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INTRODUCTION.

In compiling the present Review the principal data made use of are the telegraphic reports of observations received at this office for the purpose of weather forecasting, and reports by mail from voluntary observers and storm signal agents. For the material used in tracing the paths of areas of high and low pressure in the United States, we are indebted to the Chief of the Weather Bureau, Washington, D.C.

REMARKS UPON THE WEATHER.

The weather of August was chiefly remarkable for the heavy rainfall and low temperature westward from Manitoba and the light rainfall and high mean temperature eastward from Lake Huron to the Atlantic Coast. These abnormal conditions were almost disastrous in some districts, the drought in Ontario doing much damage. Apart from its effect upon vegetation in Ontario and Quebec the weather was fine and enjoyable in Eastern Canada.

In British Columbia the weather was cool, cloudy and wet and altogether exceedingly unpleasant. In some districts thunderstorms were unusually frequent, and in the upper mainland snow fell upon several occasions on the mountain sides. Much damage to grain and other crops was caused by the wet weather.

Throughout the greater part of the North-west Territories the weather was much the same as in British Columbia, it being cool, cloudy and unusually wet. In some places the total rainfall was three times the average amount and the temperature was 7°.0 below average at several stations. Light frost occurred in a few districts but caused no damage, nevertheless farm crops were backward and damage to grain before ripening by later frost was threatened.

The wet weather of the two last mentioned provinces did not extend to Manitoba the rainfall there being about normal; it was however somewhat cooler than usual and light frosts occurred at a few places. Harvesting of grain occurred on or about the 27th, and the farming community generally were jubilant over the condition of their crops.

In Ontario the weather was unusually fine, warm and dry, and although enjoyable it was almost disastrous to agricultural interests. In some the rainfall was only about one fourth of the average, and at three stations no rain fell during the month. Clear days with scorching sun prevailed in southern districts and vegetation had a blighted appearance. In districts contiguous to Lake Superior the rainfall, on the contrary, was well above average and vegetation was in good condition. Light frosts occurred in some places on or about the 14th.

In the Province of Quebec the weather was of much the same character as that in Ontario, it being fine warm and dry; the drought, however, was not so severe and plant life generally was in better condition. The maximum temperatures though exceeding 90° at two places were generally much lower than in Ontario, whilst the minimum temperatures were about the same.

The weather conditions in New Brunswick did not diverge much from the normal excepting in the rainfall, which was below average, and in the unusually large amount of bright sunshine; the drought however was nowhere very severe and the condition of vegetation in most districts was excellent. At a few places the mean temperature was somewhat below average.

In Nova Scotia there was much fine warm dry weather, and although the rainfall was considerably below average in some places the condition of grain and other crops was exceptionally favourable. No storms of much importance were reported and the only place at which many fogs occurred was Yarmouth.

The weather conditions of Prince Edward Island were much the same as in New Brunswick and were chiefly remarkable for the light rainfall which was recorded at some places; however the weather altogether did not differ much from the normal, and reports regarding the condition of vegetation were generally favourable.—F. F. PAYNE.

ATMOSPHERIC PRESSURE.

Pressure was from average to a little above from the Lower Lake Region to Maritime Provinces, and elsewhere throughout Canada it was below average, especially so from the Rocky Mountains to Manitoba, where the deficiency ranged from .060 inches to .120 inches.

HIGH AREAS.

Five areas of high pressure were traced during the month as follows:—

No. 1 was a shallow high, which appeared over Manitoba on the 5th, and afterwards moved slowly over the Lower Lake Region to the Ottawa Valley, where it dispersed on the 9th. No. 2 was situated as a very shallow high on the British Columbian Coast on the 11th. It travelled rapidly eastward and reached Manitoba on the evening of the 12th. After leaving Manitoba the area became more important, and between the 13th and 17th it traversed Canada from the Lakes to the Atlantic, attended by very fine weather. No. 3 was situated in the Western States on the 24th, being apparently an offshoot of a high then existing in the North Pacific States. It passed between the 25th and 26th over the Lake Region and the St. Lawrence Valley to the Gulf. No. 4 was situated in Manitoba on the 27th, and then moved with rapidity over Canada to the Maritime Provinces, where it became united on the 28th with No. 3. The system then was centred in the Maritime Provinces until the 31st, the weather, meanwhile, remaining very fine from the Lakes to the Atlantic. No. 5 first appeared on the North Pacific Coast on the 27th. During the night of the 29th, it passed into the North-west Territories. On the following night it was situated in Manitoba, and on the 31st it was centred to the northward of Lake Superior. This area was accompanied by local frosts in the Territories and Manitoba.

LOW AREAS.

Low pressure almost continuous'y covered the Territories, Manitoba and the greater portion of British Columbia, and although this low pressure was doubtless owing to a succession of shallow depressions, the courses of these depressions were so doubtful that they could not be accurately charted. Four lows were traced as follows:—

No. 1 was a shallow depression, which travelled between the 1st and 3rd from the Lake Superior district to the Upper St. Lawrence Valley, attended by general showers over Lake Superior, and scattered thunder-showers elsewhere. No. 2. From the 4th until the 8th, comparatively low pressure existed in the Territories and Manitoba, attended by numerous showers and thunderstorms in the former district, and scattered showers in the latter province. On the night of the 8th a more defined depression was situated in Alberta, and this depression passed slowly over the North-west, accompanied by frequent rains, and reached Lake Superior on the evening of the 11th. It afterwards moved more quickly far north over the country to the St. Lawrence Valley and the Gulf, giving showers generally, except in the Lower Lake Region, where they were only local. No. 3 was the West India hurricane, which caused such disaster in the West Indies between the 7th and 13th. After striking the Florida coast it moved unusually slowly up the Gulf Stream, and on the 19th apparently broke completely up when off the Hatteras coast. Its influence did not extend to any Canadian ports. No. 4 passed from the North-west Territories to the Lake Superior Region between the 19th and 20th, being seemingly augmented for a time by a subsidiary from the Western States. As the depression continued its easterly movement from Lake Superior, it decreased in energy, and after reaching the Upper St. Lawrence Valley on the 22nd, it dispersed. During its presence rain fell generally and heavily everywhere, except in the Lower Lake Region.

TEMPERATURE.

Temperature was below average from Vancouver Island to the Qu'Appelle Valley, and above average everywhere else in the Dominion except over Cape Breton and the Island of Anticosti, where it was from average to 1° below. In British Columbia and the North-west Territories it was very much below average, Kamloops reporting 8° below, and Banff and Calgary 6° below. On the other hand, many places in Ontario report the temperature as much as 5° above average, and in the Province of Quebec, Montreal was 3° above and Quebec City 2° above average.

The Highest and Lowest Temperature in each Province during August, 1899, were:

British Columbia,	90°.0 on 5th at Midway.	29°.0 on 29th at Midway.
“	90°.0 on 6th at Griffin Lake.	
North-west Territories,	90°.0 on 25th at Alameda.	27°.5 on 30th at Duck Lake.
Manitoba,	92°.0 on 25th at Aweme.	28°.0 on 31st at Rosebank.
“	92°.0 on 25th at Pipestone.	
Ontario,	101°.0 on 20th at Stony Creek.	29°.0 on 31st at Peterborough.
Quebec,	94°.0 on 25th at Richmond.	33°.0 on 15th at Brome.
New Brunswick,	91°.0 on 19th at St. Stephen.	40°.8 on 11th at Sussex.
Nova Scotia,	86°.3 on 19th at Halifax.	40°.0 on 11th at Sydney.
Prince Edward Island,	86°.4 on 3rd at Charlottetown.	47°.7 on 18th at Charlottetown.

PRECIPITATION.

The rainfall was above average from Vancouver Island to the Qu'Appelle Valley and also over the Lake Superior district, and below average throughout the large remaining portion of Canada. The excessive precipitation over British Columbia and the North-west Territories, was remarkable and more especially in the Territories where the average amount of precipitation is usually so small. Innisfail reports 12.25 inches, Didsbury, 7.4 inches, Calgary (2), 9.9 inches, Edmonton, 6.4 Kneehill, 9.7 inches, Duck Lake, 7.2 inches, Red Deer, 9.7 inches, Musquito Creek, 7.9 inches, Calgary (1) reports 9.4 inches, nearly equal to the total average annual amount for that district. Edmonton reports 6.4 inches, Prince Albert 8.0 inches. It was also remarkable, considering the abnormal rainfall in the North-west Territories, that Manitoba should have had an amount less than the average when that in the Lake Superior district was also above average. Another remarkable feature in the rainfall distribution during the month was the drought over the Georgian Bay district, the Lower Lake region and the Ottawa Valley. Some few localities owing no doubt, to local thunderstorms, recorded over two inches of rain, but over the larger portion of these districts scarcely any rain fell, and some places reported none.

WINDS.

In British Columbia the westerly direction prevailed on seventeen days and the easterly on seven. On sixteen days fresh breezes were experienced and on three days the winds were strong. In the North-west Territories no one direction predominated, there was however a considerable wind mileage generally. On thirteen days fresh breezes were recorded and on four occasions strong breezes to gales were experienced. In Manitoba the westerly direction prevailed on eleven days and the easterly on thirteen, there were eleven days of fresh breezes and seven days of strong winds. In the Lake Region light to moderate variable winds were prevalent and on only two occasions was the force of a strong breeze generally attained. In the St. Lawrence Valley the winds were westerly on sixteen days and easterly on six, there were fourteen days of fresh breezes, five of strong and on the 14th, the force of a gale was reached in the Gulf. In the Maritime Provinces the westerly direction predominated but the wind force seldom exceeded that of a moderate breeze, and on no occasion was a strong breeze experienced except very locally.

BRIGHT SUNSHINE.

Bright Sunshine was above the average in Ontario, Quebec and the Maritime Provinces and below average from Vancouver Island to Manitoba. The largest amounts registered was at Barrie and Lindsay where it was 65 per cent of the possible and the smallest amount was at Agassiz, B. C. where it was but 22 per cent of the possible.

PRESSURE, TEMPERATURE, WIND AND PRECIPITATION AT STATIONS IN THE DOMINION OF CANADA, AUGUST, 1899.

a. Barometer not reduced to Sea Level. • Stations not furnished with Registering Thermometers.

Table with columns: STATION, Latitude N., Longitude W., Elevation above Sea Level, in feet., PRESSURE, TEMPERATURE, MEAN TEMPERATURE OF DAY, DIRECTION OF WIND FROM, VELOCITY OF WIND, PRECIPITATION, and No. of Days. Rows list various stations including British Columbia, Victoria, Barkerville, Agassiz, Abbotsford, Port Simpson, Hazelton, Kamloops, Princeport, Rivers Inlet, Stuart's Lake, French Creek, Glacier, Donald, Griffon Lake, Kuper Island, Chilliwack, Quatsino, Midway, Endorby, Nicola Lake, Chilcooten, West Kootenay, Garry Point, Tobacco Plains, Alberni, New Westminster, Ladner, N. Nicomen, Quaysville, Clayoquot, Cape Scott, Massett, Quinselle Forks, Bella Coolla, Duncan's, Vancouver, Nelson, Kelowna, Matsqui, N. W. TERRITORIES, Medicine Hat, Edmonton, Swift Current, Qu'Appelle, Calgary, Prince Albert, Battleford, Oonikap, Camfr, Chaplin (2), Calgary, Moose Jaw, Regina.

N. W. TERRITORIES.—Con.

Table with multiple columns containing names of locations (e.g., Indian Head, Winnipeg, Edmonton), coordinates (in., in.), and other numerical data. The table is organized into sections for Manitoba, Ontario, and other territories.

MANITOBA:

ONTARIO:

PRECIPITATION AT STATIONS REPORTING RAIN, WEATHER, &c., DURING AUGUST, 1899.

STATIONS.	RAINFALL.					THUNDER OR LIGHTNING, &c.	REMARKS.
	Amount in inches.	Days '01 or Over.	No. of Fair Days.	Heaviest Fall in Month.	Date.		
BRITISH COLUMBIA—							
Goldstream Lake.....	2.42	8	23	0.61	9		
Langley.....	4.56	11	20	1.12	15		
Alberni.....	2.40	12	19	0.35	26	1, 5, 19.	20th Robins collecting.
Royal Oak.....	1.89	12	19	0.53	15		
Nanaimo.....	1.77	6	25	0.75	16		
Cumberland.....	3.04	10	19	1.02	10		
N. W. TERRITORIES—							
West Beaver Hills.....	6.43	20	10	1.72	14	4, 5, 6, 7, 8, 9, 16, 18, 24.	Snow flakes on 27th.
Innisfail.....	12.25	20	11	2.32	15		Creek & riv. all booming.
Stirling.....	4.54	4	27	2.30	8		No frost yet 31st.
Estevan.....	2.15	5	26	1.00	15	6.	Frost on 21st.
Saltcoats.....	5.52	5	26	1.40	19		Frost on 3rd, light.
Didsbury.....	7.38	18	13	1.28	14		1st frost on 30th.
Rouleau.....	2.05	10	21	1.01	6	6, 25.	
Coutts.....	2.63	9	22	0.60	7	7.	
MANITOBA—							
Hartney.....	2.42	9	22	0.93	8		
Elgin.....	1.99	15	16	0.42	16	1, 7, 9, 16, 19, 22, 25, 28.	[nipped.
Oakbank.....	1.45	6	10	0.88	8	3.	31st, potatoes & corn
Gretna.....	1.40	4	26	0.80	8		31st, Frost.
Selkirk.....	1.91	8	23	0.94	8	8, 15.	
Cartwright (1).....	4.15	10	21	2.59	7	7, 15, 22.	
Morden.....	1.25	3	25	1.20	7-8		31st, Slight frost.
Greenwood.....	2.46	4	27	1.43	7		
Pembina Crossing.....	5.07	7	21	3.97	7-8	2,5,7,9,10,14,15,16,19,22,25,28,29	[31st, frost.
Norquay.....	2.47	13	17	0.72	20	1, 3, 10, 11, 16, 19, 20, 21.	5th, Slight frost; 29th-
Belmont.....	1.70	9	22	0.72	7	9, 10, 16, 19, 22, 26, 28.	
Cartwright (2).....	1.48	7	23	0.45	16	16, 24.	Frost, 29th-31st.
Clear Spring.....	1.63	4	23	0.76	8	9, 16, 22, 28, 29.	4th, light frost; 13th, frost
Shoal Lake.....	0.80	2	29	0.50	3		4th, Frost.
Beaver Creek.....	2.74	6	25	1.07	7		
ONTARIO—							
Goderich.....	0.74	2	29	0.70	12		
Georgetown.....	0.33	4	27	0.18	10	3, 4, 9, 10, 11, 12, 26.	
Aurora.....	0.17	1	29	0.17	9		
Smith's Fall.....	2.21	4	27	1.30	21		
Wyoming.....	1.15	2	27	0.95	11	9.	
Dutton.....	0.56	2	29	0.32	11	10, 11, 31.	
Coldstream.....	0.70	2	29	0.53	11	11.	
Penetanguishene.....	0.80	8	23	0.58	12	12.	
Huntsville.....	0.84	4	27	0.30	1	12, 21.	
Wooler.....	0.38	2	29	0.28	12	2, 12, 21, 27.	
Lansdowne.....	0.00	0	31			4, 21.	
Croydon.....	0.75	3	28	0.30	2	2, 22.	
Parma.....	1.05	3	28	0.72	22	22.	
Midland.....	0.67	4	27	0.40	11	1, 11.	
Scarboro.....	0.16	2	26	0.15	10	2, 11.	
Watford.....	0.53	2	29	0.25	5		
Ennismore.....	0.60	2	29	0.40	2		
Elgin.....	1.40	5	26	0.77	21		
Thompson.....	2.87	6	25	0.92	2	20, 21, 30.	
Uxbridge.....	2.05	3	27	1.45	31		
Dealtown.....	0.47	3	28	0.22	3		
Providence Bay.....	0.82	4	27	0.57	1	1, 19, 31.	
Sparrow Lake.....	0.68	4	27	0.29	2		
Arden.....	1.17	7	24	0.71	22	12, 13, 22.	
Nottawasaga Island.....	0.08	1	30	0.08	11	11.	
Emsdale.....	0.84	6	24	0.34	21	2, 12, 21.	
Sunshine.....	0.25	2	29	0.16	10		
Port Burwell.....	0.29	5	28	0.12	26		
Roblin's Mills.....	1.20	3	28	0.55	2		
N. Williamsburg.....	2.31	5	26	1.00	23		
Jermyn.....	0.93	2	29	0.63	2	11, 12, 23, 27.	
Montague.....	1.79	3	28	0.95	21		
Deer Park.....	0.21	2	29	0.18	10		
Lynedoch.....	0.70	1	30	0.70	26		
Cherry Valley.....	0.36	2	29	0.25	21	21.	
Ursa.....	2.28	6	25	0.96	21	11, 21.	
Lion's Head.....	0.68	2	29	0.53	10	10.	
Wilton Grove.....	0.58	5	26	0.25	10	10.	
Oliver's Ferry.....	1.55	5	26	0.65	22		
Princeton.....	0.07	1	30	0.07	11	11.	
Orangeville.....	0.47	2	29	0.36	10		
Warton.....	0.77	3	28	0.57	14	14.	
NEW BRUNSWICK—							
Point Escuminac.....	0.60	5	26	0.37	14	13.	
NOVA SCOTIA—							
Port Morien.....	1.76	6	25	0.79	26		
P. E. ISLAND—							
Murray River.....	1.98	8	23	0.95	13	13.	
Mount Stewart.....	0.72	3	28	0.36	24		

Thunder recorded on—

1. N. Sister Rock, Pipestone, Moose Jaw, Cockburn Island, Cannington Manor, Muskowpetung, Midland, Providence Bay, Elgin.
2. Montreal, Kinmount, Beatrice, Bancroft, Erasmus, Agincourt, Paris, Otonabee, Port Dover, Knee Hill, Whiteside, Duck Lake, Port Hope, Sprucedale, Emsdale, Sparrow Lake, Parry Sound, Kingston, Sydney, Gravenhurst, London, Deseronto, Guelph, Lindsay, Scarboro, Croydon, Wooler, Pembina Crossing, Brome, Peterboro'.
3. Gosfield S., Ridgetown, Arden, Quebec.
4. Calgary, Agincourt, Red Deer, Welland, Lansdowne, Cape Magdalen, Quebec, Father Point, Haileybury.
5. Chicoutimi, Cape Chatte, Red Deer, Knee Hill, W. Beaver Hills, Alberni, Dalhousie, Nelson, Mosquito Creek, Calgary, Quebec, Father Point.
6. Moose Jaw, Calgary, Red Deer, Crane Lake, Duck Lake, Estevan, Dirt Hill, Tobacco Plains, Macleod, Kamloops, Medicine Hat, Swift Current, Regina.
7. Pictou, Portage la Prairie, Gatesgarth, Calgary, Duck Lake, Coutts, Pembina Crossing, Elgin, Barnardo, Battleford, Regina.
8. Gatesgarth, Muskowpetung, Red Deer, Duck Lake, W. Beaver Hills, Selkirk, Tobacco Plains, Macleod, Medicine Hat, Swift Current, Bermuda, Regina.
9. Moose Jaw, Calgary, Cannington Manor, Muskowpetung, Red Deer, Knee Hill, Hamilton, Duck Lake, W. Beaver Hills, Clear Spring, Wyoming, Belmont, Elgin, Birnam, Medicine Hat, Battleford, Qu'Appelle, Minnedosa, Swift Current, Sydney.
10. St. Ann's, Point Clark, N. Nicomen, Calgary, Red Deer, Gosfield S., Welland, Knee Hill, Wilton Grove, Lion's Head, Dutton, Belmont, Pembina Crossing, Treherne, Stony Mountain, Barnardo, Medicine Hat, Winnipeg, Port Stanley, London, Regina.
11. Savanne, Point Clark, Cockburn Island, French Creek, Erasmus, Otonabee, Dutton, Welland, Port Hope, Owen Sound, Princeton, Ursa, Jermyn, Scarboro', Midland, Coldstream, Medicine Hat, White River, Port Arthur, Port Stanley, Bermuda, Lindsay, Birnam, Peterboro, Woodstock, Stony Mountain.
12. Montreal, Kinmount, Beatrice, N. Nicomen, Bancroft, Agincourt, Welland, Meaford, Haliburton, Whiteside, Port Hope, Sprucedale, Arden, Jermyn, Wooler, Huntsville, Brome, Penetanguishine, Peterboro, St. Agathe, Rivers Inlet, Coldwater, Parry Sound, Quebec, Gravenhurst, Deseronto, Durham, Lindsay, Haileybury.
13. Calgary, Collingwood, Perce, Arden, Point Escuminac, Murray River, Fredericton, Kamloops, Medicine Hat, Banff, Prince Albert, Quebec, Father Point.
14. Pictou, Red Deer, Knee Hill, Warton, Parrsboro', Truro, Charlottetown, Bermuda.
15. Knee Hill, Selkirk, Aweme, Treherne, Battleford, Swift Current, Oonikup.
16. Brandon, Portage la Prairie, Muskowpetung, Perce, Clear Spring, Belmont, Pembina Crossing, Elgin, Rosebank, Treherne, Stony Mountain, Minnedosa, Charlottetown.
17. N. Sister Rock.
18. N. Sister Rock, Pilot Bay, Moose Jaw, W. Beaver Hills, Nelson, Treherne.
19. Cockburn Island, Hillview, Brandon, Portage La Prairie, Calgary, Muskowpetung, Providence Bay, Belmont, Pembina Crossing, Elgin, Barnardo, Qu'Appelle, Winnipeg, Minnedosa, Oonikup, Regina.
20. N. Sister Rock, Cockburn Island, Wolfville, Thompson, White River, Halifax, St. John, Regina, Haileybury.
21. Montreal, Kinmount, Pipestone, Beatrice, Bancroft, Otonabee, Welland, Meaford, Wooler, Haliburton, Crane Lake, Port Hope, Ursa, Cherry Valley, Roblins Mills, Emsdale, Huntsville, White River, Bissett, Kingston, Lindsay, Haileybury.
22. Montreal, Moose Jaw, Hillview, Brandon, Arden, Parma, Lansdowne, Clear Spring, Belmont, Elgin, Brome, Aweme, Treherne, Medicine Hat, Minnedosa, Quebec, Yarmouth, Oonikup.
23. Jermyn, Brome, Battleford, Yarmouth, Grand Manan.
24. Red Deer, Gosfield S., Ridgetown, W. Beaver Hills, Treherne, Prince Albert, Swift Current, Bermuda.
25. Pipestone, Moose Jaw, Hillview, Dirt Hill, Elgin, Brome, Barnardo, Medicine Hat, Swift Current, Quebec.
26. St. Ann's, Savanne, French Creek, Portage la Prairie, Gosfield S., Otonabee, Welland, Belmont, Minnedosa, Bermuda.
27. Stony Creek, Duck Lake, Jermyn, Wooler, Port Arthur, Port Stanley, Yarmouth.
28. Wolfville, Clear Spring, Belmont, Pembina Crossing, Rosebank, Parrsboro', Truro, Stony Mountain, Port Arthur.
29. Brandon, Muskowpetung, Minnedosa, White River, Port Arthur.
30. Thompson, White River.
31. Hazlemere, N. Nicomen, Agincourt, Providence Bay, Quebec, Oonikup.

Aurora Recorded :—

Where the class of aurora is noted by the observer, it is given, (I) being the brightest, (IV) the feeblest in brilliancy.

1. Cape Magdalen, Cape Chatte, II ; Quebec, IV.
2. Gatesgarth, Georgetown, IV ; Aweme, II.
3. Meaford, IV ; Haileybury, III ; Red Deer, II ; Gatesgarth, *fine* ; Hillview, I ; Clontarf, IV ; Cockburn Island, Savanne, Pembina Crossing, III ; Scarboro, Aweme, II ; Channel Island, IV ; St. Agathe.
4. Erasmus, Hillview, II ; Savanne, Pembina Crossing IV ; Aweme, III ; Minnedosa, I ; Gravenhurst, II ; Haileybury, IV.
5. Erasmus, Cockburn Island, Savanne, Chicoutimi, Georgetown, IV ; Minnedosa, I ; Haileybury, IV.
6. Channel Island, IV ; St. Agathe, Father Point, Haileybury.
7. Truro, IV ; Swift Current, IV.
8. Aweme, III.
9. Aweme, IV, Father Point, Gravenhurst, IV.
10. Point Rich.
12. Meaford, IV ; Georgetown, IV ; Midland, II.
13. Hillview, IV ; Pembina Crossing, IV ; Georgetown, III ; W. Beaver Hills, IV ; Medicine Hat, IV ; Qu'Appelle, IV ; Quebec, IV ; Haileybury, IV.
14. St. Agathe.
16. Portage la Prairie, Channel Island, IV ; Haileybury, IV.
17. Moose Jaw, Pembina Crossing, IV.
18. Pembina Crossing, IV.
20. Aweme, II ; St. Agathe, Barnardo, IV.
21. Quebec, IV.
27. Cape Magdalen, Chicoutimi, Medicine Hat, III ; Quebec, IV.
28. Gatesgarth, Hillview, IV ; Barnardo, IV.
29. Red Deer, II ; Gatesgarth, Moose Jaw, Sussex, Pembina Crossing IV ; Georgetown, IV ; West Beaver Hills, III ; Aweme, III ; Truro, IV ; Barnardo, III ; Medicine Hat, III ; Prince Albert, III.
30. Duck Lake, IV ; Portage la Portage, Hillview, I ; Savanne, Cape Chatte, III ; Sussex, Pembina Crossing, III ; Aweme, II ; Channel Island, IV ; Truro, IV ; St. Agathe, Barnardo, II ; Minnedosa, I ; Father Point.
31. Duck Lake, II ; Savanne, Cape Chatte, II ; Channel Island, IV ; Barnardo, III ; Minnedosa, I.

PROPORTION OF BRIGHT SUNSHINE REGISTERED IN EACH HOUR OF THE DAY DURING WHICH THE SUN WAS ABOVE THE HORIZON IN THE MONTH OF AUGUST, 1899.

	HOURS ENDING															
	5 A.M.	6 A.M.	7 A.M.	8 A.M.	9 A.M.	10 A.M.	11 A.M.	NOON.	1 P.M.	2 P.M.	3 P.M.	4 P.M.	5 P.M.	6 P.M.	7 P.M.	8 P.M.
VICTORIA.....	0'00	S	0'31	0'35	0'38	0'39	0'53	0'54	0'51	0'55	0'55	0'65	0'59	0'50	0'15	0'00
KUPER ISLAND.....																
AGASSIZ.....	0'00	0'00	0'11	0'15	0'18	0'24	0'28	0'25	0'29	0'32	0'35	0'39	0'32	0'19	0'04	0'00
BATTLEFORD.....	0'17	0'44	0'47	0'46	0'46	0'50	0'50	0'53	0'56	0'55	0'54	0'51	0'47	0'35	0'08	0'00
INDIAN HEAD.....	0'00	0'00	0'05	0'37	0'57	0'65	0'65	0'70	0'69	0'67	0'63	0'73	0'65	0'37	0'11	0'01
BRANDON.....	0'00	0'11	0'47	0'52	0'61	0'62	0'63	0'61	0'62	0'67	0'61	0'51	0'50	0'44	0'27	0'00
WINNIPEG.....	S	0'24	0'50	0'59	0'63	0'67	0'67	0'75	0'77	0'77	0'71	0'59	0'66	0'53	0'25	S
DURHAM.....	0'00	0'00	0'18	0'52	0'65	0'60	0'67	0'69	0'72	0'79	0'76	0'69	0'61	0'56	0'31	0'00
WOODSTOCK.....	0'00	0'05	0'34	0'57	0'68	0'73	0'82	0'80	0'80	0'78	0'77	0'71	0'71	0'63	0'17	0'00
TORONTO.....	0'00	0'03	0'36	0'66	0'78	0'83	0'73	0'75	0'73	0'69	0'69	0'75	0'69	0'56	0'25	0'00
LINDSAY.....	0'00	0'12	0'39	0'58	0'73	0'76	0'78	0'77	0'77	0'79	0'75	0'77	0'70	0'65	0'54	0'08
BARRIE.....	0'00	0'09	0'62	0'71	0'77	0'84	0'84	0'83	0'83	0'78	0'80	0'76	0'64	0'58	0'07	0'00
KINGSTON.....	0'00	S	0'28	0'70	0'70	0'75	0'77	0'69	0'70	0'70	0'75	0'77	0'68	0'54	0'00	0'00
OTTAWA.....	0'00	0'16	0'52	0'62	0'70	0'70	0'75	0'82	0'75	0'76	0'78	0'77	0'67	0'58	0'15	0'00
MONTREAL.....	0'00	0'13	0'42	0'63	0'69	0'71	0'73	0'71	0'77	0'80	0'77	0'72	0'50	0'24	0'00	0'00
FREDERICTON.....	0'10	0'40	0'55	0'59	0'68	0'72	0'76	0'82	0'80	0'76	0'70	0'65	0'54	0'29	S	0'00

	VICTORIA.	KUPER ISLAND.	AGASSIZ.	BATTLEFORD.	INDIAN HEAD.	BRANDON.	WINNIPEG.	DURHAM.	WOODSTOCK.	TORONTO.	LINDSAY.	BARRIE.	KINGSTON.	OTTAWA.	MONTREAL.	FREDERICTON.
MEAN PROPORTION FOR MONTH..... (Constant sunshine being 1.)	0'42		0'22	0'46	0'48	0'51	0'58	0'55	0'61	0'61	0'65	0'65	0'58	0'62	0'64	0'60
DIFFERENCE FROM AVERAGE.....	-0'10		-0'26	-0'12	-0'03	-0'10	-0'02	-	+0'07	+0'07	+0'12	+0'14	+0'01	-	+0'06	+0'10
MAXIMUM DAILY AMOUNT.....	0'85		0'72	0'95	0'80	0'98	0'96	0'86	0'93	0'86	0'98	0'89	0'86	0'89	0'88	0'94
DATE.....	6-30		2	28	4	26	25	18	6	6	17	15	9	16	16	14
NO. OF DAYS COMPLETELY CLOUDED.....	1		15	3	2	4	2	4	1	0	1	0	0	0	0	3

FORECASTS FOR AUGUST, 1899.

The forecasts issued by this office at 11 p.m. each night are posted up at every telegraph station in Canada, and are for the 24 hours beginning at 8 a.m. the following day.

The number of predictions issued during the month was 1000. These were divided as follows:—

. DISTRICT.	No. ISSUED.	VERIFIED.			
		No. Fully	No. Partly	No. Not	Percentage
MANITOBA.....	99	80	10	9	85.9
LAKE SUPERIOR.....	111	90	18	3	89.2
LOWER LAKE REGION.....	115	107	8	0	96.5
GEORGIAN BAY.....	113	105	5	3	95.1
OTTAWA VALLEY.....	105	97	5	3	94.8
UPPER ST. LAWRENCE.....	105	95	6	4	93.3
LOWER ST. LAWRENCE.....	112	102	7	3	94.2
GULF.....	120	106	12	2	93.3
MARITIME PROVINCES.....	120	102	17	1	92.1
TOTAL.....	1000	884	88	28	92.8

In order to obtain the percentage of verification of the predictions, the number partly verified is divided by two and added to the number fully verified, and the result divided by the total number issued.

In ascertaining to what extent the predictions have been verified, the reports from the agents at all observing stations, as well as the telegraphic reports, are used.

The forecasts and storm warnings were issued by Forecast Official—B. C. Webber.

ABSTRACT of Observations at Fort Good Hope Mackenzie River. Lat 66° 20' N. Long. 128° 25' W. From 1st March, 1898, to 30th June, 1899, by the Rev. R. P. Seguin.

	TEMPERATURE.						WIND DIRECTION FROM								Rain.		Snow.		Gales.	Fogs.	Fair Days.	
	7 a.m.	2 p.m.	9 p.m.	Mean	Max.	Min.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	C.	Amt.	dys.	Amt.				dys.
	°	°	°	°	°	°	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	C.	in.	dys.	in.				dys.
March, 1898.....	-13.0	4.8	-3.4	-3.8	30.0	-33.0	11	19	16	7	0	0	19	21	0	0.00	0	13.0	5	4	5	26
April.....	10.7	30.2	23.8	22.1	50.0	-2.0	12	5	6	5	0	2	39	21	0	0.00	0	16.8	7	1	0	23
May.....	28.7	45.7	38.2	37.7	80.0	3.0	31	7	0	13	0	0	31	11	0	0.05	1	8.8	6	2	1	25
June.....	45.1	60.5	56.6	54.7	75.0	33.0	25	21	4	11	0	1	6	22	0	0.25	1	.....	.....	0	0	28
July.....	48.4	62.2	58.8	57.0	79.0	34.0	12	8	0	8	0	2	13	40	0	0.60	2	.....	.....	0	1	27
August.....	47.9	62.3	56.0	55.5	75.0	24.0	17	22	0	3	0	3	15	33	0	0.22	3	.....	.....	0	2	25
September.....	33.0	44.1	39.4	39.0	66.0	11.0	15	25	1	3	0	0	26	10	0	0.25	3	.....	.....	0	2	25
October.....	0.5	10.6	6.4	6.0	30.0	-35.0	17	16	28	0	0	0	9	23	0	0.00	0	6.8	4	0	1	23
November.....	-25.7	-22.0	-24.8	-24.3	7.0	-52.0	15	1	33	3	0	0	25	13	0	0.00	0	7.7	4	0	15	26
December.....	-23.6	-21.0	-22.4	-22.3	16.0	-47.0	17	13	31	5	0	0	18	9	0	0.00	0	16.5	6	0	1	25
January, 1899.....	-31.9	-30.6	-31.8	-31.6	12.0	-56.0	3	0	38	9	0	0	32	11	0	0.00	0	12.0	5	5	16	25
February.....	-41.8	-41.2	-41.6	-41.6	-18.0	-59.0	0	11	54	0	0	0	19	0	0	0.00	0	3.0	3	0	4	25
March.....	-24.0	-22.3	-21.2	-22.4	23.0	-53.0	0	3	44	2	0	0	10	34	0	0.00	0	23.3	7	2	7	24
April.....	-2.0	8.9	5.8	4.6	36.0	-29.0	16	29	6	6	0	0	19	14	0	0.00	0	13.8	9	0	0	21
May.....	25.4	39.9	34.5	33.6	60.0	4.0	28	17	14	7	3	0	20	4	0	R.	.....	0.9	3	0	0	26
June.....	46.6	60.2	58.9	56.1	72.0	34.0	20	5	6	12	6	0	26	15	0	0.57	4	.....	.....	2	0	24

The Maximum and Minimum Temperature are from the readings of the ordinary Thermometer at Observation hours.

R. F. STUPART,
Director.

Meteorological Office, Toronto,
26th September, 1899.