

The Northern Transition Section.—This area is a part of the Boreal Region, but is described separately because none of its forests is of commercial value although of considerable local economic value. It represents a transition from the merchantable forests of the south to the treeless wastes of the far north. White and black spruce, larch, and birch are the principal tree species, and these are usually of stunted growth because of the severity of the climate. In river valleys and other protected sites occasional clumps of trees of fair size are to be found. The principal economic value of the forests probably consists in the habitat which they provide for fur-bearing animals, and the wood they furnish for fuel and buildings for the scattered inhabitants of the region.

The Aspen Grove Section.—This section, which lies entirely within the Prairie Provinces, is also a part of the Boreal Region, but has very special characteristics. It is a zone of transition between the true forest region to the north and the open grasslands to the south. Aspen is the dominant tree, and is in sole possession of most of the area. In southern Manitoba stands of bur oak are found, and elm and ash occur singly or in small groups in river bottoms. Most of the area is farmed and much of the forest is now in the form of woodlots.

The Sub-Alpine Forest Region.—This is essentially a coniferous forest extending from the grasslands of the prairies and the western border of the Boreal Region up the east slopes of the Rockies to timber-line. This same type of forest reappears in a narrow strip extending northwesterly from the International Boundary between the plateaux of the Montane Region and the non-forested tundra formation of the mountain tops of the Coast ranges.

In general, this forest formation occupies areas from 3,500 to 6,000 feet above sea-level. Rainfall is moderate, temperatures are low, and the growing season is short. The topography is mountainous with steep-sided valleys, and the soils are mostly derived from glacial and other residual material. The dominant tree species are Englemann spruce and alpine fir, lodgepole pine, and aspen. Less widely distributed are mountain hemlock, alpine larch, and white-barked pine.

The Columbia Forest Region.—This region, often referred to as the Interior Wet Belt of British Columbia, supports forests which are somewhat similar in composition to those of the Coast Region.

The forests properly attributable to the Columbia Region comprise stands in the valleys of the Columbia and other rivers which lie between elevations of 2,500 feet and 4,000 feet above sea-level. Below this range occurs the Montane Region, and above it the Sub-Alpine. The climate is intermediate between those of the Coast and Montane Regions. The precipitation varies from 30 to 60 inches. The region should actually be mapped as a series of 'islands' and 'stringers' surrounded by patches of Sub-Alpine forest; but it is impracticable to do this on so small a scale as is used for the map facing page 284.

Some authorities consider the Columbia Region to be merely an extension of the Coast Forest Region. Because of the complete physical separation of the two regions in Canada, and also because of important differences in environmental conditions, the division made here has been adopted.

The principal species in this region are Englemann spruce, western red cedar, western hemlock, and Douglas fir. Among other species of considerable importance are alpine and grand firs, western white pine, and western larch. Lodgepole pine commonly replaces stands destroyed by fires. Black cottonwood is found on rich alluvial soils.