

TERNs

Cabot, D. & Nisbet, I. 2013. London, UK: New Naturalist, HarperCollins. 461 pp., 241 colour and black-and-white photographs. Hardcover: ISBN 978-0-00-741247-1, £55.00. Paperback: ISBN 978-0-00-741248-8, £35.00.

In this book, authors Cabot and Nisbet compare 39 species of terns worldwide in a general description of the group, and they compare five species in more detail. Most of the terns they list are from the UK and Ireland, but some of these species are also found in New England. Anyone interested in terns would benefit from reading this book to obtain a general summary of tern biology.

The authors have more than 75 combined years of study of terns in North America, the UK and Ireland, and are well-positioned to summarize the population ecology of terns. They state that most UK and Irish tern species are under intensive management, described as “on life-support systems,” and they summarize the threats to terns, both on land and sea, from natural and anthropogenic causes. Chapter 1, “Terns of the World” summarizes threats of all kinds and measures to reduce them. The authors describe what research is needed to understand the population biology of terns, in order to help the affected populations so that they do not decrease at a more rapid rate.

There are good descriptive chapters on food and foraging (Chapter 2), breeding biology (Chapter 3), migration including recent telemetry studies (Chapter 4), and the history of terns in the UK and Ireland (Chapter 5). Chapters 6 to 10 go into great detail on Sandwich *Thalasseus sandvicensis*, Little *Sterna albifrons*, Common *S. hirundo*, Roseate *S. dougallii*, and Arctic *S. paradisaea* terns. The authors discuss their breeding in depth, including foraging behaviour and ranges, daily behaviour and diet. They also summarize productivity by colony, which is helpful for those interested in long-term trends.

The book has some excellent case studies that delve into great detail concerning behaviours, with thorough descriptions of courtship, mating, nest building, hatching, feeding, brooding, anti-predator behaviour and chick behaviour. Included in these sections are good pictures of the different stages of maturity for some of the species.

The maps, photos and drawings throughout the book are excellent, but the superscripted notes are not easy to locate. They are not at the bottom of the page (footnotes), nor at the end of each chapter (endnotes), but rather at the end of the book. This would not be a problem except that in the list of notes, the chapters are not named but rather just numbered, so if the reader does not know which chapter she or he is reading, the footnotes are not easy to locate without returning to the Table of Contents to look up which numbered chapter one wants. I would have preferred footnotes at the bottom of each page, obviating the need to keep flipping back and forth.

Cabot and Nisbet present population data very clearly in tables, with the majority of data starting from the 1980s, but some data from the 1970s. Most of the data appear to be very thorough and well researched, and there is much discussion of trends for different species. However, there are a few large holes in the descriptions of colonies and of numbers of terns. For example, there is no mention of the important colonies at the main North

Sea gas terminal at Fergus that is now a Royal Society for the Protection of Birds site. Numbers of Arctic Terns there increased there from 70 to 700 pairs in over 10 years, thriving in part because they nested behind the fox-proof fence built around the terminal. Likewise, 10 years after the terminal was built, 100 pairs of Common Terns nested on the roof, and this is not mentioned either. (However, mustelids have now apparently invaded the Fergus terminal site and decreased numbers of terns.)

Additionally, the large numbers of terns found at sea in the mid-20th century are sometimes undocumented. For example, tens of thousands of terns (presumably breeding in the Orkney islands of Scotland, probably at Papa Westray in the Northwest Orkney islands) were seen foraging in the North Sea on forage or “bait” fish in 1969, and these birds later dispersed. The numbers nesting were not reported in the mainstream literature, unfortunately. Lower numbers of terns were reported in the early part of the 21st century, but the cause of this decrease is debatable. The decrease in numbers of terns may have been caused by the increase in populations of larger fish species, which are direct competitors with the terns for small forage fish. These fish species have had a slow recovery, and their greater numbers might be keeping stocks of forage fish lower than they were before the recovery (Bourne 2013). The book distinguishes and summarizes the differences among “vagrants,” “occasional breeders,” and “passage migrants” for many of the parameters described. However, the authors do not attempt to make independent judgements about the validity of specific records of vagrants.

There is a nice summary of conservation, and how conservation issues have changed from the 19th and 20th centuries. This discussion mentions the “increase of bureaucratic professionalism of conservation” and how, although conservation programs are run by trained biologists and managers, they often get “bogged down” with “overlapping laws, regulations, and directives.” Cabot and Nisbet explain that conservation programs are often administered by “overlapping government agencies and multiple NGOs” (non-governmental organizations), and they list the difficulties that this might entail. They touch on various conservation threats such as egg collection, human disturbance and depredation, as well as conservation projects that help alleviate these threats.

There are a few confusing and perhaps conflicting passages in the book; for example, on page 269 the authors state that “Arctic Tern diets are almost as varied as the Common Tern’s,” which conflicts with what they say on page 314, that “Arctic Terns are less adaptable” to changes in prey. On one hand, the authors state that Common and Arctic Terns nest together and eat the same prey, but then say that “both species are clearly limited by the availability of food because they have much lower breeding success than... when food is abundant.” I assume that in the first sentence (p. 269) they are referring to what and how much the species eat when allopatric, and in the second (p. 268) to what they eat when they are sympatric, but it is not clear that this is what they mean. Likewise, in Figure 181, there are two different distributions of terns depicted for northern Britain.

Overall, this book is an excellent reference for seabird biologists, particularly for those specializing on the five species that have their own chapters: Little, Sandwich, Common, Roseate, or Arctic Terns. The appendices on (1) Demography, Population Trends, and the Basis for Conservation; (2) Research on Terns; (3) The Seabird Monitoring Programme; as well as (4) Scientific Names of Plants and Animals Mentioned in the Text are thoroughly researched and should be helpful to managers as well as researchers. Likewise, the

probable phylogenetic tree proposed at the beginning of the book should provide good discussion among the many geneticists and evolutionary biologists of this group.

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BOURNE, W.R.P. 2013. Seabird fluctuations. *Sea Swallow* 62: 16.

ALBATROSS

Barwell, G. 2014. London, UK: Reaktion Books. 224 pp., 101 color and black-and-white illustrations. Paperback: ISBN 9781780231914, \$17.20–\$19.95 (depending on source).

Graham Barwell's short and sweet account of how albatrosses fit into our culture, both past and present, is a lively and interesting read for those interested in our largest winged ambassadors. The writing is succinct, the photographs are beautiful as well as informative, and the author does a commendable job of researching a wide variety of subjects to include in this diverse book. The six chapters cover descriptions of the birds and associated writings by the first European explorers, not surprisingly with a strong emphasis on Samuel Taylor Coleridge's "Rime of the Ancient Mariner."

The next four chapters describe uses of albatrosses in indigenous cultures, uses by non-indigenous peoples, the history of conserving albatrosses, and albatrosses in our culture today. The chapter on uses in indigenous cultures was particularly interesting, showing both the similarities and differences among groups such as the ancient Hawaiians, Maoris and Aleut Indians across the Pacific.

Also of interest was the chapter on conservation and the descriptions of various individuals and organizations responsible for bringing albatross conservation to the forefront today. Both of these chapters are good reminders of where we started, and how far we've come with respect to seabird conservation.

Aesthetically, the book is a beautiful collection of photographs and prints (all in color) interspersed throughout to illustrate points and provide historical accuracy. There were numerous rare reprints of photographs from the 1800s and 1900s, as well as depictions of artwork and novels inspired by albatrosses. My only complaint is that the book could have been longer and slightly more detailed, given how much space was dedicated to photographs. That being said, all in all, this is an interesting, and somewhat different, book on one of the better-known seabirds today, and it is well worth reading.

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CORRECTION

In Young, L.C., Vanderwerf, E.A., Granholm, C., Osterlund, H., Steutermann, K. & Savry, T. Breeding performance of Laysan Albatrosses *Phoebastria immutabilis* foster parent program (Volume 42, Number 2, 2014), the name of Kilauea Point National Wildlife Refuge was misspelled as the result of a typesetting error. We apologize for the error, which is corrected in the version published on the website (www.marineornithology.org).