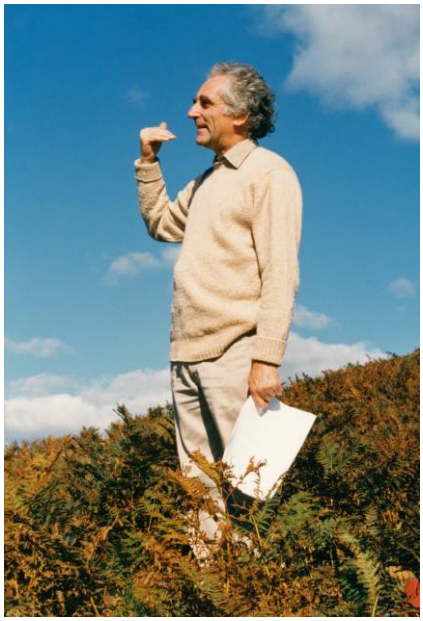
BRIAN JOHN BLUCK

29 August 1935 - 19 June 2015



Brian Bluck was born on the 29th of August 1935 into a working class family living in Pyle, nr Bridgend, South Wales. Brian's father was a miner and a rope-smith at Newlands Colliery, South Wales, and was a great influence on his early education. After studies at Bridgend County Grammar School and at Cardiff Technical College, he was initially attracted towards politics.

However, growing up amongst the coal mines and the fossiliferous Carboniferous limestones of South Wales, Brian was drawn towards geology and he applied to University College, Swansea for a place in their Geology Department. After a "difficult" interview, he was accepted onto the geology course and graduated in 1958.

Professor Frank HT Rhodes (Head of Department), and Dr Dick (RT) Owen were a great influence on him in Swansea and encouraged Brian to take a scholarship for a PhD on the South Wales coal measures, under the supervision of Dick Owen and Gilbert Kelling. Brian undertook the field mapping for the project with characteristic panache on a Villiers motorbike. This study proved to be the initial step in Brian's path to become one of the UK's foremost sedimentologists. Frank Rhodes then suggested he applied to the University of Illinois for a postdoctoral research post, a position that he took up in 1961, the year he married Mary. Working with Albert V Carozzi and Paul Potter, Brian studied Devonian carbonates and phosphates in Indiana and alluvial fans in Nevada, further extending his sedimentological experience. He returned from America on a NATO Post-Doctoral Research Fellowship at University College Swansea in 1962 to study the Triassic redbeds of South Wales. A post for an assistant lecturer came up at the University of Glasgow, and he was appointed by Prof T Neville George, who provided much advice on lecturing and publishing research. That position was turned into a lecturership in 1965 and Brian obtained a scholarship from the British Council for a sabbatical at universities in Amsterdam and Utrecht, where he further enhanced his sedimentological education. On his return to Glasgow, he rose through Senior Lecturer and Reader to be awarded a DSc in 1985 and was appointed Professor of Geology in 1989. After his retirement, he was appointed Emeritus Professor of Sedimentation and Tectonics, initially within the Department of Geography and subsequently to an Honorary Senior Research Fellow position in the merged School of Geographical and Earth Sciences.

Brian was awarded the Geological Society of London Lyell Fund in 1981, the Royal Society of Edinburgh Keith Medal in 1981, the Saltire Society Scottish Science Award for 1991, and the Edinburgh Geological Society Clough Medal in 1999-2000. He was a member of the editorial board of the Journal of Sedimentary Petrology, and Editor of the Scottish Journal of Geology and the Transactions of the Royal Society of Edinburgh.

Brian's research was impressively wide ranging but was built around an understanding of the 3D structure, texture and geometry of a range of different sedimentary deposits and their link to the broader scale tectonic environment. This work was always based upon meticulous field observations. Much of his initial research focussed on modern sedimentary processes. After studying the response of different shaped clasts to the waves on beaches in South Wales he moved on to propose a novel mechanism for the interaction of grain shape and flow turbulence from detailed observations in river systems in Iceland and Scotland. His derived models of sedimentation were based on insightful and wonderfully clear documentation of the structure of the deposits. At the same time he was studying the Palaeozoic Old Red Sandstone, a sequence in

which he identified some of the same structures observed in the recent deposits, leading to inferences of depositional processes from which it was a natural progression to study sediment provenance in ancient environments.

Brian was an early user of novel combinations of isotope dating techniques in collaborations with geochemists at the Scottish Universities Research and Reactor Centre (now SUERC) to establish the sources and origins of the clasts in the conglomerates. This eventually led him to identifying an ancient volcanic-plutonic arc sited in the Midland Valley of Scotland, the presence of which required a fore-arc basin that was found to be missing. From a comparison with North America and Greenland he showed that the metamorphic rocks of Scotland were out of place and suggested they were exotic, derived from the elsewhere and only entering into Scotland late in the Caledonian Orogeny. From these data coupled to seminal research on the rocks of the Ballantrae complex, he was able to show that Scotland comprised small fragments of crust, or terranes, brought together by strike-slip faulting. He helped recognise that the Old Red Sandstone in Scotland was composed of several pull-apart basins some of which were partly covered by the incoming Dalradian block. These studies of crustal terranes required the integration of many different branches of geoscience and brought a fresh and intellectually stimulating line of thinking to many aspects of Scottish Geology, moving away from the “fixist” views that had dominated up to then. Brian’s unique and wide ranging record of published research is testament to his ability to successfully bring together information at all geological spatial and temporal scales.

In the later stages of his career, Brian once again combined his sedimentological and tectonic expertise in research on the development of the Kapvaal Craton in South Africa, acting as a consultant for De Beers. This entailed looking at the behaviour of the craton with respect to the Orange River and the sediment it produced along its tract and the Namibian coast. Using detailed analysis of the coastal and river terrace deposits along the Orange and Vaal rivers. Brian confirmed that the coastal processes had been very active for a long time and that most of the sand discharged by the Orange has been transported along the coast and blown on-land thus making an extreme wave-dominated delta. The uplift of the craton took place in Late Cretaceous and early Tertiary times when a proto-Orange cut through the younger sediments of the cover to finally erode into the basement and deliver coarse durable clasts to the coast. These studies have refined understanding of the drainage evolution in southern Africa and are highly influential in the search for alluvial diamond deposits along the west coast of Africa.

Brian was a brilliant, popular, innovative and stimulating lecturer always generous with his time and his thoughts, and eager to help explain his subject to students. He was firmly committed to teaching in the field, but equally at ease lecturing on plate tectonic theory to first year students, or instructing final year honours students in the minutiae of sedimentology. He had a special ability to enthuse others and many professional geologists were initially converted into geoscience by his teaching. Brian was at the leading edge of research linking surface processes to deeper geology and through the clarity of his thinking in cross discipline areas, and as a consequence of his charm and political astuteness, he was pivotal in ensuring the highly successful merger of the disciplines of Earth Sciences and Geography into a single School at the University of Glasgow. The many hundreds of enthusiastic and talented Earth scientists that have graduated, and will graduate, from the University of Glasgow since that merger are perhaps his most impressive and lasting academic legacy.

Brian was a man of firm principles and never one shy away from controversy or difficult positions either in his academic or personal life. He was a committed vegetarian from the age of six, following a chance passing of the village butcher’s shop he was taken aback by what he heard and saw. In an era where this was anything but the norm, Brian ate a lot of omelettes at that time. In some respects Brian was the archetypal Welshman, through his loves of music and rugby, but he was never more at home than when enthusing others in the geology of Scotland. Although his geological heartland migrated northwards through time, his geological influence was truly global through his many international friends and collaborators. His exceptionally broad scientific perspective was fostered by these links, and associated fieldwork in USA, Southern Africa, India, Iceland, Spain, Sweden, Canada and many places in Britain and Ireland.

Brian will be sorely missed by the many geologists that he influenced, whether through his inspirational teaching, his thought provoking research, or his infectious and joyous enthusiasm in the field. An enthusiasm that characteristically remained undimmed even by a Scarborough lifeboat crew's insistence that the class of students Brian was leading, having been cut off by the incoming tide, should abandon their geological examination of the cliff face rather than wait several hours for the North Sea to recede! His mischievous sense of humour will be fondly remembered by many, although in the rather unlikely event that Glasgow Earth Science graduates ever attempt to join a croquet club, the somewhat imaginative "rules" they learnt on field trips with Brian might need some significant revision.

Brian died quietly at his home in Old Kilpatrick on 19th June 2015. He is survived by his wife Mary, daughter Emma, son Tim and four grandchildren. He leaves a legacy as a talented and passionate geologist, an influential polymath, and a true gentleman. He had a rare gift of clarity of thinking, matched by a wide-ranging expertise that branched out in all directions from his sedimentological core. His infectious personality made science fun and his contribution to geoscience in Scotland has been immense. He will be remembered with considerable affection by all who knew him.

Tim Dempster

Brian John Bluck, BSc, PhD (Swansea), DSc (Glasgow), FGS. Born 29th August 1935. Elected FRSE 1981. Died 19th June 2015