

(7) The Northern Lands including the Arctic Archipelago; (8) The Northwestern Lands including most of the area drained by the Mackenzie River and the Yukon River. These Climatic Regions loosely correspond to well-known orographical and geological regions but it is not possible to follow them very closely in defining boundaries. The boundaries of the Climatic Regions are not sharply defined, chiefly because the changes in the character of the seasons through a long period of years correspond to recurring shifts of the climatic borders. The outstanding features of each of these Regions are briefly described below.

The Atlantic Provinces

Temperature.—The Atlantic Provinces, which might be expected to have a purely maritime climate, are served principally by air moving eastward off the North American Continent. The climate is, therefore, continental in character. This is easily proved by the fact that the mildest lowlands of these Provinces average only 15°F. to 25°F. in January and February, while the milder portions of the Pacific Coast average 35°F. to 40°F. in these months. The coldest day ordinarily expected in an average winter on the Bay of Fundy averages zero or a little lower for twenty-four hours but the coldest day ordinarily expected at Vancouver, B.C., will average 22°F. or 28°F. at Victoria, B.C. This difference of twenty degrees, or more, arises from the arrival of cold waves by an ocean route to the maritime areas of British Columbia but by a land route to the Atlantic Provinces. Again, in the Atlantic Provinces there is a greater difference between the temperature of the coldest and warmest months of the year. At Gaspé, Que., there is a difference of 52°F. between the temperature of January and of August, and 42°F. at Saint John, N.B., and Halifax, N.S. Compare these figures with a difference between midwinter and midsummer of only 13° to 20°F. on the outer coast of British Columbia and 20° to 26°F. along the Gulf of Georgia. The prevailing drift of air from the land to the ocean also helps to increase the warmth of the Atlantic Provinces in summer by allowing air which has been strongly heated on the southern portion of the Continent to create occasional hot spells with a southwesterly wind. The effect is seen in the average temperature of 65°F. at Halifax, N.S., in July or August. This may be compared with 54°F. to 58°F. on the outer coast of Vancouver Island. Only the inner coastal valleys of British Columbia can approach this warmth in midsummer. While the continental character of the Atlantic Coastal Region, as compared with the Coastal Regions of British Columbia and of Europe, is, of course, not pronounced in the same sense as that of the continental interior, yet the interior highlands of the Atlantic Provinces exhibit this character more obviously. These highlands are scarcely mountainous but they rise to flat-topped hills exceeding 3,000 feet in the Gaspé Peninsula and to uplands exceeding 2,500 feet in northwestern New Brunswick. Ridges which lie just north of the Bay of Fundy rise to 1,200 feet in some places. Ridges or plateaux of 1,200 feet also occur on Cape Breton Island while on the mainland of Nova Scotia ridges or hills look down 700 to 1,000 feet to tide-water. Very cold polar air entering this Region from the north does not warm readily during slow passage especially when the ridges are snow-covered. On at least an occasional night in January and February in any average winter it may be expected that the temperature will drop to 30°F. below zero in the northwestern