

type, in that they seem to occupy portions of more than one valley, the valleys being closely adjacent and the divides low, and their greater breadth being thus accounted for. There are rock islands, in fact, in all of these large lakes and often in considerable number. Lower Saranac lake is full of them, alined so as to suggest the drowning of adjacent small valleys. The chain of islands in the center of Big Tupper lake suggests the same thing.

The smaller lakes are of a great variety of types. Some of them are in narrow and some in wide valleys; some are nearly or wholly rock bound, while others show little or no rock along their shores; some are in deep, steep sided valleys, while others have low, sloping shores; some are strung out in chains along a single valley, though the majority are single.

The causes for the existence of these lakes are as various as the causes which produce hollows on the surface of a region recently invaded by an ice sheet, such a surface having a combination topography due to both destructive and constructive processes. It is held by many observers that locally glaciers may excavate shallow rock basins, and Ogilvie has argued that lake basins of that type are abundant in Hamilton county.¹ Quite likely also such exist in the north portion of the region, though they certainly are not the common type there, the majority occupying depressions in the drift surface in the wider valleys. Such a lake as that shown in plate 16, for example, is a good representative of the usual type. This lake, Stony Creek pond, shows occasional rock ledges on its east shores, but it lies on the east edge of a great sand terrace which extends from the south end of Upper Saranac lake to Axton on the Raquette, the sand undoubtedly overlying till at no great depth, so that we are dealing with a small preglacial valley now badly clogged with drift. The level of the pond is so nearly that of the modern Raquette at Axton that its outlet has no cutting power.

The larger lakes are mostly up near the main divide of the region; and, though they occupy portions of preglacial valleys, these were toward the head waters of the preglacial streams and were therefore of no great width. Their south to southwest

¹*Op. cit.*, p.411.