Memorial to Angeline Myra Keen
1905–1986

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Professor emeritus A. Myra Keen of the School of Earth Sciences, Stanford University, died January 4, 1986, in Santa Rosa, California, at the age of 80.

The daughter of Ernest Byron and Mary Thurston Keen, Myra was born May 23, 1905, in Colorado Springs, Colorado, moving at age two to a cattle ranch twenty miles from town. Her formal schooling began in a one-room school house, where she completed all eight elementary grades in five years. She graduated Phi Beta Kappa from Colorado College in 1930, won a fellowship to Stanford University (where she earned an M.A. in 1931), and then completed a doctorate in 1934 at the University of California at Berkeley. Her post-graduate degrees were both in psychology.

Myra became a research associate and volunteer curator of molluscan shells at Stanford University in 1934. Before retirement in 1970, she had the distinction of being the first woman to receive a full professorship in the School of Earth Sciences.

Myra's first goal was to be a concert pianist, and she enjoyed classical music, especially Brahms, throughout her life. In college she thought she would be an entomologist, but her sensitivities rebelled when some butterflies came to life on the pinning boards and some beetles that hadn't been in the cyanide jar long enough revived. Next she pursued physiology, but faced with having to dissect a cat, she also rejected that, and finally selected psychology as her major field. While a doctoral student at Berkeley, she discovered sea shells in a small book shop, took a field trip to Monterey, California, and became enthusiastic about malacology. She spent a summer in Monterey collecting specimens and began her contacts with Stanford's Hopkins Marine Station. There she met Ida Oldroyd, who was then curator of the shell collections at Stanford.

Having graduated during the depression when there were no jobs in psychology, Myra returned to Stanford in 1934 to work with Mrs. Oldroyd. She had had two years of biology in college but only one course in geology, so she began to audit the courses in paleontology and stratigraphy taught by Hubert Schenck and Siemon Muller. She soon found, as she later said, that the two subjects of malacology and paleontology could provide a lifetime of unflagging interest. After three years as an unpaid research associate, Myra was appointed curatorial assistant in paleontology and became the first woman to teach in the geology department.

After 18 years as curator and lecturer, Myra was offered an assistant professorship in 1954, followed by an associate professorship in 1960, and a full professorship in 1965. This may have seemed like slow advancement, considering her international reputation and personal achievements, yet when placed in the context of the times (for example, women were not admitted to Stanford's summer geology field class until 1964), she actually did quite well. At the time of her appointment in 1965, she was one of only three women science professors at Stanford.

Although recognition was slow in coming at Stanford, Myra's reputation as the world's leading authority on tropical eastern Pacific mollusks grew rapidly. She was publicly acclaimed when Emperor Hirohito of Japan, himself deeply versed in malacology, requested that a conference be arranged with her during his state visit to the United States in 1975. This was a high honor for Myra and one that she greatly enjoyed. She was also honored by having 40 mollusks named for her, as personal tributes from her professional colleagues.
Myra published 9 books and more than 75 papers in scholarly journals. Her best known book is *Sea Shells of Tropical West America*, which is found in the libraries of malacologists and molluscan paleontologists worldwide and is also used extensively by amateurs. This book, along with her *Abridged Check List and Bibliography of West North American Mollusca* (1937) and *Check List of California Tertiary Marine Mollusca* (1944), is an essential reference for all in this field.

One of Myra's first articles documented the changes in molluscan faunas at various latitudes along the west coast of North America due to the gradual northward cooling of the sea. This research has been of great value to geologists in defining the source areas of fossiliferous sedimentary rocks that were later moved to new positions by continental drift, and in determining the temperature of the sea in past geologic times. One of Myra's first articles documented the changes in molluscan faunas at various latitudes along the west coast of North America due to the gradual northward cooling of the sea. This research has been of great value to geologists in defining the source areas of fossiliferous sedimentary rocks that were later moved to new positions by continental drift, and in determining the temperature of the sea in past geologic times. One of the highlights of Myra's career took place on a collecting trip in the Gulf of California in 1960 when she found the first living specimen of the small bivalved gastropod *Berthelinia*, long misidentified as a clam.

In addition to her consuming interest in her professional field, Myra was a strong advocate for nonviolence and peace, a supporter of women's rights, a Biblical scholar, a photographer of professional caliber, and, in her later years, an active participant in the Religious Society of Friends. She adhered to Quaker values, avoiding self-indulgence in any form, and remained steadfastly practical and frugal throughout her life. Necessities were purchased, but anything that could be mended, saved, or reused, was. Though she thoroughly enjoyed being treated to an elegant lunch or dinner, of course, she never partook of any alcoholic drink herself. No one ever smoked in Myra's home or in her office on the top floor of the Geology Corner.

After her retirement, Myra was on the board of the Friends Association of Service for the Elderly and helped to establish a Quaker-sponsored retirement center in Santa Rosa, California. A woman of tremendous courage and conviction, at age 77 she left the house she had lived in for 47 years and moved to that retirement community. She had no regrets, however, feeling as she did that it was the first day of a whole new way of life. She willed her estate to the retirement center and left her personal papers, including meticulously kept journals, to the Smithsonian archives.

Myra was a Fellow of the Geological Society of America and the Paleontological Society. She was president of the American Malacological Union (1948) and the Western Society of Malacologists (1970). She was a long-time chairman of the Committee on Nomenclature of the Society of Systematic Zoology, and she received the Award of Honor of the American Malacological Union (1948) and a Guggenheim Fellowship (1964–65). She was the first woman to receive the Fellows Medal of the California Academy of Sciences (1979) and received a special citation from Colorado College (1984) in recognition of her personal and scholarly accomplishments as one of the world's foremost experts on fossil and living mollusks. Much of this was accomplished while she cared for her invalid mother and during periods of her own failing eyesight and crippling arthritis, and eventually her battle with cancer. During the latter, she put her mind to work using biofeedback, agreeing to radiation treatment only after she moved to Santa Rosa. She only accepted complete nursing care during the last few weeks of her life, when she could no longer care for herself, and faced death as she had life, with great courage and good humor.

One of Myra's greatest joys was her students. Testimonies to her teaching ability are the former students who now are professional scientists, curators, and heads of departments of malacology. And the respect, gratitude, and affection these former students felt for Myra is apparent in the correspondence they maintained with her.

Myra always agreed to review any manuscripts her colleagues chose to send her, especially after she moved to Santa Rosa and could no longer pursue her own career. No manuscript ever left Myra's hand with any grammatical or typographical errors, let alone errors in judgement. She was still providing this kind of help to within a few weeks of her death.
MEMORIAL TO ANGELINE MYRA KEEN

Myra is survived by 3 first cousins on her father's side and 14 on her mother's. I thank one of them, Maxine Thurston Carey, for personal data for this memorial.

A talented, unassuming, shy, and gracious lady, with a penetrating mind and strong character spiced with humor, Myra believed that the spirit lives on after death. Certainly her inspiration goes on within those of us who were fortunate to have known her.

SELECTED BIBLIOGRAPHY OF A. M. KEEN

1936 A new pelecypod genus of the family Cardiidae: San Diego Society of Natural History Transactions, v. 8, p. 119-120.
____ (with Morton, J. E.) A new species of Stephopodma (Siliquariidae: Mesogastropoda) from the eastern Atlantic Ocean: Malacological Society of London Proceedings, v. 34, p. 27-35.


1967 A quantitative analysis of molluscan collections from Isla Expiritu Santo, Baja California, Mexico: California Academy of Sciences Proceedings, ser. 4, v. 30, p. 175–205.

1968 West American mollusk types at the British Museum (Natural History), II. Species described by R.B. Hinds: The Veliger, v. 8, p. 265–275.


SELECTED BIBLIOGRAPHY ABOUT A. M. KEEN


