



Loggerhead Key Lighthouse



The Loggerhead Key Light Station is significant for its role in facilitating America's ocean-borne commerce and as a notable example of a civilian public works project undertaken by Army engineers prior to the Civil War. Since it was first lit in 1858, it has helped to alert mariners to the dangerous waters and shallow reefs of the Dry Tortugas. It also marks the western end of the Florida Reef.

History of Lighthouses of the Dry Tortugas

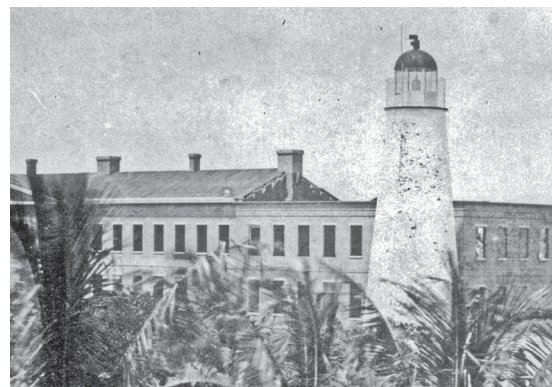
Given their location at the intersection of the Gulf of Mexico and the Atlantic Ocean where the swift Gulf Stream current flows through the Straits of Florida, the Dry Tortugas witnessed considerable shipping traffic. Westward expansion in the U.S. led to an increase in the transport of goods from the interior of the continent to the cities along the east coast. Stormy weather or a captain's inexperience could result in ships veering off course and wrecking in the shallow reefs of the Keys.

In 1821, a survey was conducted for possible sites for lighthouses to alleviate the nautical risks within the Florida Keys. The first lighthouse in the Tortugas was located on Garden Key and was first lit on July 4, 1826. It was 70 feet above sea level and was fitted with 23 lamps and 14 inch reflectors.

Almost immediately, mariners complained that the light was difficult to see in the hazy

conditions of the gulf. Ships could also find themselves in dangerous waters before the light was visible because it was too far away from the reefs. The light was simply not tall enough to adequately mark the hazards of the Dry Tortugas.

After numerous wrecks and complaints from mariners, a new lighthouse was proposed to be built on Loggerhead Key.



1826 Lighthouse on Garden Key

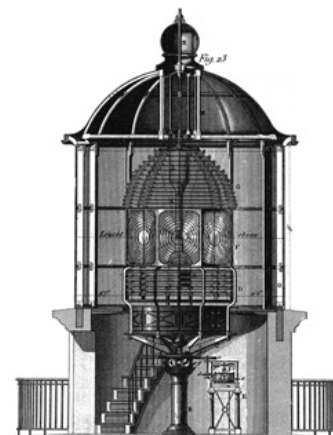
Construction of the Loggerhead Lighthouse

The location for the lighthouse was selected and on August 18, 1856 when Congress appropriated \$35,000 for its construction. Work on the tower began in 1857 and by 1858, the 150 foot tower was completed. This included the installation of a first-order Fresnel lens, the largest lens available.

The Fresnel lens was developed by physicist Augustin Fresnel, and resembles a large glass beehive surrounding a single lamp. This concentrated the light into one horizontal beam, producing a brighter signal light.

Several other structures were also constructed on Loggerhead including a detached two-story

oil house, a two-story keepers dwelling, a separate two-story kitchen, two brick cisterns and several privies.



First-Order Lantern With Fresnel Lens

Life of a Lighthouse Keeper

Benjamin Kerr was the first keeper assigned to the light station in 1858 with an annual salary of \$600. He brought with him his wife and seven children and was assigned there until 1861 when he was replaced by James Lightbourn.

The keepers duties included keeping all aspects of the light station clean and in good working order, lighting and maintaining the lamps, painting and all finishes both inside and out of all buildings, and maintaining clothing and accessories necessary to service and protect the light.

As one might expect, life on Loggerhead Key

was particularly isolated. There were 10 keepers assigned to the lighthouse between 1858 and 1912.

A break in the monotony came for keepers when on occasion they would be invited to socialize with the families of the offers stationed at Fort Jefferson. The keepers would sometimes hold parties on Loggerhead Key, usually in conjunction with turtle turning expeditions. "Turtle turning" involved turning sea turtles on their backs, rendering them helpless and unable to escape. These parties were often accompanied by the sharing of food, music and dancing.

Yellow Fever and Hurricanes

A yellow fever outbreak in 1867 resulted in the Light Station falling into disrepair for several years. During the period between 1867 and 1871. Loggerhead Key was used as a quarantine station for military personnel, which strained resources and impeded maintenance of the buildings.

A second outbreak of yellow fever occurred in September 1873, requiring all healthy soldiers on Garden Key to once again be relocated to Loggerhead Key. During the outbreak, thirty people were infected resulting in 12 deaths. The healthy were still on Loggerhead Key when the hurricane of 1873 hit the island.

The hurricane struck the island on October 6, 1873. Although the track of the hurricane took the eye of the storm north of the Tortugas, it delivered a damaging blow to the Light Station.

The initial evaluation of the storm-damaged Light Station was bleak. The Lighthouse was reported to be in dangerous condition and it was initially recommended that the entire tower would need to be rebuilt.

By 1875, the upper portion of the lighthouse had been extensively repaired and it received its distinctive daymark paint. The upper portion was painted black and the lower portion was painted white. The black color was supposed to help dampen reflections, contrast with the white clouds and show a distinct color pattern for sailors.

This work was completed just as a second hurricane hit in September 1875. The repairs held and were closely monitored during the ensuing years.

Present Day Use

Throughout history the lighthouse has had upgrades keeping up with new technology. On September 1, 1931 the Loggerhead lighthouse became the most powerful light in the U.S. with 3 million candlepower from the newly installed electric light. In 1986, it was fitted with an automated 24 inch Directional Code Beacon which could be seen 24 miles away.

The lighthouse was placed on the National Register of Historic Places in 1984. Dry Tortugas National Park was established in 1992 and the Coast Guard transferred Loggerhead Key to the National Park Service excluding the lighthouse. In 2008, the formal ownership of the lighthouse was transferred from the Coast Guard to the National Park Service with the exception of the lens and radio beacon. Under this agreement they were still allowed access to lighthouse to maintain the equipment as it was still an active aid to navigation.

The lighthouse stopped working in 2014 and the Coast Guard decommissioned it as an official aid to navigation. As part of the National Park Service Centennial Celebration in 2016,

the lighthouse will be relit, reestablishing the night historical viewshed.



Loggerhead Lighthouse with Corbelled Masonry

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