

G. Arthur Cooper: An Expert in Paleozoic Fossils

Visit behind the scenes with “Gus” Cooper, a paleobiologist who guided the museum’s research on fossils in the twentieth century. Cooper collected extensively in the Glass Mountains of Texas, which are famous for hosting millions of marine invertebrate fossils from the Permian age--many of them richly detailed. The fossils are silicified, meaning that they are petrified or made into stone (by being impregnated with silica), and can be treated with weak acids to dissolve the limestone in which they are embedded.



G. Arthur Cooper in Laboratory, 1980. Image from Smithsonian Institution Archives

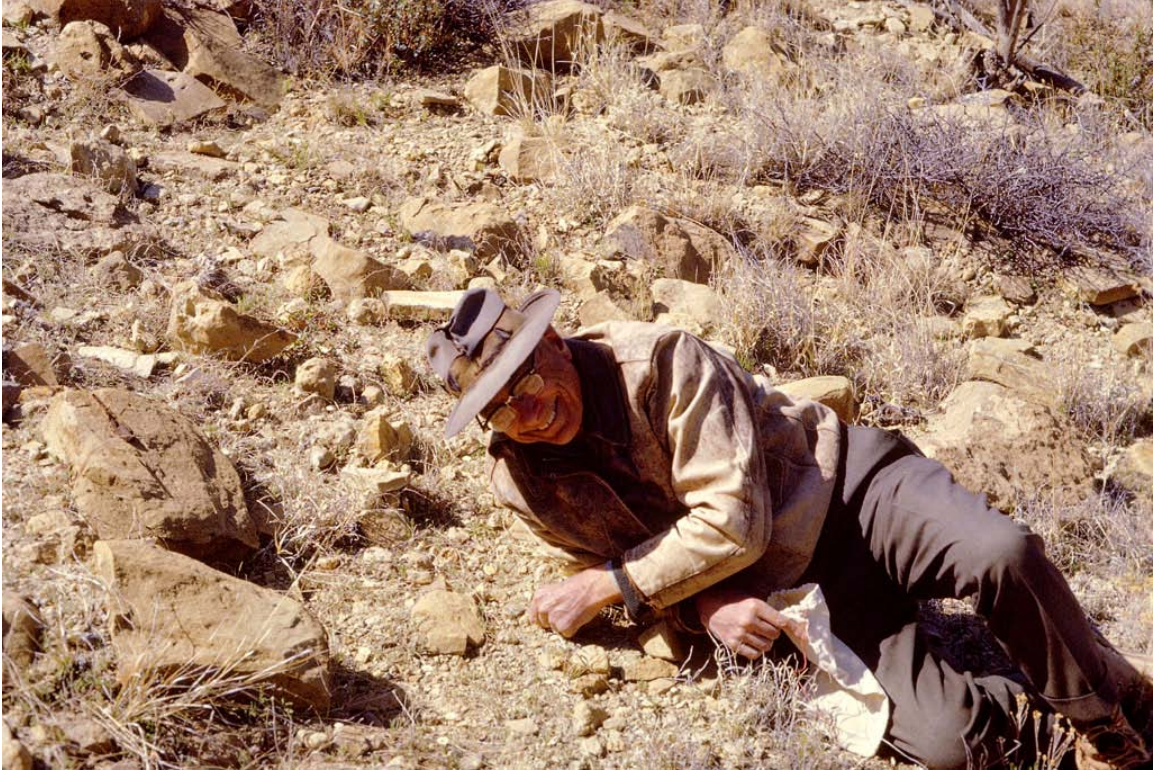
G. Arthur Cooper (1902-2000), a paleobiologist at the National Museum of Natural History (NMNH), distinguished himself as an authority on the taxonomy and stratigraphy of Paleozoic brachiopods. He first developed an interest in natural history by collecting insects and minerals during his childhood in New York. He received his Ph.D. in 1929 from Yale University, studying fossil brachiopods – a type of marine bivalve. At Yale, he also served as assistant curator at the Peabody Museum of Natural History. Cooper came to the Smithsonian in 1930 as assistant curator in the United States National Museum. In 1944, he advanced to curator of the Invertebrate Paleontology and was appointed chairman of the Department of Paleobiology through 1967. After his retirement in 1974, he continued his research as paleobiologist emeritus until 1987. His wife, Josephine P. Wells Cooper, often worked at his side and used her language skills to translate scientific articles.

During his years as an administrator, the paleobiology staff grew from two in 1944 to twenty in 1967. He also involved himself in space planning and supervision of the move into the new wings of the Natural History Building in 1963-1965.

Cooper was well known for his research on the taxonomy and stratigraphy of Paleozoic brachiopods. His major monographs include: *Ozarkian and Canadian Brachiopoda* (1938 with E. O. Ulrich), *Chazyan and Related Brachiopods* (1956), *Morphology, Classification, and Life Habits of Productoids (Brachiopoda)* (1960 with Helen M. Muir-Wood), and *Permian Brachiopods of West Texas*, vols. 1-6 (1969-1977 with Richard E. Grant). Throughout his career, he conducted extensive field work in the United States, Canada, and Mexico, significantly increasing both the range and depth of the national collections. Under his guidance, an acid-etching laboratory was established for work with silicified fossils, notably Permian brachiopods from the Glass Mountains of Texas. He also developed his own photographic laboratory, where he produced over fifty thousand images from the collections.



G. Arthur Cooper and his wife, Josephine Cooper, at work in his office in the Division of Invertebrate Paleontology, June 1954. Image from Smithsonian Institution Archives.



G. Arthur Cooper collecting in the field, 1957. Image from Smithsonian Institution Archives



Richard Grant & G.A. Cooper at Big Bend Café, Marathon, Texas (1963)



Presentation of portrait painted by Robert Ades of **G. Arthur Cooper** to the Department of Paleobiology, National Museum of Natural History, at a dinner honoring **Cooper** on October 28, 1965. L to R: Porter M. Kier, **G. Arthur Cooper**, Thomas J. Dutro and Richard E. Grant. Portrait now hangs in the **Cooper** Library of the Natural History Building.



G. Arthur (Gustav Arthur) Cooper (1902-2000), and his wife, Josephine stand beside a painting of Cooper by Robert Ades.