

Northeast Fisheries Science Center

The first scientific institution to be located in Woods Hole was the United States Commission of Fish and Fisheries, created in 1871 by Congress in response to a proposal by **Spencer Fullerton Baird**, then **Assistant Secretary of the Smithsonian Institution**.

After several years of research along the coast of New England, he had determined that Woods Hole should be the location for a major laboratory because of the purity and constant salinity of the water. He knew that the mixing of the cold water from north of Cape Cod with the warm water brought up from the south by the Gulf Stream provided diverse habitats supporting a wide variety of fish species.

The Fish Commission was incorporated into the National Oceanic and Atmospheric Administration (NOAA) in 1970 and was renamed the Northeast Fisheries Science Center, but is still known locally as "The Fisheries." To this day, it runs many vital research programs which study fish populations and ecology, providing science to manage fisheries. The researchers also evaluate the economic and cultural impacts of human interactions on fisheries, marine mammals, and marine habitats.

Three other marine science institutions, US Geological Service, Woods Hole Research Center and Sea Education Association, are not located in the village. You can check out their websites for more information.



Spencer Baird, 1823-1887

Smithsonian Institution



Spencer Baird, on the far right, coordinating the collection of marine specimens in Little Harbor

WHHM Archives



Hands-on learning at the Woods Hole Science Aquarium

Woods Hole Science Aquarium



Official Walking Tour of Woods Hole

Discover what makes Woods Hole a special place

Woods Hole could have become just another little-known fishing village. But its deep-water port and attractiveness to marine scientists have resulted in it being well-known in many places around the world.

The WHHM Walking Tour of Woods Hole is where you can learn about the history and life behind the village's charming houses, beautiful harbors, exciting sailing waters and world-renowned scientific institutions.

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Refer to this brochure for a self-guided tour of Woods Hole or take our virtual tour at woodsholemuseum.org

The Naming of Cape Cod

Cape Cod was a landmark for early explorers. It may have been the “Promontory of Vinland” mentioned by the Norse voyagers (985-1025). Some historians believe that **the western end of the Cape was visited by Leif Erikson, who may have had some other name for it.** However, it was the English lawyer, explorer, and privateer Bartholomew Gosnold who came up with the name that stuck. In 1602, Gosnold caught a great amount of cod near what is now Provincetown. He made note in his logbooks about the **plentiful “codfishes” which “pestered” his ship.** Thus, he named the northeast tip of land Cape Cod. Over centuries the name came to refer to everything east of what is now the Cape Cod Canal.

Gosnold named the Elizabeth Islands, just off the coast of Woods Hole, after the Queen of England and named Martha’s Vineyard after either his infant daughter, his wife, or his mother-in-law. They were all named Martha. It is believed that Gosnold sailed to Succanisset (today’s Falmouth) and Woods Hole as one of the first Europeans to interact with the Wampanoag Indians living on the southwestern coast of Cape Cod.

Naming this peninsula after the cod certainly turned out to be appropriate, since the cod fishing industry provided great sustenance and prosperity in Massachusetts for many years. The fishing industry peaked in Massachusetts around 1840, with nearly 1,300 total commercial vessels and 12,000 employees. The largest shipping ports in the state at that time were Boston, New Bedford, Barnstable, Nantucket, Salem, Beverly, Newburyport, and Gloucester.



The voyage of Bartholomew Gosnold



Gosnold on the shore of Cape Cod, by Franklin Lewis Gifford

Marine Biological Laboratory

Since its founding in 1888, the Marine Biological Laboratory **has played a pivotal role in scientific discovery.** Research and education at the MBL focuses on biological discovery to explore the origins, diversity, and nature of life on a changing planet. Resident scientists are joined each summer by hundreds of scientists and students from around the world.

MBL scientists have long used marine specimens collected from local waters. Notable studies have examined squid for their giant nerve axons, starfish for their ability to regenerate limbs, and sea urchin cells for cancer research. A common technique of using horseshoe crab blood to test the purity of pharmaceutical drugs was pioneered here. In addition to its acclaimed and varied bio-medical discoveries, the MBL is also known for comprehensive research that encompasses the science of climate change, genetics and evolution, biological imaging; microbial diversity, and neuroscience and animal behavior.

In 2013, MBL became an affiliate of the University of Chicago, and remains dedicated to fundamental research and educating the next generation of inquiring scientists.



The study of squid at MBL has led to a greater understanding of the human body.

Woods Hole Oceanographic Institution

Founded in 1930, WHOI is the largest private, non-profit oceanographic institution in the country, employing about 1,000 people who plan and support scientific research in all parts of the world's oceans. Dramatic achievements include the discovery of deep-sea hydrothermal vents, sea floor spreading, and the wreck of the *Titanic*.

This research includes explorations of the ocean: its chemistry, biology, geology, and physical attributes. WHOI's engineers produce pioneering instruments to measure oceanographic and atmospheric properties, and explore the ocean's depths. They also design and build manned submersibles and unmanned vehicles that operate within the global ocean. WHOI built and operated the first vessel specifically designed for oceanographic research, the sailing vessel *R/V Atlantis*, whose silhouette is depicted in WHOI's logo.

For its first decade of operation WHOI was primarily a summer operation staffed by academicians from various universities, and funded by a private grant from the Rockefeller Foundation. The advent of WWII brought large and permanent changes to the organization ~ addition of a large year-round staff, large power vessels, support by (and dependency on) Navy and government funding, and a refocusing on defense-related research. Major projects explored underwater sound for signaling, submarine detection, and exploration; antifouling paints to enhance ship mobility and economy; smoke screen technology for surface warfare; and underwater explosive technology for use in mines and depth charges.

In a joint program with the Massachusetts Institute of Technology, WHOI offers a PhD in ocean science and engineering, and currently has more than 100 students.



Launched in 2015, the R/V Neil Armstrong travels the world's oceans in support of oceanographic research.

Establishment of Woods Hole Village

In 1679, Jonathan Hatch served as the representative of 12 other settlers to purchase the land that became the village of Woods Hole from Job Nontantico of the Wampanoag tribe. The deed did "grant and give unto Jonathan Hatch all track of lands, or neck of land, commonly called Woods Hole Neck." The settlement grew slowly over the decades. By 1790, there were only ten houses and a population of about 74 in Woods Hole.

In the early days, fishing, farming, and sheep raising were the major industries. Although the soil was not good for many crops, small patches of corn, beans, onions, and squash were grown. The woods that covered the hills were cut down and used for firewood and to build houses, barns, wagons, tools, and boats. The resulting cleared land became pasture for sheep. Many of the industries established in Woods Hole were due to its deep-water port, including whaling, a guano fertilizer factory, cargo trade, and ferry service to the islands.

Woods Hole is believed to have been named for the water passage, or "hole," between Penzance Point, the southernmost tip of Woods Hole, and Nonamesset Island, the closest of the Elizabeth Islands.



Woods Hole Village, 1895, Photo by Baldwin Coolidge

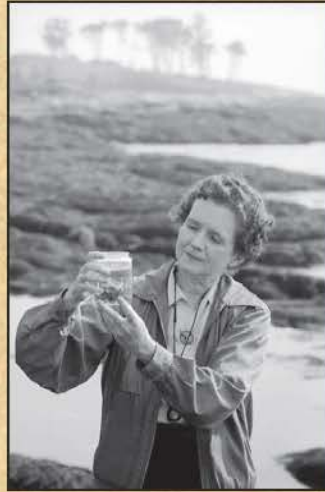
People we remember

Rachel Carson

Ms. Carson, marine biologist and author, first came to Woods Hole in 1929 to study zoology at the Marine Biological Laboratory. In 1949 she went out to sea on the Fisheries research vessel *Albatross III* to Georges Bank, using that trip as the basis for her book *The Sea Around Us*.

With the release of her book *Silent Spring* in 1962, she gained international fame and became a catalyst for today's environmental movement.

"I had my first prolonged contact with the sea at Woods Hole. I never tired of watching the tidal currents pouring through the Hole — that wonderful place of whirlpools and eddies and swiftly racing water."



National Resource Defense League

Joseph Story Fay

Joseph Story Fay, Boston-area native and Savannah, Georgia cotton broker, was a successful businessman. He visited Woods Hole in 1850 on his way to New Bedford, falling in love with the village, and then bought the 1765 Manasseh Swift house facing Little Harbor, becoming Woods Hole's first summer resident. He was a kind, generous and religious man who was a benefactor to the Episcopal Church of the Messiah, gave land to the Catholic St. Joseph church and land for the Woods Hole School.

He had the name of the village changed in 1877 to *Woods Holl* to reflect his belief in the early presence of Vikings on the Cape. The name was changed back to *Woods Hole* after his death in 1897.



Whaling

Nearby Nantucket and New Bedford were the major whaling ports in the United States. **However, because Woods Hole had a deep-water harbor, our small village was also a center for whaling. Local investors, led by the Swift family, established the Bar Neck Wharf Company in 1828. During the whaling era, Water Street, home of today's Eel Pond drawbridge, bustled with a blacksmith and other workshops producing supplies needed to fit out the whale ships, such as rope, hard tack, barrels, small whale boats and tools. Ships' carpenters built four whale ships here between 1828-1841 and the Wharf was home to nine other whale ships.**

Fireproof stone buildings for processing the oil were built across from the wharf.

The captains and crew came mostly from Falmouth and nearby ports, but often the ships' first port of call was the Azores to complete the crew. The ships traveled "around the Horn" to the Pacific, and in later years to the Arctic through the Bering Straits, on voyages that could last up to five years.



Saltworks

Until the early 1900s, salting was the most common method for preserving meat and fish. **Settlers on the Cape imported salt until the British embargoes during the Revolution. In 1776 the Continental Congress encouraged salt-making by offering a bounty of one third of a dollar for every bushel of salt (about 100 pounds) that was produced. This incentive resulted in salt production becoming the first "industry" on Cape Cod.**

The process used windmills to pump salt water into evaporation vats, often measuring 10 feet square and about a foot deep. After months of evaporation the 750 gallons in each vat would produce about 200 pounds of salt.

By 1800 much of the shoreline of Cape Cod was dotted with saltworks. **In 1837, in the town of Falmouth, which includes Woods Hole, there were 42 separate saltwork establishments. Together they produced a total of over 2 million pounds of salt that year.**



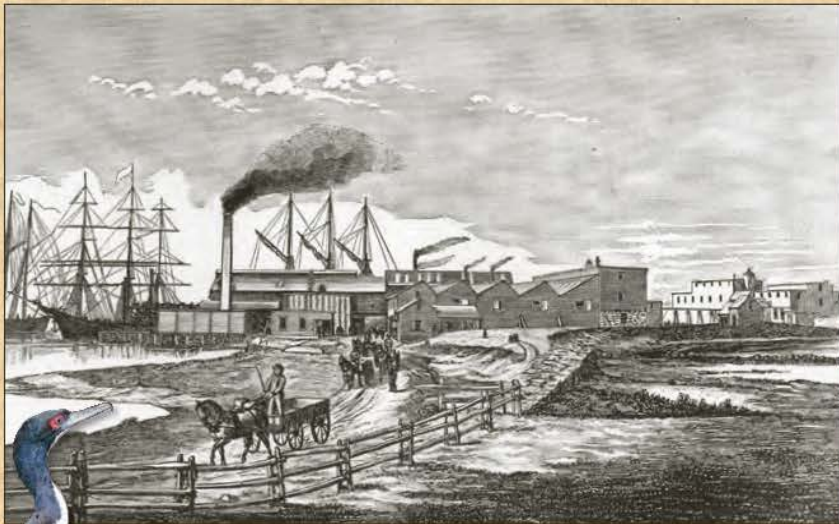
The evaporation vats had covers that were closed during rainy weather.

Pacific Guano Company

Perhaps most unusual of the past local industries was the Pacific Guano Company, built in 1863 on the outer-most peninsula of Woods Hole, now called Penzance Point. It became the largest factory Falmouth had ever seen, employing 200 men and receiving ships from around the world.

Dried-out guano (bird droppings), found in huge quantities on islands in the Pacific Ocean, was mined and transported to Woods Hole on clipper ships. In the factory it was ground into a powder, mixed with sulfuric acid and fish oil, then cooked to produce a dry product that was packaged in 200-pound bags. A by-product of the cooking process was a terrible-smelling cloud that often drifted through Woods Hole. The end product was a fertilizer that was said to be ten times more effective than manure.

After the company closed in 1889, land on the peninsula was purchased, subdivided into large lots and sold for homes to wealthy summer residents. The land on the site of the factory has such rich soil that even today lawns and flower gardens there have no need for fertilizer.



Fertilizer from the Pacific Guano Company was used in many states and was also shipped to England and Europe.



The Guanay cormorant was the most important producer of guano

Eel Pond Bridge

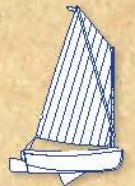
The drawbridge we see today was definitely built to last. So was the arched stone bridge built there in 1828 when the main road into Woods Hole was extended across the Eel Pond Channel in response to growth of the whaling industry. The stone bridge lasted more than 80 years and was replaced in 1912-1914 with a steel bridge. The replacement, however, did not survive the hurricane of 1938. After the storm passed the bridge was found beached on the north end of Eel Pond near the bell tower. A temporary, wooden pedestrian bridge was then put in place until the present-day drawbridge was built.



The original stone bridge
A temporary, wooden pedestrian bridge was then put in place until the present-day drawbridge was built.



Before there was a drawbridge, sailboats moored in Eel Pond had to go under a low bridge to get out to the ocean. The only way to do this was to have a boat with a mast that could be easily lowered as the boat approached the bridge, then quickly raised after it passed under the bridge. This resulted in a boat design called a "sprit sail," which became a popular racing class. The Spritsail boat became such an iconic symbol of Woods Hole that a drawing of it became the logo for this museum.



Woods Hole
Historical Museum



Eel Pond Bridge is raised on the hour and the half hour when a boat captain radios the Bridge Tender and requests passage into or out of Eel Pond.

Ferry service

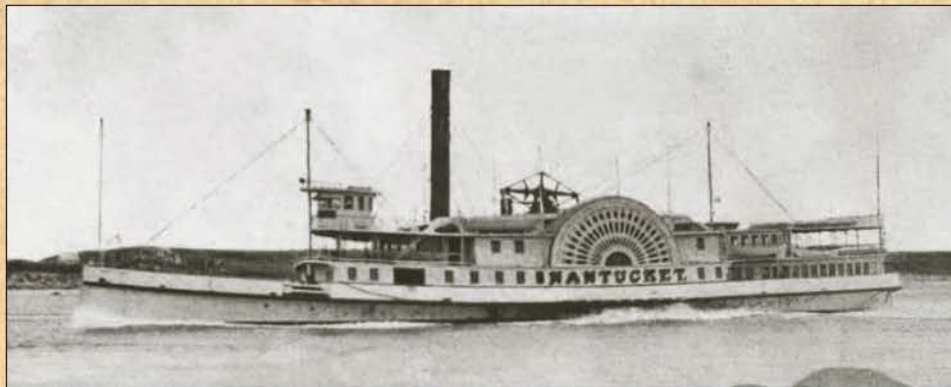
Ferries have carried passengers and freight from Woods Hole to the Islands for almost 300 years. The earliest boats left from Little Harbor, the south-facing bay just east of the present ferry slips, where the Coast Guard docks are now. By 1729 Joseph Parker was the recognized ferry operator. His boat would have been a small sailboat – a schooner or sloop – capable of taking passengers over to the islands when tide, wind and weather allowed. Sometimes people would have to spend several nights staying in his tavern, waiting for the right combination of conditions to sail across the Sound.

Over the years, the ferry boats became larger and more specialized and were owned by companies rather than individuals. With the advent of mechanical power, vessels did not need to wait for favorable winds to sail, enabling the ferry companies to establish firm schedules.

After the end of World War II, the privately-owned company that provided ferry service to the islands ran into difficulties. As its service deteriorated, residents of the islands became worried that their link to the mainland would be severed. A government commission found that “A private entity could not properly and profitably serve the islands on a year round basis.” Thus, in 1948 the state of Massachusetts established the Steamship Authority to guarantee that ferry service would always be available to both Martha’s Vineyard and Nantucket. The Steamship Authority ferries passengers, cars and freight from Woods Hole to Martha’s Vineyard. It also provides service from Hyannis to Nantucket.



WPHM Archives



The sidewheel steamer Nantucket operated from 1886 to 1907.

Railroads

In 1872, rail service began in Woods Hole and a wharf was built. The home port for the steamer Island Home was then moved from Hyannis to Woods Hole. For the next 92 years, trains provided the main link from population centers to the ferries for both passengers and freight.

The heyday of the Woods Hole Station was in the late 1930s. During those years, on a Sunday afternoon in August you would see about 60 train cars in the station being shunted to form up the trains for Boston, Worcester and New York. There were engines, passenger cars, sleeper cars, dining cars and freight cars. A great bustle of organized frenzy would break out as each ferry arrived and passengers disembarked. The last train to leave for the day, the Night Cape Codder, pulled sleeper cars bound for New York.

As the nation’s highway system developed, the use of cars, trucks and buses become more popular. Consequently, rail service to Woods Hole declined until it ended in 1965.



Crew and engine of the New York, New Haven and Hartford Railroad

WPHM Archives



WPHM Archives

This 1902 photograph shows the terminus of the rail line in Woods Hole. The Nantucket paddlewheel ferry seen in the harbor operated from 1886 to 1907. Water for the steam locomotives was stored in the large round tower. On the left side you can see the turntable that was used to turn around engines and rail cars. The train yard seen here is now used for parking and loading vehicles onto the ferries going to Martha’s Vineyard.