

Memorial to Eugene Callaghan 1904–1990

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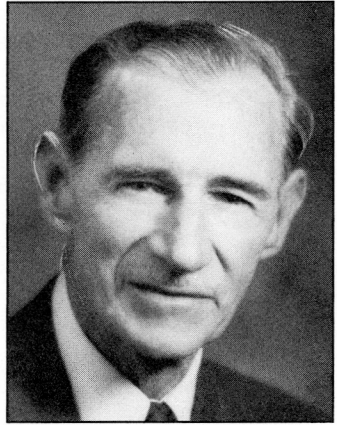
A native of the west, but later a citizen of the world, Eugene Callaghan, better known as “Pat” to his many friends, passed away suddenly on January 8, 1990, two days short of his 86th birthday. His career in geology spanned almost 62 years and touched many lives and many places. Pat Callaghan set an example, *par excellence*, for his profession.

Born in Snohomish, Washington, in 1904, he grew up in the greenery of the northwest. He was the son of Owen Callaghan, a native of County Caven, Ireland, and Zanta Elzora Dorleska Sanderlin of Galion, Ohio, daughter of a Methodist minister. Pat inherited the famous Irish twinkle in his eyes, a subtle sense of humor, and great tolerance. These special characteristics were all part of his communication with friends and new acquaintances, and a source of continuous delight among them.

Pat completed his elementary and high school education in Newport, Oregon. His wit and long legs kept him at the head of his group in these years preliminary to career education. Graduating from high school, he enrolled at the University of Oregon at Eugene, where he was an outstanding student. John Allen, of Portland State University, notes, “He was a gentle man. I had another instructor, so I did not get to know him at that time. My wife, however, had laboratory under him. She still swears that his gentle attention was responsible for her not flunking the course.”

Completing his B.A. and M.A. degrees at Oregon, Pat went on to Columbia University, where he completed his doctoral dissertation on a mapping and interpretive geological study of the 14-mile-long aqueduct tunnel in Massachusetts. His early professional work was with the U.S. Geological Survey. Charles Hunt writes that Pat joined the “Geologues” of the survey when he first entered service as a junior geologist in the late 1920s, becoming a member along with 12 others. “Thirteen was the number, and if a new member came in, the oldest member of the group was automatically dropped.” The group met monthly and presented reports about the field work we were doing. The membership roll was impressive, as time later proved: Max Knechtel, Tom Hendricks, Ralph Steward, Jimmie Williams, Frank Parker, Ed Eckel, Pat Callaghan, Ronald Brown, Hank Joesting, Charlie Read, Parker Trask, A. H. Koschman, Phil Shenon, Bill Johnson, Milt Bramlette, Phil King, Lou Currier, Ken Lohman, and Charlie Hunt. The latter notes he cannot vouch for the completeness of the list. He adds that five, who included “some of what we dubbed the older crowd, still get together weekly at the Cosmos Club in Washington. They are known there as the Cosmos Cane Club, and include Tom Nolan, Art Baker, Ken Lohman, John Reed, and Ed McKnight.” What a fraternal group to have worked with and had as professional and personal friends!

Young U.S. Geological Survey geologists took on major responsibilities in their early years. Working in his adopted state of Oregon, Pat completed a study of the mineral



deposits of the Cascades. John Allen comments that his bible of the mining districts of the Cascade Range was Pat's USGS Bulletin 893. Pat followed this with a study of Delamar, Nevada, which was a well-known gold district at the turn of the century, but in the 1930s was unknown geologically in this part of the Great Basin, where almost any study was a pioneering event in stratigraphy and structure. Nevada attracted him for other investigations as well. His report on the Searchlight mining district in Clark County still stands as the major writeup of this district. His later work, and that of Charles Vitaliano at Gabbs, Nevada, did much to open this district to major industrial development and even later gold discoveries, plus the bonus of a golden friendship with Dorothy and Charles Vitaliano.

Few geologists have geologically mapped four 15' quadrangles with the complexities of shield volcanoes, interlayered volcanic ash flows from other sources, windows of complex sedimentary geology and structures, and plutons of varied types. With a horse as a companion, and at other times with hard-working assistants, Pat traversed over 7000 feet of relief, unravelled the volcanic column, mapped the extensive alteration of the area, and added to the knowledge of the extensive and large deposits of alunite there. This served as a training ground for assistants who were touched by his field expertise and his gentle and kind personality. He pointed out problems, sought the counsel of his assistants, and subtly taught them how to solve those problems.

After World War II, Pat entered a new phase of his career. Leaving the Survey, he joined Charles Deiss at Indiana University. Pat immediately set about organizing an economic geology program in the department, securing collections, obtaining equipment, and assisting in the overall development of the department. His suggestions on staff additions were well accepted. Friend Charles Vitaliano joined the group; Brian Mason, Jay Leith, John Patton, Jud Mead, and others were added to the basic staff.

About this time, I entered as a graduate student under Pat's tutelage. Housing at universities in the post-war years was a major problem, and Indiana University was no exception. Pat was unable to bring his family with him and ended up living in a single room. I arrived in Bloomington and faced the same difficulty. True to his concern and care for a student and friend, he had me move in with him until I was later able to locate a war-time surplus trailer to accommodate my own family.

Pat Callaghan set a pace of long hours at the university that few were able to match. Frank Kottlowski notes how he enthralled his students at Indiana University, and later at the University of Utah, with hands-on descriptions of Utah's unique Marysvale alunite deposits, the Gabbs magnesite, the Indiana Gardner Ridge kaolin-halloysite deposits, New Mexico's Santa Rita copper, Mexico's great Santa Eulalia silver-lead bodies, the famous Skouriotissa copper of Cyprus, Brazil's diamonds and hematite, and the Morro Velho gold deposits. He drew facts from a broad base of reading and field experience, and remembered details that eluded most others.

Pat's career changed when he accepted the position as director of the Bureau of Mines and Geology at Socorro, New Mexico. A wise administrator, he knew his staff and worked with them. He had an uncanny ability to attract an uncommonly good staff to an environment that offered much freedom of research, but with the expectation that the work *would* be completed. Robert Balk, Christina Lochman, Rousseau Flowers, John Allen, Frank Kottlowski, Bob Weber, Max Willard, and Richard Jahns are but a few of the outstanding geologists who joined him and served with him full and part time in his eight-year tour of duty at Socorro. The earlier small staff increased from ten to thirty-one. The number of publications produced, and their quality, increased. All participated in programs that renewed the Bureau's emphasis on geology and mineral resources. Good geologic mapping was Pat's forte.

John Allen remembers him at Socorro as one who "risked his own skin as an administrator when he hired me to map, with Robert Balk, the Fort Defiance and Tohatchi quadrangles of New Mexico on the Navajo Reservation," after John had some difficulty with the chief administrative officer. "This took two years. Pat decided to accept the position of chief geologist for an international mining company, and . . . he and I left Socorro at about the same time. . . . I regard Pat as one of my . . . heroes. . . . He was quiet, gentle, and with a sly sense of humor, but underneath these was the staunch resistance to any injustice and unflinching loyalty to his many friends."

Now, as an international geologist, Pat began a series of mineral investigations around the world. In Brazil he worked as chief geologist at the great Morro Velho gold deposit. Later he spent five years in Cyprus as senior resident geologist carrying out detailed studies of these unusual deposits, and pursuing other mineral investigations in Greece, Italy, Turkey, and other Mideastern countries. We corresponded through these years, and it was apparent that family responsibilities bore heavily on him and that he had a strong desire to be closer to his wife and children. Along with many friends, I strongly supported him for a position at the University of Utah.

Pat joined the University of Utah as associate director of the Utah Geological and Mineralogical Survey, and later became a professor in the Department of Geology. He became a conciliatory counselor and chairman. As a newly appointed chairman he ably resolved the problem of a divided curriculum of earth science. Geology, mineralogy, geological engineering, and geophysics had earlier been separate departments, and the staff members had their respective loyalties. The consolidation into a Department of Geology and Geophysics did much to enhance the university's program in earth science. Pat served effectively and well until mandatory retirement in 1972. He wanted to teach, to continue his professional activity, but as he said, "They give you the boot because of some university rule, and kick you out," emphasizing the latter with a quick movement of his still very agile foot.

As professor emeritus, Pat continued his studies and diverted other energy to the emeriti club and the American Association of Retired Persons (AARP), serving in presidential positions. Some of his abundant energy was also devoted to his house. Home was a place of refuge after his many years away. Here was a change of pace, and the garden was a must. Profuse were the plantings paralleling the property lines, and partly surrounding the swimming pool. He knew the flowers as friends, by name, as part of the ecosystem in which he lived and for which he cared.

After the passing of his wife, the grounds and house became too large for Pat's exacting care. Though he loved the land and his surroundings, it was not the same. He needed associations more than the occasional visitor. He moved to the Friendship Manor in Salt Lake City where he made many new friends and became a popular and productive member. He continued to do professional work, still drove his little, bob-tailed four-wheel-drive vehicle, and attended university lectures. He was 77 when I hired him as a consultant for a short-term position in a regional mineral investigation. The mountains were rugged, with elevations to 10,000 feet. Frankly, he did me in, as he had Max Willard and myself many years before in long traverses at much lower elevations in the Marysvale, Utah, area.

An inveterate reader, Pat's home was a paradise of books and memorabilia of countries visited, and memories of friends met. Pick up a book and browse in it, and he would comment on what it contained, and its quality. His move to smaller quarters meant a loss of books unless he could secure more space. He solved the problem by taking over two apartments for himself and his beloved books and collections.

After his retirement, he visited friends in the Portland area at least once a year. John Allen relates that on one visit he and Pat visited the Bonneville (Dam) Information Center. John inquired about the geology of the area and was given a xeroxed sheet that "must have been written by one who had flunked Geology 1. Pat turned to me and said, 'John, why don't you rewrite this and send it back to them?' I did. They were delighted, printed it, and bound it in packs for distribution."

Active in professional research, applied geology, and family, Pat somehow managed considerable contributions of time and effort to professional societies to which he belonged: Institution of Mining and Metallurgy (Fellow); Geological Society of America (Fellow); Society of Economic Geologists and AIME-SME (Senior Member); Association of American State Geologists, New Mexico Geological Society, and Utah Geological Association (Honorary Member).

When one attempts to paint the life picture of a friend, he may lose himself in details of associations and relationships of the past. In looking back over our friendship, both student/teacher and later as professional colleagues, I am overcome by the panorama of honesty, integrity, fairness, gentleness, loyalty, and concern for others, all of which form the matrix of Pat's life's painting. While there are many other details, who can paint a more fitting eulogy than that he lived long and well, was loved by his family and many friends, and left an untainted personal and professional legacy.

Eugene Callaghan is survived by his two sons, Curtis John Callaghan of Petropolis, Brazil, and William Callaghan of Salt Lake City. Four grandchildren also survive him: Curtis and Karen, children of Curtis and Fatima; and Kathleen and Brinton, children of William and Mary.

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