Resolution of Respect

Robert Regester Humphrey

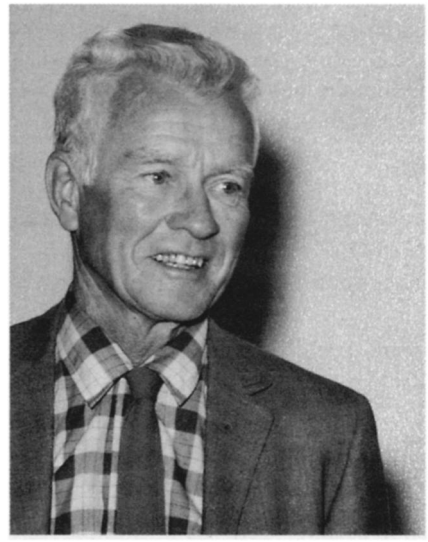
1904–2002

Robert R. (Bob) Humphrey was born 14 June 1904 in Palo Alto, California. On 12 September 1929, he married Roberta January in Minneapolis. He died 13 March 2002 in Tucson, Arizona. In addition to receiving his B.A. in botany (ecology) from the University of Minnesota (1929), he also earned his M.A. (1930; minor in zoology) and his Ph.D. (1933; minor in zoology and geology) in botany. At that time, he was part of a large cohort of students surrounding W. S. Cooper (some were Cooper students, some not; it is not clear that Bob was officially a Cooper student) who subsequently became well known in ecology: Murray Buell, Rex Daubenmire, H. J. Oosting, and Dwight Billings, to name just a few.

Bob Humphrey's work experience was primarily in the desert Southwest. He was a Research Fellow at the Carnegie Desert Laboratory, Tucson, Arizona (1930–1931) and a Teaching Assistant in Botanical Sciences at the University of Minnesota (1931–1933). From 1933 to 1936, he served as a Range Ecologist with the U.S. Forest Service in Tucson, Arizona, and from 1936 to 1948, as a Range Conservationist with the U.S. Soil Conservation Service in Arizona, New Mexico, Utah, Idaho, South Dakota, and Washington. Thereafter, he taught at the University of Arizona, first as Associate Professor of Botany (1948–1955), then as Professor of Range Management (1955–1966), and thereafter until his death as Emeritus Professor. In the Ecological Society, he served as an Associate Editor of *Ecology*, around 1955, and he and Roberta provided the Society with funds to initiate the Forrest Shreve Award.

Bob Humphrey's contributions to ecology were considerable. He was thrust immediately into ecological research as a Research Fellow at the Carnegie Desert Laboratory in Tucson, where he came under the influence of Forrest Shreve, the ecologist primarily responsible for the characterization of the Sonoran Desert. That association continued when Bob was employed by the U.S. Forest Service, stationed in Tucson. His experience was broadened substantially while he worked on Western rangelands for the U.S. Soil Conservation Service in six of the Western states. Observing the changes occurring in arid and semiarid climatic zones soon led him to question the causes of rangeland deterioration. Climate was important, of course, as was overgrazing. The absence of recurring fires became the germ of an idea that had not previously been considered, and Bob became the pioneer in developing the concept of fire as a natural force important in maintaining and stabilizing ecosystems. Fire could become a tool in managing and improving not only rangelands, but also other ecosystems. Although controversial, Bob's belief in the importance of fire and controlled burning was unwavering. There is now near-universal agreement that fire can be an important management tool, a fact due, in large measure, to the pioneering efforts of Robert R. Humphrey.

Bob grew up in a family of six children. Their father, a plant pathologist, would take them for walks in the Maryland woods, using the walks as an excuse for infusing a knowledge and interest in biological organisms and their interactions. That early exposure seems to have set a pattern that continued throughout Bob's life. As an adult with a family of his own, there were always animals of some kind in the house, even a rattlesnake and a bullsnake together in the same terrarium. Although his wife Roberta was always supportive, her role in Bob's activities after retirement enabled the continuation of his activities in ecology. She traveled with



him to remote locations, typed manuscripts, and was his helpmate in all situations.

The unusual event was not really atypical for Bob. Early during his career in Tucson, he and Roberta, along with Bob's sister, went to enjoy the Sabino Canyon, a popular recreation site northeast of Tucson in the foothills of the Santa Catalina Mountains. This was in the early 1930s, when the depression and low salaries often required doing something to supplement the family income. For Bob, collecting rattlesnakes and shipping them to a museum in San Diego was an important means of supplementing income. While walking back to their car, Bob heard a rattlesnake. He captured it, and was walking along the trail when he heard another one. That had to be captured as well, so he asked Roberta to hold the first snake while he captured the second. Not much later, a third rattlesnake was detected, so Bob's sister was asked to hold the second while he captured the third! The walk back continued, and when they reached the car, each of the girls was holding two rattlesnakes and he was holding one. Bob always carried a vasculum, so that was opened, the snakes were held above the vasculum with their tails just into or above it, and at the count of three,

the five snakes were dropped into the vasculum, the lid was quickly closed and secured, and meat and potatoes on the table was assured at least for another week.

Several stories that characterize Bob's enthusiastic, but relaxed, attitudes involve travel. For example, not too long after his employment by the University of Arizona, Bob and two colleagues were on a field trip to an area northwest of Tucson. As they were returning home, an accident resulted in a broken arm for Bob. He insisted that he not be taken to a hospital, but the common sense of his colleagues prevailed; he was taken to the hospital, the arm was set, and a cast was applied. Another time, returning from a trip to Mexico, Bob and Roberta stopped in a small village a short distance below the border to have lunch. They ordered hamburgers and something to drink. Soon they heard a noisy caterwauling coming from the patio behind the cantina. Their meal was slow in being served, but did finally arrive. Bob was never sure if they had hamburgers or catburgers.

On one of their many trips to Baja California to study the boojum tree (*Idria columnaris*), they drove a new VW van to a remote location and set up camp. When they prepared to leave, the car would not start. They waited three days for someone to come along and help them, but no cars passed by. On the fourth day, Bob told Roberta he was going to walk back five miles to a water hole and walk back. He viewed it as a test to determine if he could endure the heat and bright sun of a late August day. He accomplished that successfully, and the following morning left to walk to the nearest village, about 50 miles distant. Carrying a blanket, water, four cans of beer, cheese, salami, and crackers, he set off down the road. Bob knew where the village was located and that he could shorten the distance by cross-country bushwhacking. On the second day, two vehicles came down the road, stopped where Roberta was waiting in the van, and learned about the problem. Two of the men were engineers and tried to start the VW, but were unsuccessful. Then two of the men drove back to the village to find Bob, while the remaining three stayed with Roberta. They found Bob in a cantina in the village (his food, beer, and most of the water he carried had been exhausted), and took him back to where Roberta was waiting. In the meantime, the VW van had finally started, and they were able to complete their trip. Bob always believed that Roberta had the worst time of it because of having to wait, not knowing how he was faring in the heat of the Baja desert. But Bob's trek was a tribute to his endurance, a feat that not many would have been able to accomplish, and he did it at an approximate age of 75. We will miss his optimism, professionalism, and generosity.

Honors and awards

1966. *Distinguished Service Award, Arizona Water Resources Committee*

1975. *Outstanding Service Award, Society for Range Management, Arizona Section*

1978. *Certificate of Merit for Distinguished Contributions in the Field of Arid Zone Research, American Association for the Advancement of Science, Southwest and Rocky Mountains Division*

1978. *Outstanding Achievement Award, Society for Range Management (National)*

Foreign service

1964–1966. University of Ceara, Brazil, assisting in the organization of a graduate program in the Escola Agronomia.

1966. Mexico. Evaluation of a national range resource analysis.

1969. Saudi Arabia. Evaluation of a range resource analysis, made under contract with ITALCONSULT, Rome, Italy.

1972. Nigeria. Development of recommendations for range management and experiment station programs. Evaluation made under contract with Organizzazione Technica Internazionale, Rome, Italy.

1974. Guatemala, Costa Rica, El Salvador, Nicaragua, Honduras. Beef production potential analyzed for banco Centroamericano through ITALCONSULT and AGROTEC, Rome, Italy.

Research grants

National Science Foundation

1958. Analysis of annual ring patterns in desert shrubs

1967. Habitat characteristics of *Idria columnaris*

1969. Ecology, distribution, and growth characteristics of *Idria columnaris*

Belvedere Foundation

1967. Ecology of *Idria columnaris*

National Geographic Society

1983. Ninety years of change along the U.S.–Mexico boundary

Professional society memberships

American Institute of Biological Sciences
Ecological Society of America
Society for Range Management
The Audubon Society
The Nature Conservancy
The Arizona–Nevada Academy of Science
Friends of Pronatura
Smithsonian Associates

Selected publications (from approximately 100)

Humphrey, R. R. 1932. The morphology, physiology, and ecology of *Coldenia canescens*. Ecology **13**: 153–158.

Humphrey, R. R. 1935. A study of *Idria columnaris* and *Fouquieria splendens*. American Journal of Botany **22**:184–207.

Humphrey, R. R. 1937. Ecology of the burroweed. Ecology **18**:1–9.

Humphrey, R. R. 1949. A proposed reclassification of range forage types. Journal of Range Management **2**:70–82.

Humphrey, R. R. 1950. Arizona Range Resources II: Yavapai County, Arizona. Arizona Agricultural Experiment Station Bulletin **229**.

Humphrey, R. R., and A. C. Everson. 1951. Effect of fire on a mixed grass–shrub range in southern Arizona. Journal of Range Management **4**(4):264–266.

Humphrey, R. R. 1953. The desert grassland, past and present. Journal of Range Management **6(3)**:159–164.

Humphrey, R. R. 1958. Arizona range grasses. (104 pages.) Arizona Agricultural Experiment Station Bulletin **298**.

Humphrey, R. R. 1958. The desert grassland. (62 pages.) Arizona Agricultural Experiment Station Bulletin **299**. (Reprint of Botanical Review **24**(4):193–252)

Humphrey, R. R., and L.A. Mehrhoff. 1958. Vegetation changes on a southern Arizona grassland range. Ecology **39**:720–726.

Humphrey, R. R., and A. B. Humphrey. 1969. Height and volume characteristics of *Idria columnaris* Kellogg. Journal of the Arizona Academy of Sciences **5**(4):207–215.

Humphrey, R. R. 1969. The past role of fire in range management in the Southwest and some future possibilities. Proceedings of the Symposium on Fire Ecology and the Control and Use of Fire in Wild Land Management. Journal of the Arizona Academy of Sciences **5**:52–56.

Humphrey, R. R. 1974. Fire in the deserts and desert grassland of North America. Pages 365–400 *in* Fire and ecosystems. Academic Press, San Diego, California, USA.

Humphrey, R. R. 1987. Ninety years and 535 miles: vegetation changes along the Mexican Border. University of New Mexico Press, Albuquerque, New Mexico, USA.

Humphrey, R. R., and A. B. Humphrey. 1990. *Idria columnaris*: age as determined by growth rate. Desert Plants **10**(2):51–54.

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