

Henry B. Bigelow, the scientist

Scientist, Teacher, Outdoorsman, World Traveler, Humanist

Henry Bryant Bigelow (1879-1967) was a Harvard-educated zoologist whose work helped lay the scholarly foundation for oceanography as a scientific discipline. A world renowned expert on coelenterates (jellyfish, corals, sea anemones) and elasmobranchs (sharks, skates and rays), he transformed the Gulf of Maine from a scientific unknown to one of the most thoroughly studied large bodies of water in the world. In doing so, he developed the interdisciplinary, ecosystem-oriented approach that characterizes modern oceanography.

A Brief Chronology

- Born:** Oct. 3, 1879 in Cambridge, MA
- Died:** Dec. 11, 1967 at home in Concord, MA
- Education:** Milton Academy (1895), Harvard College A.B. (1901) and Ph.D. in zoology (1906). Honorary doctoral degrees: Yale (1941), Oslo (1946), Harvard (1946), University of Rhode Island (1960)
- Married:** Elizabeth Perkins Shattuck (1906)
- Expeditions:** With Alexander Agassiz of Harvard University (1901) to the Maldive Islands and aboard the fisheries R/V *Albatross* to the eastern tropical Pacific (1904)
1912 was the start of 12 years of research cruises in the Gulf of Maine and adjacent waters aboard the fisheries research vessels *Albatross*, *Grampus* and *Halycon*
- Harvard University:** 1905-1962. Numerous positions as a researcher, instructor and professor of zoology with the University and its Museum of Comparative Zoology
- Notable professional affiliations and achievements:**
 - Member, National Research Council Committee on Oceanography (1919-1923)
 - Member, Committee on Oceanography, National Academy of Sciences (1928-1938)
 - Founding Director, Woods Hole Oceanographic Institution (1930)
 - Served as Director, President, Chairman of the Board of Trustees, and Founder Chairman from 1930 to 1967
 - Elected member of the National Academy of Sciences (1931), awarded academy's Alexander Agassiz Medal (1931) and Daniel Elliot Medal (1949)
- Scientific Publications:** More than 100, among them:
 - Physical Oceanography of the Gulf of Maine* (1927)
 - Fishes of the Gulf of Maine* (1925)
 - Fisheries of the Western North Atlantic*, editor in chief and contributor (1939-1963)
 - His last papers on fishes published after his death



Henry B. Bigelow at the wheel of the fisheries schooner *Grampus* in 1912. Bigelow wrote: "Few living zoologists have been as fortunately placed as were we on setting sail on the *Grampus* from Gloucester on our first oceanographic cruise in the Gulf of Maine on July 9, 1912, for a veritable *mare incognitum* lay before us."

“Nothing in the sea falls haphazard; if we cannot predict, it is because we do not know the cause, or how the cause works.”

Henry B Bigelow, 1929



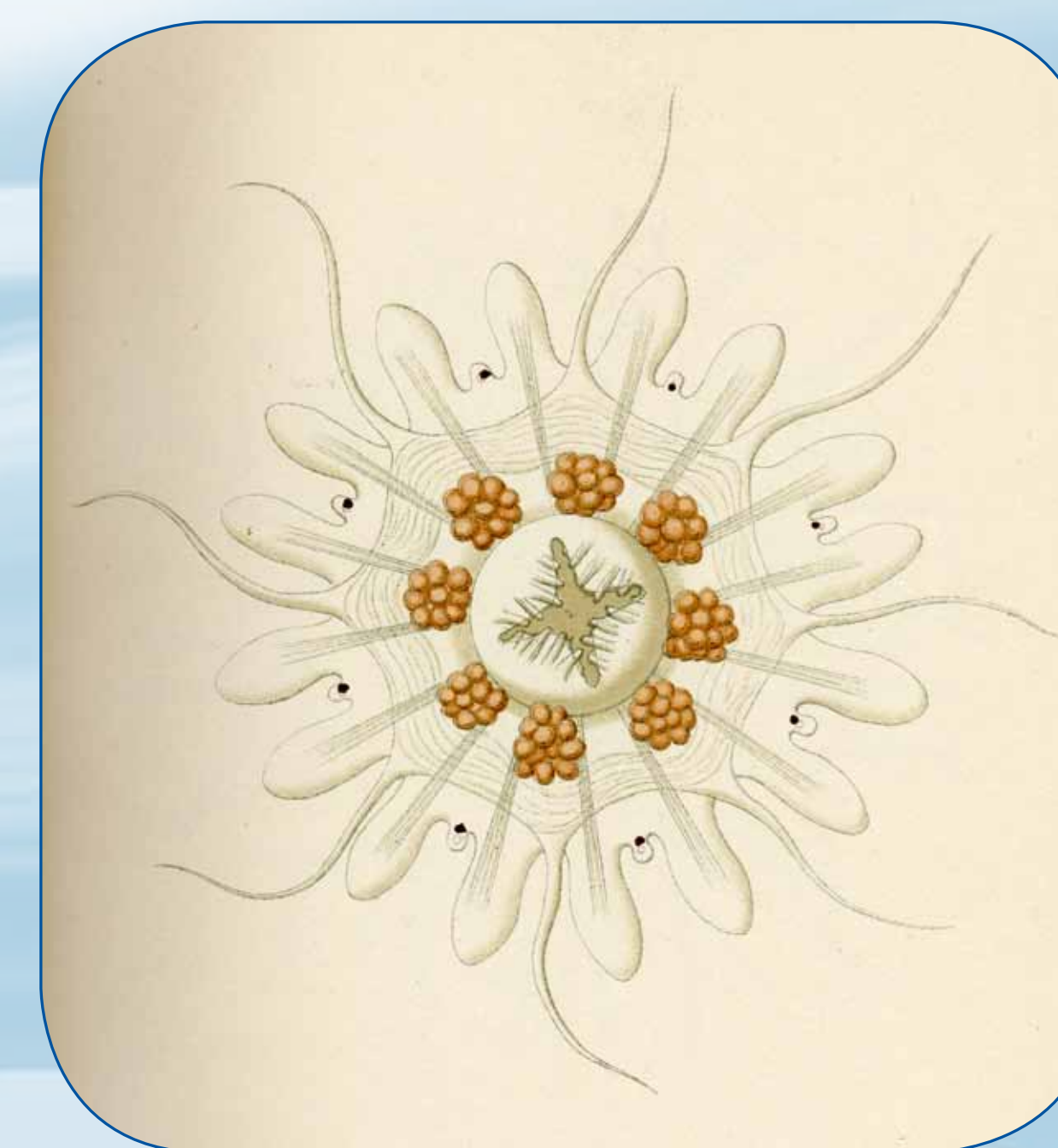
Henry Bigelow with Buck the goat, mascot for the Woods Hole Fisheries Service research vessel *Albatross*, in March 1904 off California. The 234-foot steamer *Albatross* (1882-1921) was the first research vessel in the world constructed exclusively for marine research. Henry Bigelow made numerous cruises aboard this vessel in the Atlantic and Pacific Oceans between 1904 and 1921, serving as the chief scientist on the ship's final research voyage in the Gulf of Maine in 1920. The NOAA Ship *Henry B. Bigelow* replaced the *Albatross IV* when it was retired after 46 years of service in November 2008.



Henry B. Bigelow later in his career.

“We might call Bigelow one of the founders of the new oceanography, that is oceanography with an ecological aim, so that instead of the mere description of what there was in the sea, there should be an explanation of the inter-connections based on full knowledge and the applications of other branches of science.”

Michael Graham in *Deep Sea Research*, April 1968



An original drawing by Bigelow of one of many new species of medusae collected during an exploring trip to the Maldive Islands with Alexander Agassiz from December 1901 to January 1902.

“It is generally conceded that, oceanographically, the Gulf of Maine is better known than is any other comparable area of the ocean...”

Henry B Bigelow