

resolution of respect

WALTER PACE COTTAM 1894-1988

Walter Cottam devoted his entire life to the study of the natural resources of the Intermountain West and to the preservation of those resources. For these efforts he was rewarded with diverse honors, both national and regional, including an honorary doctorate from the University of Utah, designation as Eminent Ecologist from this Society in 1960, a Gold Medal from the National Council of State Garden Clubs, and the American Motors Conservation Award.

Cottam's first real exposure to ecology came about almost by accident. He had been attending Summer School at the University of Wisconsin and was on his way back to Utah by train. He used a layover of several hours to visit the University of Chicago. It happened that Henry Cowles was giving his first lecture of the fall term to his ecology class there, and Cottam attended it. He was so excited about this new field that he couldn't sleep that night. His next summer session was at the University of Chicago, but he had difficulty getting admitted. His BS (1916) and MS (1918) degrees were from Brigham Young University, and the registration officials stated that they had never heard of BYU and were reluctant to accept his record. They admitted him on the basis of his one summer session at the University of Wisconsin.

Walter Cottam was born in St. George, Utah, a small town on the desert of southwestern Utah, the third youngest of a family of ten children. A practical joker with an impish sense of humor, he tortured his brothers with incredible tricks, and must have been a most difficult child to raise. His father, however, admired his vitality and his quick intellect and he escaped punishment for most of his pranks. He had to work hard in this difficult environment. He worked on the farm, rode the range, and carried the hod for his father, who was a part-time plasterer and carpenter as well as a farmer. Walter married Effie Frei in 1915 and was the father of five children—Ceila Fae, Grant, Beatrice, Richard Walter, and George Thomas. He was the first person from that section of Utah to graduate from college, and



the first to earn a Ph.D. His younger brother, Clarence, later Assistant Director of the U.S. Fish and Wildlife service, followed in his footsteps.

An 80-mile bicycle ride for an interview resulted in his first professional job as a high school teacher, and within two years he was a member of the faculty at BYU, a position he held while he was working on his Ph.D. He received his Doctor's degree from the University of Chicago in 1926 and in the process developed a close friendship with his major professor, Henry C. Cowles. Cowles brought his summer class to Utah for two successive years, and he and Cottam taught the course together. When someone asked Cowles what he liked best about Utah, he replied, "Walter Cottam."

One of the prized pieces of equipment at BYU was a very large view camera. With it, Cottam developed into an excellent photographer. He was friends with all of the Utah painters, and some of their paintings were based on Cottam's photographs. In those days

before color photography, he hand colored his photographs and lantern slides. The slides, particularly, were works of art, and Cottam was in great demand as a lecturer before school, church, and civic groups. He sometimes traveled hundreds of miles to make these presentations, without compensation except for the knowledge that he was educating the public about the beauty of their environment and the need for its preservation.

He helped to establish the Salt Lake City Shade Tree Commission, and served there for 25 years. He was given the Certificate of Merit from the National Shade Tree Conference in 1959.

He planted trees continually on the University of Utah campus, so that students in a desert environment would be able to see a representation of the world's forests. The campus is now the State Arboretum of Utah. Many of his honors are for endeavors such as these. He considered all the people to be his students, and did everything he could to educate them about the native environment.

In 1931 Cottam accepted a position as Professor of Botany at the University of Utah, where he remained until his retirement in 1962. His most popular course was entitled "Spring Flora of the Wasatch," which was concerned as much with ecology and conservation as with taxonomy. The field trips were exceptional, not alone for the knowledge they helped impart. They were also an emotional and an artistic experience.

His students loved him. One of them wrote in the University newspaper, "There is a biology teacher on campus—I am sure former students know who I mean—who speaks with the voice of a child who has just seen a flower bloom for the first time. . . . Here is a man who tries awfully hard to be a "tough" prof. but whose genuine interest in his students and total love of his subject give him a warmth and integrity that belies his wisecracks and his tough exterior. . . . He demands more than any teacher I have known and he gets it, because his interest is contagious, his disappointment genuine if you fail your own capabilities. . . . It is good to have curiosity again. Thanks, Prof."

Preservation of the environment became a more important force in Cottam's career as time went on. In 1947 he gave a lecture at the University of Utah entitled "Is Utah Sahara Bound?" which detailed the damage cattle

and sheep grazing were doing to the country—damage he could document because of his work with the Forest Service involving the establishment of hundreds of permanent quadrats and their assessment for range deterioration. The lecture and letters to the editor challenging complacent opinions, and numerous other public presentations, aroused a storm of controversy and the enmity of the most powerful men in the state. That he kept his job is a tribute to the high regard in which he was held by the general public and by the university. His conservation writings were printed in a book, *Our Renewable Wild Lands—A Challenge*, in 1961.

Cottam's other papers cover a wide range of subjects. He was an avid collector and carried a backpack converted to a plant press on his hikes. He published on aspens, snakes, buried bird nests, big trees, and pollution problems. Few parts of nature escaped his attention.

After his retirement Cottam embarked on his most ambitious project—a study of oak hybridization. One of his students had found what he thought was a natural hybrid between the common Gambel's oak and a live oak, whose present range is 250 miles south of the location of the hybrid. Cottam and the student searched the region where the hybrid was found and discovered several other isolated examples. They found hybrids to be common at the present location of the live oak. Cottam used this information to draw some interesting conclusions about climatic change, and then began a study of hybridization of oaks in general. He used as female parents the native Gambel's oak and several eastern and European species growing on the campus. Pollen came from all parts of the United States. A total of 43 different interspecific hybrid combinations were successful, including three intersubgeneric combinations. The seedlings were planted at the Arboretum, and others were distributed to scientific organizations, schools, and private individuals. Many of the hybrids show promise as horticultural specimens. The work, co-authored by J. M. Tucker and F. S. Santamour, Jr., was published as a book, *Oak Hybridization at the University of Utah*, in 1982.

In addition to his positions at BYU and the University of Utah, he was Visiting Professor at the University of Chicago, Botanist at the American University, Shrivenham, England,

and Lecturer for the Division of Information and Education in Frankfort, Germany.

Walter Cottam was a man of many talents. He was an inspiring teacher, a research scientist, a fierce champion of the environment, a writer, a photographer, and a raconteur, and he excelled at all these things. His personality was characterized by intensity. Everything he

did, he did to the best of his ability and with every ounce of his energy. He worked hard, loved hard, lived hard. The West is a better place because he lived there.

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