

UPDATED

Track Adjusted, Old track ended in Forest.

**Confirmed Tornado
Courtright - Smithville, Ontario
June 16, 1960**

Date- Local: Thursday, June 16th, 1960

UTC: Thursday, June 16th, 1960

Time- Local: 1915

UTC: 2315

Location: Courtright – Smithville (9 km SE of Sarnia)

Region: Sarnia - Lambton

Classification: Confirmed Tornado

Category: -999

Casualties: None

Track Length: 17680 m

Width: 1600 m

Motion: 225 degrees

Damage Estimate: \$250000

F-Scale Rating: F2

Code: BS

Damage Survey: Yes

Spotter Reports: Yes

Other Documents:

Damage survey memorandum outlining the event (time, areas affected, damage)

Many newspaper articles with pictures of damaged structures

Map of tornado track

Newark summary sheet

Tornado F-Scale Assessment

Brad L. Rousseau

Tornado Data Production Assistant, Environment Canada

January 26th, 2011

Classification: Confirmed Tornado

Date: Thursday, June 16th, 1960

Location: Courtright – Smithville (9 km SE of Sarnia), Sarnia – Lambton Region

Assessment: F2

F-Code: BS

Explanation of Assessment: 40 barns were destroyed, 9 120 ft hydro towers swept to the ground. A concrete block building in Courtright was demolished and some lifted off foundations.

A

TORNADO PROJECT SUMMARY SHEET

not plotted

AUG 7/80 RELMS.

F=2

ONT

JUNE

1. DATE AND TIME 16.6.1960 1815 LOCAL TIME
2. LOCATION OR PATH (attach map) COURTRIGHT TO WEST OF FOREST 06960-03
3. PATH LENGTH NOT KNOWN <1mi; 1-4mi; 5-10mi; 11-50mi; LENGTH IF >50mi
4. PATH WIDTH UNKNOWN
5. TORNADO PART OF SQUALL LINE? YES; NO; UNKNOWN
6. ANY UNUSUAL COLORATION? YES; NO; UNKNOWN
7. ANY UNUSUAL SOUND? YES; NO; 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 \$250,000
11. TOTAL DEATHS NONE (150 CHICKENS)
12. TOTAL INJURED NONE
13. TOTAL HOMELESS AT LEAST 1 FAMILY

14. LIST ALL REFERENCES SARNIA OBSERVER, JUNE 17, 1960.
LONDON FREE PRESS. JUNE 17, 18, 20, 1960.
TELEPHONE CONVERSATION WITH MRS HARVEY ELLIOTT, RRI CORUNNA, (519) 37-6885. (RELMS. AUG 7/80)

15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL ; (b) INTERESTING OR CAPRICIOUS EVENTS.
 - (a) allen young and his mother saw the tornado funnel heading towards their farm home, "it looked like a huge bunch of rolling white clouds." Lambton county residents reported seeing two and possibly 3 twisters Gilbert Pratt, Smithville said the funnel came big and black out of the west and the sky around it was black.
 - (b) 40 barns destroyed. 9 120 foot 220,000 volt hydro transmission towers swept to the ground in a tangled crumpled heap. Roads blocked by uprooted trees. Concrete block building in Court right completely demolished, other buildings lifted bodily from their foundations and scattered over the fields.

* In addition to the tornado 30,000 acres of Kent and Lambton counties inundated by floods with major crop losses.

WORKSHEET

IDTO 0696003

① ORIGIN x 17379600
 y 4739800

⑤ Standard Error S_x
 C 102

② LIFT-OFF x_1 17412600
 y_1 4770000

⑥ Standard Error S_y
 C 2000

③ $(x_1 - x) = 33000$

④ $(y - y_1) = 30200$

⑦ DAMAGE LENGTH

$$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$$

⑧ $\alpha = \tan^{-1} \frac{|y - y_1|}{|x - x_1|}$

③ + ④ $\rightarrow r, \theta = 44733$

$x \leftrightarrow y = 42^\circ$

⑨ Standard Error $S_L = (S_x^2 + S_y^2)^{1/2}$

⑤ + ⑥ $\rightarrow r, \theta = 2002 \text{ m}$

⑩ $\beta = \frac{\tan^{-1} S_L}{L}$

⑦ + ⑨ $\rightarrow r, \theta$
 $x \leftrightarrow y = 3^\circ$

NE Quad $\phi = 90 - \alpha$

SE quad $\phi = 90 + \alpha$

NW Quad $\phi = 270 + \alpha$

SW Quad $\phi = 270 - \alpha$

⑪ $\phi = 228^\circ$

Unincorporated Settlement

Centre of Area Municipality

Area Municipality Boundary

County/District/Regional Municipality Boundary

International Boundary

TRAVEL AND TOURIST

kilometre Distance

Travel Information Centre

Major Tourist Attraction

Hospital

Port of Entry

Airport

PARKS

Federal/Provincial Park Bdy.

Provincial Park, Camping

Provincial Park, No Camping

Other Government Park, Camping Only

Conservation Area, Camping Only

ENLARGEMENTS:

The smaller enlargements both urban and regional are designed to portray trans-urban highway routes and congested features. The urban maps are not intended to be full city maps in terms of completeness or extent.

Provincial Boundary

TRAVEL AND TOURIST

Service Centre

M.T.C. Picnic Area

Other Medical Facility

Railway (Northern Ontario)

Ferry Service

TOURIST ROUTES

Algonquin

Blue Water

Frontier

Heritage Highway

Rideau-Trent-Severn

Voyageur

Scale 1:800,000

kilometres 10 0 10 20 30 40 kilometres

Miles 10 0 10 20 30 Miles

CARTOGRAPHIC INFORMATION

The cartography was done by the Cartography Section, Surveys and Plans Office, Ministry of Transportation and Communications.

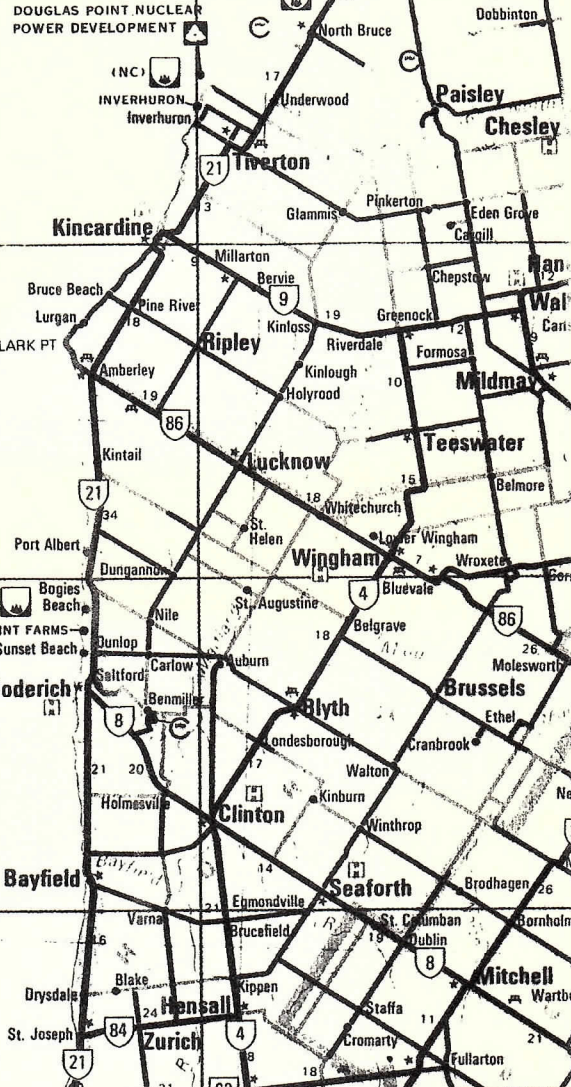
Much of the base material was provided by the Cartography Section, Surveys and Mapping Branch, Ministry of Natural Resources.

All settlement and topographic names present on the map have been verified for correctness with the Gazetteer of Canada, Ontario 1974, produced by the Federal Department of Energy, Mines and Resources and the Ontario Geographic Names Board, Ministry of Natural Resources.

Much of the information shown on this map has been derived from many governmental sources (Federal, Provincial, Municipal, State) and from other sources (railway companies, CBC, CRT, St. John Ambulance, etc.). A list of these sources is available on request.

Information pertinent to this map should be directed to:

Cartography Section
Ministry of Transportation and Communications
Downsview, Ontario
M3M 1L6



June 22, 1960

FILING MEMORANDUM

2

D.K. CAMPBELL
Line Maintenance

Preliminary Statement of Tornado
Southwestern Ontario, June 16, 1960

On June 16 at 19:15 EDT a tornado entered Ontario over the farm of Mr. Bedard located 1 mile South of Courtwright on the St. Clair River. Moving at 55 miles per hour, the tornado lashed the countryside toppling barns, trees, removing roofs from barns, and bending TV aerials at 90° angles in a northeasterly path about 1 mile wide with the severest damage occurring over the central 1,000 feet of the storm. The tornado which appeared as a gray funnel to Mr. Tvalko who lives about 500 feet southwest of tower #222, passed over his buildings and on towards the northeast. The storm diminished in intensity until it became just an ordinary wind storm around Forest about 30 minutes after it entered Ontario.

Visual evidence of the damage created by the storm indicate that it was an explosive type action produced by a combination of strong winds and a sharp pressure discontinuity. Wind velocities were probably greater than 100 mph but calculations of the forces involved have not been completed.

Interviews with residents in these areas indicate a storm of this type might be expected about once in fifteen years.

DKAG:MM

D.K.A. Gillies
Estimates and Resources Section