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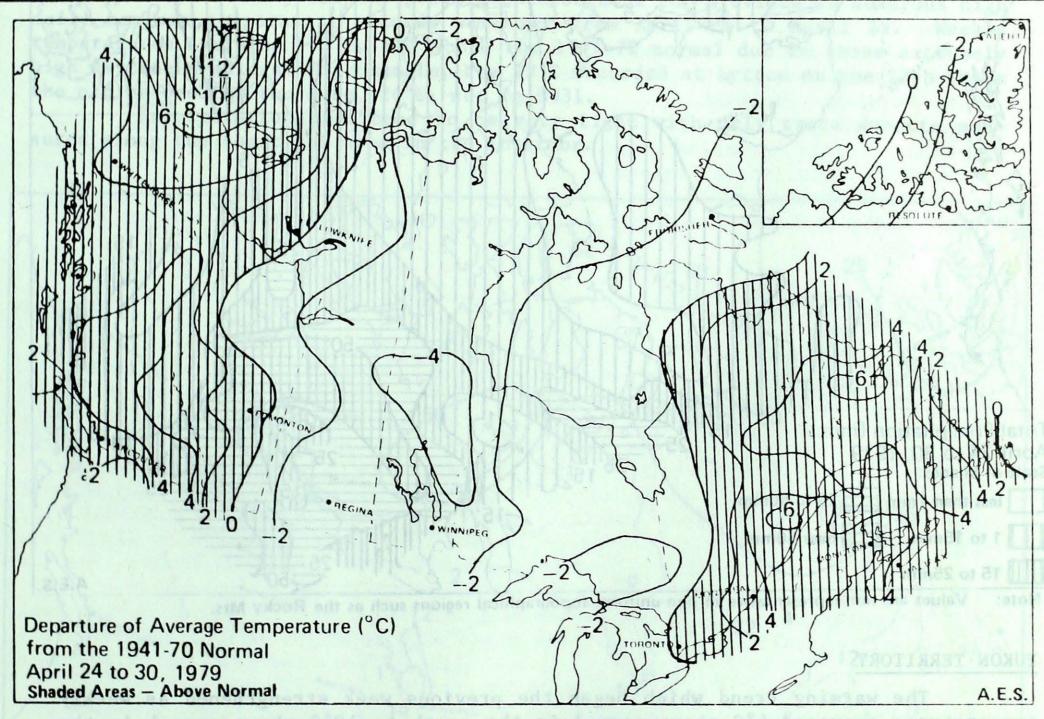
A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSFICURINGS

THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4

MAY 4, 1979

VOL.1 NO.12



WEATHER HIGHLIGHTS FOR THE WEEK - APRIL 24 - 30, 1979

Widespread Flooding Increases in Intensity Across Canada

The onset of spring has produced significant flooding of major rivers and tributaries in northern Alberta, Saskatchewan, Manitoba, Ontario, Quebec and New Brunswick. Rapid depletion of the snowpack and above normal precipitation appear to be the major factors in most of the flood occurrences.

Synoptically, a major atmospheric ridge which drifted slowly eastward to the interior of British Columbia produced exceptionally dry, mild weather throughout the Yukon, Mackenzie Valley, British Columbia and western Alberta.

A deepening atmospheric trough of low pressure situated over the northern Manitoba - northwestern Ontario border caused cool, showery weather to prevail over most of central Canada and Ontario from about April 25 onwards.

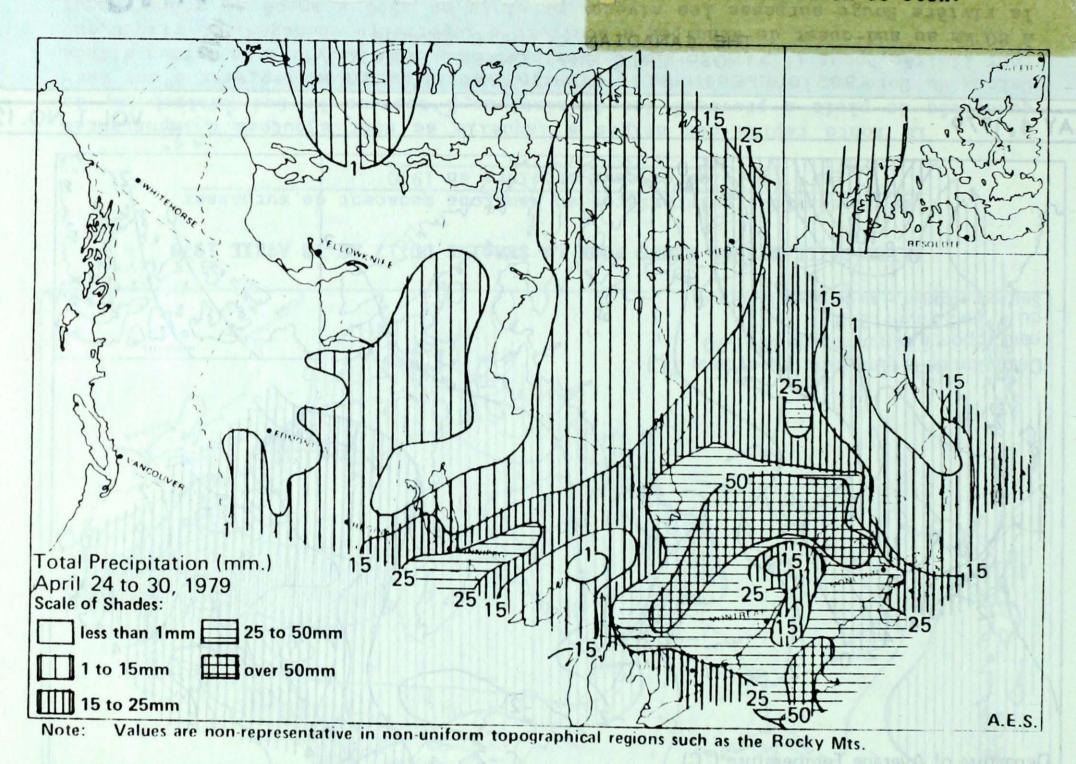
An atmospheric ridge of high pressure which earlier in the period had caused temperatures to soar into the mid 20's in Ontario moved through Quebec to

NOTE:

The data shown in this publication are based on unverified reports from approximately 170 Surface Synoptic reporting stations of the Atmospheric Environment Service.

dominate the weather in the Atlantic regions during most of the latter half of the period.

A developing disorganized low pressure system which moved eastward out of the Great Lakes April 27 produced heavy precipitation in the Baie-Comeau - Sept Isles area in Quebec and in upper New Brunswick from the 27th to 30th.



YUKON TERRITORY

The warming trend which began the previous week strengthened as weekly temperatures averaged 4°C above normal in the south to 10°C above normal in the north. The maximum temperature of 20.5°C recorded at Whitehorse on the 30th broke the old high maximum for the date, 19.4°C, set in 1976.

The snowpack rapidly deteriorated during the past two weeks. On April 16th the reported snow depth on the ground at Dawson Airport was 76 cm; on the 30th no snow was reported.

For the second consecutive week all principal stations reported no precipitation.

NORTHWEST TERRITORIES

Weekly temperature anomalies in the Mackenzie Valley strengthened considerably from the past week as departures from the 1941-70 normal ranged from +2°C in the south to +12°C in the Mackenzie Delta. Temperatures rose to 14°C at Norman Wells on the 28th, Fort Simpson on the 28th and 29th, and 10°C at Inuvik on the 28th and 29th.

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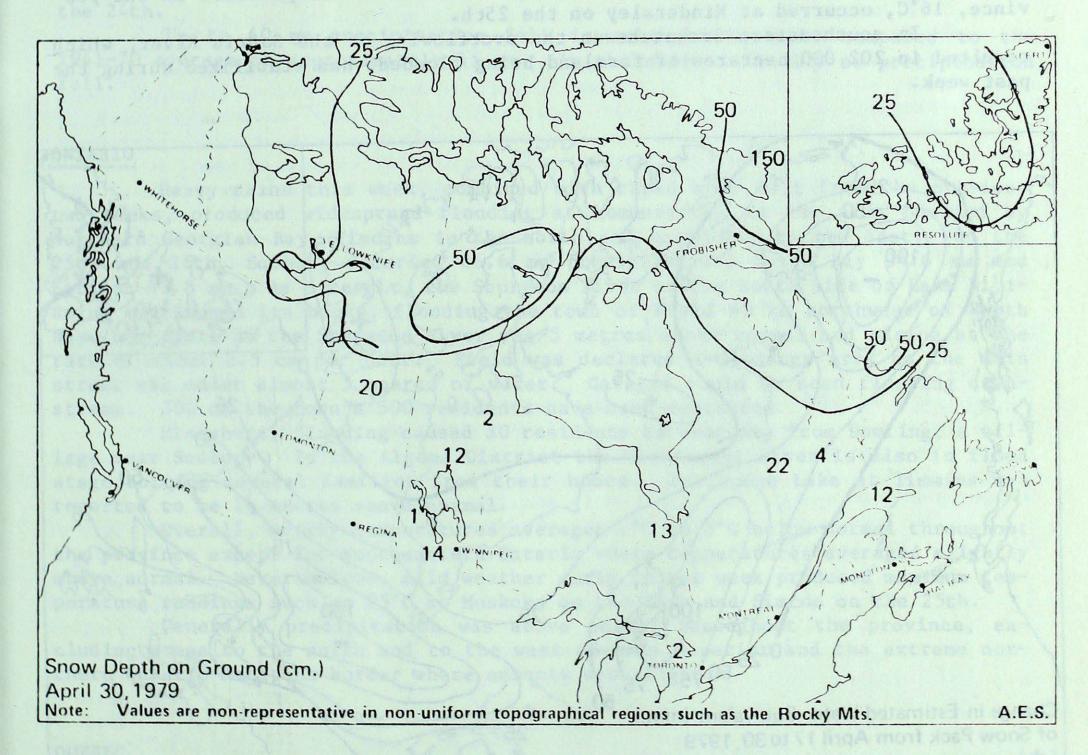
Weekly temperatures averaged 1°C to 3°C below normal throughout the central and eastern portions of the Canadian Arctic. Temperatures dipped to -31°C at Cambridge Bay on the 24th and Hall Beach on the 25th.

Precipitation was seasonably light throughout most of the territories although heavy snow at Cape Dyer resulted in the snow depths on the ground increasing to 150 cm.

BRITISH COLUMBIA

Very warm dry weather prevailed throughout the province as numerous high daily maximum temperature records were set from April 26 to April 29. Weekly temperatures averaged 3°C to 6°C above the 1941-70 normal due to these extremely high daytime readings. For example, the 29°C recorded at Lytton on the 27th broke the old record for the date, 26°C, set in 1931.

Precipitation continued to be very light with only trace amounts measured along the coast and none in the interior.



ALBERTA

Weekly temperatures averaged 2°C to 4°C above normal in west central and southwestern portions of the province and near normal elsewhere, as the weather warmed considerably from the previous week. Precipitation was very light with some stations measuring only 1 mm to 3 mm and others none, compared to the 1941-70 average of 5 mm to 10 mm.

Flooding forced the evacuation of residents in a low lying trailer court

along the Clearwater River in Fort McMurray as ice, which moved out of the Clearwater, began piling up at the confluence of the Athabasca River and resulted in high water levels upstream. Aerial surveillance is being conducted with the possibility of bombing pressure points to free the ice jam. A similar situation developed at the junction of the Smoky and Peace Rivers at the town of Peace River. Water levels had receded by May 1 but the situation is being closely watched.

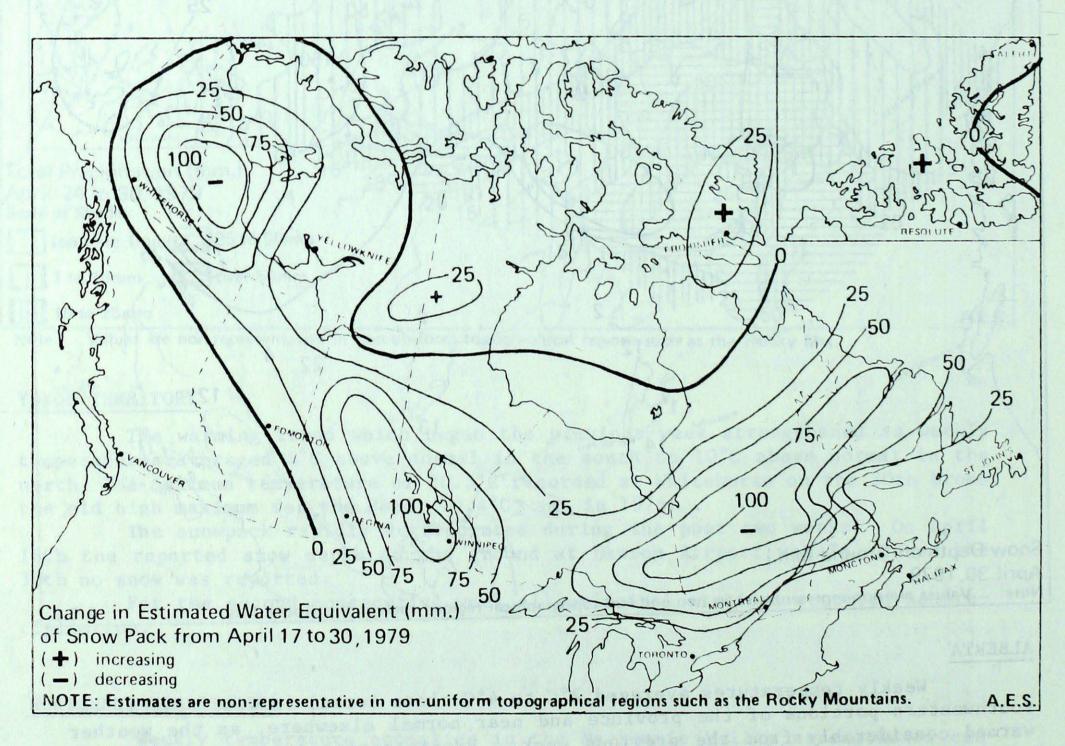
Alberta Agriculture reports intermittent spring field work beginning only in southern Alberta. Elsewhere, excessive soil moisture conditions are hampering large scale field work.

SASKATCHEWAN

Precipitation was generally below normal for the past week except in the Regina-Estevan and Prince Albert-Saskatoon areas where amounts up to 22 mm and 10 mm, respectively, fell.

Below normal temperatures prevailed, particularly in southern Saskatchewan where the anomalies ranged to -4°C. The warmest temperature in the province, 16°C, occurred at Kindersley on the 25th.

In southeastern Saskatchewan the overflowing of the Souris River, which resulted in 202,000 hectares of farmland being flooded, has stabilized during the past week.



MANITOBA

As of May 1, 1979 the Red River appeared to be cresting a few days earlier than expected in southern Manitoba and at flood levels slightly higher than 1950 levels, as the Red River Valley took on the appearance of a large lake. Approximately 1550 square kilometres of the valley were inundated. Ring dikes protecting several towns to the south of Winnipeg appeared to be holding up. Winnipeg, of course, is protected by the Red River Floodway built in the 1960's at a cost of 63 million dollars.

On April 29, the Mayor of Morris estimated that 1 million dollars worth of grain had been lost already. In neighbouring North Dakota and Minnesota, the U.S. Corps of Engineers stated that the flooding of 334,000 hectares has resulted in approximately 59 million dollars damage to property, crops and farm production so far.

Perusal of climatological data indicates that precipitation has been well above normal along the Red River since February, particularly in the headwaters area near Fargo. An extremely cold winter, accentuated by the lack of mid-winter thaw and combined with the occurrence of a rapid depletion of the snowpack due to sudden mild weather, contributed to the Red River flood of 1979.

This week temperatures have averaged 2°C to 5°C below the 1941-70 normal throughout the province. The warmest temperature, 12°C, occurred at Thompson on the 24th.

Up to 40 mm precipitation fell in southern Manitoba compared to the 1941-70 average of approximately 15 mm. In the north virtually no precipitation fell.

ONTARIO

Heavy rains this week, combined with rapid snow melt from the previous two weeks, produced widespread flooding at communities in the area bounded by northern Georgian Bay, Timmins in the north and North Bay to the east. On the 25th and 26th, Sudbury recorded 66.6 mm precipitation, North Bay 34.6 mm and Earlton 43.8 mm. As a result, the Sturgeon River on the north side of Lake Nipissing overflowed its banks, flooding the town of Field 40 km northwest of North Bay. On April 30 the Sturgeon River was 5 metres above normal and rising at the rate of about 2.5 cm per hour. Field was declared a disaster area as the main street was under almost 3 metres of water. Garages could be seen floating downstream. 300 of the town's 500 residents have been evacuated.

Elsewhere, flooding caused 30 residents to evacuate from Dowling, a village near Sudbury. In the Algoma District the Mississagi River is also in flood stage forcing several families from their homes. Porcupine Lake at Timmins was reported to be 12 metres above normal.

Overall, weekly temperatures averaged 1°C to 3°C below normal throughout the province except for southeastern Ontario where temperatures averaged slightly above normal. Nevertheless, mild weather early in the week produced maximum temperature readings such as 25°C at Muskoka on the 24th and Simcoe on the 25th.

Generally precipitation was above normal throughout the province, excluding areas to the north and to the west of Lake Superior and the extreme northern Ontario-Manitoba border where amounts were light.

QUEBEC

Many parts of the province enjoyed a warm spell near the end of the week. Quebec City recorded 25°C on the 26th which is the warmest daily maximum temperature for April since 1945 and, on the same day, the temperature rose to 24°C at Roberval, 23°C at Rivière du Loup and 22°C at Bagotville. In all, mean daily temperatures were 3°C to 6°C above normal for the week in the eastern and central portions of the province.

From the 27th to the 30th, Sept-Iles recorded 125.2 mm of rain which

brings the total rainfall for April to 196.9 mm, breaking the old record of 156 mm set in 1973. Thus both March and April have been record wet months at Sept-Iles. The heavy precipitation was felt on both sides of the St. Lawrence while Gaspé only recorded 4.2 mm of rain last week. As a result of floods, the Quebec Ministry of Transportation advised that portions of the highways in eastern Quebec had to be closed temporarily, namely Highway 138 towards Sept-Iles and Highway 132 along the north shore of the Gaspé peninsula.

The residents of Dumas, 100 kilometres from Chicoutimi, were placed on alert over the weekend as the swollen waters of the Little Saguenay River threatened to spill over and possibly break an old wooden dam. 1300 people are threatened and, as a safety measure, a score of families who were particularly endangered have been evacuated, according to an on-site spokesman for the Civil Defence.

ATLANTIC PROVINCES

In New Brunswick 30 mm to 70 mm of rain during the period April 28-30 and snowmelt caused by mild temperatures resulted in a state of emergency being declared on the 30th by the Mayor of Fredericton, as the flooding Saint John River forced an estimated 100 families from their homes. Several thousand acres of rich farmland were reported under water and some highways were closed including the Trans-Canada Highway east of Fredericton. People were urged to stay home from work and school; all but essential government offices were closed.

With the exception of near normal conditions in coastal Labrador and the Atlantic coast of Newfoundland, weekly temperature anomalies ranged from +2°C to +6°C throughout the Atlantic regions. Several locations reported maximum temperatures in the low 20's on the 27th and 28th. CFB Greenwood recorded 23°C on the 28th thus setting a new record high maximum for the date.

Before the arrival of warm temperatures in Newfoundland some very cool weather prevailed until the 27th. St. John's Airport reported maximum temperatures of -1°C on the 25th and 26th, the latter being a record low maximum for that date.

On the 28th Hopedale, Labrador reported a maximum temperature of 11.8°C, establishing a new record high maximum for the month of April.

Besides New Brunswick, above normal precipitation fell over eastern Nova Scotia. Very little precipitation occurred over Newfoundland, eastern Labrador, Prince Edward Island and Cape Breton Island.

In Newfoundland sea ice has been observed as far south as Conception Bay. Most ice is confined to coastal areas due to on-shore winds.

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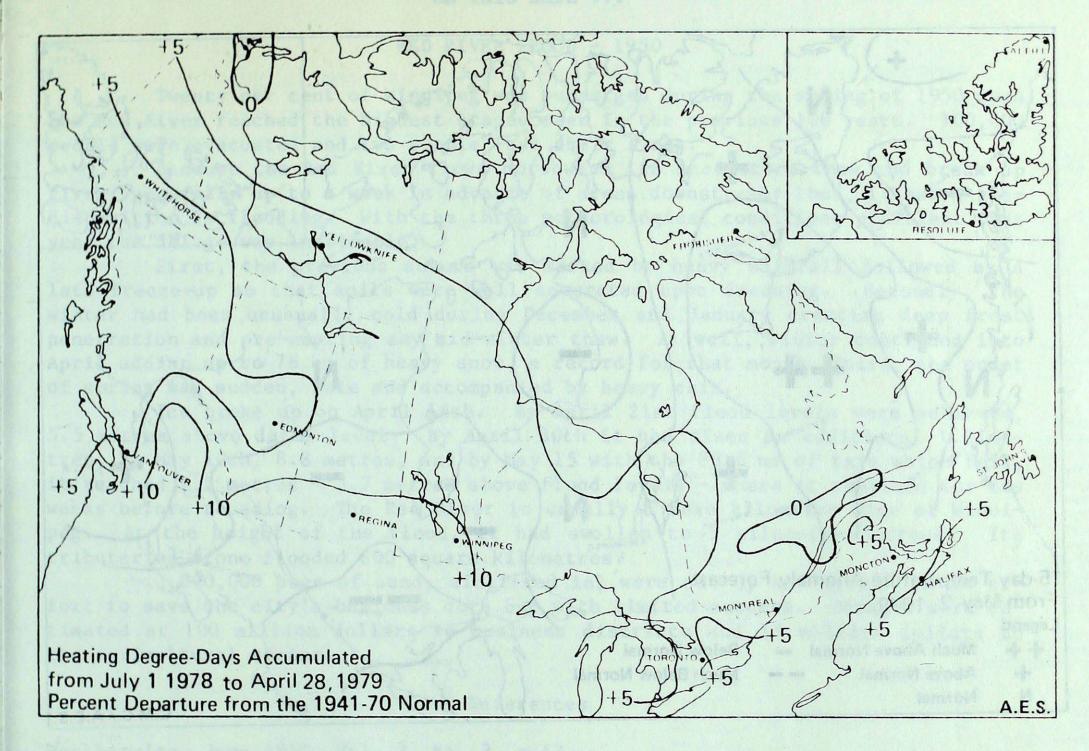
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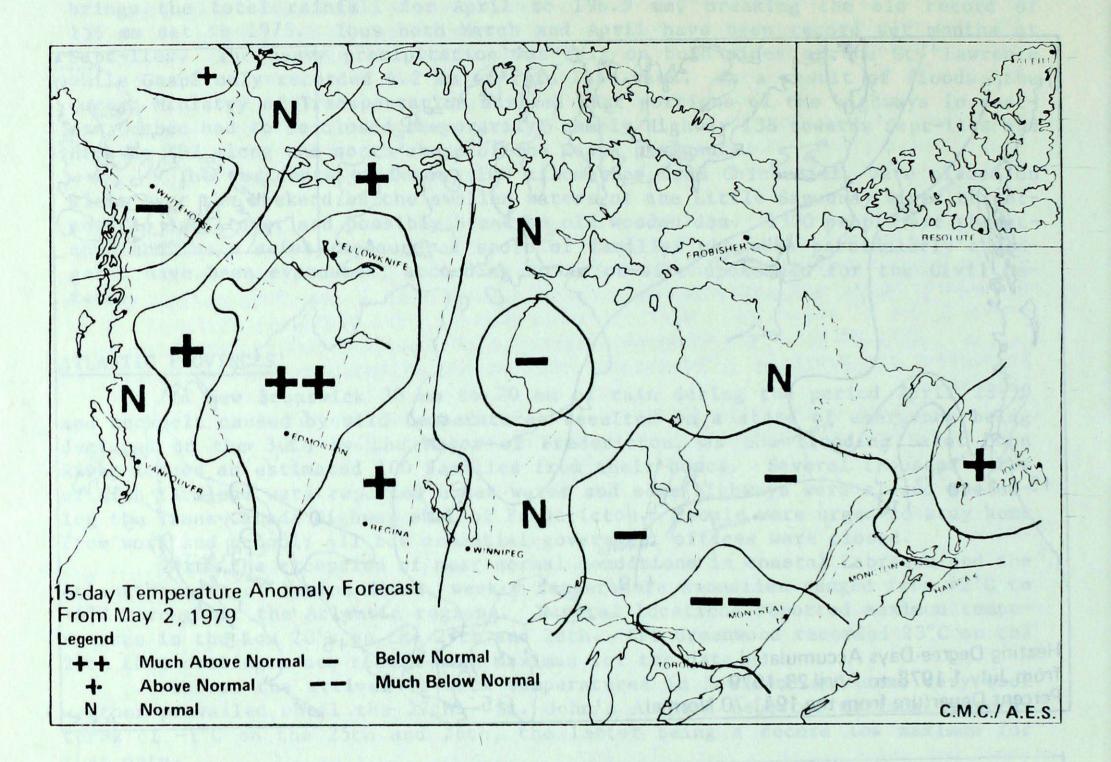
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HEATING DEGREE-DAY SUMMARY TO APRIL 28, 1979



STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	1128.0	-33.0	11395.5	355.0	103
Inuvik	919.0	7.0	9045.5	-246.5	97
Whitehorse	490.0	-25.0	6572.5	230.5	104
Vancouver Int'l A	265.0	9.0	2884.5	152.5	106
Edmonton Mun A	478.5	77.5	5404.5	166.5	103
Calgary Int'l A	479.5	64.5	5276.5	374.5	108
Regina	562.5	141.5	6165.0	596.0	111
Winnipeg Int'l A	532.0	111.0	6255.5	698.5	113
Thunder Bay	488.0	43.0	5816.0	526.0	110
Windsor	310.0	29.0	3582.5	176.5	105
Toronto Int'l A	356.5	26.5	4004.0	175.0	105
Ottawa Int'l A	338.0	-15.0	4513.5	83.5	102
Montreal Int'l A	338.5	-12.5	4476.0	229.0	105
Quebec	383.5	-35.5	4967.5	217.5	105
Saint John, N.B.	394.5	-26.5	4378.5	54.5	101
Halifax	393.0	-2.0	3890.0	202.0	105
Charlottetown	427.0	-15.0	4291.0	114.0	103
St. John's, Nfld.	493.0	16.0	4343.0	185.0	104

15 DAY TEMPERATURE ANOMALY FORECAST



Forecast Method

Analogue technique based on point prediction at 70 Canadian stations.

Temperature Scale

Each temperature class is designed to contain 20% of the historically observed 15 day means pertinent to specific location and time of year:

Station	Current Temperature Anomaly (AT) Forecast								
Dawson	Normal	$(-1.5^{\circ}C < \Delta T < +0.5^{\circ}C)$							
Frobisher	Normal	$(-0.7^{\circ}C < \Delta T < +0.7^{\circ}C)$							
Trenton	Much Below Normal								
Vancouver	Normal	$(-0.3^{\circ}C < \Delta T < +0.3^{\circ}C)$							

Note: Anomaly denotes departure from the 1949-73 mean.

ON THIS DATE ...

RED RIVER FLOOD - 1950

Twenty per cent of Winnipeg was submerged during the spring of 1950 when the Red River reached the highest stages ever in the previous 100 years. 100,000 people were evacuated and two people lost their lives.

Because the Red River flows northward its headwaters thaw and break up first, generally up to a week in advance of areas downstream: thus, it has a pre-disposition to flooding. With the three meteorological conditions prevalent that year the deluge was inevitable.

First, the previous autumn was marked by heavy rainfall followed by a late freeze-up so that soils were well saturated upon freezing. Secondly, the winter had been unusually cold during December and January creating deep frost penetration and pre-empting any mid-winter thaw. As well, winter continued into April adding up to 76 cm of heavy snow, a record for that month. Third, the onset of spring was sudden, late and accompanied by heavy rain.

Ice broke up on April 16th. By April 21st flood levels were achieved, 5.5 metres above datum level. By April 30th it had risen an additional 1.2 metres; by May 10th, 8.8 metres, and by May 15 with the 88.6 mm of rain which fell, it reached 9.2 metres - 3.7 metres above flood levels - where it remained for two weeks before receding. The Red River is usually a mere kilometre wide at Winnipeg. At the height of the flood, it had swollen to 5 kilometres across. Its tributaries alone flooded 600 square kilometres.

3,000,000 bags of sand, airlifted in, were set up as "dykes" in an effort to save the city's business core but with limited success. Damages were estimated at 100 million dollars to business districts and 15 million dollars to the agricultural sector.

References

Weatherwise, June 1950, Vol. 3, No. 3, p.63.
Boughner, C.C., Weather, July 1950, Vol. 5, No. 7, "Red River Flood, Spring 1950".

Winnipeg, Man.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May 1-15
	1949	1949	1949	1950	1950	1950	1950	1950
Mean Temp.	5.1	-0.9	-15.7	-26.6	-17.2	-11.0	-1.4	5.4
Dep. from Normal	-0.1	4.7	-1.5	-7.6	-0.3	-2.2	-4.5	-4.0
Total Rain (mm)	128.0	8.9	1.3	NIL	0.5	TRACE	2.5	
Total Snow (cm)	16.0	23.9	39.6	46.5	17.0	9.4	40.9	
Total Precip. (mm)	144.0	32.8	40.9	46.5	17.5	9.4	43.4	88.6
% of Normal	411	118	175	210	82	32	131	384
Fargo, N.D.								
rango, mibi								
Mean Temp.	7.7	1.2	-11.8	-21.7	-14.6	-6.3	0.8	
Dep. from Normal	0.8	3.9	-0.4	-6.1	-1.3	-1.1	-3.9	
Total Snowfall (cm)	TRACE	13.5	27.4	37.8	6.9	25.9	31.5	
Total Precip. (mm)	70.1	20.1	33.3	34.5	6.6	56.1	45.5	
% of Normal	163	88	182	203	38	219	82	

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. APRIL 24, 1979

	Tem	pera	ture	(°C)	Precip	o. (mm)	Typyn off or b	mperature (°C) Precip. (mm)			Precip		SAME BANGESTA	Temperature (°C)						
Station	Average	Departure from Normal	Extreme	Extreme	Total	Departure from Normal	Station	Average	Departure from Normal	_	Extreme	Total	Departure from Normal	Station	Average	Departure from Norma	Extreme	Extreme Minimum	Total	Departure from Norma
BRITISH COLUMBIA							Jasper	8	3	22	- 3	0.0	- 5.5	Timmins A	2	7.3	35.5	No. of the last of	27.6	15.
Abbotsford	12	3	24	2	0.0	-26.3	Lethbridge A	8	2	1000	- 1		- 9.7	Toronto Int'l A Trenton A	10	Marie Control	22 22	- 1 - 1	21.6	6.
Blue River	M	M	M	M	M	M	Medicine Hat A	8	0		- 1 - 5		- 7.5 - 4.7	Trout Lake	- 2	- i	7	-10	6.0	- 0.
Bull Harbour	8	0	16 26	1	1.2	-25.5 - 8.2	Peace River A Red Deer A	7	1		- 3		- 8.5	Wawa A	2	M	15	- 6	40.2	
Castlegar A	13	4	23	- 2	0.2	- 7.2	Rocky Mountain House	6	2		- 4	6 Table 1 Table 1	-11.8	Wiarton A	7			- 1	23.0	4.
Cranbrook A Comox A	12	3	21	4	0.0	-13.4	Vermilion A	5	- 1	757	- 3	0.0	- 8.2	Windsor A	10	- 1	21	3	21.4	- 0.
Estevan Point	M	M	M	M	0.3	-53.8	Whitecourt	6	2	18	- 3	0.0	-11.4	QUEBEC						
Fort Nelson A	8	4	19	- 2	0.0	- 6.2	SASKATCHEWAN	-		1 - 1			Ren	Bagotville A	11	6	1	1	12.7	2.
Fort St. John A	7	3	18	- 1	0.0	- 6.5	Broadview	2	- 3	9	- 4		- 6.1	Baie Comeau	5	6	11 9	- 3 -18	92.7	84.
Kamloops A	14	4	27	1	0.0	- 4.3	Buffalo Narrows	1	M		- 7	0.0	M	Border Chibougamau	5				52.2	٥.
Lytton	16	5	29	2	0.0	- 5.7	Cree Lake	- 3	M	- SV	-12 - 2	21.6	12.7	Fort Chimo A	- 4	2		-17	19.2	15.
Penticton A	13	3	25	0	0.0	7.6	Estevan A Hudson Bay	2	- 4	11	- 4	21.0 M	M	Gaspé A	8	4	21	- 3	4.2	0.
Port Hardy A	10	2	20	1	0.0	-24.8	Kindersley	5	1 1957		- 3	1.4	- 5.7	Grindstone Island	5	3	A CONTRACTOR		2.4	- 9.
Prince George A	10	4	23	- 2	0.0	-38.0	La Ronge A	0	1190		- 7	1.4	- 1.5	Inoucdjouac	- 9	- 2		-21	9.2	6.
Prince Rupert A	8	4	25	- 3		- 6.5	North Battleford A	4	- 2	12	- 2	0.8	- 5.3	Maniwaki	9	2		- 2	41.6	28.
Quesnel A Revelstoke A	12	3	25	- 1	0.0	-12.5	Prince Albert A	2	- 3	10	- 6	12.7	6.2	Matagami A	M	M	The second	- 5	M	
Smithers A	12	6	24	- 1	0.0	- 7.2	Regina A	3	- 4		- 6	6.0	- 3.7	Mont Joli A	9	5	21	- 3	18.4	10.
Terrace A	12	5	25	2	0.0	-14.0	Saskatoon A	3	- 3		- 4	7.7	1.1	Montreal Int'l A	12			1	44.4	26.
Vancouver Int'1 A	13	3	21	5	0.0	-14.1	Swift Current A	4	- 2		- 4	2.1	- 8.8	Natashquan A	3		1000000	An	1.2	-14.
Victoria Int'l A	12	2	19	4			Uranium City	- 3	M	and and the	-11	0.0	M	Nitchequon	5		13	1.00	23.8	16.
Williams Lake A	11	5	28	- 3	0.0	- 3.8	Wynyard	2	- 3	AND THE RESERVE OF THE PARTY OF	- 4 - 3	3.1	- 6.6 - 7.7	Port Menier Poste de la Baleine	5		13	- 3	24.1	18.
YUKON TERRITORY					0.0	2 2	Yorkton A	3	- 3	10	- 3	0.3	- /./	Québec A	12		100000000	_	25.2	9.
Dawson A	7	4	20	- 3	0.0	- 2.3	MANITOBA Bissett	2	м	11	- 7	13.9	м	Riviere du Loup	10		1 3 m	111 - 07/6	24.0	14.
Mayo A	6	4	19	- 6	0.0	- 3.8	Brandon A	3	131 S. H. (639)	9	- 4	20.7	8.8	Roberval A	10	1 6377	24		3.1	- 2.
Watson Lake A Whitehorse A	8	6	21	- 3	0.0	- 1.5	Churchill A	-10	- 3	7	-19	0.2	- 4.4	Schefferville A	0	4	10	-17	40.8	34.
NORTHWEST TERRITORIES	-						Dauphin A	2	- 4	9	- 4	15.6	4.3	Sept-Iles A	4	3	10	- 5		114.
Alert		- 3	-14	-28	0.0	- 1.7	Gillam A	- 3	M	11	-13	0.0	M	Sherbrooke A	12	6	23	- 3	9.0	- 1.
Baker Lake	-16		- 8	-25	1.0	- 1.9	Gimli	2	- 4	8	- 4	8.7	- 1.5	Val d'Or A	4	- 1	19	- 3	47.4	38.
Cambridge Bay A	-19	- 3		-31	0.6		Lynn Lake	- 3			-16	1.5	1.0	NEW BRUNSWICK	6	2	15	- 3	67.4	58.
Cape Dyer	-16	M	- 4	-25	25.4	M	Norway House	1	M	9 8	- 8 - 3	0.1	22.9	Charlo A Chatham A	11	6		0	53.0	40.
Chesterfield Inlet	-16	- 3	- 8	-25	M	4.6	Pilot Mound	2	- 3		- 5	M	22.9 M	Fredericton A	111		20	200 200	34.0	22.
Clyde	-17	- 2	- 8	-26 -26	6.0	1.3	Portage la Prairie The Pas A	1	- 2	1	- 7	0.0	- 7.1	Moncton A	111		22	0	27.7	13.
Coppermine Coral Harbour	-11 -17	- 4	- 7	-29	1.5	- 2.9	Thompson A	o	0		-11	1.2	- 5.5	Saint John A	10	100	20	0	31.4	5.
Ennadai	-12	- 3	Ó	-23	3.5		Winnipeg Int'l A	3	- 4	The state of the s	- 4	24.2	11.4	NOVA SCOTIA						
Eureka	-23	- 2	-17	-29	0.0	- 0.5	ONTARIO				1101			Greenwood A	11		23		20.2	
Fort Simpson	4	2	14	- 6	0.4	- 4.3	Armstrong A	M	M		-10	M	М	Shearwater A	8	2	15	0.000	17.4	
Fort Smith A	0	- 1	8	- 7	0.0	- 4.0	Atikokan	3	- 1		- 7		-13.0	Sydney A	6	2		- 6	1.4	-21.
Frobisher Bay A	-12	- 2	100 miles	-27	11.7	7.1	Earlton A	3	- 3		- 3	56.1	46.6	Truro Yarmouth A	10	M 4		2	35.3	10.
Hall Beach A	-22	M	1 11 11 11 11	-31	9.1	M	Geraldton	2	- 1	And Add Printers	- 8 - 1	0.4	-12.7 31.4	PRINCE EDWARD ISLAND	10	4	1,	-	33.3	10.
Hay River A	- 1	0	100000	-10	0.6		Gore Bay A	6	- 1	The second	100	18.4	7.1	Charlottetown	10	6	21	0	M	1
Inuvik A	-16	12	W. 10. 1248 (S. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	- 3 -29	0.2		Kapuskasing A Kenora A	3	- 3	All Indiana and the second	The second second	28.2	14.4	Summerside	10	5	21	1	10.8	- 2.
Mould Bay Norman Wells A	1-10	6	14	- 4	0.0	- 3.4	Kingston A	9	o	18	0	M	м	NEWFOUNDLAND		1	July 1			
Resolute A	-22	- 4		-27	0.0	- 1.6	Lansdowne House	0	- 1	9	- 8	23.2	12.7	Battle Harbour	0	1	6		10.4	
Sachs Harbour	М	M	M	-17	2.5	2.2	London A	8	- 2		- 2	20.2	3.8	Cartwright	4	5	18		1.3	
Yellowknife A	- 3	0	7	-12	0.0		Moosonee	- 1	- 2	The state of the s	-11	26.8	16.6	Deer Lake	8	5	22	THE REAL PROPERTY.		-16.
ALBERTA							Mount Forest	M	M			M	M	Gander Int'l A	4	2	18	- 6 - 6	20.3	-11.
Banff	7	4	Land Street	- 4		-10.2	Muskoka A	9	0	180 E III	- 4 - 3	40.7	32.2	Goose A Hopedale	1)1	3	19	I (Desto)	0.4	-13.
Calgary Int'l A	7	2	20	- 3	1.8	TOTAL DRIVERS AND A CONTRACT OF THE PARTY OF	North Bay A Ottawa Int'l A	11				30.0	12.8	St. Anthony	2	M	1.025712000		17.1	1
Cold Lake A Coronation A	4	1	15	- 4	0.0	CONTRACT COST AND	Petawawa A	8	M		- 4	27.6	M	St. John's A	2	- 1	10080110500	- 4	15.7	- 5.
Edmonton Mun. A	7	1	17	- 1	0.0	- 7.8	Pickle Lake	1	- 1	10		33.8	25.9	Stephenville A	8	5	20	- 4	1.0	- 8.
Edmonton Namao A	7	ī	16	ō	0.0	1000	Red Lake A	2	- 4	10	- 7	20.8	11.2	Wabush Lake	2	5	10	-14	19.7	11.
Edson A	7	3	20	- 4	0.0		Simcoe	10	0	25	0	M	M							
Fort Chipewyan	0	- 2	1000	- 8	0.4	F 115 25 CONTROL SERVICE STATE	Sioux Lookout A	3	- 2	10	00000 100000 (3)	25.8	14.7		1					
Fort McMurray A	3	- 1	11	- 4	1.8	- 3.3	Sudbury A	4	- 2	A Complete Land	- 3	82.4	64.3							14
Grande Prairie A	7	2	17	- 1	0.0	- 7.4	Thunder Bay A	4	- 1	12	- 5	3.2	-13.9				-			
	The state of	200		1						9 0					1		The same of			