

atures. The dryest conditions are found in the lower river valleys, where the forest gives way to open grassland.

The principal tree species are ponderosa pine, Douglas fir, lodgepole pine, and aspen. Towards the northern limits of the region ponderosa pine disappears and associations of Douglas fir and lodgepole pine become dominant. Towards the east, stands of Engelmann spruce and alpine fir grade into the forests of the Columbia Region. Aspen is a more important constituent of the northern parts of this forest.

The Coast Forest Region.—This region includes the western slope of the Coast and Cascade mountains and the Insular System, the higher elevations of which form Vancouver island, the Queen Charlotte group and other islands along the coast.

The climate in this region is mild and equable, with heavy precipitation varying from 40 to 120 inches per annum, about 70 p.c. of which falls during the autumn and winter months. These conditions are conducive to the luxurious growth of coniferous forests, and produce the largest trees and the heaviest stands in the Dominion.

The dominant trees are western hemlock and western red cedar. Associated with these are Douglas fir in the south and Sitka spruce in the north. All four of these species, of which the most important commercially is Douglas fir, grow to large sizes, and occasionally are found in stands running up to 100,000 ft. b.m. per acre. Other conifers which occur in the region but are of much less importance include yellow cedar, mountain hemlock, amabilis, grand, and alpine firs, and western white pine. Of the broad-leaved trees, several alders are widely distributed, and Garry oak and madrona are found in the vicinity of the straits of Georgia. Broad-leaved maple and vine maple occur at low elevations in the southern sections, and black cottonwood, which is perhaps the most important hardwood from the commercial point of view, is found on alluvial soils in the valleys.

Section 2.—Important Tree Species.

In Canada there are approximately 125 species or distinct varieties of trees. Only 33 of these are conifers commonly known as "softwoods", but they comprise over 80 p.c. of the standing timber and 70 p.c. of the wood utilized for all purposes. While the number of deciduous-leaved or "hardwood" species is large, only about a dozen are of a commercial importance comparable with twice the number of conifers.

For descriptions of the individual tree species, the reader is referred to pp. 283-286 of the Canada Year Book, 1936, where the chief tree species were covered, and to Dominion Forest Service Bulletin No. 61, "Native Trees of Canada", published by the Department of Mines and Resources, where the subject is treated in detail.

Section 3.—Forest Resources.

Areas.—The total land area of Canada, revised according to the latest surveys, is estimated at 3,466,556 square miles, of which 549,700 square miles is considered as being suitable for agricultural or pastoral purposes. About 255,000 square miles of this agricultural land is occupied and of this 213,000 square miles is classified as improved and under pasture and 42,000 square miles as forested.

In Table 1, p. 54, the forested lands are shown in detail. It will be seen that the total area covered by existing forests is 1,254,082 square miles, including 41,637 square miles of occupied agricultural land still forested. Most of this will, no doubt, be left under forest cover in the form of farmers' woodlots. There is