

The absence of good soil, the shortness of the growing season and, in the northwest, the lack of sufficient moisture prevent this climatic region from extensive agricultural exploitation.

The *Pacific* climatic region consists of the islands and a narrow coastal belt of British Columbia, nowhere extending more than 100 miles and frequently only a few miles inland. In this classification the limiting eastward factor is the January isotherm of 32°. Mild winter and cool summer temperatures are ensured by the general circulation from the west off the ocean. Temperatures rarely drop below zero in winter or rise above 90°F. in summer. With a winter season maximum this region is rainier than any other in the country. As the frontal systems impinge on the mountainous coast, the moist air is forced to rise producing precipitation that averages over 80 inches annually with a maximum of 262 inches at one station. However, there are "rain shadow" areas such as at Victoria where annual precipitation is less than 30 inches. Native vegetation is the dense coastal forest.

Extending in a north-south belt through most of British Columbia and Yukon Territory is by far the most complex climatic region of Canada—the *Cordillera*. In this region of mountains, plateaux and valleys, altitude is usually more of a climatic determinant than latitude. Considering the rugged terrain of the country, it is almost impossible to map the climate accurately except on the most open scaled maps. Furthermore most of the available data are from valley stations. In general, however, precipitation decreases eastward from the Pacific region especially in the lee of the successive mountain ranges. Inversely, temperature variability and severity increase as the mountain region is traversed to the east. In this region diurnal temperature variations are greater than anywhere else in Canada. Summers in the southern interior mountain valleys are hotter than any location on the prairies but the northern portions are much cooler. Along some sheltered narrow valley stretches, true desert-like climate exists. Except in these dry areas and on areas of sheer rock the native vegetation is boreal forest in the north with sub-alpine and mountain forest in the south.

The *Prairie* climatic region takes in almost all the settled agricultural land of Manitoba, Saskatchewan and Alberta with the exception of the Peace River country. This native grassland is bordered on the west by the foothills of the Cordillera climatic region and on the north and east by the Northern region. Division from the latter region is along a "bridge", or slightly heavier parkland precipitation belt, extending to the mountains between the drier prairies and the northern lands. The prairie precipitation regime shows an early summer maximum which is, indeed, advantageous for agriculture. Total annual precipitation is normally light, especially in the South Saskatchewan River basin. The Prairie region is well known for two weather phenomena—the "blizzard" and the "chinook". Occasionally when the region is covered with bitterly cold Arctic air the general circulation will begin moving this air to the east and it is replaced by warm dry air subsiding in the lee of the mountains. This warm air invasion, which sometimes brings temperature increases of 40° to 50°F. is seldom felt east of southwestern Saskatchewan. Also in the wintertime and produced by intense frontal systems, bitterly cold temperatures with driving snow and high winds combine to produce the prairie blizzard. Such storms often bring outdoor activities to a halt for days.

The sixth and last general climatic region may be called the *Southeastern* region and takes in southern Ontario and Quebec along with the Atlantic Provinces of New Brunswick, Nova Scotia, Prince Edward Island and the island portion of Newfoundland. Winter in this region is shorter than in the adjoining Northern region, and summer, in the interior at least, may be quite warm for Canada. Reference has already been made to the great moderating effect of the Great Lakes over southwestern Ontario. This effect is scarcely noticeable in southeastern Ontario and in southern Quebec where winters may be much more severe. Temperatures in the interior of New Brunswick are similar to those in Quebec but the other Maritime areas are modified to an extent by the ocean and its embayments, especially in summer. Precipitation is ample in this region and increases from 30 to 35