

Guest editorial

If you have a set of rocks, what should you call them?

By tradition, palaeontologists use the Linnaean scheme in the classification of fossil organisms. But what about the naming of rocks or sequences of rocks in which those fossils occur; or what about those rocks which never had even a whiff of an organism at the time of their formation? My favourite rock name is Charnockite, named from the tombstone of Job Charnock, an employee of the East India Company and the founder of Calcutta, who by legend “after the death of his wife, every year sacrificed a cock to her memory in the mausoleum” (Dictionary of National Biography, 1990) until his own death in January 1693. But it is not individual rock types that form the subject of this note; rather it is larger sets of related rocks, whether sedimentary, igneous, or metamorphic in origin. Description of related sets of rocks requires schemes of nomenclature that are widely accepted and used; these, in themselves, must be firmly based on an internationally agreed set of principles, and there must be wide dissemination of additions to the nomenclature.

Antarctica differs from all other places in that scientific investigations are carried out by many nations. Communications between their national programmes range from the acceptable to the non-existent. The recent rapid proliferation of national geological programmes, together with the move from reconnaissance investigations to detailed studies, means that the question of nomenclature must be faced before stratigraphic chaos sets in. Fortunately such chaos is further away for igneous and metamorphic rocks, but it waits in the wings for the right moment. The problem may arise for two reasons: first, new stratigraphic names may be published in journals or national reports that are not circulated widely; and second, research may be conducted by more than one national programme in the same area over the same time period. The King George Island region off the northern Antarctic Peninsula is obviously a case in point. Argentina, Brazil, Chile, China, Korea, Poland, Spain, Sweden, the United Kingdom, and the United States have all had field projects on the sedimentary and volcanic rocks exposed on these islands. The possibility exists for many alternate names for the same rock unit, independent of the problems stemming from differing views on what constitutes the definition of stratigraphic units.

In an attempt to minimize the possibility for confusion in stratigraphic nomenclature for Antarctica, the SCAR Working Group on Geology, at its meeting in Brazil, July 16–20, 1990, recommended adherence to the principles outlined in the International Stratigraphic Guide, edited by H. D. Hedberg and published for IUGS in 1976. It behoves all of us who work in the Antarctic to agree on a single scheme for nomenclature and to ensure the widest dissemination of proposals for new stratigraphic units. The International Stratigraphic Guide is the obvious choice for Antarctica, and the new section entitled *Stratigraphic Notes* to be published in *Antarctic Science* is the obvious way to disseminate the information. Furthermore, in addition to the short note in *Antarctic Science*, we should all submit our original stratigraphic papers to journals with wide circulation. We can save ourselves much grief by taking these steps, and we can save our successors even more grief by acting now rather than leaving it to the next generation to sort out the problems of poorly defined units, duplication of nomenclature, and inadequate or improper referencing of earlier work.

These steps should be our collective New Year’s resolution for 1991. It should be easier to keep than resolutions to be kind to the neighbour’s dog.

D. H. ELLIOT
The Ohio State University