

West Quoddy Head Light Station

By Wayne Wheeler



West Quoddy Head Light Station in 1989. Photo courtesy of Mark C. Ide.

Established in 1808, the West Quoddy Light Station was the first and only station in the nation's Light List (LL No. 1) until the St. Croix River station was completed in 1858. It is the easternmost light station in the country, one of only two red and white banded US towers, and among the first to be equipped with a bell fog signal

and, later, a steam whistle. This station was established to address the dangerous Sail Rock that lies 500 yards off the 'head', described as "...a formidable danger to vessels in this neighborhood, just south of which swirls [eddies] form at some stages of the tide."

In 1806, Lewis Delesdemier of the Port of Passamaquoddy and five other leading citizens petitioned for the establishment of a lighthouse to assist mariners into their harbor. They recommended the West Quoddy Head area for

the erection of a lighthouse and stated in a convoluted proposition, "We... take the liberty to suggest that the site on the mainland the bank being forty feet above the high water – is the most projecting and the nearest to acceptability that we are of opinion that this is the most elligable (sic) and judicious that can be pitched upon for the purpose and that in our judgment the elevation should not be less than 75 feet above the surface of the ground exclusive of the lantern."

On February 10, 1807, an Act was passed by Congress in which the Secretary of the Treasury was authorized to direct the construction of "...One [lighthouse] at West Passamaquoddy [Quoddy] Head, at the entrance into the bay and harbor of Passamaquoddy, in the District of Maine... the sum of five thousand dollars for the expense of erecting said beacon."

The lighthouse was completed in 1808 and Keeper Thomas Dexter was appointed at a salary of \$250 a year. Because he was unable to grow crops in the soil around the station, he was forced to travel a long distance to obtain supplies. In 1810 his salary was raised to \$300 a year to compensate him for the inconvenience.

The story of the West Quoddy Head Light Station introduces the use of fog (sound) signals to American light stations. The first fog signal was a cannon situated at the Boston Lighthouse on Little Brewster Island at the mouth of Boston Harbor in 1719, and other types of signals were not installed until well into the 19th century. The West Quoddy Head station was an early recipient of a fog (sound) signal, and one of the first stations to employ a bell signal.

Maine, originally a district of Massachusetts, became a state in 1820, and at that time a recommendation was made to transfer the superintendency of light-houses, buoys, etc. "... from the Collector of the [Customs] Port of Boston, Charlestown, to Isaac Ilsley, Esq., Collector of the Customs for the Port of Portland. His character as a prompt, faithful, and intelligent officer is well known, and as Maine is now an independent state, they feel a desire that the superintending, care and authority of the above mentioned should now be exercised by one of their own citizens. They therefore hope and respectfully request that Mr. Ilsley may be appointed."

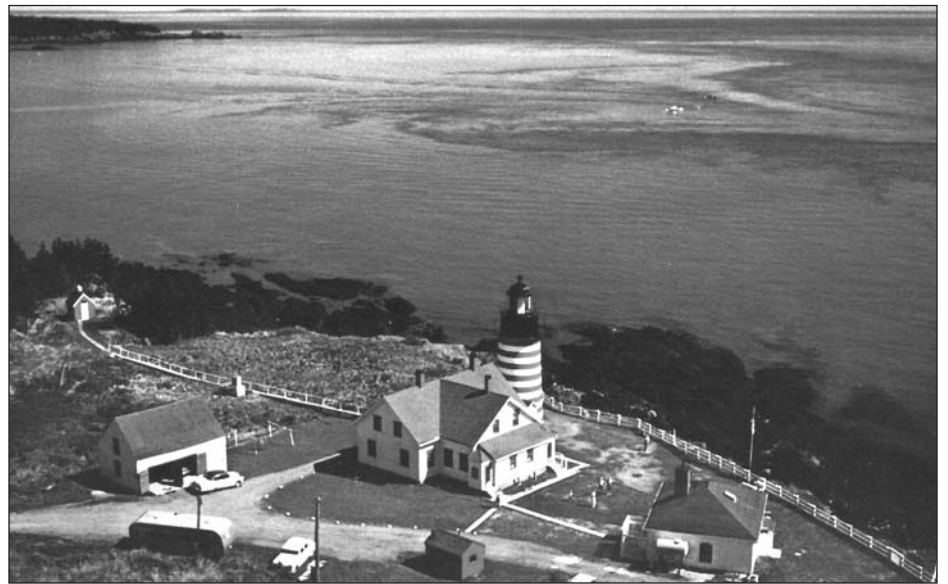
Isaac Ilsley began his duties on June 7, 1820. His first action advertised for the establishment of a bell fog signal near the West Quoddy Head Light Station.

A Congressional Act of May 15, 1820 provides "...for placing a bell near the light-house on West Quoddy Head, a sum not exceeding one thousand dollars..." After a few years the keeper must have complained about the extra work of tending to the bell and requested a raise in pay. An Act approved on May 18, 1826 states, in part, "That the keeper of West Quoddy (sic) Head light-house, in the state of Maine, shall be allowed, in addition to his

present salary, the sum of sixty dollars annually, for ringing the bell connected with said light-house, from the time he commenced ringing said bell." In other words, he was due back pay, dating perhaps as far back as 1820.

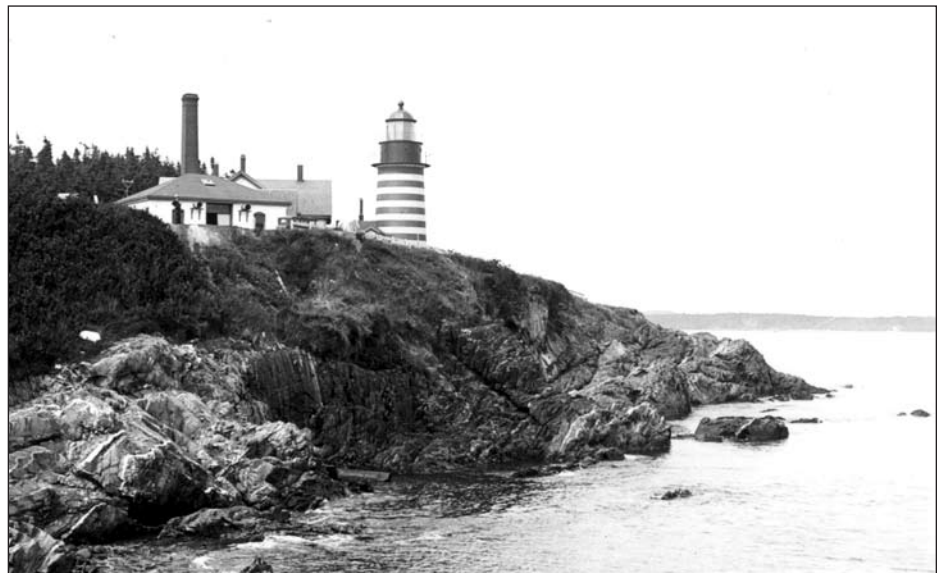
The fog bell installation was anything but perfect, and the ringing machinery had to be repaired and replaced numerous times. In 1817, the Collector of Lubec, Maine wrote, "Some years since a fog bell was put up on West Quoddy head in this town & when rung by hand is found to be of the highest importance when guiding vessels into Passamaquoddy Bay. They cannot indeed find their way without it

for half the time from the first of June to the last of September. The fog prevails when the wind is on shore and a bell to answer the object must be powerful & rung by powerful machinery or it cannot be heard. Two sets of machinery have been made for the West Quoddy bell, neither of which answered the purpose by reason of want of power. And the only way for the bell to be of any use is to ring it by hand & this is done whenever a signal gun is fired by vessels in the Bay of Fundy... since the establishment of a line of Steam Boats from the British Provinces to Boston, fog-bells along the coast are deemed an object of greater consequence.



Above – The West Quoddy Head Light Station in the 1950s. Note oil house at far left connected by a wood walkway and fog signal building at lower right. Photo from a contemporary post card.

Below – An earlier view of the light station showing the fog signal building in the foreground. Note the dual trumpets projecting from the building and what appears to be a steam whistle atop the roof. Tall chimney is for the steam boiler needed to operate the fog signal. Old post card view.





Above – Fog signal house showing the dual fog trumpets. Note oil tank at left for fueling the boiler and at far right, the fog bell. Photographer unknown.

Below – View of the light station circa 1880s. Note the keeper in front of the fog signal building and keeper's wife in doorway of dwelling. Photographer unknown.



They are obliged to run during the foggy season and to them, at such times, light-houses are of no sort of use. I have frequently heard the Masters of these vessels and Packet Masters say that they had rather have fog-bells on the headlands in three of four places than all the light-houses between this and Boston. It is of the utmost consequence to commercial interests of this part of the country that the Bell at West Quoddy be made to perform its office & I do hope that you will take measures to procure the construction of such machinery as will fully effect the object."

Apparently the person who built the first lighthouse at West Quoddy Head (a 59 foot high white-washed wooden tower) did a poor job, as Congress authorized \$8,000 on March 18, 1830 "For rebuilding the light-house at Passamaquoddy Head, in Maine." Early *Light Lists* (1839 and 1849) and early *Coast Pilots* don't mention the distinctive red and white stripe daymark of the West Quoddy Head Lighthouse as we know it to be today. Our Society's library first mentions the red and white color of the tower in the 1858 *Light List*. One book on the subject, however, notes that when the tower was rebuilt in 1820 it was painted with red and white stripes.

The 1837 *Coast Pilot* states, "When you leave Machias, and are bound to Passamaquoddy...to West Passamaquoddy lighthouse, near which is an ALARM BELL, which will, during foggy weather, strike ten times in a minute, unless neglected, which is too often the case, as the machinery is out of order, and it is now rung by hand, but when rung, the sound



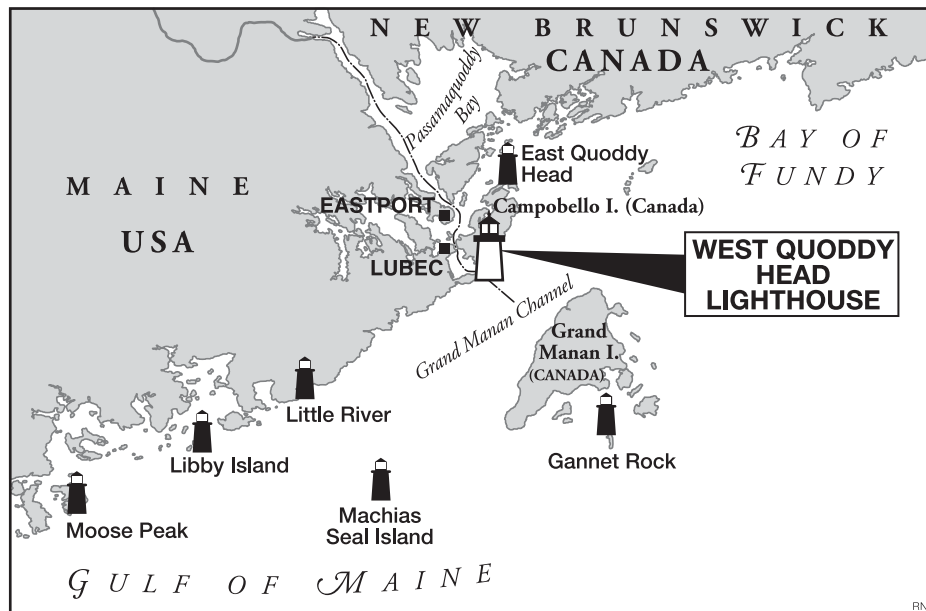
Early view of West Quoddy Head Light Station, probably in the mid- to late 1850s. Fog signal bell tower at right. Third order Fresnel lens installed in tower. Note the two keepers on the gallery. Photo courtesy of the U. S. Coast Guard.



West Quoddy Head with a light dusting of snow. From left, fog signal building, workshop, keeper's duplex and tower. Photographer unknown.

may, when calm, be heard five miles."

In addition to *Blunt's Coast Pilot* a Captain Smith complained about the fog signal in May 1837. At this point the station had already employed four different fog bells. The first was made of composite, weighed 500 pounds and was struck by clockworks and machinery; the second was of the same material, but only weighed 241 pounds; the third was similar in construction but weighed a hefty 1,565 pounds. The fourth, which Captain Smith inspected, consisted of a steel bar triangle, probably similar to the meal signal used by chuck wagons in the old west. Captain Smith said that this signal was inaudible beyond a quarter mile in heavy weather and was "worse than useless." He went





Turn of the twentieth century view. Shades in the window, flowering hedge at right and what appears to be the washing drying on the line at lower left. Note the wooden walkways to get through the Maine "mud" season. Photo courtesy of the U. S. Coast Guard.

on to say, "Various are the inventions proposed and schemes devised to answer the best purpose of a fog signal. My own opinion has been fully expressed to you in my report concerning similar work on Seguin Island, and I believe that a sharp-toned bell of 4,000 pounds weight... struck by machinery properly constructed and proportioned to the bell, would answer all purposes of a work of this description."

Congress, in an Act in 1838, authorized a lighthouse on Sail Rock, off West Quoddy Head and, "...the removal to said site of the fog bell now located at West Quoddy Head." However, the lighthouse was never constructed on Sail Rock and the fog bell remained at West Quoddy head.

In part, because of our country's refusal to install Fresnel lenses (invented in 1822) in our lighthouses, mariners, especially those who had sailed the waters of Europe, complained constantly about shoddy and inadequate system of aids to US navigation. The Lighthouse Service, at the time under the 5th auditor of the Treasury, was the subject of several Congressional inquiries in the 1830s and 40s. A

Lt. I.W.P. Lewis inspected New England light stations in 1842 and reported that the bell on West Quoddy Head was suspended to accommodate rotary motion when rung by hand, or to be tolled by a machine-driven hammer. The former could be heard at a distance of five miles; the latter "not at all."

Also in 1842, West Quoddy Head's keeper, Alfred Godfrey wrote: "I have been keeper of the light and fog-bell at this place during the last three years, and my father proceeded me in the same office, which he filled for 26 years. My salary is \$410. I have a family of seven persons. The climate here forbids the use of a garden or farm. My leisure time is occupied in boat building. I sometimes pilot vessels into Eastport when no other pilot is on hand. Wrecks occur on Sail Rock as often as once a year. On one occasion two lives were lost. The tide sets directly upon this rock, both during ebb and flood.

"The fog-bell is tolled by machinery, and is very dangerous – the supports of the [signal] house upon which it stands being exposed to the full force of the sea. The dwelling house

contains six rooms, viz: kitchen, parlor and four chambers. The house leaks all about the eaves and windows in rainy weather. The chimneys smoke badly. There is a cellar under the house. We have no rain water cistern, no well. Our water for domestic use is obtained from a spring about 200 yards from the house. The lighthouse stands 110 feet from my house door, on the edge of the cliff, 34 feet above the sea. In dark snowy nights I find it difficult to get from one door to the other. The tower is built of rubble stone, badly laid. In winter the inside walls are coated with ice from the effect of leakage. The windows of the tower blow inward in storms from being insufficiently framed. The lantern contains ten lamps with 13 inch reflectors. Three of the lamps face over the land, and two of them opposite the door of the lantern. All the reflectors are in bad order and stand from 10 to 12 inches apart. In winter the inside of the glass is coated with ice, from the condensed vapors of the burning lamps, and in summer the glass is also covered with sweat or condensed vapor."

The American Light-House Guide of 1850 describes West Quoddy Head Lighthouse as

a "...harbor light, and stationary [fixed characteristic], elevated 90 feet above the level of the sea and may be seen a distance of seven leagues in clear weather [21 miles, which is doubtful] ...attached to the light-house is a bell (or alarm) weighing 1,000 pounds, which in foggy weather will strike ten times in a minute, and may be heard at the distance of five miles in calm weather. If bound into West Quoddy Passage, give the Sail Rocks, which lie directly off the light, a berth of half a cable's length [100 yards], then haul directly around the head, when you may anchor in 7 or 8 fathoms, hard bottom. A stranger should not attempt to go through this passage without a pilot."

On August 21, 1852, Congress authorized \$10,000 for the installation of "Jones's fog bells, to be placed at Cape Elizabeth, Seguin, Whitehead and West Quoddy Head light-houses." After its formation in 1852 the Light-house Board immediately spent a great deal of energy in upgrading the long neglected system of navigation aids in the US. A better system of

parabolic reflectors was installed in many stations while the Service waited for hundreds of Fresnel lenses to be manufactured in France. By the outbreak of the Civil War most existing light stations had new lantern rooms equipped with Fresnel lenses (West Quoddy received a new lantern room and a 3rd order Fresnel lens in 1858, displaying a fixed white characteristic.) Many other improvements were introduced to light stations as well. But the Civil War redirected the Board's energies to replacing or repairing the numerous light-houses destroyed or damaged in the conflict.

After the war, the Board again returned its attention to upgrading US light stations, including the installation of more powerful fog signals. In 1869, the first two stations to receive the newly developed steam whistle were West Quoddy Head and Cape Elizabeth. The mechanism consisted of a boiler and a locomotive whistle 8 or 10 inches in diameter, which provided an eight second blast every minute. Later the West Quoddy Head signal was changed to

a two-blast, one-blast signature (3 second blast, 7 second silence, 3 second blast, 22 second silence, 3 second blast, 22 second silence.)

The exterior brick walls of the tower were rebuilt and repainted in 1881. Clapboard was replaced on the east end of the dwelling and repainted with two coats of white paint, and the cellar floor was cemented.

West Quoddy Head was electrified in 1934. The flasher installed in the third order fixed lens produced an occulting white characteristic every 15 seconds. A radio beacon was added in the 1920s, but no longer exists.

In 1968, West Quoddy Head Light Station was automated and the property eventually transferred to the Maine State Park system in 1986. The restored keeper's residence is now a visitor center operated by the West Quoddy Head Light Keepers Association.

A winter day when the station was still occupied by the Coast Guard. Photo courtesy of the U. S. Coast Guard.

