# BOOK REVIEWS

## Birds in Winter

Roger F. Pasquier
Princeton University Press, 2019. 304 pages, hardback with black & white line drawings. ISBN 978-069-117855-4.
£24.00

This is a scholarly book (the references alone occupy more than 30 pages) but an eminently readable one. It sets out to examine that most challenging part of the avian year. Whether they migrate to avoid it, or remain to endure it, for birds "winter" actually begins in late summer as they prepare for it, and lasts until early summer of the following year in that it may determine their subsequent breeding success.

Of the ten chapters, two deal with how birds "know" that winter or spring are on the way, two deal with migratory species and how they select habitat and organise themselves in relation to the resident inhabitants they encounter, and two ("Survival" and "The Winter Day") focus on those that remain and how they cope. Two final chapters on "Conservation" and "Climate Change" deal with topics such as habitat loss, invasive species, pollution, shifts in winter range and the possibility of accelerated evolution.

Pasquier is not afraid to take digressive paths and, like all broad-ranging reviews, this book throws up questions and examples which grab our attention. Do birds moult before or after migration? (Answer: both and, extraordinarily, even during). What climatic factors determine winter mortality in resident species? (Answer: temperature is much less important than snow cover or rainfall). Do some individuals like their winter quarters so much that they decide to stay? (Answer: yes, but mainly juveniles for one year only). At one point, the author invites us to spare a thought for Buenos Aires where the resident wader population must not only accommodate northern migratory shorebirds but then provide for Patagonian species coming from the south to avoid the austral winter, so that three distinct populations may briefly overlap to compete for resources.

There are two caveats. First, there is scant attention paid to "clocks" or to the mechanisms by which migratory species actually find their way. Perhaps the author feels that the dust has not yet settled on navigational cues and spatial memory. Second, Pasquier is an ornithologist at the American Museum of Natural History. It is not surprising, therefore, that at least half of the examples used are New World species. Nevertheless, the underlying principles will usually translate to species we are more familiar with, and to travelling ornithologists (and those interested in U.S. rarities that turn up in Europe by mistake) it opens many doors. The book is illustrated with charming line drawings by Margaret La Farge and these greatly complement an already impressive work.

At first sight, this may seem an off-beat topic, but it is well served by the author who clearly demonstrates that it genuinely deserves a whole book, and that it is not off-beat at all. It is too dense for devouring at a single sitting, but is a volume for dipping into, digesting and returning to. I recommend it to the serious birder.

**A.P. Payne**

## Field Guide to the Ladybirds of Great Britain and Ireland

Helen Roy & Peter Brown, illustrated by Richard Lewington
Bloomsbury Wildlife, London, 2018. 133 pages, paperback, with colour photographs and illustrations. ISBN 978-1-4729-3569-4.
£25.00

Their bright colours and patterns of spots make ladybirds (Coleoptera, Coccinellidae) a popular and generally easily recognised group of beetles. They are not bugs, despite the U.S. name "ladybug", though there a few true bugs that can be mistaken for ladybirds. Of the 47 species in the U.K., 29 have been recorded in Scotland, though of those 29 there are no recent records of the false-spotted (*Hyperaspis pseudopustulatus*), and the occurrences of Adonis' ladybird (*Hippodamia variegata*) probably represented vagrants. However, not all of the 47 are instantly recognisable as ladybirds in that some have cryptic coloration, and are rather small (1.0-3.5 mm in length – the 1 mm species is aptly named the "dot ladybird" (*Stethorus pusillus*)).

This and the book reviewed below are largely complementary to each other: the *Field Guide*, as its name suggests, is the more scholarly (though still very accessible) and is indispensable to the serious surveyor (or even casual photographer) in that it gives detailed accounts of adults and larvae of all 47 species. The *RSPB Spotlight* is in a generally more "readable" style (though certainly not lacking in academic "weight") – it does not give systematic accounts of the species, though there are illustrations of most of the larger ladybirds, spread throughout the book; and it is organised by themes, such as ladybirds in cultural contexts.

As would be expected from the authors, who are the organisers of the U.K. Ladybird Survey (www.coleoptera.org.uk/coccinellidae/home/), the *Field Guide* is both well-informed and up to date, all the more so as Helen Roy holds a research post at the Centre for Ecology and Hydrology and is visiting Professor in the School of Biological Sciences, University of Reading.

The book fills a real need, as there was previously no comprehensive guide to identification of U.K. ladybirds beyond the dichotomous keys in *Ladybirds* by Roy *et al.* (2013, Pelagic Publishing). The latter book lacked comprehensive colour illustrations and the information in it about habitat and distribution was separate and generalised, whereas in the *Field Guide* all these aspects are grouped together with the illustrations, U.K. and Ireland distribution maps, and U.K. conservation status. A dichotomous key is largely redundant given that possible confusion species are also mentioned where necessary, and there are pictorial keys including an "at a glance guide" to all 47 species, and some welcome pictorial keys to groups of very similar ladybirds, such as black ones with two red spots - also to species which might easily be confused for ladybirds.

I mentioned a key would be "largely" redundant, and this brings me to my niggle: ladybird species are notoriously variable in appearance, particularly the 2-spot ladybird (*Adalia 2-punctata*) and 10-spot ladybird (*A. 10-punctata*), and though a handful of possible variations of the most variable species are illustrated – including teneral (immediately after emerging from the pupa) forms of the 10-spot, which can puzzle the beginner – these are by no means exhaustive, as testified by the earlier *Ladybirds* book (mentioned above), and even more possibilities are shown and discussed in the authoritative book in the New Naturalist series *Ladybirds* by Majerus (1994, HarperCollins).

Another useful feature is that the authors have proposed English names for some of the previously un-named species, i.e. most of the inconspicuous species in the subfamily Coccidulinae such as the species of the genera *Rhizobius*, *Scymnus* and *Nephus*. This may well make these species more accessible and therefore better studied, which could encourage recording by "citizen scientists", another of Helen Roy's special interests.

Of the 47 British species some are relatively recent arrivals such as the bryony ladybird (*Henosepilachna argus*) and the harlequin ladybird (*Harmonia axyridisi*), some species previously confined to England are spreading into Scotland, and potential future additions are also listed. Other sections discuss the general features and life-history of the group; the species that may be found in the various habitat types and in the regions of the U.K. – including an entry on Central Scotland (with a photograph of Fannyside Moss near Cumbernauld); plant species that are good for ladybirds (Leyland cypress among them!); and a short but very useful list of "further resources" – books, websites and local record centres.

I already have the *Field Guide* and have found it useful over the past year.

In summary, this is an indispensable resource for anyone wishing to take ladybirds seriously.

**R.B. Weddle**

## RSPB Spotlight: Ladybirds

Richard Comont
Bloomsbury Wildlife, London, 2019. 128 pages, paperback with colour photographs. ISBN 978-1-4729-5585-2.
£12.99

The author of this book has also contributed to the *Field Guide*, reviewed above, and is one of the co-authors of *Ladybirds* by Roy *et al.* (2013, Pelagic Publishing). The distinguishing feature of the book is that it is organised by themes, and is more adapted to continuous reading for enjoyment rather than for reference, but there is an index if reference is required.

It begins with customary introductory sections on what characterises ladybirds and their feeding and lifecycles. This book also highlights their status as cultural icons and, in a section headed "Ladybirds Across Time and Space", outlines the evolution of insects and beetles in particular as evidenced by the fossil record, though the earliest undisputed evidence of ladybirds is from insects preserved in amber *ca.* 50 million years ago. This section is followed by an account of their presence in Britain starting with archaeological evidence dating back *ca.* 43,000 years, though the present population dates back to the period after the last ice-age but continues up to the present day - at least five species have become established in the past couple of decades.

There is also a section on ladybirds worldwide which emphasises their ability to occupy almost every terrestrial habitat from mountain tops to deserts (there is one British species called the water ladybird which lives on emergent vegetation, but should it fall into the water it has evolved the ability to swim to land!). Sections on diet follow (some species are vegetarian), their behaviour, insect parasites and fungal and bacterial infections, and no fewer than four pages on the "Horrible Harlequin".

But perhaps uniquely this book includes a section entitled "Cultural Connections", which opens appropriately enough with the cover illustration of *Goldilocks and the Three Bears* published by Ladybird Books. It mentions the folkloric significance of ladybirds worldwide, along with the various names given in different languages (there is an illustration of a German Renaissance painting by Matthias Grünewald - "Madonna im Gärtchen", which shows Mary wearing red rather than the customary blue, so referencing the German name for the group - Marienkäfer – Mary beetles). There are accounts of ladybird legends, songs, fiction and poetry, marketing logos, and in popular culture (I didn't know about the animated superhero Marinette who fights the villainous Hawk Moth – if you want to know her rousing battle slogan you'll have to read the book, or watch one of the films).

The book also includes information on how to find and watch ladybirds, and gardening for ladybirds. It concludes, like the *Field Guide*, with further reading and resources and a list of current U.K. species. The text is

amply endowed with excellent photographs of many of the U.K. species (and some of the "lookalikes"). However, it seems obligatory for a reviewer to find a niggle or two: mine are that the list of "inconspicuous species" includes *Platynapsis luteorubra* which in the *Field Guide* is listed among the "conspicuous species"; Comont also includes one ("conspicuous") species that is currently found only in the Channel Islands (*Calvia decemguttata*) and which is not included in the 47 species in the British list (and therefore the *Field Guide*), presumably because it is mentioned in passing on page 7. These matters are unlikely to trouble the vast majority of readers.

I concluded the review of the *Field Guide* with "an indispensable resource for anyone wishing to take ladybirds seriously". I'd say the *Spotlight* book, by contrast, is a useful and interesting resource for anyone with any interest in ladybirds at all, and should even spark interest among those who previously had none. An excellent complement to the *Field Guide*, and a worthy addition to any natural historian's library; it's now on my birthday "wish list".

**R.B. Weddle**

## Landfill

Tim Dee
Little Toller Books, Dorchester, 2018. 256 pages, hardback. ISBN 978-19-0821-362-4.
£16.00

This book is made up of an eclectic mixture of seemingly very different topics and subjects. The author, a long-term ornithologist, has slipped into the "bad" habit of studying seagulls, which show fascinating variation and complexity in their plumage, making their identification a satisfying intellectual challenge (this reviewer suffers from the same "malady").

But Tim Dee takes this exercise further by exploring the relationship of gulls with humans, not only in our shared existence in an increasingly polluted world, but also how humans have described and catalogued the various species. Part of the fascination of identifying gulls is that their taxonomy is in a state of flux, with birds variously described as species, subspecies or even hybrids between the two. This likely in part reflects that the birds are moving to new areas and changing their distribution, following the influence of man on the environment, which results in their speciation being a relatively recent and possibly on-going process, at least for some taxa.

The author's narrative follows him travelling through the U.K. studying gulls and speaking to bird-watchers who study and observe them, along with others interested in natural history and the relationship of humans and birds.

For those interested in our interaction and understanding of natural history, I recommend this book as a "different" read.

**C.J. McInerny**

## Britain's Day-flying Moths: a Field Guide to the Day-flying Moths of Britain and Ireland (2nd Edition)

David Newland, Robert Still & Andy Swash
Princeton University Press, 2019. 232 pages, paperback with colour photographs and distribution maps. ISBN 978-0-6911-9728-9.
£17.99

At first sight this book might seem an oddity, since most people assume that moths fly by night. However, as this book confirms, there are plenty of day-flying moths, although the authors have extended their coverage by including moths which are "easily disturbed" by day. The book is part of the *WILDGuides* series published by Princeton University Press in conjunction with Butterfly Conservation. Described as a field guide, it will fit in a large pocket (and easily in a rucksack) and has a firm, water-resistant cover; it is on good quality, glossy paper and weighs 560 g.

The book begins with a section on general moth biology, life cycles and taxonomy. I was struck by a section on habitats and the number of species found in them, and there are related ones on gardening for moths and larval food plants as related to moth families.

The book deals predominantly with macro-moths, but includes some micros. The entries are arranged by family. Each species is illustrated with one or two large photographs in a resting, natural pose and a brief description covering key identifying features, confusion species, a distribution map and larval food-plants. There is also information on status in the U.K. and flight season. The section on clearwings (*Sesiidae*) includes a useful table of pheromone lures for each species and when to use them. The book ends with a table collating all the information for each species and sections on conservation legislation, biodiversity action plans and recording, as well as lists of books and websites.

If you are a confirmed lepidopterist, this will not be your primary source book, but you will almost certainly want to own it. It will also be of use to those with a passing interest in moths they might encounter during a field trip or a day out in the country. It has clearly been successful enough to merit a second edition. The original publication came out in 2013; this second edition has eight extra pages and has gone up four pence in price.

**A.P. Payne**

## Saltmarsh

Clive Chatters
Bloomsbury Natural History, London, 2017. 384 pages, hardback. ISBN 978-1-4729-3359-1
£35.00

*Saltmarsh* is the fifth volume in the British Wildlife Collection by Bloomsbury Press. The remit of this profusely-illustrated series - to provide a reference source on varied aspects of British Wildlife - is fully satisfied by Clive Chatters' comprehensive treatment of saltmarshes. This is a subject which he describes as

forming a backdrop of much of his life, 35 years of which he has spent working as a naturalist and nature conservationist. This volume confirms how well equipped he is to deal with this diverse and dynamic environment and its place within the history and practice of conservation. Indeed, I was surprised at the breadth of subject material he included, with exceptional coverage of geology, archaeology, history and (especially) conservation, in illuminating detail I did not anticipate.

The first three chapters provide us with a definition of what constitutes a saltmarsh. Not all are coastal; inland saltmarshes also exist where the underlying rocks release salt. Clearly, even left entirely to natural forces, saltmarshes are very dynamic and vulnerable environments, but human interaction has played a huge role in their shape, form and continued existence in so many cases. In these chapters and throughout, photographic illustrations of plants, animals, habitats and landscapes are excellent.

Chapters 4 to 12 deal with individual saltmarshes in detail, from the Highlands and Islands of Scotland, to the Solway Firth, marshes in Wales, the Humber, Severn, London and Southampton. There is fascinating background information about each site covering not just the natural history, but the geology and all the human interaction factors and their interplay with the saltmarsh over the centuries. It is interesting to think of London largely being built on the saltmarshes of the Thames and "The Legacy of the Solent Saltworks" (Chapter 11).

The next chapters cover conservation issues. The human impact on saltmarshes (the wish to alter, eliminate or conserve) largely depended on their productivity in human terms at each point in time. Clive Chatters looks at this and leads into a detailed description of the development of the conservation movement in recognising saltmarshes as having intrinsic value as dynamic, biodiversity habitats and landscapes. He describes the development of conservation at local to international levels, from the concept of conservation, to legislation and regulation. The making of National Nature Reserves, National Parks, then Local Nature Reserves is outlined and illustrated as is the development of Sites of Special Scientific Interest. The fragility and biodiversity of saltmarshes was recognised in these designations with 60 sites in Britain relating to saltmarshes being covered by protective legislation. Tables of protected species and the two Appendices A and B cover much detail protect sites. "Rejuvenation" completes this section on a note of optimism.

As an addition to The British Wildlife Collection, *Saltmarsh* gives excellent coverage of a very complex and dynamic subject. It is a well-rounded volume, particularly rich with respect to botanical detail and conservation issues. However, the general natural history enthusiast, professional and amateur, has much to learn from Clive Chatters' extensive background research and vast practical experience expressed in a thought- provoking and very readable fashion.

**A. Moss**