

# **Sandy Hook Lighthouse**

**A guiding light into the past...**

Pre-Trip Background information

# Goals and Objectives:

## This presentation is designed to:

- Introduce the purpose of lighthouses in sea navigation.
- Familiarize students with the basic understandings of lighthouse functions.
- Locate the various NJ Lighthouses still in existence today.
- Build a basic Historical background of the oldest existing lighthouse in the United States, Sandy Hook.

# The Purpose of Lighthouses:

- Like many traffic lights and signs we see when driving, a lighthouse warns ships of dangerous areas and where to go!
- At the top of the tower a light was used as a signal to sailors at sea. The light would stay lit at all times. Some would blink others would not.
- With poor visibility sailors rely on the patterns of lights to make sure of their positioning and the location of the shore.
- Ships provided travel, food and trade for colonists in surrounding areas. It was very important for ships to make trips safely in order to provide for all those depending on them.



# Where can we find lighthouses?

- At entrances of many harbors and channels
- Rocky cliffs
- Sandy shores
- Reefs out at sea



# What fuels lit the light?

- The first ways of lighting the lights were things such as wood and coal for fires. Also rows of candles.
- Then later on various fuels were used such as:
  - Whale oil (they would cook the fat of the whales which then produced oil)
  - Lard oil (from animals just like the whale oil)
  - Later on, kerosene (what we use to light our barbeque grills!)



# How did the lights stay lit?



- Before Electricity:
  - Lighthouse keepers were people who lived and worked at the lighthouse quarters. Every day, no matter what the weather, keepers would climb the stairs at sunset to light the lantern that would signal to ships at sea during the night. They would have to check the lantern through out the night and eventually put it out by sunrise. After the lights were put out at sunrise sailors used *daymarks* during the day to navigate!
  - Keepers would carry heavy buckets of the oils and fuels up and down that would be used to spark the light.
  - As time went on the lanterns became larger and more effective. Eventually a fresnel lens was created in order for the lights to be seen clearly and farther away. It was the keepers responsibility to provide the different fuels to light the lanterns behind the lens for the sailors to see.
  - Once electricity was invented, the lighthouse keeper was no longer needed.

# Where are lighthouses in NJ?



There are lighthouses along the Jersey shore helping ships navigate along the coast and into it's nearest ports and harbors.

# Some of New Jersey's Lighthouses:

**Absecon Lighthouse  
(Atlantic City, NJ)**

**Barnegat Lighthouse  
(Long Beach Island, NJ)**

**Cape May Lighthouse  
(Cape May, NJ)**

**Navesink Twin Lights  
(Highlands, NJ)**

**Sea Girt Lighthouse  
(Sea Girt, NJ)**

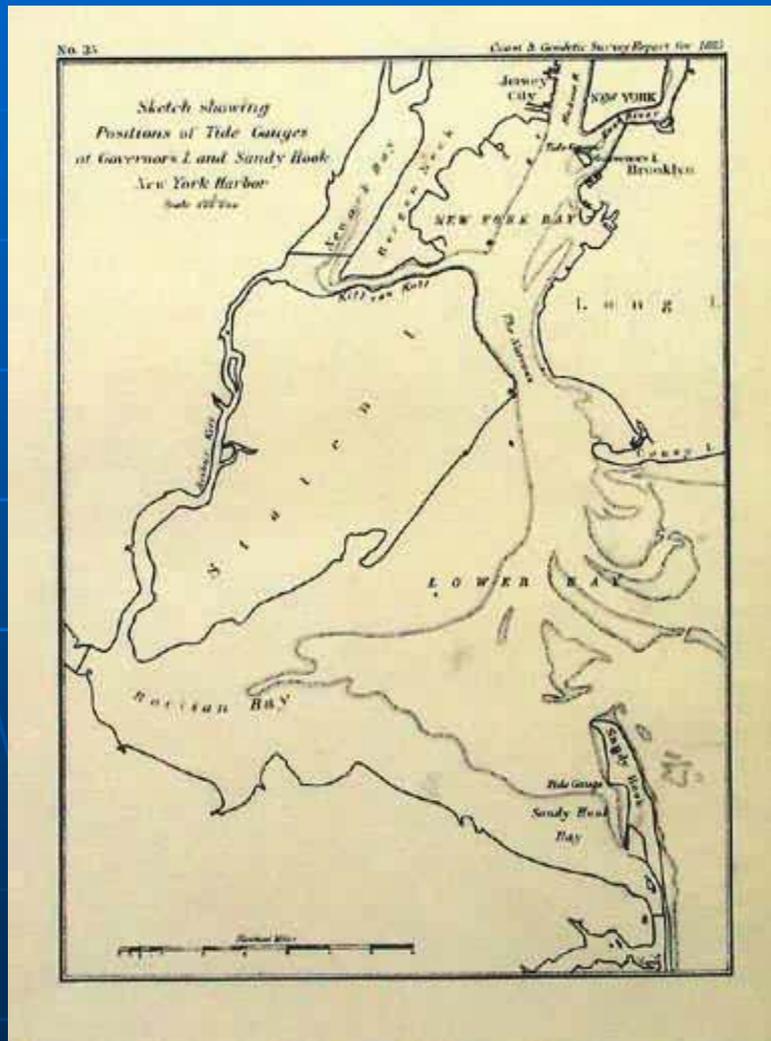
**Sandy Hook Lighthouse  
(Sandy Hook, NJ)**

**\*Oldest standing/working  
lighthouse in the US**

*Is there a light house near you?*



# Why a lighthouse at Sandy Hook?



- Sandy hook was the **ONLY WAY** for ships to get to NYC until 1908.
- Ships frequently came to the New York Harbor in order to dock and trade with the large industrious city.
- Sea navigation was difficult when conditions were severe and visibility limited.
- This map shows the location of Sandy Hook in reference to the harbor.

# The History Of The Sandy Hook Lighthouse:

## The *Stuff* you should know!!

- June 11, 1764 was the first night the light was lit.
- It was built nine stories high. From bottom to top it is measured to be 103 feet.
- Ships would pay a tax of 3 cents per ton they were bringing in. This is how they maintained and paid the keeper of the Sandy Hook Lighthouse.
- The money left over would be kept as profit.

# History continued:

- During the American Revolution the lighthouse became a target and an attempt to destroy the tower but was unsuccessful. During the revolution it was protected from any further attacks.
- After the year 1800, the Twin Lights of Navesink were built to help navigate the many ships approaching the harbor. The twin lights had one blinking and one still light so that sailors would not confuse them with the Sandy Hook Light (Sandy hook had a still white light).
- With more and more ships navigating through the harbor an additional two beacons were built on the shore of Sandy Hook.
- In 1857 the Fresnel Lens was put in at Sandy Hook. That same lens is still there today.

# History continued:

- In 1863, the lighthouse went under *renovations* which made the lighthouse thicker and also a new iron spiral staircase in replace of the old wooden one. That same iron staircase is still there today!
- By the 1930's lighthouses were lit through electricity eliminating the need for keepers.
- In 1939 the U.S. Lighthouse Service was abolished and it's duties were now the U.S. Coast guards which is still around today.
- The Lighthouse once stood *500* feet from the shore in 1764 and by 1864 it stood *4,000* feet from the shore. This was a result from strong ocean currents depositing sand along the coast.

# Sandy Hook Today:

- June 11, 1964 the lighthouse was declared a National Historic Landmark
- It still has the original Fresnel lens, a fixed white light and is visible for 19 miles out to sea on a clear night.
- The U.S. Coast Guard maintains the lighthouse and it is kept on 24 hours a day.



Photograph taken by: Cheryl Laue

# Bibliography:

- Hoffman, Thomas J. “Sandy Hook Lighthouse” National Park Service Pamphlet.
- United States Coast Guard, Teacher’s Lighthouse Resource.  
<http://www.uscg.mil/history/collect.html>