Physiography

Chapter 1

In this chapter, metric figures for text and tables are conversions rather than official metric designations. Nautical miles are used at sea, for ocean transportation and air navigation, and statute miles for coastline and inland measurements. Use of the nautical mile, equal to one minute of latitude, will be continued internationally and will be extended to the Great Lakes shipping system; the exception will be in measurements less than a nautical mile, when metres will be used.

Geography

Canada, occupying the northern half of North America with the exception of Alaska and Greenland, is the largest country in the Western Hemisphere and second largest in the world. The lands within its 3,851,809 sq miles (9976139 km²) of territory are extremely diverse, ranging from 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 is Middle Island in Lake Erie, at 41°41'N. In a straight line 2,875 miles (4627 km) 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 (5187 km) — from Cape Spear, Nfld., at 52°37'W, to Mount St. Elias, YT, at 141°W.

Canada is at the crossroads of contact with principal powers and some of the most populous areas of the world. In the south, it borders on the United States for 3,986.8 miles (6 416 km). 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, Labrador and the island of Newfoundland command the shortest crossings of the north Atlantic Ocean and link 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 (2 478 km).

In size, Canada's 3,851,809 sq miles $(9\,976\,139\,\text{km}^2)$ may be compared with the area of the USSR at 8,649,539 sq miles $(22\,402\,202\,\text{km}^2)$, China (including Taiwan) at 3,705,408 sq miles $(9\,596\,962\,\text{km}^2)$, and Brazil at 3,286,488 sq miles $(8\,511\,964\,\text{km}^2)$. 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 limitations. Much of the land is mountainous and rocky or under an arctic climate. Probably not more than one third of the total is developed; less than 8% is occupied farm land and 27% productive forests. The population, at 22,992,604 on June 1, 1976, may be compared with 214,529,000 for the United States (1976) and with 107,145,000 for Brazil (1975), according to official estimates published by the United Nations.

Politically, Canada is divided into 10 provinces and two territories. Each province is sovereign in its own sphere and administers its own natural resources. The resources (except for game) of the Yukon Territory and Northwest Territories, because of their remoteness, their great extent and meagre and scattered populations, are administered by the federal government. The approximate land and freshwater areas of the provinces and territories are given in Table 1.1.

There is no permanent settlement in approximately 89% of Canada. Only the smallest province, Prince Edward Island, is completely occupied. Large parts of

1.1