

## THE GLEN COVE BREAKWATER

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The need for a breakwater to provide a calm anchorage in Hempstead Harbor was recognized as early as the 1870's, when a growing commercial steamboat fleet was making regular runs to the Glen Cove steamboat dock. Steamboat service between New York City and Glen Cove increased dramatically during the summer months as many of New York's elite "400" would travel by steamboat to Glen Cove to stay at the famous Pavilion Hotel, which was located near the Landing Road entrance to Morgan Park, a short walk uphill from the steamboat landing. Steamboat captains had long since known that they needed protection against the relatively large waves created by periodic strong northwesterly winds blowing across the open fetch of Long Island Sound to allow for safer boarding and disembarking of passengers and cargo at the Landing Road dock. Undoubtedly, a few wealthy and well-connected steamboat owners began to petition their local Congressmen in the early 1880's for Federal help in getting a breakwater constructed. By 1888, local lobbying was successful in obtaining Federal funds to construct a breakwater. Authorization for the project was included in the River and Harbor Act of August 11, 1888, later modified by the Act of June 22, 1895. The original plan by the Army Corps of Engineers was for a stone breakwater to extend from the northwest corner of the Glen Cove steamboat dock approximately 2000 ft southwesterly into Hempstead Harbor. The rock used in the construction of the breakwater was Manhattan Schist, a hard metamorphic rock that underlies most of Manhattan Island, and which was obtained from ongoing subway tunnel and foundation excavations. Work commenced sometime around 1890 and continued on and off for the next 16 years as funds permitted. By 1906, only 1,564 ft of the original 2000 ft of breakwater was completed at a total cost of \$72,000. At that point the project was declared essentially complete by the Corps of Engineers, and no further work was planned. In addition to providing safer conditions for steamboat docking operations, the new breakwater provided a calm anchorage for the local fleet of New York Yacht Club yachts, now lying at their moorings off the newly established Station No. 10, which had been moved to the foot of Landing Road two years earlier. In later years, the Coast Guard would declare the area to the south of the breakwater a special Federal anchorage, thereby creating a "harbor of refuge" for all mariners transiting the area.



Postcard dated 1908 showing first navigational light erected on the Glen Cove breakwater.

The new breakwater required a navigational light to mark its westernmost end and to warn mariners of its location. A light had been recommended for the entrance to Hempstead Harbor as early as 1880, and by 1894, petitions and studies had been assembled to argue for the establishment of a light in the area. In 1900, a fixed, white, oil-fired, lantern light was established at the end of the breakwater. The light sat atop a black post with a white top, and was first tended by Eugene S. Bailey. On August 20, 1901, the light's characteristic was changed from fixed white to fixed red. In 1904, an oil house was built next to the light and, in 1905; Samuel Pardue took over the responsibility for tending the light. Sometime after 1910, the light was rebuilt as a conical black skeleton tower atop a white tank house, which in turn, sat atop a black concrete foundation. The light appeared this way until 1942 when the light was changed from an oil-burning light to a 200 millimeter acetylene light. At this time, the light's characteristic was changed from fixed red to flashing white every two seconds.



*The New York Yacht Club in Hempstead Harbor,*  
The NYYC fleet off the Glen Cove breakwater circa 1910. Note the conical white skeleton tower atop a black tank house. (Reynolds archives).

Over the years, the large rip-rap blocks of Manhattan Schist that comprise the breakwater had settled into the underlying harbor mud, so that by the early 1960's the breakwater was all but submerged at high tide. As a result, the Army Corps of Engineers embarked on a rebuilding project in 1966 in which tons of additional rip-rap were added to the breakwater to raise its elevation several feet. Once the design elevation had been reached, the excess rip-rap was added to the western end, thus extending the breakwater by some 20 ft. Also at this time, the Coast Guard Aids to Navigation Branch replaced the 200 millimeter acetylene light with an electric light powered by banks of lead-acid batteries and changed the light's characteristic from flashing white every two seconds to flashing white every four seconds. Sometime in the late 1970's the familiar pyramidal black skeleton tower and white tank house were replaced by a square black skeleton tower supporting the light. In 1983, the Coast Guard changed the light's characteristic from flashing white every four seconds to flashing green every 4 seconds. In 1990 a square green daymark with the designation "5" was added to the skeleton tower and a new battery-powered electrical system equipped with a solar panel was installed to power the light. The light characteristic of our beacon still remains the familiar green flash every four seconds.