

# Chapter 1

## Physiography

### 1.1 Geography

Canada, occupying the northern half of the North American Continent with the exception of Alaska and Greenland, is the largest country in the Western Hemisphere and the second largest in the world. The lands within its 3,851,809 sq miles of territory are extremely diverse, ranging from the almost semi-tropical areas of the Great Lakes peninsula and the southwest Pacific Coast, wide fertile prairies and great areas of mountains, rocks and lakes to seemingly endless stretches of northern wilderness and arctic tundra. The southernmost point of the country is Middle Island in Lake Erie, at 41° 41'N. In a straight line 2,875 miles northward, past the treeline and far into the Arctic, is Cape Columbia on Ellesmere Island, Canada's northernmost point, at 83° 07'N. From east to west at the widest point, the straight-line distance is 3,223 miles — from Cape Spear, Nfld., at 52° 37'W, to Mount St. Elias, YT, at 141°W.

In position, Canada is situated at the crossroads of contact with the principal powers and some of the most populous areas of the world. In the south, it borders on the United States for a distance of 3,986.8 miles. In the north, the Arctic archipelago penetrates far into the polar basin, making Canada neighbour to northern Europe and the Union of Soviet Socialist Republics. In the east, the salient of Labrador and the island of Newfoundland commands the shortest crossings of the north Atlantic Ocean and links Canada geographically with Britain and France. In the west, the broad arc of land between Vancouver in southern British Columbia and Whitehorse in Yukon Territory provides departure points for crossings of the north Pacific Ocean between continental North America and the Far East. The length of the Yukon - British Columbia border adjoining Alaska is 1,539.8 miles.

In size, Canada's 3,851,809 sq miles may be compared with the area of the USSR at 8,649,539 sq miles, China (including Taiwan) at 3,705,408 sq miles, and Brazil at 3,286,488 sq miles. It is more than 40 times the size of Britain and 18 times the size of France. This immense area, which seems to afford extensive scope for settlement, imposes its own burdens and limitations. Much of the land is mountainous and rocky or is under an arctic climate. The developed portion is probably not more than one third of the total; the occupied farm land is less than 8% and the productive forest land 27% of the total. The population, at approximately 21,569,000 on June 1, 1971, may be compared with 204,800,000 for the United States (1970) and with 95,305,000 for Brazil (1970).

There is no permanent settlement in approximately 89% of the total area of Canada. Only the smallest province, Prince Edward Island, is completely occupied. Large parts of the interior of Nova Scotia, New Brunswick and the Gaspé Peninsula are vacant as is most of the interior of the island of Newfoundland where settlement is confined for the most part to a broken fringe around the coast. On either shore of the St. Lawrence River below Quebec City there is a narrow fringe of settlement, with empty land behind. The continuously settled parts of these maritime areas make up about 1.1% of the area of Canada, and contain 11.7% of its population.

About 57.8% of the population of Canada live in the area between the American border and a 650-mile east-west line from Quebec City to Sault Ste. Marie. Within this area there is continuity of settlement but there are also large unsettled tracts. The block of continuous settlement, whose greatest north-south reach is 270 miles, makes up approximately 2.2% of the area of Canada. The eight largest cities within this block (Montreal, Toronto, Hamilton, Ottawa, London, Windsor, Quebec City, Kitchener) account for 35.8% of the Canadian population.

By far the largest tract of continuous settlement in Canada is in the Prairie Provinces, with a southern margin along the American border of some 900 miles. At its easternmost reach in Manitoba the northern margin of continuous settlement is about 100 miles north of the International Boundary; in the west, the northern margin reaches the 55th parallel, about 400 miles north of the boundary. This settled block occupies about 6.2% of the area of Canada and contains 15.4% of its population. Four cities within the area (Edmonton, Calgary, Winnipeg, Regina) contain 7.3% of the national population. North of this block, the Peace River district, astride the Alberta - British Columbia border, is an agricultural area which reaches the 57th