Confirmed Tornado Caledon, Ontario May 31, 1998

Date- Local: Sunday, May 31st, 1998

UTC: Sunday, May 31st, 1998

Time- Local: 0700

UTC: 1100 Location: Caldeon

Region: Dufferin-Innisfil

Classification: Confirmed Tornado

Category: G
Casualties: None

Track Length: None available

Width: None available Motion: None available

Damage Estimate: None available

F-Scale Rating: F0

Code: TS

Damage Survey: None Spotter Reports: None Other Documents:

Storm Damage Survey, Rob Paola

Emails between Darlene Siemens, spotter, and Dave Sills, MSC

Severe Weather Events Summary

Media Reports Newspaper Articles

Tornado F-Scale Assessment

Sarah J. Scriver Tornado Research Assistant, Environment Canada June 22nd, 2004

Classification: Confirmed Tornado

Date: Sunday, May 31st, 1998

Location: Caledon, Dufferin-Innisfil Region

Assessment: F0 F-Code: TS

Explanation of Assessment: Trees of unknown strength or size downed.

From:

Darlene Siemens[SMTP:mrs siemens@yahoo.ca]

Sent:

March 29, 2000 7:16 PM David.Sills@ec.gc.ca

To: Subiect:

May 31, 1998 tornado.

Finaly recognition! Anyway, I was chasing near caledon when I saw the tornado. The funnel was not visible from the clouds but there was a great debris cloud moving quite rapidly. I saw it go into caledon where I ended the chase because I was worried about family that lived in caledon. The only ones home where my young cousins who were lucky to be alive because they didn't go to the basement they were in the upstairs bedroom and the huge tree that was once in their backyard was now in their dining room. After looking after them till their dad got home I took off in the direction the twister had gone. It was easy enough to follow. It had entered a forrest that was behind their house and it now had a path cut out large enough to drive through(although it was full of debris and twisted trees). I headed down to Brantford to visit more relatives and apparently the tornado had had the same idea for quite a distance there were some very cool damage. I didn't have my camera with me at the time (broken) or I'd have gotten a cool pic of a rowboat in a tree!

Do You Yahoo!? Get your free @yahoo.ca address at http://mail.yahoo.ca

From:

Darlene Siemens[SMTP:mrs siemens@yahoo.ca]

Sent:

March 31, 2000 1:56 PM

To:

David.Sills@ec.gc.ca

Subject:

RE: May 31, 1998 tornado.

> Sorry, is it Darlene or Amanda?

Either/or

- > So would you say the tornado was at the rear-right
- > quadrant of the
- > supercell? How was it related to the storm?

I dont recall to tell you the truth. But I do think the storm ended or at leased calmed down in the area very soon after.

- > Fair enough, but can you give me a bit more accurate
- > location for the
- > sighting?

The only locations I can give is that we were heading towards Caledon Village from Orangeville on the highway, and my cousins house at the time was just down the street from the police office. Not much help I'm afraid

> >

- So now that you got a response from EC you'd > probably wish I'd quit
- > with the questions, eh? Sorry about that. I promise,
- > these are the last
- > questions ;-)

> >

Take care,

> >

Dave

That's okay, I just wish someone would have listened to me whilst the details were still fresh in mind.

Amanda.

>

Do You Yahoo!?

Get your free @yahoo.ca address at http://mail.yahoo.ca

From:

Darlene Siemens[SMTP:mrs siemens@yahoo.ca]

Sent: To: March 30, 2000 7:17 PM David.Sills@ec.gc.ca

Subject:

RE: May 31, 1998 tornado.

- > 1) when you saw the debris cloud, what made you
- > think it was a tornado
- > (as opposed to say dirt and debris along a strong
- > gust front)?

I knew it was a tornado because of it's rapid and persistant rotation.

>

> 2) what were the weather conditions (other than the tornado) at the time (ie had there been rain, lightning, hail, green skies, etc.)?

Well it's been awhile but I'm pretty sure there wasn't any heavy rain, at least while I was chasing, but there was some fabulos lightning, I don't recall if there was hail but I think there was some definate greenage going on.

>

- > 3) can you give me a better idea of the location,
- > the track direction
- > and path length?

That's one thing I can't help you on. I am HORRIBLE when it comes to direction it takes me FOREVER to find my way home after a chase:) I can't be sure of the pathe length becase it entered a forested area and I couldn't really follow it.

>

- > 4) are you aware of any injuries and can you
- > estimate the cost of the
- > damage (just rough)

I don't know of any injuries, and my cousins (who rented the house they lived in) simply moved away instead of paying to repair house.

>

- > 5) what makes you think that the tornado headed to
- > Brantford?...that
- > would be a very unusual direction of motion and very
- > long path (but not
- > impossible)

I doubt it was the tornado I was chasing that did the damage I saw en route to Brantford (for same reasons) it was either a different tornado or just REALLY strong winds. As to the unusual direction though, for some strange reason, violent storms always seem to follow us when we head to Brantford (which was usually after we ended a chase)

From:

David Sills[SMTP:dsills@nimbus.yorku.ca]

Sent:

March 30, 2000 10:20 AM

To:

david.sills@ec.gc.ca

Subject:

[wx-chase-can] St. Catharines {05} (fwd)

----- Forwarded message -----

Date: Wed, 29 Mar 2000 10:12:55 -0500 (EST) From: Darlene Siemens mrs_siemens@yahoo.ca

Reply-To: wx-chase-can@zeroreality.com
To: wx-chase-can@zeroreality.com

Subject: [wx-chase-can] St. Catharines {05}

I moved here from Duffrin County (Oh what lovely tornadoes) very good storm chasing! I've chased some interesting phenomenon in my time. Once while comming home from a completly storm unrelated excursion to Bancroft I ran into a serious Supercell tstorm. Beautiful structure in this baby! Anyway, perhaps foolishly, I punched the core. Once I cleared the heavy rain and marble sized hail, I saw a very cool sight. THREE funnels twisting together as they decended to the ground. They got 3/4 of the way down then decided they didn't want to leave home so went back up never to emearge again. Way cool though. Another neat experiance happened May 31st, 1998, 13 years to the day of the May 31,1985 out break that began my chasing when I was 5 YEARS OLD! (I was in the department store that was leveled near Orangeville). Anyway, It was quite the storm though environment canada says there were no tornadoes, well they can tell me what the heck I was chasing then! The thing hit my cousins house in Caledon (well, side swiped it.) It took a HUGE tree from the back yard brought it around to the front of the house and drove it through their front door! It also cut a perfect path through a nearby forrest. Amazing. So apparently figments of my imagination can cause some cool damage. (What it was called when I tried to report the thing)

Do You Yahoo!?

Get your free @yahoo.ca address at http://mail.yahoo.ca

An intense low pressure system tracked through Northern Lake Huron during the morning of Sunday, May 31st, 1998. A number of severe thunderstorms occurred with three features associated with this low pressure system. The first thunderstorms occurred out ahead of the warm front associated with this low pressure system. The main aspect of these storms was the significant rainfall associated. Amounts in the area of 30 to 50 mm of rain fell mostly between 3:00 AM and 7:00 AM in portions of the Manitoulin, Grey-Bruce, Barrie-Huronia and Parry Sound-Muskoka regions. This thunderstorm activity continued to move eastward giving heavy rain to portions of Peterborough and the Kawarthas, Quinte-Northumberland, Prince Edward County, Frontenac-Lanark, Kingston-Brockville and Ottawa-Hull-Cornwall between 6:00 AM and 10:00 AM.

The second feature to produce severe thunderstorms was a squall line which formed in advance of the cold front associated with this low. At 7:00 AM the squall line extended from Central Lake Huron to just west of Windsor. Driven by an intense low level jet, the squall line raced eastwards at 100 km/h moving east into Quebec by 1:00 PM. In its wake, numerous reports of strong winds, gusting above 100 km/h, resulted in a number of trees and hydro lines being blown down as well as some barns. The majority of these wind damage reports occurred in the Waterloo-Wellington-Dufferin, Barrie-Huronia and York-Durham regions with scattered reports of damage throughout the remainder of Southern Ontario. Accompanying these wind reports were also some reports of hail from ½ to ½ inch in size.

The cold front which followed the squall line moved through all but extreme southern portions of Southwestern Ontario by Sunday Afternoon. The cold front remained over the regions to the north of Lake Erie and scattered, severe thunderstorm activity fired up along this boundary, roughly from the Windsor area to the Niagara Peninsula. At around 3:15 PM ping pong ball size hail was reported from the Wheatley area (southeast of Windsor) due to one of these cold frontal thunderstorms.

Severe Weather Events for 05/31/98:

Event Time:	est14:30 UTC
Locale:	Picton, Prince Edward County
Event Desc:	The Belleville OPP report that there are downed power lines causing power outages is the Picton area. There were also reports of trees down.
""	
Event Time:	07:37 UTC
Locale:	Goderich, Huron-Perth
Event Desc:	1/2 inch (marble sized hail)
Event Time:	10:30 UTC
Locale:	Orno, Barrie-Huronia
Event Desc:	Funnel cloud report (Several), Storms that were associated with the warm front.
	CONTROL OF THE SECTION OF THE SECTIO
Event Time:	10:50 UTC
Locale :	Burks Falls , Parry Sound-Muskoka
Event Desc:	Report of 2 inches of rain in 1/2 hour.
H	
Event Time:	11:30 UTC
Locale :	Goderich, Huron-Perth
Event Desc:	Minor tree limb damage, 4-6 inch limbs broken off and windmill turned over.
H	
Event Time:	11:45 UTC
Locale :	SOUTH OF WINDSOR, Windsor-Essex-Kent
Event Desc:	WIND GUSTS 110 KM/H LOTS OF TREES DOWN
, !!	
Event Time:	11:59 UTC
Locale :	SOUTH OF GRAND BEND, Sarnia-Lambton
Event Desc:	WIND DAMAGE TREES DOWN ROOF OFF BARN
n	
Event Time :	12:15 UTC
Locale :	Durham-Southern Grey County, Grey-Bruce
Event Desc:	Very Strong Winds, Heavy Winds, Heavy Rain and trees down. The power is also out thoughout the area.

Event Time: 12:15 UTC

Locale: Kincardin, Grey-Bruce

Event Desc: Strong winds with downed power lines north of goderich.

Event Time: 12:20 UTC

Owen Sound, Grey-Bruce Locale:

Event Desc: A report of Pea sized Hail and many trees down.

Event Time: 12:30 UTC

Locale: Charing Cross - Central Kent County, Windsor-Essex-Kent

Event Desc: A report of a Funnel cloud in the area.

" "

Event Time: 12:30 UTC

Locale: Owen Sound, Grey-Bruce **Event Desc:** Trees Down in the Pinery.

. 11

Event Time: 12:30 UTC

Dufferin County, Waterloo-Wellington-Dufferin

Event Desc: 103 Km/h gust 8 miles west of Shelburne, Strong winds throughout the region.

11

Event Time: 12:35 UTC

Locale:

Tavistock, London-Middlesex-Oxford

Event Desc: Strong wind gusts blowing leaves off the trees.

11 11

Event Time: 12:35 UTC

Locale:

Tavistock, London-Middlesex-Oxford

Event Desc: Strong wind gusts blowing leaves off the trees.

Event Time: 12:45 UTC

Locale:

Owen Sound, Grey-Bruce

Event Desc:

Radio Station CFOS reports that there is extensive tree damage, decks ripped apart, and

also power lines down.

11

Event Time: 12:45 UTC

Locale:

Corbett, SE of Grand Bend, Huron-Perth

Possible Tornado touch-down, report of a barn down and trees damaged. Canwarn is **Event Desc:** currently investigating. 11 11 Event Time: 12:51 UTC Locale: Hwy2 at Morning's Mills, Waterloo-Wellington-Dufferin **Event Desc:** Violent Hail, gusts to 100km/h. 11 11 Event Time: 12:51 UTC Locale: SHELBURNE AREA, Waterloo-Wellington-Dufferin CORRECTION TO ABOVE ENTRY - Wind gusts to 100 km/h at Horning's Mills **Event Desc:** (hwy 24) and Violet Hill - no hail reported 11 11 Event Time: 13:00 UTC Locale: shelburne, Waterloo-Wellington-Dufferin Very High winds, gusts to 118 km/h, The power was also flickering. **Event Desc:** Event Time: 13:00 UTC Locale: Minden, Haliburton Event Desc: A report of pea sized hail. 11 11 Event Time: 13:05 UTC Locale: Orangeville, Waterloo-Wellington-Dufferin Event Desc: Reports of Antennas and Trees Down. 11 11 Event Time: 13:07 UTC Locale: West of Grand Valley, County road 17, Waterloo-Wellington-Dufferin **Event Desc:** A report of a barn blown down. " Event Time: 13:14 UTC Locale: Kingston, Kingston-Brockville Radio station reports heavy rains with flooding streets, power outages, and phone **Event Desc:** service interupted. !! !! Event Time: 13:20 UTC

South of Grand Valley, Waterloo-Wellington-Dufferin

Event Desc: Report of high winds, trees down, but no hail. Near hwy 9 and Kent lake road.

Locale:

Event Time: 13:20 UTC

Locale: Newmarket, York-Durham

Event Desc: Wind gusts >100km/h, trees damaged with numerous branches down.

Event Time: 13:20 UTC

11

11 11

" "

Locale: Holly, Southern Simcoe county, Barrie-Huronia

Event Desc: Wind gusts about 100 km/h, tree limbs down.

Event Time: 13:20 UTC

Locale: Aurora, York-Durham

Event Desc: Gusts to about 100 km/h, tree limbs down and near zero visibility with heavy rain and

wind.

Event Time: 13:20 UTC

Locale: Aurora, York-Durham

Event Desc: Gusts to about 100 km/h, tree limbs down and near zero visibility with heavy rain and

wind.

Event Time: 13:20 UTC

Locale: Aurora, York-Durham

Gusts to about 100 km/h, tree limbs down and near zero visibility with heavy rain and

Event Desc: wind

11

Event Time: 13:20 UTC

Locale: Srn Dufferin County, Waterloo-Wellington-Dufferin

Event Desc: 2nd wave of strong winds passed through the area.

Event Time: 13:20 UTC

Locale: Holland Landing, York-Durham

Several reports of extensive dirt from Holland Marsh being blown into the air with very

Event Desc: high winds. Sky turned red and black from airborn soil. Doppler indicated

mesocyclones in area with winds at 1 km over 120 knots

Event Time: 13:30 UTC

Locale: Belwood, Waterloo-Wellington-Dufferin

Event Desc: Small hail and damaging winds, lots of tree damage.

11 11

Event Time: 13:45 UTC

Locale:

Fergus, Waterloo-Wellington-Dufferin

Event Desc: Lots of trees down in the area.

" "

Event Time: 13:45 UTC

Locale:

Cobourg, Quinte-Northumberland

Event Desc: Report of Pea sized hail near Cobourg.

11 11

Event Time: 13:50 UTC

Locale:

Simcoe County near Schomberg, Waterloo-Wellington-Dufferin

Event Desc: Extremely high winds with many tree branches down.

Event Time: 13:50 UTC

Locale:

Central Toronto, Metro-Toronto

Event Desc: Wind gusts > 80 km/h.

11 11

Event Time: 13:50 UTC

Locale:

Baxter, Simcoe County, Waterloo-Wellington-Dufferin

Event Desc: Tree damage, powers out, gusts to at least 100 km/h.

11 11

Event Time: 13:50 UTC

Locale:

ALLISTON, Barrie-Huronia

Event Desc:

Alliston / Everett area - large trees uprooted and hydro wires down and some roof

damage to barn. Scotch Line north of Alliston East of Everett

Event Time: 13:53 UTC

Locale:

Georgetown, Halton-Peel

Event Desc: Winds gusts to 108 km/h.

11

Event Time: 14:00 UTC

Locale:

Wiarton Airport, Grey-Bruce

The METAR report at 14:00 UTC indicated that steady wind blowing at 34 knots and

Event Desc:

gusting to 46 knots blew over a hanger. These winds were not associated with a

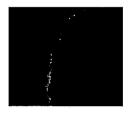
thunderstorm but were in behind the front.

Event Time: 14:05 UTC Locale: Brechin, Peterborough and the Kawarthas **Event Desc:** A report of an 8 inch tree down. 11 Event Time: 15:30 UTC Locale: Ameliasburg -SE of Trenton, Prince Edward County **Event Desc:** Report of trees down and a possible Tornado sighting. 11 11 Event Time: 16:00 UTC Locale: Lee Shore of Lake Scugog, York-Durham Lindsay Canwarn report a line a trees down on the lee shore of Lake Scugog. The **Event Desc:** winds were not associated with thunderstroms but were just gradient winds gusting to 35-40 knots in the area. 11 11 Event Time: 16:26 UTC Locale: Newmarket, York-Durham A City TV crew looking for storm samage report "hundreds" of tree down in York **Event Desc:** Rgion. 11 11 Event Time: 16:55 UTC Locale: WHITNEY, Algonquin Event Desc: HIGH WINDS. TREES BLOWING DOWN 11 11 Event Time: 17:22 UTC Locale: CHATHAM, Windsor-Essex-Kent Event Desc: 1/4" hail and wind gusts to 45 mph Event Time: est15:00 UTC Kingston, Kingston-Brockville Locale: CKWS was contacted foe storm reports. They reported that there were many trees down in the area and extensive flooding in the city as the sewers backed up. Power was alo **Event Desc:** interupted for a couple of hours this morning.

Welcome To . . .

The May 31 st 1998 Storm Damage Survey

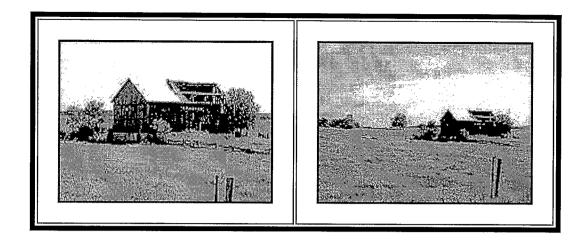
by Rob Paola



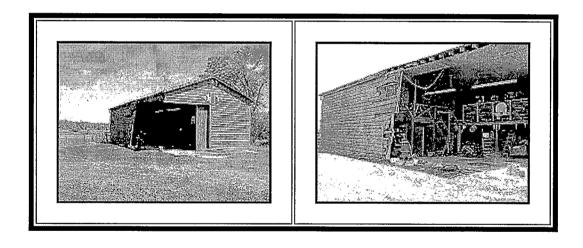
On the afternoon of June 1st 1998, I made a tour of south-central Ontario to investigate storm damage from the May 31st outbreak of severe weather. Due to the widespread nature of this event (over 50 reports of severe weather stretching from Windsor to Kingston), my route concentrated on the hardest hit areas within south-central Ontario, namely Dufferin, southern Simcoe, and northern York regions. It is in this area which Doppler radar indicated the highest winds, with the potential for tornadic storms. View a visible satellite image from 20:02z O5/31/98.

My route took me north on Highway 400, then west on Highway 89 through Cookstown, Alliston and Shelburne, south on Highway 25 to Grand Valley, east on Highway 9 through Orangeville, through the Holland Marsh on Canal Bank Road, finally returning via Yonge and Bathurst through Newmarket and Aurora. Total distance travelled was 283 km over 6 hours.

For most of the route, the main damage consisted of broken tree branches with some isolated cases of whole trees being blown over. I noted part of a roof ripped off a barn on Highway 9 east of Orangeville with roof debris strewn east of the barn in a field. All of this damage was consistent with straight line winds, with no evidence to suggest tornadic activity.

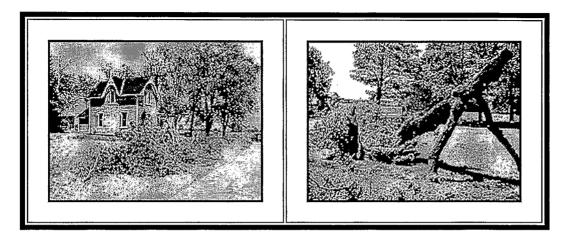


West of Grand Valley, OPP received a report of a tornado touching down and damaging a barn at Lot 25, concession 3, East Luther Township. Investigation of this report revealed the southwest corner of a barn torn off.



However, the main structure including roof, was still intact, as was the nearby farmhouse. The residents at this location (Hewitt family) told me they did not see an actual tornado, but their 14 year old son claims he did. They witnessed very strong winds, with near zero visibility in rain and soil from the neighbouring farm field when it first hit around 8:30 am Sunday morning. In addition to the damaged barn, a bus shelter for their kids and a large tree were also blown over onto their driveway. Damage at this location was consistent with downburst winds with little evidence to suggest tornadic activity. This is consistent with the account of a neighbour who also saw the storm. She did not see any funnel clouds or tornadoes, but only very high winds, strong enough for her to seek shelter in her basement.

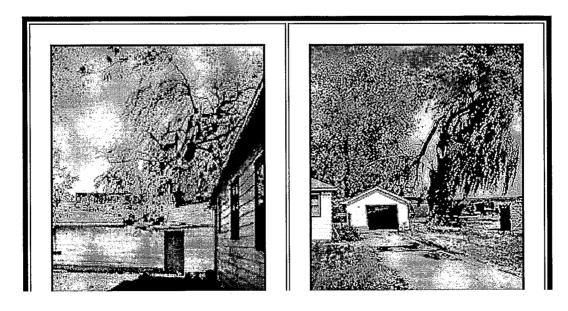
Just to the east of this location (Lot 27/28, concession 3), a farmhouse had considerable tree damage and a destroyed barn.



However, a neighbour told me the barn was already partially destroyed before the Sunday event. This witness also did not see a tornado or any funnel clouds when the storm hit, just very strong winds.

The Dufferin county CANWARN network also reported numerous cases of strong winds (max gust 118 km/h near Shelburne), but no reports of tornadoes. This further suggests that the main damage over Dufferin county was due to straight line winds.

Further east, I travelled through the Holland Marsh along Canal Bank Road looking for any evidence of tornadic damage. However, here again the main damage was to trees with numerous branches torn off. One large branch fell on a garage causing considerable damage.





Other than this however, there was no structural damage noted to any of the buildings in the area. A woman in the area told me the storm generated very strong winds with lots of soil blown up from the marsh, but she did not witness any tornadoes or funnel clouds. This is further evidence to suggest the storms in the Holland Marsh area were mainly downburst winds (120 km/h+?) which were strong enough to scour dirt and crops from the marsh, but not strong enough to cause significant damage to structures.

The last part of the storm survey took me through Newmarket and Aurora where several large trees were blown over, mainly along Bathurst Street. Again, this is consistent with straight line wind damage with little evidence to suggest tornadic activity in the area.

In summary, based on the above storm survey, it appears most of the damage on Sunday May 31st was due to strong downburst winds from fast moving thunderstorms. There was little to suggest tornadic activity with these storms as damage was mostly to trees and minor structures, with no evidence of rotation or twisted debris. Although this storm survey comprises a relatively small portion of the affected damage area, it likely is representative of most of the damage based on reports received outside the storm survey area. However there is still room for further investigation if more extreme damage is reported in local areas.

Rob Paola Severe Weather Meteorologist Regional Centre, Toronto



Environnement Canada

This page designed by Steven C. Wirth

Cornwall

Spotter Reports, May 31, 1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 13-15 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Aurora ASOCTD PUBLIC RGN: York-Durham DETAILED DESCRIPTION: "Wind gusts to about 100 km/h, tree limbs down. Near zero visibility with the heavy rain & wind." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale?: NO Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): NO Vetted by: CM Vetted date: 28/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 13-20 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Holland Landing ASOCTD PUBLIC RGN: York-Durham DETAILED DESCRIPTION: "Several reports of extensive dirt from Holland Marsh being blown into the air from very high wind velocities. Sky turned red & black from airborn soil. Doppler radar indicated mesocyclones in the area with winds at 1km greater than 120 km/h." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: 120 RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale?: NO Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): NO Vetted by: CM Vetted date: 28/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 13-20 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Baxter, Simcoe County ASOCTD PUBLIC RGN: York-Durham DETAILED DESCRIPTION: "Tree damage, power outages, gusts to at least 100 km/h." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: 100+ RAINFALL: MM RAIN DURATION:

HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale?: NO Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): NO Vetted by: CM Vetted date: 28/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 13-30 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 30.0 DAY OF THE WEEK: EVENT LOCALE: Newmarket ASOCTD PUBLIC RGN: YORK-DURHAM DETAILED DESCRIPTION: "Wind gusts greater than 100 km/h, trees damaged with numerous branches down." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: WIND Mesoscale ?: NO Synoptic ?: YES Big Event ?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): YES Vetted by: mjl-event Vetted date: 06/11/98

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 13-45 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Simcoe County near Schomberg ASOCTD PUBLIC RGN: York-Durham DETAILED DESCRIPTION: "Extremely high winds with many tree branches down." INITIAL ASSESSMENT: NEAR-SEVERE SPL WX STATEMENT IN EFFECT?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT?: NO WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale?: NO Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: UKN Separate Event (30km/30min): NO Vetted by: CM Vetted date: 28/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 14-45 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 30.0 DAY OF THE WEEK: EVENT LOCALE: Ameliasburg, SE of Trenton ASOCTD PUBLIC RGN: PRINCE EDWARD COUNTY DETAILED DESCRIPTION: "Report of trees down & a possible tornado sighting.." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: YES WARNING LEAD

TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: WIND Mesoscale?: NO Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): YES Vetted by: mjl-event not tornado Vetted date: 30/11/98

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: The Picton Gazette EVENT TIME (UTC): 14-45 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Prince Edward County - Picton ASOCTD PUBLIC RGN: Prince Edward County DETAILED DESCRIPTION: "Newspaper reports that there were 20-25 trees down in three separate areas, South of Carrying Place, The Outlet, and Cherry Valley. 4000 customers were left without power." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale ?: NO Synoptic ?: YES Big Event ?: NO Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): NO Vetted by: CM Vetted date: 21/07/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 14-50 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 30.0 DAY OF THE WEEK: EVENT LOCALE: Picton ASOCTD PUBLIC RGN: PRINCE EDWARD COUNTY DETAILED DESCRIPTION: "The Belleville OPP report that there are downed power lines causing power outages in the Picton area. There are also reports of trees blown down." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: WIND Mesoscale ?: NO Synoptic ?: YES Big Event ?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): YES Vetted by: mjl-event time adjusted radar Vetted date: 27/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 15-00 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT

DURATION (HR): 0.0 (MIN): 30.0 DAY OF THE WEEK: EVENT LOCALE: Kingston ASOCTD PUBLIC RGN: KINGSTON-BROCKVILLE DETAILED DESCRIPTION: "CKWS was contacted for strom reports. They reported that there were many trees down in the area & there was extensive flooding in the city, as the sewers backed up. Power was also interrupted for a couple of hours this morning." INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT?: YES WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: WIND/RAIN Mesoscale?: YES Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: YES Warning Est Hit/Miss: YES Separate Event (30km/30min): YES Vetted by: mjl- event Vetted date: 06/11/98

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: The Nugget EVENT TIME (UTC): 16-00 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: North Bay ASOCTD PUBLIC RGN: North Bay-Nipissing DETAILED DESCRIPTION: "30.3mm of rain in Horth Bay & up to 70mm in outlying areas. Wind gusts up to 70 km/h knocked down trees & caused power outages." INITIAL ASSESSMENT: NEAR-SEVERE SPL WX STATEMENT IN EFFECT ?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT ?: NO WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT ?: NO WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: 70 RAINFALL: 30.3 MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: Wind Mesoscale ?: YES Synoptic ?: NO Big Event ?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: NO Warning Est Hit/Miss: NO Separate Event (30km/30min): YES Vetted by: CM Vetted date: 05/07/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 16-26 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 0.0 DAY OF THE WEEK: EVENT LOCALE: Newmarket ASOCTD PUBLIC RGN: York-Durham DETAILED DESCRIPTION: "A CITY TV crew looking for storm damage reports "Hundreds of trees down in York Region". Was the aftermath of the stron squall line that passed through the area around 13-00 UTC. (The actual time of the event was not given so no lead times can be estimated)" 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: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT

DESCRIPTION: Wind Mesoscale ?: NO Synoptic ?: YES Big Event ?: YES Statement Est Hit/Miss: UKN Watch Est Hit/Miss: UKN Warning Est Hit/Miss: UKN Separate Event (30km/30min): NO Vetted by: CM Vetted date: 28/06/1998

CLASSIFICATION: Severe Thunderstorm SOURCE/WATCHER ID: EVENT TIME (UTC): 16-30 EVENT DAY: 31.0 MONTH: 5.0 YEAR: 1998.0 EVENT DURATION (HR): 0.0 (MIN): 30.0 DAY OF THE WEEK: EVENT LOCALE: Cornwall- Alexandria ASOCTD PUBLIC RGN: CORNWALL DETAILED DESCRIPTION: "Signs trees and power lines down" INITIAL ASSESSMENT: YES SPL WX STATEMENT IN EFFECT?: UKN STATEMENT LEAD TIME (HR): (MIN): WATCH IN EFFECT?: YES WATCH LEAD TIME (HR): (MIN): WARNING IN EFFECT?: NO WARNING LEAD TIME (HR): (MIN): TORNADO: NO WINDSPEED: RAINFALL: MM RAIN DURATION: HAIL DIAMETER: MM HAIL DESCRIPTION: EVENT DESCRIPTION: WIND Mesoscale?: YES Synoptic?: YES Big Event?: YES Statement Est Hit/Miss: Watch Est Hit/Miss: YES Warning Est Hit/Miss: NO Separate Event (30km/30min): YES Vetted by: mjl-event Vetted date: 29/11/98

May 310

Article View

Next Article Return to Headlines

Canadian Wire Stories
Racing thunderstorms leave trail of debris across Ontario
Gillian Livingston

06/01/98 Winnipeg Free Press Metro Page b1

All material copyright Thomson Canada Limited or its licensors. All rights reserved.

A LINE of thunderstorms raced across southern and eastern Ontario yesterday morning, leaving no town or city in its path unscathed.

The squall line of thunderstorms, packing winds of 90 to 130 kilometres an hour, battered Windsor about 7 a.m., raged over Toronto about 9:30 a.m. and hit Ottawa by lunchtime.

"It went from Windsor to Ottawa in about six hours," said Michael Leduc, a meteorologist with Environment **Canada**. "It was moving in excess of 100 kilometres an hour - and it doesn't stop for coffee breaks."

The storm swept in from Michigan early yesterday, leaving downed hydro wires, uprooted trees, broken branches and debris. No injuries had been reported.

Caledon, Orangeville, Sarnia-Lambton, Southampton, Port Elgin, Peterborough, Kingston, Bracebridge and Parry Sound were among areas hit by the sudden, vicious storm.

The weather was spawned by a swarm of thunderstorms that battered the upper midwest United States on Saturday night and early yesterday, with winds gusting to more than 160 km-h.

In Ontario, Leduc said the Doppler radar picked up indications of a **tornado**, and in the Holland Marsh area, about 40 kilometres north of Toronto, there were unconfirmed reports of a **tornado**. Hail fell east of Windsor and in the Niagara region.

The storm was an eerie reminder of the strength of Mother Nature, he said, coming on the 13th anniversary of a **tornado** that hit the Barrie area, causing severe damage and killing 12 people.

At the height of the storm, up to 30,000 Ontario Hydro customers were without power, said spokesman Al Manchee.

High winds hamper hydro crews

"Most of the damage is a result of tree limbs coming down, but some is due to lightning strikes," Manchee said, adding that strong winds also blew over some hydro poles.

Service to most customers was restored by last night, he said.

"Cottage country was badly hit," Manchee said, and some islands in the Muskoka area would likely remain without power overnight.

High winds hampered repair efforts, he said, since helicopters couldn't be used. All available hydro crews were working until late yesterday and would be back to finish the job early today.

"We're advising anyone who sees downed lines to stay away from them because they could still be live." Manchee said.

In Quebec, severe winds and heavy rain knocked out power to more than 100,000 households in Montreal, the South Shore and in the Outaouais region north of Hull yesterday, some of the same areas hit by the January ice storm that knocked out power to three million Quebecers.

Woodbine Racetrack in Toronto cancelled the day's thoroughbred racing program because of the high winds. John Whitson, vice-president of thoroughbred racing for the Ontario Jockey Club, said the jockeys felt the high winds would make it too dangerous to ride.

Toronto resident Sheri Pickett said it felt like a **tornado** hit yesterday morning as a strong gust of wind snapped the 12-metre maple tree in her front yard.

"I heard this loud crack. I screamed when it happened," said Pickett, who was on her front porch when it hit.

The tree fell onto the street and her neighbours' two cars, ripped down power lines and broke the street light.

CP PHOTO

Matt Gray jumps over downed tree in Sarnia.

Photo

Next Article Return to Headlines

International News

Twister strikes suddenly, leaves 6 dead, 150 injured Storms wreak death, damage across Midwest

06/01/98

Winnipeg Free Press

Metro

Page a1

All material copyright Thomson Canada Limited or its licensors. All rights reserved.

A **tornado** wiped out most of Spencer, a small farming community, killing six people and destroying its post office, fire station, library, bank and all four churches.

"Ninety per cent of it is just plum gone," Mayor Rocky Kirby said.

Only about two dozen homes survived, mostly along the two northernmost streets in the town of about 300 people.

An estimated 150 people were injured, many of them elderly. Eighteen of the 41 people treated at hospitals were admitted.

"This place looks terrible. It is like a combat zone, like Hiroshima, like Nagasaki," Gov. Bill Janklow said yesterday morning.

Spencer is about 700 kilometres south of Winnipeg and 72 kilometres northwest of Sioux Falls in the southeast part of the state.

Witnesses said the twister struck without warning and may have been up to 400 metres wide.

It was part of a swarm of thunderstorms that battered the upper Midwest on Saturday night and early yesterday with winds gusting to more than 160 kilometres an hour. Upwards of 900,000 homes and businesses lost power in Minnesota, Wisconsin and Michigan and five more deaths were blamed on those storms. Thunderstorms with high winds stretched into New England yesterday. About 30 houses were damaged and a dozen people injured when the storms moved through Mechanicville, N.Y., about 30 kilometres north of Albany.

In South Dakota, the damage was concentrated at Spencer. The town was hit about 8:30 p.m. Saturday.

Continued

Please see knocked-out / A 2

Knocked-out alarm 'irrelevant' for town

Mayor unsure if community will rise again

Marlene Schumm of Sioux Falls had gone to visit an aunt in Spencer.

"My husband said: 'Basement!' We had just gotten there before it hit," she said.

Warning sirens didn't sound because the storm knocked out electricity, but it didn't make much difference, the governor said.

"The town's gone. I mean, if a **tornado** 's going to come in with that amount of fury and wrath, a warning system's irrelevant," Janklow said yesterday.

The mayor said he wasn't sure if many people would rebuild in Spencer, founded in the late 1800s.

"These little towns out here in South Dakota are on their way out," Kirby said. Danny Stone, Kara Arends and their three-week-old baby, Brandon, were in the basement when their house was swept away.

"I've been in this house 20 years and I don't think it took 20 seconds" to be destroyed, Stone said.

The Spencer church building Edward Rogers bought three years ago and was trying to convert into an inn was reduced to rubble.

"For the first time in my life, I don't know what I'm going to do," Rogers said. About 100 state prisoners were brought in to help with the cleanup. Janklow also activated the National Guard.

Trees were broken off, with leaves stripped off their remaining branches. Outside town, fence posts were ripped out of the ground and wire fencing was wound up in a spiral.

The town's water tower was ripped off its steel legs, which still stood high enough to hold a car

suspended about 1.5 metres off the ground.

The governor said he asked the Federal Emergency Management Agency for a federal disaster declaration and U.S. Senator Tom Daschle said FEMA teams were on their way.

Janklow said the biggest need is housing for the town's elderly.

McCook County Sheriff Gene Taylor said most of the deaths were in the area of assisted-living apartments for the elderly on Main Street. The coroner's office identified the victims as Elizabeth Burham, 85, Mildred Pugh, 93, Ronald Selken, 62, Irene Yost, Gloria Satterlee and Bev Bintliff.

Thunderstorms also raced across Ontario yesterday morning, leaving downed power lines and uprooted trees in areas stretching from Windsor to Toronto to Ottawa. There were no reports of injuries in **Canada**.

Wind gusted to 170 km-h in central Wisconsin's Dodge County and to 130 km-h around Minneapolis-St. Paul, Minn. Central Minnesota was peppered with hail up to 4.5 centimetres in diameter.

Up to 2,000 people were evacuated in the Milwaukee suburb of South Milwaukee early yesterday because of leaking propane gas, apparently released when a falling tree limb broke a valve on a tank, fire department Capt. Joseph Knitter said.

"Our only feasible option is to allow it to empty itself," Knitter said.

AP PHOTOS

National Guardsman walks down a destroyed Spencer street.

William Nafziger, 71, sits at the curb of what was his home for 33 years in Spencer, S.D.

The town's water tower was reduced to twisted rubble.

Photo

Next Article Return to Headlines

News **MOM TELLS OF TORNADO TERROR** BY SUN MEDIA

05/29/98 The Edmonton Sun Final Page 33

(c) Copyright 1998 The Edmonton Sun. All Rights Reserved.

As a **tornado** ripped through her yard, Sarina Fesser gathered her kids and headed for the root cellar in their ranch about 30 km southwest of Calgary.

"We have a cold room, which is all cement, that we all went in to," the single mom said yesterday.

It was one of three **tornadoes** that swept through southern Alberta causing about \$250,000 damage Wednesday. There were no injuries.

A twister in the Priddis area, about 20 km southwest of Calgary was the most destructive, Environment **Canada** spokesman Dennis Dudley said yesterday.

The noise from that **tornado** was deafening as Fesser and three of her children, aged between two and eight, cowered.

When things calmed down, she assessed the damage. "It's just devastating," said Fesser, 33.

Meanwhile, rivers in southern Alberta remain dangerously high, although no serious flooding has been reported.

Next Article Return to Headlines

News

TWISTED MESS MOM AND KIDS TAKE COVER AS TORNADO RIPS THROUGH BY IAN WILSON, CALGARY SUN

05/29/98 The Calgary Sun Final Page 03

(c) Copyright 1998 The Calgary Sun. All Rights Reserved.

As a tornado ripped through her yard, Sarina Fesser gathered her kids and headed for the root cellar.

"We have a cold room, which is all cement, that we all went in to," the single mom said yesterday.

The noise outside was deafening as Fesser and three of her children, between two and eight years old, cowered in the room. When things calmed down, she assessed the damage and couldn't believe

her eyes.

"It's just devastating," said Fesser, 33.

"I looked out the window ... and I didn't know if it was an explosion or what."

The twister roared Wednesday evening through Fesser's ranch near Priddis, about 20 km southwest of Calgary.

It destroyed a barn and knocked down a partially-built hay shed.

Two smaller buildings were tossed around the yard like leaves in a windstorm.

Fesser was first tipped to the looming twister by a phone call.

"The neighbor called and said: 'I saw your building go by' and then I saw the funnel cloud," she said.

"At first, I thought it was just hail, but when it was all done, debris was spread a quarter mile away.

"The good thing is, everyone is OK. I was concerned for my kids, mostly."

Fesser has four kids -- three of whom were home at the time.

She was waiting for insurance adjusters to arrive yesterday, but estimated the damage at about \$250,000.

Environment Canada confirmed three tornadoes tore through rural Alberta Wednesday.

The Priddis **tornado** did the most damage, while minor damage occurred from separate twisters reported in Stavely, 100 km south of Calgary, and Shouldice, 100 km east of the city.

Meanwhile, rivers in southern Alberta remain dangerously high, although no serious flooding has been reported.

The Highwood River overflowed its banks in the town of High River yesterday, swamping the ninth hole on the town's golf course before receding in the evening.

photo by Dave Chidley LITTLE LEFT... Sarina Fesser, 33, looks over the damage to her family's farm, which was hit by a twister. One building was destroyed and three others heavily damaged, but no one was injured. The farm is about 20 km southwest of Calgary.

Return to Headlines

News Archives
From the Archives

05/28/98
The Globe and Mail
Metro
Page S6
All material copyright Thomson Canada Limited or its licensors. All rights reserved.

25 years ago: On May 28, 1973, The Globe and Mail reported that the leader of **Canada** 's team on the International Commission of Control and Supervision in Vietnam, Michel Gauvin, had described a Hungarian attack on Canadian policies as unwarranted and regrettable. Captain Nicholas Papas, who led a mutiny aboard the Greek destroyer Velos, called on the United States to take an active and visible role in returning Greece to democratic rule. The president of the United Steelworkers of America local in Buchan, Nfld., was fined \$5,000 for contempt of court. At least 15 people were killed as six U.S. states were hit by **tornadoes** and heavy rain.

50 years ago: On May 28, 1948, The Globe and Mail reported that the government of Prime Minister Jan Smuts had been defeated in South African elections by Daniel Malan, a Boer nationalist. Fires raged over more than 9,000 acres of timberland in the Mississagi district of northern Ontario. Israel rejected a British proposal for a ceasefire in Palestine backed by a world-wide arms embargo. The Canadian Legion national convention voted to refuse admission to those called to service under the National Resources Mobilization Act. A government spokesman said Ottawa would ask Britain to raise the #1,000-limit on money emigrants were allowed to take with them.

100 years ago: On May 28, 1898, The Globe reported that a dispatch from Key West, Fla., had cast doubt on the news that the Spanish fleet under Admiral Cervera was bottled up in Cuba's Santiago harbour, while a report from Washington said it was. The U.S. army was said to be pondering the use of balloons to assist in discovering the exact whereabouts of the fleet. A cabinet crisis was reported in Spain over proposals to introduce an income tax to pay for the war with the United States. The Senate of the University of Toronto voted to raise the examination fees from \$10 to \$14.

Return to Headlines

Copyright © 1998 Dow Jones & Company, Inc. All Rights Reserved.