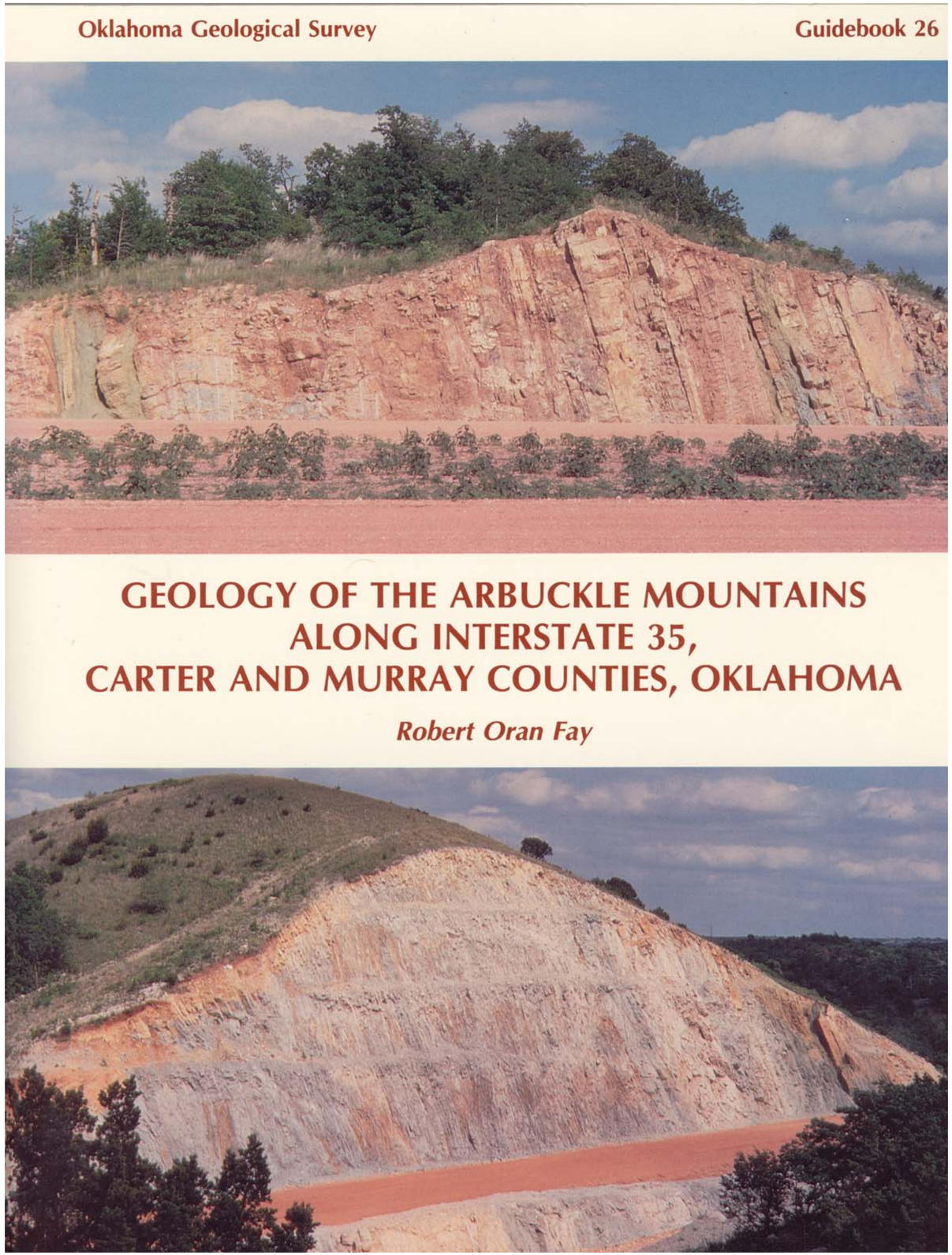


Dr. Robert Oran Fay: Fifty years of geology with the Oklahoma Geological Survey, The University of Oklahoma, and the State. More to come!

Dr. Robert Oran Fay

If you ask Dr. Robert Oran Fay how he became interested in geology, he will tell you that he had a course in historical geology at Lowell Grammar School in St. Louis in the late 1930's. But those who know Dr. Fay might rather tell you that Bob loves to learn, loves knowledge, and knows at least something about everything. Geology caught his attention in school, but throughout his life his interests have ranged to a broad spectrum of subjects.

Dr. Fay's mind collects, absorbs, and stores data with a speed and capacity equaled only when computers began to be used on a common basis. To say that he is thorough is perhaps falling short in describing his habit of exhausting every source he can find on a subject. His interests range through a myriad of topics that include geology, genealogy, history, antiques, politics, the old west, and wagon trains and their routes. He is a keen observer of people and a great teller of stories, weaving history into tales you won't soon forget.

Under the watchful eye of grade school teacher Grace Gallagher, Bob learned the phyla of fossils and the system of rocks, often collecting fossils from the St. Louis Basin along the Mississippi River where the riprap along the banks provided a rich source of material for young rock hounds. After exhausting all the subjects offered by his grade school, and probably exhausting his teachers, Bob continued his study of geology, graduating from Beaumont High School in St. Louis in 1944. While there, he studied geology from Miss Alma Brown and Miss Mabel Wood, and made exhibits for the Junior Academy of Sciences.

From 1945 to 1946, Bob served at the 279th Station Hospital in Berlin, Germany, while attached to the 78th Lightning Division and the 101st Airborne. He was a medic and experienced first hand the aftermath of World War II, lending help in the effort to rebuild Europe.

He returned to St. Louis where he enrolled in Washington University and received a degree in geology in 1949. After this, he made his way to the University of Kansas to continue his education.

Bob taught invertebrate paleontology at Kansas until 1950, then worked as a graduate assistant in the photography lab at the Kansas Geological Survey, while also writing a bibliography on conodonts and the blastoid chapter of the Treatise of Invertebrate Paleontology until 1956. While he was there, Bob helped set up and operated a seismology station for KU. In the summer of 1953 he worked for the Canadian Geological Survey to map Cornwallis Island at the magnetic north pole. The next summer, 1954, he mapped the Anaheim Lake area in British Columbia. In 1955 he mapped the Wyoming Thrust Belt from Jackson Hole, Wyoming, to Star Valley, Idaho, for the California Company.

It was on July 1, 1956, that Bob came to the University of Oklahoma to work half time as an assistant professor in the Department of Geology and half time on the staff of the Oklahoma Geological Survey. Another geologist, Ed

Stover, was hired the same day and also held down two half-time positions. Stover and Fay each decided that they preferred one half of their jobs over the other in 1961, so they switched positions and Bob came full time to the Geological Survey while Ed was full time with the Department of Geology.

Since 1950, Bob has authored or been a co-author on at least 139 articles, books, maps, and other publications, most of which were published by the Oklahoma Geological Survey. While the main focus of his work remained with fossils in the early years, Bob spent a lot of time in the field in Oklahoma mapping and doing county studies. His extensive work in Blaine County resulted in a number of articles and publications, including many for the Survey's *Oklahoma Geology Notes* and other periodicals in the late 1950's and early 1960's. Among his writings are papers on conodonts, a sink hole in Blaine County, the Pleistocene course of the South Canadian River, and a number of other topics.

Bob's Ph.D. dissertation for the University of Kansas in 1961 was *The Blaine and Related Formations of Northwestern Oklahoma and Southern Kansas*. Along with other publications, Bob produced OGS Bulletin 89, *Geology and Mineral Resources, Blaine County, Oklahoma*, with W. E. Ham and Louise Jordan, in 1962; Bulletin 98, *The Blaine and Related Formations of Northwestern Oklahoma and Southern Kansas*, an outgrowth of his Ph.D., published in 1964; and then Bulletin 106, *Geology and Mineral Resources of Woods County, Oklahoma*, that was issued in 1965. His next Bulletin, number 114, *Geology and Mineral Resources of Custer County, Oklahoma (Exclusive of Petroleum)*, was issued in 1979.

In the time frame from the mid 1960's to 1973, he released numerous paleontological manuscripts

along with the three OGS Bulletins in three years. Bob also worked on 23 publications that appraised land and water resources for the Oklahoma Water Resources Board and the U.S. Geological Survey. While engaged in this extensive project, he continued to write articles on fossils for the University of Kansas, the Geological Society of America, and other groups, and revised the Hydrologic Atlas Series.

In 1969, Dr. Fay issued *Geology of the Arbuckle Mountains Along Interstate 35, Carter and Murray Counties, Oklahoma*, as a guidebook for the Ardmore Geological Society and established his reputation as an expert on the geology of these famous mountains. He has published at least nine volumes on the Arbuckles since 1969, including guidebooks for field trips, a Circular, Special Publications, maps, and studies for the Geological Society of America and other geological organizations. His work in the Arbuckles established him as not only an authority on the area's rich geology, but also on its equally rich history.

Bob has written extensively and produced maps on the subjects of copper, zinc, lead, uranium, and gold in Oklahoma. His map of the Southwest Davis Zinc Field is an important source for the history as well as the geology of the area. It was published in 1981 with a map plate and a 16-page text. He has written on the La Harpe expedition in Oklahoma and early explorations in Pushmataha County. He wrote a *Geology Notes* article in 1990 on President Herbert Clark Hoover and the Pawhuska Limestone. Gertrude Selma Sober, the "Queen of the Arbuckles" is another favorite subject of his, as is the early history of oil and gas in Oklahoma.

Dr. Fay's work has covered all corners of Oklahoma. He has written about the land, water, mineral, and hydrocarbon resources, the fossils and stratigraphy, and about the people who founded and populated this state. As Bob sees the world, the people and the land are connected, each affecting the future of the other.

In addition to his great grasp of geology and facts, Bob has been known to fabricate some tall tales now and then. And if you ask Bob what he does, he sometimes gives you a wry smile and say "Oh, I tell lies!" Perhaps that grin is hiding his memories of having led lecture classes astray back in 1953 with a fantastic tale of a supersonic bird that flew so fast and had such poor vision that it was apt to slam into trees, leaving the bird's beak fossilized for all eternity in the tree trunk where it broke off. The hapless students wrote furiously to take notes about a mathematical formula that would calculate the air speed of the bird using the depth to which the fossil bird beaks were embedded in the tree trunks. As of yet, a mathematical formula has not been invented to measure how NOT amused some school administrators were by the prank.

Bob is still at work for the Oklahoma Geological Survey in the new Oklahoma Petroleum Information Center (OPIC), where he currently is compiling a bibliography of the Gulf–Ouachita Precambrian Astrobleme basin. He is available to answer questions for patrons and to help them find the publications and maps they need. He has achieved something no other Survey employee has had or could ever hope for: He has his own designated parking space.

He became the State of Oklahoma's longest termed employee in the spring of 2006, and also is the person with the longest continuing employment at the University of Oklahoma.

During Bob's 50 years of service, extensive field work has taken him to every part of Oklahoma. He has spent good amounts of time in some of the most rural and poverty stricken areas of the state and has come to know and appreciate the people there. He has true stories of life and hardship in remote areas that he can tell along with stories of great luck and success in the oil fields. He will tell you that riches are found in both places. Oklahoma is fortunate that he has shared his vast knowledge of this state's geology, but also is fortunate that he has shared his heart as well.

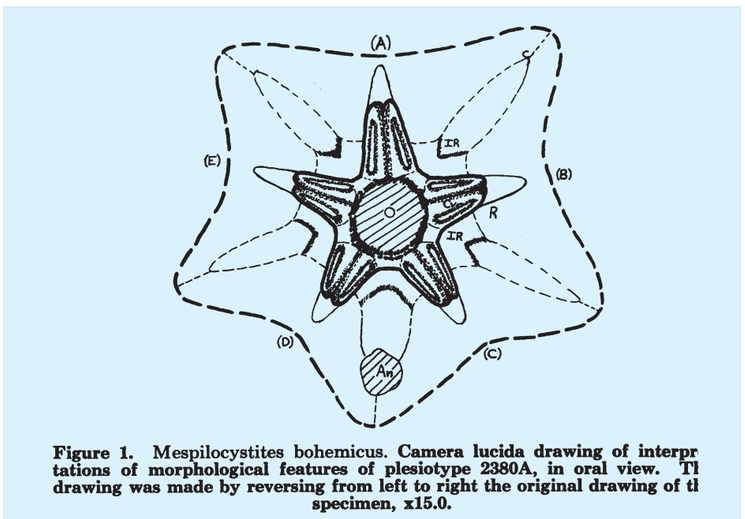
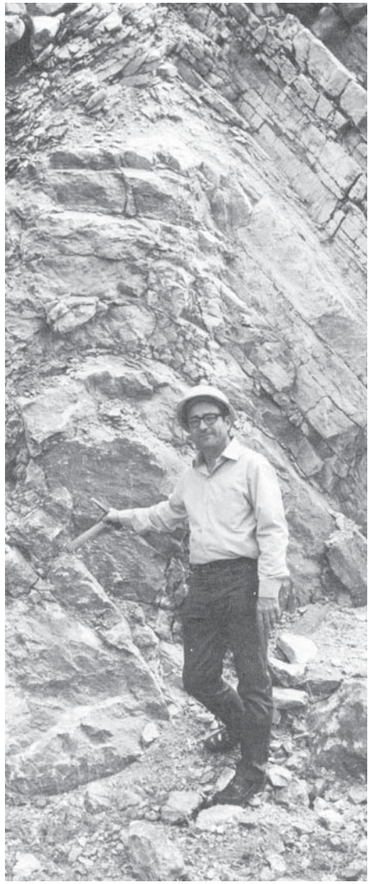


Figure 1. Mespilocystites bohemicus. Camera lucida drawing of interpr tations of morphological features of plesiotype 2380A, in oral view. Tl drawing was made by reversing from left to right the original drawing of tl specimen, x15.0.

Illustration from Dr. Fay's article MESPILOCYSTITES, *An Ordovician Coronate Crinoid from Czechoslovakia, Oklahoma Geology Notes*, June 1962.



Dr. Fay in photo from Guidebook 26, *Geology of the Arbuckle Mountains Along Interstate 35, Carter and Murray Counties, Oklahoma*, published in 1989.

Gertrude Sober, the "Queen of the Arbuckles," from OGS Map GM-20.