

these are 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. In addition, 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.

**The Grasslands.** Although not a forest region, the prairies of Manitoba, Saskatchewan and Alberta support several species of trees in great numbers. Trembling aspen forms groves or "bluffs" around wet depressions, and continuous dense stands along the northern boundary. Several other species of poplar are usually found along rivers and in moist locations, along with willows and some white spruce. There are sporadic stands of white birch, Manitoba maple, bur oak and ash. In British Columbia, where the grasslands are confined to deep valleys and low areas of the interior, there are scattered representations of ponderosa pine, birches, poplars, spruce and mountain alder.

#### 10.1.1.2 Forest land

Inventories of the forest resources of Canada are made periodically by provincial forest authorities and, with their co-operation, the Canadian Forestry Service of the Department of the Environment compiles national statistics.

The 1973 National Forest Inventory reported an area of 1,259,192 sq miles of forest land (Table 10.1). Of this total, 59,742 sq miles are reserved by legislation for primary uses other than timber production. Of the remainder of non-reserved forest land, 632,448 sq miles are allocated to wood production and are held under licence, lease and/or under sustained yield management. The balance of 567,000 sq miles whether for reasons of suitability or economic accessibility is capable of producing crops of merchantable size and as inventories are extended and refined, its area can be expected to increase. Currently, about 75% of the non-reserved forest land of Canada has been inventoried in the sense of gathering statistically reliable information on area and forest cover.

Provincial Crown forest land constituted 69% of the non-reserved forest land of Canada, leaving 23% under federal jurisdiction and 8% in private ownership. Of the provincial forest land 69% is allocated to timber production and of the federal forest land less than 2% is so allocated. Although precise use of private forest land is a matter of speculation, individual studies and limited statistics suggest that timber production still predominates despite a tendency to convert some of this land to recreational use. At the time of the 1973 inventory 8% of the non-reserved forest land was considered inadequately stocked for timber production.

The estimates of volumes of timber, which are given by province in Table 10.1, are also subject to constant revision as more accurate and complete inventories are compiled. The volumes reported in the 1973 National Forest Inventory are somewhat larger than those reported previously due to updating of inventories in some provinces. The estimates, however, are low because timber volumes for Labrador, the Yukon Territory and Northwest Territories are not available and secondly, British Columbia has adopted procedures whereby data on volume of mature timber only were compiled.

#### 10.1.1.3 Canada's forest trees

There are approximately 140 recognized tree species in Canada, excluding the various subspecies and varieties. Of this number, 31 species are conifers or "softwood", about two thirds of which are of commercial value; less than one fifth of the native broadleaved trees or "hardwoods" can be considered as commercially significant.

The most abundant forest trees in Canada, in terms of standing timber, are the spruces, pines, true firs, poplars, hemlocks, birches, cedars, Douglas-fir, maples and larches. However, the economic importance of these species, except for the spruces, does not necessarily correspond to their abundance.

About one third of Canada's timber volume is spruce. White spruce and black spruce range from the Atlantic Coast almost to the Pacific and northward into Alaska. Sitka spruce, the largest of the native spruces, is found in the Pacific Coast area; Engelmann spruce is established farther inland, extending to the foothills of the Rockies in southwestern Alberta; and red spruce is found only in eastern Canada. Spruce is used extensively for pulpwood, lumber and plywood.