Reference Publications

Memorial: G. Arthur Cooper 1902-1999

Journal of Paleontology, Jan 2001 by Dutro, J Thomas Jr, Yochelson, Ellis L

G. Arthur Cooper (February 9, 1902-October 17, 2000) was a president of The Paleontological Society and at the 1957 meeting reinstituted the long dormant custom of the presidential address. He helped design The Paleontological Society medal and, in 1964, was its second recipient. Although Dr. Cooper received other major honors for his efforts in invertebrate paleontology, he was particularly proud of this recognition by his peers.

Cooper was interested in minerals when young but, upon attending Colgate University, he came into contact with the Middle Devonian Hamilton Group fossils at the campus quarry and was a paleontologist thereafter. His bachelor and master's degrees from Colgate investigated the rocks and fossils of the Hamilton Group. His PhD with Charles Schuchert at Yale University in 1929 extended this biostratigraphic record. Later, he pursued the Devonian in Michigan, Indiana, Oklahoma and in the west. He was a member of the National Research Council Committee on Stratigraphy and chairman of the Devonian Correlation Committee, which published its summary of deliberations as a chart in 1942 in the Bulletin of the Geological Society of America.

Following his degree, Dr. Cooper spent another year with Schuchert; together they produced a monograph of the orthoid and pentameroid brachiopods. Although Cooper authored many short papers, this monographic compendium was the first of what were to be many hallmarks of his career. A colleague noted that Cooper provided a meticulous approach to the study of these fossils, carefully considering the relative importance of the thenknown features and emphasizing morphologic details which hitherto had been overlooked.

In 1930, Cooper joined the Department of Geology of the United States National Museum in Washington. Eventually he became the fourth, and last, head of the department in 1956. He helped plan paleontological laboratory and office space in a proposed east wing and oversaw the movement of collections and staff to this facility in 1962. Cooper also planned splitting the old Geology Department, and, in 1963, he became the first chairman of the new Department of Paleobiology, holding this position for four years. In 1972, Cooper officially retired, but continued his

research during the next 15 years.

Throughout the 1930s and 1940s, the museum had virtually no funds, nonetheless, Cooper managed to get into the field nearly every year. Although he concentrated on brachiopods, he was an assiduous collector and never left a good fossil on the outcrop. He was also involved in exchanges with other museums. A large part of his legacy is the systematically arranged brachiopod collection, which is the largest in the world and contains representatives of virtually all genera. Cooper was interested in the waxing and waning of the phylum through time; he described brachiopods of every period from Cambrian to Recent.

At the museum, Cooper worked in contact with U.S. Geological Survey paleontologists whose concerns were brachiopods and Lower Paleozoic stratigraphy. In 1938, Ozarkian and Canadian Brachiopods was published; authorship is by E. 0. Ulrich and G. A. Cooper, but Cooper did almost all of the descriptive work. That led to field investigations in the Middle Ordovician. Cooper played an important role in the compilation of the 1954 Ordovician correlation chart. That was a prelude to his 1956 magisterial Chazyan and Related Brachiopods. It is not generally known that the photographs on the 269 plates and those published earlier were made by Cooper. That monograph documented the Whiterockian Stage as the oldest unit of the Middle Ordovician.

Cooper is best known, however, for his studies in the Permian, where once again he was on the committee that prepared the Permian correlation chart, published in 1960. In his efforts to increase the museum's holdings in Late Paleozoic brachiopods, shortly before the start of World War II, Cooper visited the Glass Mountains in west Texas. Fossils were known to be silicified on surface exposures and a few pieces were collected to be carefully prepared with hydrochloric acid back in Washington. To his surprise, fossils within the matrix were also silicified. This led to larger and larger collections, year after year, and the use of vast quantities of hydrochloric acid. It was the largest program of acid preparation of fossils ever undertaken. The multi-volumed study, undertaken with R. E. Grant, documented the incredible variety and wondrous adaptations of these Permian brachiopods. All other fossils groups were carefully picked out and saved, and have provided the basis for innumerable studies by other paleontologists.

"Coop," as he was called by most of his colleagues and friends, was generous in sharing his fossils and his knowledge with others. He was the role model for two generations of young paleontologists who began their careers at the museum. Anyone from anywhere who was interested in brachiopods received his time and

attention. Visitors to Washington not only were provided full access to the collections, but were often guests at the Cooper home as well. Some visitors from overseas lived with the Coopers for months.

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After retiring from his "volunteer" work, Dr. Cooper and Josephine, his wife of 70 years, moved to Raleigh, North Carolina, where for a number of years he continued to pursue his hobby of photographing flowers. He died after a brief illness. His publications from 1930 through 1969 are listed in a 1972 Festschift organized by J. T Dutro Jr. Cooper was probably the last paleontologist to have a comprehensive grasp of the details of one entire phylum spanning an interval of more than 500 million years. Beyond that, Cooper served as a symbol of day-to-day devotion to the science of paleontology.

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