

centre of the Horseshoe Fall in a solid column of water of twenty feet, and it is estimated that 1,500,000,000 cubic feet pass over the falls every minute. This great water system of rivers and lakes affects the climate of the older provinces of Canada, and the other large rivers, with the numerous bodies of fresh water distributed over so large a portion of the whole surface of the Dominion, help to preserve an equable climate, and afford many facilities for local transport.

The degrees of latitude are a very partial guide to the character of the Canadian climate as compared with that of the British Isles, and any statement of the mean temperature of the two is deceptive. The severity of the winter, as tested by the thermometer, leads to a very exaggerated impression of Canadian experiences. Owing to the dry, clear, bracing atmosphere which generally prevails, the sense of discomfort produced by the raw easterly winds and damp fogs of an English spring suggests an idea of cold such as is rarely thought of in a Canadian winter. There are, indeed, every winter a few days of intense cold, as in the summer there are brief periods of equally intense heat, when the thermometer ascends, or descends, through a scale unknown in the more equable English climate. But throughout the greater part of the winter season in Canada the sky is bright and clear and the weather thoroughly enjoyable. Open sleighs are in use by all. Skating, snowshoeing, tobogganing and other outdoor exercises are in universal favor, and the sound of the sleigh bells in the open thoroughfare adds to the exhilarating sense produced by the pure bracing atmosphere. In the Province of Quebec the snow begins to lie early in November; in Ontario it is fully a month later; and it differs correspondingly at various localities throughout the Dominion. But everywhere the appearance of the snow is hailed as seasonable and beneficial. It protects the wheat sown in autumn from the frost, affords facilities to the farmer for bringing his produce to market, aids the lumberman in collecting the fruits of his labor in the forest at suitable points for transport by water with the spring freshets, and so contributes alike to business and pleasure.

The following table of averages will be of service in comparing the climate of various portions of the Dominion. It is compiled from official reports and represents the averages of several years' observations at the chief station in each province. Two points are selected in British Columbia owing to the great difference in climate between the coast and interior:

	Jan.	April.	July.	Oct.	Year.	No. of Days Snow.	No. of Days Rain.	Snow, Inch.	Rain, Inch.
Ontario.....	19.3	42.8	68.8	47.4	42.8	26	89	95.9	29.42
Quebec.....	13.5	41.8	70.2	47.0	42.8	60	84	115.0	27.26
New Brunswick.....	16.1	37.5	62.8	45.1	39.9	56	107	106.4	33.27
Nova Scotia.....	22.3	35.9	63.3	48.2	41.7	52	117	92.4	33.27
Prince Edw. Isl.....	23.5	38.1	64.3	49.4	40.5	78	129	112.4	28.73
Manitoba.....	3.9	30.3	65.9	40.0	32.5	59	62	62.5	18.82
Spencer's Pt., B. C.....	0.1	30.0	71.8	51.9	44.7	27	66	35.5	3.86
Victoria, B. C.....	26.9	47.5	60.9	51.3	47.4	—	—	*51.2	*59.66

* New Westminster.

As will be seen from the above table January is the coldest month of the year. Throughout the whole of Canada steady sleighing is reckoned upon during January and February. In Quebec and in Manitoba a longer period of sleighing can be relied upon. In Nova Scotia,

New Brunswick and Prince Edward Island, and also on the Pacific coasts, the temperature is modified both in summer and winter according to vicinity to the sea. Abrupt changes of temperature occur both in summer and in winter. A period of great cold early in the month of January is so frequently followed by a complete change that its periodicity is reckoned upon under the name of the January thaw. Snow finally disappears in Quebec about the middle of April. In Ontario it is generally gone a month earlier. The table of average fall of snow given above shows its prevalence at various central points in each of the provinces of the Dominion, from October to the end of April.

Plowing usually commences in Ontario about the middle of April, and in favorable seasons is prolonged into the month of December. But throughout the Dominion, stretching as it does across the continent, the period varies with the locality, and is affected by the vicinity of the great lakes or other local influences. Cattle are turned out to graze in April, feeding in part upon the tender shoots of the spring forest growth, until the appearance of the young pasture with the disappearance of the snow. Before the end of July harvest begins; and with the rapidity of growth under the warm Canadian skies, the hay, grain and root crops follow in swift succession, the cleared land is brought again under the plow, and the autumn sowing of wheat is carried on till another abrupt change brings the season to a close. In this way the Canadian climate is marked by the striking contrast of two seasons—summer and winter—bringing with them alternations of fruitful labor and of repose intermingled with profitable industry and pleasure. This characteristic prevails with slight variations throughout the greater part of the Dominion. Manitoba presents in this respect no marked diversity from Quebec or Ontario. Spring opens nearly at the same time from Red River to the Athabasca. Early in April the alders and willows of the Saskatchewan country are in bloom; the prairie anemone covers the southern exposures to the very verge of the retreating snow. May there brings with it more of the true summer heat than in the provinces on the St. Lawrence. But the nights are cool, and throughout the period of greatest heats the cool night breezes beget a welcome and refreshing change, accompanied with heavy dews. This protects the cereals from the effects of drought even in the driest seasons, and produces a rich growth of prairie grass, making the climate peculiarly favorable for the stock farmer. The Rev. Professor Bryce, of Winnipeg College, thus writes: "The winters of the Northwest, upon the whole, are agreeable and singularly steady. The moccasin is dry and comfortable throughout, and no thaw, strictly speaking, takes place till spring, no matter how mild the weather may be. The snow, though shallow, wears well, and differs greatly from Eastern snow. Its flake is dry and hard, and its gritty consistence resembles white slippery sand more than anything else. Generally speaking, the farther West the shallower the snow, and the rule obtains even into the heart of the Rocky Mountains. In Southwest-