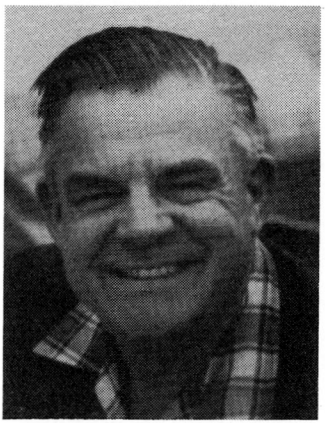
Memorial to Robert Wallace Webb
1909–1984

ROBERT M. NORRIS
Department of Geological Sciences, University of California, Santa Barbara, California 93106



Robert Wallace Webb, 74, Professor Emeritus of Geology at the University of California, Santa Barbara, died May 4, 1984, near Mammoth Lakes, California. If ever a death can come in an appropriate way, it did so for Bob Webb. He was leading an undergraduate geology field trip to the Mono Basin, of the sort he had led for more than 50 years with the University of California. He was climbing a steep ridge on the resurgent dome of the Long Valley Caldera, at an elevation of more than 8000 feet. In the middle of an animated conversation with students and faculty, he collapsed and died as a result of a massive heart blockage. He had not been ill and was doing what he loved most.

Bob is survived by his wife of 51 years, Evelyn Elaine; a younger brother, Irving D. Webb of London; three sons, R. Ian Arthur Webb of Saratoga, California, Leland F. Webb of Bakersfield, California, and Donald G. Webb of Reno, Nevada; and five grandchildren. Bob was especially proud of his three sons, all of whom earned doctoral degrees.

Bob was born in Los Angeles, November 2, 1909, and began his collegiate training in the fall of 1926 at what was then called the Southern Branch, University of California. This institution evolved into UCLA by the time Bob completed his baccalaureate degree in February 1931. In common with many geologists, Bob did not begin his student days as a geology major; he started as a Spanish major. Sometime during his first year and a half, he enrolled in a geology course taught by Professor William J. Miller whose enthusiasm and example caused Bob to change his major to geology. Probably influenced by his mother, who had been a very successful high school language teacher, Bob also decided on a career in teaching before he had finished the bachelor's degree. But it was 1931, in the depths of the depression, and jobs of any sort were hard to get. Bob elected to cover all bases, and for a brief period in the spring of 1931 attended the University of Washington as a graduate student, but returned to southern California that summer to enroll at Cal Tech for the master's degree. 1932 was a very busy year for Bob. He completed the Master of Science degree in June and simultaneously earned a general secondary credential across town at the University of Southern California. As if this weren't enough, Professor William J. Miller offered him a non-tenure track teaching appointment at UCLA beginning in the fall of 1932 which he accepted, beginning what proved to be a 52-year teaching career at the University of California. Cal Tech also accepted Bob into its Ph.D. program in the fall of 1932, and it is not difficult to imagine why it was 1937 before that degree was completed. In the fall of 1937, with Ph.D. degree in hand and five years of university teaching experience, Bob accepted a regular faculty appointment at UCLA as instructor in geology.

At that time, UCLA undergraduate geology majors were expected to do a senior thesis, and it was Bob Webb who supervised most of these students. Although graduate

study in geology at UCLA had begun by 1940, and many of the faculty had begun to devote more of their time to graduate instruction, Bob believed in the fundamental importance of the undergraduate program and devoted his considerable energy to make it rigorous, soundly grounded, and timely. Despite the fact that he supervised very few graduate students during his long career, he was convinced that a graduate program, once established, had to be a quality program taught by faculty with strong and active research interests.

In this connection, Bob's publications show considerable professional versatility as well as wide-ranging interests. Among his published contributions are a number of papers and monographs on mineralogy, many co-authored with Professor Joseph Murdoch; a series of articles in meteorites, most written with Professor Frederick Leonard; several major pioneering studies of the geomorphology of the southern Sierra Nevada; a good many teaching articles; and a very successful physical geology laboratory manual co-authored with Professor William C. Putnam. His final publication was the textbook *Geology of California* co-authored with Robert M. Norris, which appeared in 1976. Despite the fact that his serious research was pretty well completed by 1960, his bibliography includes 76 items.

During World War II, Bob became deeply involved in university administration. This and his continued activity in undergraduate advising allowed him less and less time for original research. His success and the energy he devoted to his students and to administration led his chairman, the late James Gilluly, to remark, "Bob, if you would only devote the same intensity and effort to research that you devote to the students and administration, you would become a very distinguished scientist." Implicit in Gilluly's remark was his recognition that Bob both understood the nature of research and had the intellectual equipment to do it, but Bob well knew where his contribution to geology would be the greatest and deliberately phased out his formal research publication over the next few years.

By 1945 Bob headed the UCLA Office of Veterans Affairs and by 1947 the university-wide office. During this same period he was Associate Dean of Letters and Science. It was chiefly in this capacity that his administrative talents became fully evident. During those days the military services executed numerous agreements with the University of California in connection with the many officer-training programs. On one occasion, a senior Army officer in charge of the training programs in southwestern United States announced that students enrolled in the Army programs at UCLA would henceforth be expected to march between classes. Bob insisted that any such requirement was inappropriate at the University of California and that UCLA students would do no such thing, irrespective of Army sponsorship. Bob kept President Robert Gordon Sproul fully informed, and President Sproul, for his part, pleased with Bob's forthrightness and sensitivity to university tradition, gave Bob his full support, and the final agreements with the Army included no provision for marching between classes.

Although Bob was prepared to give up his formal research activity for administration, he found it increasingly difficult to put administration ahead of teaching and undergraduate advising.

He watched with interest the addition of the Santa Barbara campus into the University of California in 1944 and saw that it offered an attractive opportunity to limit his deepening involvement in administration while simultaneously permitting him to strongly influence the development of a new undergraduate major in a University of California setting.

Bob transferred to Santa Barbara in the fall of 1948 despite the attempts of his

UCLA colleagues to dissuade him. They suggested that he was throwing away a bright future there and moving to something of an academic backwater at Santa Barbara, a charge that had at least some merit at the time. Bob, however, had satisfied himself that the opportunities far outweighed any risks and went ahead with the move, bringing with him the university-wide Office of Veterans Affairs, the first university-wide function to be located on the Santa Barbara campus.

By the early 1950s, most of the veterans had come and gone and the extensive administrative structure serving them was no longer needed by the university. Instead of resuming full-time teaching at this time, Bob took a leave of absence and accepted appointment as Executive Secretary, Division of Geology and Geography, National Research Council, which later developed into Executive Director of the American Geological Institute during its formative days. These were important and influential professional positions in Washington and could easily have become a permanent career change for Bob, as many of his colleagues at Santa Barbara fully expected. Those of us who knew him best, however, felt fairly certain that his deep interest in undergraduate teaching as well as his hopes for establishing the geology major at Santa Barbara would bring him back to the campus. He returned in the fall of 1953.

Bob played a central role in the establishment of the geology major at Santa Barbara which went into effect in 1954, the first degrees being awarded in 1956. By 1960 the Department of Physical Sciences, which then included chemistry, physics, and geology, under Bob's chairmanship, had grown enough to be divided into three separate departments.

Beginning in the summer of 1952 and continuing intermittently to 1983, Bob and Elaine went east and Bob taught summer sessions at a number of universities. First was New Mexico, followed by Maine, Columbia, Massachusetts, Northeastern (Boston), Dalhousie (Halifax), and then back to Maine a number of times, most recently in 1983. Retirement allowed Bob to accept several appointments with the University Afloat, and he and Elaine made several round-the-world trips.

Although many of these teaching assignments had the potential to be recreational larks with minimal demands on students and faculty alike, especially the round-the-world cruises, Bob's courses were run with the same vigor and rigor that characterized his regular courses at Santa Barbara and UCLA. He expected regular attendance, serious study, and a professional attitude. No grade was ever a gift. Bob oftentimes said that he never "gave" grades; students "earned them." Irrespective of whether it was a course at sea, a summer session at Maine, or a regular course at Santa Barbara, Bob would often summon a poorly performing student to his office, ascertain where the problem lay, and if it was due simply to a lack of effort, make it quite clear that the student's performance was unacceptable and unworthy of a person with such a good mind. The abler the slothful student, the harsher the Webb judgement. He had a special knack for forcing able but drifting students to perform commensurate with their abilities.

When erring students complained that they did not have enough time to study geology properly, Bob would hand them a form in which there were spaces for every hour of the day or night for the full week. Students were instructed to take this with them, fill it out completely, allowing adequate time for sleep, meals, recreation, and other responsibilities, and bring it back for discussion. Completion of such a form revealed numerous wasted hours each week, and the exercise was likely to be a revelation to the student with or without the follow-up conference.

Not only did Bob regularly get poorly performing bright students back on track, but he also had a considerable knack of motivating average students to perform up to

capacity. The importance of this is hard to exaggerate because those of us who teach know only too well that academic success, as well as any other success, is more dependent on motivation than on brilliance, background, or training.

One of Bob's great gifts was his uncanny ability to quickly and accurately diagnose students' problems, to be blunt and forthright about the appropriate solutions, but at the same time convey to the students the unmistakable knowledge that he cared about them as persons and about their academic success. That he always seemed to have unlimited time to listen to their problems, their hopes, and their aspirations made it possible for students to accept the Dutch-uncle counselling they received and to leave the interview with new admiration and respect for Bob's advice. To some extent, the rougher and more penetrating these sessions were, the greater the probability that a new and lasting friendship would be made. An impressive number of distinguished geologists were thus launched on productive careers. At the close of some of these interviews, Bob would lean back in his chair, look the student squarely in the eye and say, "You know, there are two kinds of good men. One kind never makes a mistake, and the second never makes the same mistake twice, and there are very few of the first."

If ever there was a person who did not suffer fools gladly, it was Bob Webb. He had an enduring impatience with rule-book bureaucrats, unimaginative shop-keepers, rigid bureaucracy, and personal irresponsibility no matter what the source. The University of California, like all large organizations, has plenty of this sort of thing, and many a hapless clerk or senior administrator, following the rules rigidly without first considering the merits of the student's need (it was most frequently student problems that unleashed the Webb juggernaut), would be told to find a way to make an exception to the offending rule.

Although Bob could be very supportive and helpful when a student unjustly or inadvertently ran afoul of some university regulation, he was not in the least reluctant to point out forcefully any student irresponsibility involved, particularly when it arose from failure to follow clear directions or guidelines. Even these transgressions, once pointed out, were remedied with dispatch.

On the other side of the coin was Bob's lifelong practice in dealing with clerks, administrators, and other faculty members—his faithfulness in taking a few minutes to write a personal note of appreciation to anyone who had gone the second mile or who had done an especially skillful or sensitive job in handling a problem. Each of these notes was likely to make a new and lasting friendship.

Another aspect of Bob's personality, wholly consistent with his blunt forthrightness, was his notable lack of reverence for the self-pretentious or highly placed. In his early days at regular faculty meetings at UCLA, he was famed as the only junior assistant professor to rise on the floor of the Senate to question the judgement of President Robert Gordon Sproul. Sproul, an open and forthright person himself, found himself quite intrigued by the young, outspoken professor, and the two became lifelong friends.

Bob had a keen sense of justice, and the university, tolerant as it usually is, sometimes allows personnel to be treated unfairly. During Bob's long career, there were many nonacademic staff members and junior faculty members unprotected by tenure rules who fell afoul of their supervisors. When such things became known to Bob, he would mount an energetic campaign to protect the victim from unfair treatment. One example is illustrative. Not long after he came to Santa Barbara, a young assistant professor being considered for tenure had earned the ill will of some of his senior colleagues partly because of his prickly personality but also for some other reasons that had little to do with his skill as a teacher or his competence as a professional person.

Before starting a successful campaign to get the young man advanced to tenure, Bob telephoned the candidate and told him, "I find you personally offensive, but I am not about to sit back and let your department crucify you for non-professional reasons; I intend to do everything I can to see that you are promoted because you have earned it."

On another occasion, in the early 1940s when Bob was a junior assistant professor at UCLA, the son of a rather well-known writer turned up in Bob's freshman geology course and did badly on an examination. Father came in to see the young professor, introducing himself, "I am William Henry Thompson" (not his real name). "Glad to meet you Mr. Thompson. I'm Bob Webb. Please sit down." "I am *the* William Henry Thompson," said the father. "Oh!" said Bob, "I am *the* Robert Wallace Webb!" The interview was short and for the writer, strained. Subsequently, the unfortunate son was withdrawn from Bob's class.

No account of Bob's life or his influence could possibly be complete without mention of his beloved undergraduate field trips. In the 1930s when the university was on a semester calendar and had a two-week break in late January, Bob and possibly one of the department support staff (it was Pat Quayle, curator of paleontology, the year I went) would organize a voluntary week-long camping trip to some area of geologic interest. These trips were continued annually at UCLA until war-time gasoline rationing intervened. They were resumed when Bob transferred to Santa Barbara in 1948.

Bob insisted that students attending the trips should not bring textbooks and should not take notes. Nonetheless, the trips were exceedingly informative and enjoyable for everyone involved and provided many opportunities for geologic questions and for sharing personal hopes and plans around the campfire, in the Webb vehicle between stops, or at Bob's dinner table with its inevitable green jello and rice cakes and breakfast stewed prunes (regularity was a virtue to be praised).

Having participated in most of these trips since 1940, I know that a great many students made the decision to take up geology as a life career while searching for the perfect crystal of basaltic hornblende at Siberia crater in the Mojave Desert or at some equally improbable place. I made my decision at Split Mountain gorge in what is now Anza-Borrego State Park.

Student response to these trips has remained strongly positive. It mattered not that Bob was one minute yelling at them, "Put on your shoes when you get out of the car!" or "Where did you learn to drive?" and the next, earnestly counselling them about the most suitable graduate school to attend. They would respond by contriving to bake and ice a birthday cake for him, using a Coleman stove while camped in the wilds of Greenwater Valley, or would compose a special campfire song in his honor, sprinkled with references to armored mud-balls, goblet valleys, alluvial fans, and other things they had seen for the first time.

That these trips have been important parts of student education cannot be doubted. Many students have said kind things during the trips, not a few have written notes of thanks afterward, and almost universally, when returning to the campus for a visit after some years of absence, the first question they would ask was, "Do you still run those great departmental field trips?" The answer, of course, has always been yes, and Bob's example and enthusiasm have inspired other members of the geology faculty at Santa Barbara to become regular and continuing participants. For example, five faculty and two staff members attended Bob's final field trip, an unanticipated tribute to his example and influence.

Although his formal research publication had pretty well been stopped about 20 years before his death, he was conscientious about keeping abreast of new developments

in geology in general and in his fields of interest in particular. He once said that a professor's responsibility was to master his subject and to maintain that mastery. He believed this meant that he did not use the same dog-eared notes year after year, but that it did not necessarily follow that he was forever publishing books and monographs because, in his view, some of the liveliest minds in the world of scholarship seldom rush into print, while some of the dullest often do. In his opinion, publication was an effect not a cause of good teaching. He added that an active mind, ever incorporating the results of research activity into teaching, ultimately presents the results to more than just classes, through publication.

As a result, Bob's contributions to science took a rather unusual form for a faculty member in a strong research university. As is evident from the foregoing anecdotes, his influence was on geologists more than on geology. Bob's influence on students was so strong, irrespective of context, that many geologists regard themselves as his students even though they may have had only freshman geology or sophomore mineralogy with him. Even graduate students who matriculated at other institutions would come under his influence because of a chance meeting in the hall, on a field trip, or because another faculty member referred them to Bob in order to solve some bureaucratic problem. Whatever the reason, he had a direct impact on students as persons and on geological science through these students in whom he instilled enthusiasm for geology, attitudes of professional honesty, objectivity, and open-mindedness. He was the first to open new worlds to many of them as they encountered freshman geology, perhaps while majoring in chemistry, political science, or engineering. By this means, Bob recruited many to lifelong careers in geology. He instilled in many an appreciation for their physical environment and, in short, had a significant impact on geology because he had an impact on many of its practitioners.

In research universities like UCLA and later UCSB, it has always intrigued me to find that former graduates, when dropping by for a visit, almost always asked about Bob Webb first, though the last course they had with him was sophomore mineralogy. Only after they had first talked with or inquired about Bob Webb would they ask about other faculty members. Even many former graduate students whose contacts with Bob were nearly all quite informal would, after transacting the business that brought them to campus, seek out Bob Webb for a chat. It is difficult to exaggerate the enormous importance of this man to the thousands of students who entered his office, who sat in his classrooms, or who got acquainted on a field trip. Hundreds of them made lifetime career decisions as a result of these encounters. Hundreds of others were influenced in lesser ways, but virtually all remember their contacts with vividness and appreciation.

Bob was elected a Fellow of the Geological Society of America in 1942 and through its meetings, its *Bulletin*, and its members kept abreast of new developments in the science. He assiduously made sure that new faculty members joining the department were encouraged to become members of the society and frequently initiated the paper work necessary to advance them to fellowship. At the time of his death, Bob was serving as the GSA campus representative. Although his membership in the Geological Society of America meant a great deal to him, it was the National Association of Geology Teachers, particularly the Far Western Section of which he was a founding member, that received the major part of his professional attention.

That the Far Western Section is one of the strongest and most active sections is due in no small part to the energy and persistence of Bob Webb. Although he served once as president and several times played a key role in rescuing the section from near collapse, he preferred to work as a member of the executive committee and as section historian,

encouraging, prodding, and seeking out others to carry the more visible leadership. It was his inspiration that caused the section to develop and publish a long series of highly successful field guides, the sale of which has provided financial stability for the section as well as an important resource for teachers throughout the state. He watched over section bylaws, proposing changes as needed, standardized and codified the duties of the officers, and cajoled and urged the leaders of the section to plan meetings and activities five or even ten years in advance.

In 1973 the National Association of Geology Teachers, recognizing Bob's long career as an unusually effective teacher and his yeoman work with the Far Western Section, conferred on him the Neil Miner Award at the national meeting in Dallas, Texas. The Far Western Section, also in 1973, established the Robert Wallace Webb Award in his honor for "meritorious service to the section and sustained interest in effective earth science teaching." Fittingly, he was named the first winner of this award. Subsequently, he participated in the selection of nine other winners. Typical of his thoroughness was his insistence that organizers of meetings at which a Robert Wallace Webb Award was to be made were to arrange well in advance for a photographer and the preparation of a written citation. Further, the picture, the citation, the response of the winner, and suitable biographical material were to be sent for publication to the *Journal of Geological Education*, the winner's hometown newspaper, and the head of his institution. Bob monitored these things every step of the way, and the resulting recognition has often meant a great deal to the award winner, particularly when he came from a small community college in a rural part of California or Nevada.

Those of us who knew and worked with Bob, or who received his perceptive counsel, or who sat in his many classes will miss him in countless ways. We will continue to learn how much he did for and with us.

Farewell, Bob, you have touched our lives and we are deeply grateful for the time we shared with you.

SELECTED BIBLIOGRAPHY OF R. W. WEBB

1935 Tetradymite from Inyo Mountains, California: American Mineralogist, v. 20, p. 399–400.

1936 Kern Canyon fault, southern Sierra Nevada: Journal of Geology, v. 64, p. 631–638.

1937 Paleontology of the Pleistocene of Point Loma, San Diego County, California: Transactions of the San Diego Society of Natural History, p. 337–348.

1938 Relations between wall rock and intrusives in the crystalline complex of the southern Sierra Nevada of California: Journal of Geology, v. 44, p. 310–320.

1939 Evidence of the age of a crystalline limestone in Southern California: Journal of Geology, v. 47, p. 198–201.

1940 (and W. J. Miller) Descriptive geology of the Kernville quadrangle, California: California Journal of Mines and Geology, Report 36 of the State Mineralogist, p. 343–378.

1941 Quartz xenocrysts in olivine basalt from the southern Sierra Nevada of California: American Mineralogist, v. 26, p.321–337.

1943 (and L. F. Brady) Cored bombs from Arizona and California volcanic cones: Journal of Geology, v. 51, p. 398–410.

1946 Geomorpholgy of the Middle Kern River basin, southern Sierra Nevada, California: Geological Society of America Bulletin, v. 57, p. 355–382.

1948 (and J. Murdoch) Minerals of California: California Division of Mines and Geology Bulletin 136, 402 p., 4 pls.
1950 Volcanic geology of the Toowa Valley, southern Sierra Nevada of California: Geological Society of America Bulletin, v. 61, p. 349–357.
1952 Upland meadows of the southern Sierra Nevada, California [abs.]: Geological Society of America Bulletin, Part II, v. 63, p. 1309.
1955 Kern Canyon lineament, *in* Oakeshott, G. B., ed., Earthquakes in Kern County, California during 1952: California Division of Mines and Geology Bulletin 171, p. 35–36.
1956 (and J. Murdoch) Minerals of California: California Division of Mines and Geology Bulletin 173, 452 p., 4 pls.
1957 Morainal sequence in Rock Creek drainage, eastern Sierra Nevada [abs.]: Geological Society of America Bulletin, v. 68, p. 1786.
1966 (and J. Murdoch) Minerals of California: Centennial Volume, 1866–1966: California Division of Mines and Geology Bulletin 189, 559 p.
1976 (and R. M. Norris) Geology of California: John Wiley & Sons, New York, 365 p.

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