

Alec Trendall: geologist, explorer, and cheese maker

Alec Trendall was born in Middlesex, UK, on 8 December 1928. After early schooling in India with his brother, Alec returned to the UK in 1937. While at Imperial College in London, he was greatly influenced by Robert Shackleton, who taught petrology. Shackleton supervised Alec's Honours thesis, and subsequently his PhD in 1949.

Later, Alec was invited to join a six-man expedition led by Duncan Carse to South Georgia to survey this major sub-Antarctic island. Carse led three South Georgia surveys. On the 1951–52 expedition, Alec dislocated his left knee that necessitated him being sent back to England for specialist treatment. During Alec's recuperation, Carse asked whether he was interested in going to South Georgia for the 1952–53 season. Alec declined but eventually accepted Carse's invitation to join the 1953–54 expedition while at Keele University. They sailed south two months after Alec's marriage to Kathleen Waldon, a nurse he had met while recuperating.

On his return from South Georgia, and after writing up his geological results, Alec joined the Geological Survey of Uganda and stayed for eight years. With Uganda independence looming, Alec accepted a position with the Geological Survey of Western Australia (GSWA) as petrologist in May 1962. He had little idea that the banded iron-formations of the Hamersley Group were to become a consuming interest for the rest of his geological career. This interest grew out of an investigation into the occurrence of blue asbestos (crocidolite) in the banded iron-formations of the group in which he was the lead researcher from 1964. It rapidly became apparent that a study of the origin of the banded iron-formations was an important part of this investigation, particularly as these rocks are the primary source of the iron ore deposits that were being actively explored and

developed at that time. This work culminated in GSWA Bulletin 119 — The iron formations of the Precambrian Hamersley Group, Western Australia, co-authored with John Blockley.

Alec received worldwide recognition for his work on banded iron-formations and was invited to participate in one of the Dahlem Conferences organized by the Freie Universität of Berlin. The proceedings of this 1983 conference, with Alec as one of the editors, were published under the title, *Patterns of change in Earth evolution*.

Alec recognized that work on the Precambrian rocks of Western Australia depended on accurate geochronological data. He had long been of the opinion that a numerical nomenclature for the Precambrian would enable Precambrian stratigraphy to 'start anew', rather than follow the approach used in the Phanerozoic. He articulated this in his 1966 paper, *Towards rationalism in Precambrian stratigraphy*. In 1968 he and John De Laeter [head of Applied Physics at the Western Australian Institute of Technology (WAIT), now Curtin University] established a joint program whereby GSWA supplied the samples and WAIT did the geochronological analyses.

Alec served as Director of GSWA from 1980 to 1986. One initiative during his term was to produce an updated account of the geology and mineral resources of the State. This was a large task and when Alec retired, his successor, Phil Playford, gave Alec the task of overseeing the completion of what became *Memoir 3 — Geology and mineral resources of Western Australia* — which was published in 1990 along with a new State geological map.

Alec was awarded a DSc for his work on banded iron-formations by the University of London, the Clarke Medal of the Royal Society of New South Wales in 1977, and the Gibb Maitland Medal by the Western Australian Division of the Geological Society of Australia in 1987. Trendall Crag in South Georgia is named after him.

Alec Trendall died peacefully at home near Denmark south of Perth, after a short illness.

*This is an abridged version of an article written by Tony Cockbain, based on an auto-obituary started in Albany Hospital on 19 January 2013, supplemented by details from Alec's book *Putting South Georgia on the map*, with assistance from Kathleen and Jasper Trendall, and John Blockley.*

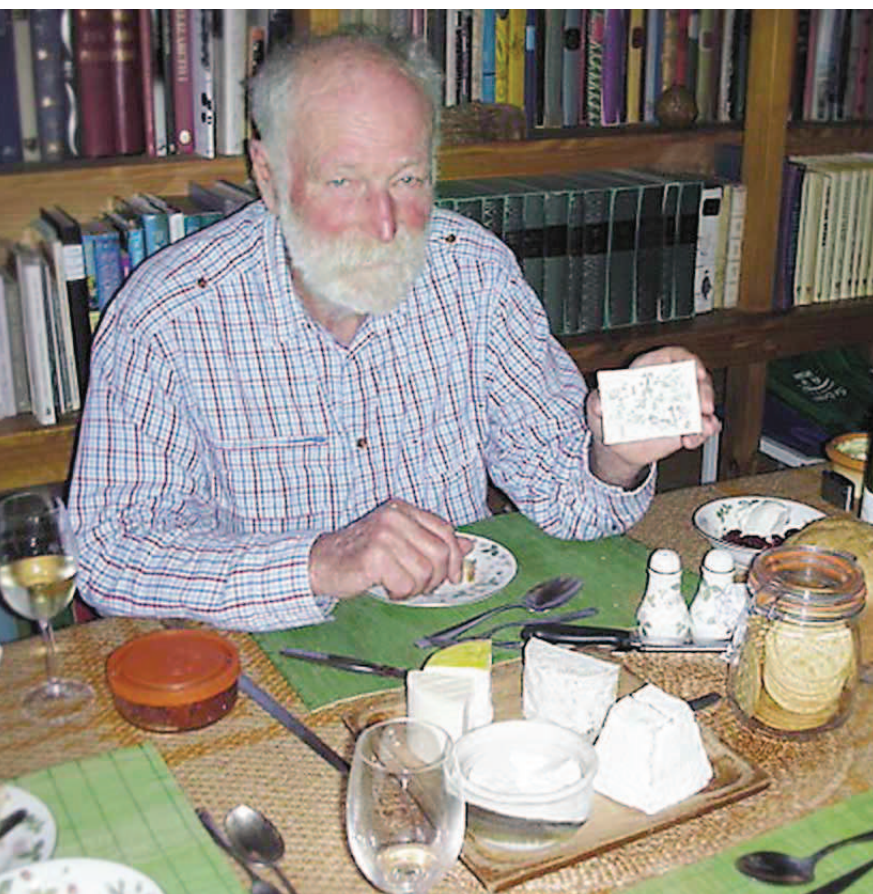


Figure 1. Alec Trendall 1928–2013 (Photograph courtesy PE Playford)