CHAPTER 3

THE HOPKINS SEASIDE LABORATORY OF NATURAL HISTORY

In his first year as President of the Leland Stanford Junior University, Jordan would build upon his Penikese experience and set out to establish a seaside laboratory of natural history. A first step toward establishing this seaside laboratory was to find the appropriate location along the central coast of California for such a facility. According to Oliver Peeble Jenkins: From the moment that the Leland Stanford Junior University proceeded as far in its organization as to have its first nucleus of a faculty appointed, the biologists of that number began to form plans for the establishing of a marine biological station somewhere on the coast.¹

In the fall of 1891, upon the organization of the Departments of Zoology and Physiology, the appointed heads of these departments, Dr. Charles Henry Gilbert and Dr. Oliver Peebles Jenkins set about an examination of the possible sites along the Pacific Coast for the best location for the study of marine biology.² As described by to O. P. Jenkins ...the examination on the Pacific coast were carried on quietly, so that no outside influences might be brought to bear to change the choice of a location; the desire being to select a situation wholly on its merits as a suitable place for such a laboratory. The points taken into the consideration in the selection were first, the natural advantages, then accessibility, and the facility of getting accommodations at which those engaged in the work could pleasantly and conveniently live.³

As for a possible location for which to establish the laboratory, the shoreline of the Monterey Peninsula was not unfamiliar territory for David Starr Jordan or Charles Henry Gilbert, as the two men had visited this region of California in 1880, during their survey of the fisheries along the Pacific coasts for the U.S Fisheries Commission.⁴ David Starr Jordan would again find reason to visit the Monterey Peninsula during the summer of 1891. Having just arrived in Menlo Park for his new position as President of Stanford University in June of that year, Jordan visited the seaside village of Pacific Grove the
following month as a speaker in the twelfth annual Pacific Coast Assembly of the Chautauqua Literary and Scientific Circle.

For the Pacific Coast Assembly of 1891, Jordan told the story of his climbing the Matterhorn and spoke to the Assembly’s School of Methods on the subject of pedagogy.⁵ A San Francisco Call newspaper article relaying the ongoing activities of the Chautauqua Assembly provided the following description of the Matterhorn lecture: This afternoon President Jordan of Stanford University arrived, and this evening he delivered a lecture before a large audience, his subject being "The Ascent of the Matterhorn," giving a graphic description of his experience. It was the first time he has addressed a public gathering in California, and it was a feature of the assembly. President Jordan is a great lover of nature, and for years has spent the summers in investigations of the mountains in this country and abroad.

Jordan would leave from Pacific Grove and his participation in the Chautauqua Assembly impressed by the educational opportunities available to the participants, and the favorable setting of the area on Monterey Bay for marine studies.⁶
THE NECESSARY REQUIREMENTS FOR A SEASIDE LABORATORY

So it was determined, by the expedition carried out by CH Gilbert and OP Jenkins that, of all the possible sites along the central coast of California to position a seaside laboratory, a headland projecting into the sea, named Point Aulon (Spanish for Abalone Point), in the coastal township of Pacific Grove, was sufficient as to satisfy those necessary requirements that Professor Oliver P. Jenkins had outlined. As previously mentioned, these requirements included (1) being in close proximity to the natural advantages necessary for a marine biological laboratory; (2) easy accessibility in terms of traveling to and from the facility; and (3) pleasant and convenient living accommodations for faculty, students and visiting research scientists. The following paragraphs offer further detail into how these three necessary requirements were satisfied and the advantages afforded by selecting this location over any other along the California coast.

Natural Advantages: For the requirement of natural advantages, Point Aulon provided easy access to the elements necessary for biological research, that being the abundance of marine life and clean seawater for the laboratory. Despite the close proximity of the Stanford University campus, the San Francisco Bay was rejected as a location for the seaside laboratory as it was virtually landlocked, with two large rivers emptying their sediments into this coastal estuary, which contributed to the absence of marine life in this location.

Monterey Bay, being more exposed to oceanic conditions, provided an abundance of marine life. In addition, Point Aulon provided access to a rocky intertidal zone perfectly suited for marine studies. At this time in the history of California, the Monterey Peninsula itself, remained relatively untouched, a virtual paradise in terms of its natural environment. Beyond the natural advantages that awaited those wishing to attend the Hopkins Seaside Laboratory, was the additional advantage of the peninsula being conveniently connected to Palo Alto and San Francisco by rail.
Accessibility: The requirement of accessibility, in terms of traveling to and from a facility were met by the Southern Pacific Railroad’s Monterey Express; then the fastest train run on the Pacific Coast. The first Southern Pacific Railroad passenger train arrived in Monterey, On January 1, 1880. Some nine years later, on June 29, 1889, the Southern Pacific Railroad, Northern Divisions, Monterey Express rail service was extended to Pacific Grove, three years prior to the opening of the Hopkins Seaside Laboratory. In addition to extending the rail line, the Southern Pacific Railroad constructed the Pacific Grove train depot, just a few blocks from Point Aulon. For those visiting the laboratory from the Stanford campus, travel time from the Palo Alto train depot to the Pacific Grove train depot amounted to an average of three to three and a half hours.

Accommodations: For the requirement of pleasant and convenient living accommodations for faculty, students and visiting researchers, Pacific Grove had been since 1880, the seat of the Pacific Coast Assembly for the Chautauqua Literary and Scientific Circle. As the Pacific Coast Assembly held a gathering for two weeks every summer, there were to be found available, a supply of cottages and tents for rent at reasonable rates and furnished for light housekeeping.9

And so it was in the end, Pacific Grove’s Point Aulon, what is today the location of the city’s “Lovers' Point Park,” was chosen as the location for establishing the teaching and research facility.
For the first twenty-five years of its existence, Hopkins Seaside Laboratory was only nominally a part of Stanford University, with the instructors being members of the biological faculty of the University. During this twenty-five year period, Dr. Charles Henry Gilbert and Dr. Oliver Peebles Jenkins served as the acting directors of the Hopkins Seaside Laboratory, be it for a significant amount of this time in name only.

AN EARLY ANNOUNCEMENT

Published in the Leland Stanford Junior University First Annual Register 1891-1892 was the following early announcement about the seaside laboratory.

THE HOPKINS LABORATORY OF NATURAL HISTORY

A seaside laboratory of natural history has been founded as a branch of the University by the liberality of Mr. Timothy Hopkins, of San Francisco. The laboratory is located on Point Aulon, a headland projecting into the sea near the town of Pacific Grove, on the Bay of Monterey. It will be provided with aquaria and with all apparatus necessary for carrying on studies in the structure, development, and life history of marine animals and plants, and will be open during the summer vacation of each year to naturalists wishing to carry on original investigations, and to students and teachers who desire to make themselves familiar with methods of study in marine zoology and botany. The work of the laboratory will be under the general direction of Professors Gilbert, Jenkins, and Campbell, the committee of the University Faculty in charge. The general purpose of the laboratory is similar to that of the Marine Zoological Laboratory at Woods Holl, Mass., and to the seaside and marine laboratories established by Johns Hopkins University at different places along the Atlantic coast. The Bay of Monterey is peculiarly favorable for investigations of the kind contemplated, being exceedingly rich with life, and the life history of the peculiar animals and plants of the Pacific Coast has for the most part received little study from naturalists.
AIMS OF THIS BRANCH

Also from the Leland Stanford Junior University First Annual Register 1891-1892, was published a one-paragraph description defining the purposes for which the Hopkins Seaside Laboratory has been constructed.

...The aims sought in the establishment of this branch of the Biological work of the University are mainly: To supplement the work given in the regular courses of instruction in the Zoological, Botanical, and Physiological Departments of the University under the favorable conditions of such station; to provide facilities for investigators who are prepared to make researches in Marine Biology for which the Pacific Coast offers exceptional attractions, in that its field is very rich and as yet is largely unworked; to afford an opportunity to those, especially teachers, who desire to become acquainted with marine animals and plants and to learn the practical methods of their study...12
POINT AULON (ABALONE POINT)

As for the specifics of the building site for the seaside laboratory, Point Aulon stood as a small treeless plateau that rested above a steep rocky point. The position of the plateau provided the building with views of the Monterey Bay on three of four sides. In front of the building was a protected cove with a small sandy beach that allowed for the safe landing of small boats; to the rear of the building and thirty feet below, the surf crashed on the rocks. Unforeseen was that this building was positioned a bit too close to the crashing surf, as the faculty and administration of Stanford University soon learned. During a winter storm in 1893, large waves reached the rear of the building, threatened to overturn the laboratory, and seriously damaged this one existing structure. This lack of stabilization required the addition of wooden braces positioned at each of the four corners of the building.
In his book titled *Stanford University - The First Twenty Five Years 1891-1925*, Orrin Leslie Elliott - Stanford’s first Secretary and Registrar - provides the following information related to the financial resources available for establishing the seaside laboratory.

During the first year, because of the heavy initial expenses in starting Stanford University, it seemed best not to ask for any financial support to be directed toward the development of a marine biological laboratory. Fortunately, however, as soon as the project became known, the city of Pacific Grove appropriated three hundred dollars to further the enterprise. The Pacific Improvement Company provided another five hundred dollars and offered free use of a site for the Laboratory. Timothy Hopkins, the adopted son of Mark Hopkins was a close friend of the Leland and Mrs. Stanford came forward with a gift of one thousand dollars.

Mr. Hopkins was a partner in the Pacific Improvement Company and through his influence the Company increased the amount of land offered and made it a gift instead of a lease. In the end, approximately one acre of land was obtained from the Pacific Improvement Company at Point Aulon. In recognition of Mr. Hopkins' generosity, though against his protest, the name Hopkins Seaside Laboratory was adopted.¹⁵