

# DOOR COUNTY TORNADO GUIDE

## (1950-2018)

EVENT	DATE			TIME		F/EF	WIDTH	PATH
#	MONTH / DATE / YEAR			(CST)	DIRECTION / LOCATION	RANK	(YARDS)	(MILES)
1	7	1	1956	1205	5 E of Maplewood to 4 SE Institute	2	50	11.0
2	7	25	1966	1820	0.5 E Maplewood	0	20	2.0
3	4	22	1970	2100-2110	1 N Casco - Rio Creek	2	500	2.0
4	4	22	1970	2120-2130	7 SE Maplewood	2	500	4.0
5	7	12	1973	0730	Jacksonport	1	100	3.0
6	6	8	1985	2000-2030	Sand Bay - Sturgeon Bay	2	150	5.0
7	7	28	1991	1015	Near Rock Island (waterspout)	0	-9999	-9999
8	7	28	1991	1015	Near Washington Island (waterspout)	0	-9999	-9999
9	8	23	1998	1730-1744	3 SW Egg Harbor - 5 SE Egg Harbor	3	1300	5.1
10	8	4	1999	1605-1615	21 ESE Sturgeon Bay (waterspout)	0	-9999	-9999
11	9	9	1999	1455	3 N Sister Bay (waterspout)	0	-9999	-9999
12	9	19	1999	1646-1710	8 SE Sturgeon Bay (waterspout)	0	-9999	-9999
13	7	13	2000	1455	1.5 NE Forestville	0	50	0.1
14	7	20	2000	1258	2 W Sister Bay (waterspout)	0	-9999	-9999
15	4	23	2001	1326-1346	12 NW - 9 NW Sturgeon Bay (waterspout)	0	-9999	-9999
16	6	18	2006	1643	3 NW Sister Bay	0	-9999	-9999
17	9	29	2006	0920-0955	Chambers Is. - 12 SE Cedar River (waterspout)	0	-9999	-9999
18	6	20	2007	1606	6 NW Ellison Bay (waterspout)	0	-9999	-9999
19	9	18	2012	1701	3 W Sister Bay (waterspout)	0	-9999	-9999

# **TORNADO REFERENCE GUIDE – DOOR COUNTY**

## **Event 1: July 1, 1956**

The F/EF-2 tornado developed 5 miles east of Maplewood and travelled 11 miles to four miles southeast of Institute around 12:05 pm CST. The tornado had a maximum width of 50 yards.

## **Event 2: July 25, 1966:**

The F/EF-0 tornado touched down about a half mile east of Maplewood around 6:20 pm CST. The tornado was 20 yards wide and travelled approximately two miles. An interesting note to the local storm report from July 1966 indicated a strong waterspout was noted over the Bay of Green Bay. According to the local storm report, a waterspout lifted several boats out of the water dropping one on a car at Ephraim. It also dropped twelve large trees down at Gordon Lodge. This tornado/waterspout was not documented in this study.

## **Event 3: April 22, 1970**

Several tornadoes were reported across north-central and northeast Wisconsin on this date. The F/EF-2 tornado touched down around 9 pm CST one mile north of Casco in Kewaunee County. The tornado moved northeast for 11 miles before dissipating near Rio Creek in southern Door County around 9:10 pm CST. The tornado reached a maximum width of 500 yards and travelled two miles across Door County. Fifteen barns near Casco and Rio Creek were destroyed. Two persons were injured when their house trailer was upended south of Forestville. Meanwhile, snow was occurring across northwest Wisconsin. Superior reported six inches of snow on the ground during the evening of the 22<sup>nd</sup>.

## **Event 4: April 22, 1970**

Several tornadoes were reported across north central and northeast Wisconsin on this date. The F/EF-2 tornado touched down around 9:20 pm CST seven miles southeast of Maplewood. This may be the same tornado that tore through eastern Kewaunee County from Algoma to 6 miles northeast of Algoma. The tornado travelled about four miles and reached 500 yards in width in Door County before dissipating.

## **Event 5: July 12, 1973**

The F/EF-1 tornado touched down in Jacksonport in Door County around 7:30 am CST. The tornado was 100 yards wide and travelled 3 miles. Scattered damage was reported west and south of Jacksonport. As many as six waterspouts were reported by one observer off Jacksonport. A seiche caused a drop of two feet in water level locally about fifteen minutes after passage of the storms.

## **Event 6: June 8, 1985**

The F/EF-2 tornado touched down around 8 pm CST near Sand Bay, causing some building damage. The tornado skipped east 5 miles across portions of Sturgeon Bay. The tornado was 150 yards wide. Garages, sheds and ten barns were leveled or blown away. Yachts were blown off cradles and hundreds of trees were downed. Property damage was estimated at \$1.8 million dollars. Hail up to five inches in diameter covered the ground to a depth of six inches just northeast of Sturgeon Bay. The storm caused an estimated \$1.5 million dollars in crop damage.

## **Event 7: July 28, 1991**

A waterspout was reported near Rock Island at 10:15 am CST. A second waterspout was reported near Washington Island.

## **Event 8: July 28, 1991**

A waterspout was reported near Washington Island around 10:15 am CST. A second waterspout was reported near Rock Island around the same time.

# TORNADO REFERENCE GUIDE – DOOR COUNTY

## Event 9: August 23, 1998

The F/EF-3 tornado struck a rural section of central Door County in Northeast Wisconsin during the evening of August 23, 1998. The multiple-vortex tornado was on the ground for nearly 14 minutes, and carved a path of damage 5.1 miles long and 1/4 to over 1/2 mile wide at times. Damage was estimated at nearly \$7 million. The tornado, which moved off the waters of Green Bay, moved on shore three miles southwest of Egg Harbor at 5:30 pm CST, near Horseshoe Bay. Thousands of trees were snapped or uprooted as the tornado moved across the heavily wooded area in Murphy Park. The width of the damage path just after it came on shore was nearly one-half mile! The tornado then crossed Highway 42 at about 5:34 pm CST, severely damaging several houses and businesses. Damage in this area was rated F2 on the Fujita Scale of F0 to F5. About three minutes later the tornado ripped a two-story farm house off its foundation, dropping it 20 yards away. Based on the house's construction, damage in this area was rated F3. Nearby, a campground was hit, causing considerable damage there to trees and campers. Amazingly, only two people were injured. The tornado weakened shortly thereafter, lifting off the ground three miles west-northwest of Jacksonport at around 5:44 pm CST.

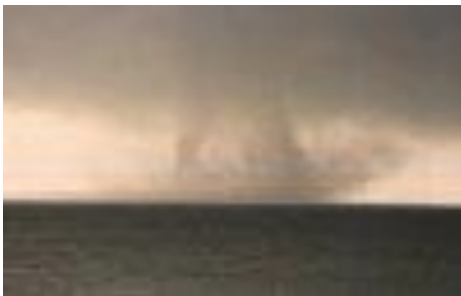


### AUGUST 23, 1998 DOOR COUNTY F/EF-3 TORNADO

This photo was taken about the time the super cell thunderstorm was entering the Bay of Green Bay, off the Menominee, Michigan coast around 5:05 pm CST. The picture was taken 75 miles south of the storm. (Photograph © 1998 Michael Schardt)



This picture was taken around 5:15 pm CST, about the time the supercell was producing a waterspout on the bay. The picture was taken 25 miles south of the storm. (Photograph © 1998 Ray Fulwiler)



These photos were taken by Tom Janssen II at Murphy Park, which was hit by the tornado. The two on the left show the waterspout just after it developed, around 5:15 pm CST. The third picture was taken a little after 5:20 pm CST. The tornado was off the Door county shore over the Bay of Green Bay.

# TORNADO REFERENCE GUIDE – DOOR COUNTY

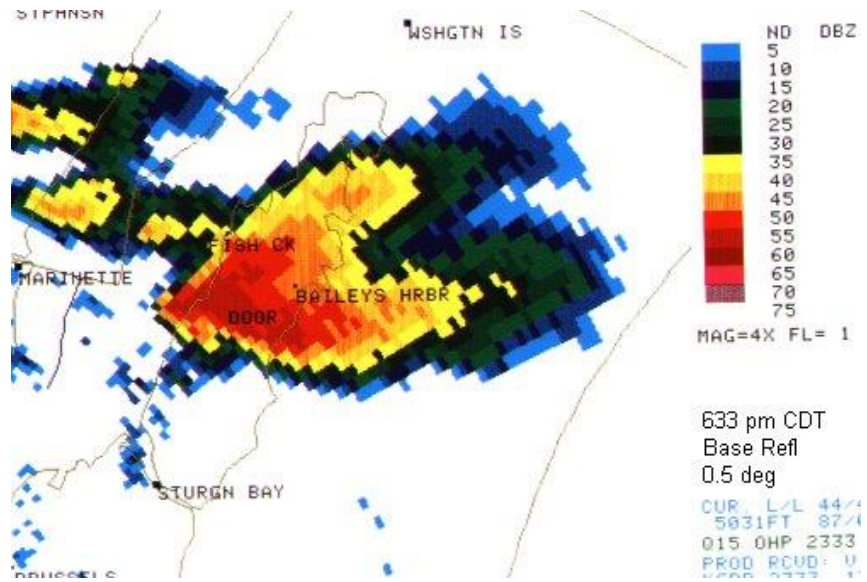
## Event 9: August 23, 1998 continued



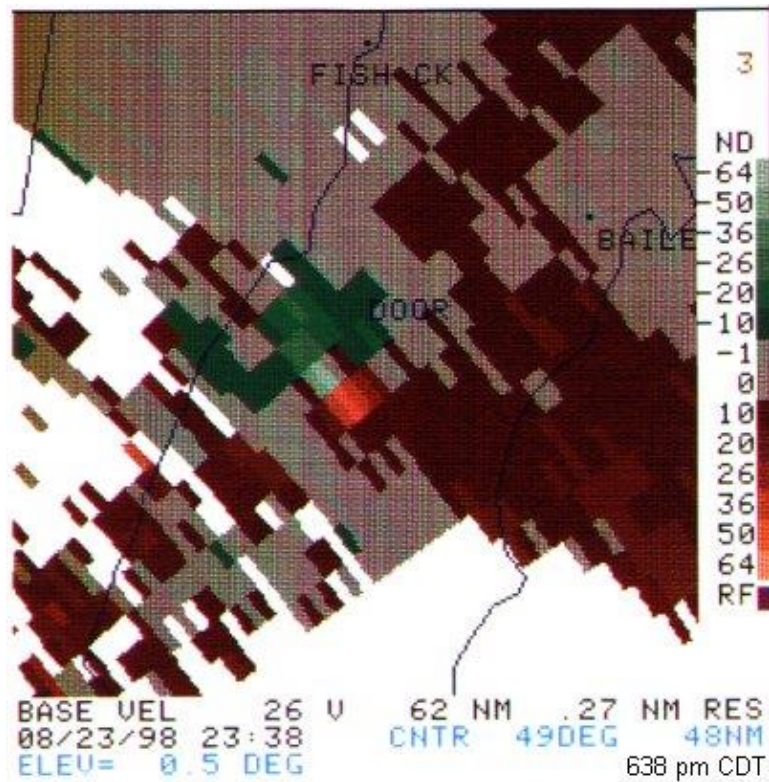
These pictures were taken by Gary Gridley, from Egg Harbor. The photo on the left was taken at 5:25 pm CST. The picture on the right was taken around 5:30 pm CST, as the tornado was coming onshore at Murphy Park.

# TORNADO REFERENCE GUIDE – DOOR COUNTY

## Event 9: August 23, 1998 Continued



This image shows the supercell thunderstorm as viewed by the radar. The image was taken at 633 pm CDT.



The second image shows the tornado vortex signature 9 minutes later (638 pm CDT) near the time it was producing F3 damage. At this point, the radar measured 94 knot (108 mph) winds (ground relative) at about 4100 feet above the ground.

# TORNADO REFERENCE GUIDE – DOOR COUNTY

Event 9: August 23, 1998

## Door County Tornado Damage



Here is a panoramic view looking east on Hwy 42. The damage width (which goes off the picture on both sides) was over ¼ mile wide as it passed over Hwy 42. (Photograph by Jeff Last)



This building (left picture) was on the south side of the tornado as it passed over Hwy 42 (Photograph by Jill Last, NWS Green Bay). There used to be a farm house and barn here (picture on right).

# **TORNADO REFERENCE GUIDE – DOOR COUNTY**

## **Event 10: August 4, 1999**

A waterspout (F/EF-0) was reported by a vessel on the lake 21 miles east southeast of Sturgeon Bay at 4:05 pm CST. The crew of the vessel observed two other waterspouts about 21 miles east southeast of Sturgeon Bay. The U.S. Coast Guard relayed the report they received from the vessel on the lake.

## **Event 11: September 9, 1999**

A waterspout (F/EF-0) was reported 3 miles north of Sister Bay at 2:55 pm CST.

## **Event 12: September 19, 1999**

The crew of a ship off the Door County shoreline, 8 miles southeast of Sturgeon Bay, spotted a waterspout (F/EF-0) at 4:46 pm CST and then dissipated around 5:10 pm CST. There may have been other waterspouts in the vicinity of the one reported.

## **Event 13: July 13, 2000**

The F/EF-0 tornado touched down 1.5 miles northeast of Forestville at 2:55 pm CST. The tornado was 50 yards wide and was on the ground for a tenth of a mile. The monthly local storm report did not indicate any damage.

## **Event 14: July 20, 2000:**

Boaters spotted a waterspout (F/EF-0) two miles west of Sister Bay at 12:58 pm CST.

## **Event 15: April 23, 2001**

A waterspout F/EF-0 developed 6 miles west southwest of Fairland around 1:26 pm CST. The waterspout moved north along the shoreline before it dissipated 9 miles northwest of Sturgeon Bay.

## **Event 16: June 18, 2006**

A waterspout (F/EF-0) was reported 3 miles northwest of Sister Bay at 4:43 pm CST.

## **Event 17: September 29, 2006**

A waterspout (F/EF-0) was reported off Door County, from Chambers Island to 12 miles southeast of Cedar River, Michigan around 9:20 am CST. The last report of the waterspout was around 9:55 am CST.

## **Event 18: June 20, 2007**

A waterspout (F/EF-0) was reported 6 miles northwest of Ellison Bay at 4:06 pm CST.

## **Event 19: September 18, 2012**

A brief (F/EF-0) waterspout was observed on the waters of the Bay of Green Bay three miles west of Sister Bay around 5:01 pm CST. The time of the event was estimated based on the time of 911 calls. A strong upper level trough and cold air aloft produced conditions favorable for waterspout formation on the waters of Green Bay.