

# John West Wells

*July 15, 1907 — January 12, 1994*

Professor Emeritus of Geological Sciences, John W. Wells, died at his home on Brook Lane on January 12, 1994. His loving wife, Elizabeth (Pie), died at their summer home at Sheldrake Point on July 1, 1990. John is survived by his daughter, Ellen Baker Wells of Alexandria, Virginia; two granddaughters, Diane Elizabeth Hull and Linda Ann Wilson (both of San Luis Obispo, California); and two great grandchildren, Alan Scott Hull and Elizabeth Darlene Hull (also of San Luis Obispo).

John was born on July 15, 1907 in Philadelphia, but grew up in Homer, New York until he entered college. John did not do his undergraduate major in geology. He started as a pre-med student at the University of Pittsburgh, and then switched to chemistry, but he also took some geology courses with two professors who had studied at Cornell—Ransom E. Somers (Ph.D. '15) and Henry Leighton (A.B. '06, GRAD '06-'08). John became so interested in geology that he ended up with more courses in that subject than in his major. His is one of many examples of future Cornell faculty members who were influenced, early in their careers, by more senior Cornellians.

Leighton suggested that if John was interested in paleontology, as he seemed to be, he should study some biology. This John did during two summers at Cornell. Then he obtained an assistantship with Professor Gilbert Harris—it covered living expenses plus \$75 per term for tuition—and began working toward his master's degree, which he received in 1930. He completed the Ph.D. degree in 1933 from Cornell.

Almost from the beginning, John began specializing in corals, both living and fossil. His interest in corals led him to an instructorship (1929-31) at the University of Texas, where he published several papers on the fossil corals of central Texas. During 1933 and 1934, he was a National Research Council Fellow, studying at the British Museum in London, the Museum National d'Histoire Naturelle in Paris, and the Humboldt Museum in Berlin. From 1935-37, he worked with the noted coral taxonomist, T. Wayland Vaughan, in Washington, D.C. After one year (1937-38) at the State Normal School at Fredonia, New York, he joined the faculty at Ohio State University, where by the time he left for Cornell nine years later in 1948, he held the rank of professor. During World War II, he served in Europe as a geographer in the Office of Strategic Services, providing assessments of war damage and searching for looted library and art collections. One reason for John's return to Cornell was his interest in the paleontology and stratigraphy of the Devonian System in upstate New York.

From 1946 until well past his retirement, John, with his colleague, the late Professor W.S. Cole, was associated with the U.S. Geological Survey, working on various aspects of the Bikini Atoll Atomic Bomb Project. John also took part in the Pacific Science Board's expedition to Arno Atoll. Part of these studies involved examining cores from holes that were drilled completely through the coral cap of Bikini and Eniwetok to the underlying basalt. Some forty of his 173 publications concerned the Recent and Tertiary corals collected from these and other Pacific islands.

For most of his career, John was accepted worldwide as the authority on coral taxonomy. Hardly a week passed that he did not receive a parcel of specimens for identification. By his recollection, in 1971 alone, he identified over a thousand Red Sea coral specimens for Tel Aviv University in Israel.

In 1954, John was a Fulbright lecturer at Queensland University in Australia, and while there he took the opportunity to make an extensive coral collection from the Barrier Reef for the National Museum in Washington. His work with corals led to the publication of a small paper in *Nature* ("Coral Growth and Geochronometry", 1963, v. 197, pp. 948-50) that received major attention. He had discovered that, with careful observation, he could count very fine ridges (about 50 microns wide) between the coarser ridges on the outer surface of Palaeozoic corals that were believed to represent annual growth increments, and he interpreted these thin ridges as daily growth rings, suggesting that the number of fine lines between the coarse annual ridges indicated the number of days in the year at the time the fossil coral was alive. Allowing for a few cloudy days, the mid-Devonian year seemed to have been about four hundred days long, indicating that the earth was rotating much faster then. A slowing down of the Earth's rotational speed had been postulated for years, but this was the first actual evidence that the calculations and predictions were correct. At a time when huge sums of money were being spent for fundamental research, the British scholar, J.B.S. Haldane, commented in a *New York Times* article that major scientific advances could still be made with a simple hand lens and careful observation. It was this work, and the ensuing explosion of studies on daily, monthly, and season growth bands in fossils that followed, that led to current calculations of the changes in the orbital patterns of the Earth and moon over geologic time, and new evaluations of the chronology of cyclical deposition of sedimentary rocks and of climatic variability.

John was a private person but generous and loyal to his friends. A newly appointed professor of prior acquaintance was invited to occupy John's house, empty because John's summer residence was at Sheldrake, until the delayed furniture arrived for the professor's house. The invitation was supported by a bottle of champagne in John's refrigerator.

John was a delightful conversationalist and for many years enjoyed luncheon with a variety of free-speaking colleagues in the small alcove at the side of the Rathskeller, the old Faculty Club on the lower floor of the Statler Building. On Monday there was always *inter alia*, a review of the facility with which the Sunday *N.Y. Times* crossword puzzle had been completed. On each Thursday, he joined the more formally organized Wilcox Luncheon Group in a private dining room. He chaired that venerable group in later years.

John's interests were many and varied and frequently astonishing. He was a collector who generously passed on to his colleagues items which he found while searching for his interests. For example, he located a statement in 1877 by a British scientist about currents and jets of water at Niagara Falls which are no longer visible, but are important to the understanding of the retreat of the Falls. He was a collector of rare books with fine bindings, including all editions of Lyell's classic textbook of geology. He found oriental rugs worth collecting, and the walls of his house in Ithaca were covered with beautiful paintings of the scenic Finger Lakes landscape, many by his father-in-law, Professor W.C. Baker. A collection of more than 300 chamber-pot lids adorned the walls of his early 20th century cottage at Sheldrake. John was an extraordinarily interesting and delightful fellow.

John retired from Cornell in 1973 after twenty-five years of teaching. He received much recognition for his professional achievements and leadership; he was a Fellow of the Geological Society of America, and served as president of the Paleontological Society. He was president of the Paleontological Research Institute (1961-62) that was founded by his mentor, Cornell Professor Harris. He was honored by election to the National Academy of Sciences in 1968. He was awarded the Paleontological Society Medal in 1974, and the James Hall Medal of the New York State Geological Survey in 1987.

What do accolades like this mean on a personal level? One day, shortly after John had received notice of his election to the National Academy, he took a student along with him on an elevator ride to the fourth floor of McGraw Hall. John had picked up his mail and was looking through it during the slow ascent. Just as the elevator reached the top, the student heard him mutter, on opening an impressive-looking envelope, "Oh, dinner at the White House. The wife will like that."

*William R. Brice, Shatter S. Philbrick, Arthur L. Bloom*