The book is essentially a diary of the summer of 2001–2002, which she spent with Fraser's group, accompanying them on exhausting fieldwork trips, watching them sort stomach samples, sharing in their concerns over the weather and the targets unachieved. That particular summer proved to be a truly disastrous one for the Adélie penguins, with a further major decline in their populations as the weather made breeding first difficult and then survival of the chicks almost impossible.

Her descriptions of the way in which the data are collected, as well as of the social interactions in Palmer Station itself will be revelatory to those who have never spent time on an Antarctic research station. The enthusiasm and dedication of all the participants comes through very clearly, as does the universal lack of privacy and the claustrophobic elements that characterise all small communities. She describes the social distinction between the scientists and the logistics people employed by Raytheon, but it seemed to me much less of a problem in the small Palmer station than is obvious at the much larger station of McMurdo, where the two groups live almost parallel lives. Her enjoyment of simply being in the Antarctic and taking part in something she clearly feels is important and worthwhile comes through very clearly.

The bigger story here is that the decline in Adélie penguins, top predators in the Southern Ocean marine ecosystem, is inextricably linked to global change. It is the biological equivalent of the retreating glaciers and ice shelves, and yet to unravel its complexities can take a lifetime's work.

If I have a complaint, it is that the book is too long and the reader may get bored and give up before the interesting final chapters. Hooper gives repeated accounts of trips to different islands to count birds, which provide little extra to the scene she has already set. We really don't need 32 chapters to understand the scientific work, nor do we need them to provide the interesting social background. A more rigorous editing would have provided a more immediate message without losing any of the key elements. In addition to the text, the book has some useful maps, some colour photos, a brief bibliography, and a useful index.

Whilst there have been other books describing different fields of science in the Antarctic by the scientists themselves, I have not seen a book quite like this before. Hooper's familiarity with the research station and the Antarctic environment combined with her probing questions in areas many scientists simply take for granted means this is an interesting and different contribution to why and how we do science in Antarctica. (David Walton, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET.)

A COMPLETE GUIDE TO ANTARCTIC WILD-LIFE: THE BIRDS AND MARINE MAMMALS OF THE ANTARCTIC CONTINENT AND THE SOUTHERN OCEAN. Second edition. Hadoram Shirihai. 2007. London: A&C Black. 544 p, illustrated, hard cover. ISBN 978-0-7136-6406-5. £35.00. doi:10.1017/S003224740800764X

The first edition of *The complete guide to Antarctic wildlife* was published in 2002 to widespread acclaim. The second edition comes just five years later (as *A complete guide*, rather than *The complete guide*, although whether this is a bit of retrospective modesty, or just something that happened to slip past the editor, is uncertain). Of course, to those of us who use the book on a regular basis, it is simply 'Shirihai.'

There are a number of differences between the editions, the most noteworthy of which is the inclusion of some 300 new photographs. These are distributed throughout, and not only serve to illustrate the morphology of different birds and marine mammals, but have been chosen to demonstrate specific aspects of behaviour, too. So, for example, there is a fabulous series of preening/grooming behaviour in the section on king penguins (page 46), and some beautiful illustrations of Adélie penguins feeding their young (page 61). Of particular interest is the collection of surfacing crested penguins in New Zealand's sub-Antarctic waters, so the reader can study the differences between four species: snares, erect crested, fjordland and rockhopper. The fairy prions (pages 198–200) and fulmar prions (page 202) also benefit from additional illustrations.

The two editions differ in more than their illustrations. Minor changes include illustrated end-papers (the front is 'Bird and marine mammal topography' from page 53 in the first edition, and the back is the map from the original 'layout of the book' section), a much longer list of acknowledgements, and additional illustrations by John Cox, well-known for his splendid illustrations in Brooke's A guide to the albatrosses, petrels and shearwaters of the world. Much of the book has been redesigned, and tables that were once just black and white have been given a facelift with a little colour. Another difference occurs in the plates relating to the cetaceans. For example, the first edition's plate 32 (page 335) of 'Dark animals with similar, prominent dorsal fins,' which highlights variation between killer whales, long-finned pilot whales, false killer whales, Risso's dolphins, and bottlenose dolphins, had corresponding text on the opposite page. The second edition crams all the information on one page, which makes for a somewhat busy page with fairly small diagrams.

There are one or two other irritations — although they are minor, and do not detract from the book as a whole. First, the map on page 9 refers to the Polar Front as the Antarctic Convergence, which could have been updated, and the 'Checklist of birds and marine mammals of Antarctica and the Southern Ocean' (pages 31–34) has been condensed from its original six pages to four, which makes for some very small print.

However, perhaps the *Guide*'s most important contribution lies in the updating of the section on tubenoses. The

taxonomy of these birds has been revised and re-revised so often that it is often difficult to stay abreast of the changes, and Shirihai provides a convenient snapshot of the current status. The grey-faced petrel (*Pterodroma [macroptera] gouldi*) was once considered as conspecific with the greatwinged petrel (*Pterodroma [macroptera] macroptera*), but Shirihai argues for counting them as allospecific on the grounds of size, plumage, and possibly in calls. His photographs would seem to support the 'splitting' of the two.

So, should anyone who has the first edition rush out to buy the second? The revisions are more extensive than the author (modestly) acknowledges, and serious birders who are using the *Guide* to identify tubenoses might want to consider investing. However, the first edition remains an excellent book, and will be a valuable research tool and

identification-aid for many years to come yet. But for all those polar enthusiasts who have yet to make a purchase, the second edition is very highly recommended. The illustrations alone are well worth the £35, and Shirihai's concise, informative text is a joy to read. Moreover, as noted on the back of the book, all the author's royalties from the sale of the *Guide* will be donated to Bird Life International's 'Save the Albatross' campaign. (Liz Cruwys, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

## Reference

Brooke, M. A guide to the albatrosses, petrels and shearwaters of the world. 2004. Oxford: Oxford University Press