This profusely illustrated book, aimed at knowledgeable naturalists, birders and researchers, covers birds, seals and cetaceans in the Antarctic, sub-Antarctic and Southern Ocean. The first edition (2002) won several awards and set a new standard for wildlife guides. Well-thumbed copies can be found on the bridge of virtually every tourist or research ship operating south of 60°S, which is the geographic scope of the book. Given the high standard of the first edition, the revised version contains relatively few changes. Most changes are minor improvements, corrections or additions to the text and illustrations, or adjustments caused by taxonomic changes in several seabird and cetacean groups.

The core of the book consists of three sections: a broad introduction to the vast region covered (geography, geology, climate, human history, and so on—27 pp.), species accounts (372 pp.) and regional site descriptions (119 pp.). There is a somewhat outdated bibliography and a list of contacts and organizations active in the region. In a valuable new feature, the inside covers of the second edition provide a quick reference to the morphological characters used for identification, and keys to the distribution maps given within.

The species accounts cover all the breeding species and common visitors. Information on each species or recognized taxon is given under the headings Identification, Distribution and Biology (which includes population estimates, diets, social behaviour and breeding biology), Conservation, and Taxonomy. Range maps show the breeding locations and seasonal at-sea distributions of each taxon. The major changes to this edition are in the text and illustrations covering some problematic taxonomic groups. In treating the contentious taxonomic issues surrounding several southern seabirds—notably the great albatrosses (Diomedea), cormorants of the Phalacrocorax atriceps group, skuas, prions, and diving petrels—Shirihai has wisely adopted a cautious approach. He recognizes the taxonomic distinctions among allopatric taxa suggested by recent molecular evidence, but treats most of these forms as allospecies (divisions within a superspecies, but not quite full species). Justification for his approach is explicitly given at the introduction to each contentious group; unfortunately, he forgot to add the post-2002 references cited in the text to the bibliography. Future research might resolve the taxonomic status of these contentious groups, but Shirihai’s approach gives both birders and biologists lots to work with. Birders will continue to challenge themselves in identifying the tricky groups, such as the five taxa of Wandering Albatross Diomedea exulans or the seven taxa of prions (Pachyptila). More importantly, the continued interest in the taxonomy and distribution of southern seabirds promoted by this book is important in helping to protect those birds from the ravages of fisheries bycatch.

Most of the excellent colour plates by Brett Jared have been retained in this edition; three revised plates by John Cox cover the great albatrosses and prions, and Jared provided new plates for cetaceans. I found the three new seabird plates to be crowded, and rather difficult to use for rapid comparisons of adults, juveniles and colour morphs. The book is worth buying just for the hundreds of photographs; many are simply stunning. In addition to providing identification tips, the photos capture the unique thrill of the Antarctic and Southern Oceans: albatrosses scudding over storm-driven waves, clouds of petrels swirling around icebergs or a leopard seal thrashing the skin off a penguin. The photos in the new edition are sharper, and many are new, especially those of the more tricky groups such as the prions, diving petrels and beaked whales. Most of the bird photos were taken by Hadoram Shirihai himself, a compliment to his skill and wide-ranging travels.

The regional descriptions cover the Antarctic coast and the islands of the Southern Ocean, but focus on the frequently-visited areas—for example, the Antarctic Peninsula, South Georgia, Falkland Islands and Ross Sea. These are brief but fact-laden introductions to many wonderful places, nicely illustrated with landscape and wildlife photos. Checklists to most areas include breeding species (land and marine birds), common visitors and vagrants. There are also short but insightful descriptions of the common “gateways” to the Antarctic: the southern tips of Patagonia, South Africa, New Zealand and Australia.

In a huge summary of knowledge such as this, a few errors are bound to occur, but both editions of the book were reviewed by an impressive list of referees, and so the information is mostly solid. A few errors remain. The references to cats eating prions on Marion Island (p. 196) ignores the eradication of cats there in 1991, as noted elsewhere in the book (p. 465). Furthermore, cats have never been found on Prince Edward Island (p. 205). The captions to the species on Plate 33 are partly missing, but that was the only printing error I noticed.

With the tremendous growth in tourism in the Antarctic and sub-Antarctic this beautiful book should enjoy a well-deserved continued popularity. If you are planning a trip to this exciting region, whether for research or tourism, buy this book well in advance and revel in the wealth of information and excellent photography. As a record of the distribution and diversity of Southern Ocean fauna, the book will be valuable to those working on seabirds and marine mammals, both in that region and also globally.

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