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Geraldine Knatz

University of Southern California, knatz@usc.edu

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Corresponding author: knatz@usc.edu
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Geraldine Knatz

University of Southern California, 3620 South Vermont Ave, KAP 268A, Los Angeles, California, 90089-2531, knatz@usc.edu

Abstract.—Los Angeles Harbor, in San Pedro Bay, has long drawn scientific researchers, from its days as a 19th century muddy tide flat to today’s industrial complex of man-made channels and wharves. A marine biological laboratory was established on Terminal Island as an outpost of the University of California and operating for the summers of 1901 and 1902. As it was a teaching laboratory, it attracted women students and researchers. Two Los Angeles women associated with the laboratory and who made contributions to the advancement of biology were Sarah P. Monks, an instructor at the Los Angeles Normal School and Martha Burton Williamson, a self-taught conchologist. These women were born in the 1840’s and grew up at a time when scientific pursuits were not the norm for the proper Victorian women. Both had done research in Los Angeles Harbor before the laboratory on Terminal Island was opened and both continued their independent research in the harbor after the laboratory was relocated to San Diego. Both women had cottages on Terminal Island from where they collected and conducted their research. Monks named her cottage Phataria after a sea star, whose asexual reproduction and autonomy was the subject of her research. Williamson amassed a significant collection of shells, corresponding extensively with malacologists from around the world. Williamson’s most significant publication was her 1892 Smithsonian paper on the shells of San Pedro Bay, possibly the first paper published devoted exclusively to the biota of San Pedro Bay and certainly, the first written by a woman. Both faced setbacks in their careers, Monks by not being recognized as author of her anatomy textbook and Williamson for her inability to join the California Academy of Sciences. They both survived residing, at least part-time, within the inhospitable environment of the Terminal Island district of Los Angeles Harbor. They serve as role models for any women who face the prospect of going where few women go in their quest for scientific knowledge.

Marine field stations and laboratories established around the country in the late 19th and early 20th centuries represented an opportunity to equip local teachers with knowledge of the marine environment to take back to their own classrooms. Teachers were a significant part of the student enrollment in the courses taught at these field stations. Early records from the west coast stations such as Stanford University’s Hopkins Marine Station, the University of Washington’s Friday Harbor Marine Station and the various field stations established by William E. Ritter of the University of California in Southern California indicate that women were studying at these laboratories (Benson 2001).

One of the University of California marine laboratories was established in the community of East San Pedro on Terminal Island in Los Angeles Harbor in 1901 (Fig. 1). Four women scientists have been documented as being associated with this laboratory. They are Sarah P. Monks, Martha Burton Williamson, Alice Robertson, and Ida Shepard Oldroyd. This paper focuses on the two lesser-known women scientists that were residents of Los Angeles, Martha Burton Williamson and Sarah P. Monks. Both should be acknowledged as part of the history of science in Los Angeles and, in particular, for their association with the science of Los Angeles Harbor.
Monks was a teacher at the Los Angeles Normal School and an independent researcher associated with the Ritter’s laboratory. Williamson was enrolled as a student at the laboratory in 1901. Both women were involved in marine biological investigations in Los Angeles Harbor before the laboratory opened and both continued their independent research in the harbor after the laboratory was relocated to San Diego.¹

The other two women who were at the Terminal Island laboratory, Alice Robertson and Ida Shepard Oldroyd pursued their scientific careers outside of Southern California. Robertson was part of the University of California laboratory staff and responsible for the specimens collected during field work. She became an authority on Bryozoans and published a series of papers on the Entoprocta and Bryozoa of the Pacific Coast of North America. Robertson left California in 1906 when she realized there was little opportunity for her at the University of California and took a teaching position at Wellesley College. She returned to the University of California when Charles Kofoid offered her a position in 1921 (Sears and Woollacott 2008). Her return was brief as she died the following year. Her contributions to science are covered by Sears and Woollacott (2008) along with a listing of the new genera and species she described.

Oldroyd was a shell collector who, along with her husband Tom, lived in Long Beach and then Signal Hill, California. According to the diary kept by Ritter of the activities at the Terminal Island laboratory, Oldroyd was at the laboratory in 1901 and offered her shell collection to him for $1000.² Ritter, facing funding challenges to keep the laboratory operating, was unable to purchase it. Oldroyd eventually sold her collection to Stanford University for $8000. In lieu of payment, Stanford hired Oldroyd as curator. Oldroyd stayed at Stanford until she passed away at age 84 in 1940. Coan and Kellogg (1990) report on her contributions to science in Veliger. In addition to her collection, which was transferred to the California Academy of

¹ See the companion paper titled The Marine Biological Laboratory at Terminal Island, for more information on the establishing of this laboratory 115(2).
Sciences in 1977, she is known for her publications on mollusks including *The Marine Shells of West Coast of North America* (Oldroyd 1924-27).

Burek and Biggs (2007) noted early female scientists were characterized as having a pioneering spirit. Often born into influential families, they had the means to pursue an interest or work as a volunteer without a formal position or salary. Monks (Fig. 2) and Williamson were middle class white women who were educated but by no means wealthy. Monks never married and had to support herself. Williamson’s correspondence with her husband often focused on financial needs and his ability to find a good paying job. They often lived apart as he traveled to find work and her letters indicate a desire for the family to be together. Williamson would occasionally come into money, likely from her writing, happily reporting to her husband that she would be able to pay the rent on time or buy something for her children.³ Both women were self-sufficient and confident enough to ignore Victorian values of decorum prevalent during the mid-to late 19th century. The west and Los Angeles, in particular, provided an environment where women, like Monks and Williamson, could be different.

³Martha Burton Woodhead Williamson Papers, 1849-1922, SIA acc. 06-121, Smithsonian Archives, Washington, D.C.
Monks and Williamson took up residence, in separate cottages, as part of the squatter community that developed on the East Jetty, a federal civil works project constructed by the U.S. Army Corps of Engineers in Los Angeles Harbor. The jetty was built from the tip of Rattlesnake Island (now Terminal Island) to Deadman’s Island during the period 1871-1881. As sand built up along the jetty, squatters built primitive wooden structures, homesteading on this newly-created land they considered free for the taking. Most of the homes built on the jetty were constructed of driftwood. They were simple wood structures, often with porches, elevated on stilts or pilings to avoid flooding. The sanitation system was high tide. Most of these shacks or cottages were furnished with the flotsam and jetsam that washed up on harbor shores (Hirahara and Knatz 2015).

Despite Monks having a home in San Pedro and Williamson in Los Angeles and Monks in San Pedro, they both spent a considerable amount of time in their harbor cottages. The presence of these educated women creates an incongruous image among the hermits, fisherman and bohemians that made up the rough and tumble community of East San Pedro.

Sarah P. Monks was born in Cold Springs, New York in 1841. She attended Vassar College and received her A. B. degree in 1871 and her masters in 1876. In 1876, she was elected to Phi Beta Kappa. She attended the women’s medical college in Philadelphia to study anatomy and microbiology. She went to work for the Academy of Natural Sciences in Philadelphia classifying birds in their collections while independently studying herpetology. From 1878 to 1891 she published papers on salamanders, lizards and turtles in the American Naturalist and the Proceedings of the American Philosophical Society. She moved to California and spent one year teaching at the College of Santa Barbara before taking a post at the Los Angeles Normal School where she taught from 1884 to 1906. She taught courses in botany, physiology, zoology, chemistry, and drawing. In addition to teaching, Monks was a collector and researcher. As curator of the museum of the State Normal School, it is likely she used her collections for her teaching and to add to the school’s museum. Monks research interests for many years focused on regeneration in sea stars but she also published on diatoms and spiders (Monks 1887, 1920).

The first annual report for the corporation known as the Marine Biological Laboratory (MBL) of Woods Hole, Massachusetts, published in 1888, lists Monks as a member. In 1894 at a meeting of the MBL, the Biological Association was created and Monks became a founding member. This annual meeting was described as a convention of teachers, students and researchers who came together to support the establishment of a marine station. It is likely that Monks attended the meeting in person since she was enrolled in a botany course at the Marine Biological Laboratory at Woods Hole the same summer (Fig. 3).

Several profiles have been published about Monks life and work. The Los Angeles Times dubbed Monks the “genius of the old government breakwater” in a profile published in 1907. Monks’ was described with white fluffy hair and pink cheeks. Her home, at 223 15th Street in San Pedro, could have been described as a cabinet of curiosities, walls lined with shelves filled with biological and geological specimens. Human skulls were perched on the

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5 Interesting Westerners, Sarah P. Monks, Sunset, the Pacific Monthly, 44(1):54.
6 The Marine Biological Laboratory, Annual Reports for the years 1888-95, Volumes 1-8, Boston.
7 The marine biological laboratory, Third Annual Report for the year 1890, Boston.
9 Mighty Borer is in Danger, San Pedro’s women scientist seeks Teredo’s end. Los Angeles Times, February 10, 1907, page II-8.
risers to her second floor. Her colleagues describe her unseen tender side although her public persona was often brusque and characterized by frankness that could be considered cold if she came in contact with what she called a stupid or unreceptive mind. She was equally conversant in biology, zoology and geology. Her profiles credit her as in the discoverer of regeneration in sea stars.

Monks retired from teaching at the Los Angeles Normal School in 1906 but continued her scientific pursuits. After her studies of regeneration, she focused her research on the destructive wood borer Teredo, hoping to find a solution to the destruction of the harbor pilings which supported her waterfront laboratory. Although Monk’s was a long term educator, her views on the pursuit of naturalistic study are revealed in her quote published in the Pacific Rural Press on November 17, 1877:

When a person had the ability and range of experience for the correct investigation of nature, it is a waste of time and talent that he must, for bread-and-butter reason, drudge in the college, or university, or the ordinary routine of professional service.

Sarah Preston Monks died in July 1926 in San Pedro and her passing made the headlines in the San Pedro Daily News.

Martha Burton Woodhouse (Fig. 4) was born in 1843 in England, moving to Cincinnati with her parents as an infant. She was educated in private school and with private instructors, took college level courses but never graduated from college. In 1866 she married Charles

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10 Mighty borer is in danger, San Pedro’s Women Scientist seeks Teredo’s End, Los Angeles Times, February 10, 1907.
11 Holographic Autobiography of Williamson at the Santa Barbara Museum of Natural History. S. S. Berry archives.
Williamson in Burlington, Iowa. The U.S. Census for 1870 indicates that Williamson lived next door to her father and both her father and husband were carpenters. Charles and Martha had three daughters.

Williamson began publishing in 1877. She was a special correspondent for the Garfield Presidential campaign. She wrote articles for various newspapers in Indiana and Kansas City. In 1882, she became an editor for the Enterprise, a newspaper from Terre Haute, Indiana (Coan 1989). Her personal correspondence indicates that she often pursued work for newspapers and would encourage publishers to create a women’s news bureau. In the late 1880’s, the family moved to Los Angeles for her husband’s work opportunities.

It was in Los Angeles where Williamson turned to science, particularly the collection of shells. In 1890, she was a founding member of the short-lived organization called the American Association of Conchologists. From 1893-1898, she served as secretary of the Issac Lea Conchologist Association of the Agassiz Association (Coan 1989). Williamson’s most significant

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12 Holographic Autobiography of Martha Burton Williamson, Santa Barbara Museum of Natural history.
scientific publication was *An Annotated List of the Shells of San Pedro Bay and Vicinity* published by the Smithsonian Institution (Williamson 1892a). She also wrote a paper on the abalone shells of the California Coast and after noting their decline due to overfishing, advocating for their conservation, and noting the inadequacy of the then-current preservation laws (Williamson 1894a, 1907).

Williamson carried on extensive correspondence and specimen exchanges with malacologists from around the world, such as Robert E. Stearns of the Smithsonian, Charles Hedley of the Australian museum in Sydney, M. J. Elrod from University of Montana and Charles W. Johnson of the Boston Society of Natural History. Her most interesting correspondence is the letters with James G. Cooper, noted ornithologist and an early member of the California Academy of Sciences (Emerson 1899). Cooper had helped Williamson with some of the identifications of her shells from San Pedro Bay. The correspondence reveals the Academy’s inability to publish Williamson’s work because she was not a member. Given how Williamson actively joined numerous scientific organizations, it would seem likely that she would want to become a member of the academy. Her lack of a college degree might have prevented her membership. Cooper’s letters to Williamson were somewhat patronizing. He told her to be careful when collecting from San Pedro because a shell might have been thrown off a ship. Cooper often requested she send specimens to him. It is possible that Williamson asked that these species be named for her, for in a letter dated February 10, 1890, Cooper tells her that *Williamsonae is just too long.*

She was a prolific writer publishing on scientific, historical and women’s topics, including a three part series of articles titled *Some American Women in Science* (Williamson 1898-99). She was active in women’s organizations as a charter member of the Friday Morning Club and a member of the Ruskin Art Club. She was the second president of the Southern California Press club. She was often a speaker at these club meetings, entertaining her audiences with her shells and jars of specimens including an octopus from Rattlesnake Island. She often made the society news in the Los Angeles papers. As a journalist she published her work under the *nom de plume* Virginia Burton while her scientific publications were all published under her own name as *M. Burton Williamson.* It does not appear she was trying to disguise her sex. Her extensive correspondence with scientists around the world indicates they knew she was female.

Williamson was an active member of the Historical Society of Southern California, joining in 1891 after being asked by Dr. Ira More, principal of the Los Angeles State Normal School. There were only two other women members when she joined, Dona Coronel, the wife of former Mayor of Los Angeles Antonio F. Coronel, and Tessa L. Kelso, the Los Angeles City Librarian (Williamson 1919). It was her involvement in the Historical Society that brought her in contact with many of the Society founders and pioneers in the development of Los Angeles. She was an active member for 30 years and published numerous papers in the Society’s Annual Bulletin including papers on the history of Catalina Island, Deadman’s Island and University Park, the area around the University of Southern California, as well as the Mission Indians of the San Jacinto Reservation.

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13 January 28, 1891 Letter from James G. Cooper to Mrs. Williamson, Smithsonian Archives.
14 February 10, 1900 Letter from James G. Cooper to Mrs. Williamson, Smithsonian Archives.
15 The Friday Morning Club founded in 1891 was an all-women’s organization devoted to personal and civic betterment.
16 Conchological Lore, Los Angeles Herald June 27, 1892, page 3.
Her involvement with the Historical Society prompted her to suggest that a special meeting be organized to record the history of all the women’s organization and societies in Los Angeles. The meeting, held at the mansion of Don and Dona Coronel in Los Angeles, on March 28, 1892, was significant enough to have been noted in Harris Newmark’s *60 Years in Southern California* (Newmark 1916). Williamson compiled the information and proposed that the Historical Society publish it. Unfortunately, the Historical Society did not have the funds to create more than a few copies of the 172 page compiled work titled *Ladies Clubs and Societies in Los Angeles in 1892*. When the Society President, Frank J. Polley, resigned in the middle of his term in 1896 to take on the chairmanship of the history department at Stanford University, Williamson assumed the role for the remainder of his term. She notes in her 1919 article, *Glancing Backwards*, that her name was not listed as the Society president in the 1896 Annual and that the oversight was repeated again in a later article listing the former presidents, although she was listed as a Vice-President from 1895 through 1913 (Hall 1916).

She was widowed in 1891. Williamson applied for a civil war widow’s pension under the Widow’s Pension Act of April 19, 1908. She began receiving twelve dollars a month beginning in June 1908, the amount being increased to twenty dollars a month in 1916 when she hit the age of 70. She died on March 18, 1922. A 13 page brochure was produced for her funeral service. She was described as a writer, scientist, and philanthropist but first of all, a homemaker. Honorary pallbearers included notables such as Dr. Millbank Johnson, of Alhambra, Dr. Laird Stabler of University of Southern California, and notable Los Angeles resident Charles Lummis.

At the Marine Biological Station in Los Angeles Harbor

Monk’s experience at the field station at Woods Hole likely attracted her to the marine laboratory established by Ritter in Los Angeles Harbor. She was neither a student nor an instructor but an independent researcher working out of the laboratory. Ritter (1902) reports that her scientific work on the sea star *Phataria* concluded that there is much variability in the number of rays but that the throwing off of rays is not accidental but an intentional means of asexual reproduction. Studies conducted at the laboratory hypothesized but did not conclusively prove that a severed ray can regenerate an entire organism including the disk (Ritter 1902). Monks however proved this point in follow-on research (Monks 1903, 1904).

Ritter, who kept detailed diaries rarely mentioned any of the students or independent researchers however he made one interesting comment about Monks. On August 3, 1901, Kofoid took the research vessel *Elsie* on a collecting trip to Whites Point, off the Palos Verdes Peninsula. Monks went along and Ritter’s diary entry states *Miss Monks gets about 40 specimens of the Phataria, all as disregardful of the law as ever*. Was Ritter complaining that Monks was taking too many specimens and violating a law of nature, potentially impacting the population? He never made any other similar comments about the other researchers despite often listing the numerous numbers of specimens collected.

Williamson was the only student at the laboratory that Ritter mentioned in his 1902 paper in *Science*, reporting on her discovery that two species of *Pecten* were hermaphroditic. Williamson, however, was already a noted authority on mollusks when she enrolled as a student at the laboratory. When William Dall, the curator of mollusks at the Smithsonian Institution...
came to the harbor laboratory to speak in 1901, he and Williamson were already well acquainted. Nearly a decade earlier, Dall had named the species *Vitrinella williamsoni* Dall for Williamson, intentionally using the male genitive ending *i* because Williamson’s name was inherently masculine. Dall’s description is included in Williamson’s 1892 paper so she apparently took no issue with how he named the species (Williamson 1892a). Williamson also published *The Marine Biological Laboratory at San Pedro* in the 1901 Annual of the Historical Society of Southern California.21 Williamson continued her study of biology at the University of Southern California in 1904.22

Monks and Williamson knew each other before the Terminal Island laboratory opened. Nearly a decade before, Williamson acknowledged Monks for use of her shell collection for her 1892 publication. She also acknowledged Ida Shepard (prior to her marriage to Tom Oldroyd) and other women shell collectors in the same publication. In August 1899, a group of scientists that included both Monks and Williamson visited the aquarium established by Charles Frederick Holder in Avalon on Santa Catalina Island (Fig. 5). Holder envisioned the aquarium as a tourist attraction as well as a zoological station similar to the Zoological Station at Naples, Italy (Holder 1899). Monks and Williamson went to study the behavior of his aquarium inhabitants and to obtain specimens.23 Despite knowing of each other work, Williamson did not mention Monks as one of the American women in science in her three part series published in 1898-99 although her series notes that some women scientists were also teachers and illustrators, as Monks was.

21 This paper is how the author discovered the laboratory existed in Los Angeles Harbor as none of the published harbor histories had mentioned it.
23 Scientists at Avalon studying Life by land and sea for useful purposes, Los Angeles Herald Examiner, August 4, 1899.
Monks named her cottage Phataria after the sea star which was the subject of her research (Fig. 7). She conducted experiments on regeneration in her waterside laboratory, keeping Phataria in tanks of water that required changing every day. The daily trek over to Phataria from San Pedro involved a ferry ride followed by a trek along a broken boardwalk over water and jagged rocks, using a wire for support. The chair on Monk’s porch was fashioned out of an old ships rudder and her stove and lamp were brought from the wreck of the vessel Portland (Fig. 8).

No photograph was found of Williamson’s cottage. She laid claim to a squatter lot in 1901 during a land rush of prospective squatters that materialized in East San Pedro after word got out that a prominent Los Angeles man had taken a lot (Hirahara and Knatz 2015).

It is not clear whether Monks and Williamson bought existing cottages or built their own. However, Williamson sought permission from the Army Corps of Engineers to make modifications to her cottage, and included a hand-drawn map of her location in her correspondence to the Corps.

As the concern intensified over legal right of the residents of East San Pedro to continue living on the Army Corps jetty and the land that accreted around it, both Monks and Williamson corresponded with the Corps of Engineers to solidify their claims to their lots. Monks in her letter to Colonel Fries of the Los Angeles District of the Army Corps

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24 A blueprint plot plan is available at the Port of Los Angeles which shows the names of the residents and building on the East Jetty. It is believes this drawing was made approximately 1912 prior to the City’s eviction of the residents.

25 Diary of Charles Fletcher Lummis, Braun Library, Autry Museum.

26 Squatters evicted at East San Pedro, lots may not be staked, Los Angeles Herald, July 31, 1901, page 4. I suspect this prominent citizen was Charles F. Lummis.

27 Letter to Secretary of War and Captain C. H. McKinistry, Corps of Engineers from M. Burton Williamson, both dated May 39, 1904, National Archives at Riverside, Record Group 77, File W-10e
called her cottage a place of study and emphasized her efforts to study the destructive wood borers Teredo. She tells Fries that she does not know anyone in Washington D.C., then proceeds to name the curators at the Smithsonian. Fries was sympathetic in his response. Nevertheless, he informed her that her cottage rested on disputed territory he called no man's land.

In 1912, the City of Los Angeles began eviction actions against the squatters (Hirahara and Knatz 2015). Like the rest of the squatters who clung to their waterside cottages like barnacles to the rocks, Monks’ and Williamson’s efforts to secure permanent rights to save their cottages were unsuccessful.

The Legacy Left by Sarah P. Monks and Martha Burton Williamson

When Monks was still living, she was best known for a 300 page textbook used at the Los Angeles Normal School titled Anatomy Physiology Hygiene. Unfortunately, she is not listed as the author. The text was compiled under the direction of the State Board of Education. Monks

Fig. 7. Cyanotype photograph taken in 1906 of Monk’s cottage on the East Jetty where she conducted her biological research. White letters on the fence show part of the name Phataria. Photo courtesy of Huntington Library.

28 Letter to Captain Amos A. Fries from Monks, dated December 23, 1907, National Archives at Riverside, U.S. Army Corps Records, File W-10e
29 Letter to Monks from Captain Fries dated February, 7,1908, National Archives at Riverside, U.S. Army Corps of Engineers Record Group 77, File W-10e.
30 Anatomy Physiology Hygiene was printed by the State Printing office without a date. Google books cited the year of publication as circa 1891.
was given credit inside the book for all its original drawings. Monks is mentioned in Creese’s American and British Women of Science for her work in herpetology (Monks 1878, 1881). Monks donated her library, consisting mostly of Proceedings of the National Museum and the Philadelphia Academy of Sciences to the Los Angeles Museum of History, Science and Art in 1915.31 It is believed that the gastropod *Fusinus monksae* was named for her by William Dall in 1915.32

Although she lived alone, many researchers made a path to her doorway. She fell in love with the sea and expressed those feelings in her poetry as illustrated in this last stanza of her poem *The Islands of the Sun*:

\[
\text{Mayhap my ships that outward went} \\
\text{And never came to me again} \\
\text{Mayhap my winged hours misspent} \\
\text{And dreams and fancies passion pent} \\
\text{Have found some port of sweet content} \\
\text{In Islands of the Sun}
\]

Williamson donated her shells to the Los Angeles Museum of History Science and Art in 1912.33 Although no complete inventory of her collection currently exists, letters in the collection file at the Los Angeles County Museum of Natural History indicate her collection numbered about 3000 specimens. Some of her specimens were traded with other institutions.34 Her extensive correspondence with malacologists around the world is in the Smithsonian

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31 Los Angeles County Museum of Natural History, Accession Catalogue, Number 372.
33 Los Angeles County Museum of Natural History, Accession Catalogue, Number 52.
34 Personal Communication, Lindsey Groves, Mollusks Collections Manager, Los Angeles County Museum of Natural History.
archives except for one box which was donated to Stanford University.\(^{35}\) The Stanford box contains material associated with the American Association of Conchologists including a letter its President John Campbell sent to Williamson, dated May 5, 1890, welcoming her as the first lady member of the association (Keen 1981).

Williamson’s daughters Lillian and Estella worked to ensure their mother’s legacy. They were dismayed to find, upon a visit to the museum in 1927 that their mother’s collection was not on display. Their written inquiry to the museum emphasized that the donation was made with the understanding that the items were to be on display. Their letter triggered acting museum director John Comstock’s request to the museum Board of Governors to go on record opposing donations that come with restrictions. Comstock found no evidence supporting the Williamson’s daughters claim, and assured them that such a valuable collection, like their mother’s, had to be preserved for research purposes.\(^{36}\) In 1925, Williamson’s daughters also printed her report *Ladies Clubs and Societies in Los Angeles in 1892*. It is frequently cited by historians in the field of women’s studies.

One of Williamson’s most delightful publications was published in Popular Science News in 1891, *A Midwinter Trip in Search of Shells*.\(^ {37}\) It provides a rare first-hand glimpse of a collecting trip to Deadman’s Island and Rattlesnake Island, two locations that no longer exist in Los Angeles Harbor. Williamson published a summary of conchological research in San Pedro Bay (Williamson 1894b) noting that the collection of shells and biological specimens from San Pedro bay occurred as far back as the 1850’s and by James G. Cooper in 1867 and William Dall in 1873.\(^{38}\) However, her 1892 Smithsonian paper on the shells of San Pedro Bay may be one of the first biological papers published specifically on the fauna of San Pedro Bay and is most certainly, the first written by a woman. Over her career, Williamson identified 11 new species of which two *Crepidula* are valid (Coan 1989).

Monks and Williamson represent a unique breed of women who led unconventional lives that were dedicated to the pursuit of knowledge and science. Both women worked to share the knowledge they gained through their studies. Although Williamson never became a teacher like Monks, she was an avid public speaker on scientific topics to women’s groups and published scientific pieces in magazines available to the general public.

Los Angeles Harbor of the late 19\(^{th}\) and early 20\(^{th}\) century was not a hospitable environment for a woman. Yet, Monks and Williamson carved out an existence there, becoming well-known members of an eclectic community that began to disappear in 1912 with the progress of harbor commercialization. Whether it is Monks making the daily trek to her waterside laboratory to change the seawater in her aquaria or Williamson collecting on Deadman’s Island, the image of these two women wearing Victorian dress navigating the rocks in the pursuit of science is one that should be imagined and not forgotten. These women can serve as role models for any budding scientist who might feel intimidated by the daunting massive industrial complex of today’s Los Angeles harbor, yet sees it as an environment worthy of biological research and discovery.

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\(^{35}\) M.B. Williamson Papers 1887-1927, Stanford University Library.

\(^{36}\) October 11, 1927 Letter to the Board of Governors of the Los Angeles Museum, Statement concerning the E. (sic) Burton Williamson collection by Acting Director John A. Comstock, Los Angeles County Museum of Natural History.


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