

Memorial to I. Gregory Sohn

1911–2000

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Israel Gregory Sohn was born in Ukraine, Russia, November 12, 1911, and died in Rockville, Maryland, February 16, 2000. With his family, Greg left the USSR in 1921 and settled in New York City. In 1935, he obtained a B.S. degree from City College of New York and in 1938 a Master of Arts from Columbia University.

In graduate school, he came in contact with H.N. Coryell, one of the few micropaleontologists of that time who was studying Ostracoda rather than Foraminifera. The Ostracoda, tiny, highly specialized Crustacea that have a bivalved shell, superficially resemble very small beans, but like all Crustacea, they molt and form a slightly larger calcareous shell from time to time. Greg wrote his master's thesis on these fossils and made this group of Crustacea his life work. "Ostracoda of the Mauch Chunk (Mississippian of West Virginia)" was published in the *Journal of Paleontology* the same year he received his M.A. After the awarding of his degree, he worked for three years with the U.S. Army Corps of Engineers, before joining the U.S. Geological Survey.



Greg Sohn's life work began at the bottom, in the position of a technician with the Paleontology and Stratigraphy Section of the USGS. The section (and later branch) was housed in the greatly overcrowded, non-air-conditioned Natural History Building of the Smithsonian Institution in Washington, D.C. The gentlest word one can use to describe the offices for the professional staff is "miserable," and for the technicians, conditions were worse. Greg began with the branch in 1941; in the same year, he married Bonnie Schooler. He remained with the section during part of 1942, but the entry of the United States into World War II disrupted all of federal paleontology to the point that eventually only two paleontologists remained to identify fossils submitted by field parties.

Greg was assigned to the Mineral Deposits Section (later Non-metals Section, and subsequently Mineral Resources Branch) and sent to the Pacific Northwest to search for bauxite-rich clays, formed from the weathering of lava flows, which might serve as a source of aluminum. In later years, Greg was of considerable assistance to colleagues in need of Russian literature translation. His favorite joke was, "I learned my Russian in Moscow—Moscow, Idaho." After a stint on the lavas, he spent several years in Georgia, continuing the search for domestic sources of bauxite. He remained with the Mineral Resources Branch until 1949, when he was finally able to return to the Paleontology and Stratigraphy Branch. His efforts on clays resulted in one USGS circular, two maps (on one of which he was the sole author), and USGS Bulletin 1091, for which he was one of four authors.

By the time Greg returned to the museum building in Washington, the Paleontology and Stratigraphy Branch had grown considerably. Conditions were even more crowded, and for a time Greg shared an office with three others. Later, he was moved to Escanaba Hall, a World War II temporary building, where the Department of Energy building now stands. He gained a

fine office in the new east wing of the museum in 1963, but during the course of his career in the building, he had to move his office at least four times. After leaving Escanaba Hall, Greg spent a year in Israel; he obtained a doctorate in 1963 from the University of Jerusalem. While in that country he also worked with the Geological Survey of Israel, training several younger persons in the study of fossil Ostracoda.

Greg was deeply involved in the *Treatise on Invertebrate Paleontology* Ostracoda volume, published in 1961. He was active in the efforts to revise and expand this compendium. Despite this strong interest in description and classification, like all others in the USGS Paleontology and Stratigraphy Branch, his prime occupation was determining the age of rocks to aid in mapping. A secondary objective was to assist in determining the environment of deposition of sedimentary rocks. Greg frequently traveled to visit geologists in the field and also wrote reports on samples that were submitted. He processed many samples himself, for technical support was scarce. As a consequence of this task, he became keenly interested in experimenting with different preparation techniques, and he wrote several short papers summarizing his methods for separating microfossils from various kinds of rock matrix.

In addition to his federal employment, for nearly a decade, beginning in 1958, Greg taught in the geology department of George Washington University. In addition to teaching micropaleontology, he gave a course on taxonomic methods, basic to both paleontologists and zoologists. Subsequently, he was an adjunct professor in the department, and he taught occasional classes through 1981; he supervised at least one master's thesis. During 1982, the Brazilian National Oil Company, Petrobras, invited him to São Paulo, where he trained more students in the stratigraphic use of fossil Ostracoda.

Despite his many moves and the concomitant disruptions, Greg remained a productive member of the branch. A few of his earlier papers were co-authored with Jean M. Berdan, whose research emphasized lower Paleozoic ostracodes. Beginning in the 1970s, he co-authored some works with Louis S. Korniker, a Smithsonian Institution zoologist, in various attempts to link Recent and fossil forms. Greg Sohn retired in 1991, after 40 years with the U.S. Geological Survey, and was designated a scientist emeritus by the agency. Since 1968, Greg had been a research associate of the National Museum of Natural History, and he retained his office in the building after retirement. He continued active research until just a few months before his death.

One of Greg's strong characteristics was that he was a source of new ideas and new approaches to the study of Ostracoda. When faced with the problem of dating Pleistocene and post-Pleistocene terraces around the Great Salt Lake in Utah for a scientist mapping the area, he established that the ostracode fauna was the same in all terrace outcrops. Despite this negative information, he then developed the approach of dissolving the shells in dilute acid. After acid treatment, those that produced a "ghost" shape, an organic template on which the calcium carbonate of the shell was deposited, were in the terraces that turned out to be younger; in the older terraces, all organic material had disappeared from the shell. Later, he experimented with converting the calcite shell to fluorite so as to better see muscle scars.

Greg Sohn was much interested in the paleoecology of his organisms. He considered the issue of salinity tolerances and what constituted a freshwater environment for fossil ostracodes. He experimented to determine whether ostracodes could survive travel through the gut of a fish. He noted that a few ostracodes will prey on newly hatched gastropods, and he tried to apply this information to the control of schistosomiasis, for the parasite infects gastropods as an intermediate host. When the National Park Service developed Constitution Garden on the Mall in Washington, D.C., he obtained a collecting permit so that he could begin sampling the newly installed pond and could study ostracodes in a pristine habitat.

Relatively late in his life, Greg began to make videos of living ostracodes. An elaborate “Rube Goldberg” arrangement of wires, boxes, and miscellaneous gear was attached to his microscopes. As with many of his other activities, the videos were used for teaching students. One of his last projects was concerned with biogeography. It had been generally assumed that freshwater ostracodes in a dormant state after ponds had dried up could be distributed by wind, but this assumption had never been studied. Greg compared the size and weight of ostracodes to ash particles from Mount St. Helens; his results indicated that distribution by wind was indeed likely.

Beginning in the 1950s the number of ostracodologists in the world increased dramatically and eventually reached a point that made international gatherings feasible. Greg helped institute the meetings, and attended every one of them through the 1980s. In the group newsletter, *The Ostracodologist*, he prepared an annual list of new zoological names from genus to superfamily, thereby calling the attention of colleagues to publications that might otherwise have escaped their notice. He produced 18 such lists for the newsletter; two of them, from 1997 and 1998, are online. For years, he also was an associate editor for the *Zoological Record*.

Apart from the clay-bauxite investigations, his publication record contains more than 100 items, almost all concerned with ostracodes. In addition to those listed here, he published extensively in the *Journal of Paleontology*, the *Geological Society of America Bulletin*, and the *Journal of the Washington Academy of Sciences*. He also contributed to a variety of guidebooks and was a frequent contributor at the annual meetings of the Geological Society of America. More than one-third of his 29 abstracts—not counted among his articles—were for talks at GSA meetings.

Greg Sohn’s work made the Ostracoda more useful for biostratigraphy in the Paleozoic, Mesozoic, and Cenozoic, in both marine and freshwater strata, and, equally, he made contributions to the understanding of living Ostracoda. He was a fellow of the Geological Society of America and a member of the American Association of Petroleum Geologists, the Paleontological Society, the Society of Economic Paleontologists and Mineralogists, the Geological Society of Washington, and other organizations, including the Cosmos Club. He is survived by his wife, Bonnie, daughter Vivian and son Daniel, and four grandchildren.

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