

*Chapter 7*DELTAS AND SHORE LINES OF THE CHAMPLAIN  
VALLEY

The deltas of the Champlain valley have been studied by the Vermont geologists and later by Taylor, G. F. Wright, Baldwin and Upham. The shore line phenomena of the New York side particularly have received mention in the literature. Mr Gilbert in his unpublished notes and Cushing in his report on local geology appear to be the first to recognize their distinctness particularly in the northern part of the area where the valley is wider and waves either of the sea or of a glacial lake would have had a greater fetch than in the southern constricted portion of the lake.

From near Ticonderoga something like beaches begin to become recognizable in favorable situations and gradually increase in size and distinctness toward the northern part of the State till within a few miles of the international boundary where they become here and there striking objects.

Space can be found for the description of types of these deposits only and then mainly the highest occurrences seen.

*Parallel roads on East Bouquet mountain.* Immediately west of Bouquet station on the Willsboro quadrangle rises East Bouquet mountain, a rounded hill attaining an elevation of 1225 feet. On the northeast slopes of this hill signs of wave action are traceable about halfway to the top. As nearly as I could estimate my position on the uppermost of these marks by the contour lines of the map, the highest of these wave lines is at 570 feet. The plane of tilting between the highest wave marks on Trembleau mountain and the Street Road highest beach cuts this hill at 560 feet, which is presumably a better reading than 570 feet [see pl. 28 and explanation].

*Port Douglas beach ridge.* On the Willsboro quadrangle, south of Trembleau mountain, a foothill of the Mt Bigelow mass is formed by a relatively thick drift deposit in the form of a ridge overlooking Corlear bay. The crest of this ridge, contoured to 540 feet on the United States Geological Survey map, is wave heaped with subangular cobbles. This ridge must have formed an offshore bar or shoal when the waters stood at its height over the Cham-