

MEMORIAL RESOLUTION
ELIOT BLACKWELDER
(1880 – 1969)

Eliot Blackwelder died on Tuesday, January 14, 1969, at the age of 88. He had been ill for several years with Parkinson's disease.

Dr. Blackwelder was born in Chicago on June 4, 1880. As a boy he displayed an inquisitive and orderly mind and a love of the natural world. He developed a keen interest in entomology, assembling a collection of more than 6000 specimens of butterflies and beetles. An early enthusiasm for ornithology gained him membership in the American Ornithological Union at the age of 15, and this interest in bird life remained strong throughout his life. Even when he was confined to bed during the last few years, a bird feeder outside his window enabled him to keep contact with his "little friends".

Young Eliot entered the University of Chicago in 1897. As an undergraduate he took many courses in Latin and Greek, and almost decided on the classics as a major. But in his senior year he came under the spell of R. D. Salisbury, a distinguished geologist and inspiring teacher, who persuaded him to make geology his life work. He accompanied Salisbury to the Rocky Mountains immediately after graduation in 1901 and again in the following summer.

For two years after receiving his B.A. he taught at the University of Chicago, and then accepted an exciting invitation to participate in an expedition to China. The expedition, under the auspices of the Carnegie Institution of Washington, was led by Bailey Willis, later himself a professor of geology at Stanford. Accompanied by a topographer, Harvey Sargent, Willis and Blackwelder made their way to China by way of Europe and Russia. During the numerous stopovers in Europe, including attendance at the International Geological Congress in Vienna, the young man established personal contact with many noted geologists. A memorable ride on the Trans-Siberian Railroad brought the three to China, where their journeys included a preliminary field trip from Peking to Tsingtao in Shantung province and then a much more ambitious expedition west to the ancient capital of Hsian in Shensi province, south across the high Tsinling Range to Ichang on the Yangtze River, and then by boat down the Yangtze to Shanghai. The expedition logged some 3000 miles by foot, pony, boat, and train. It made an indelible impression on young Blackwelder's mind, providing him with a variety of personal and professional experiences that formed a rich background for much of his later work.

On his return to America he married Jean Bowersock, an acquaintance from early childhood to whom he had been engaged for several years. He accepted a position in the geology department of the University of Wisconsin, remaining there from 1905 to 1916. He became a full professor at the age of 30, before obtaining his doctor's degree from Chicago in 1914. From Wisconsin he went to the University of Illinois, serving as head of the geology department from 1916 to 1919. During this early stage of his career he spent most summers in field work with the U.S. Geological Survey, on assignments that took him to many parts of the western United States and to Alaska. He came to Stanford as a visiting professor in 1919, but in the same year accepted a position as chief geologist with the Argus Oil Company in Denver. The love of teaching was strong, however, and in 1921 he returned to an academic position at Harvard. A year later he accepted Stanford's invitation to head the geology department, a position he held for **23 years** until his retirement in 1945.

In their years at Stanford Dr. Blackwelder and his family occupied the original Peter Couatts farmhouse on Escondido Road, now the headquarters for Escondido Village. Many former students will remember pleasant afternoons and evenings spent in the spacious rooms of the old house and the beautiful surrounding gardens.

Dr. Blackwelder's professional interests centered on desert morphology and mountain glaciation. He wrote many papers, some of which have become classics, on the origin and evolution of desert landscapes, and demonstrated the former presence of lakes in some of the now arid basins of southeastern California and western Nevada. His meticulous glacial studies in the Rocky Mountains and the Sierra Nevada provided the basic framework for all subsequent investigations. While in China he discovered evidence of ancient glaciation previously unknown in that part of the world, glaciation dating back more than half a billion years.

Outside the fields of his major work, Dr. Blackwelder's inquisitive mind led him to productive study of many other geological subjects. A paper on the recognition of escarpments formed by faulting is still frequently referred to. He was one of the first geologists to study and endorse an impact origin for Meteor Crater in Arizona, a feature that has recently received much attention because of its similarity to lunar craters. He demonstrated that, at very low temperatures, ice becomes as hard as many rock minerals and therefore competent to erode solid rock. He wrote several important papers on landslides and mudflows, earthquake phenomena, and physiographic conditions at the time of formation of some ore deposits. Throughout his career, he was interested in the geological record of man and the implications of this record with respect to man's future. The broad range of his interests is well shown by a diversified bibliography of 138 items.

As a teacher Dr. Blackwelder was especially effective in small classes. Those fortunate enough to have worked with him will vividly remember his extraordinary patience and his ability to train students in observing and interpreting the minute details of rocks and landscapes.

After his retirement in 1945, the precarious world situation influenced Dr. Blackwelder to forego the quiet life of research he had long anticipated in favor of an active role in the Atlantic Union Committee. He was a close associate of Clarence Streit, the chairman of this committee, which has as its goal an organic union of the principal democracies.

Dr. Blackwelder was an active member of many societies and served as an officer in three: president (1921) of the Geology and Geography Section of the American Association for the Advancement of Science; vice president (1934 and 1939) and president (1940) of the Geological Society of America; and vice president (1945-46) and president (1947-49) of the Seismological Society. He was a member of the American Association of Geographers, the American Association of Petroleum Geologists, the Washington Academy of Science, and the California Academy of Science.

Honors came to him in abundance, in addition to his election to high office in these societies. He was a member of the National Academy of Sciences and honorary member of the American Philosophical Society, the Geological Society of London, the Geological Society of Belgium, the German Geological Association, and the Geological Society of China. On his election to the Geological Society of London, he was cited for "distinguished contributions to the advancement of geological science."

Dr. and Mrs. Blackwelder celebrated their 60th wedding anniversary in 1964. Mrs. Blackwelder passed away about 2 1/2 years ago. Dr. Blackwelder is survived by a brother Paul, 91, of St. Louis, Missouri, by seven children, 16 grandchildren, and 13 great-grandchildren. The children are: Dr. Richard Blackwelder, Professor of Zoology at Southern Illinois University; Justin Blackwelder of Washington, D.C.; Mrs. Margery Alden, Mrs. Trude Ball, and Mrs. Lois Fuller, all of Palo Alto; Mrs. Martha Merk of Portola Valley; and Mrs. Ruth Lanz of Dallas, Texas.

Eliot Blackwelder will be remembered by his scientific colleagues for his clear, direct thinking and critical and unbiased judgment. He will be remembered by all as a gentleman "of the old school", dignified, courteous, generous, and avidly considerate of the views of others. In spite of his recognized stature, Blackwelder remained a humble man, an attribute that endeared him to those who were privileged to know him.

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