vation'. This raised over £1500 in support of the Trust. Sir Edmund spoke of problems of conservation and development in Nepal. He emphasised the need for conservation measures in polar environments but believed that Antarctica was still a continent for *people* and for *adventure*: he did not wish it to become the sole domain of scientists.

The Antarctic events of the 'New Zealand in Cambridge Week' emphasised the long-standing relationship between Britain and New Zealand in the southern polar regions. It is to be hoped that these links will continue and indeed strengthen, and lead to many more worthwhile cooperative achievements.

## **Reviews**

#### PICTORIAL ANTARCTICA

WILD ICE — ANTARCTIC JOURNEYS. Naveen, R., Monteath, C., de Roi, T. and Jones, M. 1990. Washington, Smithsonian Institution. 224 p, hard cover, illustrated. ISBN 0 87474 395 8. £19.95, US\$29.50.

Spectacular is the first adjective that springs to mind on an initial browse through this book. It is (and no condescension is intended) primarily a picture book. However, many of the photographs are amongst the best that this reviewer has seen of the Antarctic. This is perhaps not surprising, as all four of the authors are, to a greater or lesser extent, professional photographers. Antarctic wildlife is well represented, with about two thirds of the 150 photographs including a local denizen. Marine phenomena (icebergs. sea ice, etc) are also well represented, as is mountain scenery. However, these represent marginal areas of the Antarctic continent, and it is surprising to find not a single photograph of the vast Antarctic ice sheet, which after all covers over 98% of the continent. It is arguably not so photogenic, but it and its major outlet glaciers are dominant features of the region.

The book is nominally divided into four sections, one by each of the authors. The text, though unexceptional, is an interesting mix of textbook extracts, philosophy, enthusiasm and conservation gospel. For this reviewer, the most interesting section was that of Colin Monteath, which contains narratives of his journeys with dogs, trips to the Dry Valleys, and researches in the crater of Mount Erebus, together with chilling recollections of recovery operations after the New Zealand DC-10 disaster on Ross Island. For those bound for Antarctica, there is a useful 11-page section on photography in the Antarctic, with recommendations on kit, film etc.

As HRH Prince Edward rightly points out in his foreword, it is virtually impossible to describe the Antarctic accurately to anyone who hasn't been there. Perhaps the chief merit of this book is that it conveys something of the feel of the place. It will thus be of value to those who haven't been there, and will stimulate recollections among those who have. It is well produced and, particularly at the very reasonable price, can be recommended to all interested in images of the Antarctic. (M. R. Gorman, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

# ANTARCTIC CONSERVATION: THE GREAT DEBATE

THE FUTURE OF ANTARCTICA: EXPLOITATION VERSUS PRESERVATION. Cook, G. (editor). 1990. Manchester, Manchester University Press. 172 p, soft cover, illustrated. ISBN 0719034485. £10.95.

This volume is the proceedings of a symposium held at the Sir Robert Menzies Centre for Australian Studies of the Institute of Commonwealth Studies, University of London. The symposium was organized partly in response to the sequellae from the Australian Prime Minister's declining to ratify the Convention on the Regulation of Antarctic Mineral Resource Activities, and also to present general concern about the future of the continent and its resources.

An introduction from the Prime Minister is followed by eight papers that examine various aspects of the subject. Reliability of speculations on the significance of mineral deposits in Antarctica is questioned, and an excellent description is given of the present state of knowledge contrasting sharply with frequent journalistic assertions that certain riches await exploitation in Antarctica. The efficiency of the Antarctic Treaty in controlling activity in the region is assessed, and much common ground appears in otherwise dissenting views. Among the various interests represented, objectives of control and conservation are basically similar, but the methods thought best to achieve them differ widely. Bibliographies accompanying several of the papers are useful sources of the latest expert information on widely discussed subjects. Appendices include texts of the Antarctic Treaty and the Mineral Resources Convention, two documents of primary importance in the debate. The work as a whole is very timely, in view of current negotiations on the exploitation and preservation of Antarctic resources. (R. K. Headland, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

#### A FULL LIFE

A TIME TO SPEAK: AN AUTOBIOGRAPHY. Fuchs, Sir Vivian. 1990. Oswestry, Anthony Nelson. 310 p, illustrated, hard cover. ISBN 0 904614 37 9. £16.95.

The author is known primarily from his long involvement with Antarctica, which began in 1947 when he took command of the Falkland Islands Dependencies Survey (FIDS), continued with his leadership of the Common-

wealth Trans-Antarctic Expedition (1955–58), and was sustained during his directorship of British Antarctic Survey (as FIDS was renamed) from 1962 to retirement in 1973. Sir Vivian's earlier Antarctic books, *The crossing of Antarctica* (with Sir Edmund Hillary, 1958) and *Of ice and men* (1982) cover the Antarctic period very well. This account of the remainder of his life is no less fascinating.

Born in 1908, Sir Vivian's early years included adversities, in particular during World War I when his German father was interned. In happier times, as a Cambridge undergraduate reading geology, he was introduced to polar work on a summer expedition to Greenland led by James Wordie, formerly a member of Shackleton's second expedition. Between 1931 and 1938 he was involved in expedition work in East Africa, gaining a wide experience of travel and self-sufficiency which was to serve him well in World War II. He entered the war as a territorial subaltern and served in West Africa and Europe, latterly as a Staff Officer with Civil Affairs in a ravaged and conquered Germany. Sir Vivian's work with the Falkland Islands Dependencies Survey (in which he served for 33 years) and with the three-year Commonwealth Trans-Antarctic Expedition is covered in more detail in his earlier books, but very adequately dealt with here. A concise introduction by geologist Ray Adie, long-time colleague and former sledging companion, emphasises the scientific as well as the exploratory aspects of this work.

The narrative style is interesting, illustrations and maps are well selected, and there is an efficient index. The work is dedicated 'For my family'. Themes of travel, natural history and expeditionary work are blended into a most interesting autobiography. After so much of an eventful life, the title is particularly apt. (R. K. Headland, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

### **FUTURE OF ANTARCTICA**

ANTARCTICA'S FUTURE: CONTINUITY OR CHANGE? Herr, Richard A., Hall, H. Robert and Haward, Marcus G. (editors). 1990. Hobart, Australian Institute of International Affairs. 338 p, soft cover. ISBN 0-7246-2528-3. AUS\$30.00.

Launched by the Minister for Foreign Affairs, Senator Gareth Evans, in August 1990, this book reproduces the proceedings of 16th National Conference of the Australian Institute of International Affairs, held in Hobart in November 1989. The authors of the 15 chapters represent a cross-section of some of the major thinkers in current Antarctic policy.

Central is the debate over the Convention on the Regulation of Antarctic Minerals Resource Activities (CRAMRA), commonly referred to as the Minerals Convention. This has split the Antarctic community into nations supporting the Convention as the best means of controlling mining and providing environmental protection in Antarctica, and those opposing it outright. Defence of the Convention is strong: Chris Beeby, the New Zealand Deputy Secretary, Ministry of External Relations, John

Heap, head of Polar Regions Section, Foreign and Commonwealth Office, UK, and Tucker Scully, Director, Office of Oceans and Polar Affairs, Department of State, USA argue in favour of the Convention's ratification. They, and others, argue that the Convention fills a potential gap in the Antarctic Treaty by providing a comprehensive framework for controlling mining, while ensuring longterm environmental protection. In contrast the Australian/ French initiative supporting a comprehensive environmental protection convention which will establish Antarctica as a 'nature reserve — land of science' is outlined by Prime Minister Bob Hawke and suported by Jacques Cousteau. Hawke maintains that the initiative is not challenging the Treaty system or the operation of the consensus principle, but challenging the changing perspective of environmental responsibility. It is Gillian Triggs, Reader in Law, University of Melbourne, Australia, who then lays the groundwork for a comprehensive environmental regime. Support for a World Park is provided by Lyn Goldsworth, Greenpeace Australia and Coordinator of the Antarctic and Southern Oceans Coalition.

Bill Bush's paper is a major contribution to the debate. His analysis concludes that a strong comprehensive environmental protection regime is a viable goal at this stage and that many solutions to the contentious issues involved can be pirated from the existing elements of the Antarctic Treaty System. The Australian/French initiative has raised the profile of Antarctic conservation, possibly championing the rise of a new environmental regime. The initiative is being taken very seriously by Antarctic Treaty Consultative Parties, whose Special Consultative Meeting was convened in November 1990 to discuss the negotiation of a comprehensive system for protection of the Antarctic environment. While the book will be most useful for the academic or student, interested lay readers will find chapters surveying major issues on the Antarctic agenda including the role of science in Antarctica, sovereignty, and issues sourrounding security and demilitarization. At AUS\$30 the 338 pages, including four appendices of the most important Antarctic treaties regulating Antarctic affairs, are a most important addition to the literature. In Antarctic policy issues, that seem to change weekly, the authors, editors and publishers are to be congratulated for the quick time from conference papers to book release. (Lorne K. Kriwoken, Centre for Environmental Studies, University of Tasmania, GPO Box 252C, Hobart, Australia 7005.)

#### AN ISLAND REVEALED

SUBANTARCTIC MACQUARIE ISLAND: ENVIRONMENT AND BIOLOGY. Selkirk, P. M., Seppelt, R. D. and Selkirk, D. R. 1990. Cambridge, Cambridge University Press (Studies in Polar Research). 285 p, illustrated, hard cover. ISBNO 521 26633 5. £40.00, US\$65.00.

A narrow, isolated volcanic massif some 34 km long and 5km wide, Macquarie lies across the West Wind Drift just