

Early History of Collections at Scripps Institution of Oceanography

Deborah Day

Scripps Institution of Oceanography Archives

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A museum and aquarium were mentioned in the earliest plans for the Marine Biological Association of San Diego. E.W. Scripps was particularly interested in an aquarium, and made its inclusion in the institution a condition for his support, as mentioned by Miss Scripps in her diary on August 2, 1903. A museum is mentioned in the By Laws of the Marine Biological Association of San Diego:

“The general purpose of the institution shall be to carry on a biological and hydrographic survey of the waters of the Pacific Ocean adjacent to the coast of Southern California; to build and maintain a public aquarium and museum; and to prosecute such other kindred undertakings as the Board of Trustees may from time to time deem it wise to enter upon.”

The combination of the idea of a museum with the biological survey is not coincidental. The purpose of the museum was to catalog and make available for study biological and hydrographic specimens: marine plants, animals, rocks, sediment samples, and other materials collected by the institution’s scientists. Submarine geology was an infant science, and the collection and study of sediments, rocks, and cores was essential to its growth. Miss Scripps understood this perfectly as she was herself a collector of pressed seaweed, shells, and other marine specimens, which she bottled and displayed at her home. Miss Scripps was always interested in the educational aspects of the institution, and William E. Ritter wrote her in 1914:¹

“We ought, I believe, to always think of the aquarium and museum not merely in the light of public resorts for entertainment and amusement, but as essential and integral elements in our plans for public education.”

The museum initially consisted of bottled specimens maintained on a shelf in the Little Green Laboratory at the Cove in 1905. In 1910, the George H. Scripps Memorial Marine Biological Laboratory building, built with funds provided by Miss Scripps, included museum space in the lecture hall on the second floor. There was discussion of establishing the San Diego Natural History Museum at Scripps, and plans were made to acquire title to the Fred Baker Shell Collection. The shell collection was acquired, but the Natural History Museum was established at Balboa Park. In 1915, Miss Scripps funded the construction of a Library Museum building on the Scripps campus, which displayed specimens to the public on the first floor. The Aquarium was established in a separate small building, but the staff of the aquarium and museum was always combined. While the Scripps collections focused on California and Baja California, Scripps sent specimens outside its collection area to museums including the San Diego Natural History Museum, the Museum of Man, and the Smithsonian, among others.

¹ William E. Ritter to Ellen Browning Scripps, February 19, 1914. William E. Ritter Papers, SIO Archives, Box 1, folder 26.



Specimens in the Little Green Laboratory in La Jolla, 1905

The collecting scope and functions of the Scripps collections changed as the goals of the institution changed over time. Oceanography replaced biology as the research focus of the institution. Morphology diminished in importance while, physical oceanography and submarine geology took center stage. Education became as important as research in Scripps' mission, and Roger Revelle led the institution in the mid 20th century when the old Aquarium and Museum had to be replaced.

Revelle was the first American oceanographer to specialize on marine sediments. He set up the marine sediments lab at SIO and began collecting specimens and cores. Revelle donated funds to purchase coring devices that were used on the Gulf of California Expedition of 1939, but these were capable of retrieving cores only a few feet long. Cores 50 feet in length were collected during the Swedish Deep-Sea Expedition. Revelle and other Scripps scientists used Swedish corers on a series of mid-century expeditions to the Pacific. The cores and rock samples retrieved on MidPac and Capricorn called into question the history of the seafloor as it

was then taught in geology textbooks. The rocks, cores, and heat flow measurements became the texts for a new scientific theory, sea floor spreading and plate tectonics.

During this period, museum exhibits of specimens to the public continued to be important, but the value of the collections as teaching tools increased very significantly. Rocks and marine specimens were brought to class, and students went to sea to collect more. The collections themselves became the text for a new history of the seafloor. During this exciting period, when the plate tectonics theory was emerging, scientists were demanding the expansion of specimen collections and data from the seafloor. Once the theory was accepted by scientists, collections became more focused on specific areas to resolve outstanding controversies. The value of collections is most evident during periods of scientific controversy and when new knowledge is needed to resolve key scientific questions.

The cost of housing and curating collections has always been a concern at Scripps. Directors of the institution have long been frustrated in the effort to build a collections building and the difficulty of persuading the state of California and other potential funders of the importance of maintaining collections. New goals, such as making information on collections available on the Internet, have changed the way collections are processed and made available to scientists and the public.

David Starr Jordan came to Scripps in 1916 to give the key address at the dedication ceremony.² He recalled that when he was a student at Johns Hopkins the collections of the Maryland Natural History Society were received as a gift. At that time the morphology of the higher vertebrates was the key scientific problem. Two students were sent to pick out the specimens that addressed this problem and destroy the rest of the collection. Jordan used this story to urge the young Scripps Institution toward tolerance, broad mindedness, and the importance of focusing its work on nature rather than theory.

² David Starr Jordan, "Plea for Old-Fashioned Natural History," Dedication Address. Bulletin of the Scripps Institution for Biological Research of the University of California, No. 1 (December 20, 1916), page 5.