

trend closely conforms to the direction of movement of the ice sheet, which must thus have thoroughly scoured them, and it may well be that some, or all, of them have somewhat of the rock basin character, though no proof of this is yet at hand, so far as the writer is aware. Many of them are demonstrably held up by morainic dams; but that might be true and yet the lake be somewhat of the rock basin type. Many have highly irregular shore lines, owing to the drowning of the mouths of the small tributary valleys, and in general there are no features of these which at all suggest the hanging valley type; they rather strongly suggest the contrary. In the comparatively small number of instances of what may prove to be hanging valleys, of which Bog river falls at the upper end of Big Tupper lake is a good example, it is far from certain that the streams are not locally out of their preglacial channels near their mouths, and that the fall is not thus to be accounted for. There are however some features of these larger lakes that do suggest some deepening of their basins by the ice sheet, but the data are too fragmentary to justify a present discussion.

Many of the Adirondack lakes are being shallowed quite rapidly by the considerable amount of sediment washed into them by the streams. In the few thousand years that have passed since the ice vanished from the region quite a number of lakes, both large and small, have been completely filled in this way and converted into vleis. And at the present day many examples showing all stages of the process are to be found.¹ Some are converted into comparatively dry meadows, some are wet and boggy, some have still a foot or so of water, but with a growth of vegetation over the entire surface, others have still some clear water in the center, others only a fringe of rushes and water lilies along their margins, still others are very shallow throughout but with only a beginning of vegetable growth, and this well out in the pond as well as near shore, yet others are still comparatively deep. Almost without exception the topographic sheets of the region show examples, and often numerous. On the Saranac lake quadrangle, for example, a filled lake basin, 4 miles long, is seen in the north center of the sheet,

¹See Smyth, C. H. jr. Lake Filling in the Adirondack Region. Am. Geol. 11: 85-90.