

resolution of respect

Harold Sellers Colton
1881-1970

Dr. Harold Sellers Colton, Founder and Director Emeritus of the Museum of Northern Arizona, at Flagstaff, Arizona, died on December 29, 1970 after a long career in science. He was born on August 29, 1881 in Philadelphia, Pennsylvania. He attended the University of Pennsylvania where he received his B.A., M.A., and Ph.D. degrees in Zoology in 1904, 1906, and 1908. Following graduation he studied for a year at the Marine Zoological Laboratory in Naples. He returned to the University of Pennsylvania to teach zoology, and continued his research on marine zoology at the Marine Biological Laboratory at Woods Hole, Massachusetts, where he spent several summers.

In 1912 he married Mary Russell Ferrell of Philadelphia, a talented painter whom he had met when they were members of a mountain-climbing back-packing trip to British Columbia. During World War I he served in Washington, D.C. with the rank of captain in the Intelligence Division of the U.S. Army.

In 1926, to benefit the health of a son, the Colton family moved to Flagstaff, Arizona. They were not unacquainted with the area for they had spent a number of summers there. Indeed, on an early trip when a toddling son had picked up some prehistoric Indian pottery fragments, Dr. Colton's interest in Southwestern archaeology had been aroused, and he began one of the first archaeological surveys undertaken in that area.

In 1928, Dr. Colton and his wife helped found the Museum of Northern Arizona at Flagstaff. He became its first Director, a position which he held for thirty years. Under his guidance the Museum grew rapidly, principally because of his scientific work, Mrs. Colton's encouragement of Indian art, and because its goals and purposes were so carefully and soundly developed. In spite of the added burden of administrative duties, Dr. Colton continued his own research and engaged in many civic projects as well.

Dr. Colton's wide interests are reflected best in some 260 papers, monographs and books he authored. The first in 1904 was on land shells of Mount Desert, Maine, followed by a number on various problems of

marine biology and ecology. When he became a member of the University of Pennsylvania faculty, he wrote several papers on the teaching of science, especially zoology, in high schools and colleges. In 1916 there appeared "On Some Varieties of *Thais lapillus* in the Mount Desert Section, a Study of Individual Ecology." The following year marked the first of his archaeological reports, but those on marine zoology, geography, teaching of science, etc. continued for another ten years. His study of bipedal habit on the hind legs of albino rats, begun in Philadelphia, was continued after his move to Flagstaff. He added studies on phytoplankton of Arizona ponds, fossil fresh water land shells, and clothes moths.

After several years, he decided that experiments on white rats could be undertaken anywhere, and thereafter, he devoted his energies to the biology, geology, archaeology and ethnology of Northern Arizona. He made a study of Sunset Crater, the most recent cinder cone in the Southwest, its lava flows and anosma (squeeze-ups), which led to its being set aside as a national monument. Further studies dated its eruption at 1065 A.D.

In 1934 Dr. Colton published his first scientific study of potsherds in which he applied a Linnean binomial system in naming and classifying the broken pottery fragments of the prehistoric Indians of northern Arizona. This was the beginning of a series of papers and books on pottery. The study of archaeology and the establishment of the museum led him to ever widening fields of interest: Hopi Indian history, prehistoric Indian coal mines, the ecology of the Little Colorado River valley when first seen by explorers of the mid-nineteenth century, Spanish history of the Southwest, prehistoric trade in the Southwest, petroglyphs (the rock drawings of the ancients), and precipitation patterns around the San Francisco Peaks.

In 1944 he published a lengthy study, "Anatomy of the Female American Lac Insect, *Tachardiella larreae*," after it was discovered that the prehistoric Indians of the Arizona deserts used lac as an adhesive. The U.S. supply of lac from India was cut off because of war in the Pacific, and

there was a possibility that Southwestern deserts could produce enough lac to supply the needs of American industry. Dr. Colton's study proved this not to be possible. "The Sinagua, a Summary of the Archaeology of the Flagstaff Area," appeared in 1946 and is still the standard; a few years later "Hopi Kachina Dolls, with a Key to Their Identification" was published. To classify the kachinas he followed methods employed in botanical and zoological taxonomy, the first attempt at an orderly approach to a very complex problem.

He prepared "Field Methods in Archaeology," in 1950, the first manual of its kind in the Southwest. His book "Potsherds, an Introduction to the Study of Prehistoric Southwestern Ceramics," followed many years of experiments in which he made and fired pottery in the same manner as did the prehistoric Indians. Dr. Colton wrote many other papers, but it is significant that his last published work is of both zoological and archaeological interest: "The Aboriginal Southwestern Indian Dog," May 1970.

He was a member of many American scientific societies: A.A.A.S., Fellow and twice president of the Southwestern Division; A.I.B.S.; Anthropological Association, Fellow; Cooper Ornithological Society; Ecological Society of America; Eugenics Society; Genetic Association; Geographical Society, Fellow; Malacological Union;

Microscopical Society; Ornithologists' Union; Society for American Archaeology; Society for the Study of Evolution; Society of Mammalogists; Society of Naturalists; Society of Sigma Xi; Society of Zoologists; The Wildlife Society; and Wilson Ornithological Society. In addition, he actively supported many conservation organizations. Harold Colton was one of the 284 charter members of the Ecological Society of America in 1916.

Dr. Colton, unlike many scientists, was always interested in the work of others. As the Museum of Northern Arizona grew, he encouraged students to work with members of the staff during summers to gain experience in their chosen fields. He also obtained grants for graduate students so that they could pursue independent research in geology, archaeology, biology, etc. under the direction of the Museum staff. Hardly a day passed from 1928 to 1970 that he did not visit all departments of the Museum and discuss problems and offer advice when it was needed. Ecology and ecological relationships were always in his thoughts, and he was the first to perceive the importance of the Sunset Crater ash fall and its effect on the prehistoric Indians living near Flagstaff. With his death, science in the Southwest lost one of its staunchest supporters and most active participants, and many people one of their finest friends.