## **Book Reviews**

**ENCYCLOPEDIA OF THE ANTARCTIC.** Beau Riffenburgh (Editor). New York: Routledge. 2 volumes: xxxix + 580 + 86; xxxix + 566 + 86 p, illustrated, hard cover. ISBN 0-415-97024-5. £285.00. doi:10.1017/S003224740700681X

Unless the topic covered is a particularly narrow one (for example, the Amphibians of Greenland, or Led Zeppelin's Guide to Abstinence), the assemblage of an encyclopaedia is a monumental task. To be successful, it must draw together solid source material on a wide range of often disparate subjects, and then bundle everything in a logical and homogenised fashion. Given that there are so many ways to botch the job, it is not surprising that the world has been without a proper Antarctic encyclopedia for so long. Previous attempts have been made, such as the Encyclopedia of Antarctica and the Southern Ocean (2002). Lacking the depth and breadth of specialist expertise to satisfy Antarctic professionals, it was still miles ahead of Antarctica: an encyclopedia from Abbott's Ice Shelf to Zooplankton (2002). This latter book is so riddled with factual errors as to be a danger to any library. While these previous attempts may have set quite a low benchmark, there is no disguising the fact that the Encyclopedia of the Antarctic, edited by Beau Riffenburgh, is a huge leap forward in condensing into one book what is known about this most fascinating continent. It is a splendid volume and is a valuable 'first stop' reference for anyone seeking information about the

Condensing the known information about an entire continent into one book (albeit two volumes) is a daunting task, even when the continent in question is the simplest of the seven. The Encyclopedia of the Antarctic has 495 entries that range in size from about 500 to 6000 words. The list of subjects covered is vast, including such sciences as biology, geology, chemistry, biogeochemistry, atmospheric physics, oceanography, etc. The humanities are not overlooked either, with many details about human history, politics, lifestyles, and commercial activities. As a land mass without an indigenous population or, indeed, any permanent inhabitants, the culture of Antarctica is often ignored or marginalised in print. Therefore it is a pleasant surprise to see entries here for such topics as 'Art,' 'Film,' Fiction and poetry,' and 'Books.' Antarctica is maturing as a cultural entity and this encyclopedia has wisely embraced this, instead of dwelling solely in the camp of science, as have so many previous books. Some of the basic entries also take a wide view, such as 'Growth,'

a delightful inclusion that details how various organisms grow in Antarctic conditions.

In addition to the basic entries like 'emperor penguin,' 'Ross Island,' and 'Moss,' the book includes a broad selection of longer overviews of different themes. Such topics as 'Astronomical observations from Antarctica,' 'Climate modelling,' and the truly big-picture approach of 'Antarctica as part of the Earth system' give the book a depth that goes beyond simple data regurgitation. These overviews benefit from the helpful inclusion of sub-headings like 'Methods for studying sea ice micro structure,' which make them easy to dip into. The entries are generally well-written, and are pitched at the level of the educated non-specialist. For example, as a zoologist with no prior knowledge of the mechanics of ice formation, I was able to understand the entries on this process.

Historical topics are well served with concise biographies of the most important people in Antarctica's brief exposure to humans. These tend to be fairly neutral in tone, and do not 'play favourites' with the different explorers. The facts are presented with a minimum of the emotional bias that so often accompanies discussions of men like Robert Scott or Roald Amundsen. Controversies like Richard Byrd's fraudulent claim to have flown over the North Pole are noted, but are not allowed to hijack the main thrust of the entry. Behind-the-scenes players who never went to Antarctica, like Fridtjof Nansen, Clements Markham, and Georg von Neumayer all rate an entry — further evidence of the thoroughness of the book. Of course, the editor has the difficult task of deciding where to draw the line on inclusion and obviously some players miss the cut. Hence, anyone reading the entry on the 'Filchner-Ronne Ice Shelf' will learn who Wilhelm Filchner was, but not Finn Ronne. Filchner also gets a biographical entry of his own, while Ronne does not. However, Ronne is not completely ignored, as he is described in the entry on the 'Ronne Antarctic Research Expedition.' The inclusion of separate entries for many of the important expeditions that went south prior to the International Geophysical Year is another excellent feature.

This book is so thorough that it includes many entries that are not truly Antarctic. Sub-Antarctic islands and species not found in Antarctica, such as king penguins, are included as the editor takes a broad definition of what is 'Antarctic.' The book includes an excellent entry on exactly how the limits of Antarctica can be defined but, lucky for us, the editor has ignored these limits when deciding

what to include. After all, the sub-Antarctic probably isn't large enough a topic to rate its own encyclopedia, and these topics will clearly be of interest to the kind of person who will read an Antarctic encyclopedia. That stated, the list of sub-Antarctic islands is incomplete, and I could discern no specific criteria for what makes an island worthy of inclusion here. One would expect to see all the islands south of the Polar Front present, and so they are. However, for those north of the convergence there seems to be a randomness as to what's in and what's not. Islands like Antipodes and Bounty are not listed, while more northerly islands like Gough, Amsterdam, and Crozet are. The Falkland Islands, which are closer to Antarctica than all of the above mentioned archipelagos and which have many direct links to Antarctic exploration and science, do not rate an entry. Perhaps this is due to the presence there of a resident population, making them unique among southerly island groups.

The length of individual entries varies greatly, and one assumes that the size of an entry is more subjective than simply a testament to the relative value of a topic. For example, more space is devoted to the 'Shackleton Range' than to 'Shackleton, Ernest.'

The list of contributors is extensive and cosmopolitan. As a result, the book has a truly international feel to it and generally avoids sliding into the bias of any one nation. One exception to this is in the descriptions of 'Field camps' and 'Base technology,' which have a perhaps unavoidable British slant. Very occasionally a contributor also lets slip his boreacentric prejudices by including the redundant adjective 'austral' when describing something. For example, if one is discussing summer in Antarctica, there is no need to qualify it as the 'austral' summer. Each entry includes a few references and suggested further reading that will allow the deeply curious to pursue more information elsewhere. Mostly, the works cited are the primary literature or other peer-reviewed sources that are likely to be reliable. It was therefore a surprise to read the 'chinstrap penguin' entry and find that two out of the seven references were non-scientific books (Mitsuaki Iwago's penguins and Ron Naveen's Waiting to fly). A reader wishing to understand how people and politics work in Antarctica will be pleased to find not only the complete texts of the Antarctic Treaty and the Environmental Protocol, but also descriptions of 35 different national Antarctic programmes. The role of women in Antarctica is specifically discussed in two separate entries over 10 pages ('Women in Antarctic science' and 'Women in Antarctca: from companions to professionals'), but the work of various Antarctic women is also very much a part of the fabric of many of the entries. The recent increase in the popularity of adventure tourism in Antarctica also rates an entry, although more depth here would have been desirable. For example, what better place than this volume to include a list of everyone who has travelled overland to the South Pole?

The index is a thing of beauty. It clocks in at a massive 86 pages and is splendidly and precisely detailed. A good index is the backbone of a successful reference work and

those who spent the considerable time required to do this task thoroughly should rightly congratulate themselves on time well spent. From this index one can find any number of ways to track down needed information.

The book includes some excellent appendices, with the novel treat of such things as a list of the journals that publish Antarctic work. Unfortunately, the maps included are not up to the same high standards as the text and are perhaps the biggest shortcoming of this book. Not only would the book benefit from the inclusion of many more maps, those already here could show more detail. Adding colour would be the simplest way to improve them. For example, the chart showing the courses of early explorers is a rat's nest of not-easily-distinguished black and grey lines. Different coloured lines would make this map usable. The inclusion of more photographs would also improve the usefulness of the book. It is rare to find an organism entry that includes pictures, although the editor's apparent love of 'Tardigrades' means that this entry is nicely illustrated. A lack of colour or photographs in the production of a book is often a budgetary constraint, and this shows in other ways as well. The overall production value seems moderate. The pages are printed on good-quality paper, and the text is clean and very readable, but the feel of the binding after just a few weeks of handling and cross-referencing does not suggest a robust future. Time will tell. I found just one typographical error (page 316, where the latitude of Iles Crozet is incorrect). This book retails for £285, and for that price, most buyers will expect higher production quality. But should that stop you from buying this book? Absolutely not, for it is a clearly written, authoritative treasure trove of up-to-date information on all aspects of Antarctica, presented in a highly organised fashion. (Peter W. Carey, 8 Estuary Road, Christchurch 7, New Zealand.)

## References

Iwago, M. 1996. *Mitsuaki Iwago's penguins*. San Francisco: Chronicle Books.

Naveen, R. 1999. Waiting to fly: my escapades with the penguins of Antarctica. New York: William Morrow.
Stonehouse, B. (editor). 2002. Encyclopedia of Antarctica and the Southern Ocean. Chichester: John Wiley.
Trewby, M. 2002. Antarctica: an encyclopedia from Abbott's Ice Shelf to Zooplankton. Auckland: David Bateman.

## DANGEROUS PASSAGE: ISSUES IN THE ARCTIC.

Gerard Kenney. 2006. Toronto: Natural Heritage Books. xii + 211 p, illustrated, soft cover. ISBN 1-897045-13-1. \$Can24.95; \$US19.95.

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This is an unusual book. Effectively its intention is to alert the Canadian government and people to the dangers posed to the nation when navigation through the Northwest Passage becomes easier due to the decline in ice cover because of global warming. The writer suggests that, as the United States has not ratified the United Nations Convention on the Law of the Sea and, hence, does not