

**Great Lakes–St. Lawrence forest region.** Extending from the Great Lakes and the St. Lawrence River lies a mixed forest of eastern white pine, red pine, eastern hemlock and yellow birch. With these are associated certain dominant broad-leaved species common to a deciduous forest region including sugar maple, red maple, red oak, basswood and white elm. Other species with wide ranges are the eastern white cedar and largetooth aspen and, to a lesser extent, beech, white oak, butternut and white ash. Boreal species such as white spruce, black spruce, balsam fir, jack pine, poplar and white birch are intermixed, and red spruce is abundant in certain central and eastern portions. This region extends westward into southeastern Manitoba but does not include the area north of Lake Superior.

**Subalpine forest region.** The mountain uplands of Alberta and British Columbia include characteristic coniferous species: Engelmann spruce, alpine fir and lodgepole pine. There is a close relationship with boreal regions, with black spruce, white spruce and trembling aspen. There are also some Douglas fir, western hemlock, western red cedar and amabilis fir. Other species are western larch, whitebark pine, limber pine and, on the Coast Mountains, yellow cypress and mountain hemlock.

**Montane forest region** occupies a large part of the interior uplands of British Columbia, part of the Kootenay Valley and a small area on the east side of the Rocky Mountains. It is an extension of the typical forest of the western mountain system in the United States. Ponderosa pine is characteristic in the south. Douglas fir is found throughout but particularly in the central and southern parts, and lodgepole pine and trembling aspen are general, the latter particularly in the north-central area. Engelmann spruce, alpine fir and white birch are found in the north. White spruce also grows here.

**Coast forest region.** This is part of the Pacific Coast forest of North America. Essentially coniferous, it consists of western red cedar, western hemlock, Sitka spruce in the north and Douglas fir in the south. Amabilis fir and yellow cypress grow throughout and, with mountain hemlock and alpine fir, are common at higher altitudes. Western white pine is found in the south, and western yew in widely scattered groups. Deciduous black cottonwood, red alder and bigleaf maple have a limited distribution. Arbutus and Garry oak grow on the southeast coast of Vancouver Island.

**Acadian forest region.** This covers the greater part of the Maritime provinces. Red spruce is characteristic but not exclusive. Associated with it are balsam fir, yellow birch and sugar maple, with some red pine, eastern white pine, jack pine and eastern hemlock. Beech has been drastically reduced in Nova Scotia, Prince Edward Island and southern New Brunswick by beech bark disease. Abundant species are white spruce, black spruce, red oak, white elm, black ash, red maple, white birch, grey birch and poplars. Eastern white cedar is present in New Brunswick.

**Columbia forest region.** A large part of the Kootenay Valley, the upper valleys of the Thompson and Fraser rivers and the Quesnel Lake area of British Columbia contains coniferous forest. Western red cedar and western hemlock are characteristic. Douglas fir has general distribution; western white pine, western larch, grand fir and western yew are found in southern parts. Engelmann spruce grows in the upper Fraser Valley and to some extent at upper levels. At lower elevations the forest merges with the montane forest region.

**Deciduous forest region.** Northern limits of the deciduous forest, widespread in the United States, extend into southwestern Ontario between lakes Huron, Erie and Ontario. Here, with sugar maple, beech, white elm, basswood, red ash, white oak and butternut, are scattered other deciduous species including the tulip tree, cucumber tree, pawpaw, red mulberry, Kentucky coffee tree, redbud, black gum, blue ash, sassafras, mockernut hickory, pignut hickory, black oak and pin oak. Black walnut, sycamore and swamp white oak are confined largely to this region. Conifers are few but there is scattered distribution of eastern white pine, tamarack, eastern red cedar and eastern hemlock.

**Grasslands.** The prairies of Manitoba, Saskatchewan and Alberta support several species. Trembling aspen forms groves around wet depressions and continuous dense stands along the northern boundary. Other species of poplar grow along rivers, with willows and white spruce. There are sporadic stands of white birch, Manitoba maple, bur oak and ash. In British Columbia grassy valleys and low areas of the interior, there are scattered ponderosa pine, birch, poplar, spruce and mountain alder.

**Forest inventory.** Inventories of forest resources are made periodically by provincial authorities. The Canadian Forestry Service of Environment Canada compiles national statistics.

The 1981 national forest inventory reported on 4.4 million square kilometres (km<sup>2</sup>) of forest land (Table 8.1). Of this total, 49 000 km<sup>2</sup> are reserved by law for uses other than timber production. Almost 100% of production forest land of Canada has been inventoried.

The estimates of wood volume of timber, given in Table 8.1, are subject to revision as more complete inventories are compiled. Volumes reported in the 1981 national forest inventory are about 2% larger than those reported previously. The compilation is more standardized across the country than previously and is derived from more recent provincial inventories.

### 8.1.2 Forest depletion

The primary sources of Canada's current wood production are areas of Crown forest land (provincial and federal) and private forest land that are classed as productive. In addition to cutting, extensive forest depletion is caused by fire, insects, diseases and natural mortality. A total of 8,973 forest fires occurred in 1980, down from 10,063 in 1979, but covering a much greater area (Table 8.3).