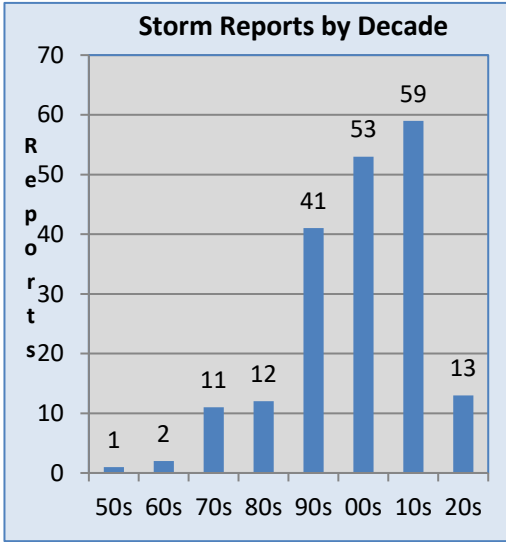


# Langlade County Severe Weather Facts (1950-2023)

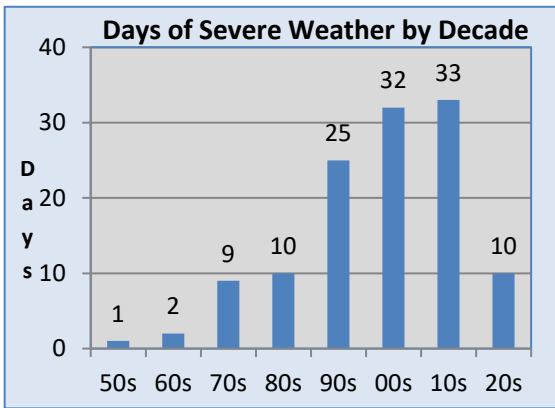
Updated: 01/01/24; Next Update: January 2025

## Storm Reports by Decade



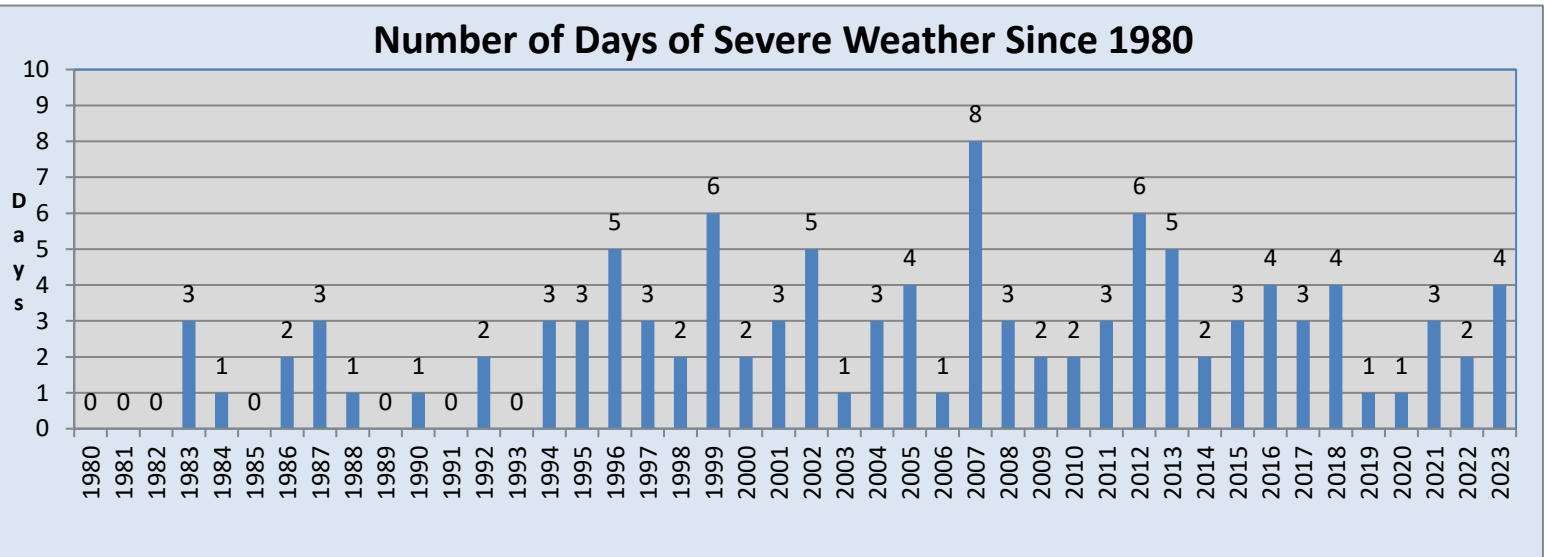
Since 1950 there have been 192 documented reports of large hail, damaging winds and tornadoes across Langlade County (see graph to the left). The population boom of the 1980s and 1990s combined with the SKYWARN program led to an increase in the number of reports of severe weather during both decades. The number of reports has not changed from the 2014-2023 period compared to the 1990s, although many counties in northeast Wisconsin have seen increases in severe weather. One can't say for sure there has been an increase in severe weather 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. The most active year was 2007 with nineteen reports followed by eleven reports in 2016, and nine reports in 1999, 2012 and 2013. Since 1980, the following years had no reports of severe weather: 1980, 1981, 1982, 1985, 1989, 1991 and 1993. In 2023, large hail was reported on June 3 (two reports) and July 10 (one report) and July 14 (1 report). Strong winds/wind damage was reported on July 7 (2 reports).

## Severe Weather Days by Decade



In order to address the impact of multiple reports for the same storm, the data was examined by the number of days of severe weather. Since the reports were sporadic during the 1950s through the 1970s, only data from 1980 to present was used. There has been an 8% increase in the number of days of severe weather from the 2014 to the 2023 period compared to the 1990s (see graph to the left). This trend can be attributed to the increase in population, technology advances and greater severe weather awareness. Since 2010, Langlade County averages 3.1 days of severe weather per year. The long-term average from 1980-2023 is 2.5 days. The most active year was 2007 with eight days of severe weather; followed by six days of severe weather in 1999 and 2012 and five days in 1996, 2002 and 2013. In 2023, there were four days of severe weather: June 3, July 10, July 7 and July 14.

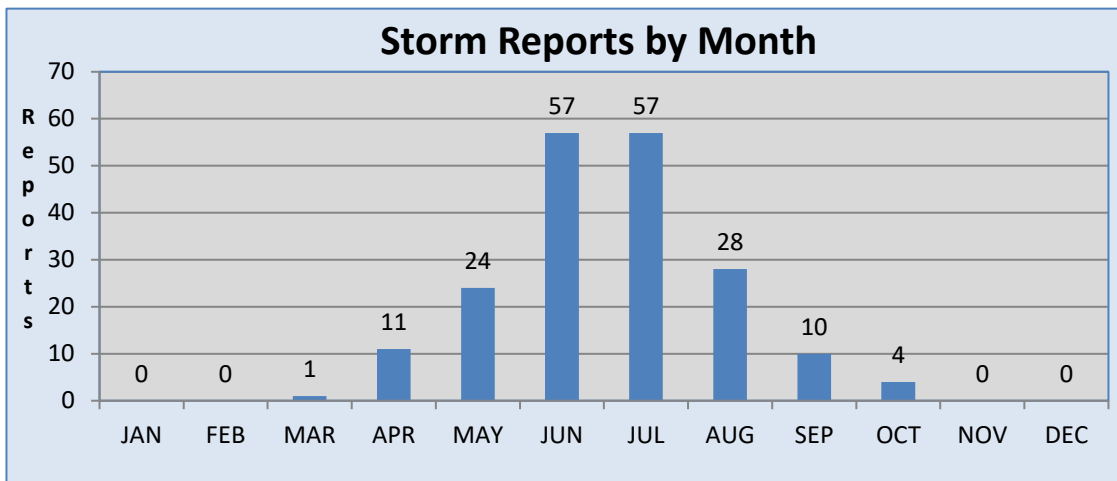
## Number of Days of Severe Weather Since 1980



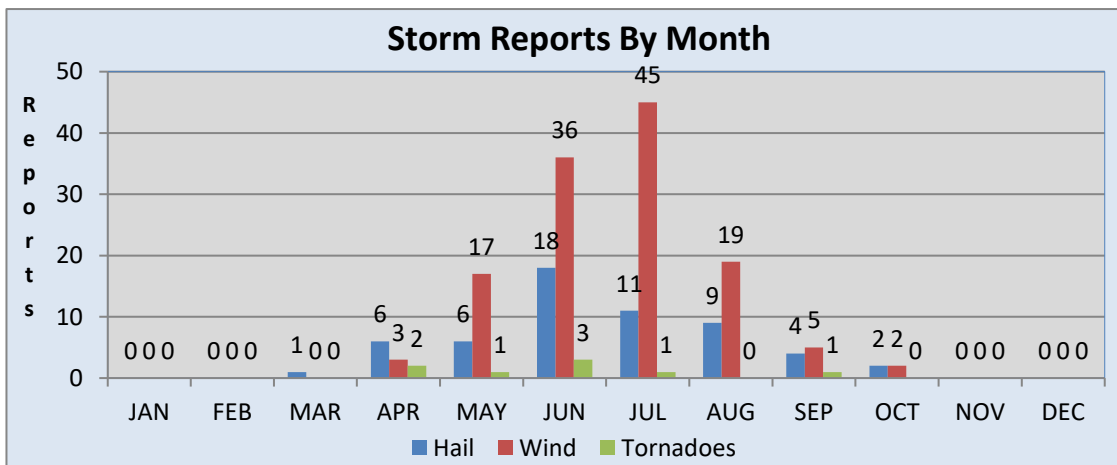
# Langlade County Severe Weather Facts (1950-2023)

## Storm Reports by Month

Severe weather has been documented in Langlade County from March through October. The earliest and rare event during the year occurred on March 25, 2007 when one and a half inches hail was reported at White Lake. The severe weather season begins in earnest in April. The convective season peaks during June and July and accounts for 59% of all severe weather reports. The convective season wanes quickly in September. The warm season months (May-September) account for 92% of all severe weather reports during the year. The latest report of severe weather during the year occurred on October 25, 2012 when a gust estimated at 52 knots was reported 0.8 miles southeast of Pickerel.



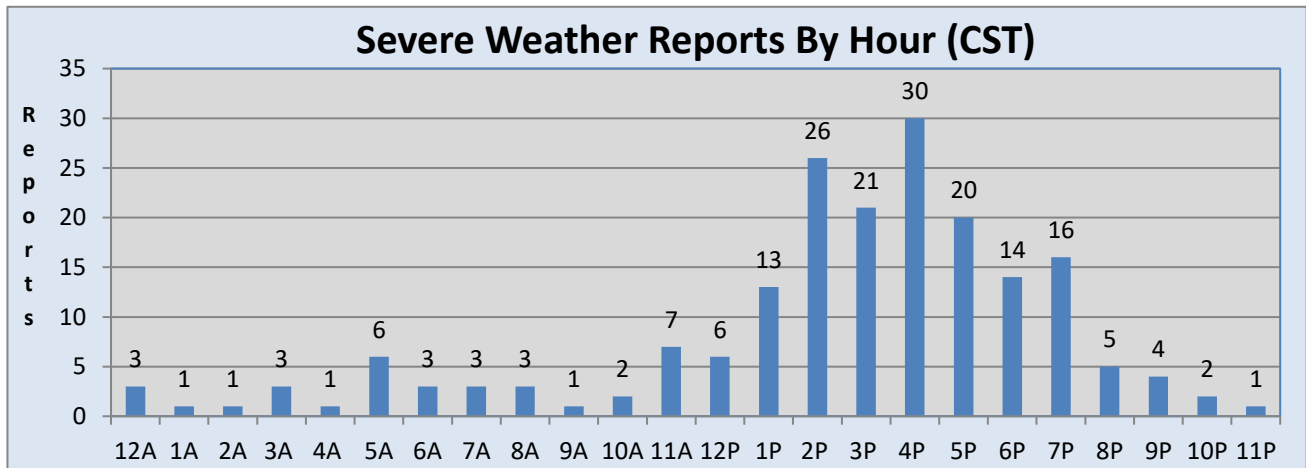
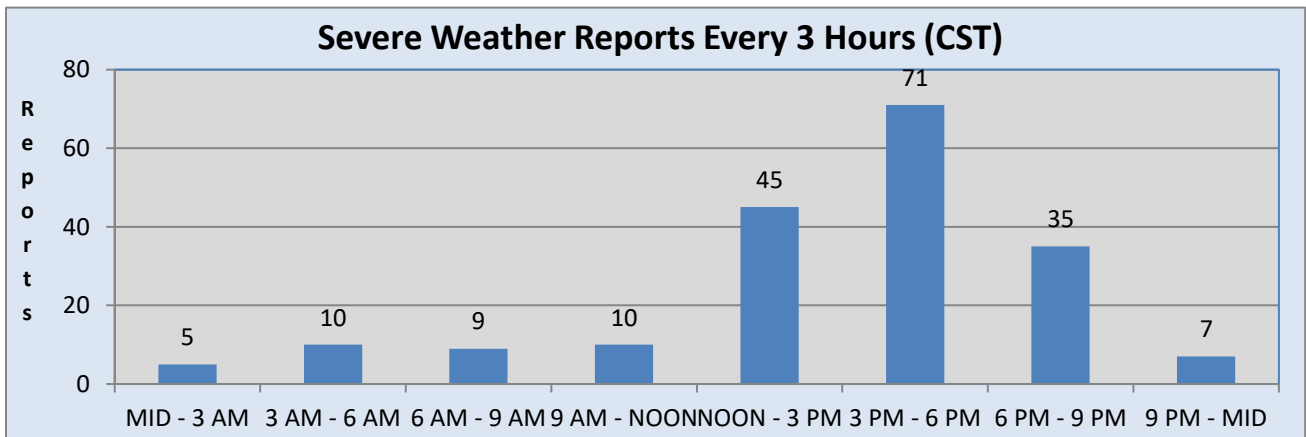
NOTE: The chart depicts storm type by month: (hail, wind/wind damage, tornadoes).



# Langlade County Severe Weather Facts (1950-2023)

## Storm Reports by Time of Day

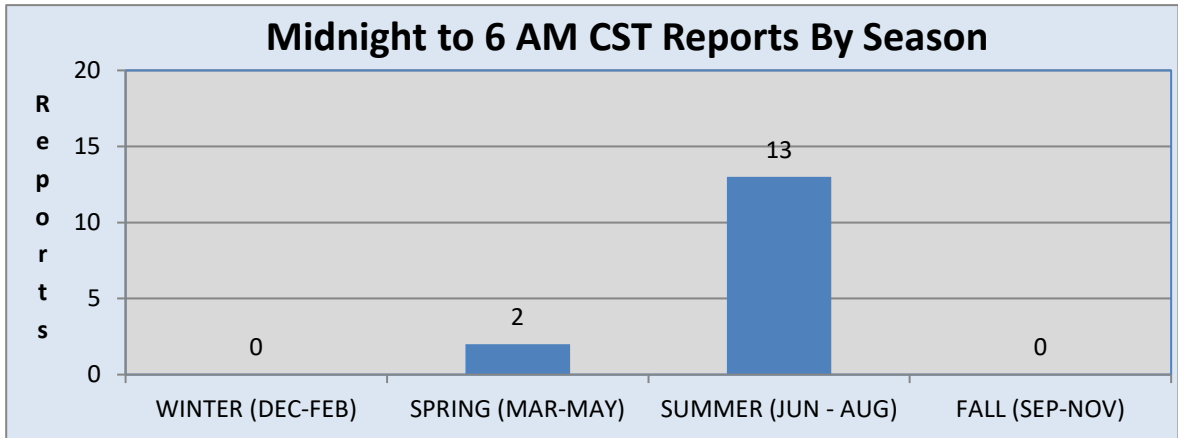
No matter the season, the afternoon and early evening hours are the peak time for severe weather across Langlade County. Seventy-six percent of all severe weather reports occur between 1 PM and 9 PM CST. In Langlade County, severe weather reports increased sharply after 1 PM CST. The peak reporting time of severe weather reports were between 2 PM and 5 PM CST. The peak in the storm activity corresponds to peak afternoon heating when the atmosphere is most unstable. During May through August, there is another peak of severe weather that occurs around midnight. In these events, thunderstorms that develop across the Dakotas and Minnesota move eastward into the county.



# Langlade 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 account for thirteen out of the fifteen overnight reports (87%) during the year. There have been no reports of overnight severe weather during the fall and winter.



# Langlade County Severe Weather Facts (1950-2023)

## Langlade County Tornadoes

Since record keeping began in 1950, there have been eight documented tornadoes that touched down across the county. There have been two tornadoes documented at F/EF3 tornadoes and zero F/EF4 or F/EF5 tornadoes. The first documented F3 tornado to strike the county occurred on September 28, 1971, when the tornado touched down in Hewitt and travelled to near Middle Inlet. The most recent EF3 occurred on June 7, 2007. On June 7<sup>th</sup>, severe thunderstorms erupted across Wood and Portage counties and moved northeast in Langlade County. The EF3 tornado was moving rapidly to the northeast at 50 mph, providing little time to take shelter before the storm hit. The most severe structural damage occurred 3.5 miles east of White Lake. The Bear Paw Outdoor Adventure Resort sustained severe damage. Nearly every building was damaged or destroyed, including a three-story inn. One of the largest tornado outbreaks in April occurred on April 10, 2011, when an EF1 tornado touched down five miles south of Parrish. The ten tornadoes on this date set a record for the most tornadoes on any single day across north-central and northeast Wisconsin. The last tornado to strike Langlade County occurred on July 9, 2013, when an EF0 tornado touched down between 10.8 miles south of Parrish to 3.1 miles west of Deerbrook.



Jerome Wahleithner  
White Lake, WI

Photo taken by: Jerome Wahleithner 06/07/2007



Picture above: Satellite picture of the tornado track across northeast Wisconsin.



Phil Kurimski  
NWS Green Bay

Picture above of damage at the Bear Paw Outdoor Adventure Resort, Photos by Phil Kurimski

# Langlade County Severe Weather Facts (1950-2023)

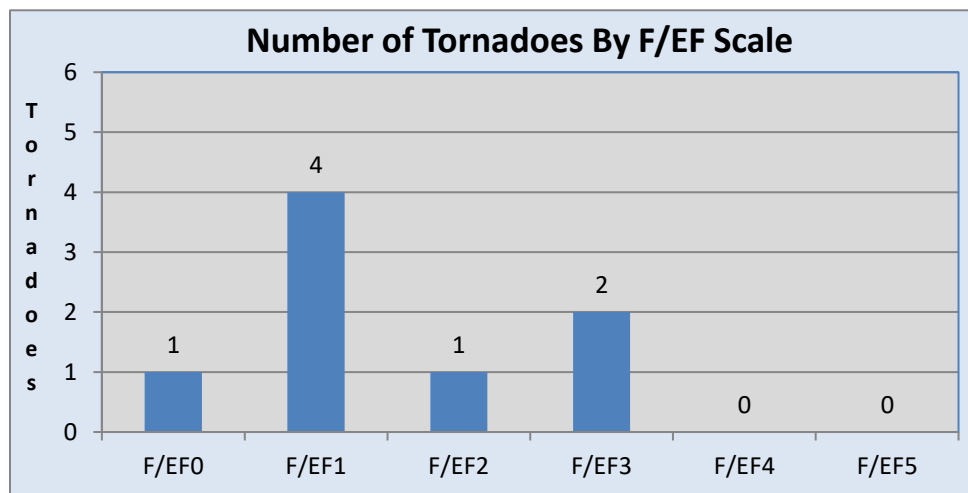
## Langlade County Tornadoes

Event #	Date			Time (CST)	Start / End Location	F/EF Rank
	Month	Day	Year			
1	5	4	1959	11:45	Deerbrook	1
2	9	28	1971	16:00-17:20	Hewitt - Middle Inlet	3
3	6	13	1976	20:00-20:10	2 W Hogarty - Elton	1
4	6	13	1976	20:45-21:00	Rural Langlade Co - Rural Lincoln County	1
5	4	27	1984	14:50	4 NW Antigo	2
6	6	7	2007	15:48-15:58	3.7 S White Lake - 3.5 NNE Markton	3
7	4	10	2011	17:50-17:58	5 S Parrish	1
8	7	9	2013	14:32-14:56	10.8 S Parrish - 3.1 W Deerbrook	0

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

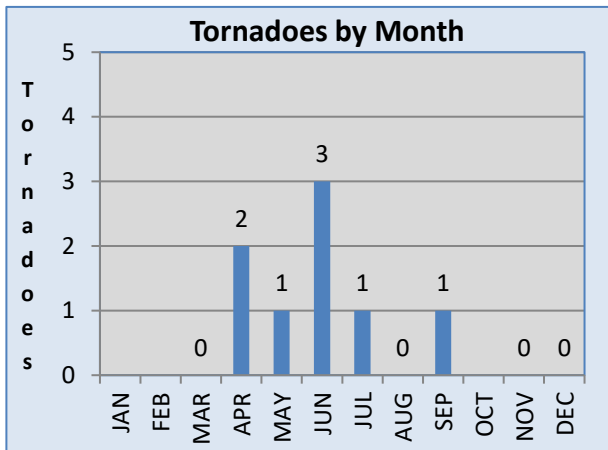
## F/EF2 or Greater Tornadoes in Langlade County

Event #	Date			Time (CST)	Start / End Location	F/EF Rank
	Month	Day	Year			
1	9	28	1971	16:00-17:20	Hewitt - Middle Inlet	3
2	4	27	1984	14:50	4 NW Antigo	2
3	6	7	2007	15:48-15:58	3.7 S White Lake - 3.5 NNE Markton	3



# Langlade County Severe Weather Facts (1950-2023)

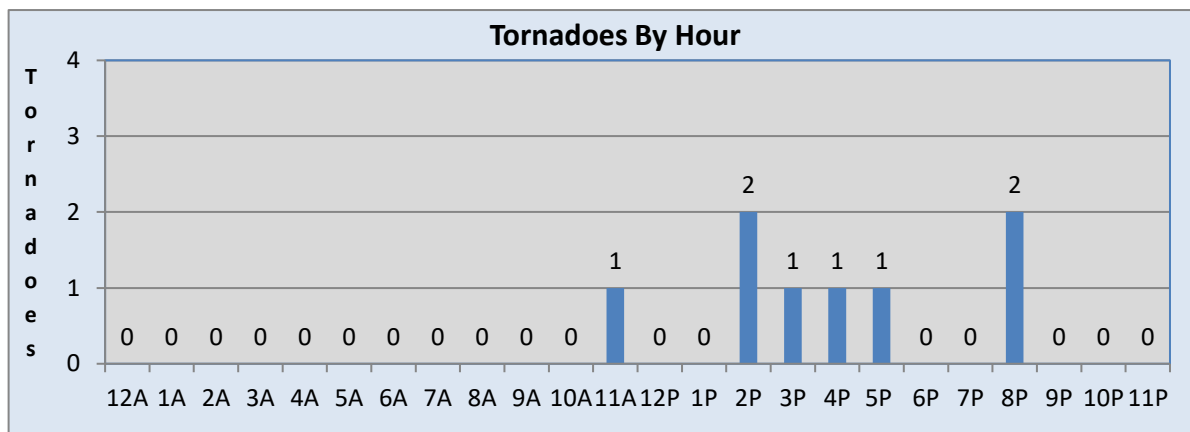
## Tornadoes by Month



Documented tornadoes have occurred in April, May, June, July and September. In 2011, Langlade County experienced its earliest documented tornado at the beginning of the year when an EF1 tornado touched down five miles south of Parrish on April 10<sup>th</sup>. The previous earliest documented tornado on record during the year occurred on April 27, 1984, when a F2 tornado touched down four miles northwest of Antigo. The months of April, May and June account for six of the eight tornado reports (75%) during the year. June was the most active month with 3 tornadoes while April was the 2<sup>nd</sup> most active month with two tornadoes. The latest tornado on record during the year occurred on September 28, 1971, when a F1 tornado touched down near Hewitt and traveled to near Middle Inlet. A tornado has touched down in seven separate years since 1950. On average, a tornado strikes Langlade County every eight years.

## Tornadoes by Hour

In Langlade County, seven out of the eight (88%) documented tornadoes have occurred between 2 PM and 9 PM CST. There have been no documented tornadoes between the 9 PM and 11 AM CST.



# Langlade County Severe Weather Facts (1950-2023)

## Predominant Storm Reports – Wind and Hail Only

During the early spring and again later in the fall, large hail is the dominant weather event that is reported to the National Weather Service. During this period, the atmosphere is cold aloft to support large hail reaching the ground. The predominant severe weather type transitions to strong winds/wind damage by June. The months of May and July have the strongest ratio of over seven out of ten reports being strong winds/wind damage compared to large hail. Over the course of the year, nearly seven out of ten reports are strong winds/wind damage compared to nearly three out of ten reports of large hail.

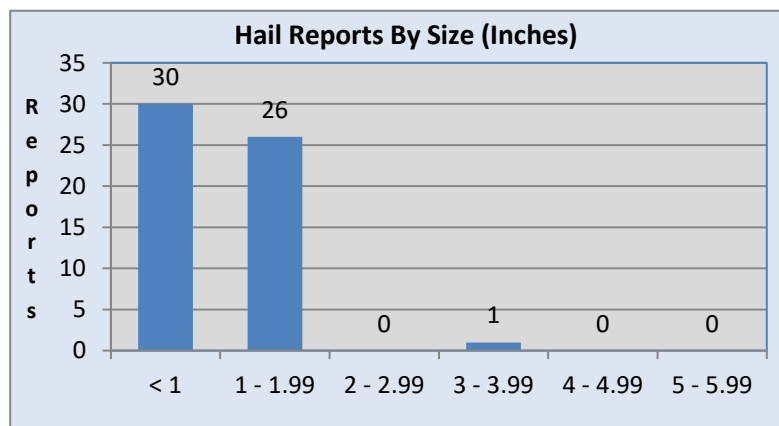
Month	% Hail Reports	% Wind or Wind Damage	Month	% Hail Reports	% Wind or Wind Damage
Jan	0.0	0.0	Jul	19.6	80.4
Feb	0.0	0.0	Aug	32.1	67.9
Mar	100	0.0	Sep	44.4	55.6
Apr	66.7	33.3	Oct	50.0	50.0
May	26.1	73.9	Nov	0.0	0.0
Jun	33.3	66.7	Dec	0.0	0.0
			Year	31.0	69.0

## Large Hail in Langlade County

There has been one documented report of large hail over two inches in diameter across the county. The largest hail stone of three inches in diameter was documented five miles west of Langlade on June 7, 2007. Overall, hail ranging in size from three quarters to one inch accounted for 74% of the documented large hail reports. Large hail reports of two inches or greater only accounted for two percent of the total hail reports.

## Hail over 2 inches

Event #	Date	Time	Hail			
	Month	Day	Year	(CST)	Start / End Location	(Inches)
1	6	7	2007	15:50	5 W Langlade	3.00





# Langlade County Severe Weather Facts (1950-2023)

## Langlade County Summary

In Langlade County, the severe weather season begins in earnest in May and wanes quickly by September. Early season tornadoes are possible in April and May, but the peak of the tornado season is in June. Severe weather usually occurs in the afternoon and early evening hours, with a secondary peak between midnight and 6 AM CST during the summer months. If you do experience severe weather, you are likely to see large hail early in the spring or later in the fall. Damaging wind or wind damage will be the dominant severe weather report during the remainder of the convective season by a two to one margin over large hail. In the NWS Green Bay County Warning Area which includes 22 counties from central to northeast Wisconsin, Langlade County ranks 18<sup>th</sup> in the total number of storm reports and 19<sup>th</sup> 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

# Langlade County Severe Weather Facts (1950-2023)

## 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