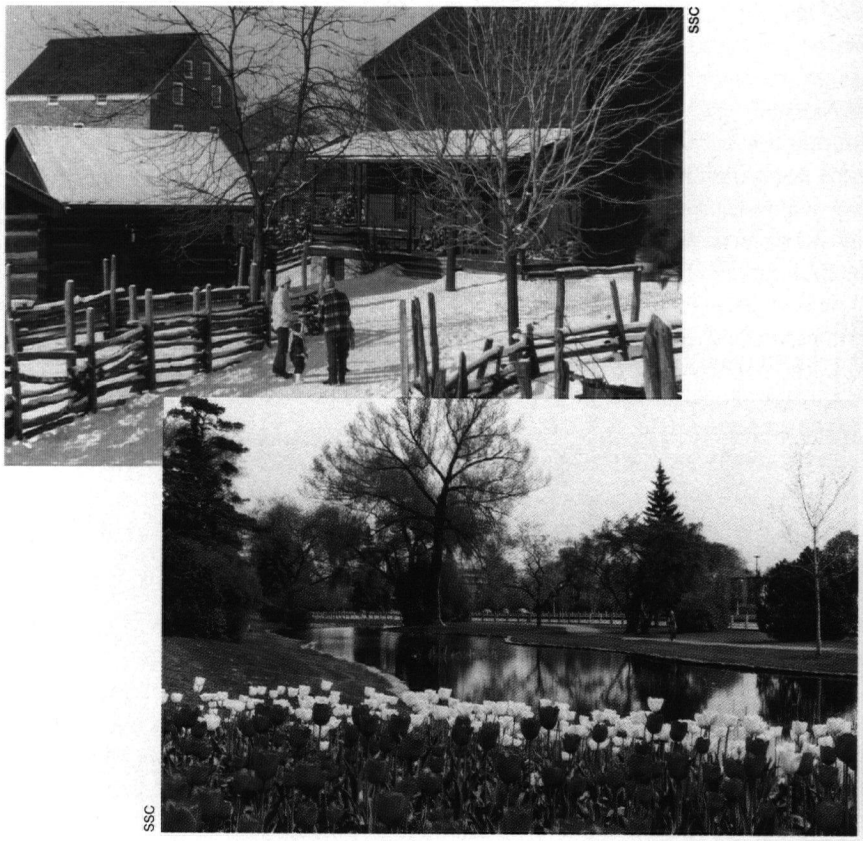
CLIMATE

Canada's climate can best be described as variable. Temperature and precipitation differ from region to region and from season to season. While it is true that in the extreme north temperatures climb above 0°C for only a few months of the year, most Canadians live within 300 km of the country's southern border where mild springs, hot summers and pleasantly crisp autumns prevail at least 8 months out of 12.

Seasons dictate the look of the land: whether the natural environment is in a state of growth or dormancy and, indeed, whether Canadians are water skiing or alpine skiing. While seasonal change signals fluctuations in temperature and hours of sunshine, the shifting positions of air masses also play a part. The usual moderate air flow from west to east is disrupted in winter when cold, dry Arctic air moves down from the northwest and in summer when warm tropical air moves up from the southeast. Added to these factors are the effects of mountain ranges, plains and large bodies of water.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The West Coast Climate

The west coast of British Columbia has the most temperate climate in Canada, thanks to warm, moist Pacific Ocean airstreams. The province's most populous cities, Vancouver and Victoria, enjoy cool and relatively dry summers and mild, wet winters. Snow seldom falls here, and when it does, it usually melts the same day.

The Cordilleran mountain system, which includes the Coastal Mountain Range and the Rocky Mountains, effectively blocks warm moist Pacific air from reaching the interior plains of the Prairie provinces. As the moist air is forced to rise over the mountains, it cools and falls on the westward mountain slopes in heavy amounts of precipitation — as rain at lower altitudes and snow at higher ones. The valleys between the mountain ranges receive much less precipitation and experience warm, even arid summers.

The Prairies

Located in the Canadian section of the vast central plains of North America, the Prairies extend east from the Rocky Mountains to the Great Lakes. Here, cold winters and hot summers are the norm, with relatively light precipitation. For instance, in the dry southern portion of Saskatchewan, annual precipitation averages less than 300 mm. The wettest area of the plains, Manitoba, receives about 500 mm each year.

Spring rains and dry autumn conditions have helped make the Prairies one of the top grain-growing areas of the world. The region also has its share of agricultural hazards, however, such as wind erosion, thunder and hail storms, and unseasonable autumn frosts.

Among the most remarkable features of the prairie winter is the chinook, a warm, usually dry winter wind that affects much of southern Alberta. The chinook sweeps down from the Rocky Mountains and has been known to raise temperatures as much as 16°C in a single day.

The Great Lakes/ St. Lawrence Region

More than half the Canadian population lives close to the Great Lakes or along the St. Lawrence River. Here, winter brings heavy snowfalls. Spring can be fleeting: temperatures in the 20-28°C range have been recorded as early as March. On the other hand, temperatures of -17°C have been recorded in April.

Summers tend to be longer and more humid than elsewhere in Canada. The heat is moderated somewhat by frequent rainfalls. Mean daily temperatures reach close to 20°C from mid-June to mid-September with week-long heat waves in the 30s a common occurrence.

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