BOOK REVIEW

ALKALINE ROCKS AND CARBONATITES OF THE WORLD, PART 3: AFRICA. A.R. Woolley, 2001. The Geological Society Publishing House, Bath, U.K. U.S.A. Distributor AAPG Bookstore: bookstore@aapg.org. Hardback, 372 p. \$142 (\$85 AAPG members, \$65 Geological Society of London members)

This is the third book in a four-part series, cataloguing the world occurrences of alkaline rocks and carbonatites. The first part lists the occurrences in North and South America (Wooley 1987) while the second part deals with those in the former U.S.S.R. (Kogarko et al. 1995). The fourth part will cover Asia and Europe (excluding the former U.S.S.R.), Australia, Antarctica, and oceanic islands.

The purpose of the current book is to present a catalogue of all reported alkaline rocks and carbonatites in Africa and to provide readers with enough description to judge whether an occurrence is within their area of interest. Wooley has done a meticulous search of the literature in compiling this information. As well he has not simply transferred information but frequently presents his own interpretation of the often scant available data. Where necessary he has gone beyond literature searches and has presented communications with other researchers. The reader is left with the impression that he has left no stone unturned in his quest for completeness and accuracy.

A brief introduction and discussion of the scope and organization of the catalogue is followed by 859 locality descriptions covering 40 countries. The catalogue is arranged alphabetically by country. Within each country every occurrence is assigned a number and these are keyed to a simplified locality map. The heading for each description is given in bold and consists of the number, the preferred name and the geographical coordinates. Synonyms are also given. The descriptions range from 20 to over 1500 words, depending on the extent of knowledge and importance of the occurrence. Generally, especially for locations that have been well-documented in the literature, the descriptions begin with a brief discussion of the geographic location and features, followed by the more detailed petrography of the occurrence in order to give the reader enough data to make his own evaluation of the rock types. As noted by Wooley, the variation in rock names points out a need to establish an internationally accepted nomenclature of alkaline rocks. A brief outline of the mineralogy of each occurrence is included. Within each description, when known, the economic history, the potential of the deposit, and an outline of the age determination are given. A very simplified geological map, designed to show merely the distribution of occurrences within a certain area, is presented in about one third of the descriptions.

Because this book is merely a catalogue of localities, adequate references to important papers is essential. In this regard, Wooley lists not only the most important references available but also more recent references, which facilitates literature searches. These are found at the end of each description under another sub-heading. The entire list of complete references can be found at the end of each country. Finally, a complete locality index including synonyms is found at the end of the book.

This book, like the others in the series, is very well organized, with clearly written text. No typographical errors were noted, indicating a book which has been carefully edited. The vast amount of information on the alkaline rocks and carbonatites of Africa available in the literature is well-condensed and the reader is able to get a good understanding of the nature of each occurrence. It is well-referenced and indexed and the maps are simple and easily scanned. A glossary of geological terms would be a handy tool but is beyond the scope of this book and most readers interested in this subject would have a glossary close at hand in any case.

This is an essential reference text for the increasing number of petrologists and mineralogists who are studying alkaline rock systems; however, its cost might limit its appeal for those without the resources of an institutional library. Certainly the library of any institution or university involved with the geological sciences should have a copy on its shelves. Those involved in mineral exploration would also find it a useful tool. Although worth waiting for, it is unfortunate that we have to wait so long between publications (part 1, 1987; part 2, 1995, part 3, 2001) but considering the volume of literature that has to be researched, this is understandable.

REFERENCES CITED

- Woolley, A.R. (1987) The Alkaline Rocks and Carbonatites of the World. Part I: North and South America. British Museum (Natural History) and University of Texas Press.
- Kogarko, L.N., Kononova, V.A., Orlova, M.P. and Woolley, A.R. (1995) The Alkaline Rocks and Carbonatites of the World. Part II: Former USSR. Chapman and Hall, London.

ROBERT GAULT Canadian Museum of Nature Ottawa, Ontario, Canada