BOOK REVIEWS

A Naturalist's Eye; Twenty Somerset Years, by Philip Radford, published by the Somerset Archaeological and Natural History Society, Taunton, 2008. £14.99, ISBN 978 0 902152 20 5

Philip Radford writes in the long tradition of the English (or Russian) all-round naturalist. Not for him the obsession of the statistically minded atlascompiler nor the hectic enthusiasm of the twitcher following ceaselessly in others' 'birding' footsteps. His interests and his style look back rather to Gilbert White in Hampshire or to Hendy in his beloved Dunkery combes. As a young doctor, he was actually GP to the Revd F.L. Blathwayt, for many years the doyen of Somerset ornithology.

This is a series of diary entries, arranged chronologically but not always precisely dated, and largely confined to his native county of Somerset, in which he settled on his retirement, at West Bagborough. Most extracts deal with the Quantocks, the Mendips or the coast of Bridgwater Bay. His greatest delight has perhaps been in birds (and especially in Wood Warblers) but the reader will find here an admirable, and now unusual, breadth of other natural history interests, especially in dragonflies, lepidoptera and fungi. The author is perpetually curious, as can be seen in his many published notes in journals on bird behaviour. He slips easily from one subject to another, as when a mushroom find leads him to a sloughing adder, or a search for Sneezewort at Langford Heathfield is followed by the capture of 14 moth species at a light. If you wish to learn what the plasmoidal stages of a slime-mould look like, he is the man to tell you. He frightens us away from Death Caps, but would still like to know why slugs can eat them without harm. His interest in sound recording cannot be represented here, but there are many photos of marked originality, notably a splendid jet-black Adder, a Beautiful Demoiselle Dragonfly, and a Queen Hornet.

This pleasant book should send us back into the field with a sharper naturalist's eye for unusual events and a willingness to speculate on their meaning.

DAVID BALLANCE

Dartmoor, by Ian Mercer, Harper Collins, London, New Naturalist Series, 2009, 400 pp., numerous col. pls, maps, diagrams. Hbk £50. ISBN 978-0-00-718499-6. Pbk £30. ISBN 978-0-00-718500-9.

Dartmoor was created a national park in 1951 and, in 1953, number 27 of the Collins New Naturalist Series was published as *Dartmoor* by L.A. Harvey and D. St Leger-Gordon, and which ran to several editions. Interestingly, in a preface to one of the later editions, the authors acknowledged help from one Ian Mercer. Now, in 2009, there is a new New Naturalist Dartmoor with Ian Mercer as author. Ian Mercer, now Professor, is a naturalist and a geographer, with a special interest in Dartmoor; he was Warden at Slapton Ley Centre and was the first chief officer of the National Park Authority. Latterly, in retirement, he is Chairman of the Dartmoor Commoners' Council and President of both the Devon Wildlife Trust and of the Field Studies Council. So, it seems that Ian Mercer is more than fully qualified to write this work. A new Dartmoor book was due because of fresh conservation ideas and recent archaeological discoveries; moreover, the material, new and old, has been illustrated by large numbers of recent colour photographs, many taken by the author, thus creating a truly attractive book for Dartmoor enthusiasts.

It is intriguing to realise that molten granite moved upwards into older rocks in Devon some 200-300 million years ago and also that the whole of Dartmoor was once isolated as an island by invading sea. The retreat of the waters apparently produced the characteristic flat land mass of the South Hams and then, only some 1.6 millions of years back, came the Ice Age with all its glaciations and interglacial phases. It is thought that Dartmoor was never covered with moving ice as it was situated just to the south of the polar ice cap but, even so, climatic conditions were obviously very cool at times! Current ideas on past geographical changes appear to be well covered, at least for me, but I do wonder how much of this is really speculation. Anyway, upland Dartmoor is very impressive whatever the detail of its origin, and it is not surprising that it can

be seen from the Lizard Head on a really clear day. The granite tors of Dartmoor, with their surrounding boulder clitter formations, are certainly impressive as well, both for the sightseer and the walker, together with associated peat expanses and their attractive vegetation cover of bell heather, ling and whortleberry; surely, all these features combine to give us the feel and atmosphere of the moor.

Of course, the Dartmoor landscape has been worked through the centuries and the villeins and serfs, mentioned in Domesday Book, doubtless had very hard and unenviable clearance tasks given to them. Throughout the ages, winter toil on exposed Dartmoor uplands cannot have been the choice of many individuals, however tough! Even so, some hardy hill farmers do work on the moor through the year these days, and seem to enjoy the life too. I understand that there is considerable evidence for Bronze Age Dartmoor habitation, as at Grimspound and Riders Rings, where there are remains of pounds and hut groups. Additionally, Bronze Age people sometimes prepared graves for important people, so exercising the minds of Devon's archaeologists. The moor does not show any evidence of Roman occupation but there was a signal station near North Tawton together with part of a Roman road, perhaps a section of a route to Cornwall, with its importance for metal mining. I am not surprised that the Romans, with Mediterranean origins, did not settle on the Dartmoor uplands. Still, Dartmoor has been farmed intermittently and then there was tinning; maybe tin was worked even by Bronze Age people for, after all, tin is a constituent of bronze. Anyway, later tinners left remains of shelters and of smeltinghouses, although not in great numbers. I enjoyed the account of Dartmoor tin: the last recorded Court of the Stannaries was held in 1786 at Moretonhampstead and the last tin was shipped from Vitifer waste tips in 1939, to South Wales for smelting. Besides tin, there are other metals associated with granite: metals which have been Dartmoor-mined, with varying degrees of success, include copper, silver, arsenic and iron. Yet another Dartmoor industry was that of china clay extraction, while much of the area is dotted with stone quarries, with some in use but most defunct; granite was once in big demand as a building material and for memorial stones, but most quarries have now closed. As well as granite, limestone and some cherts have been extracted on Dartmoor, although these industries have also declined. Another industry which has vanished has been rabbit farming; the story of Dartmoor rabbit warrens is certainly an interesting one.

The book's natural history coverage whets the appetite but, considering the scope of the work, this subject cannot be dealt with in detail. There is a helpful section on vegetation, including the ecology of Dartmoor woodland, moors, mires and grassland. Dartmoor has some national rarities and an example here is the purple Vigur's eyebright, which is parasitic on western furze. Some of the insect and bird photographs are of high quality, but I thought the standard rather variable: one of the best nature photographs, in my view, is that of a marsh fritillary butterfly resting on a marsh orchid flower. Amongst Dartmoor birds, it is sad to read of the recent decline in numbers of nesting Golden Plover, Dunlin, Lapwing, Snipe and Curlew, although there has been a welcome increase in winter roosts of Lapwing. Animals squashed in roads by speeding cars leave plenty of food for Carrion Crows and Magpies and these birds are thriving; further, a good-sized rabbit population provides prey for Buzzards, and Ravens do well because of big numbers of sheep after-births. Other Dartmoor notables include resident Stonechats, Wheatears and Whinchats, the last two being spring migrants. Characteristic of Dartmoor moorland in spring and summer is the Cuckoo, using Meadow Pipits as the host species.

Many of the topics covered in the book are complex; there is a large background of scientific literature and this is listed in a helpful bibliography; also, there are chapter references and suggestions for further reading. There is a full index; one mistake I noted was the incorrect spelling of the scientific name of the Yellowhammer, but I think that can be forgiven! The book covers a very wide field; I can certainly recommend it to anyone considering a Dartmoor holiday or exploration.

PHILIP RADFORD

Collins Complete Guide to British Mushrooms and Toadstools, by Paul Sterry and Barry Hughes, Harper Collins, London, 2009, 383 pp., over 2000 col. pls, £16.99. ISBN 978-0-00-723224-6.

A brief, well-written introduction emphasises the importance of fungi in the world, explaining that some help in tree growth and development while others are necessary in breaking down dead wood and vegetation in general, so releasing chemical constituents for recycling. Britain is home to thousands of different fungal species, so only the commoner ones can be covered in this work; species

selection has been influenced by importance relating to edibility, poisonous properties and beauty of form or colour. The authors state that great care has been taken in photograph selection and this is certainly true; some photographs were taken in mainland Europe and others in Britain, but the book only covers species to be found in the British Isles. I was impressed that the fungi illustrated are mainly free of slug damage: when I look for fungi in Somerset it is unusual to find intact specimens, and this often seems to apply to the most colourful and interesting examples! One could imagine the authors scattering liberal amounts of slug bait on the ground before considering a photograph! The work is a field guide and is not intended to rival larger and fuller fungal texts so, as I expected, microscopic examination of fungal tissue and spore details are not covered at all. The guide deals with macro characteristics only, although including form, colours and, of course, habitat. However, it is recommended that the beginner makes spore prints, because the print colour gives such valuable information as to identification.

In the main identification section, each species is given a recommended common English name, sometimes rather fancifully and, far more importantly, the current scientific one. Unfortunately, over the years, there have been many changes in fungal nomenclature, often leading to confusion; one must hope for greater stability in the future. Still, some of the recently allocated English names do hold one's attention; what about 'Turkeytail', 'Crazed Cap', 'Egghead Mottlegill', 'Surprise Webcap', 'Bleeding Bonnet' or even 'Mousepee Pinkgill'? Maybe such imaginative names will spur some people to take up mycology!

Helpfully, advice is given as to what to carry with you on your fungal searches. One essential is a rigid basket or trug to take back specimens for more detailed examination; so often the beginner will use a plastic bag with resulting squashing. A small mirror is recommended also, so that the underside of a specimen can be inspected without picking; certainly, this shows consideration for the habitat and fungal spores will not be wasted in seasons when few fruiting bodies are appearing. In addition, the value of a small hand lens (x 10) is stressed. The book contains a glossary of fungal terms which, helpfully, is colour illustrated; further, I was pleased to see good coloured diagrams which indicate the varied shapes of fungal stalks, stalk rings, gill arrangements, cap textures and cap shapes. Additionally, several well-illustrated pages are allocated to descriptions of genera and fungal groupings; this is conveniently placed just before the main species identification section which forms the bulk of the work.

The authors have also included a short tree and shrub identification section, with photographs of bark, leaves and conifer cones; this is thought to be important as some fungi only grow in association with specific trees. Probably this part is unnecessary for most naturalists, as they are likely to have access to more detailed botanical books. Even so, I suppose it could be helpful if only one book is taken on a foray. As already mentioned, some fungi only grow with specific trees or in certain habitats and, importantly, this is indicated in the text. So, there is a useful selection of photographs showing, for instance, fungi with oaks or with willows or conifers; other pages are devoted to habitats, such as the fungi of marshes or of pasture. I was pleased to see, additionally, photographs of the commoner slime moulds, rusts and mildews, all of which can be of help in solving identification problems. Then, a comprehensive index is included, which really is essential in so complex a subject as mycology; the index runs for 17 pages and appears to be in greater detail than for most field guides. As an example, 63 fungal species are listed for the Russula genus and, yes, I found that 'Pinkgill, Mousepee' was included. I have never come across the Mousepee Pinkgill but, if I do so, I wonder if I am sufficiently confident that I can recognise the smell of mouse urine to be sure of the identification? The use of the sense of smell in fungal identification can certainly be of help in confirming one's opinion, although odour descriptions vary so much with different people. Nevertheless, I have always found that False Deathcaps definitely smell of potatoes and, usually, if I am with other people, there is full agreement over this, often to my surprise!

The strength of this work is based on the selection of numerous high-quality and representative photographs for all the main fungal groups; clearly both authors are excellent photographers as well as being skilled mycologists. For a field guide, some may complain that it is overpriced at £16.99, but the colour reproduction of so many photographs necessitates this. For anyone with an interest in fungi and, perhaps, considering going on a fungus foray, I can certainly recommend this up-to-date guide. In autumn, and in suitable countryside, any walk can turn into a fungus foray; with this guide in one's rucksack, I think one could gain increasing confidence in the correct identification of many of the toadstool puzzles that may be encountered. In my view, the book is worth its $\pounds 16.99$.

PHILIP RADFORD

Poisonous Plants, by Robert Bevan-Jones, Oxbow Books, Oxford, 2009, 197 pp., numerous col. pls, line dwgs, £25. ISBN 978-1-905119-21-9.

As the author points out, this book is not a plant identification guide but deals with the cultural and historical aspects of poisonous plants; perhaps wisely, it is stressed that it is foolish to nibble at, let alone swallow any of them! Relevant plant species are discussed both archaeologically and historically, with special reference to ancient herbals; additionally, modern research on toxic plant chemicals is mentioned in varying detail. There are several helpful line illustrations which have been taken from old herbals, both English and Continental, together with colour plant photographs, largely taken by the author. I thought that some of the colour illustrations were too pallid, perhaps arising in the course of reproduction; the drawings, however, are displayed excellently. To my surprise, there is a chapter on poisonous fungi, even though fungi are not plants; fungi are in a kingdom of their own, but certainly with some highly toxic species. Nevertheless, the fungal chapter has good accounts of poisonous species, including Liberty Cap, Fly Agaric, Death Cap and Ergot. The possible medical uses of Ergot are mentioned too; thus, the drug ergometrine will aid contractions of the muscle of the uterus during childbirth, and certain ergot-based compounds can be used to help prevent attacks of migraine.

Nowadays so many people are town-dwellers and live somewhat remote from nature; in fact, it is relatively rare at present to come across true cases of plant poisoning, at least in Britain. Most hospital admissions for poisoning are the result of taking overdoses, accidentally or otherwise, of various drugs; most commonly these are analgesics, often combined with alcoholic drink. As has long been known, when considering whether a given chemical is a poison or a helpful drug, it is the dosage which matters. One must agree with the author that plants deserve our respect and we can but admire their 'diverse and powerful properties'. The text has 387 references and there is a select bibliography of about 100 books or articles; literature quoted includes material from medical, pharmacological, botanical, mycological and historical sources. Poisonous plant species are described in an A to Z section with 43 of them being featured, each with two or three text pages. Not all the plants covered are indigenous British species; for example, Castor Oil Plant and Strychnos (the source of strychnine) are included although neither grows naturally in this country. I liked the coverage of Yew; it appears that the Anglo-Saxons used small quantities of the berries in some herbal remedies, although associated with superstition and, as expected, polypharmacy. The poisonous chemical taxine is to be found in all parts of a Yew tree except for the pulpy red aril, which coats the actual seed. The aril has a pleasant sweet taste and is completely non-toxic; arils were commonly eaten as sweets by country children in the past, but I would be surprised if any dare to sample them these days! However, the Yew seed, if chewed, will release taxine which can give rise to serious symptoms. Cattle will occasionally eat Yew foliage and may die in consequence; sadly, a horse owned by the author's grandfather died of Yew poisoning. Yet taxine is used today as an anti-cancer drug and is certainly beneficial in certain types of tumour: all depends on the drug dosage.

Although it is uncommon in Somerset. I was interested in the section on Deadly Nightshade. The large black berries, when ripe, can be very attractive to children and several tragic stories are quoted from the past. But adults can be fooled even now; apparently, in 1999, an English couple made what they believed was a bilberry pie but, in reality, it was a Deadly Nightshade pie! The man ate over 100 berries but survived thanks to hospital treatment; confusion, vomiting and hallucinations combined to give frightening symptoms as a sequel to what had been expected to be a special treat. Bilberries ('worts') grow freely on Somerset moorland and are well-known locally. Somehow I do not think that any native of Somerset would confuse a Whortleberry with the larger, shiny, purple-black berry of Deadly Nightshade - but mistakes do happen!

Another well-researched and informative essay was on Mistletoe, including the problems of its cultivation and the different feeding methods of Mistle Thrushes, Blackbirds and Blackcaps when dealing with the berries. It appears that Mistletoe, as rotting berries, was once used as an ingredient of bird-lime; this highly sticky substance was in common use to trap birds for the cooking pot or for training for singing when caged. Many bird fanciers had their own secret lime recipes, but I think that

Mistletoe berries were essential for most of them. As expected, the relationship of Mistletoe to magic and worship by Celtic Druids is discussed but, surprisingly, it seems that this topic was also known to Pliny the Elder. Well, if you would like to read of the use and misuse of poisonous plants as at present or in classical times or in early medieval Europe, then this is a volume for your library; moreover, it is useful to have information at hand on the development of botanical texts and herbals in the vears following the Norman Conquest. Plants are vital in the world and necessarily influence all our lives; furthermore, chemicals elaborated by plants affect our lives more than many people realise. Gardeners, historians and naturalists will be glad to have access to the information in this volume which, for myself, I found very enjoyable reading. For instance, the story of how Dr William Withering deduced that foxglove could be helpful in treating dropsy is an intriguing one and, nowadays, a drug obtained from foxglove is used worldwide in the treatment of various heart disorders. Withering's conclusions were based on trial and error but apparently, if you were poor, then treatment was free of charge; after all there was no National Health Service in the 18th century.

PHILIP RADFORD

Consider the Birds, by Colin Tudge, Allen Lane, London, 2008, 480 pp., 42 line dwgs, £25. ISBN 978-1-846-14097-6.

Colin Tudge, with a background of zoology at Cambridge, is a full-time writer on biology and scientific subjects. In this book the life and behaviour of birds worldwide is explored, with emphasis on the group's evolution; the author's previous book was on the lives of trees, which was widely acclaimed. Essentially, the writer is a biologist and makes no claim to be an expert ornithologist; the work is a review of variations in bird species and their behaviour, evolution, bird anatomy and, of course, not forgetting reproduction and sex. Briefly, the book's contents ask what is it like to be a bird? Somehow, I liked the title; in the New Testament (Matthew 6: 26) one interpretation gives us: 'Behold the fowls of the air', but the author points out that a valid translation of this passage could well be: 'Consider the fowls of the air'. I think this reads well. The work is illustrated by good-quality line drawings; clearly these have been specially prepared

to indicate forms of bird behaviour or species characteristics, so adding to the book's appeal.

The topic of flight in the animal kingdom is discussed in depth, including the reasons why some birds, such as penguins or certain duck or parrot species, have become flightless. Then the complex nature of the process of wing beating, requiring powerful muscles for both the downstroke and the upstroke, is explained. I thought, as clearly as is possible for so difficult a subject. Moreover, to understand flight requires a knowledge of bird anatomy, including bones and the skeleton; this was well covered in my view. As expected, there is a full section on feather structure, and the value of feathers to the bird for flight, for insulation or for sexual decoration, is described in some detail; further, the necessity of feather hygiene, through preening, is stressed, as well as the complicated matter of feather moulting. Another topic dealt with is that of sound production by birds, and the specialisation of the syrinx; helpfully, the syrinx is compared with the larynx of mammals, together with thoughts on vocalisation quality and volume.

Bird evolution is approached by discussion on natural selection, as advocated by Charles Darwin and Alfred Wallace. Further, the significance of the discovery of a bird fossil in a German quarry in 1861 is discussed; remarkably, this bird was reptile-like and had wings which were feathered. Surprisingly, this fossil was sold to the British Museum in London (for £450) and became known as the 'London Archaeopteryx'; the subsequent differing opinions of Richard Owen and Thomas Huxley make entertaining reading today. Interestingly, in 2005 another Archaeopteryx was found with a head which had teeth; this specimen is now in the Wyoming Dinosaur Center and has been assessed as one of the oldest known bird fossils, and maybe the 'missing link' between reptiles and birds. But, what is the ancestor of Archaeopteryx? Well, dinosaurs with feathers have now been excavated in China, so, are birds really dinosaurs? Clearly, it will be some time before these problems are resolved.

The author has consulted past bird literature widely, with particular attention to studies of behaviour and social and sexual biology; writers have included Konrad Lorenz, Niko Tinbergen and David Lack, with their important early papers on the manner in which birds live and interact. Much of the material given will be well-known to experienced ornithologists, but the presentation is clear and certainly attractive. I am sure that anyone interested in comparative anatomy and behaviour will enjoy this book; at times I did not appreciate the rather breezy style of writing but, overall, the work is well worth reading with care. Perhaps unsurprisingly, the author is concerned for the future of birds in the world and for the conservation of wildlife in general; moreover, he appears to accept global warming as a fact and deplores the relatively small amount of money spent on nature conservation. Attention is drawn to the vast sums of money being spent by developed nations on overseas wars but how can these political problems ever be resolved? Anyway, this is a good book and its value is enhanced by a full and well-compiled index; figures are included too indicating, as examples, how birds are related to dinosaurs and how modern bird species are related to each other. This is not a simple work on Somerset birds but it is one for those who appreciate the broader aspects of the lives of birds as a group. I can recommend the volume: it should be read as the author wished, as a consideration of birds.

PHILIP RADFORD

Birds of the Cotswolds, by Iain Main, Dave Pearce and Tim Hutton, 2009, Liverpool University Press, 234 pp., numerous maps and col. pls, £25. ISBN 978-1-84631-210-6.

The North Cotswold Ornithological Society was formed in 1983 with the aim of increasing the ornithological knowledge of that area, as based on organised fieldwork; the area covered is bounded by Chipping Campden and Shipton-on-Stour to the north and Cirencester and Fairford to the south. A breeding bird atlas was published in 1990; following this, another atlas survey was commenced in 2003, with this volume presenting the new information and with emphasis on recent changes. Special attention has been paid to farmland birds, especially those which have been in decline nationally; these include the Turtle Dove, Grey Partridge and Corn Bunting. Publication has been made possible through generous local support and sponsorship.

The Cotswold landscape and varied bird habitats are described as a preliminary, helpfully illustrated by a map and good-quality coloured photographs; it is pointed out that, although changes have occurred, habitats have not altered greatly in recent years, certainly not in their appearance. Geological features are diverse, leading to a designation of an 'Area of Outstanding Natural Beauty'; of course, active farming, both arable and pasture, are important in the local economy. Traditional farm buildings, churches and drystone walls are characteristic of the area and provide nesting sites for several species; understandably, houses and villages have been modernised and tidied, sometimes with a negative effect, at least for birds.

Much of the book is taken up with bird species accounts. Each bird is allocated a page for a survey summary and a colour photograph; most of the photographs are the work of Society members, with variable quality. One photograph, however, that of a male Redstart, is quite outstanding. Opposite each bird species page there is a survey map to indicate breeding, together with smaller maps to show change since the earlier fieldwork. This detail must have involved a lot of hard work by dedicated and enthusiastic amateurs; naturally, the observers had to remember that some male birds, when on migration, will sing occasionally. It is easy to assume, falsely, that if song is heard then a bird has chosen its breeding territory. It is certainly sad to note the contraction of the Lapwing's breeding range for, after all, it was once a relatively common nesting bird over suitable Cotswold farmland, while Turtle Dove territories have declined to near-extinction numbers Another cause for concern is the reduction in Cuckoo numbers over the Cotswolds; in the bird's survey there were no confirmed breeding observations and no reports of young ones on the wing. Wood Warblers too have fared very badly, with no evidence for breeding at present in what was once suitable woodland; unfortunately, this is in agreement with a national decline for this very attractive warbler. The Chiffchaff, however, another migrant leaf-warbler, has increased and is now more numerous than the once-abundant Willow Warbler. Another bird which is much commoner now than previously is the Buzzard; it is easy to count and identify, with reports indicating that it has spread to the extent of nesting throughout the study area. Possibly, Buzzards will have some competition soon from Red Kites, which now appear to be commonplace over the Chilterns and in parts of Wales. Anyway, one success story is the Wood Pigeon which has become increasingly abundant, perhaps to pest levels for some people. Several other bird species with decided recent population trends, both migrants and residents, are mentioned in the text and possible reasons for the changes are discussed. Even so, in many cases the possibility of reversing the changes is very unlikely, as is the situation nationally.

Without doubt, alterations in a district's bird numbers make interesting reading and raise many questions. The work is attractively presented and contains a surprising amount of information; I can recommend it to anyone who visits, or is intending to explore, the Cotswold region. Moreover, the book would be useful to anyone who is considering organising bird fieldwork in his home patch; hopefully this will not be seen as too daunting a task! Anyway, the Cotswold Hills are not far from Somerset and I am pleased that this useful book is now in the Society's library; the authors and their helpers are to be congratulated on their achievement.

PHILIP RADFORD

Wildfowl, by David Cabot, Harper Collins, New Naturalist Series, 2009, 460 pp., maps, 91 tables, line dwgs, numerous col. pls, £50. ISBN 978-0-00-714658-1.

David Cabot is an Irish naturalist with a special interest in the study of wildfowl. He was educated at Oxford and Dublin and then lectured on zoology at University College, Galway. Later, he became environmental advisor to two Irish Prime Ministers and founded the Irish Wildfowl Conservancy in 1964, combined with fieldwork in the Arctic and on various islands. In an introduction, the author points out that wildfowl have been studied more intensively than any other bird group and, already, there is a vast literature on the subject; he emphasises, however, that this volume is not a wildfowl identification or field guide, but deals with interactions with people, migrations and social and breeding biology. The author, I believe, aimed to transfer his evident passion for wildlife to his readers. The volume has an appeal fitting with the New Naturalist Library and, as expected, has an attractive duck jacket design; the artist is Robert Gillmor.

Wildfowl evolution is discussed as a preliminary, emphasising the importance of the bill in the group, and which is linked to diet. Horny lamellae at the edge of the mandibles enable some species to extract food items from mud, while the mergansers have saw teeth so that they are able to seize fish underwater; further, geese have serrated cutting edges to their mandibles and specialise in cutting and plucking grass and vegetation. Then, wildfowl feet are necessarily webbed, thus adapting the group to a life on or near water; moreover, legs are situated towards the end of the body, so enabling skills in diving and swimming. Many wildlife species can only waddle on land, although, when airborne, they will fly strongly with the aid of well-developed flight muscles.

I liked the section on wildfowl legends and myths, with a discussion on tree-geese, bird-fish and the Irish story of King Lir and his four children who were turned into swans. This leads on to the history of wildfowl as human food, including the collection of eggs and the rounding up of birds when they are in moult and flightless. The history of duck decoys is worth reading; in the 19th century some Dutch decoys trapped over 25,000 ducks in a year. Nowadays, some European decoys are still in use, but mainly for the purpose of ringing the birds. A notable decoy is present at Slimbridge, where the late Sir Peter Scott established the Wildfowl Trust in 1946: of course, this has now been greatly expanded to form the Wildfowl and Wetlands Trust with several reserves in Britain. Quite understandably, from historic times, wildfowl were domesticated for use as food, egg-production, the extraction of grease and oil and the provision of down for bedding and clothing. Eiders have been farmed for down in Iceland for over a thousand years, while Greylag Geese eventually became farmyard geese.

Half of the book is taken up with descriptions of the status and distribution of wildfowl in Britain and Ireland, including those which were introduced: these amount to 56 species. This survey contains a large amount of information on migration data and population sizes, based on monthly counts as organised by ornithological organisations and involving amateur and professional observers. Colour photographs are used to illustrate most of the species, both as individuals and in flocks; photographic quality is good, greatly enhancing the text descriptions and, moreover, the captions are helpful in indicating behaviour or identification features. I particularly admired the photograph of a Long-tailed Duck flying over ice, including the information that the male's long tail is composed of just two central tail feathers; also, I was impressed by the sight of a multitude of Snow Geese on their wintering grounds in Mexico. The work of many bird photographers, some of whom specialise in wildfowl, has been used; I expect that photograph selection was quite time-consuming.

Well-covered sections include those on behaviour, with emphasis on courtship display and species variation, copulation, incubation and rearing and care of young. Then food ecology, as related to structure and seasonal requirements, is shown to have developed to avoid competition by related wildfowl

for the same food; clearly, the wide variation in wildfowl species bill structure depends on feeding preferences. Understandably, adequate feather growth depends on a proper diet; perhaps not so well known is the high energy demand of the moult period, especially in geese and swans. Population dynamics are considered, including the influence of parasites, predation, weather and terrain; the influence of people is not forgotten, with full discussion as to the effect of shooting and its popularity in some communities. The killing by shooting of breeding adults is thought to be of greater population significance than the loss of young birds of the year. Research on wildfowl numbers and methods now used for tracking birds are mentioned, with varying importance for different species; furthermore, as I had expected, there is a helpful chapter on wildfowl conservation and its history in Britain. This is a well-researched book, with the contents attractively presented; I can recommend it to anyone with an interest in wildfowl and, for those who live near the Somerset Levels, who has not got an interest in wildfowl? Over 350 literature references are cited: no doubt the work will be of value to zoology students as well as well as those with a general interest in natural history. Even so, at £50 for the hardback version, some will complain of the price; probably the price is justified because of so many colour photographs and, after all, many people have access to a library which, hopefully, will stock the work. There has been no previous New Naturalist book on wildfowl; this volume will fill the gap, and very ably too in spite of the price.

PHILIP RADFORD

Say Goodbye to the Cuckoo, by Michael McCarthy, John Murray, London, 2009, 243 pp., £16.99. ISBN 978-1-84854-063-7.

Michael McCarthy is a journalist who is now the environmental editor of a leading newspaper. Like many other people, the author is seriously concerned that several of Britain's long-distance spring migrants are failing to arrive or are coming in reduced numbers. The book represents the author's thoughts on these migrants, based on the views of numerous bird experts and country people, together with many references to literature and poetry. Towndwellers often do not realise that bird migrants have declined because of their urban environment; way back, people lived closer to the countryside and Shakespeare, as an example, mentioned more than 50 bird species. In the book, tribute is rightly paid to Gilbert White of Selborne, perhaps the first enquiring ornithologist, who first described the three migrant leaf-warblers, pondered bird migration and maintained that Swifts mated while airborne. Again, tribute is rightly paid to Eliot Howard and his ninepart work on British warblers, started in 1907; Howard did much to draw attention to the fascinating breeding biology of this group of birds.

One of the best chapters, I thought, was on the Nightingale. McCarthy asked 100 people, randomly selected, if they had heard the bird in song and, of these, only nine had done so; even so, there was familiarity with the Nightingale, largely through literature. Anyway, the author was taken to a Nightingale stronghold in Surrey and eventually, after long descriptions of routes taken and a pub visit, he is thrilled by the song and its variation and intensity; also, the Nightingale guide gives a description of the habitat type essential for the bird. Later, a warbler expert escorts the author to listen to various species in Norfolk where he is introduced to mimicry in bird song, as illustrated by a Sedge Warbler which obliged with the notes of several other bird species.

McCarthy then visits Wales where he meets up with a Wood Warbler admirer in a pub, with the occasion made memorable by bird gossip with a gin and tonic background. Long quotations from Gilbert White's writings follow, interposed with remarks on the life history of the bird scientist guide! Eventually, in woodland habitat, a Wood Warbler was heard and seen; the structure of the song and the manner of the bird's singing made a deep impression on the author. It was concluded that the male Wood Warbler, proclaiming its territory in a western oakwood, was 'a bird of place'.

Perhaps the book's most important chapter is on the Cuckoo, which was well-known to Chaucer, White and Shakespeare, while Dr Edward Jenner, of smallpox vaccination fame, described how the Cuckoo chick will push eggs or nestlings of the fosterer over the nest rim; in addition, the Cuckoo observations of Edgar Chance, around 1920, were discussed. An academic Cuckoo expert took the author on a May tour of Wicken Fen where, much to the delight of all, a Reed Warbler nest, complete with a Cuckoo egg, was discovered. It is certainly sad that Cuckoos have so declined in the general British countryside in recent years and there is an interesting discussion about this with a lady living in the Ashdown Forest. The author knew she was a country person when he saw her collection of wildflower books, walking sticks and wellies; while Cuckoos were once so common in that part of Sussex, none were heard in the spring of 2007, causing much family anxiety and disappointment.

Importantly, there is consideration as to the reasons for the decline in British migrants, both in Africa and along migration routes, drawing on the views of several biological experts and ornithologists. Throughout the work, the chapters are enhanced by well-chosen wood engravings by Thomas Bewick, which certainly reflect the essence of the English countryside of over 200 years ago.

I thought that these wonderful illustrations should have been acknowledged; after all, there are profuse acknowledgments to the many ornithologists and naturalists who helped by giving interviews or leading field trips for the author's benefit and, additionally, the numerous quotations from past literary works are always credited. The book is well written by a journalist and presented largely in a journalistic style; the subject is of great importance in British natural history but, for me, I found the work a disappointment.

PHILIP RADFORD