

# MEMORIAL TO HUGH DINSMORE MISER 1884–1969

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The village of Pea Ridge, Arkansas, was the site of a little-known but important battle in the Civil War; to geologists it is noted as the birthplace of Hugh Dinsmore Miser, the third child born to a farm couple, Jordan Stanford and Eliza Caroline (Webb) Miser, on December 18, 1884. In addition to Hugh, two other offspring of this union lived to maturity: Dr. Wilson Lee Miser, a distinguished mathematician and educator, and Cora Dot Miser, who married Dr. William Boyd Stelzner, an outstanding professor of electrical engineering. Hugh's father lived to an age of 75 years; his grandfather was gored to death

by a bull at the age of 105. Family stock of this solidity was required to produce a Hugh Miser. Of course Hugh, in his typical self-deprecating way, often said that Pea Ridge was really famed as the home of Clyde (Pea Ridge) Day—big league pitcher and world champion hog caller.

Death came to Hugh from a heart attack at his home in Washington, D.C., on August 1, 1969. As those of us who were close to him would have expected, he had worked a full and effective day on July 31, and was dressing to go to work when the end came. It is typical that he left no loose ends of unfinished business—his desk was clean.

Hugh's boyhood and early education were in Pea Ridge, where a high school science teacher interested him in geology. Later, at the University of Arkansas, he came under the influence of A. H. Purdue, professor of geology, who recognized his talent and led him into the profession. Purdue was Hugh's mentor, both in the classroom and in the field, where Hugh worked as his assistant and, on Purdue's early death, took over the completion of unfinished reports.

Hugh received his Bachelor's degree from the University of Arkansas in 1908 and his Master's degree in 1912; in 1949 the University recognized his eminence by awarding him the honorary degree of Doctor of Laws and Letters.

Hugh started work for the U.S. Geological Survey in 1907 as a Geologic Aide; in 1911 he was appointed Junior Geologist, and in 1912, Associate Geologist. He was raised to the grade of Geologist in 1919, and that year

took leave of absence to serve as Acting Professor of Geology at the University of Arkansas for the academic year, and Acting State Geologist, after which he returned to the Geological Survey. Later, in 1926, he took leave of absence to serve as State Geologist of Tennessee. He then returned to the Geological Survey, which he served ably and loyally until his death.

Most of Miser's early work was in Arkansas, Tennessee, and Virginia. During World War I, he studied manganese deposits in the Appalachian region and in Arkansas. However, in 1921, he was the geologist on a U.S. Geological Survey expedition to map the tortuous course of the San Juan River in southeastern Utah. This expedition lasted from July 18 to October 8, spanning the period from early summer runoff to the early fall low stage of the river. In the early summer runoff the boats rode over sand waves six feet high, and one boat split when it hit a submerged rock. In September, supplies could not be delivered as planned because of the blocking of the access trail by landslides. Miser and the boatmen towed a boat 17 miles upstream in 14 hours, which Hugh describes in his notes as "exceedingly strenuous work," in order to meet the packer and receive supplies. In the low stage of the river, the boats required towing most of the time. Miser's geologic work extended as much as 25 miles from the river.

Between 1923 and 1926, Miser compiled the State Geologic Map of Oklahoma. This map was prepared from published material, unpublished maps by USGS geologists, Oklahoma Geological Survey geologists, and company geologists. The complete cooperation of oil companies and their geologists was an indication of the confidence he enjoyed from all sources.

On his return from work as the State Geologist of Tennessee in 1926, Hugh was designated Chief of the Section of Areal Geology. From 1928 to 1947, he served as Chief of the Fuels Branch. From 1930 to 1947, he also served as Acting Chairman and Chairman, Geologic Names Committee, U.S. Geological Survey. While Chief of the Fuels Branch he was author of more than 30 official reports and papers in outside journals. These papers, together with his earlier work, established him firmly as the authority on the geology of the Ouachita Mountains for at least two generations. In addition, he reviewed about 400 scientific reports by members of the Fuels Branch and other Survey geologists.

In World War II, Miser encouraged geologists of the Fuels Branch to offer their allotted funds for field work, as well as their services for studies of minerals that were in strategically short supply. He even volunteered himself, and was placed in charge of work on manganese deposits in the Appalachian region. In the late part of World War II petroleum supplies became critical, and Miser sought advice from geologists and officials in the petroleum industry regarding the most useful role that might be played

by the U.S. Geological Survey in finding new supplies. His efforts led to the preparation of regional stratigraphic studies, and the establishment of a publication series of Oil and Gas Preliminary Maps and Charts, designed to make geologic information of the Geological Survey available to industry with a minimum of delay.

When it was learned, in 1947, that Miser wished to be relieved of administrative duties, the Oklahoma Geological Survey and the Geological Societies of Tulsa, Oklahoma City, and Shawnee successfully sought to have him assigned to the preparation of a modern geologic map of Oklahoma, based on the abundant new information available. During the period 1948 to 1954, he compiled maps, guided mapping of inadequately mapped areas, and did some mapping himself in critical areas. The result was a modern state map that could serve well as a model for others.

From 1954 until his death in 1969, Hugh, acting for the Director, reviewed for content and policy all manuscripts by Geological Survey authors. However, during this period he arranged to spend some time each year in the field with geologists working in Arkansas and Oklahoma—particularly those working for the State geological surveys and the USGS. In 1955, he was awarded the Distinguished Service Medal of the Interior Department.

Hugh Miser was a dedicated geologist and, as his bibliography of more than 80 publications attests, he was versatile. Even his hobby was geological—the collection and study of quartz crystals. This hobby yielded a tremendous collection, with many unique individual crystals. During World War II, this collection, and Miser's guidance of the search for optical or oscillator quality crystals, yielded a significant addition to the critically short supply. Travelling with Hugh in the Ouachita Mountains of Arkansas, one soon learned that he knew every roadside purveyor of quartz crystals. Generally, unusual crystals were put aside to be brought out when he next visited—and the price was never raised unless it was increased by Hugh. His interest in minerals caused Waldemar Schaller to name a rare pink silicate mineral, occurring at Potash Sulfur Springs, Arkansas, "miserite," in honor of Hugh Miser. Hugh donated part of his collection to the museum of the University of Oklahoma. The University of Arkansas received a somewhat larger collection, consisting of 5,700 select crystals.

Quartz crystals were not the only things collected by Miser. His collection of "Arkansas" stories was worthy of a professional humorist. When Hugh was President of the Geological Society of Washington he managed to slip at least one Arkansas story into the proceedings at each meeting. The basic point of these stories was to laugh at, and with, Arkansas and Arkansawyers, which Hugh felt he could do because of his established position as ambassador-at-large of Arkansas.

Miser was elected a Fellow of The Geological Society of America in 1916. He also held membership in the following societies: American Association for the Advancement of Science, Vice-President and Chairman, Section on Geology and Geography, 1940; American Association of Petroleum Geologists, Honorary Member, 1948, member of six committees, Associate Editor, 1932 to 1948; American Institute of Mining and Metallurgical Engineers; Geological Society of Washington, President, 1938; Mineralogical Society of America; Society of Economic Geologists; Society of Economic Paleontologists and Mineralogists; Tennessee Academy of Science, Vice-President, 1939; Tulsa Geological Society, Honorary Member; Washington Academy of Sciences, Vice-President, 1939; Oklahoma City Geological Society, Honorary Member; New Mexico Geological Society, Honorary Member; The Oklahoma Gem Society, Honorary Member; and Sigma Gamma Epsilon, Honorary Member.

In 1948, he was invited to present the Bownocker Lectures at Ohio State University and the Grant Memorial Lectures at Northwestern University.

Among Hugh's activities, beyond his work, was his active service as a member of the Board of Directors of Sibley Memorial Hospital, Washington, D.C., from 1925 to 1944. He served as Board Chairman from 1936 to 1937.

Hugh married Mary Kate Goddard in Fayetteville in 1910. Their marriage provided all of the encouragement that Hugh needed to achieve his outstanding position as a geologist and a geological administrator. Hugh and Kate had one child—now Mrs. Catherine Kayser of Bethesda, Maryland; a grandson, Roger H. Sherriff; and three great-grandchildren.

Miser's tremendous energy and versatility are shown by the volume and scope of the selected bibliography.

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