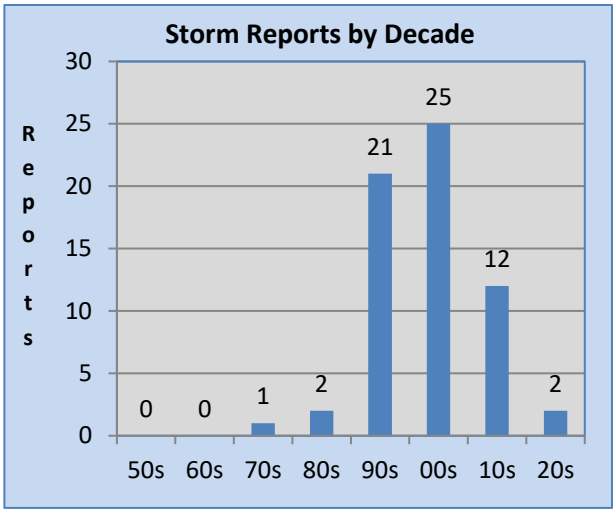
Menominee County Severe Weather Facts (1950-2023)

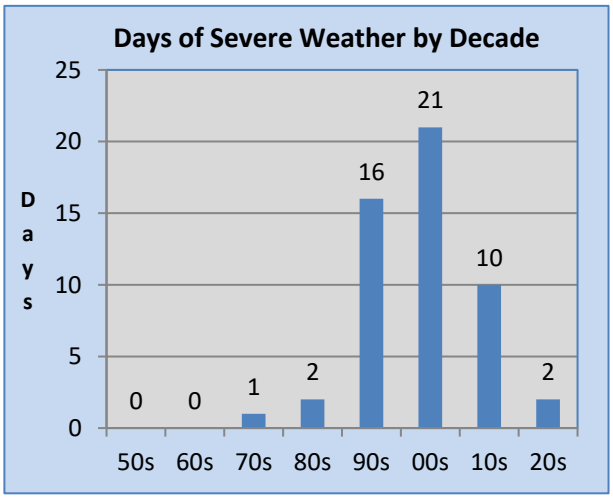
Updated: 01/01/24: Next Update: January 2025

Storm Reports by Decade

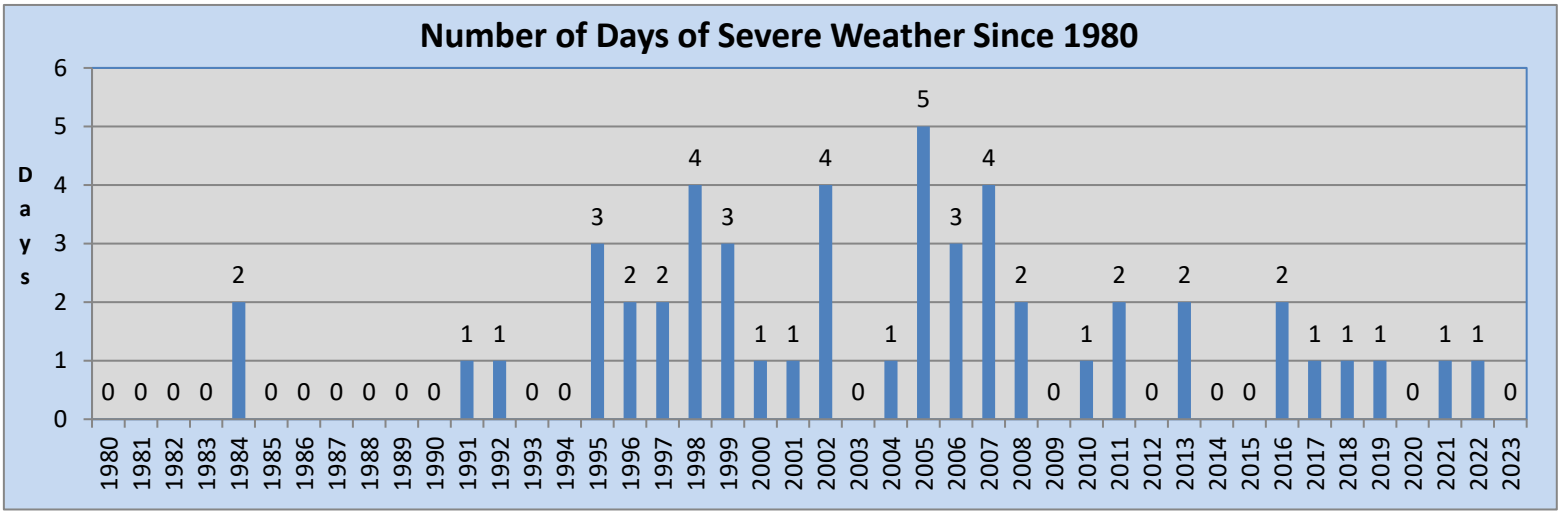


Since 1950 there have been 63 documented reports of large hail, damaging winds and tornadoes across Menominee County. The population boom of the 1980s and 1990s combined with the SKYWARN program led to an increase in the number of reports of severe weather during both decades. The number of reports has decreased 52% from the 2014-2023 period compared to the 1990s. One can't say for sure why there has been a decrease in severe weather reports across Menominee County while many other counties reported an increase in severe weather reports across northeast Wisconsin. One possible reason for the apparent increase in reports is that in some instances, multiple reports were received from a single location for the same storm due to more spotters today. Another reason for the increase in storm reports has been the focus by the National Weather Service (NWS) to improve warning verification. 2005 was the most active year with six reports followed by five reports in 1998, 2002, and 2007, and four reports in 1999, 2006 and 2013. In 2023, there were no reports of severe weather.

Days of Severe Weather by Decade



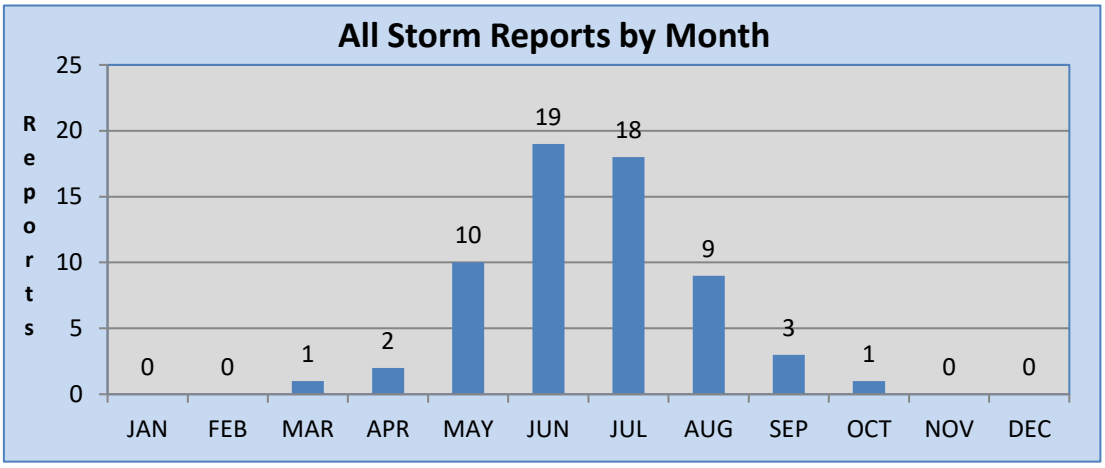
In order to address the impact of multiple reports for the same storm, the data was examined by the number of severe weather days. Since the reports were sporadic during the 1950s through the 1980s, only data from 1990 to present was used. There has been a 38% decrease in the number of days of severe weather from the 2014-2023 compared to the 1990s. Since 2010, Menominee County averages 0.9 days of severe weather per year. The long-term average from 1980-2023 is 1.2 days. The most active year was 2005 with 5 days of severe weather; followed by four days of severe weather in 1998, 2002 and 2007. In 2023, there were no reports of severe weasther.

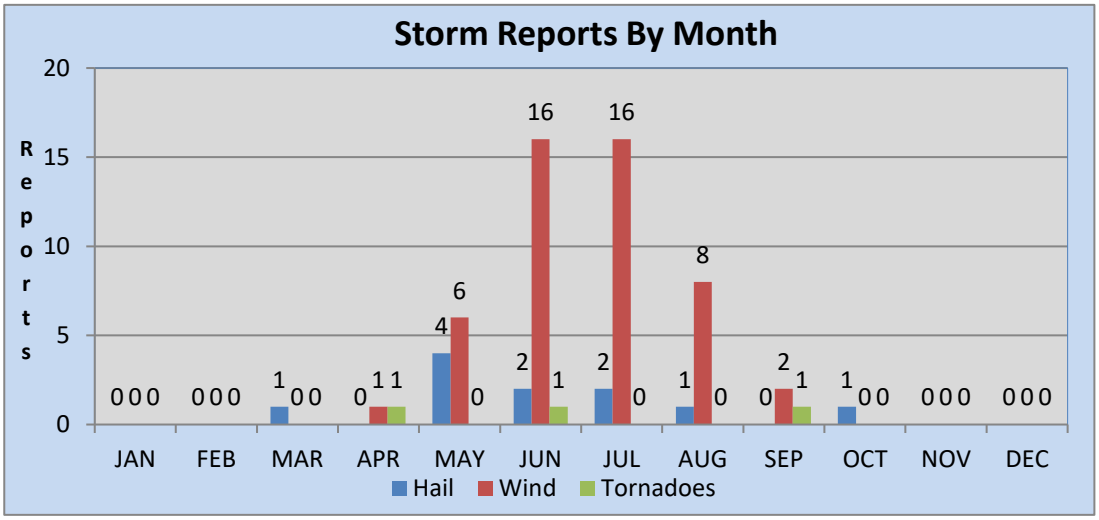


Menominee County Severe Weather Facts (1950-2023)

Storm Reports by Month

Severe weather has been documented in Menominee County from March to October. On a rare occasion, severe weather breaks out during the month of March. The earliest documented large hail report during the year occurred on March 29, 1998 when three quarter inch hail was reported in Keshena. The severe weather season begins in earnest in May and peaks in June and July. June and July account for over half (59%) of all severe weather reports. The severe weather season wanes quickly by September. The warm season period from May to September accounts for 94% of all reports during the year. The latest report of severe weather during the year occurred on October 3, 2006 when one inch hail was reported at Neopit.



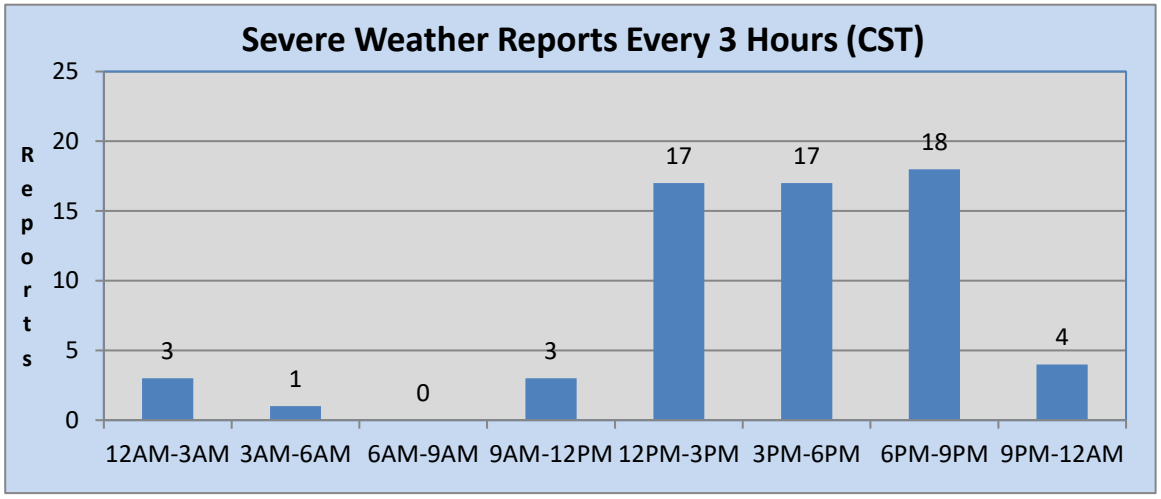


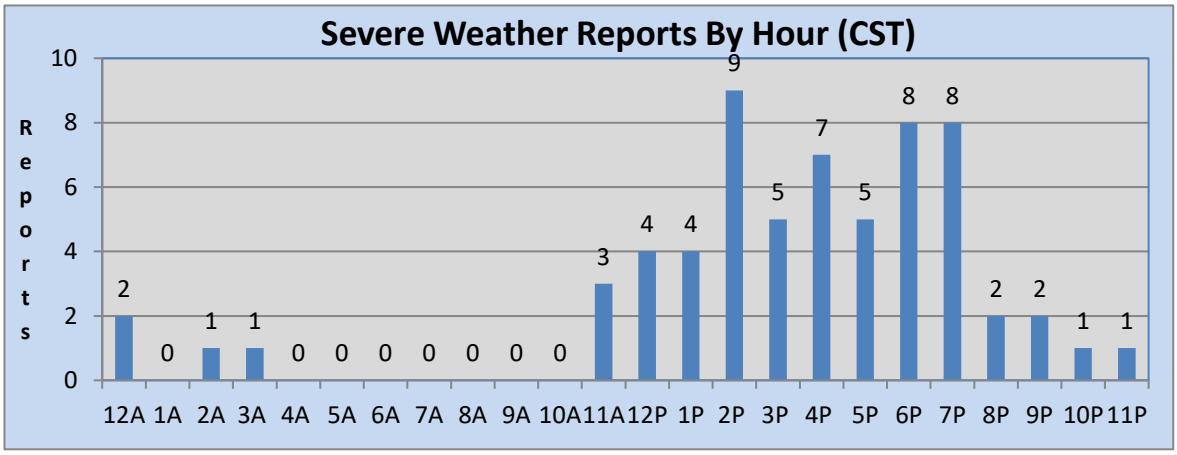
NOTE: The chart depicts storm type by month: (hail, wind/wind damage, tornadoes).

Menominee County Severe Weather Facts (1950-2023)

Storm Reports by Time of Day

No matter the season, the afternoon and early evening hours are the peak time for severe weather across Menominee County. Overall, seventy-six percent of all severe weather reports occur between 1 PM and 9 PM CST. In Menominee County, severe weather reports increased rapidly after noon. The most active time for severe weather is between 2 PM and 8 PM CST. The peak in the storm activity corresponds to peak afternoon heating when the atmosphere is most unstable. During May and June, there are scattered reports of severe weather between midnight and 6 AM CST. In these cases, convection that fires up across the Dakotas and Minnesota works its way into the county overnight.

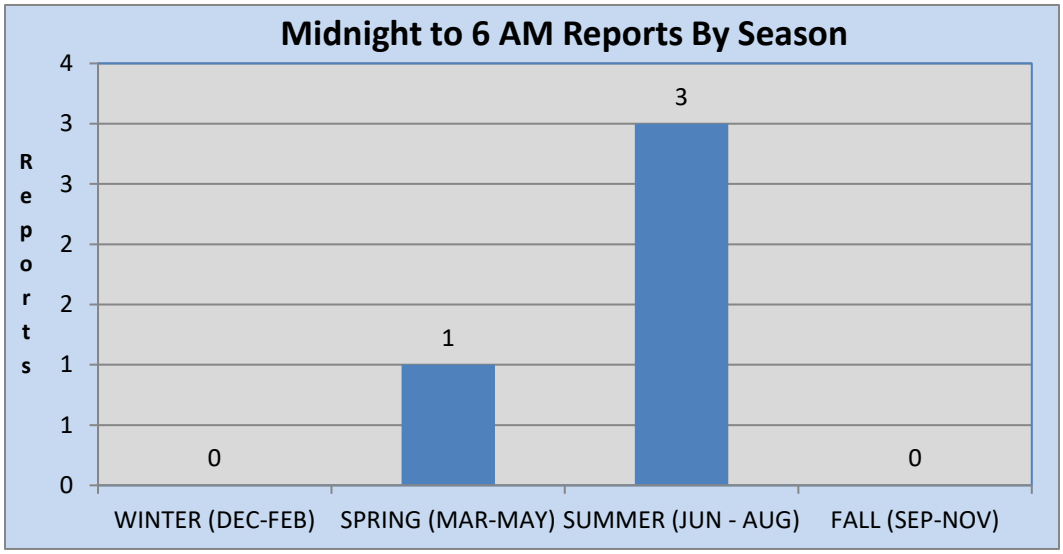




Menominee County Severe Weather Facts (1950-2023)

Severe Weather Reports Midnight to 6 AM CST

Overnight severe weather reports are most prominent during the summer (June through August) due to nocturnal convection along warm fronts, or from complexes of storms that develop across the Dakotas and Minnesota and roll through northeast Wisconsin during the early morning hours. The summer months accounted for 75% of all overnight severe weather reports during the year.



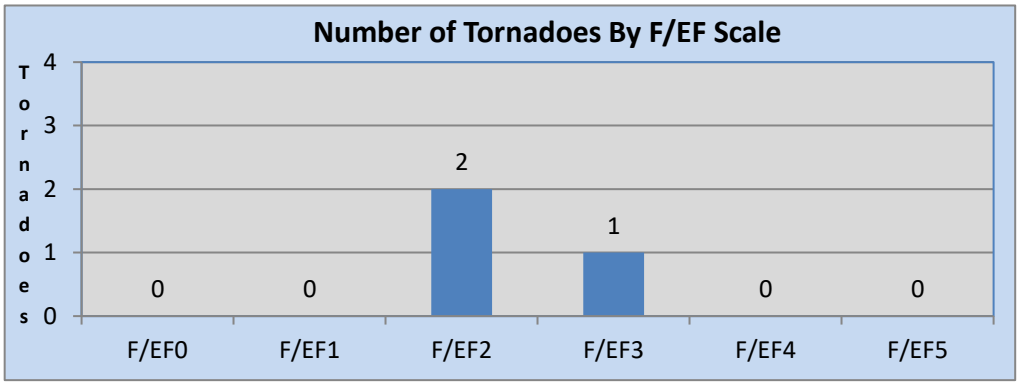
Menominee County Severe Weather Facts (1950-2023)

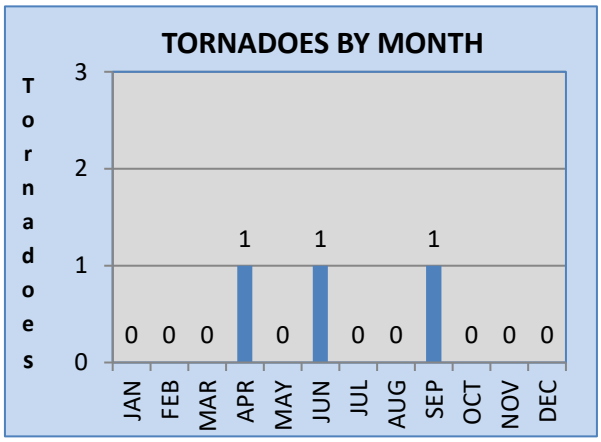
Menominee County Tornadoes

Since record keeping began in 1950, there have been three documented tornadoes in Menominee County. One tornado was ranked as a F3 tornado which occurred on April 27, 1984. The tornado touched down near Union in Waupaca County and moved northeast to near Legend Lake. The other two tornadoes were rated F2 on September 28, 1971 and EF2 on June 7, 2007. There has not been more than one documented tornado in a given year. Since 1950, tornadoes have touched down in three different years. A tornado strike in Menominee County usually occurs once in every 26 years.

Event		Date			Time		F/EF
#		Month	Day	Year	(CST)	Start / End Location	Rank
1		9	28	1971	16:00-17:20	Hewitt (Marathon Co) - near Mountain	2
2		4	27	1984	14:55-15:40	Union (Waupaca Co) - Legend Lake	3
3		6	7	2007	15:32-15:48	4 W - 9.4 W Zoar Settlement	2

Additional tornado data can be found on the NWS Green Bay webpage at: **http://www.weather.gov/grb/severeclimate**





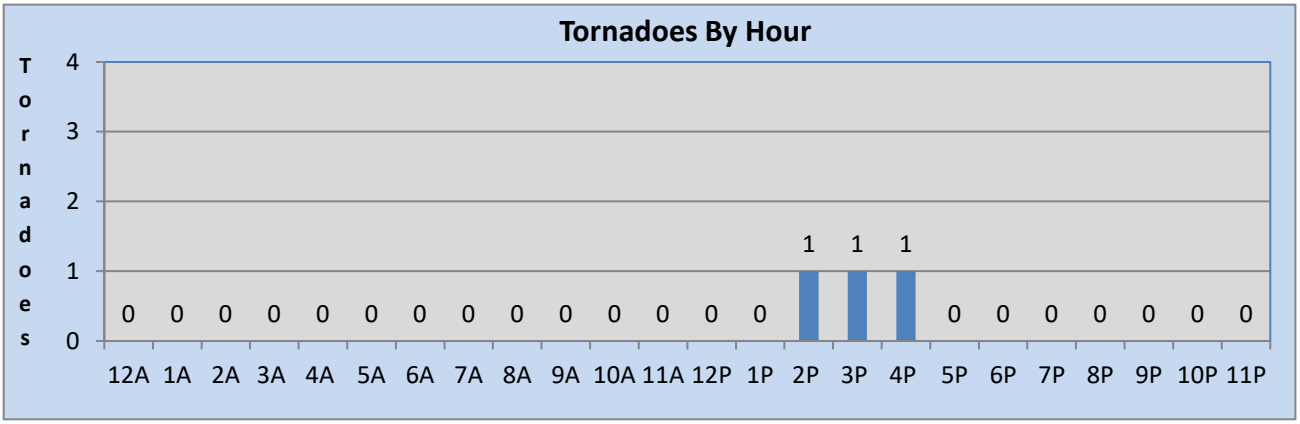
Tornadoes by Month

Tornadoes have occurred in Menominee County in April, June and September. The earliest documented tornado during the year occurred on April 27, 1984, when a F3 tornado touched down near Union in Waupaca County and traveled to near Legend Lake. The latest tornado on record during the year occurred on September 28, 1971, when a F2 tornado touched down near Hewitt in Marathon County and moved northeast across Shawano and Menominee Counties before dissipating near Mountain.

Menominee County Severe Weather Facts (1950-2023)

Tornadoes by Hour

In Menominee County, the three documented tornadoes have occurred between 2 PM and 5 PM CST. There have been no documented tornadoes between the 5 PM to 2 PM CST.



Predominant Storm Reports – Wind and Hail Only

During March and October, large hail is the predominant storm type. The atmosphere is typically colder during this time of year to support large hail reaching the ground. During the remainder of the convective season, reports of strong winds or wind damage are the predominant storm report. Out of all reports, nearly eight out of ten reports are strong wind gusts and or wind damage. The counties of Shawano and Menominee have the highest percentage of reports due to strong winds or wind damage across north central and northeast Wisconsin.

Month	% Hail Reports	% Wind or Wind Damage	Month	% Hail Reports	% Wind or Wind Damage
Jan	0.0	0.0	Jul	11.1	88.9
Feb	0.0	0.0	Aug	11.1	88.9
Mar	100.0	0.0	Sep	0.0	100.0
Apr	0.0	100.0	Oct	100.0	0.0
May	40.0	60.0	Nov	0.0	0.0
Jun	11.1	88.9	Dec	0.0	0.0
			Year	18.3	81.7

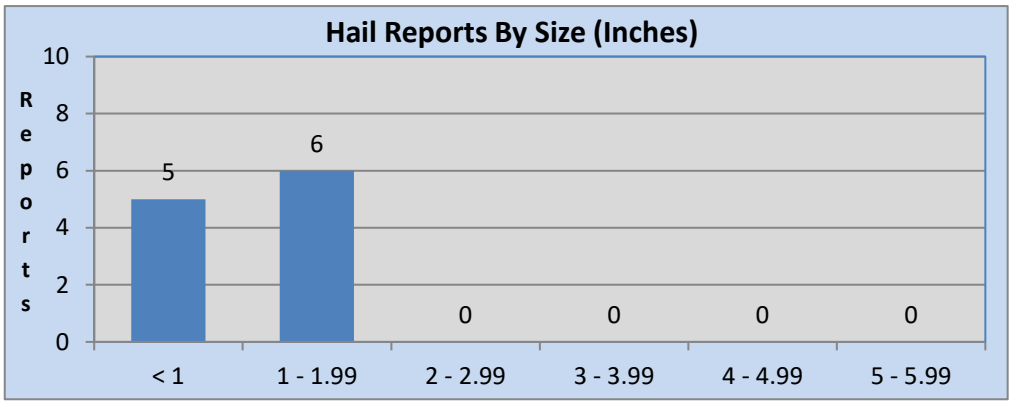
Menominee County Severe Weather Facts (1950-2023)

Large Hail in Menominee County

There have been zero documented reports of hail over two inches in diameter across the county. The largest hail stone of 1.75 inches was documented fifteen miles north northeast of Keshena on May 12, 1998. The last hail report of an inch or greater occurred in Neopit on June 20, 2007. Overall, hail reports between three quarters of an inch to one inch accounted for 90% of all hail reports.

Hail over 1.5 inches

Event		Date			Time		Hail
#		Month	Day	Year	(CST)	Start / End Location	(Inches)
1		5	12	1998	21:05	15 NNE Keshena	1.75



Menominee County Severe Weather Facts (1950-2023)

Menominee County Summary

In Menominee County, the severe weather season begins in earnest in May and wanes quickly by September. Severe weather usually occurs in the afternoon and early evening hours, with a secondary peak between midnight and 6 AM CST during May and June. If you do experience severe weather, you are likely to see large hail in March and October. During the remainder of the convective season, nearly eight out ten reports are wind damage or reports of strong wind gusts. In the NWS Green Bay County Warning Area which includes 22 counties from central to northeast Wisconsin, Menominee County ranks 22nd in the total number of storm reports and 22nd in the number of tornado reports since 1950.

Green Bay Forecast Area Severe Weather Climatology Summary

Across the Green Bay forecast area which covers 22 counties in north-central and northeast Wisconsin, severe weather has been documented in every month except February. This includes a rare event on January 24, 1967, in which a line of thunderstorms produced damaging winds across Brown, Winnebago, and Outagamie counties during the early evening hours. Another rare late season thunderstorm produced one inch hail in Florence County on December 5, 2001, while one inch hail was reported four miles west of St. Nazianz in Manitowoc County on December 20, 1967.

Tornadoes have occurred from March through December, with an extremely rare tornado outbreak occurring on December 1, 1970. On this date four tornadoes were reported across central and northeast Wisconsin during the morning. A strong area of low pressure brought unseasonably mild temperatures and severe thunderstorms to portions of central and northeast Wisconsin as a cold front swept across the state. The first tornado was reported twelve miles southeast of Marshfield in Wood County around 7 AM CST while another tornado was reported in the town of Hull in Portage County around 9 AM CST. Later that morning, a F2 tornado was reported in Waupaca and Shawano counties, from four miles southwest of Iola to near Marion and Pella. The last and strongest tornado occurred around 9:45 AM CST. The F3 tornado travelled from Medina in southwest Outagamie County to far southeast Shawano County, destroying about 20 barns and five homes.

Here are the strongest documented tornadoes in the Green Bay forecast area which covers 22 counties in central, north-central and northeast Wisconsin.

F/EF4 Tornadoes

Event	Date			Time		Tor in GRB Service Area
#	Month	Day	Year	(CST)	Start / End Location	County or Counties
1	6	25	1950	21:00	1 W Woodboro - 5 NE Rhinelander	Oneida
2	9	26	1951	15:45-16:08	9 SSW Amherst - 2 SW Bear Creek	Portage-Waupaca
3	4	3	1956	13:45-13:53	Berlin - 2 W Omro	Waushara-Winnebago
4	8	19	1968	16:10	3 SW Pound - Marinette	Marinette
5	4	21	1974	14:40-15:08	5 S Ripon - Oshkosh	Winnebago
6	4	27	1984	15:20-15:40	1 NE Winneconne - Freedom	Winnebago-Outagamie
7	7	5	1994	15:43-15:55	2.5 NW Maribel - 0.5 W Cooperstown	Manitowoc

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Green Bay Forecast Area Severe Weather Climatology Summary

The state record for the largest documented hail stone in Wisconsin occurred in Wausau on May 22, 1921. The hailstone measured 5.7 inches in diameter. More recently, a hailstone of 5.5 inches in diameter was reported in Port Edwards in southeast Wood County on June 7, 2007. In 2021, there were three reports of hail four inches in diameter or greater across northeast Wisconsin.

Hail	Month	Date	Year	Time (CST)	Start / End Location	County
5.70	5	22	1921	??	Wausau	Marathon
5.50	6	7	2007	15:23	Port Edwards - Wisconsin Rapids	Wood
4.50	9	7	2021	07:47-07:48	2 W Apple Creek	Outagamie
4.50	7	16	1997	14:15	8 NE Merrill	Lincoln
4.25	5	22	2011	15:05	0.8 NW Winchester	Winnebago
4.25	5	22	2011	14:35	0.5 E Redgranite	Waushara
4.10	9	7	2021	07:45-07:46	3 NE Greenville	Outagamie
4.00	9	7	2021	08:13-08:14	2 E Apple Creek	Outagamie
4.00	8	2	2015	13:32	2.8 S Brookside	Oconto
4.00	8	2	2015	13:24	0.5 E Abrams	Oconto
4.00	4	25	2008	17:50	0.8 SW Kings	Lincoln
4.00	7	1	2006	14:31	1 N Hayes - Suring	Oconto
4.00	3	29	1998	12:25	St. John	Calumet
3.75	9	7	2021	07:47-07:48	1 NW Little Chute	Outagamie
3.50	6	8	2000	22:30	10 W Middle Inlet	Marinette
3.25	7	1	2006	15:05	Oconto - 6 SE Oconto Falls	Oconto
3.00	10	24	2023	08:50-08:51	Nasonville	Wood
3.00	8	2	2015	14:06	Rudolph	Wood
3.00	5	22	2011	17:35	Plover	Portage
3.00	6	7	2007	15:50	5 W Langlade	Langlade
3.00	7	1	2006	19:29	Branch - Manitowoc	Manitowoc
3.00	4	18	2002	15:30	7 WSW Bloomville - 7 NW Bradley	Lincoln
3.00	8	9	2001	12:50	1S Sturgeon Bay	Door
3.00	6	5	1999	18:24	3 S - 8 SE Eagle River	Vilas
3.00	7	27	1989	10:50	1 N Oshkosh	Winnebago
3.00	8	19	1968	16:15	2 E Harmony	Marinette
3.00	7	19	1963	15:00	4 S Rhinelander	Oneida
3.00	7	1	1956	11:00	5 E Green Bay	Brown