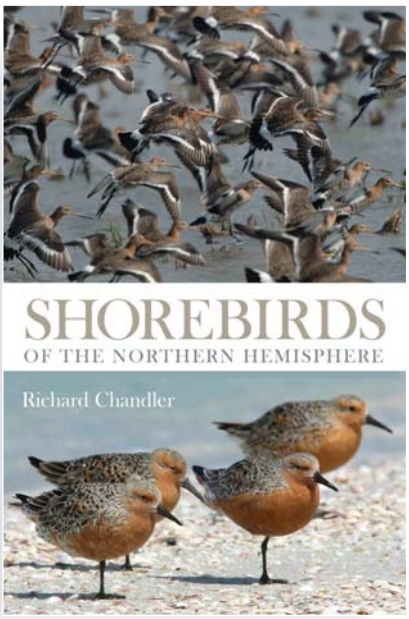
REVIEWS



Shorebirds of the northern hemisphere By Richard Chandler. Christopher Helm, London. 2009. ISBN 978-1408-10790-4. 448 pages, 850 colour photographs, distribution maps, tables. Softback. £29.99.

This most recent shorebirds publication is essentially a photographic guide aimed at the field observer. It contains 850 photographs, the majority taken by the author, a well known shorebird enthusiast and photographer. The book immediately has a solid, quality feel to it, being heavily adorned with page after page of excellent close up shots of these fascinating birds. Even the first page, of Acknowledgements, has a stunning portrait of a Terek Sandpiper *Xenus cinereus*, while the monotony of the reference section has been broken by the inclusion of full page photographs!

There is a short introduction, beginning with Chandler's definition of the 'northern hemisphere' as used for the book. This is not the true northern hemisphere, but an area within certain geographic and zoogeographic boundaries, the reasons for which are fully explained. As a result there is a rather odd mix of some mainly sedentary tropical birds (e.g. Wattled Jacana *Jacana jacana* in South America, Black-headed Lapwing *Vanellus tectus* in Africa, Jerdon's Courser *Rhinoptilus bitorquatus* in India, and Beach Thick-knee *Esacus magnirostris* in southeast Asia) among the majority of largely migratory Holarctic species. However, this is not a criticism as such species do add a bit of spice to the selection.

There then follows a general overview of basic, but important ground information, including plumages, moult, feather wear, hybrids and aberrant plumages, as well as a behaviour section on feeding, roosting and plumage care. These are well illustrated by informative photographs depicting each of these topics.

The bulk of the book consists of the individual species accounts which are grouped into chapters of closely related species, each chapter beginning with a stunning photograph chosen for aesthetic quality rather than identification purposes. The author has succesfully portrayed all the main age, sex and racial variations for almost every subject. These are laid out in a user friendly format with very informative captions, together with a concise text discussing these topics in more detail, with an emphasis on difficult species pairs. Also included are a paragraph on status and distribution and a short list of key references. The distribution maps, taken from the *Handbook of the Birds of the World*, will be familiar to owners of that publication. Particulary appealing are the watermark headers to each species account.

An attest to the author's thoroughness is the treatment of Dunlin *Calidris alpina*, where a total of 20 photographs over eight pages portray a range of plumages and all of the world's nine sub-species. Short-billed Dowitcher *Limnodromus griseus* and the sand plovers are given equal attention, the different races being of particular interest to identification buffs. Personal favourites among the photographs are the full page given to variation in male Ruff *Philomachus pugnax* breeding

plumages, and the photo of a Black Turnstone *Arenaria melanocephala* and a Ruddy Turnstone *A. interpres* standing on the same rock.

All in all, I cannot fault this book. It is crammed full of up to date information, and even the recently described, but as yet un-named 'White-faced' Plover *Charadrius sp*. of east Asia is included. This is a very attractive publication at a very reasonable price, and I highly recommend it to all wader enthusiasts.

Mick Mellor

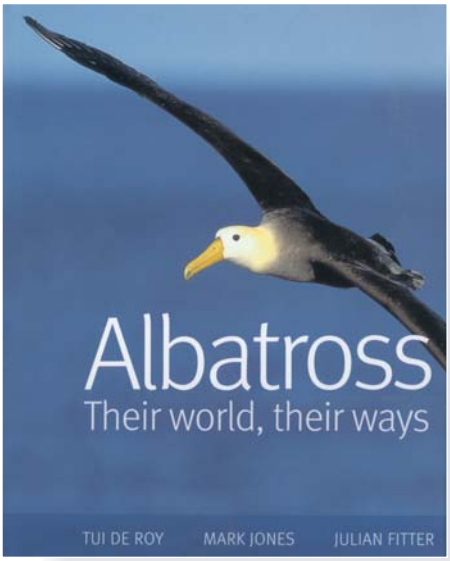
Albatross - their world, their ways By Tui De Roy, Mark Jones and Julian Fitter. Christopher Helm, London. 2008. ISBN 978-0-7136-8812-2. 242 pages, over 400 colour photographs. Hardback. £35.00.

Is there anyone reading *Seabird* who is not in awe of albatrosses? This book is by far the most spectacular book on this amazing group of seabirds yet published. There are essentially four parts of this book. The main feature, running throughout it are a set of superb photographs illustrating all species and engaging in all behaviours. Tui De Roy has been working for many years to take the majority of these photographs, and it is these that make this book accessible to just about anyone that can appreciate wild birds in wild places. I was delighted to see a picture of my first albatross - the lost Black-browed Albatross *Thalassarche melanophrys* that was present for many summers at Hermaness, Shetland in the 1970s and 1980s. Other favourites include a flying Buller's Albatross *T. bulleri* inspecting the photographer and a calling Sooty Albatross *Phoebetria fusca* perched on the edge of a fern-filled canyon on Gough Island. The book could be purchased just for its photographs.

The first part of the book's text is an introduction by Tui De Roy of each of the albatrosses, very often in the form of a story of her trip to photograph the species. This captures effectively the romance of the group and the places that they live. Although the section is entitled Spirits of the Ocean Wild, rather little wild ocean appears in the text or the photographs - instead the remote islands (and often strange vegetation) that the birds nest on feature in most pictures. Being a 'seabirds at sea' person, I would have loved to have seen a few more pictures of raging sea with the birds gliding seemingly effortlessly over it.

The second text section is an interesting series of generally double-page spread essays by noted albatross researchers and conservationists. A free hand has been granted to the 17 authors in this section. Accounts include one from Conrad Glass - Police Inspector on Tristan da Cuhna - writing on the plight of the island group's albatrosses, and a number of other authors writing status reports. More widespread conservation efforts are covered in sections on Southern Seabird Solutions and BirdLife International's Albatross Task Force. Other groups of essays cover aspects of the scientific study of albatrosses, with perhaps my favourite being Dave Anderson's account of the enigma of why Waved Albatrosses *Phoebastria irrorata* take their eggs out of their nests and frequently into places where they can no longer be incubated. There is something not quite right in this occurring in the Galapagos, the islands that helped inspire Darwin - hardly survival of the fittest. This section though could have done with a good edit though - there is some repetition between the essays and perhaps most annoyingly, some essays contain scientific references (while others do not) but there is nowhere in the book to find out what those references are.

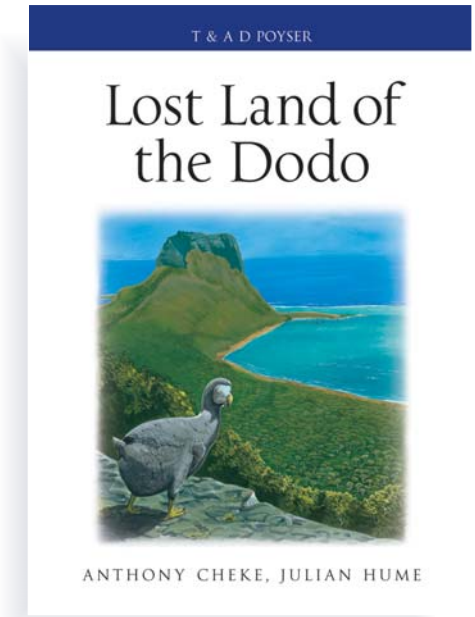
The final section, by Julian Fitter, is a set of species profiles of the albatross clan. An introductory section covers features such as etymology, nomenclature, taxonomy (this book recognises 22 species), and many aspects of general biology. A large double-page summary table provides key identification



features and describes the species' breeding and non-breeding range. Each of the 22 species is then described in some detail. Again this section is irritating in that scientific references are used (particularly for taxonomic sources and notes), but most of these cannot be followed up anywhere in the book. The information is well laid out, but perhaps one of the more specialist books such as Brooke's (2004) *Albatrosses and Petrels across the World* would be a more comprehensive source for those needing this information. Smaller sections cover where to see albatrosses and a glossary.

Photographically this is a coffee table book of the highest quality; it gains on that family of books by also having an interesting and varied text - that could have been improved by being more coherent. This though should not deter you from buying and savouring this book.

Mark Tasker



Lost land of the Dodo By Anthony Cheke and Julian Hume. Poyser, A&C Black, London. 2008. ISBN 978-0-300-14186-3. 464 pages, numerous maps, figures and colour plates. Hardback. £45.00.

'Archipelagos are the workshops of evolution' (Jones 2000). As such, the frequently unique species on islands and archipelagoes have played a central role in evolutionary biology. More recently, the disproportionate extinction of island taxa has played an equally pivotal role in the theory and practice of conservation. Because the Mascarenes, like Christmas Island (eastern Indian Ocean) and St Helena in the Atlantic, are the largest tropical oceanic islands where the first humans were Europeans, there are written records of pristine conditions. The authors have combed these records diligently, combined them with data from excavations of sub-fossil deposits, and so attempted to reconstruct the islands' ecological history.

This monumental book addresses both issues, centred around the iconic Dodo *Raphus cucullatus* of Mauritius whose extinction not only still stands as a metaphor for extinction itself, but, as the authors rightly point out, initiated the very concept of extinction. The book essentially builds on the senior author's earlier ecological history of the Mascarene Islands, published for the British Ornithologists' Union (Diamond 1987), updating it with a detailed account of the subsequent decades of tireless research especially by the senior author. The earlier book included rather little on seabirds, which receive more attention here.

The Mascarene Islands lie east of Madagascar, in the tropical western Indian Ocean. All three are volcanic. Réunion is 665 km E of Madacascar at 21°S, and its active volcano is about 3 million years old. Mauritius is 164 km E of Réunion, at 20°15'S, the oldest of the group at about 10m years; and Rodrigues, the youngest (though its age remains uncertain), is 574 km E of Mauritius (4,800 km W of Australia) at 19°45'S. Réunion is an overseas *département* of France, and one of that country's best-kept secrets - a remote tropical hideaway, as Hawaii once was for Americans. Mauritius is an independent state (formerly a British dependency), administering remote Rodrigues as well. All three islands are overrun by exotic pests and predators introduced by European colonists over the last 400 years or so, and have been devastated by habitat destruction, though Réunion's altitude (to over 3,000 m) offers some protection in the steep mountainous parts of its landscape.

Of the 464 pages, 47 are taken up by the bibliography and 91 by the notes; this book was researched very thoroughly indeed. There are 15 appendices ranging from timelines of all vertebrates recorded on each island, through local names, lists of the birds shown in the colour plates, and accounts of recent excavations. Thirty-nine colour plates by Julian Hume range from single-species portraits to magnificent dioramas reconstructing scenes from pristine or early-settlement conditions. These are splendid; reviewers must always find a quibble or two but my only one

is that the Rodrigues Starling *Necropsar rodericanus* plate makes them look more like seabirds than they presumably did. ASC is responsible for the main text, JPH for 38 boxes on major vertebrate taxa, and the colour plates.

The chapter titles convey the flavour of the book, and its generally historical approach: Geography of the Mascarenes; First contact; The pristine islands; Where did the Dodo come from? Early settlement; United under France; A century of sugar; The limits to growth; A miraculous survival; Practical Conservation on Mauritius and Rodrigues; Reflections. So where on earth, in such a book, is anything of interest to seabird biologists? Seabirds, of course, nest on islands, and the authors have been commendably inclusive in the taxa they address in their ecological reconstruction of the biota of this fascinating archipelago. As Steadman (2006) points out so graphically, 'landbirds and seabirds are biogeographic apples and oranges': the sea that acts as a hostile barrier to dispersal of terrestrial taxa, so promoting their divergence, provides food and dispersal corridors to seabirds. Consequently seabirds are much more widely distributed than are insular landbirds; thus the extinction of a breeding seabird population on an island is much more likely to involve extirpation of a population than extinction of a species. The authors rightly point out the ecological importance to the terrestrial island ecosystem of the enormous input of nutrients from breeding seabirds, a phenomenon often referred to as 'marine subsidy' and fully justifying insular ecologists paying more attention to seabirds than they generally do.

The difference in distribution patterns of landbirds and seabirds is reflected in the much greater attention paid by early explorers to the former; landbirds on 'new' islands were so unfamiliar and bizarre that early explorers generally ignored the more familiar seabirds. However an engraving from 1598 shows frigatebirds *Fregata* which apparently attended the camps of early Dutch sailors to take advantage of fish guts and other refuse; evidently they were breeding as they were taken for food from their nests.

I found references to seabirds in about 15 different parts of the book; unlike Steadman's (2006) recent attempt to reconstruct pre-human avifaunas in the Pacific, from fossil evidence alone, there is no chapter devoted specifically to seabirds. I may well have missed some pertinent points on seabirds; like most seabird biologists, I am also interested in the other inhabitants of the islands where they live so it is easy to get distracted by non-seabird material. The total number of seabird species thought to have nested in the Mascarenes is 23 (including an as yet undescribed sub-fossil referred to here as Bourne's Petrel); currently there are ten species breeding on Mauritius, seven on Rodrigues and six on Réunion - 14 in all.

The islands differ in the nesting habitat they provide for seabirds. Réunion has only one small offshore stack to support breeding seabirds, where small numbers of Brown Noddies *Anous stolidus* and Wedge-tailed Shearwaters *Puffinus pacificus* nest. Réunion's high mountains support two endemic petrels (Barau's *Pterodroma baraui* and Réunion Black *Pseudobulweria aterrima*); despite a population of several thousand, the first Barau's Petrel nest was not found until 1995. Many Tropical *P. bailloni* and Wedge-tailed Shearwaters, and smaller numbers of White-tailed Tropicbirds *Phaethon lepturus*, also nest on inaccessible mountain cliffs. On Mauritius, of the ten species of seabird now breeding, nine do so only on offshore islands; of the seven species breeding on Rodrigues, four nest only on off-shore islands. Prior to human contact, more seabird species seem to have bred, in larger numbers, on Rodrigues than on either Mauritius or Réunion.

The highlight of the seabird fauna must be the petrels, especially as they include endemics. Chapter 4 'Where did the Dodo come from', includes a section on 'seabirds of unclear origin and affinities'. This focuses on gadfly petrels, traditionally placed mainly in the genus *Pterodroma*. In the first group is the Réunion Black Petrel, now placed in *Pseudobulweria*, a genus of poorly-known birds breeding between 5° and 20°S in all three oceans. Members of this genus characteristically are nocturnal visitors to inaccessible nest sites high up in mountains. The second group are the 'Herald Petrels' (*Pterodroma*), which are diurnally active around nest sites on low islands. They include the Kermadec Petrel *Pt. neglecta* of the south Pacific, which has recently been found breeding on Round Island off Mauritius (and also, incidentally, in the Seychelles); most of the petrels on Round Island have traditionally been attributed to the Trindade Petrel *Pt. arminjoniana* but recent records of both Herald *Pt. heraldica* and Kermadec Petrels there have complicated the situation - a Herald Petrel ringed in Australia was caught on Round Island in 2007. In recent years a Bulwer's Petrel *Bulweria*

bulwerii (first seen in 1987) has also bred, and Black-winged Petrel *Pt. nigripennis* has also been seen on Round Island. The unresolved question of the identity and relationships of the petrels nesting on Round Island is dealt with in several different places in the book; a single summary of these different treatments would have been useful. The various treatments are consistent in emphasising the strong possibility of hybridisation or introgression among several of these forms. The authors point out that Round Island's latitude (20°S) makes it susceptible to colonisation by both the tropical Herald Petrels and the sub-tropical Black-winged and Kermadec Petrels. The third 'group' of petrels is Barau's Petrel nesting at night in the high mountains of Réunion.

Early accounts also identified Abbott's Booby *Papasula abbotti* from 1668 on Mauritius, and there are later records from Rodrigues; both these locations are supported by specimens or sub-fossils. On page 49 it is stated that 'two of four recent breeding stations of Abbott's Booby were in the Mascarenes'. Elsewhere (Box 3, page 47) these are specified as Mauritius and Rodrigues - the other two (not identified in the book, so far as I can find) are presumably Assumption and Glorioso islands, also in the tropical western Indian Ocean, though whether they nested on both is somewhat controversial. I did not find a reference in this book to the discovery of fossils of this species in the Solomons and Vanuatu in the tropical western Pacific, and as far east as the Marquesas (Steadman 2006), which show quite clearly that the current distribution of this rare example of a current single-island endemic species of seabird is actually a relic of a distribution that originally covered half the width of the globe.

Seabird conservation has evidently increased significantly in the last 20 years. Recent wardening of islets off Rodrigues has increased tern populations. Exotic mammalian predators have been removed, and some reintroduction of seabirds to these islets is being considered or is underway. Widespread poaching of seabirds on the islets off Mauritius has been much reduced since the 1970s but still continues. The authors promote the reintroduction of both frigatebirds and Abbott's Boobies, but don't explain how this might be done. The challenges involved in reintroducing large tree-nesting seabirds with protracted breeding cycles including long periods of post-fledging parental care may be underestimated here. The suggestion that frigatebirds need sufficient potential victims to support their "kleptoparasitic lifestyle" I suggest is off the mark; many colonies of frigatebirds clearly subsist with few or no opportunities for kleptoparasitism.

Reviewers earn their free copy of the book by being picky. I had my own copy already, but will carp a little anyway. The standard of writing is generally high, though the use of 'impact' as a verb, and 'data' as singular, is annoying to elderly pedants. My main reservation about the book is its organisation; there is no list of tables, figures, colour plates, or text boxes. In Appendix 14, the monochrome figures identifying species shown in the colour plates are not in the same order as the plates themselves, making it unnecessarily tedious to put a name to species in the otherwise superb colour plates. Fortunately the index is comprehensive, so it is possible to find particular points of interest. I did expect to find modern maps of each island, identifying places named in the text, in Chapter 1 'Geography', and was grumbling about it until I stumbled upon just those maps in Chapter 8, 'Limits to growth'. I still haven't figured that one out.

Quibbles aside, this is a magnificent and very important book with lots for seabird biologists to learn about the ecological history of islands which still support some extremely important, and poorly known, colonies of breeding seabirds.

Diamond, A. W. (ed.) 1987. *Studies of Mascarene Island birds*. CUP, Cambridge.

Jones, S. 2000. *Darwin's Ghost: the Origin of Species updated*. Random House, New York.

Steadman, D. W. 2006. *Extinction and biogeography of tropical Pacific birds*. University of Chicago Press, Chicago.

Tony Diamond

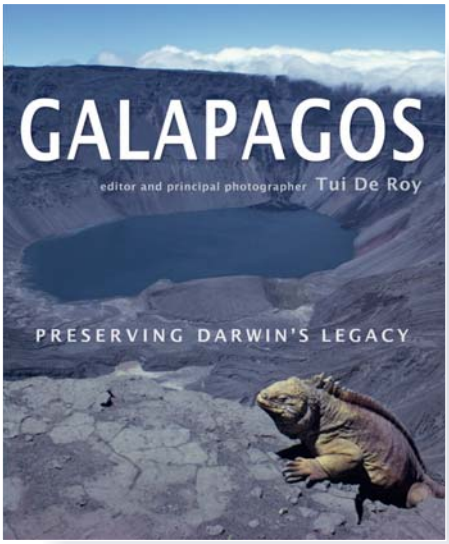
Galapagos: Preserving Darwin's Legacy By Tui De Roy (editor and principal photographer). A. & C. Black, London, UK. 2009. ISBN 978-1-408-10866-6. 240 pages, many colour photographs. Hardback. £30.00.

This is a spectacular book - if you want to give yourself (or anyone even remotely interested in conservation) a present then look no further. It

is beautifully produced, a really good read and inspiring. The editor's plan is simple and effective. You get the current major researchers and fieldworkers in the Galapagos to write essays on their work, illustrate them with 600 of the most stunning photographs available, mostly by yourself since you were raised in these islands and have become one of the world's foremost nature photographers, and link it to the Darwin celebrations and the 50th anniversary of the founding of both the Galapagos National Park and the Charles Darwin Foundation.

The photographs and production are outstanding. In many books like this, the text is a bit of a let down but these essays are almost without exception brilliant. It is so nice to see the enthusiasm and commitment of fieldworkers shining through and key results presented without being submerged in jargon and statistics (though of course the latter are essential in other situations).

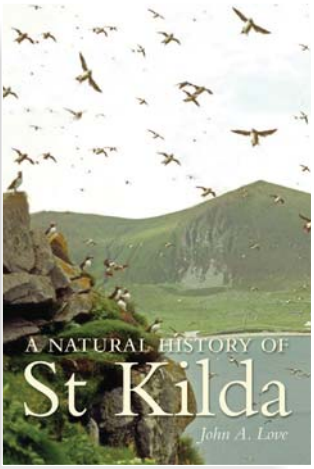
Topics covered range widely from Galapagos Giant Tortoise *Geochelone nigra* to Marine Iguanas *Amblyrhynchus cristatu*, pathogens to goat *Capra aegagrus hircus* eradications and Darwin's finches to snails. There are four chapters on seabirds - Galapagos Penguin *Spheniscus mendiculus*, Waved Albatross *Phoebastria irrorata*, Nasca Booby *Sula granti* and Flightless Cormorant *Phalacrocorax harrisi*. I thought that I was fairly well up on Galapagos seabirds but I learnt much. For instance, Dave Anderson's contribution is subtitled 'Some evolutionary surprises' and indeed there are - unemployed Nasca Boobies of both sexes wander the colony looking for unattended chicks. If such a booby finds one, it either (a) preens and is generally nice to it, (b) viciously attacks it or (c) tries to mate with it! Almost all full-grown Nasca boobies are unemployed at some time or other so that this sexual behaviour is ubiquitous. Bizarrely, adults that had been 'abused' as chicks were more likely to exhibit this behaviour as adults than those that had not. This is remarkably similar to the 'cycle of violence' hypothesis in humans. Current work involves protecting chicks when their parents are away and waiting to see how they behave when they return to the colony to nest in the future. Long-term population research with a sociological aim!



Galapagos has more than its fair share of introduced animals. The scale of the devastation caused by goats on oceanic islands is well know but the aptly-titled chapter 'Project Isabela: Ecosystem restoration through mega-eradication' by Karl Campbell shows what can be done given ambition, conviction, drive and money. A few years ago donkeys *Equus africanus asinus*, pigs *Sus scrofa domestica* and goats (80,000!!) were removed from the 150,000 acre island of Santiago. The effort needed was immense - 27,000 miles walked through terrible terrain by human hunters in 2001–04 and then 21,000 miles flown by helicopter in 2004–06. Lessons learnt here allowed a more efficient attack to be made on the goats on an even larger island - the 1.13 million acre Isabela. This was carried out by the use helicopters and Judas (or Mata Hari) goats. These goats were castrated and radio-collared and the females had hormone implants to keep them in almost permanent oestrus. Once the hunters had removed most of the goats, the Judas goats were released into the wild. The females in oestrus searched intensively for males and males tracked down females in heat and stayed with them so allowing small groups of goats to be easily found. This tool allowed the removal of males from the remnant population faster, and consequently stopped reproduction in the last remaining females. The island is now goat-free after the removal over two years of 59,000 goats. The use of decoy goats and helicopters reduced the cost of cleaning the island by 90%.

I realise that this is somewhat of a rave review but it is unusual to get such a positive picture of conservation at work. As a cautionary note, the last illustration in the book points out that there are continuing risks to islands. It is of a Black Rat *Rattus rattus* escaping from a sinking cargo ship ashore in Galapagos - a graphic reminder that the threats of introductions still remain.

Mike Harris



A Natural History of St Kilda By John A. Love. Birlinn Limited, Edinburgh, UK. ISBN 978-1-841-58797-4. 320 pages, 31 colour photographs. Paperback. £20.00.

St Kilda is a magical, mysterious place that lingers in the imagination. For those who have been lucky enough to visit and experience the islands, and this is an increasing number with the advent of regular tourist boats from Harris some 50 miles across the Atlantic, this book will have special appeal. It adds to an extensive literature dating back to 1697, when Martin Martin wrote his classic text *A late voyage to St Kilda*. Such a richly-documented natural history is matched, even surpassed, in the public imagination by its fascinating human history, and this latest book also provides much insight into this.

The reader expecting a methodical and easily-digestible treatment of the seabirds, plants and other animals of Kilda may be disappointed. This information is often present, but one has to commit to a lengthy read in order to extract it. However, this book is more ambitious than a dry factual treatment; accounts of the natural history are woven through a dense narrative of stories and observations documented by visitors to St Kilda from Martin's time to the present day, and from the author's own observations spanning a number of decades. I found this approach not wholly to my taste; the minutiae of recounted details from diaries and the like, no doubt to be savoured by the die-hard St Kilda enthusiast, at times lost my full attention. For example, of the two chapters devoted to 'Seabirds', I found the second all the better for its more restrained use of historical anecdote and quotation, although other readers may well disagree!

An excellent chapter on fowling recounts the history and many human tales of the St Kildan practice of taking seabirds from the cliffs for use as food, fuel for lighting, bedding and a source of income. One vivid description relates how Northern Gannet *Morus bassanus* skins were sewn to make shoes, which lasted only five days before a fresh pair was required! This chapter in many ways encapsulates the key theme of the book: the story of the nature, men and women on St Kilda and of the people who have observed them.

A glance at the chapter headings of the book reminds us of the many facets of the St Kilda story; from its origins as a volcano in the chapter on geology, to the Great Auk *Pinguinus impennis* (named the 'garefowl' by the St Kildans). The latter chapter reads as a fascinating 'who dunnit' of the fate of the last individuals of this now extinct species. The chapters on the 'St Kilda Wren' *Troglodytes troglodytes hirtensis* and the 'St Kilda Field Mouse' *Apodemus sylvaticus hirtensis* provide examples of island biogeography and evolution of species on islands. More than once the author refers to St Kilda as the "Galapagos of the British Isles" with tongue only partly in cheek; the parallels he draws are justified.

The author's fascination, knowledge and love for St Kilda shines through, as does his erudition. The text is for the most part entertaining and well written, though a few careless inaccuracies and oddities such as the use of too many 'etc.' took some polish off the writing. I would like to have seen the addition of sub-headings within chapters to help me find what I was looking for.

One surprising element of this book for me was discovering the author's artistic talent; his excellent ink drawings start and end each of the 15 chapters. The 31 colour photographs, many by the author, are mostly well-reproduced and informative, though the book's photographs are not its key asset. The figure showing a bathymetric diagram of the sea floor around the islands is a highlight, illustrating the volcanic beginnings of St Kilda.

I'd recommend this book to all dedicated St Kilda enthusiasts; it contains a vast wealth of information that has been generally well-marshalled into a cohesive treatment of this fascinating subject.

Matt Parsons