## Memorial to W. Storrs Cole 1902-1989

PAUL R. SHAFFER
518 Hickory Drive, Marysville, Ohio 43040

With the death of W. Storrs Cole, the science of geology lost an excellent teacher, administrator, practitioner, and benefactor. Those who knew him well also lost a loyal friend and companion. He died in Boswell Memorial Hospital in Sun City, Arizona, June 14, 1989, just a month prior to his 87th birthday. He is buried beside his wife Gladys in Mount Albion Cemetery in Albion, New York.

Storrs was born in Albany, New York, to Frederick Willard and Edna (Storrs) Cole in 1902. He liked to watch for the reaction when he told someone he was born in the "poor house," after which he might point out that his father was the administrator and was housed there. He was married to Gladys Watt in June of 1926, which explains the W. in the Gladys W. Cole Research Award of the Geological Society of America.



He attended Cornell University, where he received the baccalaureate in 1925, the master's degree in 1928, and the doctorate in 1930.

As a graduate student, Storrs had already been introduced to the larger Foraminifera when he accepted a position with the Huasteca Petroleum Company in Tampico, Mexico, in 1927. He worked as a micropaleontologist studying and collecting the larger Foraminifera until an almost fatal attack of malaria ended that part of his career and sent him back to Cornell. He worked briefly as a paleontologist with the Sun Oil Company in 1930 and early 1931.

A thorough account of his undergraduate, graduate, and later teaching and administrative experience is available in the book *Cornell Geology Through the Years* by William R. Brice, published by the College of Engineering, Cornell University, Ithaca, New York, 1989. For those wishing a more detailed account than that possible here, it is recommended.

In 1931, Storrs Cole joined the faculty of the Ohio State University as an instructor in geomorphology. This may seem strange to those who know of his extensive work with the Foraminifera, but the record reveals that he had taught geomorphology at Cornell with O. D. Von Engeln in 1928–1930, and had published in the field. Many geologists familiar with the literature are aware of his work in the two fields but may not be familiar with some of his other interests and activities, which are included in this memorial because they made up a significant part of his life.

Storrs proceeded through the academic ranks and became a professor in 1945; he also served a stint as acting head of the department. In 1946 he returned to Cornell and a year later became head of the department, a position he held until 1962. He remained on the faculty until his retirement in 1968.

In 1935 our paths crossed, first in a professor-graduate student relationship, and later as professional and personal friends, for more than half a century.

The activity that made it possible for him to be a benefactor to the Geological Society of America, the Cushman Foundation, and others began about the time of his arrival at Ohio State. Bear in mind that faculty salaries were then in the \$1500 to \$2000 range. Each pay period he and

his wife set aside a small sum and began the purchase of a few shares of carefully selected stock. Brokers at that time were not overly concerned about "odd lots" or institutional investors and welcomed individuals who were willing to buy a small number of shares. Storrs was a frugal man and a shrewd investor and had the advantage of what the economists call "the impetus of an early start." He kept making purchases through the years and accumulated the shares obtained in stock splits and by reinvestment of dividends. There were elements of good fortune also when some of his holdings became especially valuable during mergers, and in his predictions of what activities would be successful investments. In his retirement years, working with his investments became a major interest as well as a hobby and a conversation topic.

He and his wife Gladys were a devoted couple throughout a marriage of more than fifty years. Each was a talented person: she with her music and her painting, and he, armed with his hot plate and skillet, with his ability to make beautiful thin-sections from the fragile shells of ancient organisms. Both liked outdoor activities. Gladys was an avid golfer, and Storrs liked to hunt with his dogs on the land along the Olentangy River near their home in Ohio. During World War II, when another distinguished paleontologist had an assignment in the Columbus area and housing was almost nonexistent, the Coles shared their home with Dr. and Mrs. R. C. Moore—the same R. C. Moore who later became president of the Geological Society of America (1958) and went on to perform many services for the Society and the profession in general.

Mrs. Cole's health began to fail in the early 1970s. A case of shingles in the right eye progresssively destroyed its sight and was the precursor of problems that caused general debility. For a period of about five years, Storrs looked after her and devised plans and schedules so they could travel back and forth between Ithaca and Sun City. He was not content with the care she received during a brief stay in a nursing home, so he brought her back to their own home. He wrote to me, "So long as I am able, she will stay at home," and she did until her death in 1979. If anyone praised him for his devotion and his sacrifices, his standard reply was, "She put up with me for over fifty years and she deserved it." Sometimes there were a few colorful additions to that reply.

Storrs's knowledge of and admiration for the Pueblo Indians of the American Southwest occupied a prominent place among his many and varied interests. He admired many aspects of Pueblo society in general, and seemed to have a special fondness for the Hopi. He began making frequent long drives to the Southwest in the 1930s and continued them until his retirement from Cornell, after which he spent each spring and summer in Ithaca and autumn and winter in Sun City where he could continue his frequent visits to the reservations.

He became fascinated by the kachinas (variously spelled, from the Hopi term for supernatural). There are scores of kachinas—ancestral gods and dancing spirits who come to visit the tribes at special times to bring rain and crop fertility, and to spread good will and special joy, particularly to the children. Men from the tribe in ornate costumes and elaborate masks perform the intricate dances, playing the parts of the various kachinas. Although they join the people and spread good will, they may also reprimand persons whose actions are obnoxious and will punish children who are not behaving properly. The children believe that the dancers are the actual kachinas, but later are told the truth at ceremonies in which they join a kachina group.

A figurine or doll is made to resemble the costumes of the dancers. The dolls are made of cottonwood root or cactus root or some similar material and are carved, adorned, and painted; after the dance they are given to the children by the dancers. Some of the dolls are decorated with feathers, plumes, beads, and leather. They range in height from a few inches to a foot or more and are quite distinctive and beautiful. Storrs began collecting kachina dolls during his early trips and continued throughout his lifetime. The collecting, as well as the collection, was a great joy to him, and he shared it with others. Some of his most outstanding dolls were displayed at the Heard Museum in Phoenix and in other showings.

He also became interested in Indian jewelry and handiwork; he knew many of the artisans on a first-name basis, particularly those of the Hopi and the Zuni. He carried a case with him on his various travels and always brought a gift of Indian jewelry for his host and hostess and the children.

Because of his knowledge of the Southwest and the Pueblo Indians, he was interested in the welfare of the Heard Museum in Phoenix. Each week he drove from Sun City to meet with the director and members of the staff for lunch and a general discussion of the week's happenings. He frequently accompanied the director and staff members on trips to the reservations to purchase materials for the museum. He wore the large bracelets of silver with turquoise and red coral inlays, the bolos, the rings, and the hat ornamentation as standard apparel.

Storrs was associated with many organizations during his more than 40 years of teaching, research, and administration, and he continued his interests after retirement. He was a research associate in paleontology with the Scripps Institution of Oceanography in the summers of 1931 and 1935, a consulting paleontologist with the Florida Geological Survey from 1929 to 1947, and served as a geologist with the U.S. Geological Survey from 1947 to 1975. The citation for the Joseph A. Cushman Award in 1983, prepared by Emile A. Pessagno, Jr., described Cole's service with the Survey as follows: "This relationship was apparently quite fruitful in that it resulted in the authorship of U.S. Geological Survey Professional Papers dealing with the Tertiary larger Foraminifera and stratigraphy of Tonga, Guam, the Panama Canal Zone, Saipan, Fiji, the Palau Islands, and Eniwetok."

He was a member of the New York State Museum Advisory Council from 1958 to 1963. He joined the Board of Directors of the Cushman Foundation for Foraminiferal Research in 1951, was its president in 1953–1954, and not only maintained his interest in the Foundation throughout his lifetime, but was one of its benefactors. He was elected to Fellowship in the Geological Society of America in 1931, was vice-president in 1954, attended the 100th anniversary celebration in Denver in 1988, and was planning to attend the annual meeting in St. Louis in 1989. He established the Gladys W. Cole Research Award and aided the Society in numerous ways. He was a member of the American Association of Geographers; the Paleontological Society, of which he was president in 1953; the Paleontological Research Institute; and the Ohio Academy of Science, of which he was vice-president in 1939. He was a member of the Geology and Geography Section of the National Research Council from 1944 to 1947. He held membership or Fellowship in Sigma Xi, Sigma Gamma Epsilon, Gamma Alpha (honorary), and Acacia, and he was a Mason.

A selection of his publications in paleontology and geomorphology is included here. These papers indicate the breadth and depth of a lifetime of endeavor.

W. Storrs Cole had a long and productive life, and he knew it. Although he expeienced considerable pain in his final months, it never affected his acuity. When the time came, he followed the admonition of the poet Bryant, "Like one who wraps the drapery of his couch about him, and lies down to pleasant dreams."

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