low maximum temperatures this past winter.

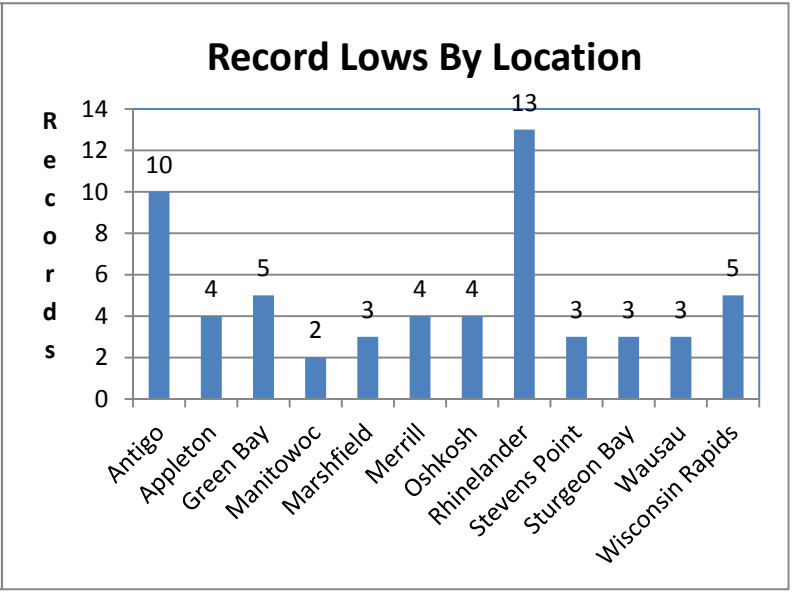


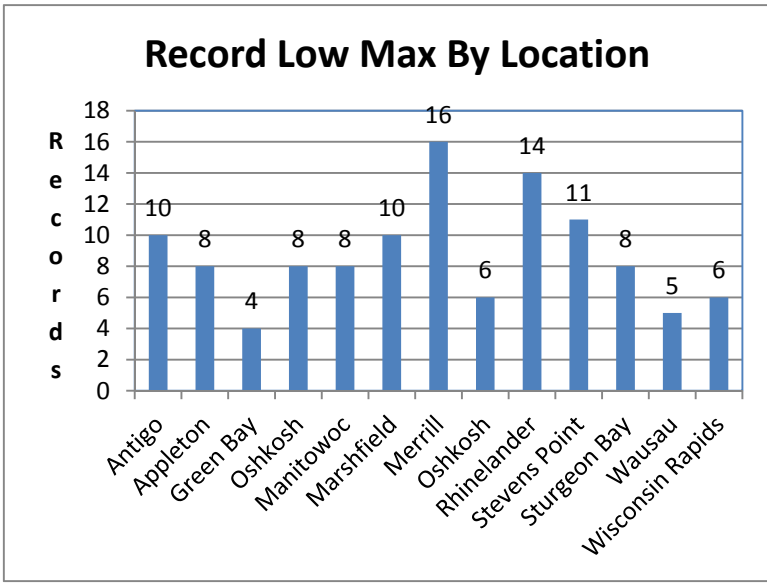
2014

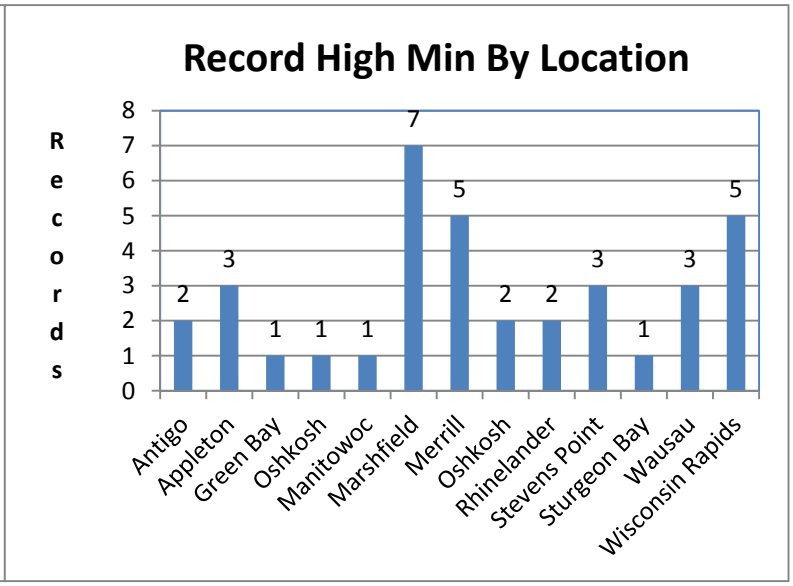
Records were further broken down by category. For record highs, there were zero record highs established at the ten sites in 2014. There was a significant difference in record lows, however. Rhinelander established 13 new record lows during the year, followed by ten new record lows at Antigo. Merrill recorded 16 new record low maximum temperatures during the year wit

In addition to Rhinelander setting the most new record low maximum temperatures during the period, Marshfield recorded the second highest number. For record high minimum temperatures, the locations away from Lake Michigan/Bay of Green Bay (Wausau, Marshfield, and Wisconsin Rapids) established the most high minimum temperature records. Most of the record high minimum temperatures were set during the summer months of 2013 and 2014.

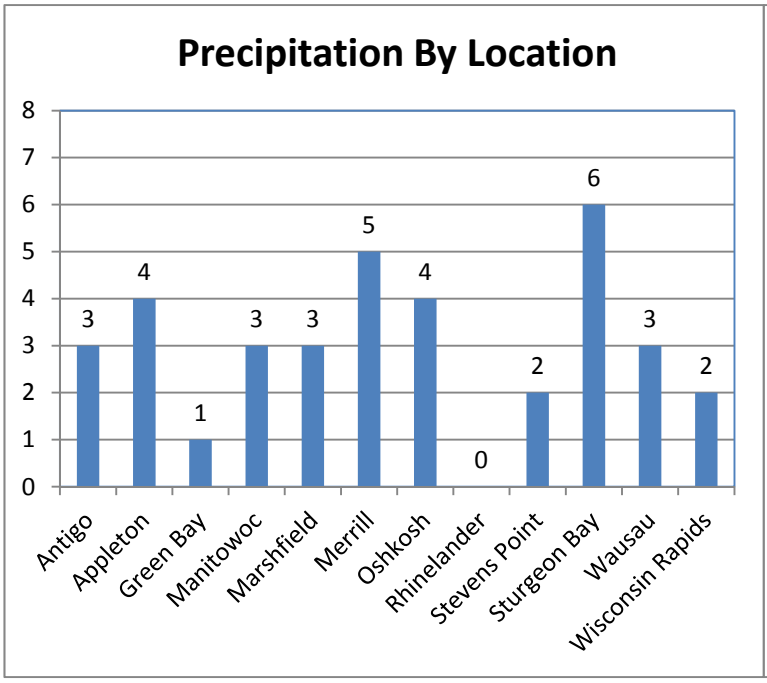


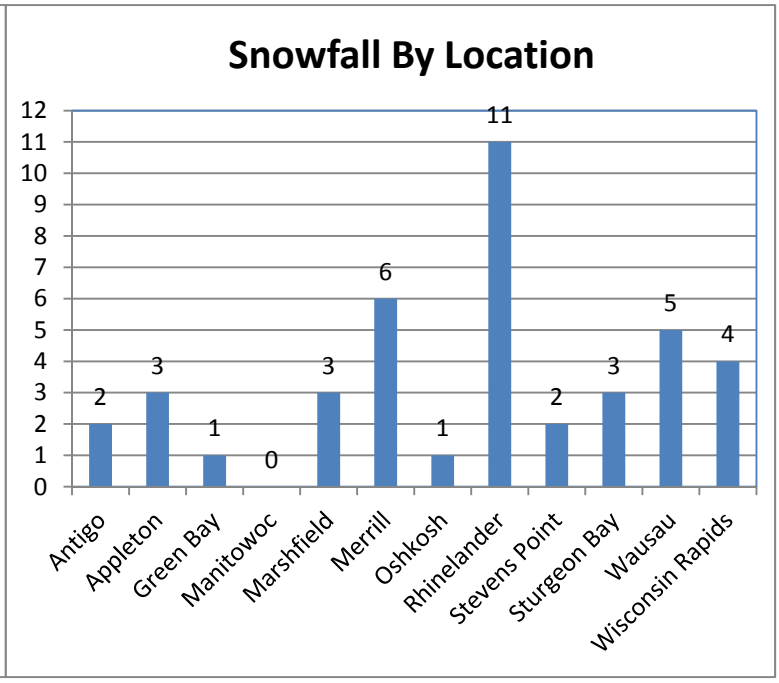




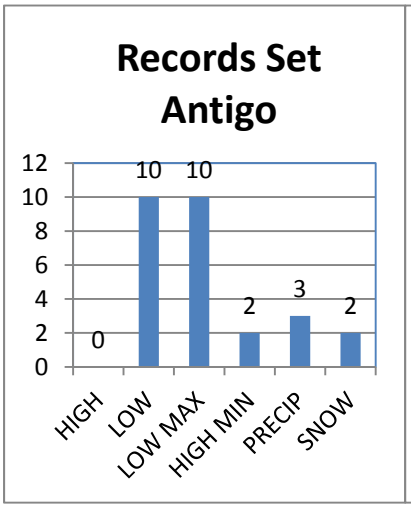


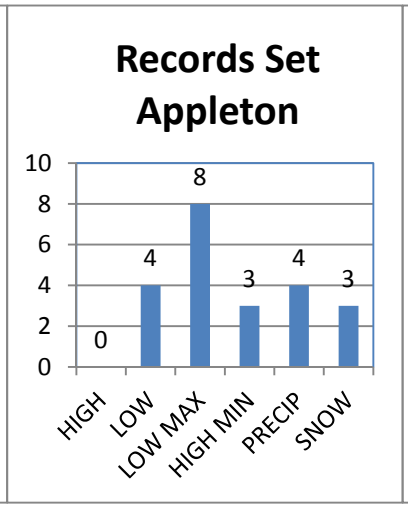
2014

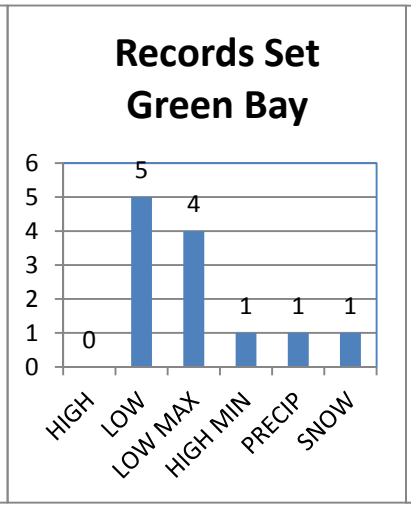

Precipitation By Location
8
7
6
5
4
3
2
1
0
3
4
1
3
3
5
4
0
2
6
3
2
Antigo
Appleton
Green Bay
Manitowoc
Marshfield
Merrill
Oshkosh
Rhinelander
Stevens Point
Sturgeon Bay
Wausau
Wisconsin Rapids

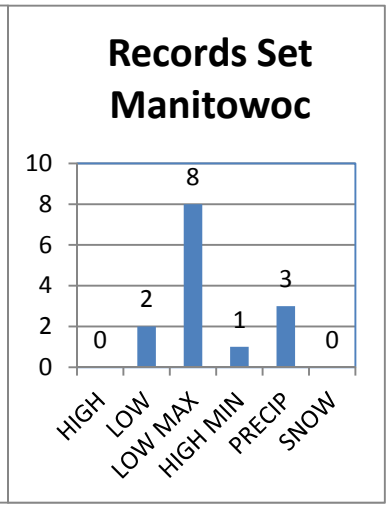

Snowfall By Location
12
11
10
9
8
7
6
5
4
3
2
1
0
2
3
1
0
3
6
1
11
2
3
5
4
Antigo
Appleton
Green Bay
Manitowoc
Marshfield
Merrill
Oshkosh
Rhinelander
Stevens Point
Sturgeon Bay
Wausau
Wisconsin Rapids

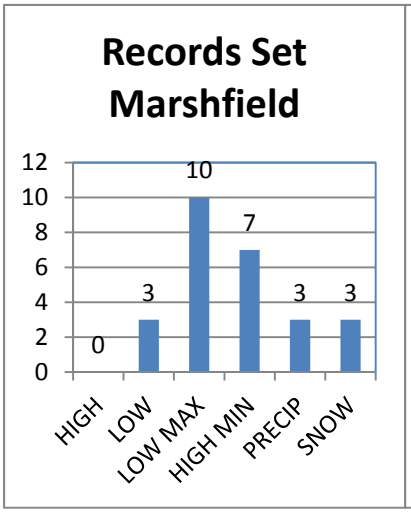
Below is a graph of types of records for each site in 2014

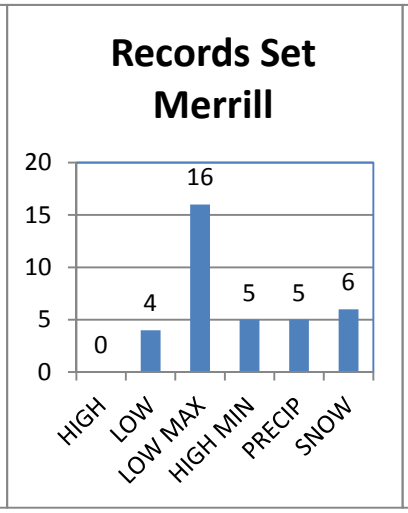


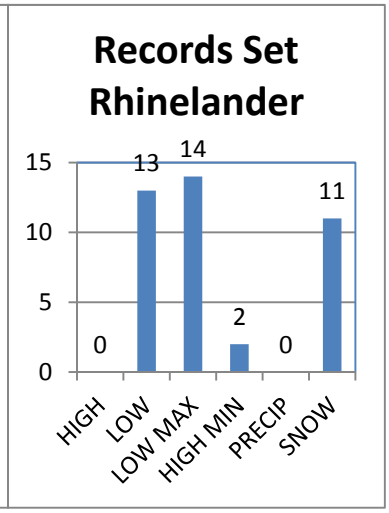


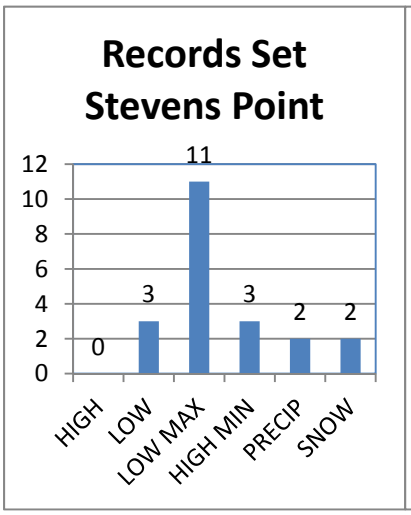


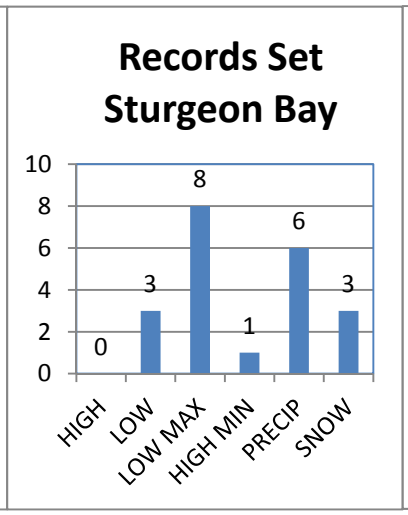


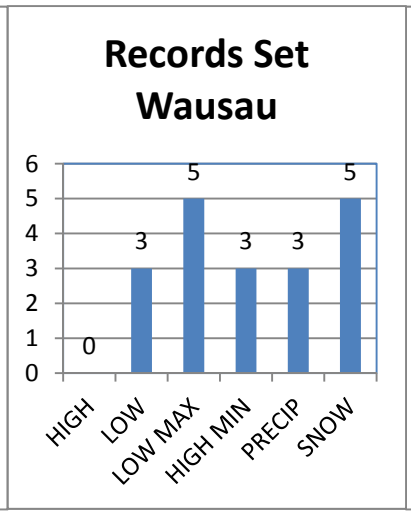


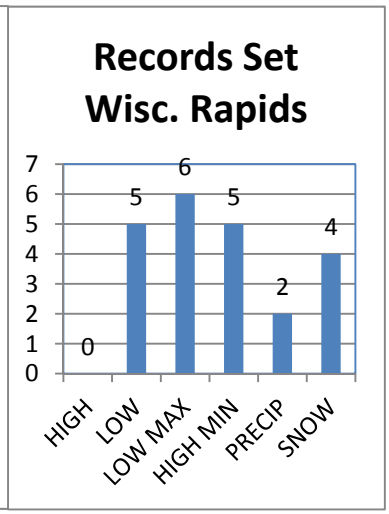












ANTIGO RECORDS SET IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low	Jan 3	-26	-22	1979
Record Low Maximum	Jan 6	-14	-12	1912
Snowfall	Jan 14	7.5	6.0	1998
Record Low Maximum	Feb 25	7	7	1934
Record Low	Feb 27	-17	-17	1925,1935,1964
Record Low Maximum	Feb 27	4	7	1925
Record Low	Feb 28	-30	-17	2009
Record Low Maximum	Feb 28	8	14	1996,2001
Record Low	Mar 3	-29	-19	1972
Record Low	Apr 15	3	3	1928
Record Low Maximum	Apr 15	29	31	1923
Record High Minimum	Jun 2	64	64	1934
Precipitation	Aug 29	2.12	1.38	1932
Precipitation	Sep 4	1.89	1.18	1941
Record Low Maximum	Sep 11	50	52	2006
Record Low Maximum	Sep 12	47	55	2006
Precipitation	Oct 2	1.19	0.66	2007
Record Low Maximum	Oct 4	41	41	1935
Snowfall	Nov 11	7.0	1.0	1976,1986
Record Low	Nov 15	-9	-5	1916
Record Low Maximum	Nov 18	11	19	1989
Record Low Maximum	Nov 20	13	15	1985
Record Low	Nov 21	-11	-5	1895
Record Low	Nov 27	-13	-5	1903
Record Low	Nov 28	-14	-12	1976
Record Low	Dec 1	-16	-15	1919
Record High Minimum	Dec 15	36	32	1928

APPLETON RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Snowfall	Jan 14	6.1	4.6	1998
Snowfall	Feb 28	3.6	3.5	1972
Record Low	Mar 3	-12	-10	1943
Record Low Maximum	Mar 3	12	13	1916,2002
Record Low Maximum	Mar 5	15	15	1917,1936,1943
Precipitation	Apr 13	1.51	1.02	1952
Precipitation	Apr 14	1.61	0.95	1987
Precipitation	May 12	2.30	1.76	1942
Record Low	Jul 3	46	47	1909,1968
Record Low Maximum	Jul 15	66	69	1903
Record Low	Jul 16	46	46	1912
Record Low Maximum	Sep 11	51	55	2006
Record Low Maximum	Sep 12	49	55	1975
Record Low Maximum	Nov 18	19	19	1903
Record Low Maximum	Nov 19	23	24	1903,1911,1937
Record Low Maximum	Nov 20	20	22	1926,1964
Record Low	Nov 21	3	7	1920,1964
Snowfall	Nov 24	4.0	2.1	2008
Record High Minimum	Dec 14	38	37	1928
Record High Minimum	Dec 15	38	35	1992
Precipitation	Dec 23	0.80	0.58	2007
Record High Minimum	Dec 24	34	33	1931,1982

GREEN BAY RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low	Jan 3	-18	-17	1887,1911,1979
Snowfall	Feb 15	3.9	3.9	1979
Record Low	Feb 27	-15	-14	1897
Record Low Maximum	Feb 27	8	9	1888
Record Low	Feb 28	-21	-17	1962
Record Low	Mar 3	-24	-10	1943,1950
Precipitation	May 12	1.05	0.88	1924
Record Low Maximum	Sep 11	53	56	2006
Record Low Maximum	Sep 12	50	52	1902
Record Low Maximum	Nov 20	19	20	1895
Record Low	Nov 21	3	6	1895,1929
Record High Minimum	Dec 15	39	37	1928

MANITOWOC RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low	Mar 3	-6	-6	1943
Record Low Maximum	Apr 15	34	34	1904
Precipitation	Jun 2	1.69	1.40	1999
Record Low Maximum	Jun 14	53	54	1880
Record Low Maximum	Jun 21	57	59	1992
Record Low Maximum	Jul 10	62	66	1913,2004
Record Low Maximum	Jul 24	63	64	1914
Record Low Maximum	Sep 11	56	56	1924
Record Low Maximum	Sep 12	51	55	1902
Precipitation	Oct 14	1.95	1.60	1886,2012
Record Low	Nov 19	10	10	1914
Record Low Maximum	Nov 20	20	22	1914
Precipitation	Nov 24	0.84	0.78	1908
Record High Minimum	Dec 14	41	40	1975

MARSHFIELD RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low Maximum	Jan 6	-16	-5	1942,1988
Precipitation	Jan 14	0.43	0.37	1952
Snowfall	Jan 14	9.0	5.5	1998
Precipitation	Feb 20	0.89	0.61	1953
Record Low Maximum	Feb 25	7	7	1950
Record Low Maximum	Feb 27	1	6	1919, 1934
Record Low Maximum	Feb 28	10	12	1922,1962
Record Low	Feb 28	-18	-18	1922
Record Low	Mar 3	-20	-17	1943
Record Low Maximum	Mar 25	17	18	1955
Record Low Maximum	Apr 15	32	33	1944
Precipitation	May 19	1.71	1.56	1940
Record High Minimum	May 26	63	63	1978,2010
Record High Minimum	May 27	64	62	1939, 1941,1987
Record High Minimum	Jun 2	63	63	1991
Record Low Maximum	Jul 15	68	71	1920,1946,1981
Record Low Maximum	Jul 25	70	70	1915
Record High Minimum	Aug 23	71	71	1968
Record Low Maximum	Sep 12	49	54	1975
Snowfall	Oct 4	T	0.0	
Snowfall	Oct 30	T	T	1923,1962
Record Low Maximum	Nov 18	14	19	1951
Record Low	Nov 21	-5	3	1964,2000
Record High Minimum	Dec 14	39	36	1928
Record High Minimum	Dec 15	41	36	1928
Record High Minimum	Dec 24	33	32	1940
Snowfall	Dec 27	3.0	2.5	1944,1988

MERRILL RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low Maximum	Jan 6	-17	-8	1909
Snowfall	Jan 14	9.5	8.6	1930
Record Low Maximum	Jan 27	-7	-4	1915
Precipitation	Jan 30	0.34	0.31	1937
Snowfall	Jan 30	4.5	4.0	1976
Snowfall	Feb 17	5.9	4.2	1932
Record Low Maximum	Feb 25	7	8	1934
Record Low Maximum	Feb 26	8	9	1919
Record Low Maximum	Feb 27	1	12	1925
Record Low	Feb 28	-26	-19	1963
Record Low Maximum	Feb 28	8	15	1996
Record Low	Mar 3	-25	-24	1943
Record Low Maximum	Mar 3	6	10	1989,2002
Record Low Maximum	Apr 15	28	33	1962
Record Low	Apr 16	12	13	1935
Record Low Maximum	Apr 16	32	32	1951
Snowfall	Apr 17	3.2	1.5	1949
Precipitation	May 12	1.11	0.82	1995
Record High Minimum	May 27	63	63	1948
Record Low Maximum	Jun 15	65	68	1990
Precipitation	Sep 4	1.45	0.96	1926
Record Low Maximum	Sep 11	52	53	2006
Record Low Maximum	Sep 12	49	54	1996
Precipitation	Oct 2	1.61	1.03	1930
Precipitation	Oct 14	1.43	1.15	1954
Snowfall	Nov 11	6.1	1.0	1932
Record Low Maximum	Nov 15	21	25	1916
Record Low Maximum	Nov 18	13	20	1989
Record Low Maximum	Nov 20	12	15	1985
Record Low	Nov 21	-9	-1	1978
Record Low Maximum	Nov 28	13	15	1967,1976
Record High Minimum	Dec 14	34	33	1993,2011
Record High Minimum	Dec 15	35	33	2006
Record High Minimum	Dec 24	32	32	1979
Snowfall	Dec 27	5.0	2.4	1981

OSHKOSH RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low	Feb 27	-11	-11	1897
Record Low	Feb 28	-14	-12	1962
Record Low	Mar 3	-15	-8	1943
Precipitation	Mar 27	0.68	0.61	1976
Precipitation	Apr 12	1.72	0.93	2014
Precipitation	Apr 13	2.16	1.30	1911
Record Low Maximum	Apr 15	33	34	1904
Record Low Maximum	Jul 15	69	70	1987
Record Low Maximum	Sep 11	53	57	1940
Record Low Maximum	Sep 12	48	53	2014
Record Low Maximum	Oct 4	46	47	1935
Record Low Maximum	Nov 20	20	22	1964
Record Low	Nov 21	1	5	1964
Precipitation	Nov 24	0.72	0.65	1908
Snowfall	Nov 24	6.0	4.6	2008
Record High Minimum	Dec 14	39	36	1891,1928,1993
Record High Minimum	Dec 15	40	37	1928

RHINELANDER RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low Maximum	Jan 6	-17	-14	1912
Snowfall	Jan 30	5.2	4.7	2013
Snowfall	Feb 17	3.3	2.8	2007,2008
Record Low Maximum	Feb 27	-1	10	1922,2009
Record Low	Feb 28	-25	-22	2009
Record Low Maximum	Feb 28	6	17	1912,1922,1962,1980,1996
Record Low Maximum	Mar 1	5	7	1925
Record Low	Mar 3	-28	-23	1972
Snowfall	Apr 4	7.3	5.5	1945
Record Low	Apr 5	2	4	1972,1996
Snowfall	Apr 14	4.5	2.0	1964
Record Low	Apr 14	2	9	2013
Record Low Maximum	Apr 15	28	29	1935
Record Low	Apr 16	9	12	1983
Snowfall	Apr 16	3.7	3.3	1985
Snowfall	Apr 17	7.5	0.5	2003
Snowfall	Apr 24	1.4	1.3	1910
Record Low	May 16	24	25	1929
Record Low	Jul 9	42	43	1908,1963,1997,2009
Record Low Maximum	Jul 15	62	65	1981
Record Low	Jul 16	40	40	1912,1939
Record Low	Jul 17	42	42	1911
Snowfall	Sep 10	T	0.0	
Record Low Maximum	Sep 11	51	53	1940,1945
Record Low Maximum	Sep 12	48	52	1975,1996
Record Low	Sep 12	29	29	1946
Record Low	Sep 13	29	29	1995
Record Low Maximum	Oct 4	41	42	1980
Snowfall	Oct 31	2.3	0.8	1939
Snowfall	Nov 11	8.3	2.0	1966
Record Low Maximum	Nov 16	21	21	1932
Record Low Maximum	Nov 18	10	18	1989
Record Low Maximum	Nov 19	17	20	1914
Record Low Maximum	Nov 20	11	13	1985
Record Low	Nov 21	-8	-5	1978
Snowfall	Nov 24	5.9	2.4	1946
Record Low	Nov 27	-11	-4	1976,1985
Record Low Maximum	Dec 1	4	5	1919
Record High Minimum	Dec 14	36	35	1928
Record High Minimum	Dec 15	37	34	1928

STEVENS POINT RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low Maximum	Jan 6	-16	-5	1988
Record Low Maximum	Feb 27	0	6	1919
Record Low	Feb 28	-17	-12	1917
Record Low Maximum	Mar 2	2	6	1943
Record Low	Mar 3	-21	-14	1972
Precipitation	Apr 14	1.58	1.10	1941
Record Low Maximum	Apr 15	32	34	1904
Record Low Maximum	May 16	49	49	1970,2009
Precipitation	Sep 4	1.55	1.05	1912
Record Low Maximum	Sep 11	53	53	2006
Record Low Maximum	Sep 12	47	50	1902
Snowfall	Oct 4	T	0.0	
Record Low Maximum	Nov 17	12	20	2005
Record Low Maximum	Nov 18	15	15	1903
Record Low Maximum	Nov 19	21	22	1937
Record Low Maximum	Nov 20	15	20	1969
Record Low	Nov 21	-2	4	2000
Snowfall	Nov 24	4.8	4.5	1991
Record High Minimum	Dec 14	38	37	1928
Record High Minimum	Dec 15	37	37	1928
Record High Minimum	Dec 24	32	32	1936

STURGEON BAY RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Record Low Maximum	Jan 6	-12	-9	1912, 1942
Precipitation	Jan 14	0.72	0.63	1923, 1998
Snowfall	Jan 14	11.0	7.0	1998
Record Low Maximum	Jan 27	-4	1	1972
Record Low Maximum	Feb 27	6	16	1922
Record Low	Feb 28	-12	-9	1922
Snowfall	Mar 27	6.0	3.0	1908
Precipitation	Apr 13	1.05	1.01	1952
Precipitation	Jul 14	3.05	0.82	1933
Precipitation	Aug 12	3.10	1.57	1962
Precipitation	Sep 4	2.40	0.85	1939
Record Low Maximum	Sep 11	55	57	2006
Record Low Maximum	Sep 12	53	57	1996
Precipitation	Oct 14	1.63	1.37	2012
Record Low Maximum	Nov 18	22	22	1989
Record Low Maximum	Nov 19	21	24	1932
Record Low Maximum	Nov 20	20	20	1914
Record Low	Nov 21	10	10	1929
Snowfall	Nov 24	4.5	4.0	1912
Record Low	Nov 28	0	0	1955
Record High Minimum	Dec 15	41	36	1928

WAUSAU RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Precipitation	Jan 14	0.54	0.44	1930
Snowfall	Feb 17	6.0	6.0	1942
Record Low	Feb 27	-17	-16	1900
Record Low Maximum	Feb 27	1	6	1925
Record Low	Feb 28	-23	-21	1962
Record Low Maximum	Mar 3	10	12	2002
Record High Minimum	May 26	64	64	1978
Record Low Maximum	Sep 12	50	51	1975
Precipitation	Oct 2	1.70	1.31	2014
Snowfall	Oct 4	T	0.0	
Snowfall	Oct 31	1.7	1.6	1932
Snowfall	Nov 11	4.5	2.5	1933
Record Low Maximum	Nov 18	13	14	1903
Record Low Maximum	Nov 20	16	16	1985
Record Low	Nov 21	-2	1	1929
Snowfall	Nov 23	4.8	4.0	1965
Record High Minimum	Dec 15	39	38	1928
Record High Minimum	Dec 23	33	32	1931,1952
Precipitation	Dec 27	0.41	0.32	1982

WISCONSIN RAPIDS RECORDS SET OR TIED IN 2014

TYPE OF RECORD		NEW	OLD	
BROKEN	DATE	RECORD	RECORD	YEAR(S)
Snowfall	Jan 14	7.0	3.0	1998
Record Low Maximum	Feb 25	8	9	1963
Record Low Maximum	Feb 27	4	8	1919
Record Low	Feb 28	-20	-18	1922
Record Low	Mar 3	-23	-22	1943
Record Low Maximum	Apr 14	34	35	1943
Precipitation	Apr 14	1.20	0.80	1986, 2013
Snowfall	Apr 14	3.2	3.0	1996, 2013
Record Low	Apr 15	12	14	1928
Record High Minimum	Jun 2	66	63	1991
Precipitation	Aug 18	3.61	1.85	1990
Record High Minimum	Sep 4	67	67	1983
Record Low Maximum	Sep 12	48	56	1989
Snowfall	Oct 4	T	0.0	
Snowfall	Oct 31	T	T	1918,1951,1966,1970,1996
Record Low Maximum	Nov 18	15	19	1989
Record Low Maximum	Nov 19	21	21	1937
Record Low	Nov 20	-2	-1	1921
Record Low	Nov 21	-7	-4	1929
Record High Minimum	Dec 14	38	38	1928
Record High Minimum	Dec 15	41	36	1928
Record High Minimum	Dec 24	33	33	1982