Memorial to Mackenzie Gordon, Jr. 1913–1992

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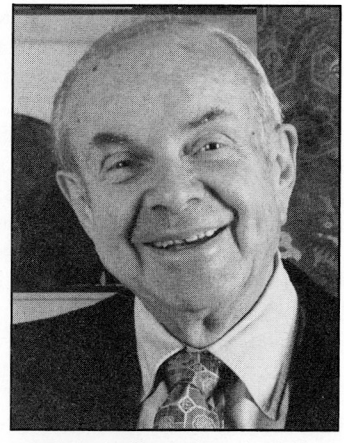

Mackenzie Gordon, Jr., 78, world-renowned geologist and paleontologist with the U.S. Geological Survey for more than 40 years, died of cardiac arrest at his home in Washington, D.C., on January 30, 1992.

Gordon specialized in the geology of the Carboniferous System, a time in Earth history when much of the world's energy resources were formed. As a paleontologist, Gordon studied two major groups of fossils—cephalopods, ancient ancestors of today's nautilus, squids and octopi, and brachiopods, especially the spiny-shelled productoids. Gordon published more than 100 scientific papers during his career. He retired in 1981 but continued to work on various geological manuscripts for the Survey and as a research associate of the Smithsonian Institution.

From 1957 to the time of his retirement in 1981, Gordon produced 10 major systematic studies on Carboniferous cephalopods (see Selected Bibliography). He published five major papers during the period from 1965 to 1981 on brachiopod paleontology.

Gordon was more than a taxonomist; he studied fossils mainly because he could use that information to solve geologic problems. In a statement written after his retirement in 1981, Gordon summarized this aspect of his career as follows:

> In my early career ..., I learned that perhaps the two most vexing problems of Carboniferous stratigraphy in the U.S., that plagued and puzzled my senior colleagues, were what had become known as the Amsden and Ouachita problems. I never imagined that it would fall to my lot to solve both problems concurrently. An exhaustive study of the Amsden brachiopod faunas, supplemented by work on other fossils, gave the clues that enabled Sando, Dutro, and myself to demonstrate that the Amsden was an eastwardly transgressive unit laid down during the time span that embraced the Late Mississippian through early Middle Pennsylvanian. This [transgression] served to explain the discordant conclusions of investigators who studied the problem only locally, like the blind men who examined different parts of an elephant and came out with vastly different conclusions.
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> Solution of the Ouachita problem was brought about by a biostratigraphic and paleontologic study of the sparsely fossiliferous Carboniferous strata beneath the huge masses of Mississippian Caney Shale at the base of the Pennsylvanian Johns Valley Shale. By demonstrating that roughly 7,000 feet of beds *below* this level contain fossils that are *younger* than those found in the Caney, it was possible to show that the presence of the masses of Caney Shale at that level was due to submarine slumping during Brentwood (late Early Pennsylvanian) time. This had been suspected before, but no one had been able to prove it.
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> Both studies showed the value of careful paleontologic and biostratigraphic analysis in solving tectonic problems and determining geologic history.

Born in San Francisco, April 4, 1913, Gordon attended Bates High School, graduating in 1929. He received an A.B. degree in geology from Stanford University in 1934 and attended graduate school there, studying geology in 1935–1936.

Gordon's early geological work, just before and during World War II, involved mineral

resource appraisal in three major metal commodities. He studied tungsten deposits in California and Arizona and manganese in Arkansas, and he played a critical role in the government's Arkansas bauxite project from 1942 to 1945. During this early period, Gordon also participated in strategic mineral mapping in the Dominican Republic and studied Carboniferous and Permian stratigraphy in southern Brazil from 1945 to 1947.

In 1950, Gordon transferred to the Survey's Paleontology and Stratigraphy Branch, where he conducted his research for most of the next 40 years. He was in charge of the upper Paleozoic unit from 1951 to 1956 and spent 1956 to 1958 in the Survey's office in Menlo Park, California, where he assisted in establishing the regional research center.

Gordon returned to Brazil and from 1958 to 1960 participated in the U.S. government's international program to establish geology departments in selected Latin American universities. He organized and taught courses in stratigraphy, paleontology, and sedimentology, in Portuguese, and also established a summer field camp at the Universidade do Rio Grande do Sul in Porto Alegre. For these efforts, he was cited by the Brazilian Geological Society in 1964.

Mac Gordon was an accomplished pianist. He composed music and lyrics for satirical reviews, mostly those performed by the famed Pick and Hammer Club, both in Washington and in Menlo Park, where he helped set up a branch of the club. He provided dozens of lyrics for songs in the yearly shows during the 1950s and 1960s, culminating in the 1971 show that was produced at the annual meeting of the Geological Society of America in Washington, D.C. For that extravaganza, Mac wrote the lyrics and original music of eight songs for the show, celebrating the origin of the U.S. Geological Survey, called "The Birth of a Notion, or the Weaning of the West." These theatrical talents were developed early on at Stanford, where Mac was a moving force in the yearly student reviews, but the tendencies must have been inherited from his father, Gordon Mackenzie, who was a professional singer and theatrical entrepreneur. Mac also performed in these shows, sometimes alternating roles as accompanist and song-and-dance man, as the occasion required.

Gordon was a Fellow of both the Geological Society of America and the California Academy of Sciences, a past director of the American Geological Institute, president of the congress and editor-in-chief of the Proceedings of the Ninth International Congress on Carboniferous Stratigraphy and Geology, held in the United States in 1979 as part of the year-long celebration of the U.S. Geographical Survey Centennial. He was also a titular member of the Carboniferous Subcommission of the International Stratigraphic Commission and served for two decades as the United States member of the Permanent Committee for the International Carboniferous Congress.

He was a member of several other scientific societies, including the American Association of Petroleum Geologists, American Malacological Union, Paleontological Society, Geological Society of Washington (past councilor and vice president), Paleontological Society of Washington (past president) and the Society of Economic Paleontologists and Mineralogists.

Gordon was an acknowledged expert in ancient Chinese art and history and had accumulated one of the world's finest private collections of bronze mirrors. He and his wife Barbara were collectors of western contemporary art and were active in local art circles. Gordon served on the Board of Directors of the Friends of the Corcoran Art Gallery and was Chairman of its Acquisitions Committee. The Gordons were also deeply involved with the Washington Society for the Performing Arts. Gordon was a long-time member of the Kenwood Country Club in Bethesda, Maryland, and was active in the affairs of the Christian Science Church, where he held several church offices. He is survived by his wife, Barbara W. Gordon of Washington, D.C.

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