

to the present time Doobaunt Lake, the largest of the many hitherto unexplored lakes through which we passed, lying in North Latitude 63° and West Longitude 102° , and with an elevation of about 500 feet above the sea, seems to be always more or less completely covered with ice, for during the ten days which we spent on it—from August 7th to August 17th—we were obliged to travel in a narrow lane of water between the solid ice covering the main body of the lake and the shore, and in two places this channel was blocked by the ice resting against the beach.

In general physical features the "Barren Lands" often closely resemble the great plains west of Manitoba along the line of the Canadian Pacific Railway, being undulating grass-covered country, underlain by Till more or less thickly studded with boulders; but a hard granite knoll projecting here and there serves to remind one that the Till is not here resting on soft cretaceous shales and sandstones, and at once accounts for the much greater abundance of boulders.

In some places the surface is composed entirely of large sub-angular boulders, without any matrix of sand or clay, while the shores of Chesterfield Inlet, and part of the north-west coast of Hudson Bay, are bold and rocky.

A particularly noticeable feature of the "Barren Lands" is the absence of valleys for the rivers. The Telzoa River, probably the largest stream in all that country, is, through the greater part of its course from Daly Lake to the head of Chesterfield Inlet, merely a succession of lakes of larger or smaller size, lying in original depressions in the Till or rock, connected by stretches of rapid water flowing in one or more shallow, tortuous, and often ill-defined channels frequently choked with boulders. Although the long winter and the ever-frozen ground would prevent very rapid erosion, it is evident that this river has been but a short time cutting out its channel.

Throughout the whole region the rock has everywhere been strongly glaciated, leaving the exposed portions rounded and often polished and striated. Most of the prominent knolls show clearly the direction of glaciation by the rounded stoss and broken lee sides, but in cases where two or three different glaciers have scored records on the small rocky knolls, all sides may be well smoothed, rounded, and scored.

The accompanying map shows the general directions in which the glacial grooves and striæ are trending, deduced from several hundred observations. As is there shown, the direction of glacial movement on the upper Churchill River is south or a little west of south, or parallel to the long axis of the lake; on Chipman River and the head of Telzoa River south-west; on Doobaunt Lake and the river in its vicinity west. Some of these last striations are crossed by an earlier set of striæ coming from the north.

On Telzoa River, between Doobaunt and Baker Lakes, the direction of striation is north-westward, the course being clearly shown by the stoss and lee surfaces, boulder trains, and the