B

TORNADO PROJECT SUMMARY SHEET

F=1

1. DATE AND TIME Wed July 3 1974 15:30 EDT

2. LOCATION OR PATH (attach map) Charlottetown PEI (Milton - Fort Augustus)

3. PATH LENGTH ☐ NOT KNOWN ☐ <1mi; ☐ 1-4mi; ☐ 5-10mi; ☑ 11-50mi; ☐ LENGTH IF>50mi

4. PATH WIDTH U 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.) Heavy Hail

10. TOTAL DAMAGE ESTIMATE $1 million 11. TOTAL DEATHS 0

12. TOTAL INJURED 3 1 due to hail 13. TOTAL HOMELESS about 14

14. LIST ALL REFERENCES Charlottetown Guardian July 4, 5, 6, 8th 74

15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.

- Storm was accompanied by heavy rain (1.40") and heavy hail. Hail "as big as bird eggs." injured a fisherman who had his back bruised by the pounding hail. Hail also flattened crops
- High winds, approximated at 65-70mph broke windows tore off doors, uprooted trees
- six trailers were overturned, one four times while another disintegrated.
- homes owned by 5 different people sustained extensive damage
- eight aircraft at Charlottetown A were damaged. 5 were overturned. Wings were torn off and one blown down a runway
- several people were hurt when a barn collapsed around them
- At least 25 cottages were damaged, some completely destroyed

WORKSHEET

IDTO 02174-01

① ORIGIN x 20.486000
y 5124000

⑤ Standard Error S_x
0 = 1000

② LIFT-OFF x_1 20504500
y_1 5126500

⑥ Standard Error S_y
0 = 1000

③ $(x_1 - x)$ = 18500

④ $(y - y_1)$ = 2500

⑦ DAMAGE LENGTH

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

③+④ [→r,θ] = 18668

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

[x↔y] = 8

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

⑤+⑥ [→r,θ] = 1414

⑩ $\beta = \frac{\tan^{-1} S_L}{L}$

⑦+⑨ [→r,θ]
[x↔y] = 4

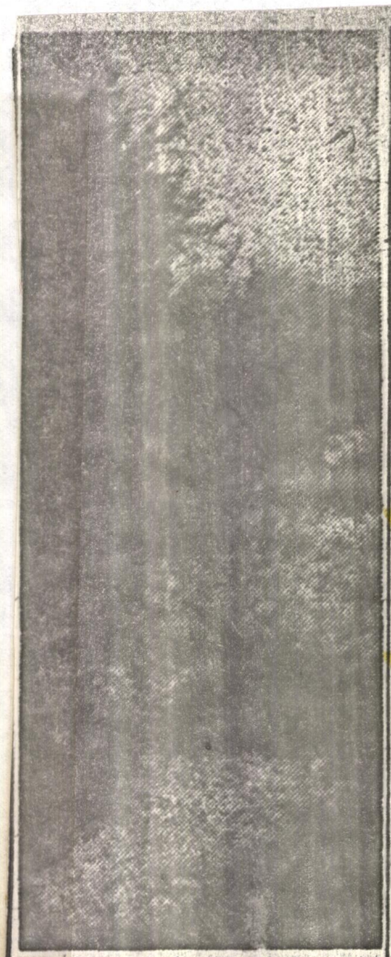
NE Quad $\phi = 90 - \alpha$
NW Quad $\phi = 270 + \alpha$
SW quad $\phi = 270 - \alpha$

SE quad $\phi = 90 + \alpha$.

⑪ ϕ = 262

Charlottetown Guardian: July 4 74
Storm Date: Wed July 3 '74

Damage Widespread In Central Queens



SUMMER HAIL . . . IN WEST ROYALTY

BY ANDY MacPHERSON

Widespread destruction was caused in central P.E.I. by a sudden thunderstorm late Wednesday afternoon.

The storm, driven by 65-70 mph winds, swept in at about 4.30 p.m. breaking windows, tearing off doors and television antennaes and uprooting trees.

At least 1.4 inches of rain and hail fell in the half-hour storm. Over 50 trees were uprooted at the Belvedere golf club alone.

At least six trailers were overturned at a West Royalty trailer court, one of them overturned four times while another disintegrated. Several persons were taken to hospital from the site.

In hospital are Mr. and Mrs. William Peters. A hospital spokesman said their condition is good.

Homes owned by Joseph Burke, William Peters, Harold Tremere, James Hughes and Marcellus Trainor were said by RCMP to have sustained extensive damage.

AIRCRAFT DAMAGED

Eight aircraft at the Charlottetown airport were damaged and five were overturned. Wings were torn off and one was blown down a runway.

In Mermaid, 25 cottages were damaged in various ways, some were completely demolished.

Hailstones in the area were said to be "as big as bird eggs" by persons on the scene.

Power to eastern P.E.I. was cut off almost as soon as the storm began and remained off well into the evening.

City police said numerous electric and telephone wires were pulled down by falling trees and branches but said there were no fatalities, serious injuries or traffic accidents in the city.

TRAFFIC TIEUPS

City police were plagued with traffic tieups resulting from fallen trees and power lines on University avenue, Douglas street, Skyview drive, Hillsborough street, Kensington Road, Fitzroy street and Park Lane.

A tree fell on a car on University avenue.

In suburban Sherwood and Parkdale, trees were uprooted, doors and windows were carried away and roofs were blown off houses.

In East Royalty, a barn at a riding academy collapsed on a number of horses inside. None were killed but several were injured.

At least 10 barns and a silo belonging to Leo McIsaac were flattening in the Ft. Augustus area.

In Souris, a mechanic, Keith Lutz, was nearly struck by lightning which burned his back and hand and took the tools out of a tool chest he was carrying.

Eastern P.E.I. and points roughly west of Kensington were relatively untouched by the storm which concentrated around the central Queens area.

The extremities of the Island got moderate winds, some rain and thunder and lightning but little in the way of significant damage.

Maritime Electric general manager Robert Smith said late last night that crews have isolated the problem that cut power to Kings county and said he expected service would be restored well before morning.

Falling trees also hindered Island Telephone service in the Charlottetown area and in the Kings County area.

Telephone company officials could not be reached for comment on when service could be expected to be restored, though some lines were still inoperative at about 11 p.m.

Eastern Provincial Airways services operated nearly normally last evening.

Charlottetown Guardian
Friday July 5 '74
Storm Date: Wed July 3
'74

INSURANCE ADJUSTERS POPULAR

Wednesday's Storm Damage May Reach $1 Million Mark

Spokesmen for several Charlottetown insurance companies have estimated damages caused by Wednesday's storm at over $1 million.

One company had claims totalling over $100,000 within two hours of opening for business yesterday.

Most insurance companies were swamped with telephone calls and some companies couldn't be reached by telephone to determine the type of calls they were receiving.

It is too early to determine what damage claims will amount to in dollars because it will be days before most companies are able to have adjusters investigate all reports.

Higgs Insurance received 15 to 20 calls in the first 10 minutes after they opened Thursday morning.

Reports of shingles blown off roofs, roofs themselves leaving homes, broken glass doors blown off, aluminum siding damaged by flying objects and hail stones, cars damaged and outbuildings demolished were common.

A spokesman for Armstrong Insurance said damage reports will be received until a pattern of destruction is determined. Adjusters will then concentrate their efforts in these areas, covering as many reports as quickly as possible.

"There are insured losses and uninsurred lolses. Insurance policies cover specific items and most dwelling policies cover wind damage," said an insurance adjuster.

He added that trees, hedges, shrubs and gardens are not usually covered by city dwellers.

A spokesman at Wheatley Adjustment Bureau said "everyone thinks they should have everything repaired immmediately. But we just can't do it."

SHOTGUN BLAST

Another adjuster said aluminum siding on some houses sustained damage in such a way that it looked as though it was struck by a shotgun blast.

"I never saw anything like it in the last 12 years," said Pat Gaudet of Higgs Insurance.

Charlottetown Guardian Fri July 4 74
Storm Date: Wed July 3 '74

Charlottetown Businesses Suffer High Storm Damage

Damage reports from Wednesday's storm continue to pour in.

Clive Cudmore of Henderson and Cudmore on Confederation square, said Thursday he estimated damage to his stock of clothes stored on the top floor of the Brace Block on Queen street to be $50,000 to $75,000.

He said the rain "wrecked the place."

This morning we were still going crazy," he said after he and ten members of his staff had worked three hours Wednesday night cleaning up.

He said "this year's, next years," stock were affected by the storm as well as numerous other clothing accessories the form had stored.

"We will save most of it," he said.

A spokesman from the MacLeod and MacLeod law firm which manage the building in trust, said rain came in as a result of the drain on the flat-roofed building backing up.

The resultant flooding affected the top floor dwellings as well as Wrights' Shoes and the Island Grill down below.

Although a spokesman from Wrights was unavailable, Mr. Cudmore said he imagined damage would be extensive.

"They were shovelling water out by the bucketful this morning," he said.

A spokesman for the Island Grill, which specializes in Chinese food, said water dripping from the chandeliers forced the electricity to be cut off allowing patrons to dine by candlelight.

The spokesman said it was no pleasure since there was scarcely a dry place with water dripping from the ceiling.

Although a large water- suction machine was employed and de- humidifiers were left running through the night, the carpets were still wet in the morning, she said.

The restaurant's kitchen was not damaged but the basement which housed the food storage was the receptacle of much of the water, she said.

The spokesman declined to say the extent of the damage to the restaurant save to say there was.

Mrs. Bertha White, a resident in one of the two apartments upstairs in the two-storey building, said the water was dripping from the door frames and cracks in the walls and ceiling.

Mrs. White said she had only the wall closest to the hallway of her apartment stained by the rain while her neighbour, Mrs. Teresa James who was away, had water dripping from the walls and ceiling.

She said the rug in the office of Dr. A. R. Smith, dentist, was soaked by water running down the corridor wall.

Dr. J. P. Millar, a dental surgeon whose office is also located on the floor said the storm didn't bother his office save for a little water which came in at one of the corners.

He said the western end of the building escaped unscathed while the eastern portion was hardest hit. Two of Henderson and Cudmore's three rooms were damaged he said.

The firm has nailed temporary barricades across these two door ways to keep out people.

Charlottetown Guardian
July 6 '74
Storm Date: Wed July 3 '74

Queens Farming Area Said 'Disaster Zone'

BY ROD LAMB

Farmers in central Queens County southeast of Charlottetown are petitioning the provincial government to have the area declared a disaster zone.

"We've been wiped out," said Earl Proctor, a farmer of 250 acres in Mermaid. "If I don't get compensation for my loss, I will have to throw in the towel."

"I can't survive this kind of loss," he aid. "The storm took away my income. Without it, I can't continue."

He echoed the thoughts of other farmers in the area who were dramatically affected by Wednesday's swirling hail storm which devastated their crops.

Alvin Beagan of Johnston's River said, "Two thirds of my 74 acres have been wiped out. If this had been harvest time, I would estimate I lost $150 an acre."

Mr. Beagan's four plots of land, one of which he rents, were planted in grain crops.

"Pointing to one of them he said, "The hail broke the stalks. They should have been four inches. Now they're useless."

He said he was further handicapped by a late planting season.

"It doesn't give us much chance for it to recover. There is an outside chance, but I doubt it."

WIPED OUT

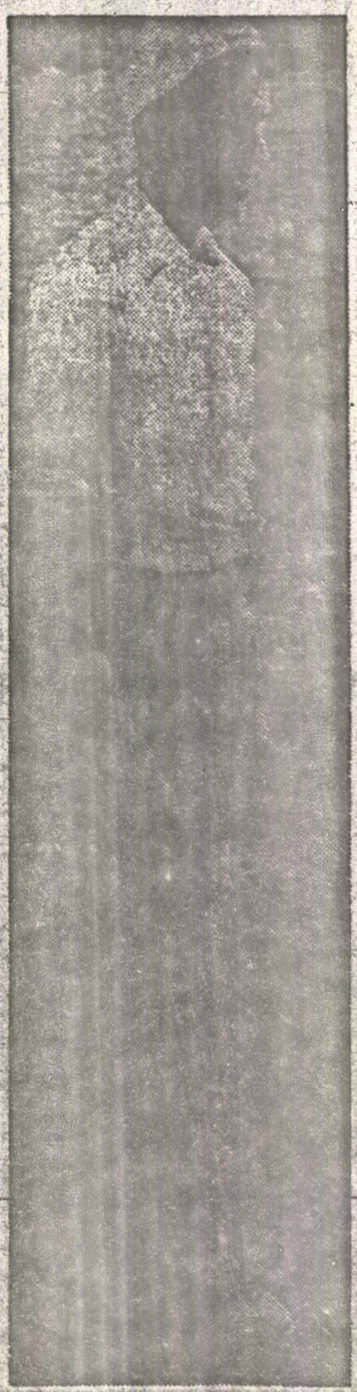
Peter Driscoll, a teacher who maintains a market garden to supplement his income at Johnston's River, said he was wiped out.

"The potatoes, lettuce, turnips, corn, rhubarb, everything was destroyed. It's as if the fields were raked with machine and gun fire," he said. "The paint around my window frames were chipped away. I thought surely the house and us in it would blow away."

Charlie Power of Mermaid said a number of farmers had met with Lloyd Palmer, deputy minister of agriculture, Friday.

"We came away with the impression the government is dragging its feet," he said.

Mr. Proctor said, "He told us the government would meet next week. That doesn't do us much good."



AL

"The government is slow enough," he said, "but if it doesn't get acting, it will leave us guessing."

Mr. Power said he was going to sell his $12,000 combine next week and maybe a tractor.

"They're no use to me," he said. "I don't have any crops to harvest. The storm took care of that."

None of the farmers had crop insurance.

"We've never had a storm like this in living memory," said Mr. Practor. "It was a freak, an act of God."

Because of this he said farmers never considered it.

"The premiums are just another expense and we don't need it, especially when these things rarely happen, he said.

COMPENSATION NEEDED

Mr. Proctor said if the area is not declared a disaster area which would give the farmers 90 per cent of their losses, they would need sufficient compensation to stay in the business.

"I'm carrying a big debt now. With my loss, banks won't talk to me, he aid.

"I have no choice, if the money isn't coming, I'll have to sell out."

Although Mr. Beagan said he would be able to weather the storm, the younger farmers said they were carrying too much debt in equipment and overhead to float.

"My father from Hunter River came down after the torm," said Mr. Proctor, "and he could not believe the damage we had. He'd never seen anything like it."

"When Palmer came down, he couldn't believe it either," said Mr. Power. "I was showing him my crops of grain which should have been four inches high and which the storm cleaned right out, and he was down on his hands and knees looking at it. He couldn't believe it."

Charlottetown Guardian: Monday July 8 '74
Storm Date: Wed July 3 '74

Farmers Want Storm Area Declared Disaster Zone

BY ROD LAMB

"It was an act of God," said Earl Proctor describing Wednesday's storm.

"It was a freak. Never in the living memory of anyone here, could a storm as bad as this be recalled."

A farmer in the community of Mermaid five miles southeast of Charlottetown, Mr. Proctor said he was "wiped out."

"I lost $35,000 worth of income in the storm," he said. "It destroyed everything." "I lost all my potatoes, mixed grain and hay. The hail levelled everything."

Mr. Proctor said he was only three weeks away from digging his potatoes.

"Everything had been done. Plowing, seeding spraying, all we had to do was wait. Now with the storm, we've lost the crop."

HIT HARD

Other farmers in the center of Queens County which had been hard hit by the hail storm echoed similar sentiments.

Alvin Beagan of Johnston's River said two-thirds of his 74 acres of mixed grain had been wiped out.

"If this had been harvest time, I would have had made $150 an acre return," he said. "The grain should be four inches high. Now their stalks are broken and I doubt if they will grow."

"It was a late planting," he said. "Depending on the kind of fall we get, there is an outside chance it might grow back but it depends on the weather."

Mr. Beagan said there were still inches of hail stones lying along the lower edge of one of his fields in testimony to the amount of hail which fell.

"People don't believe the amount of damage we received," said Mr. Proctor. "We had eight barns down in the area."

Although Mr. Proctor had one of his sheds destroyed by the storm, he said the crops were his main concern.

"None of us had insurance on our crops," he said. "We've never had a storm like this before. Most of us consider the premiums an additional expense."

Mr. Beagan and Charlie Power of Mermaid, another farmer, both said they didn't carry insurance on their crops for the same reason.

DRAGGING FELT

"We met with the provincial government earlier today (Friday)" said Mr. Proctor. "After our meeting with Lloyd Palmer (deputy minister of agriculture) we were left with the impression the government was dragging its feet."

He said the government wouldn't do anything until next week.

"We want the government to declare this area a disaster zone which will make us eligible to receive federal funds."

If the area were declared a disaster area, the farmers could receive up to 90 per cent of their losses in compensation said Mr. Proctor.

"If I don't know soon, I will have to throw in the towel," he said. "If you don't have money, its like looking down the barrel of a loaded gun."

Mr. Proctor said the banks won't grant loans to farmers who are carrying debts from previous years and who have lost their crops.

SELLING MACHINERY

Mr. Power said he was going to sell his $12,000 combine next weeks and maybe a tractor.

"They're no good to me," he said. "I don't have any crops to harvest." "I had 200 acres of mixed grains devastated."

Peter Driscoll of Johnston's River and a teacher who supplements his income by a seven-acre market garden said, "it looks as if the fields were riddled with machine gun bullets."

"I don't know what I am going to do for income," he said. "My wife doesn't work, and I'm off for the summer."

Mr. Beagan said he would be able to weather the storm because he had been farming longer than the rest.

"I've got a son helping me," he said. "Plus I don't have the debts these younger fellow have, who got into it (farming) by taking loans from the bank."

If federal funding is not granted said Mr. Proctor, "we will need more compensation than just for our seed and fertilizer. I owe money on my equipment and the farm."

"I have to support a family too," he said.

Farmers Claim Storm Damage Underestimated

Two farmers who sustained damage in last week's wind storm say estimates of farm losses have been underestimated.

They did not wish to be named but said in an interview that they feel the original estimate of $1 million is too low because it only includes the value of insurance claims.

"Many people didn't have any insurance at all on crops, for instance. My father is 75 and he says he has never seen anything like this, so people don't insure against such things," one man said.

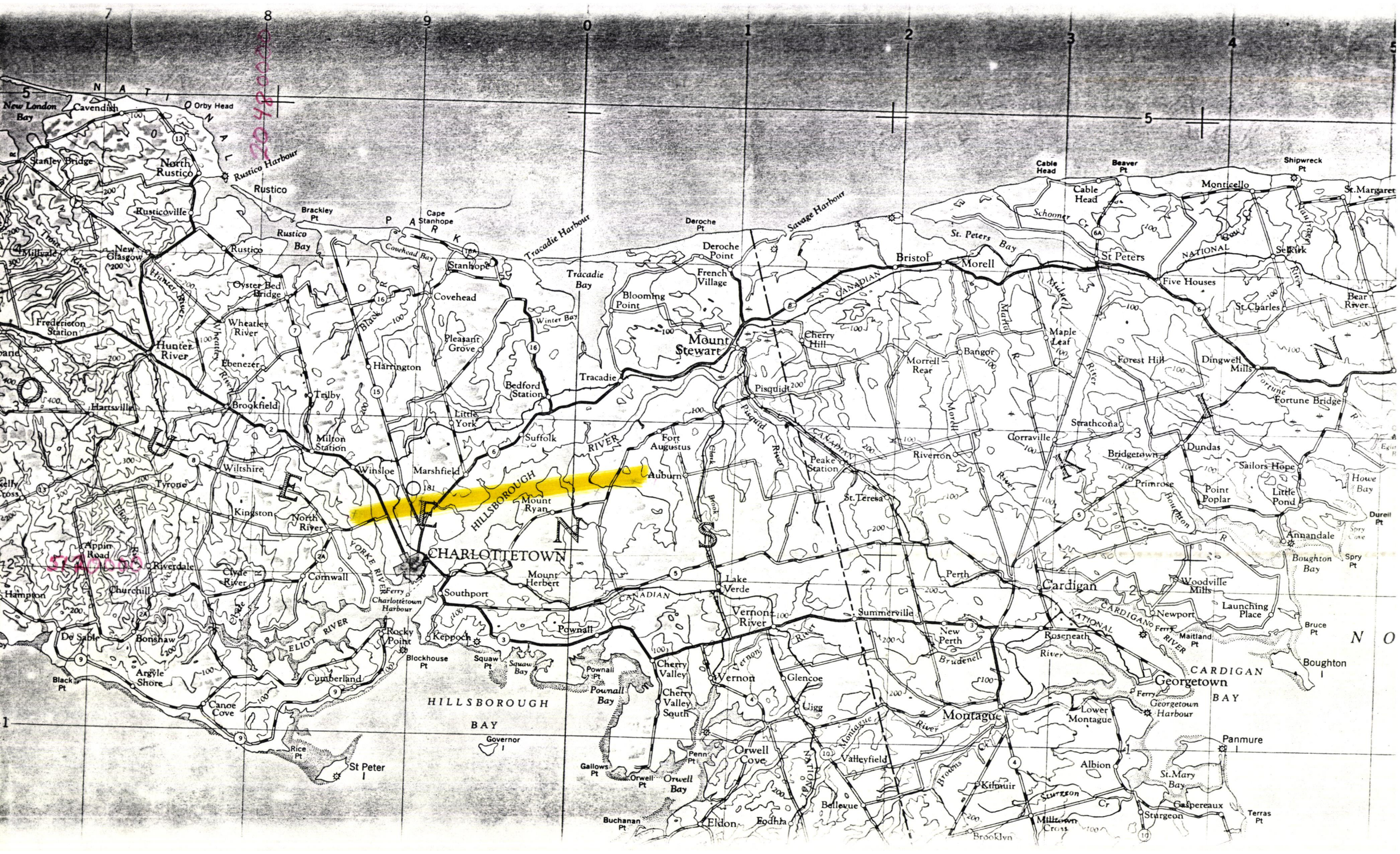
A Milton area farmer said he will be "on the rocks" unless some form of disaster assistance is forthcoming from government.

He estimated his loss at $15,000 in corn alone and a $5,000 silo was destroyed in winds that took paint off his house. He said he paid $3,000 for the silo in 1963 and doubted he could replace it for "anything near that at today's building prices."

One of the farmers, from Marshfield, said when the storm and accompanying hail struck, his cattle immediately ran for a nearby river. He theorized that the animals were attempting to outrun the hailstones which were "as big as ping pong balls."

He suffered no livestock loss but said neighbors will have to dispose of some cows that suffered udder injuries while running through barbed wire fences.

He also told of a group of oyster fishermen crossing the Hillsborough river at the time of the storm. He said they were not able to take shelter on the beach and had to bury their faces in their hands. The farmer said one fisherman's back was completely bruised from the bombardment of hailstones "like he'd been beaten with a stick".


NATIONAL
New London Bay
Cavendish
Orby Head
Stanley Bridge
North Rustico
Rustico Harbour
Rustico
Rusticoville
Brackley Pt
Cape Stanhope
PARK
Rustico Bay
Covehead Bay
Tracadie Harbour
Deroche Pt
Savage Harbour
Deroche Point
Millvale
New Glasgow
Trout River
Oyster Bed Bridge
Stanhope
Covehead
Tracadie Bay
French Village
Bristol
Morell
St. Peters Bay
Cable Head
Beaver Pt
Shipwreck Pt
Monticello
St. Margaret
St Peters
Selkirk
Five Houses
St Charles
Bear River
Fredericton Station
Hunter River
Wheatley River
Ebenezer
Harrington
Tilby
Brookfield
Hartsville
Pleasant Grove
Winter Bay
Blooming Point
Mount Stewart
Cherry Hill
Bedford (Station
Tracadie
Pisquidit
Morrell Rear
Bangor
Maple Leaf
Forest Hill
Dingwell Mills
Fortune Bridge
Little York
Suffolk
Milton Station
Fort Augustus
Peake Station
Riverton
Corraville
Strathcona
Bridgetown
Dundas
Sailors Hope
Primrose
Point Poplar
Little Pond
Howe Bay
Durell Pt
Annandale
Spry Cove
Spry Pt
Boughton Bay
Wiltshire
Winsloe
Marshfield
Auburn
Tyrone
Kingston
North River
Mount Ryan
HILLSBOROUGH RIVER
St. Teresa
Appin Road
Riverdale
Clyde River
Cornwall
Churchill
Hampton
YORKE RIVER
Ferry
Charlottetown Harbour
CHARLOTTETOWN
Mount Herbert
Southport
Lake Verde
Perth
Cardigan
Woodville Mills
Launching Place
Newport
Maitland Pt
Bruce Pt
Boughton I
Rosenath
New Perth
Brudenell River
Summerville
Vernon River
Pownall
Rocky Point
Keppoch
Blockhouse Pt
Squaw Pt
Squaw Bay
Pownall Pt
Pownall Bay
Cherry Valley
Cherry Valley South
Vernon
Glencoe
Uigg
Montague
Lower Montague
Georgetown
Georgetown Harbour
CARDIGAN BAY
De Sable
Bonshaw
Argyle Shore
Black Pt
Canoe Cove
Cumberland
ELIOT RIVER
HILLSBOROUGH BAY
Governor I
Rice Pt
St Peter I
Penn Pt
Orwell Cove
Orwell Pt
Orwell Bay
Gallows Pt
Valleyfield
Kilmuir
Albion
Panmure I
St.Mary Bay
Gaspereaux
Sturgeon
Terras Pt
Buchanan Pt
Eldon
Bellevue
Brooklyn
Millcrown Cross