

BOOK REVIEWS

Early Humans, by Nick Ashton, William Collins, New Naturalist Library No. 134, 2017, 354 pp., numerous graphs and col. photos, reference list, index. Hbk £60, Pbk £40. ISBN 978-0-00-815033-4 (Hbk), ISBN 978-0-00-815035-8 (Pbk).

An earlier volume in the New Naturalist Library – No. 18, *A Natural History of Man in Britain* – was almost entirely concerned with *Homo sapiens* and the last 10,000 years of our history, mostly during historic times. This new book takes us back to the Cromer forest bed, laid down some 450,000 years ago; only Chapter 12, which considers the period between 11,000 and 6,000 years ago, overlaps the earlier book in any way.

Despite its title, this book is not concerned with the evolution of our ancestors from chimpanzees, or with the radiation of the various groups of hominids ‘out of Africa’, but rather with the presence of pre-historic humans in what is now Britain. As is so often the case in anthropology, skeletal remains of humans are rare and most of the evidence for the presence of hominids is of a palaeontological (footprints) or artefactual (worked flint) nature. The reader is given fair warning of this from the cover which depicts various hand-held flint tools, arrow heads and cave drawings of woolly rhinoceros and mammoths.

It is evident that, at least until relatively modern times, Britain was very much on the periphery of human evolution. All the important developments were taking place further south in Europe, if not the Middle East or Africa. Compared with any novel, the story line of this book is slow moving and repetitive. Britain was never really ‘habitable’ during one of the glacial periods, but during many of the interglacials of the last 400,000 years small groups of hominids set up temporary occupation in suitable sites. They may only have been summer visitors but they used the same sites for many years.

It is unclear which of these early visitors should be referred to *Homo antecessor*, *H. heidelbergensis* or even *H. neanderthalensis* but, as no permanent settlement was established, it may not really matter. Not until our own species, *H. sapiens*, appeared on

the scene during the present interglacial, was that possible. The amount of information that has been discovered about the lives of these early humans in Britain is truly amazing and the author, Nick Ashton, is to be congratulated on presenting this very valuable synthesis for us.

It may seem confusing to the reader that the story jumps about from one place to another (rather than describing the sequence of human activity over time in one given place). It should be remembered that, just as no site in modern Britain displays a complete exposure of the Geological record, survival of the evidence of past human activity is very patchy – and buried. Essentially, all the evidence reviewed in this book became available as a by-product of some other human activity.

Even if the reader were only interested in the culture of early humans in Britain, this would prove to be a worthwhile read. But, if the interest lies more in the manner in which early humans interacted with their environment in Britain, this book becomes a veritable mine of information. Human remains may be sparse amongst the plethora of flint artefacts (and waste knappings) but, on occasion, there are useful remains of animals and plants that were surely collected for food or other purposes. The remains of insects, usually beetles, that were also (fatally) interested in those collections provide additional information – and relevant pollen data was often to hand. Between them, the presence or absence of key species of animals and plants provides evidence for the climatic regime experienced by the assembled biota.

Nobody would pretend that this book is light reading; it demands your whole concentration – for you will find it necessary to have remembered details of one encampment’s circumstances to appreciate the differences experienced by another. But if you give the book its due attention you will be rewarded in spades. It is a worthy addition to the New Naturalist library and I am very glad to have a copy.

JOHN CROTHERS

Living on the edge: archaeological investigations at Steart Point, Somerset, by Lorrain Higbee and Lorraine Mephram with other contributors, Wessex Archaeology Occasional Paper, 2017, 102 pp., b/w and colour illustrations, 33 figures, 19 plates, 20 tables and bibliography, £7.50, ISBN 978 1 874350 89 7.

Investigations by Wessex Archaeology took place in advance of the construction of a floodplain mitigation scheme on the Steart peninsula northeast of Otterhampton and Combwich. Unlike the evaluation work at Longforth Farm near Wellington published recently in their Occasional Series, no spectacular or totally unexpected discoveries were made. This latest volume covers the evidence found for seasonal or permanent exploitation of a large part of the peninsula, although neither Steart village nor the freshwater marshes on the seaward side of Stert Drove were included in the scheme. The new landscape had to avoid any threat to the existing power line from Hinkley Point so all the saltwater creeks and major ponds lie to the northeast of the pylons beyond a new flood barrier. This extends from the river Parrett to Stert Drove and then runs parallel to the drove until it curves eastwards back to the river beyond the new breach in its defences, providing protection to Steart village. The part of the site closer to higher ground is relatively dry around the pylons but is still capable of storing excess land water from the streams that continue to drain areas west of Stert Drove.

The Steart peninsula was not such a remote and marginal habitat in antiquity as it appears to be today. Shipping on the river Parrett combined with an extension of the route along the Polden ridge by way of a natural causeway over the river near Combwich would have made the peninsula feel much more accessible before the turnpike roads diverted traffic further inland. The short distance from settlements on higher ground would have allowed some direct initial exploitation of the rich resources usually found in coastal wetlands. After that the first phase of settlement on the marsh began with seasonal occupation of some sites in the Iron Age and more permanent occupation on the raised banks alongside tidal creeks during the Roman period until it ended with a marine transgression. A second phase of settlement had begun by the

eleventh century and continued until the smaller tenements were abandoned in favour of larger farms at Otterhampton and Steart in the seventeenth century. A notable point made by the authors is the sequence of reclamation in this second phase revealed by the allocation of fields among five separate parishes. Land west of the drove seems to have been reclaimed first by Stogursey and Stockland acting together while most of the fields that lay within the new landscape scheme were allocated to Otterhampton and Cannington. The end of the peninsula near to Steart Point belonged to the parish of Huntspill on the opposite bank of the Parrett, probably owing to some movement of the course of the river.

The content of the book follows the usual sequence for archaeological reports familiar to readers of Somerset Archaeology and Natural History. Chapter 1 introduces the project and the related previous investigations and the geology, topography, land-use and historical background. Chapter 2 then describes periods of use of the marshes from the Iron Age through to Post Medieval in relation to each separate area or site, with plans showing individual features. Details of finds follow in Chapter 3 describing the pottery analysis according to Wessex Archaeology's own recording system together with specialist studies of other ceramics, metals and bone. Chapter 4 deals in similar detail with the environmental evidence which should be particularly interesting to visitors to the new nature reserve. Chapter 5 concludes with a discussion of the significance of the Steart peninsula in space and time and is followed by two appendices on pottery fabrics and thin-section analysis and an extensive bibliography.

At over one hundred pages, the report includes enough information to compare the Steart Marshes with similar saltwater habitats, both around the Severn estuary and further afield in Britain and northern Europe. In contrast to some of those marshes, the Steart peninsula lacked a 'backfen' of lower lying peat bog inland, because drainage was easy. The illustrations, many in colour, are well laid out in relation to the text and the tables in chapters 3 and 4 will be a valuable resource for future scholarship in those fields. The A4 page and slightly larger print size than that used by many learned journals is also helpful and the lack

of constraint on the number of pages has enabled the authors to include more historical background and to give fuller cover to the techniques used post excavation. This volume will be of particular interest to members of SANHS who follow the publications of the Severn Estuary Levels Research Committee and also appeal to anyone who wishes to explore this remote part of Somerset.

JILL POLAK

Woad to this and the cloth trade of Frome, by Carolyn Griffiths, Frome Society for Local Study, 2017, 280pp., illus., £24, ISBN 978 0 9930605 5 7.

A work of meticulous scholarship, *Woad to this* illuminates an aspect of the history of Frome and district which has not had the attention it deserved. There are still references to woad in Frome. It still grows in the garden of the Blue House whose scholars' uniforms were dyed blue with it. The woad – or oad – ground, now covered by the Trinity area, is mentioned frequently in the rate books of St John's Church. John Billingsley in his *Agriculture of Somerset* refers to Harvey the woadman of Mells and as late as 1836 Thomas Bunn, the Frome philanthropist, riding for the good of his health, rejoiced at the sight of the woad and teasels growing in the vicinity.

Woad (*Isatis Tinctoria*) was a plant that produced an indigo dye much used in medieval Europe and later for the dyeing of military uniforms. Despite all the work carried out on the history of Frome in the last 40 years no one has been tempted to tackle this elusive subject. This lack has now been remedied in splendid form by Carolyn Griffiths. She has produced an attractive, well researched, elegantly written volume notable for the variety, richness and relevance of its illustrations, mostly in colour and reproduced with beauty and clarity. The curious title of the book is taken from a dye recipe book and describes 'the dyers process by which they obtained a standard blue shade.'

Adam of Domerham in the 13th century is probably the first to mention the woadball in which it was transported. This was the size of a 'ferthing luv', said to be a corruption of farthing loaf. An enquiry of 1585 tells us that 605 acres of woad was grown in Somerset and that the southern counties produced 600 tons of dye. The book begins with an engaging account of the plant itself and a succinct chapter on the history of the industry. The story of

the Wallbridge and Welshmill dyehouses in Frome based on dye recipe books discovered in Bath Reference Library and the National Archives is very informative. It is illustrated with outstanding photographs of the recipe books and selvidges.

There is an excellent chapter on Frome as a cloth town followed by an account of the dye workshops and associated buildings. Although these have suffered by time three drying stoves still remain. Finally we read of the Frome clothiers (with some excellent portraits), their workers and the actual process of making cloth, then the melancholy end, the decline of the trade, the rise of steam power and machinery, and riot and discontent among the workers. There is a useful glossary and bibliography.

Perhaps the last word should go to the Revd Richard Warner visiting Frome in 1801: 'An agreeable appearance of bustle and business everything indicated the presence of manufacturers and trade ... with all the labouring men, women and children at Frome as deeply tinged as ancient Britons with dark blue with the manufacture of cloth.'

MICHAEL MCGARVIE

The world of the small farmer, by Patricia Croot, Studies in Regional & Local History Volume 15, University of Hertfordshire Press, 2017, 240pp., illus., £18.99, ISBN 978 1 909291 87 4.

Although I am not sure about calling an area 'Brent Marsh', when it stretches from Burnham and the Brents as far as Cheddar and Wedmore, this book contains much that is important in assessing the impact of farming in this area during the sixteenth to eighteenth centuries, when the Agricultural Revolution was changing both the landscape and the lives of the population. Many previous studies of the industry have extrapolated from regional studies in other counties, which are both irrelevant and misleading for the Somerset Moors and Levels, where changes to land tenure, farm sizes and farming practices often did not conform to what has been claimed as the national model. Whilst they are not specifically discussed here, this may well be true for other areas within Somerset, which means that the analysis of the industry provided here can provide many clues for those seeking to research the intricacies of their own area. Somerset had many small farmers, who were often pejoratively

called peasants, implying that they were backward and hindered the social gain which released the workforce enabling the Industrial Revolution. Yet the picture shown here is far more complex and does not support the claim that local farmers were merely subsistence level providers for their own families.

The book's sub-title is "Tenure, profit and politics in the early modern Somerset Levels" and much of what it discusses under those headings is thought provoking, whilst the methodology provides insights which tend to suggest that agrarian history should be treated at a far greater molecular level than has previously been employed. One of its main objectives is to highlight the fact that topographical features play an active role in what had formerly been assumed to be merely changing manorial practices, though the lack of a substantive presence by the gentry in this part of Somerset was also a major influence, affecting many aspects of both their tenure and their political independence.

Many ideas about how the productivity of farming increased over this period assume that larger farms were the main cause, whilst other important factors, such as increased grain yields are side-lined. Lack of evidence can also be a major problem. A prime example of this, mentioned here, is the Somerset apple industry. Everyone knows about the prevalence of apples and cider in Somerset; most surveys report extensive orchards within the area; yet inventories, extensively used in agricultural history, rarely include any mention of the fruit or the ubiquitous staple drink derived from it and it is consequently not given any value.

After describing the sixteen parishes involved and discussing their population, markets, communications and non-agricultural occupations, major chapters discuss tenure, including customary tenure, leasehold for lives and copyhold, examining how they were applied within the region, and how that land was used. Three types of terrain are highlighted: the inland, low-lying parishes among the moors; the coastal parishes with large enclosed pastures and access to the moors; and the Mendip edge parishes with rough hillside grazing on one side and low-lying meadow and moor on the other. This diversity, even in such a relatively small area, promotes considerable variance in the means employed for making a living. How the farmers income was derived and how they handed assets on to their family in inheritance is shown to have a large impact on the wealth of a family over the generations.

There is an implication that political and religious affiliations were affected by the lack of a strong manorial influence in the area. The resulting independence and nonconformity had repercussions at critical times such as the period of the Civil War, the Interregnum and the Restoration, and strongly influenced local reaction to the Monmouth Rebellion. This was an area which had a preponderance of small land holdings, but that land also offered exceptional advantages. In utilising these advantages, the local farming community was not only able to survive, but also to thrive, improving their standard of living through profit driven motivation. Their strategies highlight some additional approaches to the inauguration of the agrarian revolution. As Jane Whittle, the General Editor of this series, comments in her preface, "in demonstrating that small farmers were agents of economic development...[the book] suggests there was not one route to agrarian capitalism,...this had previously been acknowledged...but the point has never been so effectively made for England..." A book well worth reading.

JOHN PAGE

Sir Benjamin Hammet, 1736-1800: a biography, by Mark McDermott, Somerset Archaeological and Natural History Society, 2017, 114 pp, illus., index and notes, £7.50, ISBN 978 0 902152 28 1.

Like the author, Mark McDermott, I only knew Hammet's name as that of a road and a passage, but nothing about the man. I believe that the same could be said of a lot of people in Taunton so I was very pleased to discover this biography, which explores the life of a remarkable man, who deserves to be much better known, especially in his native town.

Mark McDermott has divided his subject's life into four main sections: his early years in Taunton and London, the part he played in constructing the street that bears his name, his career as a Member of Parliament and finally his retirement in South Wales.

The first part covers his family background and childhood, leading on to his move to London and his early development as a merchant and banker. It was at this time that he married into the Esdaile family and became a partner in their business interests. McDermott shows how this gave him the money and experience which allowed him to

undertake various building projects first in Taunton and later in London.

The second section I found the most fascinating part of the book. McDermott pointed out how Hammet changed and preserved much in the town. It was not only the street that was named after him, but work on the restoration of the Castle and ensuring that Taunton would continue to house the Assizes and remain the county town. He also improved access to Hunt's Court (now Bath Place) and supported the development of Taunton Market. He built Wilton House where he and his family lived. Some of these activities did result in the demolition of a number of private houses together with the displacement of their occupants but as far as possible he did his best to ensure that as few as possible people suffered by his actions. The rebuilding of Richard Huish's alms houses is an example of this.

At the same time as he carried out much of this work, he was elected as one of the Members of Parliament for Taunton in 1782. Hammet was an active Member of Parliament, but without joining either of the main parties and determined to remain his own man. One issue near to his heart was legislation for the abolition of the practice of burning the corpses of women who had been convicted of treason which he introduced and promoted. Other issues which he supported were generally of a socially beneficial nature though, as McDermott pointed out Hammet made certain that his own interests did not suffer.

Finally, in the early 1790s, Hammet took over the management of a failing tinplate works at Cilgerron in Pembrokeshire and turned it into a flourishing business employing many local workers. He was also responsible for a number of improvements in the district, building bridges over the Teifi and altering the roads, to his own benefit as well as that of local inhabitants. During this period his interest in the London based projects dwindled. He was elected Lord Mayor of London but refused to take up the position to his own financial detriment.

He died in 1800 and is buried in Wilton churchyard. There is a memorial window in the church to his memory but other than the two roads named after him, nothing else to commemorate his life. This is a shame as without him, Taunton would have been of much less importance. This book fills an important gap in the history of Taunton and is in itself a memorial to Sir Benjamin Hammet. Not least, it is exactly the sort of book that should be on the book shelves of anyone interested in local

history, and not least, it comes at a bargain price.

The book has copious illustrations many of which are certainly new to me. There is a map of the Taunton of his time, which I could wish it to be clearer as it was not easy to pick out all the sites mentioned. It is well illustrated throughout with many of the pictures being unfamiliar, at least to me. References to the sources consulted are included together with additional notes. There are two indexes, one containing the names of people and the other those of places. I would have liked the indexes to also contain references to the subjects dealt with.

The author, Mark McDermott, has lived in Taunton for a number of years. Before he retired, he taught English and History at Richard Huish College (formerly School) and since then has been very much involved with the local history of the town. He has been an active member of the Somerset Archaeological and Natural History Society, serving as President, Editor of *Proceedings*, and with Sue Berry edited *Edmund Rack's Survey of Somerset* as well as producing a number of guidebooks for the Churches Conservation Trust.

CAROL DIMMER

Dr Jonathan Toogood: the story of the 19th century Somerset surgeon who founded the Bridgwater Infirmary, by Lesley Sutcliffe, 2017, 123pp., illus., £13.99, ISBN 978 1 5272 0826 1. Copies may be purchased only from the Blake Museum, Bridgwater, the Somerset Heritage Centre, Taunton and Brendon Books, Taunton.

Jonathan Toogood was born in Sherborne, Dorset, in 1784, was apprenticed in 1798 as a surgeon-apothecary in Bridgwater, then became a pupil in 1803 of the surgeon, John Abernethy, at St Bartholomew's Hospital, London. He became a Member of the Royal College of Surgeons in 1804.

Toogood married Ann Giles, of Mark, in 1806: they had 12 children, – 10 sons and two daughters, (three of them died in infancy.) Three of his sons became doctors.

He set up a practice in Bridgwater in 1806, and in 1813 became heavily involved in the establishment of the Bridgwater Infirmary. In 1834 he established the Bridgwater Eye Dispensary. He was opposed to the establishment of the new workhouses in 1834, on the grounds that they were dehumanising, and this indeed proved to be the case later at Bridgwater.

Toogood was a prolific campaigner, writing articles to the medical press, criticising the ease with which arsenic might be purchased, and the profligate use of it in medicines. He was highly critical of Homeopathy.

Toogood retired in 1845, at the age of 61, and moved to Torquay with his son Isaac Baruch, who was in practice there. In 1853 he published his *Reminiscences of Medical Life*. He died in 1870.

Toogood's lasting legacy in Bridgwater is the Infirmary, more familiarly known as the Bridgwater Hospital. Long supported by voluntary subscriptions, its imposing building overlooking the river at Salmon Parade, was extended over the years, until in 2014 it closed and moved to new premises with improved facilities on the town's outskirts. The listed building is about to be converted into apartments.

This is a thoroughly researched and well-written and illustrated contribution to Bridgwater's local history, and well worth reading.

TONY WOOLRICH,
Hon Curator, The Blake Museum, Bridgwater

Beetles, by Richard Jones, William Collins, New Naturalist Library No. 136, 2018, 480 pp., numerous col. photos, reference list, index. Hbk £65, Pbk £40. ISBN 978-0-00-814952-9 (Hbk), ISBN 978- 0-00-814950-5 (Pbk).

There are more species of beetle alive today than of any other kind of animal and even our own depauperate fauna amounts to more than 4,000! The task of writing a review of the biology and natural history of the British species was not one for the fainthearted and it is hardly surprising that it has taken more than 70 years for a *New Naturalist* on this subject to appear.

It was worth waiting for. In place of a dry catalogue listing those 4000 species, their habitats and food, we find a series of very readable, wide-ranging chapters considering matters of general interest. My favourite might be 'Beetle flight' but parts of 'Beetle habitats and Natural History' run it close.

Indeed, once the reader has absorbed the fascinating introductory chapter, I might advise moving onto the chapter on 'flight', with the sub-heading 'Why do beetles fly?' Anyone who has watched the complicated pre-flight routine of a ladybird must have asked this question, especially

for water beetles; no, the latter cannot emulate a swan and rise from the water surface. But the fact that they fly "... is clear to anybody who has dug a new garden pond. Within days (sometimes within hours) dytiscids are swimming about in the new water." If that is true of water beetles, terrestrial beetles should be very active fliers; as indeed some of them are.

To those who have 'enjoyed' – if that is the correct word – Richard Jones' earlier book, *Call of Nature: the secret life of dung*, it will come as no surprise that dung beetles figure strongly in this new work. Whilst it may benefit a predatory waterbeetle to colonise new habitats promptly, speed is of the essence to the egg-laying dung beetle. They "fly readily and can be seen zigzagging their way upwind to locate a cow pat, minutes after it has been extruded." And he quotes accounts of 16,000 tropical dung beetles "spiriting away 1.9 kg of excrement in under two hours." More fascinating to the physiologist is the manner in which one African species can 'warm up' its flight muscles to take advantage of the elephants' early morning routines.

The European settlers of Australia took with them cattle, sheep and horses – but did not appreciate the necessity of also importing the relevant dung beetles. Native Australian species, adapted to "dry marsupial nuggets", could not cope and the dung from 25 million cows, 70 million sheep and 25,000 horses was rendering "200,000 hectares useless for grazing each year." Turn to pp 283-4 of the book to read the sequel!

In 1771, Linnaeus named the largest species *Titanus giganteus*, a Brazilian stag beetle 167 mm long, from an illustration – "he would never have got away with that now" – but living specimens were not seen by coleopterists until 1958, when they were attracted to newly-installed electric street lights. That is but one consequence of the number of coleopteran species – there are a lot of rare ones. World-wide, on one authority, 45% of species are known from a single locality and 13% from a single type specimen! To some that re-opens the "What is a species?" question; to others, "Are we looking in the right places?"

Natural historians usually concentrate on 'natural' or at least 'greenfield' sites. Richard Jones admits to some irritation on being asked to survey a 'brownfield' site – and his "heart sank at the bleak industrial dereliction all around." But the 63 beetle species included several Red Data Book entries and some national rarities; one common find had not been recorded in the UK for nearly 50 years. The

unshaded, well-drained substrate (soil is too grand a term) that develops on builders' rubble is suitable for annual plants and supports an insect community more commonly associated with southern climes.

I was interested in the section on the beetles associated with human habitation, remembering my 30-year association with woodworm. What I had failed to register was that most of our household pest species do not occur naturally in the UK. "If left uncontrolled they can become pests of biblical proportions. Many of these species are from the biblical middle east ... and first invaded, from the wild ... around 15,000 years ago."

There is, of course, a very useful and well illustrated review of British beetle families accompanied by a key. All in all, it is impossible to praise this book too strongly – apart from its weight.

JOHN CROTHERS

Farming and Birds, by Ian Newton, William Collins, New Naturalist Library No. 135, 2017, 628 pp., numerous col. photos, graphs, line drawings, reference list, index. Hbk £65, Pbk £40. ISBN 978-0-00-814789-1 (Hbk), ISBN 978-0-00-814790-7 (Pbk).

With his background of work with the Natural Environment Research Council and, in particular, his involvement in research on the effects of chemical pesticides on birds of prey, there is probably no-one better qualified than Ian Newton to write on the influence of farming on bird populations. Furthermore, the author is an expert on bird migration and ecology, especially with regard to finches.

Obviously, farming practices in Britain have been changing since Neolithic times but, relatively recently, agriculture has become 'intensive'. Farming through the ages has had profound effects on the British landscape and its wildlife; these effects are fully discussed, aided by well-chosen photographs of the countryside and its birdlife.

As I had rather expected, I found a gloomy chapter on population changes in farm birds: for example, since 1970 there have been 90% reductions in numbers of breeding Grey Partridges, Turtle Doves, Corn Buntings and Tree Sparrows. Significant losses have also occurred with Yellow Wagtails, Lapwings, Skylarks, Mistle Thrushes and Yellowhammers. At the same time, there have been population increases amongst Carrion

Crows, Magpies, Wood Pigeons, Goldfinches and Jackdaws, while Buzzards have increased too.

There is a full and helpful discussion about these changes, but the reason for the Goldfinch increase seems a mystery. I suspect that Carrion Crows and Magpies are thriving because of so many road-traffic kills; so perhaps farming changes are not implicated here. The Turtle Dove has sadly declined almost to extinction in England but, as it is a summer visitor, problems along the migration route or in the African wintering area might be a contributory factor.

Of course, some bird species began to decline well before recent times: for instance, the Great Bustard once bred on open farmland in eastern and southern England, but was last seen nesting around 1830. However, the bird has recently been re-introduced as a breeder on Salisbury Plain. It is pointed out that both marsh and woodland birds have not decreased in numbers to the same extent as those of farmland hedgerows and fields, certainly in recent years.

Usefully, the book contains a broad survey of farming practices since Neolithic times, including the effect of the introduction of enclosures on the countryside. Birds, like many of the rural poor, obtained their cereals by gleaning, a practice that amongst country people extends back to biblical times. Modern-day farming, however, is too efficient to allow any gleaning, at least for people, although maybe Rooks still manage to find a few spilt grains here and there; at least the general scarcity of spilt grain means that, these days, farmers do not have to employ boys as Rook scarers! For people, I suppose corn gleaning died out towards the end of the 19th century. Additionally, more efficient agricultural tools, including seed drills and improved ploughs, probably resulted in fewer farm weeds, many of which produce seeds invaluable as bird food.

The influence of steam engines, used to power the threshing of cereals to extract the grain, is discussed, together with the effect on farm birds. Another section deals with the coming of tractors, fuelled by diesel, so leading to a reduction in the number of farm horses. Another important topic is that of the agricultural recession, which lasted from around 1870 up until the time of the Second World War and had various effects on the countryside and, indirectly, its wildlife. Post-war farming, rightly, has a full chapter, with a section on the rise of 'indoor agriculture', including covered cattle yards and indoor pig and poultry units. The value

of various chemical fertilisers and pesticides is discussed, leading to remarks about the dangers of their over-use.

I liked the section on hill farming although, sadly, crofters were driven from their homes in Scotland to make way for sheep. British sheep were derived from wild Asian Mouflon which, originally, must have been imported. (Similarly, domestic forms of pigs, goats, cattle and horses probably came from animals brought from the Near East.) Increasing sheep numbers must have had an effect on breeding bird populations; of late, there have been marked declines in wader numbers, especially Curlew and Snipe, while smaller birds to suffer have included Whinchats, Wheatears and Yellow Wagtails. Furthermore, the conversion of tracts of open hill ground to agriculturally improved pasture has caused declines in numbers of various moorland birds, such as Golden Plover, Ring Ouzel, Merlin and Hen Harrier. Large areas of hill grassland are being overstocked with sheep, and this is having a major impact on upland habitats and their birdlife.

The general decline in insect numbers in recent years has, deservedly, a chapter to itself: no longer do we have to remove killed insects from our car windscreens after a long journey. Moreover, nostalgically, those who remember flower-rich meadows from the past will recall how they used to teem with insects. Obviously, fewer insects means less food for birds. Could this be one of the reasons why, for example, Red-backed Shrikes are no longer to be seen on British farmland?

Farming at present is highly productive, but this has only been achieved through the provision of government subsidies, and has come at considerable cost to the environment. The author concludes that, if we are to conserve farmland wildlife and maintain the richness and beauty of the countryside, farmers must be encouraged – and subsidised – to manage their land in a sustainable way.

This is a detailed and authoritative volume which is sure to become a standard work of reference on its subject. It provides a first-rate overview of all the relevant recent research, the comprehensive reference list having around 800 entries! Anyone interested in farmland birds would be well advised to purchase a copy.

PHILIP RADFORD

Nightingales in November, by Mike Dilger, Bloomsbury, 2016, 368 pp., b/w illus., maps, further reading list, index. Pbk £9.99. ISBN 978-1-4729-1537-5.

Mike Dilger is a naturalist and wildlife TV presenter. This book represents a year in the lives of twelve British birds, and discusses their reactions to our varied climate and seasons. Dilger's chosen birds are: Bewick's Swan, Peregrine, Lapwing, Puffin, Cuckoo, Tawny Owl, Nightingale, Swallow, Robin, Kingfisher, Waxwing and Blue Tit – all birds with very different ways of life, and including both migrants and residents. The material for the book has been gleaned from scientific papers, monographs and the author's own knowledge and experience, and is presented in an easily digestible form.

The author makes no claim to be writing scientifically, and there is no reference list; however, the text is certainly easy to read and sometimes quite entertaining in its presentation. Dilger's hope is that by encouraging us to observe and enjoy birds we will in time gain a better understanding of why the populations of so many bird species are in such serious decline at the present time.

Choosing just one of the author's bird selections, I was pleased to have the opportunity of reading about the lives of Waxwings. I have only seen Waxwings in England during an 'irruption year', and feeding on either rowan or cotoneaster berries. The birds are highly attractive in appearance, and very tame too. In the spring, Waxwings seem in no hurry to leave for their northern Scandinavian breeding grounds, where weather conditions may not be suitable for nesting until early June. Still, by late March Waxwings should be moving through Norway and Sweden, heading for forests surrounding the Arctic Circle. Apparently, 35 British-ringed Waxwings have now been recovered on their northerly migration in Scandinavia.

As insects become available, perhaps during April, Waxwings begin to catch mosquitoes and midges, so switching from a fruit to a meat diet. By May, most Waxwings will be back on their breeding areas – forests of spruce and pine, together with fruit-bearing bilberry, cloudberry and crowberry plants. In July, Waxwing eggs should be hatching out, but chicks need a lot of brooding by the female because of prevailing low temperatures. In August, family parties begin to move round the taiga forest, feeding on both berries and insects. In good years, the birds winter close to their breeding

grounds; but, should food supplies fail, Waxwing populations move southwards, with many reaching our own shores by mid-winter.

Similar year-round accounts are given for the other birds chosen by Dilger. In particular, the value of satellite-tracking transmitters in determining bird migration routes is discussed. Satellite tracking has played an important role in revealing the movements of Cuckoos, both in Europe and Africa, although these devices are generally too large and heavy to be attached safely to smaller bird species. A better appreciation of the lives of many migrant species makes one reflect on their 'nationality'. Is the Cuckoo, for example, an African or a British bird?

It is both, of course. And with smaller birds, too, geolocators – much smaller than satellite-tracking transmitters – have proved valuable in indicating the lengthy migrations taken by particular individuals. One Nightingale was shown to have travelled from Sierra Leone to Portugal in just three days! Unfortunately, geolocators can only provide information once the bird in question has been recaptured. In the future, there is hope that tracking transmitters will become progressively smaller, so that they can be used safely on even the smallest of species.

Throughout the species accounts, special

attention is given to feather moult, including its timing in the year and the sequence in which the feathers are lost and replaced. Moult affects a bird's way of life. Thus, with Puffins, it is now known that birds reared on islands in the North Sea move to the Atlantic for the winter, where their primary wing feathers are moulted, rendering them almost flightless for about four weeks. In due course, it is hoped that year-round tracking data will give clues about the factors leading to the recent decline in so many Puffin populations.

Most of the species covered in the book are Somerset birds, many of them either breeding or wintering in the county. Bewick's Swans are rare winter visitors with us, although large numbers congregate at Slimbridge, which is not far distant. Nightingales used to nest regularly in the county, but there has been a worrying reduction in recent years. Puffins, while not breeding on the Somerset coast, can often be observed offshore; and parties of Waxwings are occasionally seen here in winter, at least in 'irruption years'.

For anyone with an interest in birds, this unusual book is well worth reading, and you can buy it for less than a tenner too.

PHILIP RADFORD