
**Probable Tornado
Grippen Lake, Ontario
May 31, 1985**

Date- Local: Friday, May 31st, 1985.

UTC: Saturday, June 1st, 1985.

Time-Local: 20:10

UTC: 00:10

Location: Grippen Lake

Region: Brockville – Leeds and Grenville

Classification: Probable Tornado

Category: A(-1)

Casualties: None

Track Length: 1.5km

Width: 30m

Motion: 260°

Damage Estimate: None Available

F-Scale Rating: F1

Code: TS

Damage Survey: yes

Spotter Reports: None

Other Documents:

Logged event citing tornado.

Damage survey conducted by Kingston OIC, including map of damage, eyewitness survey, pictures and newspaper reports.

Tornado F-Scale Assessment

Marci Vanhoucke

Tornado Data Production Assistant, Environment Canada

July 21, 2005.

Classification: Probable Tornado

Date: Friday, May 31st, 1985.

Location: Grippen Lake, Brockville – Leeds and Grenville

Assessment: F1

F-Code: TS

Explanation of Assessment: There is a Damage survey sent into the Ontario Weather Centre detailing damage mainly to trees (40) and minor roof damage to one/two trailers (may be from trees). Due to the tree damage to at least 40 trees, this tornado is rated an F1.

CLASSIFICATION: Severe Thunderstorm

SOURCE/WATCHER ID:

EVENT TIME (UTC): 00-10 **EVENT DAY:** 1.0 **MONTH:** 6.0 **YEAR:** 1985.0 **EVENT DURATION (HR):** 0.0 **(MIN):** 0.0

DAY OF THE WEEK:

EVENT LOCALE: Grippen Lake

ASOCTD PUBLIC RGN: Kingston-Brockville

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:

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:



Government
of Canada

Gouvernement
du Canada

MEMORANDUM

NOTE DE SERVICE

TO
À

S. Siok
Quebec Weather Centre

To OWC
Attn: M. Leduc

FROM
DE

O.I.C.
Ottawa Weather Office

Fm OAEWR.
F.Y.I.

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE / NOTRE RÉFÉRENCE
YOUR FILE / VOTRE RÉFÉRENCE
DATE 06 June 85

SUBJECT
OBJET

Accounts of Severe Weather - Ottawa Area May 31 1985

1. Enclosed please find some newspaper accounts of the severe weather experienced on May 31. Some personal observations follow.
2. I noted that damage was most severe in (but not confined to) areas adjacent to the Ottawa River, notably in Aylmer Quebec and at Rockcliffe Airport. Debris from aircraft overturned at the Rockcliffe Airport was scattered in several directions and not just in one direction. In Aylmer, a barn was destroyed and several (at least 8) lombard poplars fell or were uprooted. These trees were approximately 80 feet high. Several firs and elms were shattered with a break in trunks about 1.5 metres above ground. Most significantly, it was noted that pieces of bark were ripped from trees and driven into the ground at an angle of approximately 60 degrees, much like a javelin. Some staff members reported hearing a "whooshing" sound but nobody saw anything resembling a funnel cloud.

RECEIVED JUN 12 1985

R.H. King
Offier-in-Charge
Ottawa Weather Office.

c.c. OAEWR

RECEIVED
JUN 12 1985
no attachments



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MEMORANDUM

NOTE DE SERVICE

TO
À

OAEOI Toronto
OAESH OWC
CCAA/N Downsview

*M. Leclerc
for info*

FROM
DE

OIC KINGSTON.

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE/NOTRE RÉFÉRENCE
YOUR FILE/VOTRE RÉFÉRENCE
DATE 12 June 1985

SUBJECT
OBJET CORRECTION FORM 2322

1. Information has come forward concerning the storm on May 31, 1985 that was not included on form 2322 for that date before the forms were mailed.

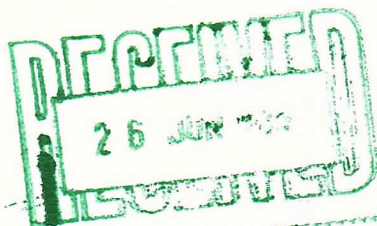
Please add the following data to column 1 (notes) for May 31st, 1985.

"Tornado damage was reported at Minto, Ont , 15 Mi. NE Stirling 2 barns destroyed large hail reported that area, also Thomasburgh, Tweed, Marlbank. Some hail stones golf ball sized. Storm damage also reported from Grippen Lake some 20 Mi. NE YGK. 40 tress damaged & 1 cottage roof damaged."

G. Hasler
G. Hasler

Officer-in-Charge.

To: OAE MM





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MEMORANDUM

NOTE DE SERVICE

TO
A
M. Leduc
Severe Weather Meteorologist
OWC

FROM
DE
O.I.C. Kingston

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE/NOTRE RÉFÉRENCE
YOUR FILE/VOTRE RÉFÉRENCE
DATE 10 June 1985

SUBJECT
OBJET MAY 31, 1985 STORM DAMAGE - GRIPPEN LAKE.

1. According to cottage residents at Grippen Lake beach resort Leeds & Grenville county, rear of Leeds & Lansdown Township a "TWISTER" cut a path of destruction thru their campground on Friday May 31st at about 8:10 p.m. (See enclosed newspaper article). On a visit to Grippen Lake beach resort on Wednesday June 5th, I talked to a Mrs Webb and Carl Rosenburgh. Mrs Webb was not at the resort on May 31st, but Mr. Rosenburgh was. He noted that the sky turned a yellowish black colour before the storm hit, there was heavy rain, but no hail occurred. He claimed that his trailer accommodation which was situated amongst a grove of cedar trees was rocking violently. Residents claim that the storm came in from the west across Grippen Lake moving from roughly west to east, struck the shoreline hurling a 14 foot aluminum boat onshore against a grove of overturned cedar trees. The outboard motor was originally attached to the boat but after the storm was found some 20 metres away along the beach. From the shoreline the storm moved eastward across a lawn area for about 1000 metres before reaching a line of cottages. The damage to trees at this point was mainly to trees being snapped off about 20 feet above the ground and then falling on roofs of cottages, one cottage had roof badly damaged from a falling tree. Path of damage was about 30 metres wide at this point and the storm continued to move eastward thru a wooded area snapping tops off trees for another 1/2 km before moving into an open field. About 40 trees were damaged, some maple.

A farmer some 5 KM west of Grippen Lakewhen interviewed stated, there was no hail to his knowledge, there was very heavy rain though with strong wind but no damage evident on his property.

- Photo # 1 - looking west over Grippen Lake
" " 2 - Shows cedar tree stump near shoreline & looking east to line of cottages thru which the storm passed.
" # 3 - a group of cedar trees overturned near shoreline.
" # 4 - damage to trees at cottages
" # 5 - " to cottages due to falling trees
" # 5(a) tops of large pine trees snapped off.

One has to suspect a brief Tornado touchdown at Grippen Lake shoreline, else how can one explain the aluminum boat being hurled onshore with the outboard motor torn from the boat and found some 20 metres away.

G. Hasler

Officer-in-Charge.

APPENDIX 2





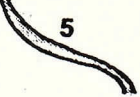


Summer Severe Storm Survey

NAME OF INVESTIGATOR GORDON HASLER	INVESTIGATOR'S PHONE 389-8349	DATE OF INVESTIGATION 5 JUNE 85
INVESTIGATOR'S ADDRESS KINGSTON W04		

1.	NAME(S) OF PERSON(S) INTERVIEWED MRS WEBB			
2.	ADDRESS (NOT RR#) OF THIS LOCATION CARL ROSENBERGH AN UNKNOWN FARMER LEEDS & GREENWICH TWP (REAR) GRIPPEN LAKE Lot Con. Twp Co. or # street, town			
3.	PHONE NUMBER OF PERSON INTERVIEWED			
4.	Area Code Number			
	(a) TIME AND DATE OF THE EVENT AT THIS LOCATION ABOUT 8:10 P.M. MAY 31/85			
	(b) HOW WAS THE TIME DETERMINED (STOPPED CLOCK, POWER FAILURE, MEMORY, A TIME-FIXING EVENT ETC)			
5.	DESCRIPTION OF THE DAMAGE 40 TREES BURN OFF, A FEW UPROOTED - 60 CM DIAMETER SOME TREES. 2 COTTAGES DAMAGED FROM FALLING TREES - CANOES DAMAGED			
6.	VISUAL SKY COLOUR? Y or N if yes, describe YELLOWISH BLACK			
7.	(a) HAIL? Y or N NO			
	(b) HAIL SIZE (CIRCLE) PEA GRAPE WALNUT GOLF BALL TENNIS BALL OTHER UNKNOWN DIAMETER(MM)			
8.	RAIN, HOW MUCH? —			
9.	(a) COMMENTS ON RELIABILITY OF WITNESS REPORTS			
	(b) DOES WITNESS KNOW OF OTHERS WHO WERE AFFECTED BY OR WITNESSED STORM? If yes:			
	Name	Address	Phone#	
10.	ANY INJURIES RELATED TO STORM NO			
11.	DOES EVIDENCE INDICATE NEED FOR DETAILED ON-SITE SURVEY? Y or N If <u>Y</u> contact Severe Weather MT OWC			

APPENDIX 4

Detailed Severe Weather Survey Form

1.	(a) FUNNEL SEEN Y or <u>N</u> <i>No</i>	
	(b) FUNNEL TYPE (CIRCLE)	
	 Multiple	 Smoke-like
	 Columnar	 Cone
	 Rope-like	 Unknown
	 Other	
	(c) IF MULTIPLE HOW MANY	(d) FROM WHICH DIRECTION
2.	UNUSUAL NOISE Y or N If yes, describe	
3.	ANY EVIDENCE OF RAPID PRESSURE DROP? (E.G. WINDOWS BLOWN OUT) Y or <u>N</u>	
4.	EVIDENCE OF SWIRLING (CIRCULAR) MOTION IN DEBRIS. Y or N If yes, describe <i>NONE EVIDENT</i>	
5.	EVIDENCE DEBRIS WAS CARRIED A LONG WAY Y or <u>N</u> If yes, describe	
6.	EVIDENCE OF NARROW DAMAGE PATH <u>Y</u> or N If yes, estimate of width <i>30 metres</i>	