JOHN BARRY DAWSON 1932–2013



Photo courtesy of Barbara Scott Smith

Barry Dawson died suddenly at his home in Edinburgh on Saturday 2nd of February, 2013. He will be missed by his son Michael, daughters Rebecca and Sarah, colleagues and friends many of whom belong to the kimberlite, carbonatite and upper mantle petrology community. Barry was known and loved not only for his wit, charm and conviviality but also for his extensive knowledge of kimberlite geology, poetry and African history.

He was widely regarded as the patriarch of the "kimberlite family". Well respected by university faculty, students and industrial geoscientists, Barry was an inspiration and a near father-figure to many young geoscientists, always willing to talk with them about their work. Typically, he never held a grudge and was always willing to consider opposing views.

Barry was a Gentleman and one of a rare breed, an almost irrepressible raconteur, which complemented his skill as an after-dinner speaker, and his penchant for entertaining colleagues with amusing, if rather riské, songs. His hospitality was legendary and many of us have lasting memories of being his guest at the 'Braid Farm Road Hotel', enjoying the hospitality and G&Ts so generously provided by the host.

Born in Leeds (UK), Barry attended Leeds University from which he graduated with a BSc in Geology in 1957. His interest in all things African was developed as a graduate student with the Research Institute of African Geology. His work

at the institute led to his studies of kimberlite intrusions in Basutoland (now Lesotho), which culminated in his PhD in 1960. Parts of his thesis appeared in the seminal paper Basutoland Kimberlites (*Geological Society of America Bulletin*, 73, 1962). This work was the first modern study of kimberlites and was notable in that Barry introduced the term "fluidization" to kimberlite geology. Even today there are on-going arguments as to the role of this process in diatreme emplacement!

Subsequent to graduation, Barry and his late wife Christine embarked again for Africa to join the Tanganyika Geological Survey, where he was employed to map areas of the then remote Angata Salei region near Lake Natron, a location of an active volcano. The first ever descent into the crater of this volcano, Oldoinyo Lengai, (the Maasi Mountain of God), was made by Barry and Ray Pickering in October 1960. It was during this visit that he recognized the unique sodium carbonate volcanism and earned himself a permanent place in petrological history with the publication of his paper on these extraordinary rocks in Nature (1962). Subsequently, he maintained an active research program on the petrology of Oldoinyo Lengai and other volcanoes in the Gregory Rift Valley. During this work he narrowly survived one violent silicate ash eruption of Oldoinyo Lengai in 1966, and was fortunate enough to observe, some 40 years later

in 2007, the return to silicate pyroclastic activity from the quiet effusive natrocarbonatite eruptions.

To the time of his death, Barry was actively involved in studies of Oldoinyo Lengai, Kerimasi, Mosonik and other Tanzanian volcanoes. He was especially pleased with the publication in 2009 of his comprehensive review of volcanic activity in the Gregory Rift (*The Gregory Rift Valley* and *Neogene-Recent Volcanoes of Northern Tanzania*. Memoir no. 33, Geological Society, London). Undoubtedly, Barry's knowledge of this region surpassed that of any other geologist and his passing deprives us of a lifetime of accumulated wisdom.

In his academic career, Barry was initially employed at the University of St Andrews (1964-1978), followed by appointment as Sorby Professor of Geology, University of Sheffield and ultimately as Professor at the University of Edinburgh 1988–1997. He retired from teaching in 1997 and continued an active programme of research in his two favourite topics; upper mantlederived xenoliths and Recent volcanic rocks of northern Tanzania. In recognition of his research he was awarded the Collins medal of the Mineralogical Society of Great Britain & Ireland in 2012 and the Clough Medal of the Geological Society of Edinburgh in 1999. He was a Fellow of the Royal Society of Edinburgh and the German Academy of Scientists.

Barry's involvement with kimberlites continued throughout his life. His seminal paper with Barry Hawthorne on the Benfontein sills (Journal of the Geological Society of London, 129, 1973) demonstrated for the first time that kimberlites were not formed by some bizarre type of magmatism but are subject to normal igneous differentiation processes. His book Kimberlites and their Xenoliths (1980) remained for many vears the definitive reference on these topics. Barry was one of the instigators and conveners of the 1st International Kimberlite Conference, held in Cape Town, South Africa (1973), with field excursions led by he and Peter Nixon to Lesotho. This conference resulted in world-wide attention being drawn to kimberlites and upper mantlederived xenoliths, and to Barry as "the authority" on all things "kimberlitic". Subsequently, Barry was a convenor of the 2nd International Kimberlite Conference held in Santa Fe, New Mexico, USA (1978); an event at which major advances in kimberlite geology and upper mantle petrology were reported; these being a product of studies of the material collected in Lesotho and South Africa. As a consequence of the success of these conferences Barry was instrumental in the formation of the International Kimberlite Conference Advisory Committee and was Chairman of this committee from 1986–1998.

During the last years of his life Barry undertook several expeditions to the Oldoinyo Lengai area, even making the difficult trek to the summit of the volcano, Kerimasi. As a participant in several of these trips I had the pleasure of listening to Barry's recollections of his early days in Tanzania and learning of the hardships endured by field geologists (and their wives) at that time. I doubt if there are many people today who could run a field camp such as Barry and Christine did, in a remote arid place where there was little water, no helicopter support or GPS and you had to shoot your own dinner! As late as December 2012 he was back in South Africa and Lesotho pursuing his interests with more field work.

The photograph above shows a typical 'Dawson Tanzanian Moment'. He was perhaps never happier than when in the field and conversing with the locals, commonly in Kiswahili. With him are Alex (left) and Burra (centre) his driver and guide, respectively, at Oldoinyo Lengai in 2007.

His one regret was that he had not yet reached the summits of all the Scottish Munros. His passing is a great loss to us all. To some of us involved in kimberlite and carbonatite research he can never be replaced as he was a mentor and guide throughout our careers.

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