

Obituary: Keith Ingham (1937-2022)



Keith Ingham was a most worthy recipient of the society's Professor Thomas Neville George Memorial Medal in 2004 as he excelled in the fields of both palaeontology and stratigraphy for which the medal is awarded. He was a regular contributor of short talks and display specimens at the society's Members' Nights in the 1970s and 1980s, led several field trips to Girvan and Dob's Linn from the 1980s to the early 2000s and lectured to the society in the early 2000s. He also wrote and co-wrote several of the chapters in the society's *Geological Excursions around Glasgow and Girvan*.

Originally from Harle Syke near Burnley, Lancashire, Keith obtained his BSc at the University of Hull in 1959 and his PhD there in 1962. He then joined the University of Glasgow, taking up a joint appointment between the Hunterian Museum and the, then, Department of Geology. He remained at Glasgow for his entire career and retired in 1998. He continued to be active in research and the curation of his extensive collections in the Hunterian Museum until ill health took its toll, some 18 months before his death in May 2022.

Keith Ingham was an internationally renowned expert on Ordovician trilobites and stratigraphy. His PhD study of the Upper Ordovician succession in the Howgill Fells in northern England and subsequent work in the Welsh Borderlands, at Girvan, Dob's Linn and on the Highland Border all reflected his remarkable practical and intellectual skills. His enormous patience enabled him to find and collect fossils even in very unpromising ground and to produce detailed (and accurate) geological maps in poorly exposed and/or structurally complex areas. His remarkable 3D sense at all scales enabled him to piece together the stratigraphical succession and unravel the geological structure of an area and, on a much smaller scale, to reconstruct the anatomy of trilobite (and other arthropod) exoskeletons from disparate and, in some instances deformed, pieces.

As a palaeontologist, Keith Ingham's clear descriptions of Ordovician trilobites reflected his eye for detail and the ability to make succinct comparisons between species. His papers were superbly illustrated by drawings and photographs of the highest quality. He took pride in compiling composite figures of photographs of trilobite specimens, each photo cropped and

fitted close to its neighbours in an intricate jigsaw of variously shaped images, evenly matched in tone and with a minimum of “wasted space”. These works will stand the test of time and are referred to by Ordovician trilobite workers around the world. The same applies to his collaborative 1975 review of the 230 species of the quintessentially Ordovician group of trilobites, the Trinucleidae. His reconstruction of the trinucleid *Marrolithus favus*, made as the symbol for the 1974 Symposium on the Ordovician System, became the logo for the Palaeontological Association and is testament to his first class artistic abilities that were also applied to many of the displays in the Hunterian Museum.

The review of the trinucleids included an analysis of their distribution and evolution using a series of global palaeogeographical maps; an early use of such maps that were a significant outcome of the development of plate tectonic theory in the previous decade. Palaeogeography and palaeobiogeography were important themes in Keith’s work, none more so than in his joint editorship of, and contributions in, the *Atlas of Palaeogeography and Lithofacies* published by the Geological Society of London in 1992. His artistic skills were also very much to the fore through his editorial responsibility for all the artwork in the highly illustrated volume that includes over a hundred colour maps showing the changing geography of what is now Britain and Ireland from the mid-Proterozoic to the present day.

As a stratigrapher, Keith Ingham, excelled in correlating Ordovician rock successions regionally and internationally and he played an important role in establishing the modern chronostratigraphical and biostratigraphical subdivisions of the Upper Ordovician in the Anglo-Welsh area, the type region for the Ordovician System. He was the only contributor common to both the 1972 and 2000 Geological Society of London volumes on the correlation of Ordovician rocks in the British Isles. As a member of the International Subcommission on the Ordovician System he was heavily involved in helping to establish an internationally recognized Ordovician-Silurian boundary, eventually chosen to be the section at Dob’s Linn in the Southern Uplands.

Beyond trilobites, Keith Ingham had an extensive knowledge of other fossil groups including graptolites, Jurassic marine vertebrates and even hominins. His deep interests outside geology included astronomy and photography. His undergraduate lectures on the Solar System exemplified his skills as a captivating and inspiring teacher and his lecture to the Society in 2000 on “The Geology of the Terrestrial Planets” included some of his own digital compilations of images of the surface of Mars. He had considerable knowledge of historical techniques in photography and photographic processing, an inkling of which was given to the Society at the 1983 soirée to mark its 125th anniversary: members had been invited to wear Victorian costume and the report in the Proceedings noted that photographer for the occasion “...who some believed to be Count Dracula, while others thought him to be Dr Ingham” used what appeared to be a box camera and magnesium flash.

Keith Ingham’s attention to detail was evident in all that he did and his perfectionism has meant that some major works on which he expended a great deal of effort were sadly left unfinished. The quality and scientific rigour of his published works, however, are an unquestionable scientific legacy. His generosity with his knowledge, his encouragement of the work of others and his communication skills both as a teacher and in the production of museum displays have touched a great many lives and will be sorely missed.

Alan Owen

Photo courtesy of Helje Pärnaste