

Reviews

HISTORY OF THE ANTARCTIC FLORA AND FAUNA

ORIGINS AND EVOLUTION OF THE ANTARCTIC BIOTA. Crame, J. A. (editor). 1989. London, The Geological Society (Geological Society Special Publication No. 47). 322 p, illustrated, hard cover. ISBN 0-903317-44-3. £58.00

This volume is a record of the papers presented at an international discussion meeting on the 'Origins and evolution of the Antarctic biota', at The Geological Society, London, on 24 and 25 May 1988. The attendance of more than 100 earth and biological scientists representing 15 countries clearly demonstrated growing interest in the subject matter. The introductory summary by the editor is particularly useful to the specialist in enabling him to select which papers to read in depth. Indirectly, it also reveals how many gaps there are in the content of the book, as is frequently the case with symposium volumes. Over the past 25 years, knowledge of both the marine and terrestrial palaeontology of Antarctica has increased tremendously and, in combination with various reconstructions of Gondwana, it has been possible to make many more plausible interpretations of the known facts than previously.

Several of the papers are straight reviews of the present state of knowledge, eg the evolution of the Antarctic fish fauna, whereas others are far more fundamental and attack the real problems of the influence on diversification of past landmass distributions and suitable corridors for both floral and faunal interchange between high and low southern latitudes. Some authors have reached a similar conclusion that many of the plant and animal groups seem to have originated in high southern latitudes and then radiated outwards. Of course, the southern margins of Antarctica and Gondwana appear to have been important dispersal routes. Palaeoclimatological implications are that over very long periods of time the equable climates 'contributed to the proliferation of life'.

The paper by Clarke and Crame on 'The origin of the Southern Ocean marine fauna' is quite outstanding in bringing together palaeontological and modern-day biological thinking: 'Overall the fauna clearly has had a long evolutionary history and thus has no single origin. In a sense, it has always been there'. This is not a book for the faint-hearted; the extensive use of highly scientific jargon is often sufficient to defeat even the most experienced scientist. Nevertheless, it is well produced and liberally illustrated with clear line drawings and quite exceptionally good half-tones. (Raymond J. Adie, 8 Manors Way, Cambridge CB1 4SL)

SHIPPING IN THE CANADIAN NORTH

THE CHALLENGE OF ARCTIC SHIPPING: SCIENCE, ENVIRONMENTAL ASSESSMENT AND HUMAN VALUES. VanderZwaag, D.L. and Lamson, C. (editors). 1990. Montreal and Kingston, McGill and Queen's University Press. 282 p, illustrated, hard cover. ISBN 0-7735-0700-0. £33.20.

This book, as is not immediately obvious from the title, is concerned almost exclusively with Canada, and not at all with the Eurasian north, where most Arctic shipping takes place. Nor is the technical side of Arctic shipping discussed. But there is nevertheless plenty to say about the Canadian scene, and our two editors have assembled a team of eleven specialists to try to explain the complexities of the present situation, which does indeed require informed explanation.

Commercial navigation in Canadian Arctic waters does not have a very long history, and now that technology is rapidly expanding the possibilities, Canada is very properly seeking guidelines and solutions. There has already been a bewildering proliferation of administrative requirements, with associated acronyms, for projects involving Arctic shipping. The proposal to ship out natural gas from the remote north coast of Melville Island, known as the Arctic Pilot Project (APP), was subject to an extraordinary number of investigations between 1977 and 1983. The effort to find the right way to avoid possible environmental damage ended, that time, in the collapse of the scheme.

There are, of course, pros and cons to all these ideas, and they are properly mirrored in this book. Thus the report of the Lancaster Sound Study, a detailed examination thought necessary before any development decisions were taken, is called 'the excellent final report' by one contributor, and 'a series of platitudes and extremely conservative general options' by another. As a final contribution, the senior editor pulls some of the threads together and puts the whole set of complex issues in a wider framework. (Terence Armstrong, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

ANTARCTICA: AN INDIAN VIEW

DAWNING OF ANTARCTICA: A GEOPOLITICAL ANALYSIS. Chaturvedi, Sanjay. 1990. New Delhi, Segment Books. 300 p, maps, hard cover. ISBN 81-85330-06-9.

Though a further addition to the extensive literature on Antarctica, this book is the first of its kind by an Indian author. It gives both a fair background to readers who are new to the area, and at times a distinctive Indian viewpoint.

The book is divided into six parts. Part I describes the geographical features of the continent, followed in Parts II and III by a history of exploration leading to the territorial claims of the early 20th century, and to India's growing interest on behalf of the United Nations from 1956 onward. Part IV deals with current politics, including, with a detailed analysis of the Antarctic Treaty System. Part V is a study of resource issues, and in Part VI, 'The future and India's share in it', the author describes India's stakes on the continent and her role as a full member of the Antarctic Treaty System.

As one of very few Antarctic publications to have come from India, this work obviously merits attention. The author, who lectures on political geography and geopolitics at the Panjab University, analyses the political realities and complexities of Antarctic issues, and India's stake in them. 'Dawning of Antarctica' provides a comprehensive, up-to-date overview of Antarctic geopolitics, though one would have hoped for a more detailed analysis of India's interests on the continent, and the reasons for her long-term involvement in Antarctic exploration, science and politics since 1982. (Anita Dey, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

ANTARCTIC PLACE NAMES

GAZETEER OF THE ANTARCTIC. US Board on Geographic Names. 1990. (Fourth edition). Washington, National Science Foundation. 145p, soft cover. NSF 89-98.

The previous edition of this work, published in 1981 under the title 'Geographic names of the Antarctic' (reviewed in *Polar Record* 21(130): 75-76, 1982), is now out of print. It contained entries for 11,604 place-names, complete with descriptive and historical notes on the features, in addition to the geographical co-ordinates. Since its publication 758 new place-names have been adopted by the US Board on Geographic Names. The new edition thus lists 12,362 approved names together with co-ordinates, but the exclusion of the notes has led to a very much slimmer book. A small proportion (2,546) of the total number of 'unapproved variant names' (or synonyms) in several languages are also listed, not only in separate cross-referenced entries to approved names (as in the last edition) but also as indents under the approved names, a convenience previously lacking.

In nearly all the foreign synonyms the generic part of the name comes first, for example 'Isla Torre' for Tower Island. For alphabetical listing the usual practice is to invert the name so that, in the example given, it is listed under 'T'. Not so in this gazeteer, for all the 'Islas' are listed under 'I', all the 'Montes' under 'M', and so forth. In the introductory pages there is no clue as to the reason for this curious listing. It may have been used in deference to totally monolingual readers who are unable to distinguish between generic and specific parts of foreign names. Or it may have been thought useful to bring most of the syno-

nyms together in discrete blocks, for even English synonyms beginning with 'Mount' (for example, 'Mount Andrew Jackson' for Mount Jackson) are listed under 'M'. However, Antarctic specialists will easily overlook this peculiarity of listing and find extremely useful an updated edition of the only gazeteer to cover the whole Antarctic. (G. Hattersley-Smith, The Crossways, Cranbrook, Kent TN17 2AG.)

MORE FALKLAND ISLANDS POSTCARDS

1988 SUPPLEMENT TO POSTCARDS OF THE FALKLAND ISLANDS. A CATALOGUE 1900-1950. Heyburn, H. and F. 1989. Chippenham, Picton Publishing. 109 p, illustrated, hard cover. ISBN 0-948251-40-9. £14.95.

This work, a sequel to that reviewed in *Polar Record* (23 (144): 361, 1986), is an illustrated catalogue of postcards, mostly photographs, from the Falkland Islands and Dependencies. The first volume concluded with a page titled 'Your turn!', inviting further illustrations and contributions. The additional information sent to the authors, combined with more of the authors' own indefatigable research, has added a substantial number of items to their original catalogue and some extra information, and drawn attention to a few errors. The system and style have remained identical, especially the careful indexing, and much historical detail of the Falkland Islands and their dependencies is again revealed from this study. The authors have been rash enough to include another 'Your turn!' request at the end of this supplement. I feel sure from experience that compiling such a definitive list is fraught with danger — the certainty that more entries will be found as interest is aroused. A third volume is to be expected in due course. (R. K. Headland, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

A SHACKLETON MAN

SHACKLETON'S LIEUTENANT: THE *NIMROD* DIARY OF A. E. A. MACKINTOSH, BRITISH ANTARCTIC EXPEDITION 1907-09. Newman, S. (editor). 1990. Auckland, Polar Publications. ISBN 0-473-00969-2. 144p, illustrated, hard cover. £16.50.

The diarist Æneas Mackintosh was a member of the first expedition led by Ernest Shackleton, serving as second officer aboard *Nimrod*, a small former Newfoundland sealer. He records two Antarctic voyages, one to establish the station at Cape Royds, Ross Island in 1907-08, and the second to relieve the expedition in 1908-09. His account, which includes much exploration in the Ross Sea region, several inland journeys and summer sea ice traverses, is a fascinating chronicle of events. The loss of an eye was overcome by the diarist's character and resilience. The editor and his colleagues R. McElrea (associate editor) and D. Harrowfield (research and maps) have supplemented the text with very helpful notes; the result is an essential work which is a good complement to the official account (Shackleton's *Heart of the Antarctic*), especially as it