

the east, increasing from 30 inches in Ontario to 50 in Nova Scotia. Seasonal distribution is also dissimilar. While the Pacific regions expect the winter to be their rainy season, the prairies and the Arctic get most of their precipitation in summer. The seasonal precipitation regime is much more uniform over eastern Canada although the Maritime Provinces may expect a slight autumn and early winter maximum.

Snow is common to the entire country but, except for areas of heavy fall in the mountains of British Columbia, mean annual snowfall is heavier in eastern than in western Canada. The snow cover season is quite long in interior Canada; in fact the northern interior half of the country is usually snow-covered for longer than six months each year. Freezing precipitation may occur during the colder months in any part of the country and it occasionally seriously disrupts transportation and communications in southeastern Canada. Cloudy weather and the lack of sunshine are common across the country in winter but are most pronounced along the northwest Pacific Coast.

In spring, wind speeds are usually at their maximum and southern interior areas may unfortunately experience a few tornadoes each year in late spring and early summer. Fog is also more common in the Atlantic Provinces during this season. Thunderstorms are essentially a summertime phenomena over the southern interior and southeastern Canada. High sensible humidity conditions may be at their worst in midsummer accompanying high temperatures. These sultry conditions are most often felt in southern Ontario but usually the spells last only a few days at a time. The southeastern coast may be affected by one or more hurricanes in the early autumn but usually the centres of these storms pass to the south giving this portion of Canada abundant rainfall and high winds. Upon occasion though, a hurricane will pass directly over Canada as far west as Ontario with serious damage from wind, rain and floods.

Considering climatic controls and the basic features of the climate referred to above, it is possible to divide Canada into six general climatic regions—Arctic, Northern, Pacific, Cordillera, Prairie and Southeastern. It should be remembered that except for mountainous dividing lines the regions are really divided by broad transition zones and not by sharp lines as shown for convenience in Fig. 4. The classification used is not mathematically precise but it does take into consideration some of the basic Köeppen and Thornthwaite concepts.

The *Arctic* climatic region is that part of the country north of the July 50° isotherm. This line, extending from Aklavik to Churchill around Hudson Bay and down the Labrador coast, corresponds in general to the northern limit of tree growth. In this region there is no summer as that season is known in southern Canada. The northwestern part of the region is the true desert area of Canada while on the other hand sufficient moisture is available on the large eastern islands to maintain small ice caps. Snowfall is relatively light but it blows, drifts and packs to a degree unknown in southern Canada. Continuous darkness and/or twilight during the long winter season is also a major factor in making this region so inhospitable. Surprisingly, Canada's record low temperatures have not been observed in this region. There is just enough heat transmitted through the ice over the Arctic seas to slightly modify the winter temperatures, although sub-zero conditions certainly have a longer season in this region than in any other.

But for the possible connotation of the word, the *Northern* climatic region might well be called the sub-arctic. Bordered on the north by the Arctic tundra, this region consists of a broad band from the interior northwest of the country, south of Hudson Bay to the Great Lakes including most of Quebec and Labrador. The region consists of sparse, lightly treed barren lands in the north and the more heavily forested native boreal forest in the south. It is in this region that appreciable snow cover lasts for more than half the year, especially in the northeastern section. Extremely low temperatures occur every winter throughout most of the northwestern section, and very hot temperatures may occur in summer. Precipitation is light in the northwest—in fact, this section is sub-humid—but there is ample in most of the southeastern portion. The central Quebec-Labrador portion has more snow each winter than any other comparable area in Canada.