

than 100 miles from the sea; most of it less than 30 miles from salt water. The eastern and central parts of New Brunswick, most of the northern part of Nova Scotia and all of Prince Edward Island are lowlands. Much of northwestern New Brunswick is more than 1,000 feet above sea level, and the southern highlands also contain elevations above 1,000 feet. The practically flat-topped Cape Breton Plateau rises to an elevation of 1,200 feet and there are similar elevations in the Cobequid range in Nova Scotia.

Although the effects of the sea are everywhere noticeable, the climates of the Maritime Provinces are typically continental rather than maritime owing to their situation on the east coast of an immense continental land mass. Since the general movement of air masses is from west to east in these latitudes, air reaching the region has usually had a previous history over the Continent; for this reason the mean annual range of temperature is about twice as great on the Nova Scotia coast as on the west coast of Vancouver Island. On the other hand, influxes of moist Atlantic air produce mild spells in winter and periods of cool weather during the summer.

The winters are particularly stormy on the Atlantic Coast since the weather is controlled by cyclonic storms which tend to pass along the southern border of the region, preceding the invasion of cold polar air. These winter storms often produce violent gales and rains changing to snow. In summer the concentration of low pressure centres over the St. Lawrence Valley to the north leaves the Atlantic Provinces under the predominating influence of winds from the south, southwest or west.

The comparatively warm waters of the Gulf Stream and adjacent waters form a reservoir of moisture which aids in the production of fog especially along the Atlantic Coast of Nova Scotia and in the Bay of Fundy where some coastal stations report nearly 100 days with fog annually, with the greatest frequency in July. On the other hand, the cold Labrador Current, moving down the eastern shore of Newfoundland and with a branch entering the Gulf of St. Lawrence through the Strait of Belle Isle, cools the air passing over it and produces fogs at sea and along the coast with a peak frequency in the late spring months.

January is the coldest month and July the warmest in most sections of the Maritime Provinces but at some coastal points in Nova Scotia both the warmest and coldest periods are delayed several weeks owing to the moderating effect of the water. The effects of elevation and continental influences are clearly reflected in the winter temperatures with the mildest occurring along the Atlantic Coast of Nova Scotia where the mean temperature for the coldest month varies from 24° to 26°F. Along the south shore of the Bay of Fundy and in the Annapolis Valley, January means of 20° to 24°F. occur, with lower means of 18° to 20°F. general along the north shore. Towards the interior of New Brunswick lower winter temperatures prevail as illustrated by a January mean temperature of 14°F. at Fredericton and 8°F. at Edmundston. January mean temperatures average 18° to 20°F. on Prince Edward Island and 20° to 24°F. at Cape Breton Island. Cold polar air entering the region from the north does not moderate rapidly especially if the ridges are snow covered; in fact, extreme minimum temperatures of -30°F. may be anticipated in northwestern New Brunswick. The record low for the province is -52°F. at Chipman which compares with an extreme low temperature for Nova Scotia of -42°F. at Upper Stewiacke and -27°F. for Prince Edward Island at Charlottetown.

Summer temperatures are not as high in the Maritime Provinces as in Southern Ontario and Quebec at the same latitude. Mean temperatures for the warmest summer months are 60° to 65°F. along the Atlantic Coast of Nova Scotia and the shores of the Bay of Fundy, but on Prince Edward Island and in the interiors of Nova Scotia and New Brunswick July mean temperatures vary from 64° to 67°F. Occasionally during any summer month maximum temperatures in excess of 80°F. may be expected in all three provinces with extremes of heat more pronounced in New Brunswick. Extreme temperatures have exceeded 100°F. often in New Brunswick and occasionally in Nova Scotia but never at an official weather station on Prince Edward Island.