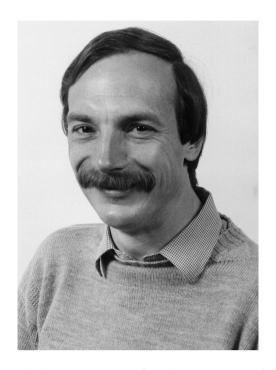
## **OBITUARY: DAVID HENRY KEEN** 1947-2006

With the premature death on Easter Day of David Keen, we have lost a leading figure in environmental research into the recent geological past, a field of increasing importance as we look towards an uncertain climatic future. The multidisciplinary nature of this type of research is reflected by David's first degree: joint honours in geography and geology at Bedford College, University of London (1969), and in his academic career, working in Departments of Geology (research fellow, Queen Mary College, University of London, 1972-5), Geography (all grades from lecturer to professor at what eventually became Coventry University, 1975-2002) and Archaeology (Birmingham, since 2002). David's special expertise was using fossil molluscs as evidence for the nature of past environments, climates and as a means of geological correlation.

David was born in Hitchin in 1947, although his family hailed from SE London and he was brought up in Catford, attending Raine's Foundation Grammar School in Stepney (1958-66). After graduating at Bedford College, he continued there as a post-graduate, gaining his Ph.D. in 1975 on the Pleistocene history of the English Channel under the supervision of Dr Christopher Green. This topic brought him into contact with similarly minded people, including academics, archaeologists and museum personnel, in France and on the Channel Islands. He maintained close collaborative links across the channel throughout his career, leading field excursions of British learned societies to France and the Channel Islands, and of French societies in the other direction. The recent Field Guide to Normandy (May 2006) published by the Association Française pour l'Etude du Quaternaire (AFEQ) was appropriately dedicated to his memory.

Our understanding of the Quaternary Era, which encompasses a complex succession of cold (glacial) and temperate (interglacial) periods during the past ~2 million years, developed considerably during the course of David's career. Indeed, he was one of several who, from the late 1970s onwards, promoted an interpretation in which much greater complexity of environmental change was envisaged. The orthodox view



claimed the existence of only two interglacial periods in the last half a million years (between the Anglian glacial stage and the Holocene). However, David repeatedly argued that an additional interglacial stage could be recognized between the Hoxnian (the stage immediately following the Anglian) and the Ipswichian (the This view, then somewhat Last interglacial). controversial, was summarised in a textbook he co-authored with Bob Jones entitled Pleistocene Environments in the British Isles (Chapman & Hall, 1993). The situation has proved to be even more complex than originally suggested by David and there is now evidence for two additional interglacial stages occurring between the Hoxnian and the Ipswichian, a view he readily embraced and one to which he provided additional support. Such views had been anticipated by people in the palaeoceanography community, who had proposed a series of Marine Isotope Stages (MIS) based on oxygen isotope records from deep-sea cores. These records provided a global chronology to assess events during the Quaternary and the challenge was to correlate episodic events on land with these continuous records from the deep-sea.

Much of David's evidence came from the study of non-marine molluscs in fluvial terrace deposits, in particular the occurrence of the bivalve Corbicula and the small prosobranch Belgrandia. He correctly pointed out that in the

British Pleistocene Corbicula is never associated with Hippopotamus, an indicator species of the Ipswichian (MIS 5e), except where reworking is involved. Together with a few other colleagues, he suggested that the presence of Corbicula indicated a pre-Ipswichian interglacial age, probably attributable to MIS 7 (or earlier). Most people would now accept this view. However, he also claimed that Belgrandia did not occur with Corbicula in Pleistocene deposits in the Midlands and, by extension, did not occur in MIS 7. I had a long-standing, but always good-humoured, argument with him about this, which is espoused in a number of our papers. At the time of his death, he had been working on a new site near Peterborough, which contained both these critical species in what appeared to be a MIS 7 context. I couldn't resist pulling his leg and told him how much I looked forward to reading the paper he was preparing on the site, especially the discussion on its age.

At Coventry, where the bulk of his career unfolded, he was part of a small but influential centre of excellence in Quaternary research and teaching within what was once the polytechnic sector. Sadly that centre was soon disbanded as the new century began and David turned to consultancy. Amongst several new challenges, he developed an important role as National Coordinator of the 'National Ice Age Network', an initiative established with funding from the Aggregates Levy Sustainability Fund, overseen by English Heritage. His particular brief was to monitor, in collaboration with other specialists, important Quaternary geological and archaeological sites arising from aggregates extraction, especially in the English Midlands, always his stamping ground both geographically and in terms of expertise. This coincided with his new position at Birmingham, where he had made a notable impact before his tenure was so abruptly curtailed.

There is a long list of positions on examinations boards and scientific committees, such as periods as Secretary (1986-1990) and President (2002-2005) of the Quaternary Research Association, Trustee of the Bill Bishop Trust, European editor of *Quaternary Science Reviews*, editor of the *Quaternary Newsletter* and an extraordinarily long period as Editor (1991-2002) of the *Proceedings of the Geologists' Association*. He received the Foulerton Award from the

Geologists' Association in 2003. He also served on, and was eventually Chair of, the committee that oversees the funding of radiocarbon dating by the Government's Natural Environmental Research Council. He had been a member of the Conchological Society since 1985 and had contributed records to the Society's non-marine census. He leaves a legacy of over a hundred publications, including half a dozen authored/ edited books and more than sixty articles in major journals, with more of both to appear posthumously. As a consultant to English Nature, he co-authored the Geological Conservation Review volume on the Quaternary SSSIs (Sites of Special Scientific Interest) in 'South-West England' and 'East Anglia and the Midlands' (covering a third of all British Quaternary SSSIs), to be published shortly. His large collection of Mollusca will find its way to the National Museums and Galleries of Wales, Cardiff. He leaves a wife, son, daughter, father, brother and sister.

Professor David Henry Keen, born 26th January 1947, died 16th April 2006.

R.C. Preece

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