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**Confirmed Tornado  
Hopeness-Rush Cove, Ontario  
May 31, 1985**

**Date- Local:** Friday, May 31<sup>st</sup>, 1985.

**UTC:** Friday, May 31<sup>st</sup>, 1985.

**Time-Local:** 15:00

**UTC:** 19:00

**Location:** Hopeness to Rush Cover

**Region:** Grey – Bruce

**Classification:** Confirmed Tornado

**Category:** A

**Casualties:** None

**Track Length:** 2714m

**Width:** 250m

**Motion:** 234°

**Damage Estimate:** None Available

**F-Scale Rating:** F2

**Code:** BS/TS

**Damage Survey:** yes

**Spotter Reports:** None

**Other Documents:**

Logged event citing tornado.

The May Thirty-First Tornado Outbreak in Southern Ontario report.

Hopeness-Rush Cove Tornado report by S.Leitch.

More information can be found in the brown 'Ontario May 1985' folder at the front of the year.

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## **Tornado F-Scale Assessment**

Marci Vanhoucke

Tornado Data Production Assistant, Environment Canada

July 21, 2005.

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**Classification:** Confirmed Tornado

**Date:** Friday, May 31<sup>st</sup>, 1985.

**Location:** Hopeness-Rush Cove, Grey – Bruce

**Assessment:** F2

**F-Code:** BS/TS

**Explanation of Assessment:** There is a Tornado Damage Survey report stating that a barn and 3 outbuildings were completely destroyed, a house had its chimney and siding torn off and severe tree damage towards the end of the path on land. Due to the damage cited, this tornado is rated an F2.

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**CLASSIFICATION:** Severe Thunderstorm

**SOURCE/WATCHER ID:**

**EVENT TIME (UTC):** 19-00 **EVENT DAY:** 31.0 **MONTH:** 5.0 **YEAR:** 1985.0 **EVENT DURATION (HR):** 0.0 **(MIN):** 0.0

**DAY OF THE WEEK:**

**EVENT LOCALE:** Rush Cove

**ASOCTD PUBLIC RGN:** Grey-Bruce

**DETAILED DESCRIPTION:**

tornado

**INITIAL ASSESSMENT:** YES

**SPL WX STATEMENT IN EFFECT ?:** UKN **STATEMENT LEAD TIME (HR):** (MIN):

**WATCH IN EFFECT ?:** UKN **WATCH LEAD TIME (HR):** (MIN):

**WARNING IN EFFECT ?:** UKN **WARNING LEAD TIME (HR):** (MIN):

**TORNADO:** YES F?

**WINDSPEED:** ?

**RAINFALL:** ? MM **RAIN DURATION:**

**HAIL DIAMETER:** ? MM **HAIL DESCRIPTION:**

**EVENT DESCRIPTION:** Tornado

**Mesoscale ?:** **Synoptic ?:** **Big Event ?:**

**Statement Est Hit/Miss:**

**Watch Est Hit/Miss:**

**Warning Est Hit/Miss:**

**Separate Event (30km/30min):** YES

**Vetted by:**

**Vetted date:**

## Summary Sheet

IDTO - ID Number : 698501  
 AUTH - Report Author : Steven Leitch  
 TYFU - Tornado Type & Fuji Code : a2  
 TITL - Report Title or Location : The Hope Ness - Rush  
 Cove Tornado of May 31, 1985  
 PROV - Province : Ontario  
 COUN - Counties : Bruce  
 REFS - References : The Wianton Echo,  
 Wednesday June 5, 1985  
 ZOTO - Touchdown Zone Number & Easting : 17486800  
 NOTO - Touchdown Northing : 4976830  
 LOVA - Touchdown Error Value & Code : 30c  
 DADA - Date of Data Entry : 9 November 1989  
 ZOLO - Liftoff Zone Number & Easting : 17489000  
 NOLO - Liftoff Northing : 4978420  
 UPVA - Liftoff Error Value & Code : 30c  
 DEAD - Number of Fatalities : 0  
 HURT - Number of People Injured : 0  
 HERT - Injuries Code :  
 DATA - Date of Tornado : 31 May 1985  
 DAVA - Date Error Value & Code : 999  
 TITO - Time of Tornado : 1400  
 TIMR - Time Meridian : 75  
 TIVA - Time Error Value & Code : 15c  
 AXDA - Maximum Path Width : 250  
 AXVA - Max. Path Width Error & Code : 10c  
 AVDA - Average Damage Width : 9999  
 AVVA - Avg. Damage Width Error & Code : 9999  
 SADA - Sample Damage Width : 9999  
 SAVA - Sample Damage Width Error & Code : 9999  
 INTO - Initials : JAM  
 DFTO - Detailed Report Flag : Y  
 JUNK - PRDA & DIMO & DALE : -1234 1 2714 42  
 CODA - Property Damage Code :  
 MISC - ORDE,PICS1TYPE0,1PICS0AVAIL,COCO : 114  
 MANY - Multiple Event Flag : Y

MEMO: Tornado described as being white in colour. One barn completely destroyed, older house had chimney blown off, 9m sailboat lifted from trailer and rolled 70m. This is the first tornado of the May 31, 1985 outbreak. 41 A/14

PHEN - Associated Phenomena :  
 TSHP - Townships : Eastnor

JAM, 9 November 1989



0698501

A ✓

F=2

## TORNADO PROJECT SUMMARY SHEET

1.	DATE AND TIME	Barrow Bay	May 31, 85	1400 EST
2.	LOCATION OR PATH (attach map)	Barrow Bay, Ont. (Rush Cove)		
3.	PATH LENGTH	<input type="checkbox"/> NOT KNOWN	<input type="checkbox"/> <1mi;	<input type="checkbox"/> 1-4mi;
			<input type="checkbox"/> 5-10mi;	<input type="checkbox"/> 11-50mi;
				<input type="checkbox"/> LENGTH IF >50mi
4.	PATH WIDTH	<input type="checkbox"/> 250m Max.	5. TORNADO PART OF SQUALL LINE? <input type="checkbox"/> YES; <input type="checkbox"/> NO; <input type="checkbox"/> UNKNOWN:	
6.	ANY UNUSUAL COLORATION?	<input type="checkbox"/> YES; <input type="checkbox"/> NO; <input type="checkbox"/> UNKNOWN		
7.	ANY UNUSUAL SOUND?	<input type="checkbox"/> YES; <input type="checkbox"/> NO; <input type="checkbox"/> UNKNOWN		
8.	IF ANSWER TO 6 OR 7 YES, ELABORATE;			
9.	LIST ANY ASSOCIATED PHENOMENA (Such as hail, vivid lightning heavy rain, no rain, etc.)			
10.	TOTAL DAMAGE ESTIMATE	\$	11.	TOTAL DEATHS
12.	TOTAL INJURED	0	13.	TOTAL HOMELESS
14.	LIST ALL REFERENCES			
15.	SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.			
	a) Tornado described as a "white thing".			
	b) One barn completely destroyed, older house had chimney blown off, siding torn off, windows blown out. 9m sailboat lifted from trailer and dropped 70m away.			
	T.O. 174 86800 30C 4976 830			
	L.O. 174 89000 30C 4978420			



The HOPE NESS - RUSH COVE TORNADO of May 31, 1985

Investigation date June 22, 1985

Investigation, photographs and report by Steve Leitch

Downsview office 667-4662

On the afternoon of May 31, 1985 a very active cold front advancing into an unstable airmass triggered severe thunderstorms over the Bruce Peninsula. The front approached the area from the northwest. At about 3 pm EDT ( 19:00 GMT ) a tornado touched down in Eastnor township near the small hamlet of Hope Ness. Hope Ness is near the east shore of the Bruce Peninsula 1.5 km south of Rush Cove which is on the south shore of Barrow Bay. The breadth of the tornado was quite narrow at its initial touchdown. As the tornado progressed northeastward damage became more severe and the track reached an approximate width of 250 metres.

Roger Meneray's barn was completely destroyed and a trailered sail-boat was tumbled 70 metres into a field. Brad Mackie's barn ( which I could not find - it could be the first one uptrack on the map ) was shifted on its foundation. From Meneray's onward tree damage increased until, near the coast, there was total downing of all trees in some areas.

Conclusion:

Based upon the severity of the damage and the sharpness of the damage track I would conclude that the storm was an F2 tornado. At the storm vortex the winds may have reached speeds of 250 kmh. The length of the storm track, on land, was about 2.7 km. The track could be extended a little farther back west, if I knew where Mackie's farm was; and may extend farther east ( as I did not walk the whole coast ). The tornado track may, also, have continued out onto the waters of Barrow Bay or even farther onto Georgian Bay. The width of the damage started at just a few metres and broadened to about 250 metres near the coast. This tornado was the earliest touchdown of an outbreak of tornadoes that occurred in Southern Ontario on this afternoon.

**DAMAGE UNDERLINE ITEMS AS APPROPRIATE, AND ADD INFORMATION AS APPROPRIATE.**

- |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FO | (64 - 115 km/h) T.V. antennae bent. <u>A few roof shingles removed from houses</u> and roofing stripped from barns. Patches of siding removed from houses, awnings or canopies damaged. Aluminum garden sheds moved or buckled and garden furniture blown around. Fences blown down. <u>Trees broken or uprooted (intermittently in heavily treed bush lots).</u>                                                                                                                        |
| F1 | (116 - 179 km/h) Large areas of roofing material stripped from homes or industrial buildings. Barn roofs entirely removed and boards or siding removed from barn walls. Some impact damage from flying missiles. <u>Unanchored buildings twisted on their foundations.</u> Steel hydro-electric transmission towers knocked down. Summer cottages moved off their foundation.                                                                                                            |
| F2 | (180 - 251 km/h) Structural failure of roofs and porches. <u>Barns demolished to the foundation.</u> Empty stave concrete silos blown over or the upper portions of partly filled stave silos demolished. Unanchored 1 - storey houses moved entirely off their foundation. Cottages rolled over or carried short distances. Farm wagons or equipment carried short distances. <u>Areas of total damage in heavily treed bush lots.</u> Considerable impact damage from flying missiles. |
| F3 | (252 - 330 km/h) Upper storeys of brick houses destroyed. Extensive structural damage to frame houses. Heavy farm machinery and automobiles moved or upset. Unanchored 2 - storey frame houses moved entirely off their foundation. Tombstones blown over or carried short distances. House trailers entirely demolished. Extensive impact damage from flying missiles.                                                                                                                  |
| F4 | (331 - 416 km/h) Two-storey brick homes almost completely destroyed. Empty poured concrete silos blown down. Automobiles, vans, heavy farm equipment carried long distances through the air. Extensive structural failure of industrial buildings.                                                                                                                                                                                                                                       |
| F5 | (417 - 509 km/h) Little remains intact.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



TORNADO PATH OF MAY 31, 1985

BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985  
by THE ONTARIO WEATHER CENTRE

SCALE  
5 0 5 kilometres

TORNADO PATH

5.1 Rush Cove Tornado - Figure 4

About 3:00 p.m. a small tornado touched down about 1.6 km southwest of the coast of Georgian Bay near Rush Cove and moved northeast out over Barrow Bay. Rush Cove is located about 25 km due north of Wiarton. One barn and three outbuildings were completely destroyed. One older house had its chimney blown off, siding torn off, and windows blown out. A 9 metre sailboat was lifted from a trailer and dropped 1200 metres away. There were no reports of any personal injuries with this storm.

INCORRECT  
SHOULD BE 70m

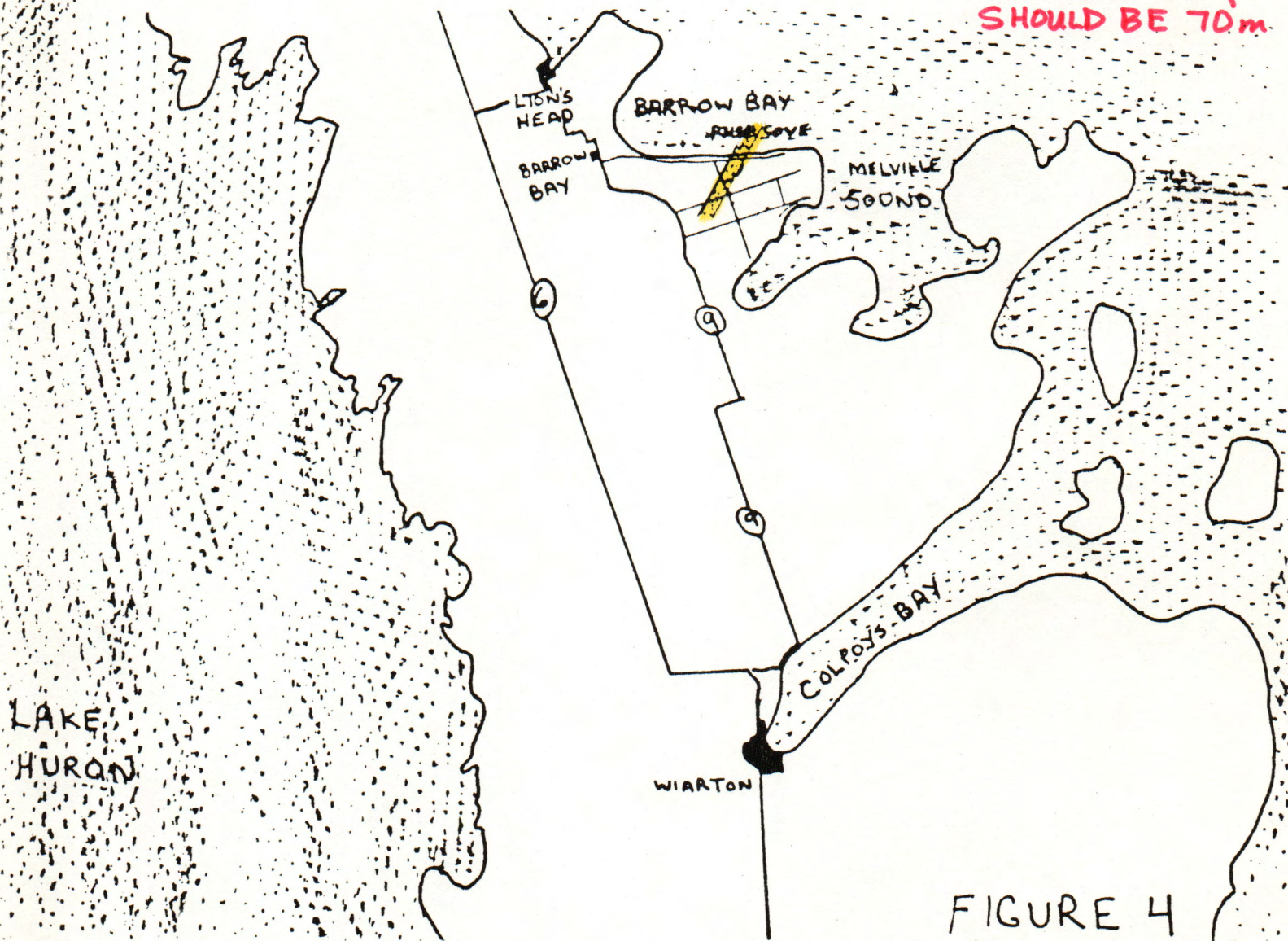
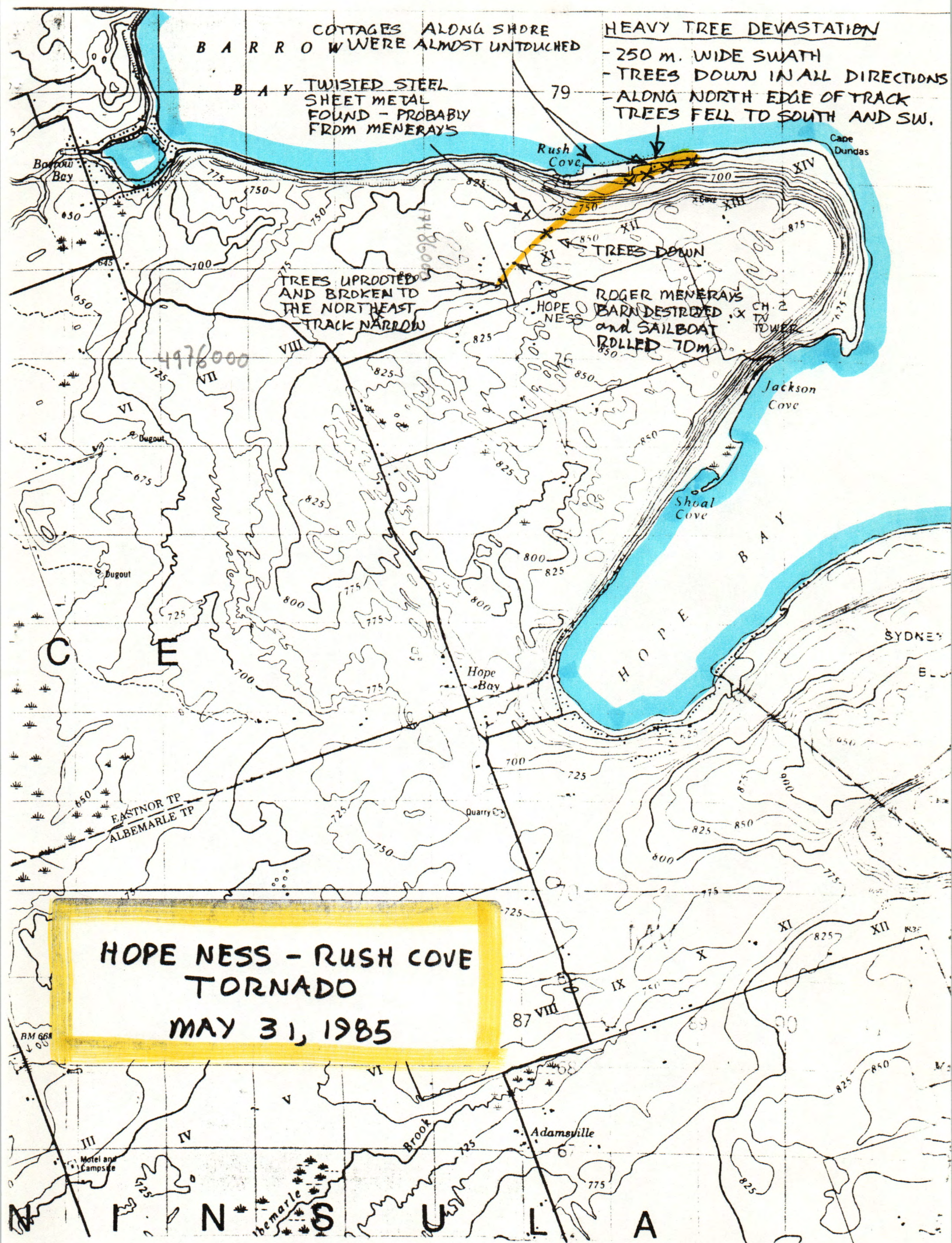


FIGURE 4









Gateway to Bruce Peninsula

# The Warton Echo

Volume 103, Number 23

Warton, Ontario

Wednesday, June 5, 1985

40\*



Gateway to Bruce Peninsula

## Twister kills 12, injures hundreds

# Hope Ness hit

Vicious twisters swept through southern and central Ontario Friday killing 12, injuring hundreds and causing millions of dollars worth of property damage.

Grey and Bruce Counties were lucky, but not untouched. Roger Menary and his family, who live at Hope Ness near Lion's Head had a narrow escape when a tornado completely destroyed his barn, blew a

sailboat 70 metres and moved a parked van 8 metres.

The family first saw the twister when it moved towards the house. Menary described it as a vicious looking 'white thing' full of debris. It broke windows out of the house and cut a swath through a bush, toppling trees.

Another barn belonging to Brad Mackie was also damaged. Several barns were

also destroyed or damaged in Grey County.

Worst hit was the town of Barrie where the storm destroyed or damaged 400 homes and killed eight people. Alliston, Grand Valley and Orangeville were among other communities that sustained heavy damage. The storm occurred late Friday afternoon.



Roger Menary and his family of Hope Ness watched as a twister swept by his house destroying his barn and a tool shed. Above he starts clean-up with his horse.





## Hope Ness

(by Mrs. Bev. Greig)

We, at Hope Ness can be very thankful no one was hurt during the tornado that struck our community Friday afternoon. The storm demolished Roger Meneray's barn and work shop flying debris as far away as the waters of Georgian Bay at Rush Cove. The end of Brad Mackie's barn was damaged and it was also shifted off the foundation. At least 100 acres of bush are also wiped out. The roads were heavy with traffic on the weekend with people wanting to see what damage had been done. One can't see all the bush damage from their

car. When you walk through the bush it is a complete catastrophe.



The tornado that ripped through western and central Ontario touched down at Rush Cove cutting a number of swaths through the bush.





ROGER MENERAY'S

A 9 metre long sailboat was taken from its trailer  
and moved ( probably rolled ) 70 metres northeast.





### RUSH COVE

Looking southwest; the direction from which the storm came. Trees have been felled at a variety of angles, but many have fallen towards the southwest. The swath of destruction has been estimated at up to 250 metres wide. Photo taken on June 22, 1985.



# THE MAY THIRTY-FIRST TORNADO OUTBREAK IN SOUTHERN ONTARIO

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### TABLE I Time of Occurrence of Tornadoes by County

Figure 1 Hail, Damaging Wind Areas and Tornado Tracks for May 31, 1985 Tornado Outbreak

Figure 2 Tornado Paths for Barrie, Grand Valley-Tottenham, and Alma Tornadoes.

Figure 3 Tornado Paths for Wagner Lake, Reaboro, Ida, Rice Lake and Minto Tornadoes

Figure 4 Tornado Path for Rush Cove Tornado

Figure 5 City of Barrie Tornado Path

### Acknowledgements:

We wish to acknowledge the contribution of all staff from the Ontario Weather Centre, Scientific Services Division, Peterborough Weather Office and the Kingston Weather Office who conducted on site investigations or aerial surveys of the tornado paths during the week following the tornado outbreak.

# THE MAY THIRTY-FIRST TORNADO OUTBREAK IN SOUTHERN ONTARIO

by

W. Lawrynuik - Chief, Forecast Operations  
B. Greer - Chief Meteorologist  
M. Leduc - Severe Weather Meteorologist  
O. Jacobsen - Meteorologist

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## 1. Introduction

During the afternoon of May 31, 1985 a powerful cold front moved through Southern Ontario triggering a series of very damaging tornadoes. Twelve people were killed and scores of others injured as the storms moved across the Province. Property damage is estimated well over \$100 million.

This report will outline the weather pattern of May 31 which led to the storms as well as the Ontario Weather Centre's response to the real time events of the day. The report will document through detailed maps the tracks of all the tornadoes confirmed to this date (June 10). A general description of the damage and a best estimate of the time of the tornadoes will be included. Some preliminary recommendations are put forward as a consequence of the May 31st tornado outbreak.

## 2. Meteorological Conditions and Severe Weather Watches

On May 30th hot, humid tropical air became established across the Central United States. The air was also very unstable meaning that with any sort of lifting mechanism very intense thunderstorms could develop. During the early afternoon of May 30th a weak disturbance moved across Lake Erie and allowed some of this tropical air to move into extreme southwestern Ontario.

Another weak disturbance during the morning hours of May 31st pushed the warm humid air northeastward producing thunderstorms across all of Southern Ontario. No damage was reported from these thunderstorms in Ontario but the arrival of the warm very unstable airmass set the stage for the very dramatic events of later that day.

While the warm humid air was becoming established across the south half of Ontario an intense spring storm was developing just west of the Great Lakes. A low pressure centre with strength more typical of a mid winter storm tracked across upper Michigan during the morning of May 31st to north of Sudbury by evening. A very sharp cold front trailed southward from this low pressure system.

The morning analysis at Environment Canada's Ontario Weather Centre indicated that the thermodynamic and dynamic features necessary for the possible development of severe thunderstorms were present. The thermodynamic instability of the airmass was confirmed from the radiosonde reports east of the cold front crossing Michigan. The air above one km was

3. The Severe Weather Event and the Severe Weather Warnings - Cont'd...

Durham and Victoria Counties. Following a confirmed report of a tornado at Shelburn, a tornado warning was issued at 5:00 p.m. for Southern Simcoe, Northern Peel and York Counties.

Reports of the tornadoes at Grand Valley and Barrie were received by the Ontario Weather Centre at 5:00 and 5:20 p.m. respectively. Tornado warnings were issued at 5:40 p.m. for the downstream areas of Northern Durham, Victoria and Haliburton counties. Radar reports between 5:20 and 5:40 p.m. also indicated the very rapid development of storms moving across Eastern Lake Erie to the Niagara Peninsula. As a result at 5:50 p.m. severe storm warnings were issued for the Haldimand-Norfolk and Niagara Regional municipalities.

Further details on tornadoes in Orangeville and in the Tottenham area came in to the Ontario Weather Centre between 5:30 and 6:00 p.m. Based on the continuing strength of the radar echoes, tornado warnings were extended to Southern Durham and Peterborough Counties at 6:05 p.m. and to Haliburton, Northumberland, Prince Edward and Hastings counties at 6:25 p.m. At 7:00 p.m. all watches and warning messages were cancelled for all regions except for Haliburton and Lake Ontario east of Oshawa. Between 6:40 and 7:20 p.m. reports were received of tornadoes just southwest of Peterborough and in Rawden Township of Southern Hastings county.

At 7:10 p.m. the tornado warning was extended east again to include Lennox and Addington, Renfrew and Frontenac counties which mark the eastern most areas served by the Ontario Weather Centre. At about the same time the Quebec Weather Centre in Montreal, which handles forecasts for the Ottawa - Cornwall and vicinity, was notified of the continuing presence of tornadoes in the storms headed their way.

Finally at 9:20 p.m. the remaining watches were cancelled for Eastern Ontario.

4. Tornado Paths and Estimated Time of Occurrence

The tornado paths and time estimates contained in this report were determined from aerial surveys and on-site investigations of the tornado paths by Ontario Weather Centre staff, from provincial police reports, photographs, newspaper clippings, weather watcher reports, eye witness accounts, etc. Only information assembled before June 10th was available to prepare this report.

General information concerning all tornadoes and other related reports of severe weather are given in this section mostly in map form. Detailed accounts for individual tornadoes are provided in the next section.

## 5.2 Barrie Tornado - Figure 2

About 4:10 p.m. a funnel cloud dipped down from a severe thunderstorm in Egremont Township about 4 km southwest of Hopeville. For the next 50 minutes the severe thunderstorm travelled east-northeastward at 75 km/h over a distance of 85 km. It appears to have generated a series of 5 tornadoes which culminated in the devastating storm which struck southern portions of the city of Barrie. It is also conceivable that the damage paths could have resulted from one or two tornadoes touching down more than once.

### a) Damage Area 1 (Hopeville)

Three concessions southwest of Hopeville to near Grey County Road 8.

Path Length: 17 km (the storm may have skipped occasionally)

Time: about 4:10 p.m.

Description of Damage: numerous barns and outbuildings were destroyed or severely damaged. Only minor damage to houses was indicated. No injuries were reported.

### b) Damage Area 2 (Corbetton)

From 1 km southwest of Corbetton, a village southeast of Dundalk on Highway 10, to near Randwick at the intersection of Airport Road and the 25th Sideroad of Mulmur.

Time: struck Corbetton area at 4:17 p.m.

Path Length: 35 km

Description of Damage: the width of the damage path averaged 200 to 300 metres to just south of Honeywood where it narrowed to 50-100 metres. Through this area about 15 barns or outbuildings were destroyed and about 10 houses were heavily damaged. Cars and trucks were tossed around with some moved 60 metres. The storm continued to just south of Ruskview where it appears that a split occurred. A weakening portion appears to have lifted off the ground and moved northeast. Debris was found several km north of Ruskview. One sign which originated near Highway 24 was discovered near the hamlet of Glencairn. It had travelled about 20 km. The southern part of the storm moved from south of Ruskview to south of Randwick where it also appears to have lifted off the ground.

### c) Damage Area 3 (Lisle)

Two concessions east of Randwick the tornado appears to have touched down again. Tree damage is reported as far east as Camp Borden. Two barns were destroyed near Lisle. Investigators were not allowed onto Camp Borden but reports from the Base Police and aerial surveys indicate little damage on the Base and no damage further east.



### 5.3 The Grand Valley-Tottenham Tornado - Figure 2

At 4:15 p.m., only a few minutes after the start of the storm which would hit Barrie, another tornado touched down just north of Arthur. This same tornado remained on the ground for an incredible 90 km as it tracked east-northeast at 85 km/h to the east end of the Holland Marsh. It then skipped along a further 17 km before lifting off for good near Mount Albert.

The damage path width varied from about 150 metres to 400 metres occasionally up to 600 metres wide. Nearly all structures within this track were damaged. Well over 100 homes were seriously damaged or destroyed with at least that many barns and outbuildings destroyed.

From Arthur to Grand Valley the damage path ranged from 150 to 400 metres wide. Estimates are that 40 buildings were seriously damaged or destroyed. In the town of Grand Valley an estimated 40 to 50 homes near the centre of the tornado track were destroyed. Winds with the tornado are estimated to have exceeded 400 km/h. Dozens of other buildings on the edge of the track suffered varying degrees of damage. One indication of the intensity of the storm was the roof of the Library being lifted and thrown 200 metres before crashing down on a house. Two people were killed in the town.

From east of Grand Valley to Orangeville the swath of damage continued 150 to 300 metres wide. The most noteworthy damage was at Mono Plaza north of Orangeville. The plaza was levelled. East of Orangeville all the way to Holland Marsh the damage swath continued with a similar degree of damage occurring. Particularly hard hit was the area just south of Tottenham where about 15 homes were extensively damaged or levelled and two deaths were reported. There was some evidence all along the track of a second weak swath of tree damage a few hundred metres south of the main track but little property damage has been noted.

The tornado moved down into the Holland Marsh just southeast of Dunkerron and followed the canal road eastward and then northeastward about 5 or 6 km. It destroyed hundreds of trees along the canal and did considerable damage to buildings along the north canal road. The tornado then headed directly eastward across the marsh hitting the village of Ansnorveldt after destroying three hydro transmission towers. East of the Holland Marsh the storm began skipping with less serious intermittent damage reported. The storm appears to have lifted off for the last time near Mount Albert.

6. Recommendations

The following recommendations are made as a result of the preliminary investigation conducted by the Ontario Weather Centre.

- 6.1 A public education program needs to be undertaken to make people more aware of the nature of severe storms. For example there seems to be a widespread misconception that severe thunderstorms and tornadoes are independent events. Also, the public in general, and emergency officials in particular, need to understand the steps they should take when a watch is in effect; when a warning is in effect; or, when a severe storm appears imminent.
- 6.2 The methods in use for distributing warnings to the public and to emergency officials needs to be reviewed in detail.
  - a) Consultation with the media and emergency officials should be an integral part of this review.
  - b) Evaluation of the public awareness of and reaction to Environment Canada's weather watches and warnings should be undertaken.
- 6.3 The Weather Centre needs to improve its ability to detect severe thunderstorms and tornadoes:
  - a) Doppler Radar has been shown to be a fairly effective, though far from a foolproof method of detecting severe thunderstorms which may produce tornadoes. Research should be accelerated to assess the abilities of the newly acquired Doppler Radar at King City.
  - b) Additional severe weather watchers in rural areas of Ontario especially upstream of population centres need to be recruited.
  - c) The Ontario Weather Centre should undertake a development project with a view to identifying any new knowledge resulting from this survey and report the data collected on this storm that would improve future forecasts.
  - d) The Ontario Weather Centre will review its severe weather procedures in consultation with other regional units in view of the May 31st experience.

TABLE ITime of Occurrence of Tornadoes by County

<u>Counties</u>	<u>Issue Time of * Severe Thunderstorm Warning</u>	<u>Issue Time of Tornado Warning</u>	<u>Time of Actual Storm</u>
Northern Bruce	2:25 p.m.	-	3:00 p.m. Rush Cove Tornado
Northern Wellington	3:15 p.m.	-	4:15 p.m. Tornado Touchdown near Arthur
Dufferin	3:54 p.m.	-	4:28 p.m. Grand Valley 4:45 p.m. Orange- ville
Southern Grey	3:15 p.m.	-	4:17 p.m. Tornado Touchdown near Corbetton
Southern Simcoe	3:54 p.m.	5:00 p.m.	5:18 p.m. Holland Landing.
Northern Simcoe	3:54 p.m.	-	5:00 p.m. Barrie
Northern York	4:53 p.m.	5:00 p.m.	5:25 p.m. Holt
Northern Durham	4:53 p.m.	5:20 p.m.	5:40 p.m. Wagner Lake
Southern Victoria	N/A	5:20 p.m.	6:05 p.m. Reaboro
Southern Peterborough	N/A	6:05 p.m.	6:20 p.m. Cavan 6:25 p.m. Birdsall
Southern Hastings	N/A	6:25 p.m.	6:35 p.m. <u>Minto</u>

\* These severe thunderstorm warnings issued by the Ontario Weather Centre contained the statement: "Remember some severe thunderstorms produce tornadoes."



NUMEROUS REPORTS OF LARGE HAIL  
AND DAMAGING WIND

SOFTBALL SIZE HAIL REPORTED

NO STORM DAMAGE REPORTED

FIGURE 1

HAIL, DAMAGING WIND AREAS AND TORNADO TRACKS FOR MAY 31,  
1985 TORNADO OUTBREAK.  
TORNADO PATH



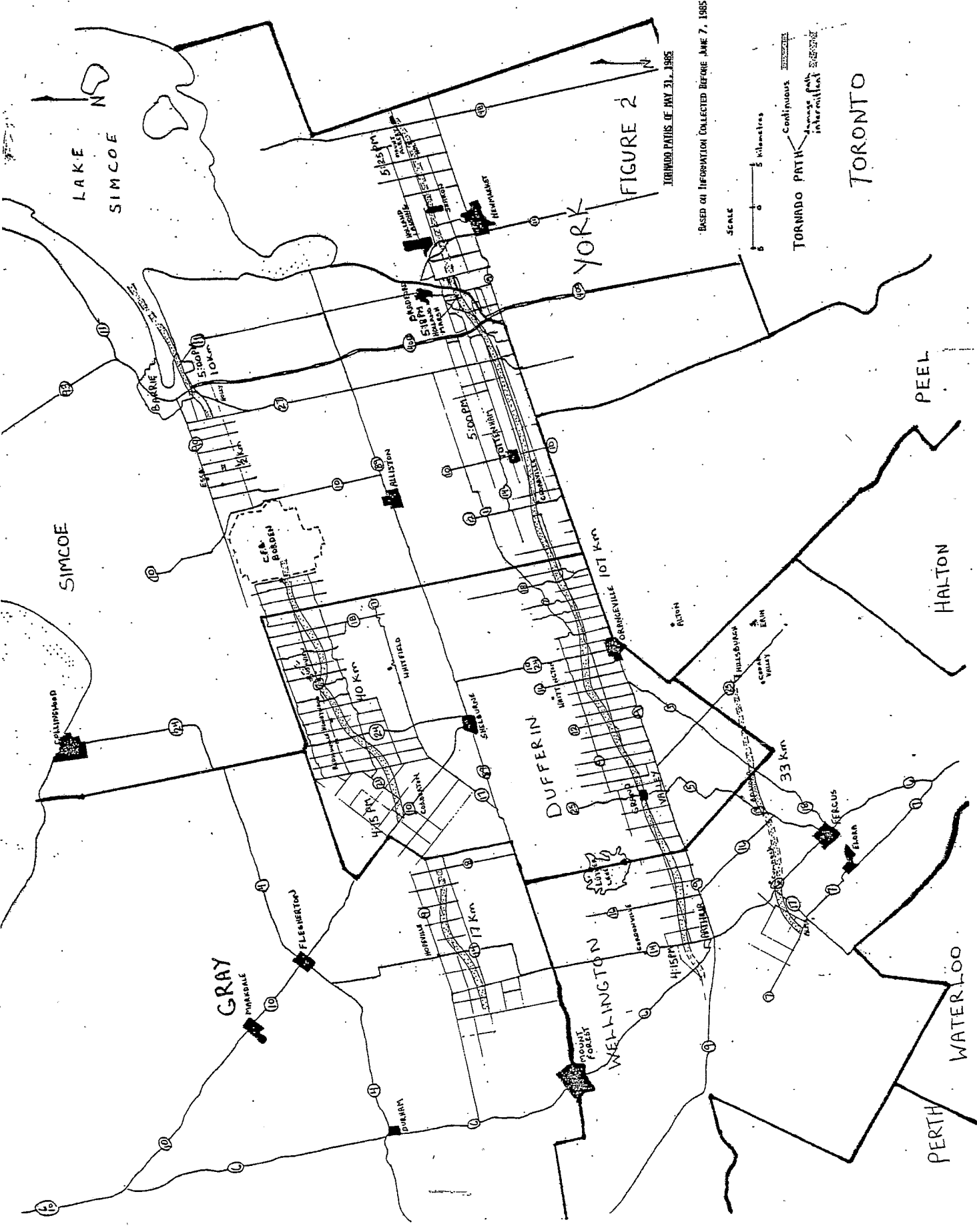


FIGURE 2

TORNADO PATHS OF MAY 31, 1985

BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985

SCALE

0 5 Kilometres

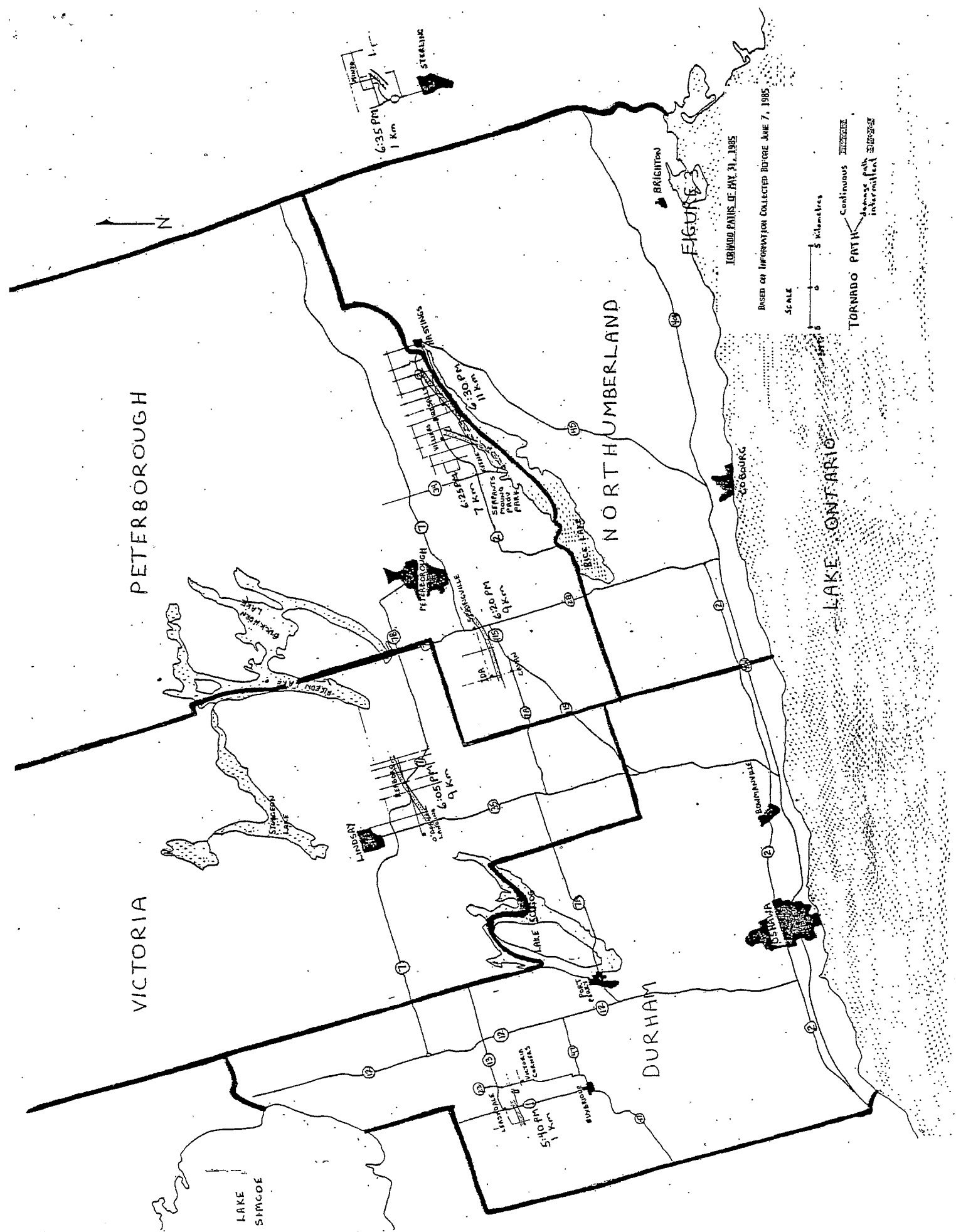
TORNADO PATH  
Continuous  
Intermittent  
Intermittent

TORONTO

PEEL

HALTON

PERTH  
WATERLOO



TORNADO PATH OF MAY 31, 1985

BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985

SCALE

5 0 5 kilometres

TORNADO PATH



GEORGIAN BAY



LION'S HEAD

BARROW BAY

RUSH COVE

BARROW BAY

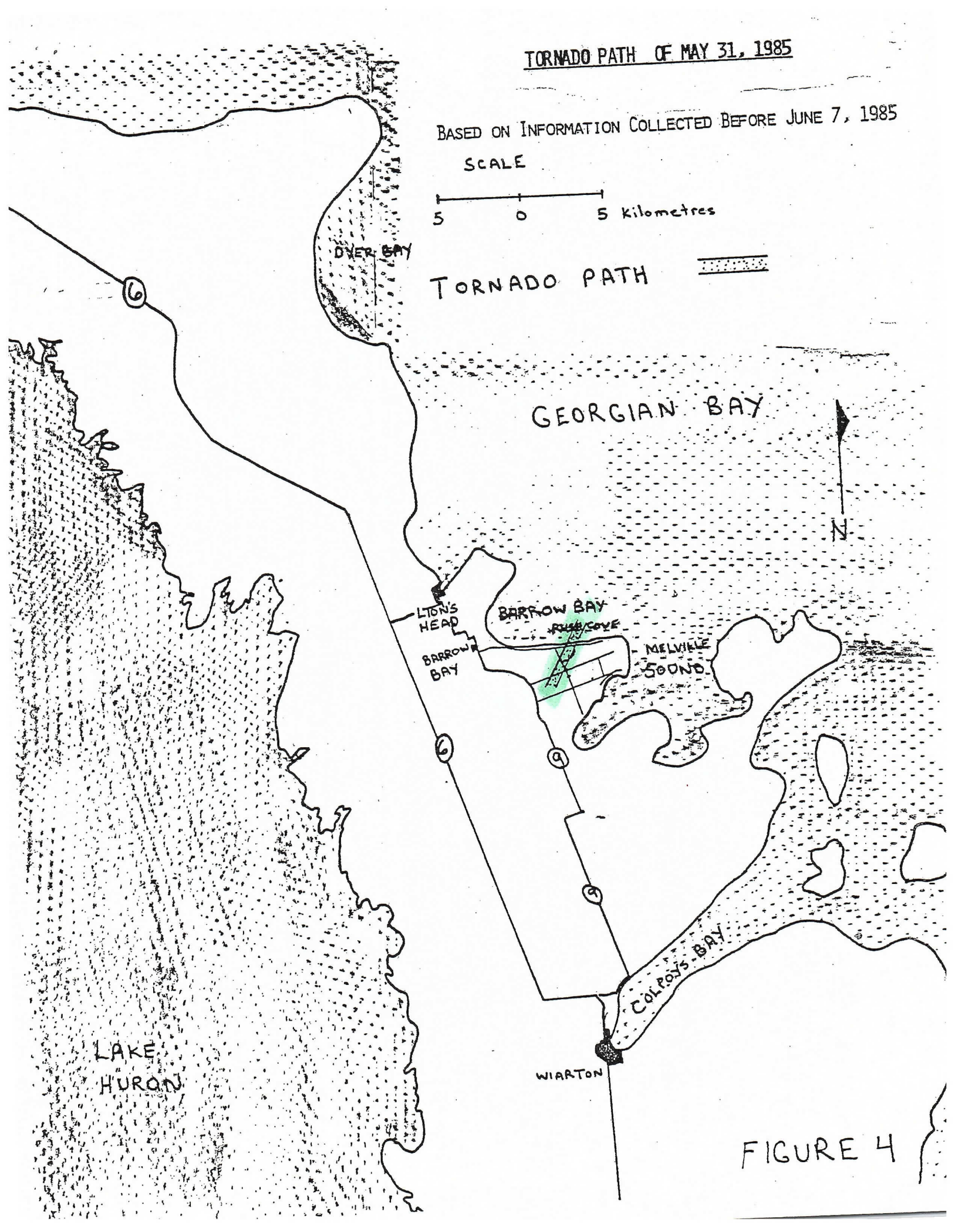
MELVILLE SOUND

LAKE HURON

COLPOYS BAY

WIARTON

FIGURE 4



BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985



FIGURE 5

Numbers are keyed to houses.  
Tour distance approximately 5 km/3 mi.



CITY OF BARRIE  
ENGINEERING DEPARTMENT

TORNADO PATH  
Continuous  
damage path  
intermittent

PRELIMINARY  
ESTIMATE  
TORNADO  
DAMAGE  
PATH

MINOR  
DAMAGE

