

## Book Reviews

**ALBATROSSES.** W.L.N. Tickell. 2000. Mountfield, East Sussex: Pica Press. 448 p, illustrated, hard cover. ISBN 1-873403-94-1. £40.00.

People devote their lives to many strange things. Some people restore vintage cars, some climb and hang out overnight above a terrifying void, and others, perhaps fewest, love albatrosses. Let there be no doubt that Lance Tickell belongs to the third group. For sure this is a well-researched, thoroughly scholarly book on albatrosses. But it is also the tale of a lifetime's love affair with these great birds, which have formed the backdrop to Tickell's life since he first joined the British Antarctic Survey (then known as the Falklands Islands Dependencies Survey) in 1954.

It is somewhat ironic that albatrosses, many breeding on the world's remotest islands and foraging in the stormiest seas, are now among the best-studied seabirds. Their docility allows them to be handled easily. Their diurnal habits ashore allow them to be observed closely. And they are large enough to carry satellite transmitters that document their wanderings way beyond the researcher's visual horizon.

How then is this treasure trove of information structured? Two introductory chapters cover tube-nosed birds in general and albatross nomenclature. In only the second page of the latter chapter, Tickell rushes to and lands perfectly on the fence on the thorny subject of albatross taxonomy. 'Readers may choose for themselves whether the albatrosses they see or read about are best considered species or subspecies.' In other words, the reader is never told precisely how many albatross species there are. While this approach works for the book, and I was never confused about the taxon under discussion, it gives scant hint of the emotion the issue can generate. For example, if, as I believe, the two shy albatross taxa, *Thalassarche cauta stadi* of the Auckland Islands and *T. c. cauta* of Tasmania, do not merit the specific status recommended by Robertson and Nunn (1998), then Australia loses an endemic seabird species. Not only would this cause much angst Down Under, it would also have significant repercussions on political efforts to conserve albatrosses in the region.

The meat of the book is three sections on the albatrosses of the Southern Ocean, of the tropics (that is, the waved albatross *Phoebastria irrorata*), and of the North Pacific. Each section begins with a useful oceanographic chapter followed by chapters on the detailed biology of either individual species or obviously related species, such as the sooty albatrosses. There is a fascinating bonus chapter on the history of the sub-Antarctic islands, where so many species breed.

Next follow four comparative chapters on moult, flight,

behaviour, and ecology. The behaviour chapter certainly conveys the rich behavioural repertoire of albatrosses, from the heart-rending Sky-call of a sooty albatross *Phoebastria fusca* on its bleak and lonely ledge to the downright Goofy stare of a Laysan albatross *Phoebastria immutabilis*. But I still found myself asking 'What does it all mean?' This question was less persistent in the ecology chapter because Tickell successfully conveys the developing understanding of the adaptive basis of differences in the ecology of different species. However he should perhaps have extended his comparisons a little further, both to other Procellariiformes and to other seabirds. After all, albatrosses do in many respects represent the extreme of an instructive continuum.

There is an often bleak but occasionally humorous chapter on the damage wrought by humanity on so many albatross species. The reader is provided with Sir Joseph Banks' cooking directions: 'The way of dressing is thus. Skin them overnight and soak their carcasses in salt water till morn then parboil them and throw away the water, then stew them well with very little water and when sufficiently tender serve them up with a savory sauce.' The reader is also told of the urgent threat posed today by pelagic longlining. The fact that Steller's albatrosses *Phoebastria albatrus* are increasing at 7.4% per year after near-extirmination in the first half of the twentieth century shows that, despite their low reproductive rate, albatross populations can recover if nurtured. And finally there is a chapter that collects some of the depictions of the albatross in verse. I was delighted to learn that Coleridge, of *Ancient mariner* fame, made only a single sea voyage, during which he saw just one seaduck, which was something of a disappointment to him!

The appendices on measurements and recorded prey are useful. Drawing on 189 references, the appendix on population sizes at all known breeding islands is a *tour de force*.

Furthermore there is a sandwich of excellent colour plates depicting all the taxa. The quality of these plates is on a par with the design of the whole book, which is simply outstanding. Tables and figures are exceptionally clear and superbly integrated with the text.

Overall then, this is an admirably researched book based on some 1100 references. It is especially strong in its treatment of the history of albatross research. I cannot help admitting to a less than charitable frisson of satisfaction on learning that all 129 islanders, the feather-hunters who slaughtered so many Steller's albatrosses, were killed by the Torishima eruption of August 1902.

Other intriguing nuggets abound. I did not know that sooty albatrosses have unusually long pointed tongues. Why? Is it in some way connected to a difference in

feeding ecology that might also explain their hitherto-unexplained dark plumage? Tickell does not speculate on this point. Nor does he set out avenues of future research. Given that the age at which individuals of a species start to breed varies so much, and has been declining in some declining populations, it would be fascinating, if difficult, to understand more of the basis for these inter-individual differences. Now that Theresa Burg's unpublished doctoral work in the Department of Zoology at Cambridge has established more extra-pair paternity in wandering albatrosses *Diomedea exulans* than hitherto realised, there may be scope for more behavioural ecology studies. And the flood of information from transmitters that monitor the birds' positions and physiological states can only increase. The challenge is to ensure that the data are used to address focused questions.

How does *Albatrosses* compare with the opposition? Robertson and Gales (1998) edited a book that is substantially devoted to the impact of longlining on albatrosses. It therefore does not begin to compare with Tickell's book as an all-round source of information on albatross biology. John Warham's (1990, 1996) two excellent volumes were largely written before the advent of satellite tracking permitted wonderful advances in the understanding of albatrosses at sea. Thus the clear message is that, if you are seriously interested in albatrosses, it would be a sin not to obtain Tickell's *Albatrosses*. How lucky these birds are to have been served by such a dedicated author. (M. de L. Brooke, Department of Zoology, University of Cambridge, Downing Street, Cambridge CB2 3EJ.)

#### References

- Robertson, C.J.R., and G.B. Nunn. 1998. Towards a new taxonomy for albatrosses. In: Robertson, G., and R. Gales (editors). *Albatross biology and conservation*. Chipping Norton: Surrey Beatty: 13–19.
- Robertson, G., and R. Gales (editors). 1998. *Albatross biology and conservation*. Chipping Norton: Surrey Beatty.
- Warham, J. 1990. *The petrels: their ecology and breeding systems*. London: Academic Press.
- Warham, J. 1996. *The behaviour, population biology and physiology of the petrels*. London: Academic Press.

**RAVEN'S SAGA: AN ARCTIC ODYSSEY.** Peter Schledermann. 2000. Calgary: Corvus Press. 347 p, soft cover. 0-9687088-0-3. Cdn\$15.00; US\$12.00.

*Raven's saga* is a significant departure from Peter Schledermann's previous work, which had been situated more narrowly within the domain of the social sciences, especially archaeology. Here, Schledermann shifts to the realm of fiction, informed by the considerable knowledge he has accumulated over the years as a research social scientist, in order to reconstruct a long-past world. At a time when universities in Canada pay great lip service to the importance of interdisciplinary studies, Schledermann's new book truly embraces that integrated notion so elusive to the fragmented approaches of the academy. Schleder-

mann draws on his vast professional knowledge of Arctic archaeology and ethnography, as well as his personal interests in sailing and Scandinavian cultural history, to create a piece of fiction that is solidly situated in an historical setting.

This is undoubtedly a piece of historical fiction. And historical fiction should be distinguished from fiction that merely uses the historical past as its setting. In many ways, historical fiction is like science fiction: both are imaginative accounts attempting to understand something that exists *outside* the realm of the imagination. Science fiction, at its best, grows out of some subtle principle of science, exploring it in the realm of the imagination. In H.G. Wells' *The war of the worlds*, for example, the invasion of Earth by the Martians is premised on the scientific understanding that Mars, because of its greater distance from the Sun, would have cooled sooner than Earth, thus allowing the evolutionary process of life to begin long before it was possible on the much hotter Earth. Accordingly, the environment of Mars would have generated more highly evolved forms of life than were present on Earth at the time the book was set. And it is the medical understanding of how organisms build natural immunities to familiar viruses and bacteria that Wells ultimately uses to defeat the Martians upon their invasion of Earth.

*Raven's saga* operates in much the same way. Both books construct an imagined world, although one soundly premised on the scientific understanding of the tactile world in which we live. But while *The war of the worlds* launches forward into the imagined future, *Raven's saga* reaches backwards into the distant past. Schledermann's created world of the past, like Wells' imagined world of the future, is solidly based on scientific data that can be verified and substantiated. The imagination comes into play in Schledermann's attempt to account for how those factual, historical details could have occurred. Where organic and inorganic evolution provide the scientific thrust to Wells' fiction, the principles of archaeology inform Schledermann's book.

In 1978 and 1982, Schledermann and his colleagues discovered a number of Norse artifacts during archaeological excavations in the high Arctic. Rivets from Viking ships, chain-mail of the variety worn during the Crusades, a Norse carpenter's plane, a knife blade, and several other items were found in the ruins of an Inuit winter house on an island off the central east coast of Ellesmere Island. The house, according to radiocarbon technology, had been occupied sometime between 1250 and 1300 AD. These facts are grounded in the sound empirical observations of sophisticated archaeological research. But they are only the beginning — the point of embarkation, if you will — from which the imaginative journey that is *Raven's saga* begins.

In Schledermann's imaginative reconstruction, an exploratory expedition sets out from the southern tip of Greenland around 1278 and travels up Greenland's west coast beyond modern Thule to Skraeling Island, one of numerous islands midway up the east coast of Ellesmere