

# **Tornadoes Across Bond and Marion County Illinois** May 1<sup>st</sup>, 2002

#### **Overview**

FIRST PATH OF DAMAGE (CENTRAL BOND COUNTY)

THE FIRST SWATH OF DAMAGE WAS FROM SIX TORNADO TOUCHDOWNS ACROSS PARTS OF CENTRAL BOND COUNTY ILLINOIS. THREE OF THE SIX INITIAL TORNADO DAMAGE PATHS (TORNADOES 1, 2, 3) BEGAN 3 TO 4 MILES WEST OF GREENVILLE ILLINOIS ALONG AND JUST NORTH OF HIGHWAY 140. SEVEN BARNS AND MACHINE SHEDS SUSTAINED VARYING DEGREES OF DAMAGE ALONG AND 1.5 MILES SOUTH OF HIGHWAY 140. SHEET METAL FROM SOME OF THESE STRUCTURES WAS TOSSED OVER 100 YARDS AWAY. A NUMBER OF LARGE TREES WERE STRIPPED MAINLY OVER THE UPPER HALF OF THE TREE. LARGE BRANCHES WERE TOSSED AS MUCH AS 50 TO 75 YARDS AWAY. THE TORNADIC DAMAGE PATHS WERE RELATIVELY NARROW, LESS THAN 30 YARDS WIDE, AND BEGAN BETWEEN 1:35 AND 1:40 PM CDT. DAMAGE INTENSITY VARIED FROM FO TO F1 ON THE FUJITA SCALE.

TWO OTHER TORNADO TOUCHDOWNS (TORNADO 4 AND 5) FORMED SOUTH OF THE FIRST THREE, ONE HALF MILE NORTH OF THE INTERSECTION OF COUNTY ROADS 900 NORTH AND 800 EAST AND ONE MILE EAST-NORTHEAST OF THIS INTERSECTION RESPECTIVELY. TWO BARNS SUSTAINED DAMAGE FROM THE SOUTHERN MOST TORNADO WHILE NUMEROUS LARGE TREES AND PINES WERE SEVERED ALONG BOTH PATHS. SIMILAR TO THE FIRST THREE TRACKS, THESE DAMAGE TRACKS WERE RELATIVELY NARROW LESS THAN 30 YARDS WIDE WHILE DAMAGE INTENSITY WERE RATED FO AND F1. THESE TORNADOES INITIALLY FORMED BETWEEN 1:35 AND 1:40 PM CDT. TORNADO 6 FORMED APPROXIMATELY ONE MILE WEST OF GREENVILLE AT APPROXIMATELY 1:40 PM CDT.

TORNADOES 1, 2, 3, 5, AND 6 CROSSED OLD NATIONAL ROAD, ONE HALF TO ONE AND ONE-HALF MILES SOUTHWEST OF GREENVILLE AROUND 1:40 PM CDT. FOUR HOMES ALONG OLD NATIONAL ROAD SUSTAINED VARYING DEGREES OF DAMAGE WHILE NUMEROUS LARGE TREES AND PINES WERE SEVERELY DAMAGED. ONE GARAGE WAS COMPLETELY DESTROYED. A FEW LARGE PINES WERE TOSSED OVER 100 YARDS INTO AN OPEN FIELD. THE WIDTH OF THE DAMAGE TRACKS VARIED FROM 30 TO 40 YARDS WHILE DAMAGE INTENSITY WAS RATED F1. ALONG COUNTY ROAD 975, JUST SOUTHWEST OF GREENVILLE, TORNADO 2 DAMAGED TWO MACHINE SHEDS AND ONE HOME.

#### **Damage Surveys**

AROUND 1:40 PM CDT, SEVERAL WITNESSES LOCATED SOUTH AND SOUTHWEST OF GREENVILLE OBSERVED FOUR TORNADOES SIMULTANEOUSLY TO THEIR NORTHWEST. THE TORNADOES WERE NOT ROTATING AROUND EACH OTHER, RATHER THEY WERE ALIGNED NORTH-SOUTH AND MOVING RAPIDLY EAST TO SOUTHEAST.

AFTER 1:40 PM CDT, TORNADO 6 NEARLY DESTROYED ANOTHER LARGE MACHINE SHED SPREADING PIECES OF SHEET METAL ONE-HALF MILE TO THE EAST. DAMAGE INTENSITY WAS RATED HIGH-END OF F1. TORNADO 1 CROSSED FOURTH STREET THEN HIT THE HILLVIEW NURSING HOME CAUSING MAINLY ROOF DAMAGE. THE TORNADO CONTINUED TO MOVE EAST DAMAGING THREE STORAGE SHEDS, ANOTHER BUILDING AND FINALLY CAUSING MINOR ROOF DAMAGE TO TWO HOMES. SEVERAL TREES WERE ALSO DOWNED OR STRIPPED. TORNADO 2 ALSO CROSSED FOURTH STREET DAMAGING A RURAL COOPERATIVE ELECTRIC RADIO TOWER AND THE F&S GRAIN STORAGE BINS. TWO LARGE METAL GRAIN BINS THAT WERE FIFTEEN PERCENT FILLED WERE DAMAGED WHILE TWO OTHER BINS SUSTAINED SOME DAMAGE. PIECES OF THE ELEVATORS WERE TOSSED OVER 70 YARDS AWAY AND DRIVEN INTO THE GROUND AT 45 TO 60 DEGREE ANGLES. THE DAMAGE INTENSITY WAS RATED F1 INTENSITY. TORNADO 3 JUST MISSED A CAR DEALERSHIP, HOWEVER IT CAUSED SIGNIFICANT DAMAGE TO A BARN AND MACHINE SHED AND SOME DAMAGE TO A FARM HOME ONE-FIFTH MILE SOUTH OF THE F&S GRAIN STORAGE BINS. DAMAGE WIDTH CONTINUED TO BE LESS THAN 50 YARDS WHILE DAMAGE INTENSITY WAS RATED F1. TORNADO 5 CROSSED U.S. 40 JUST WEST OF DUDLEYVILLE ROAD AND CAUSED TREE DAMAGE AND MINOR DAMAGE TO A HOME. THIS TORNADO WAS RATED FO. TORNADOES 3 AND 5 WERE ALSO RESPONSIBLE FOR OVERTURNING FIVE TRACTOR TRAILERS ON INTERSTATE 70 SOUTHWEST OF THE INTERSECTION OF HIGHWAY 127 AND INTERSTATE 70. THERE WAS ONE MINOR INJURY.

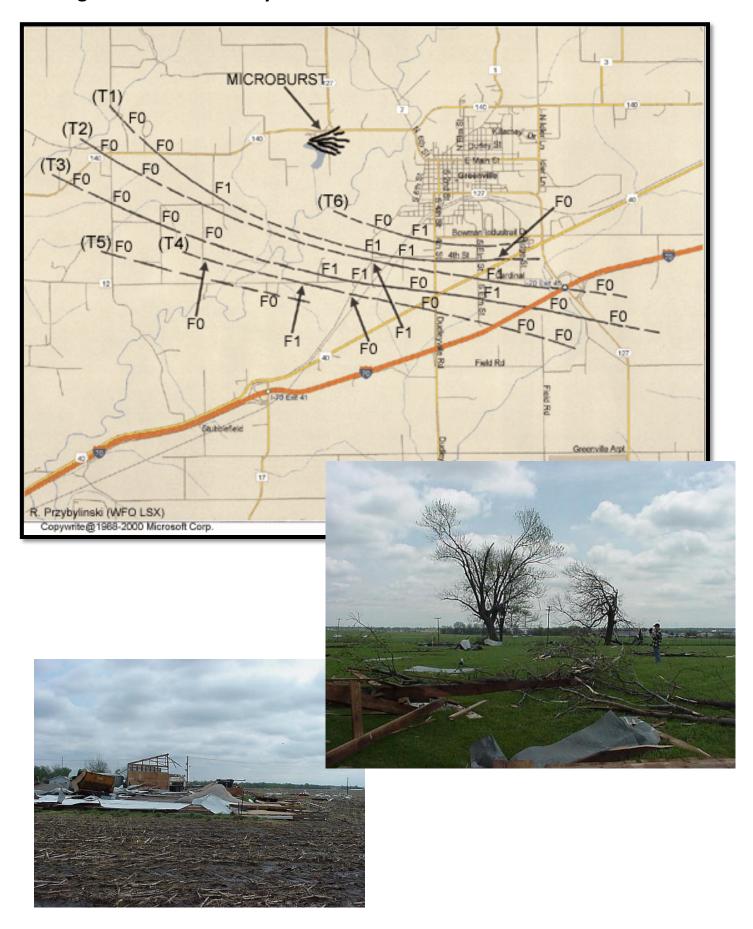
TOTAL LENGTH OF DAMAGE PATHS FOR TORNADOES 1, 2, AND 3 WERE 6.0, 6.5, AND 7.5 MILES RESPECTIVELY. TOTAL LENGTH OF DAMAGE PATHS FOR TORNADOES 4, 5, AND 6 WERE 2.5, 5.0, AND 2.5 MILES RESPECTIVELY. OVER THIRTY-FIVE STRUCTURES WERE DAMAGED BY THE SERIES OF TORNADOES.

#### **Damage Surveys**

#### SECOND PATH OF DAMAGE (NORTHEAST MARION COUNTY)

THE SECOND SWATH OF DAMAGE WAS FROM THREE TORNADO TOUCHDOWNS ACROSS PARTS OF NORTH-CENTRAL AND NORTHEAST MARION COUNTY ILLINOIS. THE FIRST OF THREE TORNADO DAMAGE PATHS BEGAN 6.5 MILES WEST-NORTHWEST OF KINMUNDY ILLINOIS BETWEEN 2:10 AND 2:15 PM CDT. THE DAMAGE PATH WAS QUITE FRAGMENTED COMPARED TO THE NEARLY CONTINUOUS DAMAGE PATHS ACROSS BOND COUNTY. DAMAGE WAS CONFINED TO MAINLY TREES. HOWEVER ONE TWO-STORY STRUCTURE NEAR THE INTERSECTION OF HIGHWAY 37 AND KINOKA ROAD (1.5 MILES SOUTHWEST OF KINMUNDY) SUSTAINED CONSIDERABLE DAMAGE. THE ROOF AND TWO SIDES OF THIS STRUCTURE WERE TOSSED ACROSS HIGHWAY 37 AND INTO A NEARBY WOODS. THE TORNADIC DAMAGE TRACK WAS AGAIN RELATIVELY NARROW, APPROXIMATELY 30 TO 40 YARDS WIDE. DAMAGE WAS RATED FROM FO TO F1 INTENSITY. A SECOND TORNADO TRACK STARTED AT KINOKA ROAD, 5.5 MILES WEST OF KINMUNDY AT APPROXIMATELY 2:15 PM CDT. SIMILAR TO THE FIRST THIS DAMAGE PATH WAS ALSO QUITE FRAGMENTED. HOWEVER TWO HOMES DID SUSTAIN VARYING DEGREES OF DAMAGE 2.5 MILES SOUTHWEST OF KINMUNDY. OVER FIFTY PERCENT OF THE ROOF OF ONE HOME WAS TOSSED OVER 50 TO 70 YARDS AWAY. THE DAMAGE TRACK WAS AGAIN AROUND 40 YARDS WIDE WHILE THE DAMAGE INTENSITY WAS RATED F1. A THIRD BUT SHORT TORNADIC DAMAGE PATH STARTED 1.5 MILES WEST OF KINMUNDY AND TRAVELED SOUTHEAST ACROSS HIGHWAY 37. THIS TORNADO INITIALLY TOUCHED DOWN AFTER 2:15 PM CDT. DAMAGE WAS CONFINED TO LARGE TREES. HOWEVER ONE HOUSE TRAILER WAS SIGNIFICANTLY DAMAGED BY THIS TORNADO. THE DAMAGE INTENSITY WAS RATED F1. THE TOTAL LENGTH OF DAMAGE PATHS OF THE FIRST, SECOND AND THIRD TORNADOES WERE 7.0, 6.5, AND 2.5 MILES RESPECTIVELY.

THE PATTERN OF TORNADO DAMAGE TRACKS WEST AND SOUTH OF GREENVILLE WERE SOMEWHAT SIMILAR TO THE TORNADIC DAMAGE PATHS OF THE MAY 18<sup>th</sup>, 1995 TORNADIC STORM OVER MONROE COUNTY ILLINOIS WHERE MULTIPLE DAMAGE PATHS FROM TORNADOES WERE DOCUMENTED. THE GREENVILLE ILLINOIS STORM IS REFERRED TO AS A 'HIGH-PRECIPITATION SUPERCELL' WHERE LARGE HAIL, HIGH WINDS, AND WEAK TORNADOES ARE OFTEN ASSOCIATED WITH THESE STORMS. THE TORNADOES ACROSS BOND AND NORTH-CENTRAL MARION COUNTIES IN ILLINOIS OCCURRED ALONG THE LEADING OUTFLOW OF THE STORM'S SOUTHERN FLANK.











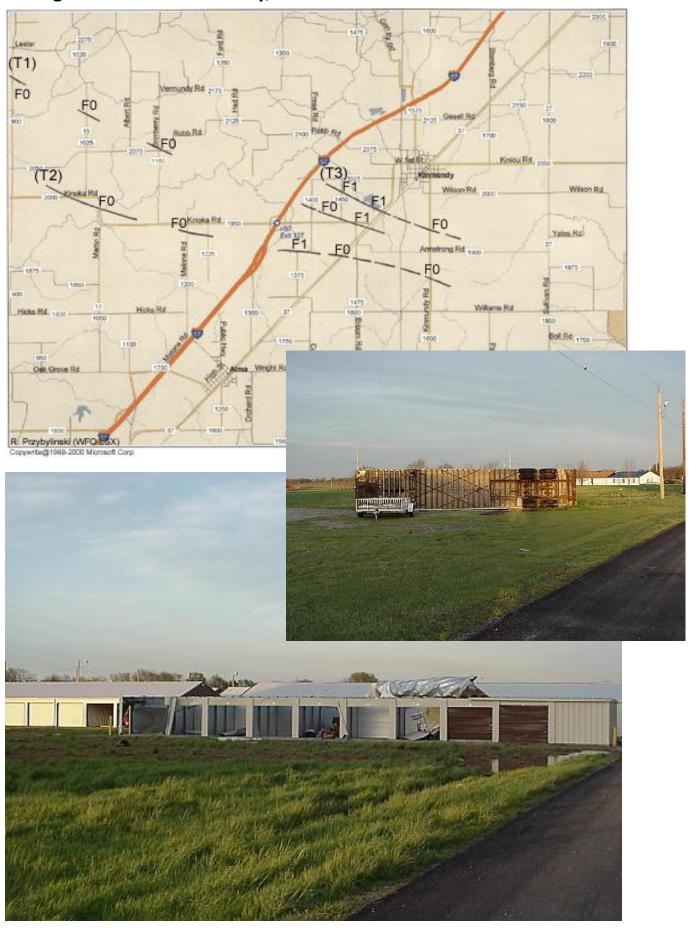








#### **Images from Marion County, Illinois:**



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## **Preliminary Storm Reports for May 1st:**

TIME(CDT):	LOCATION(COUNTY):	EVENT:	REMARKS:
1230 PM	PARIS MO (MONROE)	1.75 INCH HAIL	AMATEUR RADIO OPERATOR.
1240 PM	EWING MO (LEWIS)	1.75 INCH HAIL	SEVERE WEATHER SPOTTERS.
1245 PM	HARDIN IL (CALHOUN)	1.75 INCH HAIL	CALHOUN COUNTY SHERIFFS DEPT.
1245 PM	GOLDEN EAGLE IL (CALHOUN)	1.75 INCH HAIL	CALHOUN COUNTY SHERIFFS DEPT.
1247 PM	MENDON IL (ADAMS)	1.75 INCH HAIL	SEVERE WEATHER SPOTTERS.
0112 PM	BENLD IL (MACOUPIN)	1.75 INCH HAIL	MACOUPIN COUNTY SHERIFFS DEPT.
0115 PM	4N BUNKER HILL IL (MACOUPIN)	1.75 INCH HAIL	SEVERE WEATHER SPOTTERS.
0120 PM	MOUNT OLIVE IL (MACOUPIN)	1.75 INCH HAIL	AMATEUR RADIO OPERATOR.
0120 PM	LITCHFIELD IL (MONTGOMERY)	1.75 INCH HAIL	AMATEUR RADIO OPERATOR.
0120 PM	LITCHFIELD IL (MONTGOMERY)	WIND DAMAGE	SEMI-TRAILERS BLOWN OVER ON I-55.
0128 PM	PANAMA IL (BOND)	WIND DAMAGE	POWER LINES DOWNED.

## Preliminary Storm Reports for May 1st:

TIME(CDT):	LOCATION(COUNTY):	EVENT:	REMARKS:
0138 PM	LIVINGSTON IL (MADISON)	WIND DAMAGE	LARGE TRUCKS OVERTURNED ON I-70.
0140 PM	GREENVILLE IL (BOND)	1.75 INCH HAIL	BOND COUNTY SHERIFFS DEPT.
0141 PM	COFEEN IL (MONTGOMERY)	1.00 INCH HAIL	SEVERE WEATHER SPOTTERS.
0145 PM	3NW WOBURN IL (BOND)	1.00 INCH HAIL	BOND COUNTY SHERIFFS DEPT.
0146 PM	4S BARRY IL (PIKE)	1.75 INCH HAIL	PIKE COUNTY SHERIFFS DEPT.
0148 PM	GREENVILLE IL (BOND)	WIND DAMAGE	TREES UPROOTED.
0200 PM	4E STAUNTON IL (MACOUPIN)	WIND DAMAGE	TRAIN DERAILED ALONG COUNTY LINE.
0207 PM	8SE VANDALIA IL (FAYETTE)	1.75 INCH HAIL	FAYETTE COUNTY SHERIFFS DEPT.
0215 PM	KINMUNDY IL (MARION)	TORNADO	BUILDINGS DAMAGED.
0215 PM	KINMUNDY IL (MARION)	1.00 INCH HAIL	MARION COUNTY EMA.
0220 PM	FARINA IL (FAYETTE)	2.00 INCH HAIL	ILLINOIS STATE POLICE.
0220 PM	SALEM IL (MARION)	WIND DAMAGE	TREES DOWN.
0300 PM	1W PALMYRA IL (MACOUPIN)	TORNADO	POWER LINES DOWN.
0312 PM	FARMERSVILLE IL (MONTGOMERY)	1.00 INCH HAIL	AMATEUR RADIO OPERATOR.

Please note that while the severe weather data presented in this event synopsis has been quality controlled, it is still considered unofficial. Official reports & statistics for severe weather events can be found in the *Storm Data* publication (<a href="http://www.ncdc.noaa.gov/IPS/sd/sd.html">http://www.ncdc.noaa.gov/IPS/sd/sd.html</a>) or *Storm Events Database* <a href="http://www.ncdc.noaa.gov/stormevents/">http://www.ncdc.noaa.gov/stormevents/</a>), available from the National Centers for Environmental Information (NCEI) web page [formerly the National Climate Data Center (NCDC)].

More detailed tornado track information can be accessed using the National Weather Service Damage Assessment Toolkit for all tornadoes beginning in 2012. <a href="https://apps.dat.noaa.gov/StormDamage/DamageViewer/">https://apps.dat.noaa.gov/StormDamage/DamageViewer/</a>

Any questions regarding this event review should be address to w-lsx.webmaster@noaa.gov