

Old lake
basin.

the lakes through which it passes, the change brought about by the gradual filling up of the channel by detritus, is a marked feature. In the early history of the river, several lakes were situated along this channel. The ridge crossing the valley at The Pas, at one time held back a large lake, and in this was accumulated a thick deposit of sediment, but as the outlet across the ridge was worn down, the lake disappeared. The river channel across this basin is built apparently above the flood plain. The land on either side is raised but little above the bed of the river channel, and so is subject to periodic inundations. In the country which formed the shore of this lake, it is generally found that limestone beds are not far below the surface, being covered by a light deposit of boulder clay and the lacustrine silt which supports a growth of spruce and poplar.

The basin of Moose lake is apparently the remains of a larger one, the southern end of which has been silted up by the river, and through the plain so formed the latter now winds in several crooked channels. The present outlet for the water of Moose and Cedar lakes is by the channel which reaches Lake Winnipeg at the Grand Rapids. There seems, however, to be a possibility of there having been an earlier outlet to the north-east from Moose lake by the channel of Minago river.

Rocks covered
by stratified
clay.

East of the outlets of Reed and Burntwood lakes the surface of the country slopes gradually to the east to Nelson river, while beyond that again there is a slight rise to the south-east, forming in this manner a wide though shallow valley or depression running north-east and south-west. This depression is probably continued under the Palaeozoic limestones to the south-west. It is quite possible that the limestone beds formerly extended through this shallow depression and joined those bordering the west and south sides of Hudson bay. From the Nelson river westward, the rock, mainly gneisses, are buried beneath a thickness of from ten to one hundred feet of soft gray stratified clay. This clay has rarely been deposited in sufficient thickness to level up the original inequalities of the underlying rocky floor.

West of this clay-covered country of the Nelson valley, the underlying rocks emerge at a slightly higher level than in the rest of the district, and form a plateau with rough surface partly barren and unattractive in appearance. The surface deposits are meagre, being limited to a thin sheet of till and occasionally sandy beds in the lake basins.

In the valley of Churchill river a narrow strip of clay is found on which there is a fairly luxuriant growth of small timber. The