

In some sections, as in the vicinity of the Great Lakes, sedimentation took place in large lakes produced by the blocking of the outlets of the present lake basins by lobes of the retreating glacier. Recent sedimentation took place also over southwestern Quebec and eastern Ontario during submergence beneath the sea about the close of the glacial period.

Plain Region.—The plains of Manitoba, Saskatchewan and Alberta are underlain by nearly flat-lying shales and sandstones. These have weathered down into the clays and clay loams that have made the plains one of the great wheat-producing districts of the world. This part of Canada was also subjected to glaciation, but the great proportion of the surface deposits is derived from the underlying rocks.

Some large stretches of the Plains region were submerged by glacial lakes in which fine silts and clays carried down from the surrounding land and introduced by glacial streams were deposited. Such is the very fertile Red River valley. This is a part of the bed of a great lake that extended from the Laurentian plateau west to the Manitoba escarpment; it reached southward into the United States and northward 100 miles beyond lake Winnipeg.

The great fertility of the prairie provinces is due in part to the mineral constituents of the soil and in part to the great accumulation of nitrogenous organic matter, the remains of ages of vegetable growth.

Cordilleran Region.—The Cordilleran region, extending from the Rocky mountains to the Pacific ocean, is underlain by igneous rocks of various kinds and by sediments that have been folded into mountain ranges and much altered. The whole region remains mountainous, though the interior section is reduced to an elevated plateau. Agricultural pursuits are therefore limited to the valleys. In these there are numerous terraces composed of silt carried down by streams issuing from former glaciers, the latter acting as eroding agents on the underlying rocks. These valley deposits are fertile and are well adapted to fruit culture. The soil of the lower Fraser is a heavier soil and consists chiefly of alluvium.

Thus is Canada's rich heritage in green forests and broad waving fields of grain the result of the geological processes of ages. Nature in her sterner moods produced those great upheavals, foldings and crushings of the earth's crust that resulted in the rugged and uneven stretches of country suited to the growth of forests; in her kindlier moments she slowly and gently and with little disturbance elevated above the sea the level or slightly undulating areas so well adapted to agriculture. Ages before man appeared upon the earth had the geological processes already determined what his pursuits should be and where they should be carried on.