

commenced on all sides of the Adirondack region; but, as was the case also in the Potsdam, it was most pronounced on the northeast and diminished in amount toward the west and south. The formation must have encroached on the Adirondack island on all sides, greatly diminishing its previous area. On the south side specially a large transgression of the sea on the former land took place, since the Potsdam shore line had been an unknown distance to the south of the present line of the Mohawk valley, while the Beekmantown has a thickness of from 300 feet to 500 feet there, and its shore must have lain several miles to the northward. On the west side of the region but little subsidence took place, and the Beekmantown shore line lay to the west of the present Precambrian border there. In the Champlain region the formation has treble the thickness that it has along the Mohawk, and the transgression of the sea on the northeastern portion of the region must have been of vast extent. The Adirondack land mass must certainly have been an island during the Beekmantown, whose area was small compared with the present size of the region, and which lay mainly in its western portion, extending eastward for an unknown distance, greatest on the south side.

Then conditions changed, and the downward movement was replaced by an upward one, which caused cessation of deposition on the south and west sides of the area, brought a large but unknown amount of the previously submerged tract above sea level, so that the Beekmantown island was greatly extended in those directions, and shut off communication between the basin on the southwest and that on the northeast. The latter district did not feel the upward influence, but continued to subside, and the limestones and dolomites of the Cassin formation were deposited on the normal Beekmantown. The abundant fauna found fossil in these beds and absent from the Beekmantown beneath, must have entered the basin from the east or north, arguing for extended depression and open sea connection in one or the other, or both, directions.

The depression on the northeast persisted throughout Chazy time, though likely with interruptions, of which the most important is indicated by the basal sandstone of the Chazy. Like the preceding Cassin subsidence, this diminished rapidly in amount