

# Memorial to Robert L. Bates 1912–1994

DONALD D. CARR

*Indiana Geological Survey, Bloomington, Indiana 47405*

MICHAEL C. HANSEN

*Ohio Geological Survey, Columbus, Ohio 43224*

WALTER C. SWEET

*Department of Geological Sciences, The Ohio State University, Columbus, Ohio 43210*

Robert Latimer Bates, emeritus professor of geoscience at The Ohio State University, died on June 21, 1994, after suffering a heart attack at his home on June 14, in Columbus, Ohio. He was 82 years old and in apparent good health, having attended the Forum on Geology of Industrial Minerals at Halifax, Nova Scotia, and having been the featured banquet speaker at the annual meeting of the Association of American State Geologists at Toledo, Ohio, both within two weeks of his illness. On the day of his heart attack, he worked as a volunteer in the Columbus Park of Roses.

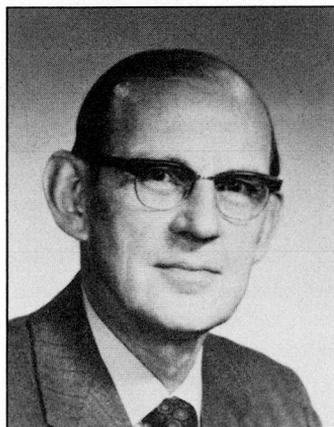
Bob was born on June 17, 1912, at Brookings, South Dakota, where his father was teaching English at South Dakota State College. In 1917, the family moved to Vermont, where Bates senior had wanted to live ever since he had visited the state while in college. They lived in the village of Manchester for ten years, during the last two of which Bob was in high school. Years later Bob used to say that no one should be forced to attend a high school of which his father is principal.

In 1927, the family moved to New Jersey, and in the fall of 1930 Bob enrolled at Cornell University. He had always been interested in words and writing, so it was assumed that Bob would major in English. At the suggestion of H. P. Woodward, a colleague of his father's in New Jersey, he took a course in physical geology. He immediately decided that if a lecturer like Heinrich Ries, using black-and-white glass slides, could make a subject fascinating, that was the subject for him. Graduating in the depression year of 1934, Bob wrote 35 letters of application to oil companies. He received seven apologetic replies and no job offers.

In the summer of 1934, Bob assisted H. P. Woodward, who was doing field mapping for the Virginia Geological Survey. Through A. S. Furcron of the Georgia Geological Survey, whom Bob met in the field, he learned of a graduate assistantship available at the University of Iowa. He applied and was accepted. Graduate study, under A. C. Trowbridge, yielded the M.S. in 1936 and the Ph.D. in 1938. Both degrees were based on field studies in southwestern Virginia.

Shortly after arriving in Iowa City, Bob met Marion Helen Hoftzyer, a librarian at the university. They were married in September 1935. The marriage was a long and happy one. A son, Steven, was born in 1940, and a daughter, Helen, in 1942. Marion, Steven, Helen Bates McDermott, and granddaughter Emily Anna McDermott survive.

After leaving Iowa, Bob worked from 1938 through 1940 as a geologist with the Texas Company. From 1941 to 1947, Bob was employed as a geologist with the New Mexico Bureau



of Mines, which he served from 1945 to 1947 as chief of the Oil and Gas Division. Between 1941 and 1943, Bob was assistant professor at the New Mexico School of Mines; from 1948 to 1951, he was assistant and associate professor of Geology at Rutgers University; and from 1951 to 1977, associate professor and professor of Geology at The Ohio State University.

During the early years at The Ohio State University, Bob taught economic geology, principally petroleum geology, but he foresaw a growing need for studies in the industrial minerals, and it is in that area that he first brought international attention to the university. His book, *Geology of the Industrial Rocks and Minerals*, first published by Harper and Bros. in 1960 and later reprinted by Dover as a new edition in 1969, was the first teaching text in the field. He took mixed pleasure in learning, after the fact, that without the knowledge or permission of anybody on this side of the Iron Curtain a Russian translation had appeared in the USSR. Later books with Peter Harben, first in 1984 and then in 1990, continued the tradition and have had broad appeal.

Seeing a great need for communication of information in the field of industrial minerals, Bob organized the first Midwest Forum on Geology of Industrial Minerals in 1964. Although the Forum started in the midwestern states, "midwest" was dropped from its name in 1965. The Forum quickly gained popularity and has been hosted annually by states and provinces across the United States and Canada. Although Bob repeatedly referred to the Forum as an event not an organization, he received much satisfaction from its annual meetings. He frequently made technical presentations or banquet speeches, and in 1990 he prepared an index of Forum publications covering its first 25 years. Bob was affectionately known as the father of the Forum, and he religiously attended every one of the 30 meetings, the only person to do so. During the later years he was always accompanied by his wife, Marion.

Bob's preeminence in the field of industrial minerals is reflected in his numerous publications, speeches, and awards. In 1976, he was named a Distinguished Member by the Society of Mining Engineers (SME), and in 1978 he was awarded the Hal Williams Hardinge Award by the American Institute of Mining, Petroleum, and Metallurgical Engineers (AIME) for his contributions to the field of industrial minerals. Bob served on the editorial boards of the fourth, fifth, and sixth editions of *Industrial Minerals and Rocks*, published by AIME and by SME, and for each edition he contributed an introduction to the book.

Although Bob became legend in the field of industrial minerals, it was probably his articles and columns in *Geotimes*, the monthly magazine of the American Geological Institute, that brought his name to the forefront in the geologic community. In the 1950s, Bob chaired the Committee on Public Information of the American Association of Petroleum Geologists, which queried geology departments, state surveys, and museums to find out what was being done to publicize geology. Starting in 1955, the results of this survey and later developments were published in a column called "Geology in the Public Eye." This was the progenitor of "The Geologic Column," which Bob prepared monthly from 1966 to 1987 and which quickly became the most widely read feature of the magazine. In these columns, which were often very funny, he patiently and artfully instructed students, colleagues, and the profession-at-large in the craft of scientific communication, and he delicately offered principled disagreement with the establishment. He chronicled the sometimes humorous mangling of the language by scientists in technical reports. His focus, of course, was to point out how such usage interferes with effective communication of ideas. He was himself a skilled writer and took pleasure in words. Once Bob said, "It's been said that language is the only natural resource that can be mined indefinitely without depletion. I enjoy mining it." His book *Pandora's Bauxite* was a collection of what may be termed the best of Bob Bates.

Bob's penchant for writing columns began early in life. From 1928 to 1930, he wrote "BB Shots" for the school paper of Columbia High School in Maplewood, New Jersey, and from 1933 to 1934, he wrote "Berry Patch" for the *Cornell Daily Sun*. Bob seemed uncomfortable

without the deadline of a column. After completing 250 columns over 22 years for *Geotimes*, he briefly retired in 1987. Then in 1988 he began writing "Why on Earth?" for *Earth Science* magazine and "The Raised Eyebrow" for *Blueline*, the newsletter of the Association of Earth Science Editors. Although the subjects that Bob wrote about were far reaching, he had a way of inspiring affection in his readers.

As Bob grew older, his interests diversified. He admired his colleagues' accomplishments in pure science even as he urged exchanges between the ivory tower and engineers, consumers, and conservationists. In addition to the books he and Peter Harben wrote, he wrote several books on geologic subjects for younger readers and with Julia Jackson compiled and edited the much-expanded second and third editions of the *Glossary of Geology* and the third edition of the *Dictionary of Geological Terms*—all activities in which he combined care for science with care for language. He delighted in light verse (which he wrote as well as read) and in solving word puzzles, especially acrostics. His pleasure and zeal in these activities could be felt in his concern for the nuances of scientific terminology. He was fun to work with and a hard worker, accomplishing a great deal, especially in the years after he retired from teaching.

Bob was a polished speaker and a concerned and devoted teacher who lectured at many universities and professional meetings in this country and abroad. His contributions to education and the field of geology were honored through his election as a Life Member of the Ohio Geological Society. Bob's skill as a writer made him much in demand as an editor and critic. He served from 1960 to 1964 as editor of the *Journal of Geological Education*, and from 1969 to 1970 as editor of *The Professional Geologist*. His editorial expertise was honored in 1981 by the Award for Outstanding Editorial Contributions by the Association of Earth Science Editors; by his receipt, in 1984, of the Ben H. Parker Award of the American Institute of Professional Geologists; and by his designation in 1988 as an honorary member of the European Association of Earth Science Editors.

During the last four years and when in Columbus, Bob worked every Tuesday as a volunteer in the Columbus Park of Roses. Whether weeding, mulching, or painting, Bob tackled the jobs with the same tenacity and enthusiasm as he did his writing. He seldom missed a session and seemed to relish work from which others would shy away. The chore of weeding thistles was left for Bob because these pesky weeds were known to others as "Bob's thistles." Donations by family and friends will be used to purchase a dimension-stone memorial, a bird bath of Indiana Limestone for the park. Bob would be pleased that an industrial rock, utilitarian yet beautiful, will provide enjoyment for many.

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