

Seabirds: a natural history

Gaston, A.J. 2004. New Haven: Yale University Press. London: Christopher Helm. In text: 50 figures, 13 tables, 29 colour plates. 222 pp. (hard cover). ISBN 0-300-10406-5. \$45.00.

Bob Furness, *Institute of Biomedical and Life Science, University of Glasgow, Glasgow G12 8QQ, UK (r.furness@bio.gla.ac.uk).*

Received 26 October 2004

Before I opened this book, I assumed that it would be a review of recent research on the biology of seabirds, updating and no doubt improving on the previous “text books” by Nelson (1980), Furness & Monaghan (1987) or Ferns (1992). But *Seabirds: A Natural History* is not a text book. It does not attempt to list and review all the major papers of the last few years on seabirds. I would argue that it does not attempt to provide a complete and uniform coverage of seabird biology either. Instead, Tony Gaston has written a personal guide to the natural history of seabirds, with a strong input of his own ideas and experiences.

Tony emphasises that the book is a work of natural history, not a scientific treatise. He enjoys the “telling anecdote” and avoids statistics and references. One consequence of this personal approach is that the reference list is not only short, it is also eclectic. Many professional seabird ecologists may be disappointed to see that their best, most “important” papers are missing from the book. But the outcome is a book that is a fascinating read rather than a review for postgraduate students of seabird ecology.

Indeed, Tony indicates that the book is aimed primarily at the interested novice. It is therefore perhaps less likely to be of use to the average reader of *Marine Ornithology*. In his words, it provides “an account of how these beautiful and engaging birds fit into the economy of nature.” But I would enthusiastically encourage you, too, to read it, because it is peppered with stimulating ideas that could keep the seabird community active in research for years to come.

Some of those ideas have been taxing seabird ecologists for some time, but many of the points raised are ones that I certainly had not been thinking about up until now. So now I’m wondering whether I’m just narrow-minded, or whether Tony Gaston has an exceptionally fertile mind, or whether the book is even perhaps intended to stimulate the rest of us into looking anew at relatively neglected aspects of seabird ecology. I certainly think that the latter objective would be realistic and worthwhile.

About half of the book (chapters 1–5, which occupy up to page 98) is devoted to topics that might be considered less fashionable as subjects for research nowadays—types of seabirds, comparative anatomy, adaptations of seabirds such as body design for underwater locomotion, the waterproofing of plumage, seabird coloration, zoogeography, regional patterns of diversity, distributions of seabird families, post-Pleistocene extinctions of seabird species and local populations.

The other half (chapters 6–10, occupying pages 99–191) deals with topics that tend to be more active areas of current research—for example, seabird feeding behaviour, migrations, colonial breeding, life history and population dynamics. I felt that this latter half was

slightly superficial in places, having to cram a rather large amount of information into relatively few pages. The treatment in the first half of the book was more leisurely and detailed.

That evaluation might be a reflection of my own interests and knowledge, which tend to lie more heavily in the topics of the second half of the book, and so I may be more aware of detail that could have been added there. For example, factors affecting annual breeding success of seabirds (which must surely be one of the largest areas of research in seabird ecology) are treated in about half a page of text, with one figure. On the other hand, wing shapes of seabirds are discussed over about six pages with seven figures. Of course another possibility could be that the author ran out of page allocation by spending too much time on the earlier parts of the book. But I’d prefer to believe that the emphasis is deliberate. There are too many interesting ideas to list but a few. Is the absence of penguins in the northern hemisphere attributable to sharks in tropical waters preventing colonisation of northern latitudes by penguins? If parents share the work to feed a single chick that can be left unattended, but must spend half of their time incubating their egg, should such seabirds time breeding so that peak food availability coincides with incubation rather than chick-rearing? Is there really a lack of predation upon seabirds at sea, or do skuas adequately fill this niche in the Antarctic, sub-Antarctic and Atlantic? Are there no seabirds as small as most terrestrial birds because seabird body size is limited by thermodynamics?

So have I no complaints? Well, very few. In “seabird predators” (page 106), I was surprised to find no mention of skuas, or even of the major impact that Great Black-backed Gulls can exert in colonies of puffins and storm petrels. The view that these predatory seabirds rarely kill birds at sea is certainly not in accord with my observations in skua strongholds such as Shetland or Iceland. Skuas are adept at drowning smaller seabirds, even though they do have some difficulty tearing the meat off floating carcasses.

Tony points out that more species of shearwater migrate from the northern hemisphere to winter in the southern than vice versa, but surely the point to emphasise is the vast number of the southern hemisphere species that flood into the north to dominate energy flow to seabirds in many regions during the northern winter.

The treatment of the role of fishery discards as a food supply for scavenging seabirds is given just six lines of text (the same amount given to the phenomenon of terns learning to pick up stunned fish where dynamite fishing is practiced), yet some 25 million tonnes of fish are discarded globally each year and may have a huge influence on scavenging seabird numbers. And surely longline bycatch issues deserve presentation as a major conservation issue. Each chapter is headed by a quote or a personal anecdote in italics,

providing a lead-in to the subject matter. I have always admired Tony for his ability to squat in a shed on a cliff in the high Arctic making detailed observations of the murre. Reading that he subsequently observed polar bears climbing the cliffs to reach food makes me even more in awe of his intrepid and resolute nature. But a story about watching television from an exercise machine did seem an odd contrast with the Arctic adventures, even though it goes further to confirm the hard-wired dedication that may afflict seabird ecologists whose senses have been sharpened by many

years of fieldwork. I also particularly enjoyed the imagined conversation between Ricklefs, Cody and an Emperor Penguin. Indeed, I liked the book very much.

REFERENCES

- FERNS, P. 1992. Bird life of coasts and estuaries. Cambridge: Cambridge University Press.
FURNESS, R.W. & MONAGHAN, P. 1987. Seabird ecology. New York: Chapman & Hall.
NELSON, J.B. 1980. Seabirds. London: Hamlyn.
-