

Dr Christopher King, December 1943 - January 2015, some personal recollections

Chris King, a founder member of the Tertiary Research Group, died suddenly on January 5th 2015. TRG members who knew him, will remember the most enjoyable French field trips he led, as well as some of his more excruciating thematic puns.



Figure 1. Chris King on the Giza Plateau, Egypt 2008.

Education

As a child, Chris lived on the outskirts of Southampton, a city on the south coast of England. More importantly geologically, in the centre of the Hampshire Basin, famous for its Tertiary rocks and fossils. He attended the local junior school, then, after passing his eleven plus examinations, moved on to Barton Peveril Grammar School, now a Sixth Form College. His two main interests; geology and astronomy stayed with him the whole of his life. Family trips to Lyme Regis as well as local London Clay brick pits did nothing to dampen his enthusiasm.

At Grammar School he achieved three “A level” passes and at the age of 20, gained a place as an external student at Kingston College of Technology. Initially, he had applied for a job locally with the Ministry of Agriculture, but luckily for geology, decided not to take it.

Geology and the Tertiary Research Group

During his time at Kingston his passion for the early Eocene London Clay grew but he never lost his love of the sandier facies of the middle Eocene Bracklesham Beds. As a second year student, he co-authored a paper with Dennis Curry [1, 2] on the London Clay of Lower Swanwick Brickyard, Bursledon, a site a few miles from his parent’s home where he had collected as a schoolboy.

While at Kingston, he lodged in nearby New Malden, SW London with Tony and Sheila King. Tony, no relation, shared Chris’ interest in the Tertiary, but had a preference for the middle Eocene. When in 1968 Chris achieved a BSc at Kingston he opted to do a PhD at Imperial College, London on his favourite topic, the London Clay. At this time, the soft rocks of the Palaeocene and Eocene were unfashionable and understudied. ‘Real’ palaeontologists armed themselves with hammers and chisels whilst Chris preferred a trowel, sieve and gardening spade. It was during his time at Imperial

College, that he and Tony King, became founder members of the Tertiary Research Group.

The birthplace of the TRG was John Cooper's 'room' in Gallery 9, a disused library gallery in the Natural History Museum, London. John allowed this to become a hub for all those interested in the London Clay. When it became apparent that a formal group was viable, a steering committee including Chris and Tony was formed. It was Chris, who in 1969 led the first TRG fieldtrip, to Swanwick Brickyard. Chris and Tony introduced the fledgling group to some of the famous names in British Tertiary Geology, Fred Stinton, Dennis Curry, Paul Clasby, Roy Fowler and Edmund Venables.

Career

After three years at Imperial College, presumably when his funding ran out, he put his research topic on the back burner and joined Paleoservices Ltd, a geological consulting company. Over the next few years both Chris and Tony became increasingly distant from the TRG. This was partly due to pressure of work and partly despite the initial lofty ideals of being a 'Research Group'; all most members wanted to do was to collect fossils. It was probably the founding of the journal *Tertiary Research* in 1976, that brought back Chris into the fold [5, 6, 41].

Chris worked at Paleoservices and its successor Paleo Services until 1992. During all of this time Professor Dick Moody kept his PhD registration open (more than 21 years) and had his faith rewarded in 1991 when Chris presented his thesis 'The Stratigraphy of the London Clay in the Hampshire Basin' [29]. Unfortunately, this was never published as Chris was concerned about the quality of the photomicrographs.

Going abroad

If accepting the place at Kingston College of Technology was the first pivotal point in Chris' life, joining a Geologists' Association trip across the Sahara in 1986 was the second; also organised by Dick Moody. This trip was not without its mishaps, including the breakdown and abandoning of the expedition truck which necessitated a large number of people travelling back across the Sahara in a single Landrover. For many, this was the highlight of the trip and is still spoken of with reverence. At about this time, Chris decided that there was more to life than 9 to 5 commuting and decided to work part time. This gave him time to pursue his personal research and complete his PhD thesis.

It was no surprise that, when an opportunity presented itself to return to Niger with Kingston University and the NHM, Chris jumped at it. The objective was to search for Baryonyx-like dinosaurs in the Ténéré desert and to be part of a BBC/ David Attenborough television series. The die was cast, and when, a couple of years later, in 1990, a similar trip



Figure 2. Chris King, in the field in Uzbekistan, 2004) writing his field notes.

was organised, Chris did not need asking twice.

A third trip to Niger, with the University of Chicago went less smoothly, when Chris and a number of participants deciding that the region was too unstable to support a large party and flew home. Sub Saharan Africa was getting increasingly unsafe, and it looked as if desert fieldwork had come to an end. Then, out of the blue, an invitation came, to spend some time the Moscow University Field Station in the Crimea. This was a completely different cultural experience. The Field Station was something between a WW2 prison camp and a university campus. The staff were charming, and every possible event was turned into an excuse for a party, dominated by sprats (tinned sprats), beer and vodka. The scenery and geology was outstanding, assuming that you shared a fondness for carbonate platforms.

The Soviet Union was disintegrating and the administrative vacuum provided a window of opportunity to visit the former Soviet states; Uzbekistan and Kazakhstan. In all, Chris visited Uzbekistan about eight times and Kazakhstan at least three times. Chris appeared to enjoy camping and expedition life in general. When he chose to pitch it, he lived in a battered gravity-defying one man ridge tent supported by two poles and two guy ropes and a degree of optimism. In Uzbekistan he assisted David Archibald and a combined Russian, US and UK team in mining Mesozoic mammals and placing them in a stratigraphic context [48, 50, 51, 71]. In western Kazakhstan, he studied the microfossil assemblages in the Eocene of Mangyschlak Peninsula, Ustyurt Plateau and the Turan Platform [57, 58, 63, 64, 69, 83, 85, 87].

It was at about the time when the former Soviet Union became less accessible, another opportunity presented itself. Many of us had been involved in a long-running quest to find a suitable location for the base of the Eocene. This involved visiting a number of countries including the USA, Israel and Egypt. Eventually a suitable candidate for a stratotype section was found, close to Luxor, on the Nile [55, 56, 62, 75, 78, 79]. The Egyptians were extremely hospitable and it was a novelty to sleep in a 4 star hotel rather than a sandpit. When the project eventually drew to a close, many of the participants did not want to sever their ties with Egypt so they reinvented themselves as geoarchaeologists. This gave Chris and his co-workers, supported by Marie-Pierre Aubry and Bill Berggren, virtually unfettered access to the various tombs and monuments in the Valley of the Kings and Thebes mountain, which true to form, he logged [72]. Who coined the term “pharonic necrostratigraphy” [66] is uncertain but it has now entered the geological lexicon.

When not working in exotic locations, Chris maintained his interest in local geology, contributing to papers on the British [32, 34, 43, 45, 46] and European Tertiary [39, 42, 47].

More recently in Egypt, as guests of the University of Michigan, Chris, assisted by Etienne Steurbaut and Charlie Underwood, overturned the conventional late Eocene stratigraphy of Wadi al Hitan, the famous Valley of the (fossil) whales west of the Fayum. Together they produced a scheme that allowed the famous vertebrate faunas to be placed in a sound lithostratigraphic framework [73, 80, 81, 89].

England, the Eocene, the Lias

Perhaps the third pivotal point (fourth if you count marrying his partner, Pat) was moving from Morden to Bridport, Dorset, within a stone's throw of Lyme Regis. One facet of Chris' life, that was not generally evident to his friends was his childhood fascination with the Lower Lias. Over the last couple of decades he regularly visited both the Dorset and the North Yorkshire, meticulously collected ammonites and made detailed logs of the sections. While living in Dorset, he still worked part-time, undertaking short contracts as a wellsite biostratigrapher in the North Sea, North Africa, Venezuela, Demark and more recently, the UK onshore. By 2000 he was moving into the world of engineering geology due to his expertise in the London Clay. He started to teach courses covering the London Clay and the Harwich formations to engineering geologists which soon became essential for engineers working on the Crossrail and Thames Tideway projects.

Chris published more than 90 scientific papers that are listed in Appendix 1 and cross referenced to this account.

Obituaries, eponyms

There are other obituaries, each viewing Chris' life and achievements from different aspects. Dick Moody (2015a,b) as one would expect from his college professor and PhD supervisor, focussed on his early academic career. Chris' work colleagues, Haydon Bailey (Bailey *et al*, 2015; Bailey, 2015) and Liam Gallagher (Gallagher, 2015) highlight his career as a commercial biostratigrapher and more recently, in the field of geological engineering.

He had two species of calcareous nannofossil named after him; *Pontosphaera kingii* and *Dictyococcites chriskingii*, both by his friend, Etienne Steurbaut (Steurbaut 1991, 2011).

Chris leaves behind his wife Pat, his mother Joan and three younger brothers; David, Robert and Raymond. He will be missed by the many friends and colleagues whose lives he touched.

This account was written with the assistance of many of Chris' friends including Haydon Bailey, Dick Moody, Jackie Skipper, Ross Sandman, David King, Pat King and Liam Gallagher.

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Appendix 1

A list of publications by Dr Chris King.

- Curry, D. & King, C. 1965. The Eocene succession at Lower Swanwick Brickyard, Hampshire. *Proceedings of the Geologists' Association* 76 (1): 29-35.
- Curry, D., King, C. & Venables, E.M. 1965. Field meeting at Lower Swanwick Brickyard, Hampshire, and Bracklesham Bay and Selsey, Sussex: 1 July 1962. *Proceedings of the Geologists' Association* 76(1): 37.
- King, C. 1970. The biostratigraphy of the London Clay in the London district. *Tertiary Times* 1: 13-15.
- King, A. & King, C. 1973. Commentaires sur une série d'articles de C.W. Haskins intitulées: 'Tertiary Ostracoda from the Isle of Wight and Barton, Hampshire, England. Parts I - VII'. *Revue de Micropaléontologie* 16: 19-22.
- King, C. & King, A. 1976. A London Clay section at Waterworks Corner, Woodford, Essex. *Tertiary Research* 1(1): 21-24.
- King, A. & King, C. 1977. The stratigraphy of the Earnley 'division' (Bracklesham Group) at Copythorne, Hampshire. *Tertiary Research* 1: 115-118.
- Curry, D., King, A., King, C. & Stinton, F. 1977. The Bracklesham Beds (Eocene) of Bracklesham Bay and Selsey, Sussex. *Proceedings of the Geologists' Association* 88: 243-254.
- Kemp, D., King, A., King, C. & Quayle, J. 1979. Stratigraphy and biota of the Elmore Formation (Huntingbridge Division, Bracklesham Group) at Lee-on-the-Solent, Hampshire. *Tertiary Research* 2: 93-103.
- King, C. & Kemp, D. 1980. Exposures in the London Clay of the Gosport area (Hants.). *Tertiary Research* 3: 71-81.
- King, C. 1981. Stratigraphy of the London Clay and associated deposits. *Tertiary Research Special Paper* 6: 158 pp.
- King, C. *et al.* 1981. Cainozoic of the North Sea. In: Jenkins, D.G. & Murray, J.W. (eds.). *Stratigraphical Atlas of Fossil Foraminifera*. Horwood (Ellis): 294-298.
- King, C. 1982. Comments on 'The nomenclature of the Claygate Beds and Bagshot Beds of London and Essex' (Bristow, 1982) and 'The Claygate Beds of Essex' (Bristow, Ellison & Wood, 1980). *Tertiary Research* 4: 47-52.
- Knox, R., Harland, R. & King, C. 1983. Dinoflagellate cyst analysis of the basal London Clay of southern England. *Newsletters in Stratigraphy* 12: 71-74.
- King, C. 1983. Cainozoic micropalaeontological biostratigraphy of the North Sea. *Report of the Institute of Geological Sciences* 82/7: 40 pp. 6 pls.
- Cooper, J., Gamble, H. & King, C. 1984. A bibliography of the Isle of Sheppey: geology, palaeontology, archaeology, topography, history and literature, 1572-1983. *Tertiary Research* 6: 35-46.
- King, C. 1984. The stratigraphy of the London Clay Formation and Virginia Water Formation in the coastal sections of the Isle of Sheppey Kent, England. *Tertiary Research* 5: 121-160.
- King, C. 1985. In: Bristow, C. *Geology of the country around Chelmsford*. British Geological Survey. (microfaunal, molluscan and lithostratigraphic contributions by C.K.).
- King, C. 1986. In: Lake, R. *et al.* *Geology of the country around Southend and Foulness*. British Geological Survey. (mollusc identifications by C.K.).
- King, C. 1987. In: Edwards, R. & Freshney, E.. *Geology of the country around Southampton*. British Geological Survey. (contributor: C.K.).

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22. King, C., Bailey, H., Burton, C. & King, A. 1989. Cretaceous of the North Sea. *In*: Jenkins, D. & Murray, J. (eds). *Stratigraphical atlas of fossil Foraminifera* (2nd ed.): Horwood (Ellis): 372-417.
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31. King, C. 1992. Problematic microfossils from the London Clay Formation studied by E.M. Venables. *Tertiary Research* 13: 113-116.
32. Bone, D. & King, C. 1992. The London Clay of Earldoms Clay Pit, Whiteparish, Wiltshire. *Tertiary Research* 13: 125-130.
33. Ali, J., King, C. & Hailwood, E. 1993. Magnetostratigraphic calibration of Early Eocene depositional sequences in the southern North Sea Basin. *In*: High Resolution Stratigraphy. *Geological Society Special Publication* 70: 99-125.
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