

stones occurs, which has a very considerable extent. In places the soil and thin forest growth has been removed and the rounded stones are laid bare sometimes over a space of several acres. These shew low terrace like ridges of eight or ten feet high, the whole deposit sloping towards the valley of the Rivière à la Graisse which flows past the northern flank of the mountain. The rocks comprising this curious deposit, which is known locally as the *Devil's Field*, are nearly all of reddish syenite often composed almost entirely of red felspar, with others of flesh-red felsite and porphyry, and a few of quartzite, the latter belonging presumably to some portion of the Laurentian, which is found on the north side of the Ottawa River. The bulk of the syenite and felsite rock is from the mass of Rigaud mountain itself. This deposit extends for several hundred yards along the north face of the mountain, and has a depth of from ten to twenty feet, though the bottom has not apparently been reached, but lower down the mountain side the deposits become finer, being largely coarse gravel and sand. There is every probability that this curious deposit marks an old shore or beach of the time subsequent to the glacial period. The locality has been briefly described in *Geol. Can.* 1863, p. 896, and is well worthy a visit from any one interested in the subject of glacial geology.

That the surface of the country was below the sea level at this period is clearly shewn by the presence of marine shells in extensive deposits of blue clay which is widespread throughout the valley of the Ottawa River. Along the streams flowing from the north, as the Rouge, Du Lievre, Gatineau, etc., it has been recognized for nearly 100 mile from their juncture with the main stream. Frequently the clay deposits are covered by a mantle of sand often of considerable thickness. That the greater part of these clays are of marine origin is shewn by the finding of marine shells at elevations of 450 and 500 feet above present sea level at various points throughout the area. Along most of the rivers throughout this section a succession of terraces occurs, some of which along the upper part of the Rouge River are 1000 feet above the sea level. The distribution of the clays and sands throughout the northern area is very extensive; great areas as the Kazubazua plains embracing many square miles on which the soil is nearly pure sand, the vegetable growth consisting of small pine and blueberry