butternut. The pine forests of the Ottawa Valley and Algonquin Park have been famous as one of the greatest of Canada's lumbering areas. Elsewhere in the Region forests of mixed type predominate, with a considerable proportion of pure hardwood stands in the more favoured locations towards the south.

The Deciduous Forest Region.—This Region in Canada consists of a small northerly intrusion from the great forest of the same type in the United States, and occupies the southwestern portion of what is commonly referred to as the Ontario Peninsula. It enjoys very favourable climatic and soil conditions that permit of the growth of a number of tree species not found elsewhere in Canada. The area is completely settled because of its fertile soil, and the forests are represented now only by woodlots, parks, and small wooded areas on the lighter soils.

The characteristic trees of this Region are beech and sugar maple, together with basswood, red maple and several oaks. Coniferous species are represented largely by scattered specimens of white pine, hemlock and red juniper.

Among the less common hardwoods, which occur singly or in small groups, are hickories, black walnut, chestnut, tulip tree, magnolia, mulberry, sycamore, sassafras, black gum, Kentucky coffee tree and a number of other species that find their northern limit in this Region.

The Boreal Forest Region.—This Region covers the greater part of the land area of Canada. It stretches unbrokenly from the Northern Peninsula of Newfoundland and the Atlantic Coast of Quebec westward to Alaska. Along its southern side it follows the limits of the Great Lakes-St. Lawrence Region, then skirts the open grasslands of the Prairie Provinces, and is terminated in the west in the foothills of the Rocky Mountains. To the north it is bounded by the limits of tree growth.

The principal trees of the Region are white and black spruce, balsam fir, poplars, white birch and jack pine. Near the foothills of the Rocky Mountains the latter species is replaced by lodgepole pine. In Quebec and Ontario, and as far west as a line running from Lake Winnipeg to Lake Athabaska in the Prairie Provinces, the Region is, for the most part, underlain by granitic rocks of the Precambrian formations, known as the Canadian Shield. Within this area there are extensive tracts of good soil, formed from glacial or sedimentary deposits, but a larger portion of the Region is characterized by shallow soils. Considerable areas of bare rock testify to the disastrous results of forest fires followed by erosion. The forests of this part of the Region are mainly coniferous, with black spruce and balsam fir as dominants, and are valuable chiefly for pulpwood. West of Lake Winnipeg the same tree species are in evidence but in different proportions. Here the soil is deep and relatively fertile, and the characteristic forest is a mixture of poplar and white spruce.

The climate of the Region is severe and precipitation ordinarily varies from 15 to 30 inches annually, although these amounts are exceeded in eastern Quebec.

The Northern Transition Section.—This area is a part of the Boreal Region, but is described separately because its forests are of no commercial value, although some have considerable local economic value, since they provide cover for furbearing animals, wood for fuel and buildings for the scattered inhabitants of the Region. This Section 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.