

Memorial to William Heyden Easton 1916–1996

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Paleontologist William Heyden Easton, a professor emeritus of geological sciences at the University of Southern California and a world authority on fossil corals, died of cancer on Sunday, July 7, 1996, at his home in Westlake Village, California. He was 80.

A fellow of the Geological Society of America and a past president of the Paleontological Society, Easton was the author of the widely used textbook *Invertebrate Paleontology* (Harper & Row, 1960) and of more than 100 journal articles on topics ranging from the history of science to the influence of rainfall and earthquakes on landslide activity, from studies of reefs to new methods for oil and gas exploration, from speleology and paleontology to studies of sea-level change and findings in engineering geology.

Born January 14, 1916, Easton grew up in the limestone quarry district of southern Indiana and graduated from Bedford (Indiana) High School in 1933. He worked as a scenewriter in New York City theaters during 1934.

After attending Bard College in New York and the Corcoran Art Institute in Washington, D.C., Easton earned two degrees at George Washington University—a B.S. degree in 1937 and an A.M. degree in 1938. Meanwhile, he was a student assistant at the Smithsonian Institution and worked summers for the National Park Service and the Arkansas Geological Survey.

After earning his Ph.D. at the University of Chicago in 1940, he worked in the Oil and Gas Division, Subsurface Division, and Paleontology and Stratigraphy Division of the Illinois Geological Survey. He joined the USC faculty after serving as a naval officer in the Pacific theater from 1944 to 1946.

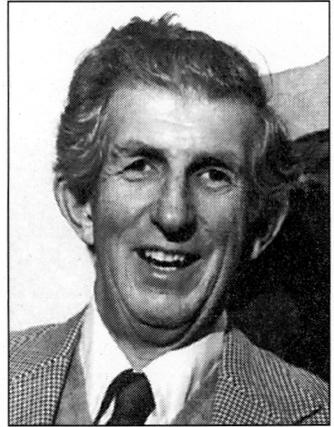
He was a geologist with the U.S. Geological Survey during a sabbatical from USC in 1952–1953, doing field work in the Williston Basin of Montana and in laboratories at the Smithsonian Institution. In 1955, he toured the United States and Canada as distinguished lecturer for the American Association of Petroleum Geologists.

For 35 years, Easton served on the geological sciences faculty at USC. He joined the faculty as an assistant professor in 1946, rising to an associate professorship in 1948 and a full professorship in 1951. He was part of the activist group of young professors who energized and reorganized USC's faculty senate after World War II.

From 1964 through 1967, Easton chaired the Department of Geological Sciences (currently the Department of Earth Sciences) in the USC College of Letters, Arts and Sciences—overseeing the department's inclusion in the National Science Foundation's Centers of Excellence program and leading a fund-raising campaign for the construction of a new science building.

A devotee of French language, literature, and culture, Easton served as acting chairman of the USC department of French and Italian during academic year 1975–1976. He served again in 1986–1987, coming out of retirement until a new chair could be appointed.

In May 1980, he was one of the first three recipients of USC's Raubenheimer Award for excellence in teaching, research, and university service.



"Dr. Easton was an outstanding gentleman in the truest sense of the word," says USC paleobiologist David J. Bottjer. "He was an extraordinary teacher, an internationally respected scientist, and a humanist—as much at home at a Baroque recital or in the French department as he was on a desert field trip or working in the geological sciences. He meant a lot to USC and to all of his friends in the earth sciences department."

Easton's principal research interests were in applying paleontology and stratigraphy to exploration for oil and gas and other mineral resources. In this vein, he conducted research in the United States and in Canada, Mexico, England, France, Belgium, and Sweden. He was also a consulting geologist for several different oil companies regarding problems in California, Nevada, Utah, Montana, Fiji, and the Spanish Sahara.

During the exploration for oil in Nevada and western Utah in the 1950s, he headed a cooperative project among geologists from several petroleum companies to establish a standard stratigraphic nomenclature.

With the discovery of oil and gas in buried reefs, he began a study of both fossil and living reefs in the Caribbean, Hawaii, Australia, New Zealand, and the western Pacific. The award of a Guggenheim Fellowship in academic year 1959–1960 enabled him to study collections of fossils from the American Southwest in the British Museum of Natural History in London and the Musée d'Histoire Naturelle in Paris.

From 1961 on, Easton conducted research in Hawaii on the growth of coral reefs, the erosion rate of volcanic islands, and the factors that cause changes in sea level. In 1961 he began a project to measure the erosion of Oahu, and he focused on the marine terrace at Hanauma Bay. He believed that the erosion of islands is not necessarily due to wave action, as was previously thought, but rather to the chemical breakdown of soil by exposure to salt and wind. At locations around Oahu, and in several places on the marine terrace at Hanauma Bay, he drove 16-inch bronze spikes into the earth and then measured the rate of erosion for more than 35 years. His last measurements were made in May 1996. It was his intention to turn this project over to the University of Hawaii for the next generation of geologists to carry forward.

He was one of the first paleontologists to use radiometric dating to determine the age of the ancient coral reefs composing islands in the Pacific Ocean. In the early 1960s he obtained reef samples from Hanauma Bay by positioning a drilling platform over the central reef and extracting cores that were dated using C-14 and U-234 techniques. The subsequent papers were "Radiocarbon Profile of Hanauma Reef, Oahu, Hawaii," with E. A. Olson, and " $^{230}\text{Th}/^{234}\text{U}$ Dates of Pleistocene Deposits on Oahu," with T. L. Ku.

Easton was accompanied by his wife Phoebe Jane on all of his Pacific island trips, from Hawaii to Palau, the Caroline Islands, the Marianas, Micronesia, and Fiji, where they enjoyed living with their host islanders.

Easton's advice was sought locally and nationally while he served as a member and chair of numerous review and advisory panels and of several national professional societies. He was a past chairman of the Cordilleran Section of the Geological Society of America, a past national councilor for the Society of Economic Paleontologists and Mineralogists, and a Fellow of the Southern California Academy of Sciences. He was a critical reviewer of manuscripts for the National Science Foundation, the Geological Society of America, the American Association of Petroleum Geologists, the Paleontological Society, the Society of Economic Paleontologists and Mineralogists, and the American Chemical Society.

Easton and Phoebe Jane were active in a host of local organizations, including the Los Angeles County Museum Association, the Los Angeles County Art Museum, the Save Our Coastline Committee of Palos Verdes, Friends of the USC Libraries, the Westlake Management Committee, and various church and social groups. Their interests ranged from art, literature, and

rare books to the exploration of diverse cultures in Europe, South America, Australia, and the South Pacific.

Survivors are his wife Phoebe Jane, son Robert, of Westlake Village, California, and daughter Katherine, of Kailua, Hawaii.

The USC Department of Earth Sciences has established a memorial fund in William Heyden Easton's name to support students in paleontology. Friends, colleagues, and alumni are invited to send contributions c/o Dr. Charles Sammis, Chairman, USC Department of Earth Sciences, Los Angeles, CA 90089-0740.