Memorial to Brian Frederick Glenister (1928–2012)

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Brian F. Glenister, 83, a leading researcher on Paleozoic ammonoids, passed away on 7 June 2012 in Phoenix, Arizona. He was an influential member of the International Stratigraphic Commission and several of its subcommissions, led many seminars on Holocene lithofacies and molluscan biofacies in Florida Bay, and was an inspiring teacher for almost forty years at The University of Iowa in Iowa City.

Brian was born in Albany, Western Australia on 28 September 1928 into a large family whose father died four years later. He was then raised by his eldest sister but also encouraged greatly in his studies by his mother. He attended the University of Western Australia in Perth, where he received a B.Sc., majoring in physics in 1948. Brian had taken an introductory geology course in order to fulfill requirements for the degree, and decided that he liked it enough to switch to geology at the first opportunity, so he took a postgraduate year of geology courses in Perth



Brian Glenister at the Conklin Quarry in the Middle Devonian Cedar Valley Limestone near Iowa City. 1964. courtesy Desmond Collins.

in 1949. In 1950, he enrolled in the M.Sc. program at the University of Melbourne, working there as Curt Teichert's research assistant. He received his M.Sc. in geology in 1952. Between 1952 and 1954, jointly with his mentor Teichert, he published papers primarily on nautiloids, but also ammonoids, from Australia, and then his thesis on spiriferid brachiopods from Western Australia. In 1953, following Teichert's departure for the United States, Brian became lecturer in geology at the University of Melbourne. During the first half of 1954, he was temporary lecturer at the University of Western Australia, replacing Rhodes Fairbridge.

In 1954 Brian received a Fulbright Fellowship and was assigned to work with Rousseau Flower, a cephalopod specialist—primarily on nautiloids—at the New Mexico Institute of Mining and Technology. However, as a result of the intervention of Teichert and G.A. Cooper of the Smithsonian Institution, he studied instead at The University of Iowa under A.K. Miller and W.M. Furnish, completing his Ph.D. thesis on Devonian ammonoids from Western Australia in 1956 (Glenister, 1958).

Brian spent the 1955 summer field season with the Geological Survey of Canada as one of the geologists involved in Operation Franklin, the first major aircraft-supported geological exploration program ever conducted in the Canadian Arctic Archipelago. Brian was the only non-Canadian of eleven geologists who surveyed the stratigraphy and structure of the north-central part of the Archipelago, resulting in the 1963 GSC Memoir 320 of almost 700 pages, to which he contributed five papers plus three jointly with Ray Thorsteinsson.

Immediately after completing his Ph.D. at Iowa in early 1956, Brian returned to the University of Western Australia as lecturer, then senior lecturer, in geology. While in Perth, he published papers with Miller and Furnish from Iowa, and two with his wife, Anne, who had completed an M.S. thesis at Iowa on Ordovician conodonts (they met when they shared an office in Iowa City).

In the fall of 1959, Brian joined the geology faculty at The University of Iowa, where he taught and did research on ammonoids, nautiloids, and conodonts. He served as full professor beginning in 1966 and was chairperson of the Department of Geology from 1968 to 1974. Near the end of that tenure he was fully responsible for the department's move from a nineteenth-century building into an early twentieth-century one recently vacated by the Dentistry College. He engineered that challenging feat with his personality and administrative ability. Brian was the A.K. Miller Professor of Geology (a position created for him) from 1974 until his retirement in 1997, after which he worked steadily during emeritus status. He was as dedicated to the department as he was to his research.

Brian published over 140 papers primarily in paleontology, of which more than thirty were devoted to Permian ammonoids. Most of these were co-authored with his long-time colleague, W.M. "Bill" Furnish (1912-2007). Together they made major contributions to the nautiloid section of the Treatise on Invertebrate Paleontology (1964). For many years during their time together at Iowa, they concentrated research efforts on Permian ammonoids. In 1965 this was highlighted by an NSF-funded world tour of all the museums holding major Permian ammonoid collections such as those in the Netherlands, Germany, and the Paleontological Institute in Moscow, where they met with leading ammonoid workers B.I. Bogoslovsky on the Devonian and V.E. Ruzhencev on the Carboniferous and Permian. The trip was combined with fieldwork in the Sosio Valley of Sicily and was planned to include fieldwork in Timor. Unfortunately they arrived in Djakarta right at the beginning of the Indonesian revolution, but they successfully collected in Timor three years later. Brian and Bill worked for many years on the Permian part of the revision of the Paleozoic ammonoids for the Treatise on Invertebrate Paleontology. They were joined in this from the late 1980s on by Zhou Zuren of the Chinese Academy of Sciences, Nanjing, who spent several research leaves at The University of Iowa. Brian continued working on this well after retirement, as did Bill, who officially retired in 1978, their efforts achieving publication in 2009.

Brian made major contributions to the International Stratigraphic Commission, serving as titular (voting) member of the Permian Subcommission from 1978 forward and chair from 1980–1984, as well as maintaining membership in three boundary working groups: Devonian-Carboniferous, Carboniferous-Permian, and Permian-Triassic. Through the strength of his personality, commitment, and tenacity he marshaled Permian workers from all corners of the globe into abandoning long-held views and embracing the basics of the International Stratigraphic Code. In this effort, he was instrumental in the establishment of a tri-partite nomenclatural scheme for the Permian System. Especially convincing, following the Permian Congress in Perm, Russia, in 1991, was Brian's work in the Ural Mountains, the Guadalupe Mountains of west Texas, and South China. He demonstrated to enthusiastic and reluctant colleagues alike that these three regions offered the best stratigraphic representations for the Lower, Middle,

and Upper Permian; the Cisuralian, Guadalupian, and Lopingian epochs, respectively, and their component stages.

Together with his colleague Alan B. Shaw, Brian participated in and eventually led Amoco seminars devoted to the study of Holocene lithofacies and biofacies in Florida Bay and ancient analogues in the Mississippian of Iowa and Montana. This activity also affected teaching at Iowa in laboratories in "Principles of paleontology," which analyzed the molluscan biofacies of Florida Bay, and spring field trips for undergraduate geology students to that significant site.

Brian was the founder and chair of a committee of local citizens, formed following the flooding of the Coralville Reservoir in 1993, who raised over a half million dollars to develop the area below the spillway as a recreational and educational resource. The torrential release of water from the spillway stripped off fifteen feet of overburden, exposing spectacular bedding surfaces of a Devonian stromatoporoid-coral biostrome. The committee's plan for the Devonian Fossil Gorge, accomplished with the complete cooperation of the U.S. Army Corps of Engineers, was supported by major contributions from the local limestone quarry owners, many of whom Brian had long known personally. Midway in the last decade, the Corps of Engineers announced that the number of visitors to the gorge had exceeded one million.

A member of the Geological Society of America and many other geological and paleontological organizations, Brian was president of the Paleontological Society from 1988 to 1989. He was the recipient of the Gilbert Harris Award of the Paleontological Research Institution in 2000. At the 2004 Sixth International Symposium, Cephalopods Present and Past, he received a lifetime achievement award. Brian directed thirty-two M.S. theses and twenty-four completed Ph.D. dissertations during his tenure at Iowa.

Brian was an outgoing person, articulate at all times, and an enthusiastic supporter of geology department functions. He never lost his Australian accent although the edge softened over the years. Brian married Anne Marie Treloar when they were graduate students together at Iowa in 1956. From the mid-1970s on they lived in a specially designed house overlooking the Coralville Reservoir, with solar panels that effectively eliminated heating bills. It was there that Brian and Anne continued to host dinners for his students, visiting as well as Iowa City colleagues, and departmental alumnae reunions. Anne passed away in early 2010. They were loving parents of their three children, Alan Glenister, Linda Lehrer, and Kathryn Wolf, and five grandchildren. Brian will be deeply missed by all who knew and admired him.

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