

# Severe Weather Synopsis and Tornado Outbreak

## Friday August 24, 2007

The following information was duplicated from the National Weather Service website, as well as the Lansing Amateur Radio Public Service Corps site. Because the photos and descriptions on their site are considered “in the public domain”, no permissions were necessary, although we did ask for them first. Please feel free to distribute this document to any and all who may benefit by its contents. Perhaps lives can be saved in the future, if we learn from events like this.

- J. Ervin Bates (Erv), W8ERV  
Lansing Michigan SKYWARN



**Lansing Area/  
Ingham County**  
Amateur Radio Public Service



# Tornadoes Strike Potterville and Lansing on Friday Afternoon

Eaton County Tornado Rated EF-3: Strongest Michigan tornado in 10 years

A line of thunderstorms formed on Friday afternoon south of Grand Rapids and intensified quickly as it moved east towards Lansing. One of the storms developed a strong rotating updraft, becoming a supercell thunderstorm as it moved across Eaton County. The National Weather Service issued a tornado warning for Eaton County more than 15 minutes before the first tornado began, about 2 miles north of Charlotte. This allowed people in the path of the storm to take shelter before the destructive winds hit. The tornado destroyed several homes and injured five people before it ended just east of Potterville. The National Weather Service conducted a survey of the damage path Friday evening. Based on the damage, it appears this tornado produced winds near 140 mph, making it an EF3 on the Enhanced Fujita Scale.

The damage in Eaton County was the most severe along a path from M-50 just north of Kinsel Highway to just west of M-100 and Vermontville Highway, near Potterville Michigan. The damage survey in Eaton County indicated a Tornado path 200 to 300 yards wide and six and one half miles long. Around 15 homes were seriously damaged. A single story home had its roof blown off and windward facing walls blown in. The majority of the roof and garage from this home was not found. A two story home across the street had its roof blown off and upper story front walls blown in. Other damage included the partial collapse of the upper story of a home and a home that was blown off its foundation. Most of the damaged homes were beyond repair.

The tornado that produced the damage in Eaton County ended north of Potterville. It was at this time that a Severe Thunderstorm Warning was issued for Ingham County downstream. Another tornado then developed just into Ingham County and the Severe Thunderstorm Warning was upgraded to a Tornado Warning for Ingham County.

Another National Weather Service team surveyed the damage in Ingham County and found evidence of a weaker tornado, as compared to the Eaton County damage. The first sign of damage was near the intersections of Waverly and M-99. The first sign of significant damage was to Stonegate a mobile home park south of M-99. Many trees were down in this mobile home park, some on homes. The damage path continued northeast toward Interstate 96 across Grovenburg Rd. More tree damage was found on the north side of Interstate 96 along Haag Rd. Rotation was seen in the damage path both at Stonegate and more so along Haag Rd. The damage path continued northeast across Miller Rd through neighborhoods where numerous trees were down, some on homes as well. The damage path crosses Cedar St, near the Fazoli's Restaurant where damage was noted to signs on both sides of the road. Damage continues northeast across Pennsylvania Ave north toward the intersections of Jolly and Aurelius and Dunckel and Aurelius. Tree damage was again noted in this area to a campground. Structural damage in Ingham County was limited to trees falling on homes and some siding being peeled back. The tornado path length was approximately six miles in length and around 300 yards wide. The tornado was rated an EF 1 on the Enhanced Fujita Scale. Based on the damage, it appears this tornado produced winds near 140 mph, making it an EF3 on the Enhanced Fujita Scale.

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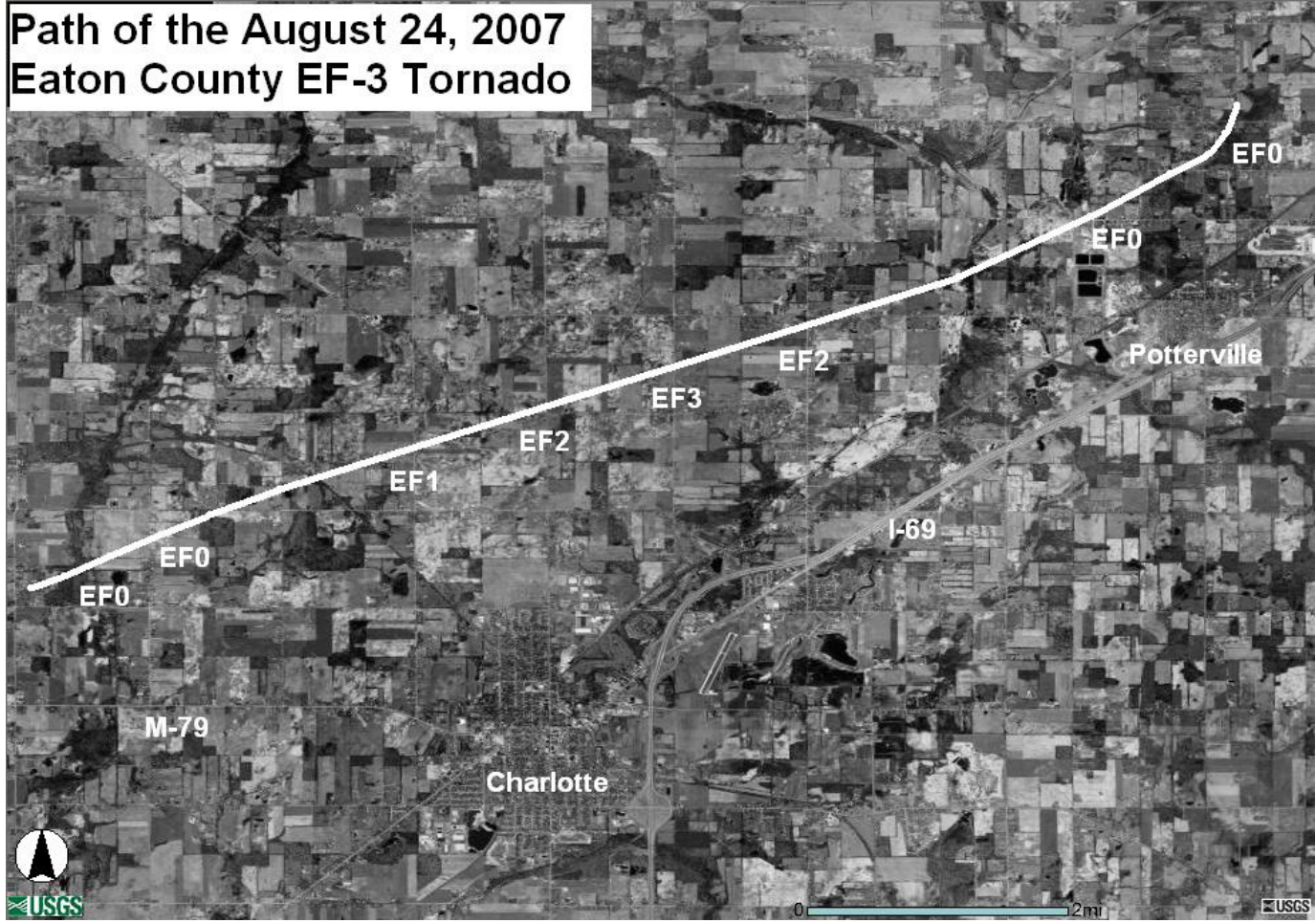
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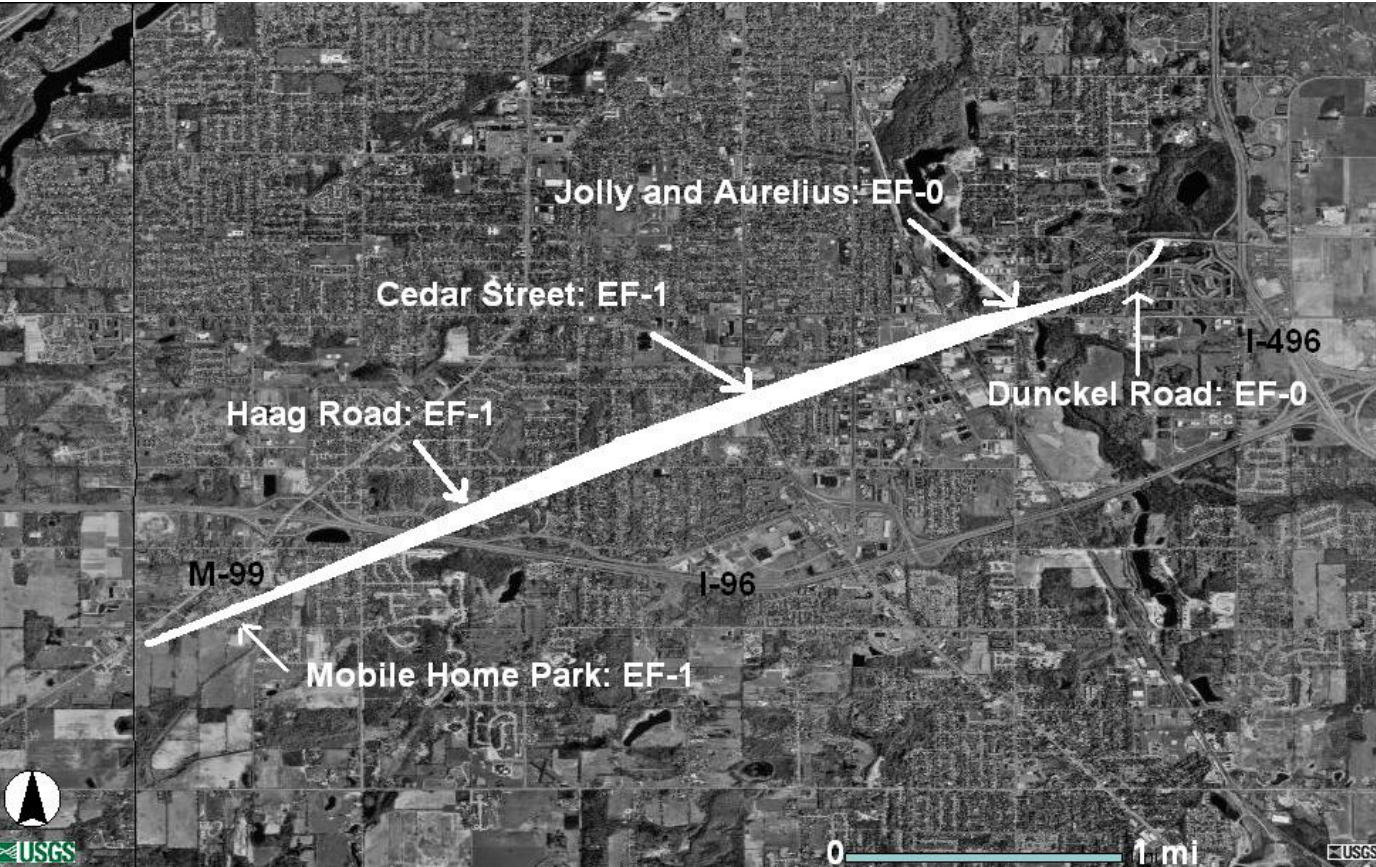
Photographs of what appears to be the destructive funnel of the tornado that struck near Pottersville. Photos courtesy WLNS-TV.



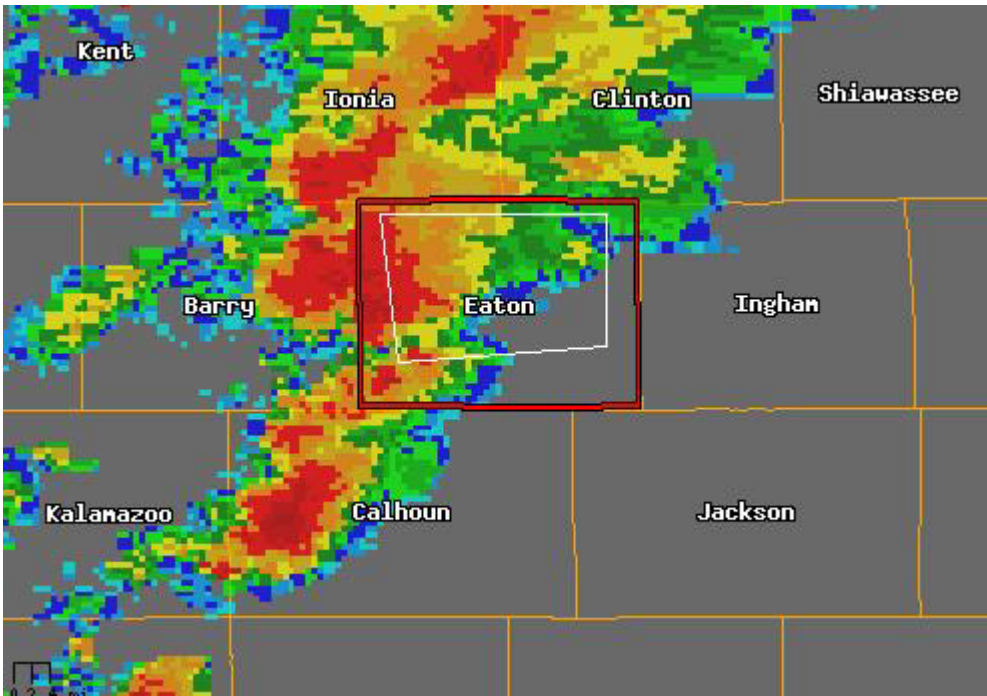
# Path of the August 24, 2007 Eaton County EF-3 Tornado



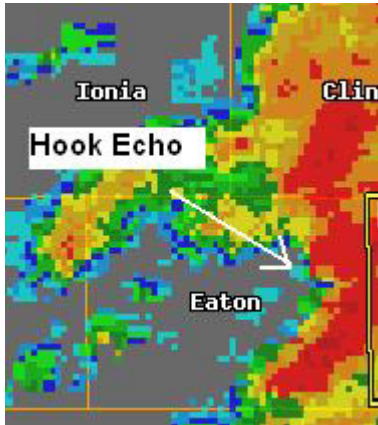
Below, Path of Ingham County's EF-1 Tornado on 8/24/07







Radar picture showing the storm moving towards Charlotte and Potterville.



A radar picture of the supercell thunderstorm as it was about to move into the Lansing area. Note the “hook echo” indicative of a storm capable of producing a tornado.



Some of the damage in Inghan County from the weaker tornado.





Tornado damage near Potterville. Note the barn debris wrapped around the tree on the right. Photos courtesy of WILX-TV.

**The tornado that struck Eaton County around 425 PM on Friday, August 24, 2007 was rated EF-3 with top winds estimated at 140 mph. This is the strongest tornado to strike the state of Michigan since July 2, 1997. Here are some photos of the damage from Eaton County, where several homes were destroyed and five people were injured.**



**Damage to a home and a flattened cornfield.**





Wall and roof damage to a home, and an overturned van. Note the piece of wood sticking out of the windshield.



Destroyed homes, blown apart by the winds of the strongest Michigan tornado in ten years.



The tornado produced a trail of destruction from two miles north of Charlotte to near Potterville.





Scenes of tornado destruction of a magnitude not witnessed in over a decade in the state of Michigan.



This brick building was heavily damaged by the tornado that brought winds of well over 100 mph.



A house and exterior stairs that were battered by the tornado's debris-laden winds, and the inside of a home that sustained heavy damage.



## National Weather Service Information Statement

PUBLIC INFORMATION STATEMENT  
NATIONAL WEATHER SERVICE GRAND RAPIDS MI  
1247 AM EDT FRI AUG 24 2007

...STORM SURVEYS CONFIRM TORNADO DAMAGE ...

THE NATIONAL WEATHER SERVICE IN GRAND RAPIDS, MI CONDUCTED POST STORM DAMAGE SURVEYS IN INGHAM AND EATON COUNTIES FRIDAY EVENING. BOTH OF THE SURVEYS INDICATED THAT TORNADOES HAD OCCURRED IN THOSE AREAS. THE DAMAGE IN EATON COUNTY WAS THE MORE SEVERE AND EXTENDED ON A PATH FROM M-50 JUST NORTH OF KINSEL HIGHWAY TO JUST WEST OF M-100 AND VERMONTVILLE HIGHWAY, NEAR POTTERVILLE, MI. THERE WERE OTHER SPOTTY REPORTS OF DAMAGE IN EATON COUNTY THAT WERE APPARENTLY FROM DOWNBURST WINDS.

THE DAMAGE SURVEY IN EATON COUNTY INDICATED A TORNADO PATH 200 TO 300 YARDS WIDE AND 6 AND ONE HALF MILES LONG. AROUND 15 HOMES WERE SERIOUSLY DAMAGED AND 5 PEOPLE WERE TREATED FOR INJURIES. TWO PEOPLE HAD INJURIES SERIOUS ENOUGH TO BE HOSPITALIZED. A SINGLE STORY HOME HAD ITS ROOF BLOWN OFF AND WINDWARD FACING WALLS BLOWN IN. THE MAJORITY OF THE ROOF AND THE GARAGE FROM THIS HOME WAS NOT FOUND. A TWO STORY HOME ACROSS THE STREET HAD ITS ROOF BLOWN OFF AND UPPER STORY FRONT WALLS BLOWN IN. OTHER DAMAGE INCLUDED THE PARTIAL COLLAPSE OF THE UPPER STORY OF A HOME AND A HOME THAT WAS BLOWN OFF ITS FOUNDATION. MOST OF THE DAMAGED HOMES WERE BEYOND REPAIR. TOP WINDS OF THE TORNADO...ESTIMATED FROM THE DAMAGE...WERE PROBABLY IN EXCESS OF 130 MPH. DAMAGE PHOTOS WILL BE ANALYZED TO DETERMINE IF THE TORNADO IS AN EF-2 OR EF-3 ON THE NEW ENHANCED FUJITA SCALE.

A TORNADO WARNING WAS ISSUED BY THE NATIONAL WEATHER SERVICE ABOUT 10 MINUTES BEFORE THE DAMAGE OCCURRED...ALLOWING PEOPLE IN THE PATH OF THE STORM TO SEEK SHELTER. RESIDENTS LAUDED THE NATIONAL WEATHER SERVICE FOR TIMELY ISSUANCE OF THE TORNADO WARNING.

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HEATHFIELD

PUBLIC INFORMATION STATEMENT...ADDED INFO EDITED CONTENT  
NATIONAL WEATHER SERVICE GRAND RAPIDS MI  
330 PM EDT SAT AUG 25 2007

...TORNADOES STRIKE POTTERVILLE AND LANSING ON FRIDAY AFTERNOON...

A LINE OF THUNDERSTORMS FORMED ON FRIDAY AFTERNOON SOUTH OF GRAND RAPIDS AND INTENSIFIED QUICKLY AS IT MOVED EAST TOWARDS LANSING. ONE OF THE STORMS DEVELOPED A STRONG ROTATING UPDRAFT...BECOMING A SUPERCELL THUNDERSTORM AS IT MOVED ACROSS EATON COUNTY. THE NATIONAL WEATHER SERVICE ISSUED A TORNADO WARNING FOR EATON COUNTY MORE THAN 15 MINUTES BEFORE THE FIRST TORNADO BEGAN...ABOUT 2 MILES NORTH OF CHARLOTTE. THIS ALLOWED PEOPLE IN THE PATH OF THE STORM TO TAKE SHELTER BEFORE THE DESTRUCTIVE WINDS HIT. THE TORNADO DESTROYED SEVERAL HOMES AND INJURED FIVE PEOPLE BEFORE IT ENDED JUST EAST OF POTTERVILLE. THE NATIONAL WEATHER

SERVICE CONDUCTED A SURVEY OF THE DAMAGE PATH FRIDAY EVENING. BASED ON THE DAMAGE...IT APPEARS THIS TORNADO PRODUCED WINDS NEAR 140 MPH, MAKING IT AN EF3 ON THE ENHANCED FUJITA SCALE. THERE HAS NOT BEEN A TORNADO RATED AS A LEVEL 3 IN THE GRAND RAPIDS WARNING AREA SINCE MARCH 27 1991 IN CALHOUN COUNTY.

THE DAMAGE IN EATON COUNTY WAS THE MOST SEVERE ALONG A PATH FROM M-50 JUST NORTH OF KINSEL HIGHWAY TO JUST WEST OF M-100 AND VERMONTVILLE HIGHWAY...NEAR POTTERVILLE MICHIGAN. THE DAMAGE SURVEY IN EATON COUNTY INDICATED A TORNADO PATH 200 TO 300 YARDS WIDE AND SIX AND ONE HALF MILES LONG. AROUND 15 HOMES WERE SERIOUSLY DAMAGED. A SINGLE STORY HOME HAD ITS ROOF BLOWN OFF AND WINDWARD FACING WALLS BLOWN IN. THE MAJORITY OF THE ROOF AND GARAGE FROM THIS HOME WAS NOT FOUND. A TWO STORY HOME ACROSS THE STREET HAD ITS ROOF BLOWN OFF AND UPPER STORY FRONT WALLS BLOWN IN. OTHER DAMAGE INCLUDED THE PARTIAL COLLAPSE OF THE UPPER STORY OF A HOME AND A HOME THAT WAS BLOWN OFF ITS FOUNDATION. MOST OF THE DAMAGED HOMES WERE BEYOND REPAIR.

THE TORNADO THAT PRODUCED THE DAMAGE IN EATON COUNTY ENDED NORTH OF POTTERVILLE. IT WAS AT THIS TIME THAT A SEVERE THUNDERSTORM WARNING WAS ISSUED FOR INGHAM COUNTY DOWNSTREAM. ANOTHER TORNADO THEN DEVELOPED JUST INTO INGHAM COUNTY AND THE SEVERE THUNDERSTORM WARNING WAS UPGRADED TO A TORNADO WARNING FOR INGHAM COUNTY.

ANOTHER NATIONAL WEATHER SERVICE TEAM SURVEYED THE DAMAGE IN INGHAM COUNTY AND FOUND EVIDENCE OF A WEAKER TORNADO...AS COMPARED TO THE EATON COUNTY DAMAGE. THE FIRST SIGN OF DAMAGE WAS NEAR THE INTERSECTIONS OF WAVERLY AND M-99. THE FIRST SIGN OF SIGNIFICANT DAMAGE WAS TO STONEGATE A MOBILE HOME PARK SOUTH OF M-99. MANY TREES WERE DOWN IN THIS MOBILE HOME PARK, SOME ON HOMES. THE DAMAGE PATH CONTINUED NORTHEAST TOWARD INTERSTATE 96 ACROSS GROVENBURG RD. MORE TREE DAMAGE WAS FOUND ON THE NORTH SIDE OF INTERSTATE 96 ALONG HAAG RD. ROTATION WAS SEEN IN THE DAMAGE PATH BOTH AT STONEGATE AND MORE SO ALONG HAAG RD. THE DAMAGE PATH CONTINUED NORTHEAST ACROSS MILLER RD THROUGH NEIGHBORHOODS WHERE NUMEROUS TREES WERE DOWN, SOME ON HOMES AS WELL. THE DAMAGE PATH CROSSES CEDAR ST...NEAR THE FAZOLIS RESTAURANT WHERE DAMAGE WAS NOTED TO SIGNS ON BOTH SIDES OF THE ROAD. DAMAGE CONTINUES NORTHEAST ACROSS PENNSYLVANIA AVE NORTH TOWARD THE INTERSECTIONS OF JOLLY AND AURELIUS AND DUNCKEL AND AURELIUS. TREE DAMAGE WAS AGAIN NOTED IN THIS AREA TO A CAMPGROUND. STRUCTURAL DAMAGE IN INGHAM COUNTY WAS LIMITED TO TREES FALLING ON HOMES AND SOME SIDING BEING PEELED BACK. THE TORNADO PATH LENGTH WAS APPROXIMATELY SIX MILES IN LENGTH AND AROUND 300 YARDS WIDE. THE TORNADO WAS RATED AN EF 1 ON THE ENHANCED FUJITA SCALE.

DUKE MWH 93



## Skywarn Net Log:

1604 - National Weather Service in Grand Rapids issues a Tornado Warning  
1610 - Net Start - Net Control is WA8BEN from his home in South Lansing  
1610 - KC8RBK - Check in Saginaw near Lansing Mall  
1610 - KC8ZGZ - Check in Holt  
1610 - KD8BD - Check in Don Jolly and Cedar  
1610 - KD8BOQ - Check in Cory in Holt  
1611 - WD8SDW - Check in Dansville mobile  
1611 - W8ATT - Check in M100 - North of Potterville  
1611 - W8ERV - Check in Mobile Harper & Wolverine  
1611 - K8DRB - Check in Mobile Moores River Drive  
1611 - N8SG - Check in Stationary St Johns  
1611 - KC8ZPX - Check in Jolly and 127  
1611 - KC8QYB - Check in Michigan and Foster  
1612 - W8JRL - Check in Downtown Lansing mobile to West Lansing  
1614 - WC8ING - Check in Mike Perez at Ingham EOC  
1615 - KC8TCS - Check in I-96 and Saginaw  
1615 - K8RDN - Check in Potter Park  
1615 - W8ERV - Mobile to 96 and 69  
1618 - W8JRL - Mobile to Saginaw and 96  
1618 - KB8ZXR/KB8RAD - Check in Holt  
1618 - KC8YT - Check In  
1619 - AB8RX - Check In Willoughby and Cedar  
1619 - KC8TCS - Check out  
1620 - WA8KZY - Check in Mobile East Lansing heading on 496 to Delta Township  
1620 - Net Control is in Contact with City Emergency Manager Trent Atkins  
1622 - N8SG - Check in 3 miles west of St Johns on M21  
1623 - KC8EHR - Gave directions to W8ATT in Potterville  
1623 - W8ATT - West on Vermontville from M100  
1624 - Net Control is in Contact with City Emergency Manager Trent Atkins  
1625 - KD8BOT - Check in Tyler in Holt  
1625 - W2PMH - Check in Mobile from Downtown Lansing to Meridian Mall  
**1626 - Missed Callsign - Otto and Doan quarter size hail and winds 50-60**  
**1627 - W8ATT Heavy debris - House destroyed - Lots of circular damage**  
**1628 - N8GSK "Debris is raining from the sky. Shingles, Wood and insulation"**  
**1634 - Net Control contacts Lansing 911 Center, advises of situation, and that a confirmed tornado is heading towards Lansing**  
1637 - National Weather Service in Grand Rapids issues Severe Thunderstorm Warning for Ingham County  
1638 - W8JRL Saginaw and Creyts Flooded  
**1638 - N8GSK - Rotation over Dimondale**  
**1639 - W8ERV near capital center wind gust over 50 mph**  
1640 - AB8RX Holt & Grovenburg  
1641 - Net Control is in Contact with City Emergency Manager Trent Atkins  
1641 - W8JRL - Waverly and Jolly 1/8 inch hail

1641 - K8RDN - Relocated to Hawk Island Park

## SKYWARN NET LOG CONTINUED:

1643 - WC8ING - Needs spotters

1643 - W8ERV willing to go to Ingham County Sheriffs Department

1643 - KB8MUN - Otto & Vermontville

1644 - AB8RX advises an Accident Holt & Kahres

**1646 - National Weather Service in Grand Rapids issues Tornado Warning for Ingham County**

**1647 - W8ATT - Power Line Snapped on Holt Road just east of Dimondale**

**1647 - W8JRL - Creyts & Lansing Rd Cloud with Rotation off to the East**

**1648 - KC8ZPX - Power off Jolly & 127 Roofs off Winds 70 mph**

1648 - WD8MBB - Check in Onondaga

1649 - KC8YHE - On Campus East Side streets are flooding

1649 - KD8DRB check out

1650 - KC8YT - Hagadorn north of grand river flooded out almost impassible.

1651 - WC8ING to W8ERV - Please check in with field services Lt. Foote

**1651 - KD8PA - Greg advises that stonegate trailer park at M-99 and Bishop has possible overturned trailers**

1653 - W8ABE non rotating wall cloud in Dewitt

**1654 - KD8PA - substantial trees knocked over in Stonegate**

**1655 - WD8SDW Advises that Lot 196 overturnd trailer from county dispatch radio.**

**1657 - KC8RBK - Grovenburg & Bishop - Trees down on cars as big as spotters waist.**

**1659 - WD8BCI - 10 inches large trees down medium in age South Washington & Edgewood**

1706 - W8JRL Entering Stonegate

1708 - W8SRM - Advises in Okemos that wx radio didn't go off

**1709 - W8JRL - Trailer 151 has a tree uprooted and laying on house**

1710 - KB8ZXR/KB8RAD - Arrival at Ingham County Sheriffs Department

1711 - WB8NUS - Advises his weather radio went off in Delta Township

1712 - KC8QYB - Flooding at Trowbridge and Mt Hope in East Lansing 5 inches of standing water on the road

1713 - KD8PA - Grovenburg & Bishop closed off

**1715 - KC8ZPX - Jolly and 127 - Shingles off Roofs, New Tim Hortons Restaurant construction blown down. 10-12 inch trees down**

1715 - W8ATT Check out

1716 - WD8MBB Check out

1717 - KC8QYB Check out

**1717 - KC8ZPX - Jolly at Oakbrook in Lansing - Tree Down 15" in diameter tree down live & healthy roots out of ground completely uprooted**

1718 - KC8RBK Check Out

1722 - KC8ZPX Check Out

1725 - National Weather Service expires Tornado Warning for Ingham County

1725 - Skywarn Storm Net closed, all damage report/recovery operations moved to 146.940.