
**Confirmed Tornado
Rice Lake, Ontario
August 20, 2009**

Date- Local: Thursday, August 20th, 2009

UTC: Friday, August 21st, 2009

Time- Local: 2030

UTC: 030

Location: Rice Lake/Otonabee South Monaghan

Region: Peterborough - Kawartha Lakes

Classification: Confirmed Tornado

Category: C

Casualties: None

Track Length: 10248.75 m

Width: None available

Motion: 190.36 degrees

Damage Estimate: None available

F-Scale Rating: F1

Code: AH, BS

Damage Survey: Yes done by Arnold Ashton and Lindsey McCallum

Spotter Reports: None

Other Documents:

Storm damage survey report filled out by Brad Rousseau based on Arnold Ashton's data

Aerial and ground photos of damage

Tornado F-Scale Assessment

Brad L. Rousseau

Tornado Data Production Assistant, Environment Canada

February 12th, 2010

Classification: Confirmed Tornado

Date: Thursday, August 20th, 2009

Location: Rice Lake, Peterborough - Kawartha Lakes Region

Assessment: F1

F-Code: AH, BS

Explanation of Assessment: Well built house with aluminum roof had large section of aluminum removed. Storage building had roof removed and some walls blown out.

OSPC Storm Damage Survey Report

Investigators	<i>#1 (Lead) #3</i>	<i>#2 #4</i>
Location / Region	<i>Rice Lake/Otonabee South Monaghan</i>	<i>Peterborough - Kawartha Lakes</i>
Event Date Local / UTC (YYMMDD)	<i>2009-08-20</i>	<i>2009-08-21</i>
Event Time Local / UTC	<i>2030</i>	<i>030</i>
Severe Weather Event Type	<i>Tornado</i>	
Classification	<i>C</i>	
F-scale Value	<i>F1</i>	
F-scale Code	<i>AH, BS</i>	
Start Lat / Long	<i>44.211456</i>	<i>-78.150194</i>
End Lat / Long	<i>44.302278</i>	<i>-78.126957</i>
Path Length (m)	<i>10248.75</i>	
Motion (degrees)	<i>190.36</i>	
Max. Path Width (m)	<i>width</i>	
Avg. Path Width (m)	<i>width</i>	
Human Injuries / Fatalities	<i>0</i>	<i>0</i>
Animal Injuries / Fatalities	<i>0</i>	<i>0</i>
Damage (\$K) / Source	<i>0</i>	
Damage Description	<i>Well built house with aluminum roof had large chunk removed. A storage building had roof removed and part of the walls blown out.</i>	
Other Notes	<i>There is a very distinct path cut in a corn field, with damage very localized. Neighbours had no damage</i>	

Images and Captions

include storm photos, damage photos, maps, etc. below









Rice Lake Tornado - Damage Survey Information:

Summary:

Date: August 20th, 2009

Time: Around 8:30-8:50 pm

Location: Rice Lake/Keene Area

Surveyors: Arnold Ashton & Lindsay McCallum

Damage Path Length: Approximately 12 km

Path Width: Approximately 100 m

F-scale Rating: F1

(Note: rating was based on the fact that a car was moved/rotated 3.5 feet)

Way Points (#90 - #111):

90 – Location of house with damaged roof on 1630 Settlers Lane

91 – Location of “pole barn” that was blown down on 1630 Settlers Lane

92 – Location of “tarp barn” that was flattened on 1630 Settlers Lane

93 – Roof from house on 1630 Settlers Lane blown NE to this location

94 – Location of tree damage, large trunk snapped half way up.

95 & 96 – Path width

97 – Location of barn with roof 2/3 gone (thrown 300 m NE) on 3780 County Rd 2

98 – Trees snapped

99 – Large pine tree (trunk diameter = 2-3 ft) snapped half way up

100 – More trees snapped

Note: All waypoints above 100 (i.e. 101-111) were taken while on the aerial survey. An attempt was made to have the waypoints correspond with photographs being taken from the plane (see photographs).

Video:

The video camera was loaded with a tape that should not contain any material other than the aerial survey. The video is approximately 15 minutes and includes travelling along the damage path one way (SW → NE) and then going back along it again (NE → SW). Filming from the airplane was difficult so I am not sure how useful the footage will be.

Photographs:

The photos that were taken for the rice lake damage survey are from 32-71 on the Canon camera. Before photograph #32 are images from a prior damage survey.

- **Photos from 1630 Settlers Lane:**

#32 – Facing West. Extensive roof damage (half peeled off and blown away) on house.

#33 – Facing West. Tilted column and spatter on east side of house.

- #34 – Facing NW. Close-up of spatter of front door and on windows. Screens were blown into the house along with leaves and branches.
- #35 – Spatter also located on the north side of the house.
- #36 – Facing North. Impact marks made on Aluminium siding and dents along roof.
- #37 – Facing West. Metal fence with brick/stone pillar moved several inches.
- #38 – Facing SSW. Original location of old “pole barn” that was blown down.
- #39 – Facing NE. Flattened “tarp barn.”
- #40 – Roof of pole barn that was removed during storm.
- #41 – Structural attachment of pole barn roof; two nails per truss.
- #42 – Puncture mark from missile puncturing right through metal barn roof.
- #43 – Close up of metal barn roof; details of attachment.
- #44 – Facing West. Close up of house roof damages on the SE corner of the structure.
- #45 – Looking NW. Roof damage.

- Photos from 3780 County Rd. 2 – Otonabee-South Monaghan:

- #46 – Looking SE. Tree damage along driveway.
- #47 – Looking SE. Tree damage along other side of driveway, indicator of path width.
- #48 – Photo of barn with 2/3 of the roof lifted off (repairs were being made) and blown 300 m north east.
- #49 – Looking NE. Base of large pine tree that was snapped about half way up, trunk diameter = 2-3 ft.
- #50 – Looking NE. Wider view of pine tree damage with top of tree snapped off.
- #51 & 52 – Facing North. Trees further along the damage path, with their tops snapped off.
- #53 – Photo of Arn standing beside our sea plane! ☺

- Photos from the aerial survey:

- #54 to 56 – Arn’s “scenic shots” of the islands on Rice Lake.
- #57 – 71 – Shots taken of the damages caused by the tornado as seen from the plane. Roughly correspond to the waypoints, although there were more photographs taken than waypoints plotted.

IMPORTANT NOTE: I will be leaving the camera, GPS and video camera with all of the information from this damage survey in the top drawer of Vicki’s desk. I attempted to download the pictures and waypoints but the PC computers with the camera software and Google Earth on them were being used by the people working project shifts.