

*Chapter 8*

## LARGER GLACIAL LAKES OF THE CHAMPLAIN AND HUDSON VALLEYS

## LAKE ALBANY

The preceding descriptions of the successive stages of frontal and marginal deposits of the shrinking ice sheet and the attendant evidences of local water bodies within the Hudson valley make it evident that as the ice front retreated from the terminal moraine, bodies of water stood at the ice front increasing in length northward as the ice withdrew in that direction. Doubtless at many of these stages the water in front of the ice might justifiably be denominated a lake regardless of the relation to sea level. If the land were at the same level as now the outpour of fresh water would have excluded the salt and made the conditions those of an estuary or lake; with the land 100 feet lower so as to bring the deltas and terraces at Peekskill south of the Highlands at sea level the same conditions would have held; if for any geographic reason the entire southern Hudson valley were above sea level at that time lacustrine rather than estuarine conditions would have prevailed. These considerations hold good also for the conditions in front of the retreating ice sheet as far north as the vicinity of Poughkeepsie at least. But north of Staatsburg and thence northward throughout the Hudson valley there is a record of continuous lacustrine conditions for a time marked by beds of clay and marginal deltas which indicate typical lacustrine conditions in the total absence of marine fossils from the beds deposited at this time. To this body of water whose clays were early designated the "Albany clays" by Ebenezer Emmons, no name is so appropriate as Lake Albany.

E. Emmons<sup>1</sup> wrote "the Albany clay, or as it is in other places called Post-tertiary clay," in 1843, long antedating the name Albany as used in the geology of Texas.<sup>2</sup> He regarded the clays

<sup>1</sup>Natural History of New York, division 5, Agriculture. 1846. 1:260.

<sup>2</sup>U. S. Geol. Sur. Bul. 191, p.42.