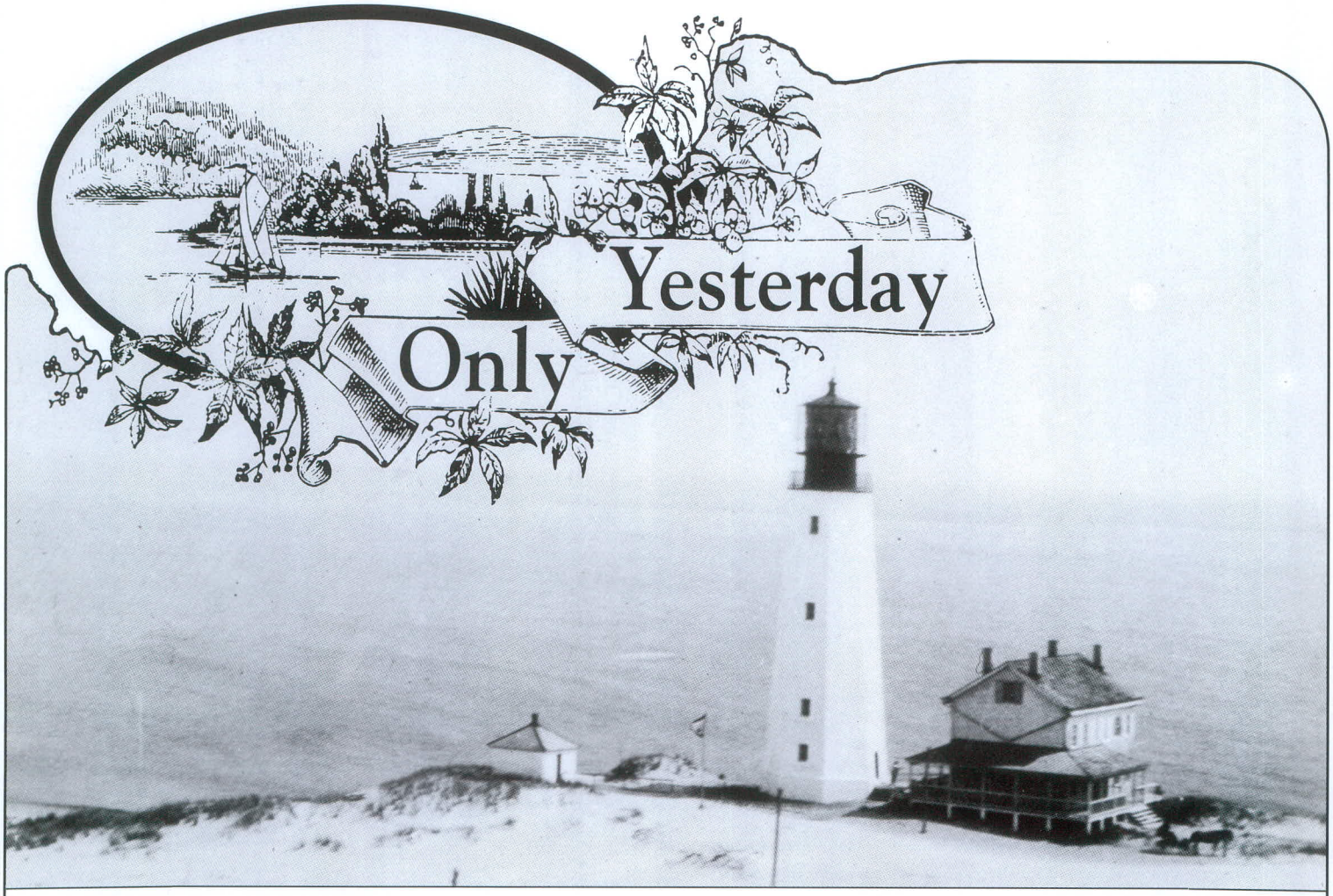


Cape Henlopen: by George Worthylake

In 1788 Benjamin Franklin, President of the Supreme Executive Council of the Commonwealth of Pennsylvania, appointed a Committee of Wardens to investigate the condition of the Cape Henlopen light station, located in the State of Delaware.

The tower was virtually built upon shifting sands and from its early days caused uneasiness as to its preservation. It was near the eastern end of a long ridge of sand dunes, from the top of which one could see a living forest being buried in sand on one side and on the other side the stripped trunks of trees of long ago emerging as the sand moved away.

On May 25 of that year the committee reported back that erosion could endanger the lighthouse at some future date. Their prediction came true, although it would be 138 years before the Cape Henlopen tower would fall into the sea.

The wardens noted that new high moles had been formed by the wind where only a few years earlier there had been deep ponds, and where there had been hills of sands there were vales and hollows. "Every precaution should therefore be taken," they concluded, "to secure the foundation from the growing effect of this evil. Barriers of logs and fences of rails have already had their effect and ought to be attended to. Underwood and weeds of every kind, or indeed, anything that can be brought to vegetate, will doubtless have a tendency to prevent the sand from blowing away. The gravel which is now around the foundation evidently strengthens, and no doubt, in great measure, secures its stability." They also noted: "From the bleak and exposed situation of the lighthouse it is unavoidably assaulted by repeated and severe storms, and notwithstanding the thickness of the walls, the beating of the rain, especially in the Northeast gales, has so effected them by the penetration of the moisture, that in many places the mortar on the inside has begun to crumble and a good deal of it to fall off. Perhaps there is no more effectual method of securing the building than giving it a coat of rough casting on the outside.

"There are eight iron stanchions in the octagonal corners of the walls (the lighthouse being an octagon) are built within them and are designed to support the lantern as they extend from the fifth to the sixth flight of stairs, they are now in many places become bare, and the better to protect them from the corroding of rust it would be necessary to have them plastered over the mortar or at least whitewashed."

Above – Cape Henlopen in 1924. The structure to the left of the tower is the oil house. Note the service flag between the tower and oil house. U.S. Coast Guard photo.

The history of Cape Henlopen Lighthouse began on September 5, 1762 when a patent for 200 acres of land in Sussex County, DE was granted to Pennsylvania for the purpose of erecting a lighthouse on Cape Henlopen even though the proposed structure was located in the State of Delaware. There is evidence that a light of some sort (probably a minor post lantern) preceded the Cape Henlopen structure which was first lighted in 1767. There is a document detailing an "expense of oil from the year 1765 — £802" and a record which reads: "Augt ye 26, 1756. Measured by Mr. Wm. Shankling Dept. Surv. from ye end of ye warfs to the light house two miles 15 perches — from ye Light House to ye sea E.N.E. one quarter 15 perch."

On Monday January 4, 1762 an advertisement appeared in the New York Mercury for a "Scheme of a lottery for raising £3,000 to be applied to erect a lighthouse on Cape Henlopen and otherwise facilitate the Navigation of the Delaware [river]."

During the next year materials for the lighthouse were purchased but for some reason the structure wasn't begun until 1765 and finished in 1767, the fifth to be constructed in the colonies.

The British burned much of the light station in 1777 but the Pennsylvania Wardens repaired the damage when hostilities ceased in 1783, relighting the structure the following year.

The earliest recorded keeper is a Abraham Hargin who maintained the lighthouse from 1797 until he died in 1813. The next keeper, John Ware, also served until his death at the station in 1827.

Because of the lack of training, instructions and quality inspections Cape Henlopen, like so many American light stations, suffered during the early years of this country. An inspection of 1838 by Lt. William Porter, USN stated, "The foundations and walls of this tower in good order; woodwork out of repair; many panes of glass in the lantern broken, and replaced by wood and sheets of copper. Keeper's dwelling requires extensive repairs, leaks throughout."

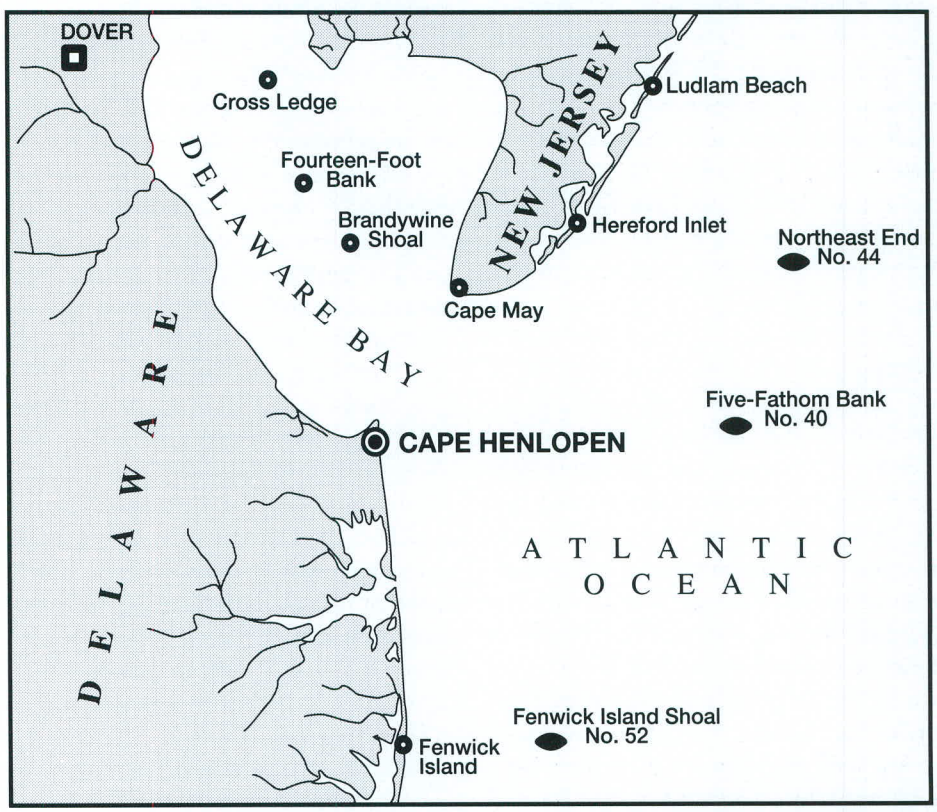
An 1851 inspection report noted that William Elligwood was "principal and only keeper" having taken charge in 1849 and was a farmer by vocation and that, "There has been no paint applied for two years since Mr. Elligwood took charge and the dome and sashes of the lantern were black inside for want of it. Keeper has charge of main light and beacon [front range light]; $400 salary for main light and $250 for beacon light. Trims at midnight. Impossible for one man to attend these duties alone. Wall cracked to the northwest. No curtains in lantern. Dwelling leaks about the eaves and windows. Foundation of the house undermining and requires looking after at once. . . ."

The report also included an inspection of the 'beacon' or front range light, also under the charge of the keeper, ". . . lantern miserable . . . water runs through the lantern, keeping everything in bad condition; tower of rubble stone masonry — no repairs for two years, everything in wretched condition; threatened with being carried away by the sand; woodwork inside rotting and going fast, whole establishment in wretched condition, and if not repaired soon will become unfit for use . . . keeper complains very much of not being supplied with necessary articles to enable him to keep the lights in order . . . no dripping pans to lamps, tanks not marked, except with chalk. . . ."

But the ad hoc Lighthouse Board report of 1852 gave Cape Henlopen better marks. That report stated, "This is one of the best reflector lights on the coast although inferior to the third order lens on Brandywine Shoal, in the proportion of 1 to 6. This light has an elevation of 180 feet, and only requires a first order lens to make it equal to the requirements of commerce and navigation.

The large amount of trade from Philadelphia warrants the proposed expenditure, and humanity would seem to dictate it as consistent with true policy and philanthropy."

In 1853 the newly created Lighthouse Board requested $15,000 from Congress to purchase and install a 1st order lens at Cape Henlopen. The request was approved the following year but the lantern room proved to be too small for such a large lens and a 4th order optic was temporarily installed. Finally, with a newly designed lantern room in place a 1st order lens was installed in 1856.



Chartlet courtesy of Rusty Nelson.

By 1862 the keeper's dwelling had to be rebuilt as "the old one at that place being threatened with speedy destruction by the steady progress in that direction of a remarkable sand hill, which has been moving inflexibly in a certain course at a constant rate for many years, presenting in its existence and movement a most singular natural phenomenon." The following year the Board reported that the new dwelling for the keepers had "been completed in a position calculated to avoid the course of the large moving sand hill at that place."

But "the sand hill" continued to plague the Cape Henlopen station. In 1868 the Board reported that, "Examinations conducted by the lighthouse engineer of the district, for a number of years, show that the dune at this station, called the 'big sand-hill' situated at the north of the tower, and formed by drifting sand, had moved to the southward at the rate of 11 feet a year. The height of this hill in 1863 was 73 feet, since which it has lowered and widened at the base. At the period just referred to, the old keeper's dwelling had to be abandoned, the sand having banked up to the second story windows. Fears were entertained that a similar drift would obstruct the tower." By 1872, "Trouble has been anticipated at this station by the encroachment of the 'Big Sand Hills' near it . . . but no serious inconvenience has yet resulted . . . so long as the space between the tower and the dwelling is kept open by removing the sand as fast as it accumulates."

After 1872 the "big sand hill" never increased it's threat to the station, but it was always there, looming over the keeper's house. The District reported various repairs and changes over the next twelve years, and occasionally mentioned the existence of the "large sand-hill" but it remained fairly stable. In 1884 a new threat to the station occurred, the Annual Report stated, "The beach is being cut away under this station, so that every high tide the sea comes up under the house."

In 1897 the Board noted that "the high sand dune surrounding this station is steadily blowing away." and in 1905, "Several tons of brush were placed about the tower and the oil house to prevent the oil house foundations and brick walls from being undermined by the drifting away of the sand."



The "big sand hill" that the board was worried about can be seen at the left side of this 1874 engraving by F.B. Schell.

By 1914 the danger was so great that the Delaware Public Lands Commission was called into session at the State House to confer with the Inspector of the Lighthouse District. "It was feared that should a severe northeast storm set in, such a deposit of sand would be made near the lighthouse so as to endanger the foundations and cause a dislodging of the structure," was reported. The District Inspector was not willing to have protective jetties constructed north of the lighthouse unless the state ceded the necessary land to the government. Apparently this never happened as the erosion continued until the fall of 1924 when it became evident that the tower could fall at any moment. The light was discontinued on October 1 and 1½ years later on April 13, 1926, a northeast storm undermined the tower causing it to fall seaward.

Then Lighthouse Bureau Commissioner, George Putnam, stated "Its value to shipping, however, had been quite superceded by the light and fog signal station on the Delaware Breakwater, and by the lightships and lighted buoys marking the entrance to Delaware Bay." Still, an important part of our maritime heritage went over in that storm of 1926. One of this countries 12 colonial lighthouses, the fifth constructed, was reduced to bricks on the beach . . . and it seems like only yesterday.



Above – The Cape Henlopen keeper lowers the service flag in 1924, perhaps for the last time. U.S. Coast Guard photo.

Below – left and right – Erosion undermines the keeper's house and the tower, circa 1925. Note that the lens has been removed from the lantern room in both photos. In the left photo the basement cistern has slid out from under the house and is halfway down the bank. U.S. Coast Guard photos.



