

## Book Reviews

### UK and Ireland

JOHN BELCHER, *The foldcourse and East Anglian agriculture and landscape, 1100–1900* (Boydell Press, 2020). xii + 199pp. 4 plates, 8 figures, 20 tables. £75.00. The first modern description of the foldcourse appears in K. J. Allison's article in the *Review* in 1957 (vol. 5, part I). In his introduction to this book, John Belcher defines what is meant by the foldcourse and in particular by foldcourse husbandry, the farming regime based around the foldcourse. Whilst focusing specifically on the western part of East Anglia, he notes the need to make inter-regional comparisons.

Chapter 1 commences with an examination of the environmental, social and agricultural contexts within which foldcourse husbandry existed. Starting with a review of the soils of East Anglia in terms of recognized soil associations, the correlation between the foldcourse and the differing soil types is considered, noting that the predominant link between foldcourse and light soils is a consequence of the nutritional poverty of those soils. However, Belcher does note some anomalies, where the foldcourse was practised on other types of soil. Different field systems are then examined and it is concluded that the field systems which developed in East Anglia were significantly different to those of the Midlands. In addition, there was also a range of pastures available in the region including fens, heathland and salt marshes.

In the second chapter, consideration is given to the overlapping boundaries of manors, villis and foldcourses. A single manor could have had multiple villis, whilst at the same time one vill may have belonged to more than one manor; over and above that, a single manor may have had multiple foldcourses. Looking at tenurial rights and customs and their complex linkage to the foldcourse, Belcher examines four features: the feeding of animals on the post-harvest stubble (shack); the right to put sheep in the demesne flock (cullet rights); ownership of the tathe (sheep manure) of the flocks; and the practice of the role of exchanges of arable lands between lord and tenants. He considers that it is this latter arrangement which provides a clear and

unique distinction between the agrarian practices of the champion region and that of foldcourse husbandry. Further, the tathe was regarded as a commodity with financial value which also contributes to regional differences and emphasizes the market-driven methods employed in the region.

Chapter 3 examines the medieval foldcourse in detail. By examining the use of the term 'fold' and other related terms in Domesday Book, it is concluded that this provides evidence that the foldcourse was already established by the eleventh century: this evidence is focused on East Anglia and relates to feudal relationships at this time, rather than as an agricultural practice. Belcher then considers post-Domesday examples of folds, including requirements to tathe the land and the existence of stints, specifying the number of sheep permitted. The chapter ends with a consideration of folding arrangements in the medieval period in three townships across East Anglia. In his conclusion to the chapter, he notes that the flocks of East Anglia were not operating in the same sense of 'common', as described by Kerridge in respect of the downs of Wiltshire.

In the following chapter, the evolution of foldcourse husbandry is considered in the later medieval period, starting with the effects of famines and plagues in the mid-fourteenth century and the social disturbances of the sixteenth century. Belcher notes that medieval foldcourse husbandry had been a co-operative, and possibly a communal, activity involving lords of the manor and tenants as owners of sheep. However, the impact of changes over this period including the role that flock-masters played, and the acquisition of former monastic grounds and foldcourses, resulted in the foldcourse of the early modern period becoming what Belcher calls 'a mirror image of its medieval predecessor' (p. 112).

Chapter 5 examines the actual farming practices of foldcourse husbandry and the agrarian regime of which it formed a significant part. Infield-outfield agriculture was widespread across East Anglia, primarily in the Good Sands and Brecklands regions, and the foldcourse was an important agricultural practice. Further, the

flexibility of these practices was facilitated by the smaller unit of land (furlong), as opposed to field, and the need to adapt practices which matched the soil. The final chapter considers the contribution which the foldcourse made to the improvement of land, along with the impact of engrossment and enclosure. This is examined for single estates as well as for the landscape of the whole of western East Anglia, thereby bringing the focus of the book to the landscape element of its title.

This is a well-presented book, although with numerous typographical errors, many of which would have been eliminated through use of spell-checking software: further, typesetting has resulted in the running head on odd-numbered pages in chapter 3 reverting to that of chapter 2 for part of the chapter (pp. 86–101) – all would have benefited from thorough proof-reading. As the commercial outcome of Belcher's doctoral thesis (University of East Anglia, 2016), it appears to have been written for those who already have some knowledge of the foldcourse, rather than for the general interested reader: the latter would have benefited from explicit definitions of fold, foldcourse and foldcourse husbandry in an East Anglian context early in the book, rather than the implicit ones provided in the Introduction and throughout the text. The author attempts to excuse this in his conclusions, where he states that the differences between foldcourse husbandry and other regimes 'cannot be framed in monocausal terms', the former being a 'complex system of interactions between the environment, social structures and agrarian practices' (p. 179). However, this is an in-depth study into the subject of the foldcourse, drawing on a wealth of examples taken mainly from primary sources to provide a comprehensive understanding of its practice in East Anglia, thereby emphasizing the distinctiveness of East Anglian agricultural practices in the past. Whilst Belcher notes that the book removes some misconceptions about the foldcourse, he recognizes that there is still work to be done to understand fully this significant complex subject.

ALAN WADSWORTH  
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J. MICHAEL JEFFERSON, *The Templar estates in Lincolnshire, 1185–1565: Agriculture and economy* (Boydell Press, 2020). 348 pp. 30 illus. £70.

This book is partly based on Michael Jefferson's 2016 University of Nottingham doctoral thesis and in parts reads like a dissertation, but that is not necessarily a bad thing. The Knights Templar, like King Arthur, suffer from being the subject of far-fetched

popular histories, so this well-researched scholarly book is welcome. It tells of political wrangling, spiritual provision and agricultural management.

The Templars were major landholders in Lincolnshire, understanding how their estates worked both under them and subsequent landlords illuminates medieval agrarian land management. Today the tower of a Templar preceptory still stands within a farmyard at Temple Bruer and without Jefferson's research we would not know how this structure fitted into the wider landscape. Historians are limited by their written sources and in this case that is strikingly clear. The book is by necessity framed around five surveys carried out between 1185 and 1535.

The story of the Templars cannot be told without the Hospitallers (the estates of the former were granted to the latter in 1312 and formed the bulk of the Hospitaller holdings in Lincolnshire) and Jefferson, in his introduction, explains how both orders worked and evolved. He rightly points out that the story of the Templars in the Holy Land has been told on many occasions (Helen Nicholson's *The Knights Templar* or Malcolm Barber's *The new knighthood* for example), but his is a rare insight into the estates that supplied and sustained them.

Chapter 1 concentrates on the 1185 survey of Templar properties by Geoffrey Fitz Stephen, the Master of the Templars in England. The real shame is that we do not have records of the initial donations of small parcels of lands that formed the holdings, but the 1185 survey is sufficiently early that when compared to the early fourteenth century records, allows us to see the process whereby the Templars consolidated their scattered donations. As Jefferson says (p. 41): 'The Templars became adept at acquiring and exchanging land so as to consolidate estates, reduce travel time, and lengthen the effective working day'.

The second chapter summarizes the estate accounts after the Crown had seized the estates with the fall of the Templars and date to 1308–13 (these were the focus of Jefferson's original thesis). These form the bulk of Jefferson's evidence and he takes four chapters to analyse them, which he does very successfully. Chapter 3 looks at the evidence for arable production and how soil fertility was maintained through crop rotation and manuring (but oddly with no record of marling) as well as controlling weeds by frequent ploughing. Readers of the *Review* will probably be aware of the discussions surrounding the relative success or failure of late medieval farmers to maintain soil nutrients and the evidence here is useful when investigating that debate. Templars were also building windmills to replace the less efficient watermills. Once the Crown

got control of the estates, they squeezed every penny out of them with little regard to longer-term planning.

The fourth chapter looks at livestock and here Jefferson argues that the use of either mixed horse and oxen plough teams or ones solely made up of horses on estates with lighter soils or hillier ground (which in Lincolnshire generally means the Wolds) confirms that the Templars were managing their estates innovatively. This corroborates Langdon's theory published both in this journal and elsewhere that the use of horses and appropriate harnesses in the twelfth century onwards was a product of good estate management and led to higher yields. There are obvious gaps in the survey evidence, for example almost no pigs are recorded and Jefferson notes (p. 89): 'The manor of Willoughton had a herd of forty-two cattle but recorded no cowherd, which seems highly improbable'. The fifth chapter looks at sheep rearing, a sizeable part of their income (mainly wool but also cheese), and by using the size of fleeces produced concludes that small horned sheep were the norm, perhaps settling the debate as to whether the larger Lincolnshire Longwool had a medieval equivalent. The sixth chapter looks at who worked the estates and lived on them.

Chapter 7 tells of the tortured process whereby the Hospitallers, who had been granted the Templar's property by the Pope, battled to gain control of the estates. With the benefit of hindsight we can see how they were cheated; the 1338 Hospitaller report on the Templars' estates in England (tackled in detail in chapter 8) lists far fewer than there should have been. The last chapter deals with the *Valor Ecclesiasticus* compiled in 1535 when the Hospitaller estates were dissolved and a final document of 1557 that relates to Mary Tudor's short-lived attempt to re-establish the order.

The conclusion of his study is that the Templars practised innovative estate management, trying to control disease that affected their flocks of sheep, consolidating their scattered holdings into nucleated estates and built an infrastructure to process their agricultural surplus to finance the Order.

At the end the primary sources are reprinted, useful for future researchers (some tables even list how many carts, pots and bowls were stored in individual buildings). There are numerous maps, these would have benefited from colour and some are taken from other historical atlases. I was a little disappointed when I first thumbed through the book that the author was not able to reconstruct the estates in more detail, perhaps mapping out the boundaries of the preceptories and manors. For descriptions of the physical remains of the estates in Lincolnshire you would also need to look

elsewhere (for example Philip Mayes' monograph on the South Witham Preceptory).

Overall, this is a very useful study for anyone wishing to test theories about medieval estate management and agricultural practices, as well as anyone who wants to know more about the Templars.

ERIK GRIGG

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SUSAN KILBY, *Peasant perspectives on the medieval landscape: a study of three communities* (University of Hertfordshire Press, 2020). 238 pp. 8 figs. 8 tables. £18.99.

In an era when there were likely to have been butterflies everywhere, why would medieval people have named a local meadow *boterflymede* 'butterfly meadow'? Susan Kilby suggests three practical explanations in a book which is a major contribution to a long-standing field of study and an important source for English landscape history: that of place-names.

'Minor' names, such as those for roads, streams, and farms, for which local inhabitants are the source, have long been collected and recorded by the English Place-Names Society and the work of Margaret Gelling and Ann Cole has revealed the perceptions of landscape features contained in major place-names. Dr Kilby investigates the micro-toponymy, the words that local people used for much smaller features: furlongs and lanes, ponds and ditches, lanes and paths. Her book is far more, however, than an introduction to a new source for place-name scholarship: her aim is to show us 'the medieval world through peasants' eyes' and is an example of an emerging direction in rural studies towards cultural geography, exemplified by recent work by Stephen Miles, Stuart Brookes and Richard Jones on peasant perceptions of their environment. This theoretical grounding leads her to look for links that might be made with other disciplines and to robust engagements with other fields and approaches. Sometimes this has paid dividends. The archaeological evidence for the village of Elton, for instance, has revealed the external boundaries of 'plots'. Known as messuages, these are often taken to be the base of the typical peasant landholding in the medieval village. In the high-pressure conditions before the Black Death micro-toponymy reveals what is long lost to archaeological record: they were minutely, and often controversially, divided by an informal network of fences, walls and ditches as well as containing more than one dwelling. From the manor court rolls we learn more. The lord of the manor found it necessary to determine which occupant of which crowded plot his labour services were to come from: it was decided that

'each house, having a door open onto the street should provide a man for the loveboon'. The 'on-the ground' reality and the way that the resulting conflicts were settled, are thus laid out before us.

Kilby's approach takes us even further. She finds that locational by-names, such as 'in the lane' were more typical of servile tenants than of free. The village layout at Elton could thus well have reflected a similar situation to that at Cuxham, Oxfordshire, where, as Paul Harvey revealed, the position of servile tenants' holdings along the village street was the result of the landlord, Merton College, organizing the labour for demesne production. How they named their surroundings could preserve local people's ideas about the remote past and could pass on valuable farming practice. It reveals a thriving unofficial micro-economy of fishing, fowling, and small-scale pastoralism which evaded the seigneurial eye and thus the seigneurial records.

The contribution that micro-toponymy makes to what we can learn about the everyday language of medieval country people is fascinating in itself: these East Midlanders saw and named their world with the same closely engaged perception as did a later East Midlander, John Clare. Whether micro-toponymy, or cultural geography more broadly, brings us closer to peasants' 'lived experience' demands closer examination. Two possible problems suggest themselves. The first is that, as displayed here, it has a very narrow perspective. Like those in traditional 'labours of the months', Kilby's peasants seem to do nothing *but* work. Surely, even for the poorest smallholder there was more to life than work? After all, in the books which Zvi Razi, Barbara Hanawalt, Rodney Hilton and others based on very similar source material peasants are found loving, marrying, and dying, bringing up children, joining rural protests... We learn from LeRoy Ladurie's *Montaillou* not simply what medieval French peasants' experience of everyday life was like, but what they believed about the origins of good and evil, life, death and the hereafter! A second problem in this approach is also inherent in its very quality of intense localism. Kilby's sources are the surveys drawn up on behalf of the landowners and the proceedings of the manorial courts of three manors: Elton (Hunts.), Lakenheath (Suff.) and Castor (Northants.). As all are in 'Village England' (and had been in the Danelaw) and all practised open-field farming, the implications of her work might perhaps have profited from moving further away from the geographical constraints this has imposed. Descriptions of her sources, perhaps a legacy from the book's origins in her Ph.D. thesis, make her first chapters somewhat of a trudge (could the series editors have pruned a little?), and, for a

book which depends so much on micro-topography, the size at which the OS maps are reproduced makes the topography of the villages, so essential for her argument, very hard to make out. Cavils aside, this is a deeply fascinating book.

ROSAMOND FAITH

CHRISTOPHER GERRARD and ALEJANDRA GUTIÉRREZ (eds), *The Oxford Handbook of later medieval archaeology in Britain* (Oxford University Press, 2018). xlii + 1058 pp. 217 illus. £35.

This major tome represents a huge body of synthesis and research, expertly crafted by the editors and contributors to bring together holistically key themes and topics in later medieval British archaeology. As is the case with most books in the Oxford Handbook series, this is a large volume, at 1058 pages and 60 chapter contributions. The subject matter of later medieval archaeology is multi-faceted, complex and describes an already fairly disparate array of research foci. Nevertheless, the volume does an excellent job of achieving balance in a cohesive and comprehensive overview.

The 60 contributions are split between ten sections in the book, which demonstrates an attempt to arrange the analysis thematically, covering everything from the fundamental and usual suspects, namely the historiography of later medieval archaeology, towns, power, craft, and rural settlement, to religion and belief. The volume does, however, attempt to account for more recent, novel and emerging trends in the field too, with slightly less common thematic sections, analysing the senses, or growing up and growing old, while the final section of the volume also attempts to contextualize British research trends, within wider European analyses. Though there are few major quibbles that one may have with such an ambitious and accomplished shopping list of research themes, how effective this latter international section is at summarizing effectively the key trends in neighbouring regions is perhaps moot.

In terms of the pitch of contributions, there is a decent blend of analyses that fall into the category of critical literature reviews assessing research trends on the one hand, and those that summarize and assess key forms of evidence (old and new) on the other. Added to this, however, are a number of contributions that hone possibilities in relatively novel areas of research, including the analysis of sound and landscape by S. Miles, or the analysis of play by M. Hall. These contributions give a hint at the more theoretically engaged and pioneering forms of analysis

that are slowly coming to characterize later medieval archaeology, and which are expertly foregrounded by Graves and Gerrard in the introductory section. There are few major gaps in the volume, although some readers might have preferred to see more coverage of other traditional stalwarts of medieval analyses, including the burgeoning and rich field of cemetery archaeology, or castle studies, more overtly. There are of course some excellent contributions covering these fields, including one of the standouts for this reviewer, by O. Creighton, summarizing the major issues and trends facing analysis of elite space and castle landscapes. While contributions are drawn from across a range of sectors, the volume as a whole is weighted towards academic contributions. Given the boom in information produced through developer-led contexts in recent years, one may have liked to see slightly more coverage and input from the commercial sector. Notwithstanding such quibbles, there is a remarkable balance overall, with most sections of the book characterized by both breadth and depth.

In terms of pitch, contributors seem to have received a steer towards a wider British focus, with overt efforts in a range of contributions to avoid too regional a focus. This means that inevitably disparities in regional research trajectories often necessitate a gap in coverage, data being acknowledged as unavailable in some regions for overview, or an inevitable bias towards data and debates that really only characterize scholarship in and concerning particular regions. Hence, Scotland, Wales or the south west, emerge in many respects as poor cousin to the midlands, central and eastern England. While this is as much the result of regionality in academic interest, the absence of similar scales of infrastructure and development projects in recent decades, has simply not engendered the same trajectories of discovery across Britain. It also remains true that different research histories necessitate that some debates have simply not featured as priorities, or been sufficiently prominent in certain regions to attract field analysis or focused research. For example, assembly culture in Gaelic areas, a topic of considerable significance for medieval Scotland, is absent.

Thus, there is something of a tension throughout the volume between the regional nature of many of the principal debates and themes, and the attempt at national coverage that characterizes most of the analyses presented in the volume. While this may be somewhat exacerbated by the selection of contributors and their topics of focus, this is not a failing. Instead, one may read this as a valuable contribution to comparison and contrast, which ensures that the volume as a whole focuses on national trajectories,

and truly does attempt to capture as holistically as practicable the state of the art.

To this latter aim, this volume may be said to have been spectacularly successful, and it will constitute a major landmark for the field for some time to come. As a whole it represents an indispensable reference for the widest array of themes and debates in medieval archaeology yet assembled. Sections like Part IV, examining life within towns and ports, includes analysis of urban housing, the relationship with hinterlands, shops, and infrastructure, to paint an extraordinarily holistic assessment of the whole. These themes and associated debates, moreover, characterize scholarship in Britain and elsewhere in Europe, making the volume appropriate to the interested reader, student and specialist working within Britain and without. Alongside these many achievements of synthesis may be placed a considerable number of contributions that problematize the current state of the art, and indeed, pioneer new directions within the historiography of later medieval archaeology. Ronan O'Donnell's overview of field systems and arable agricultural practices, teases apart temporal change in an accessible and important overview for much wider debates. Amanda Richardson contributes an important discursive analysis of gender and space, while Aleks Pluskowski presents an important overview of the fluid relationship between wild animals, humans and landscape, as well as the impacts of changes that characterize the post-medieval period, and practice of things like hunting culture thereafter.

There is therefore much to recommend this volume, with the paperback edition in particular being remarkable value for such a comprehensive piece of synthesis. The editors have done an exemplary job of knitting this volume together into a cohesive, readable and fluent landmark of scholarship for this field.

PATRICK GLEESON  
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HUGH WILLMOTT, *The Dissolution of the Monasteries in England and Wales* (Equinox Publishing). 220 pp. 98 illus. £85.

Willmott's book provides a useful overview of the archaeology of the Dissolution, and will be welcomed both by students and by scholars specializing in other aspects of the early modern period seeking an introduction to this topic.

The introduction sets out two aims: to counter a perceived bias in popular and academic writing on the Dissolution towards narratives of destruction, and to recover human agency. The characterization of traditional narratives of the Dissolution seems a little one-sided. Certainly, some writers have over-em-

phasized destruction, but the corrupt and greedy abbot is as much a stereotype of popular English history as the wanton destruction of monastic houses, and this aspect of the historiography is not discussed. Similarly, the fact that the Reformation, and thus Dissolution, are traditionally painted in a positive light in Whiggish narratives of progress is also ignored. The second aim, to examine human agency, is one which nearly all archaeologists set themselves in a work of this type; though to the extent that Willmott has moved away from top-down understandings towards examination of the motives of people in the shires and towns he has achieved it.

Having set out his aims Willmott provides a brief chapter of background information on monasticism in England before moving on to the main subject matter of the book in chapters three to seven. Each of these reviews a different part of the archaeological record.

Chapter 3 examines the initial dispersal of monastic movable goods and building materials, and thus broadly examines portable material culture. This is one of the book's strongest chapters. Much of it is truly fascinating. The suggestion that the church was often chosen as the site for melting lead in order to desecrate it particularly interesting. This section would have benefited from some comparison with archaeologies of iconoclasm in contemporary parish churches. Willmott shows that the deconstruction of the monastic building was often a very well-ordered process, particularly those parts of it conducted by agents of the Crown. It is surprising that this was not examined in the context of the growth of state power in this period which would have helped place the Dissolution within post-medieval archaeological narratives. Likewise, Willmott brings together some interesting evidence for respectful treatment of human remains, and suggests that this was common. This would have benefitted from contextualization in terms of archaeological understandings of attitudes to the corpse and burial in the early modern period.

The next chapter addresses the dispersal of monastic real-estate. This is a vast subject, but Willmott provides a good overview. The discussion of how the gentry used monastic land to consolidate and extend their power locally, and to set up cadet branches is very useful. Likewise, examples of the gentry securing the tombs of their ancestors is interesting and adds to the discussion of the treatment of human remains in the previous chapter.

The next two chapters discuss the use of monastic buildings. Firstly, non-domestic uses are examined. This discussion begins with ecclesiastical reuse, both as cathedrals which continued in use with a Dean and Chapter replacing the monastic community, and as

parish churches. Willmott suggests that scholarship has downplayed these uses because they do not fit the traditional narrative. This is unconvincing, as the phenomenon is a familiar one. An alternative, which is not examined, is that, as the Dissolution is a transition-period, medievalists may study the monastic phases of a site and neglect the post-medieval phases, whereas post-medievalists ignore monastic sites altogether as a medieval phenomenon. Nonetheless, the discussion of the archaeological evidence is excellent, and it is very useful to have the material drawn together. The success of parish communities in defending their rights against their social superiors is revealed, which is interesting in light of the contemporary defence of secular rights of manorial tenants. Willmott then explores secular uses, and reveals a great variety of these. The creation of schools and almshouses is familiar, but the examples of use of monastic sites for courts, town halls, prisons and industry and the reuse of monastic water management systems is perhaps more unexpected. Willmott's suggestion that burgesses may have felt some ownership of houses that they had patronized is particularly interesting.

A further chapter is devoted to domestic uses. As Willmott notes such uses are underappreciated. Consequently, this synthesis is very valuable. The discussion of the highest-status houses draws strongly on Maurice Howard, which is then placed in context by discussion of evidence for more modest houses and farms. One of the most interesting features of this chapter is the discussion of the treatment of monastic churches by different owners for personal and political reasons, which really goes to the heart of the human agency issue raised in the introduction. Finally, a chapter examines the landscape gardens which surrounded these houses, where the symbolic uses of monastic ruins is a particularly interesting aspect.

Overall, Willmott's valuable work drawing together and summarizing the archaeology of the Dissolution is let down somewhat by the aims that he set himself, and particularly the perceived traditional narrative which he is criticizing. Despite this some really important observations are made on the treatment of the church building, of human remains, the ability of the state to carry out an orderly process of asset stripping across the country, and the use by the gentry of monastic sites for symbolic/political purposes. One wonders if more could have been achieved if the book had instead been built around such themes. Nonetheless, if Willmott's book stimulates work on any or all of these subjects, he will have made a valuable contribution.

RONAN O'DONNELL  
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WILLIAM D. SHANNON, *Seventeenth-century Lancashire restored: The life and work of Dr Richard Kuerden, antiquary and topographer, 1623–1702* (The Chetham Society, 2020). xviii + 346 pp. £39.95.

This book fits perfectly with The Chetham Society's aims to publish the 'remains historical and literary connected with the Palatine Counties of Lancaster and Chester'. Shannon acknowledges that Kuerden 'played an interesting, if perhaps marginal, role', but historians of Lancashire will find this an illuminating tour through his notes and papers.

The structure of the book carefully organizes Kuerden's jumbled materials into nine thematic chapters – no mean feat – but the sheer volume of his catalogue makes it a dense read. There are 18 small, black and white figures which serve as a whet to the appetite. The book begins with a very thorough introduction discussing the intellectual milieu of the time, setting Kuerden at the edge of, but never quite part of, noted circles of antiquarian studies, local history, and topographical practice.

The first chapter discusses Kuerden's bold, but ultimately fruitless, proposal to create an all-encompassing five-volume history of Lancashire, usefully transcribed in full as Appendix 1. Chapter 2 is a biographical account, rich in detail regarding some areas – such as how Richard Jackson came to be known as Richard Kuerden – but there is little basic personal detail such as date of birth. This is no fault of the author; all that is known of Kuerden derives from an autobiographical account, probably intended to accompany his intended History of Lancashire. Kuerden's statement that he was 'interested in mathematics from childhood' crops up several times throughout the book. Kuerden's correspondence with William Dugdale proves an ongoing connection with the better-known antiquary, but the letters 'throw little new light onto his biography' (p. 47). We see how Kuerden's increasing devotion to his antiquarian work had a detrimental effect on his medical career, a mismatch recognized even by his contemporaries (p. 74). Thus, Chapter 3 provides an illuminating – if alarming – account of medical training and practice at the time. Kuerden's flirtation with Catholicism is the subject of chapter 4, although no definitive conclusions can be drawn from the available evidence; this is perhaps as much a reflection of the limitations of being a professing Catholic at the time Kuerden was working.

The five chapters of the second half of the book feel more substantive, being a thorough analysis of the contents of Kuerden's extant papers. As such, it will be an invaluable source for those interested in the history of Lancashire, signposting the contents and

coverage of his notes. This is given further weight by the inclusion of a second Appendix giving a description and discussion of the contents of each surviving manuscript folio. Kuerden had a voracious appetite for the written text, amassing a huge collection of papers and notes copied from – and sometimes onto – original documents. Preston Corporation were still trying to wrest their papers back from Kuerden decades after he had 'borrowed' them (p. 121). Kuerden, Shannon tells us, had 'substantial, albeit unfulfilled, ambitions as an author' (p. 124), and this amassed material was arranged into several unfinished drafts, none of which made it to publication during Kuerden's lifetime.

Shannon's chapters on Kuerden as map-maker and the Towneley maps (Chapters 7 and 8) are perhaps the strongest; whilst his discussion of whether the maps were made by or with Kuerden's involvement is inconclusive, what is not in doubt is the huge value of the Towneley maps. As Shannon states on p. 245, 'the town plans, road strip maps, and the Cartmel boundary survey, individually and collectively, not only throw considerable light on the methodologies and techniques of the seventeenth century surveyor but ... add considerably to our knowledge of the landscape and townscapes of Lancashire in the late seventeenth century'. Three further appendices give the reader a partial transcription, calendar and notes relating to the Description of Leyland Hundred, the Towneley Maps, and the War Office Accommodation Returns of 1686, further enriching this volume.

Shannon gives us a window into the process of mapping, the specialist paper (including a gridded paper of Kuerden's own invention), tools and methodology of the surveyor, and an analysis of annotations and calculations on the map paper itself to reconstruct the process in real time. The note on Statute and Customary Measurements forming part of the front matter of the book is a very useful adjunct, explaining some of the challenges of interpreting mapping attempts given the range of lengths in use. As an example, a perch could be anywhere from 5 to 8½ yards in length, varying even between north and south Lancashire, despite attempts of Charles I to introduce a standard yard.

Whilst Kuerden's work was never brought to completion during his lifetime, and 'much of his work on medieval texts has been superseded' (p. 182), his surviving papers are useful to us now in providing insight into Kuerden's Lancashire in the seventeenth century, his working practices, and some of the social and scholarly reverberations of the political and religious upheaval of the time. Shannon's thorough and helpful descriptions of the archive are perhaps most useful in the way they shed light on the life and afterlife

of antiquarian and miscellaneous papers; the initial collection, then dispersal, loss, acquisition, rebinding, and annotations made over subsequent centuries.

Shannon successfully achieves his intention to restore Richard Kuerden to Lancashire's historiography, although Kuerden comes across more akin to a disorganized uncle than 'Father of Lancashire History' (p. 240) – particularly given his collaborator, Christopher Towneley, started twenty years earlier. Kuerden's materials do indeed reveal to us 'some aspects of seventeenth-century Lancashire which are perhaps available to us from no other source' (p. 18). But, whatever the authorship of the Towneley maps, they are the jewel at the centre of this treasure trove of papers, and I found myself agreeing with Shannon's assertion that 'these maps today have more value than the 11 manuscript volumes put together ... [throwing] a unique light upon seventeenth-century Lancashire, unavailable from any other sources' (p. 182).

EMILY SLOAN  
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RICHARD HOYLE (ed.), *Histories of people and landscape: Essays on the Sheffield region in memory of David Hey* (University of Hertfordshire Press, 2021). 218 pp. £18.99.

This lively volume of essays will be close to the hearts of many members of the British Agricultural History Society. Not only are the editor and several of the contributors stalwarts of the society but its dedicatee, David Hey (1928–2016), had served as the society's president and is remembered affectionately as the life and soul of many a conference and excursion. The book is a fitting memorial to the scholarship of one of England's leading regional and local historians, who was firmly rooted in the Sheffield region but whose many contributions to rural history were never myopic. It contains ten essays, many by long-standing colleagues and friends (often an artificial distinction to David), prefaced by the tribute paid to him at his funeral by Charles Phythian-Adams, his friend for half a century.

The ten papers range widely across historical themes, with a greater or lesser focus on the Sheffield region. Two explore woodland in the medieval landscape. The late Melvyn Jones provides a reflective and wide-ranging survey of the purposes and meaning of deer parks, using those in the Sheffield area as examples, and paying welcome attention to their post-medieval history in the transition from park to coppice woodland or farmland. Trajectories in the history of woodlands are also the theme of Ian Rotherham's contribution, a broad, general essay with a focus on what he terms

'shadow woods', the medieval wood pastures which often evolved into largely treeless commons.

As is appropriate for a volume of essays on the Sheffield region, two contributions home in on the history of the steel industry – the 'fiery blades of Hallamshire' of the title of one of David Hey's most important books. In a characteristically thought-provoking and stimulating paper, Richard Hoyle offers a revisionist view of the role played by the earls of Shrewsbury in the statute of 1624 which established the Cutlers' Company in Sheffield. Rather than signifying a withdrawal from active manorial control, he sees the move as an expression of the need for new regulatory mechanisms for urban industry in early modern England. Dorian Gerhold places the south Yorkshire steel industry in a national context, providing a useful and succinct survey of steel-making in England as a whole in the seventeenth and early eighteenth centuries. He traces its development from Coalbrookdale (c.1615), south Yorkshire (probably by 1630) and Stourbridge (by 1641), to north-east England by the 1680s and Birmingham by around 1714. Within south Yorkshire, the steel-making heartland shifted from the Rotherham area to Sheffield around 1710.

Several papers examine aspects of rural society and landscape between the seventeenth and twentieth centuries, shedding new light on a disparate array of topics. Peter Edwards' detailed account of the realities of wardship in the early seventeenth century uses estate disbursement books to trace how Lord William Cavendish of Hardwick Hall integrated the estates of his ward, Francis Wortley, with his own, while honouring his obligation to make payments as Wortley's guardian. John Beckett seeks to reach behind the formal records of parliamentary enclosure in Nottinghamshire to assess the full scale of resistance to enclosure, arguing that W. E. Tate's conclusions based on counter-petitions to enclosure bills significantly underestimated the level of opposition. Alan Crosby's paper provides an exemplar of how the history of a single family can be used to shed light on much wider aspects of socio-economic history in local societies, an approach of which David Hey was himself a pioneer. His reconstruction of the fortunes of the Bagshaws, a yeoman family in the Peak District, from 1600 to 1942 is a fine case study of a long-resident family of the 'middling sort', whose rootedness fostered the distinctive local cultures of pre-modern England. Nicola Verdon's essay on the First World War ploughing-up campaign in Derbyshire also illustrates the value of a local case-study approach. Using surviving records of district War Agricultural Committees, she provides a full account of the challenges and achievements of the ploughing-up campaign in the county, which saw

an increase of over 32,600 acres of ploughland between 1916 and 1918, as official encouragement was replaced by compulsion.

In a fascinating survey, which touches only briefly on the Sheffield region, John Broad explores the growth of settlements along boundaries – many of them marginal communities of ‘squatter’ cottages, exploiting jurisdictional uncertainties along the boundaries of parishes and counties. Several place-names recur, not only the self-explanatory ‘No Man’s Land/Heath’ but others, notably ‘Little London’, which occurs at least 140 times, though the full significance of the name is far from clear. The volume is rounded off by a brief paper on south Yorkshire surnames by David Hey’s friend and collaborator, the late George Redmonds, which is included in the form in which it was submitted shortly before his death. It offers a sharp reminder of the importance of local knowledge (in his case a profound familiarity with both landscape and documentation) in the study of naming, as in so many other aspects of local and regional history.

David Hey was deeply appreciative of the richness of landscape and history in the Sheffield region. ‘Where else in Britain’, he wrote, ‘can you pass from heather moors through wooded hills and vales to the “champion country” of the magnesian limestone belt and on to the Dutch-style landscape of Hatfield Chase within a journey of only thirty miles?’<sup>1</sup> This meaty volume succeeds in using the varied territory of his home patch to interrogate wider themes and in doing so to illuminate a broad range of topics. David would have enjoyed it thoroughly.

ANGUS J. L. WINCHESTER  
Lancaster University

JOSEPH HARLEY (ed.), *Norfolk pauper inventories, c.1690–1834* (Oxford University Press, 2020). 320 pp. £77.

The Records in Social and Economic History series provides a great service to historians in collecting, publishing and, crucially, contextualizing material often located in disparate local record offices, and *Norfolk pauper inventories* is no exception. Pauper inventories, as Joseph Harley notes, are notoriously difficult to locate in archival collections, as they are not always individually catalogued within broader collections of material relating to the operation of the poor law, leaving the historian to sift through boxes of papers in an often-fruitless search. Once located,

they must also be distinguished from inventories taken for other purposes, before one begins the task of deciphering the list of household goods – often hurriedly recorded, using archaic or local terminology for the objects described – and attempting to trace the fate of the pauper in question. The publication here of 230 transcribed inventories is therefore in itself a gift to historical researchers. These are grouped by the relieving parish and each inventory is accompanied by valuable information regarding the amount of relief provided to the pauper in question and any other relevant and available biographical information. To the rear of the book is a glossary of terms explaining the less familiar names for household items, and this will prove a useful reference for all historians of domestic material culture in Norfolk and beyond. Harley also provides detail about the inventories as material objects themselves, noting their placement within the wider archive and their physical condition. He is honest regarding any uncertainty about items listed, allowing the reader to come to their own conclusions about ‘Dubious Terms’ and highlighting cases where damage such as smudging and fading have obscured the text.

In addition to contextualizing the published inventories, *Norfolk pauper inventories* provides a rich and accessible introduction to pauper inventories as a historical source in the four chapters that precede the sources themselves. The first chapter explains the research contexts in which pauper inventories can be of use to the historian, demonstrating Harley’s familiarity with histories of poverty and consumption, and the debates over industrialization and standards of living in the long eighteenth century. The extensive references in this section signpost the reader to further work in these fields while making a strong case for using pauper inventories to redress the relative lack of scholarship on the poor’s own experiences of the industrious, industrial, and consumer ‘revolutions.’

The second chapter goes into more technical detail about the operations of the poor law and the dubious legality of taking an inventory of a pauper’s goods. Different parishes varied in how they exercised their responsibility to distribute relief, so that the poor law in practice was a complex patchwork of provision. There was no legal basis for taking pauper inventories, so the practice depended on local customs which could differ starkly. Harley argues that the taking of an inventory could be seen as a benevolent act where it guaranteed a pauper regular assistance, as the goods were usually only removed and sold or redistributed after their death. However, the awareness of local variations in practice is crucial in making such judgements. Harley points out that in Northern England the parish might require

<sup>1</sup> David Hey, ‘What landscape means to me’, *Landscapes*, 9 (2008), p. 77.

that goods were sold before relief could be provided, suggesting a much more draconian operation. He also points to temporal shifts in attitudes to providing relief, suggesting that in the late eighteenth and early nineteenth centuries concerns about pressures on the poor law system may have led to inventories being used as evidence of material sufficiency to deny relief to applicants.

The third chapter is therefore dedicated to outlining the specific local context for the creation of the pauper inventories in the volume. Norfolk had high levels of poverty during the long eighteenth century due to the decline of the worsted industry, resulting in a reliance on low agricultural wages at the same time as enclosure was limiting access to the commons as a supplementary resource for the poor. As a result, Norfolk has the largest collection of pauper inventories of any single English county, enabling Harley to draw out trends in the provision of relief relating to the gender and lifecycle stage of paupers whose goods were assessed, and the extent of relief they were likely to receive. He is, however, cautious of generalizing from the sample, given its distinct local character.

The final chapter guides the reader through the process of reading an inventory, pointing out areas where researchers might exercise caution, for example by highlighting the multiple reasons why an inventory might underrepresent the goods of a given household. One of the great strengths of the book is its generous, accessible style, making it a helpful starting point for non-specialists or historians new to using inventory evidence, though the rigorous detail makes it a similarly worthwhile read for experienced researchers. As Harley's own extensive publications on the material culture of the poor demonstrate, pauper inventories have considerable potential to challenge simplistic portrayals of eighteenth-century poverty. They can reveal the agency of poor people in negotiating with the parish overseers, and the potential to 'make home' with small comforts even in challenging economic circumstances. They can highlight the ways in which the experience of poverty differed between individuals and at different life stages, humanizing the poor by complicating their portrayal as an amorphous mass. As Harley notes, though pauper inventories were produced 'from above' by those with power in the parish, they nonetheless offer intimate insight into domestic lives that might otherwise fade into obscurity. In this book, he has provided a tremendously valuable resource to equip historians to research the stories pauper inventories can tell.

RUTH MATHER  
Nottingham Trent University

ALAN WADSWORTH (ed.), *The farming diaries of Thomas Pinniger, 1813–1847* (Wiltshire Record Society, 74, 2021). 586 pp. 7 illus. £20.

The merit of this book lies in reprinting the day-by-day husbandry activities of an early nineteenth-century Wiltshire farmer. He was Thomas Pinniger, who farmed at Little Bedwyn, then lived at leisure in a farmhouse near Chippenham, but spent most years on a farm he bought at Beckhampton in Avebury parish, west of Marlborough. He was a consistent diarist who wrote down minor details. This volume includes about 160 pages of introduction, arranged under various headings (labour, law and order, events beyond the farm and so forth), followed by 330 pages of daily entries starting in 1823 and ending in 1838, although Pinniger continued recording for three further years.

Pinniger is described as the principal representative of the Wiltshire yeoman class in his day. This is misleading: he was a gentleman farmer, involved in agricultural decisions about his 200 acres but able to buy a coaching inn, have family portraits painted, hold large sums in the bank, and invest in stocks. This was not typical of working farmers, although many may have shared his opinions. He was church-goer, turnpike commissioner, and a Protectionist, some of whose employees signed with him an appeal in favour of the Corn Laws. Coercion? They were unlikely to refuse, especially as Pinniger seems to have been a disagreeable employer who had no satisfactory workforce and fell out with several hands. Some had to travel many miles to work, particularly the specialists. Admittedly he hired a number of dishonest men – perhaps he was not a good judge of character. He was 'tight', sold the leazing and sometimes fed his labourers on 'giddy' sheep.

Pinniger also fell into disputes about boundaries and the management of water meadows in which he had a share. As the editor remarks, we hear only his side of all this, which does rather undermine the value of relying on a single diary source. Yet about Pinniger's social standing and conventional views there can be little doubt. He joined a posse which rode over a wide area capturing men supposed to be ringleaders in the 1830 riots. Most farmers, petrified by fear of arson, probably agreed with him but few engaged so directly in putting the men down. He wrote a brief account of the riots, given in an Appendix.

The agricultural content of the diaries is in sum considerable. A handy Glossary and several Appendices are added to the editor's comments on a number of topics. Little of the farming detail surprises in view of what is in general accounts. Statistical material is scarce and much of what is available most conveniently appears in the Appendices, set out as information

on categories such as livestock, harvests and market prices. A prime interest was the weather, noted even on his wedding day, and he endlessly juggled farm operations to match its waywardness. Occasionally he had more grass than his flock could eat, and he took in sheep from other people whereas at different times drought put him at a disadvantage. Part of coping with fluctuations in workload involved exchanging teams of horses with his neighbours but he made sure to keep a record.

It is stated that no comparable diaries are available for Wiltshire. There are two problems with this. First, diary material overlaps with other types of farm records, notably account books, agent's reports to landowners, and collections of letters. Among the imperfections of any single source, diaries have their own quirks. We may accept the reliability of what is being penned without being clear about the context or knowing what is excluded. Diarists take their own affairs and local arrangements for granted and even the most assiduous feels no need to commit absolutely everything to writing. Pinniger's opinions are only indirectly ascertainable, and his private life is scarcely mentioned – his wife hardly gets a look-in. His love life is omitted, apart from enigmatic drawings of hearts in the margins during the period before his marriage. What else is left out?

Secondly, Wiltshire is not the most relevant unit of comparison. Counties are administrative units rather than agricultural ones. Beckhampton Farm was on the chalk and comparisons with ecologically similar farms beyond the county boundary might have been enlightening. Even on the Wiltshire chalk no comparison is made, for instance, with farming a dozen miles away at Aldbourne, for which ample documentation survives and where Pinniger knew the Browns whose descendants still farm there. Pinniger himself did not keep his affairs within the county boundary, visiting distant fairs and buying implements from Tasker's, right down in Hampshire. The limitations of county studies are illustrated by the identification of George Castle of 'Laten' Down, from whom Pinniger bought sheep at Ilsley Fair. The editor states that Castle possibly, then probably, came from Latton, Wiltshire – but Latton is only half a mile from the Thames, has no down farms, and its farmers were Habgood and Cook. George Castle was surely the farmer of that name from Lattin Down, Berkshire, on the chalk seven or eight miles from Ilsley, and next to which Castle descendants farm to this day.

This book is heavier on documentation than interpretation. Many of the extensive footnotes are informative, though straying occasionally into common knowledge

and at the other extreme into one or two abstruse scientific definitions. Pinniger was not a forthcoming diarist, being observational rather than thoughtful. His notes do consist of hard husbandry facts but, again, what is excluded is uncertain. A close-up diary may suffer from the eye-witness fallacy; it is unclear that outside reports are not more enlightening than a diary because the onlooker sees more of the game. Rather than transcribing so very much semi-repetitive material from these diaries, it might have been helpful to print sample pages and allot more space to comparative analysis.

ERIC L. JONES  
*University of Buckingham*

VANESSA DOE, *Improving agriculture in nineteenth century Rutland* (Rutland Local History and Record Society, 2018). viii + 128 pp. 71 illus. £12.50.

The primary focus of this book is Richard Westbrook Baker who from 1829 to 1861 was steward of the Exton estate in the county of Rutland. His primary concerns were the improvement of agricultural practices on the estate and the wider county and the well-being of farm labourers. Born in Hertfordshire in 1797, he moved to Rutland in 1808: by 1814, he was working on the Exton estate but it was not for another fifteen years that his employer Sir Gerard Noel Noel appointed him as steward of the estate.

After a review of Baker's early years and education, chapter 1 examines Sir Gerard's connections to the family followed by a description of his acquisition of the Exton estate. Prior to Baker's appointment as steward, he also involved himself in parish affairs being a member of the select vestry and he was appointed Overseer of the Poor in 1821. From this came an understanding of the plight of rural labourers which led him to establish the Rutland Association with the intention to raise a petition to parliament on the state of agriculture and the related rural distress.

With enclosure of the parish came the need for new farms to be built away from the existing farms which were located in the villages: however, there was some reluctance by tenants to accept these farms in that there was a well-developed pecking order in the local communities, whereby the closer you lived to the centre of the community, the more respected a farmer you would be. By 1828, Baker was farming 249 acres, as well as running a coal wharf on the Melton to Oakham canal. It is noted that a model farm was built at Cottesmore in 1853 with livestock housed around a square courtyard with a central water trough.

Chapter 3 then examines his role as estate steward and his influences on the agricultural practices of the estate.

He clearly recognized the need for improvements to be made: a lack of progress with drainage, poor livestock management and a lack of attention to the value of manure. Farm buildings were in poor order and there was still continued use of the village centre farms, rather than farms being located near the centre of the new land allocations which arose from the enclosure process. With regard to livestock, Baker was a breeder of Shorthorn cattle and, in this way, he was able to demonstrate at first hand what could be achieved: he also organized ploughing matches, agricultural shows and estate inter-farm competitions. He did not use leases to instruct farmers to undertake improvements: rather, he engendered a spirit of emulation to achieve his aims.

As well as the estate in Rutland, Sir Gerard also owned an estate in Gloucestershire at Chipping Campden extending to around 3000 acres, managed by a second steward. This book adds to scholarly knowledge by revealing the reason why some 16 small plots of land on the Exton estate were owned by residents of Chipping Campden. Although distant from the Rutland constituency which Sir Gerard represented in parliament, individuals on the Campden estate wished to support him in his political activity and as a result of their purchase of land were able to acquire voting rights in Rutland, a practice known as faggot voting which was abolished in 1884.

Chapter 4 looks at improvement in land management. A Farmers and Graziers Club was established in 1838 which considered drainage methods and farm mechanization: part of the latter included the development of the Rutland plough designed by Baker and manufactured by Ransomes of Ipswich, given that in the 1820s, Baker had described ploughing in the estate villages as akin to 'the disturbance made by grubbing pigs'. Other implements trialled included harrows, chaff cutters and flour mills, as well as steam ploughing.

Livestock improvement is then examined starting with livestock improvers elsewhere who may have influenced Baker in his endeavours. Baker won many medals both locally and at the annual Smithfield fatstock shows: he was also involved in the setting up of the Rutland Agricultural Society which exists to this day.

In Chapter 6 aspects of rural society are examined, in particular, poverty amongst farm labourers. To address this issue, Baker established cow pastures in some of the estate villages, to enable labourers to graze the cows which would previously have grazed the wastes and open fields before enclosure. Some of these pastures included a 'hovel': this was a building sub-divided to provide both fodder storage and winter

housing for stock owned by a number of labourers. He also introduced a spade allotment system whereby small plots of land under  $\frac{3}{4}$  acre had to be cropped in three equal areas of grain, potatoes and vegetables, and worked only by hand, outside of normal farm labouring hours. The final chapter concludes by reviewing his successes and achievements, noting that he had been described as a 'foremost agriculturalist of his day'. A series of appendices follow, mainly containing transcribed material from archive sources and newspapers, along with a useful bibliography.

The book is well produced with few minor typographical errors: the only distraction comes in the introduction where there are numerous examples of repetition. Overall, this book provides an insightful exposition of the role of the estate steward in the mid-nineteenth century.

ALAN WADSWORTH  
*Evesham, Worcestershire*

WILLIAM EVANS, *The Victorian model farm in south Gloucestershire and north Somerset* (Avon Local History & Archaeology, 2018). 37 pp. 19 illus. £3.50.

This short booklet opens by setting the background to model farms in general, drawing on Susanna Wade Martins' book on the subject, and situates them in terms of agricultural, political and social contexts, with Prince Albert's farm at Windsor presented as a 'model' for model farms. Four farms in south Gloucestershire and three in North Somerset are reviewed before examining Eastwood Manor Farm at East Harptree as the major focus of the book. Owned by William Taylor, his plans and concepts were implemented by Robert Smith: having established himself as a breeder of cattle and sheep in Rutland, Smith was also agent to John Knight and Frederick Winn Knight, responsible for implementing their extensive reclamation project on Exmoor. The booklet concludes by considering the success of model farms in the Avon area in terms of agricultural and financial parameters. In doing so, this short book localizes the general concept of Victorian model farms to one specific geographical area. Whilst the publication is well presented, the diagrams therein could be made clearer.

ALAN WADSWORTH  
*Evesham, Worcestershire*

DAVID FRITH, *The Hornsey Enclosure Act, 1813* (Hornsey Historical Society, 2021). 92 pp. 11 maps, 18 figs. £12.00.

Anyone who has wrestled with a tightly rolled collection of parchment sheets forming an enclosure award, along with its unruly map counterpart, will appreciate what

David Frith has done in preparing this book, for here is an enclosure award and its associated map tamed! The parish of Hornsey is some six miles to the north of the centre of the city of London and includes what were in 1813 the villages of Highgate, Muswell Hill and Crouch End, as well as Hornsey itself. The parish extended to just over 3000 acres and was rural in character, producing hay for the city's horses: at this time, some eight per cent of the area remained to be enclosed. Having introduced the parish, the purpose of the Enclosure Act is presented, section by section in Chapter 2, followed by an examination of the map. Whilst only a small part of the parish remained to be enclosed, it appears as though a full survey was undertaken, considered by David Frith to be in anticipation of the tithe commutation to come.

Chapter 4 presents the detail of the award and examines the roads and footpaths prescribed therein, before considering the division of the common and waste land: starting with the ecclesiastical recipients specifically named in the act, Frith then looks at the allocation of the remainder, noting that land tax values were used to determine proportional allocations not just of land, but of the weight attached to objections and the division of any surplus or deficit in expenditure. A table of the plots sold to defray expenses is given, whilst an appendix contains the allocation of land sorted by recipient surname and then by plot number.

In the next chapter, the landowners are presented: although one-half of the associated property index is missing, a fair attempt has been made at filling the gaps. The commons of Hornsey, Highgate and Muswell Hill are reviewed in separate chapters, before the costs of implementation are examined. In conclusion, David Frith notes that the high costs of administering the Act were due to the full survey undertaken: however, the objectives of the Act had been met in that 'improvement' by enclosure of the remaining parish land was achieved. This reviewer has found only two typographical errors in the whole book, thereby confirming the high quality of production. In this book, Frith has provided a model for the presentation of other enclosure acts across the country.

ALAN WADSWORTH  
Evesham, Worcestershire

HEATHER HOLMES (ed.), *Scottish agricultural implement and machine makers, 1843 to 1914: a directory* (Scottish Record Society, Electronic Series Volume 2, 2020). lxvi + 918 pp. £45.00.

This directory is the second volume in the Electronic Series of the Scottish Record Society and as such they are available as electronic books only, provided as

searchable PDF documents through the Record Society's online partner TannerRitchie. Heather Holmes starts her introduction to the directory by reviewing similar directories and compilations of data from England and Wales, which contain some Scottish material. She then identifies four broad groups of evidence, namely: trade directories, the agricultural press, catalogues of archives, and the records of the Royal Highland Show. The latter was the key event for exhibiting agricultural implements and machinery across Scotland, thereby encouraging their development. The use of newspapers has provided a rich source of information through the advertisements placed, reports of agricultural shows, accounts of machine trials, as well as articles referring to specific businesses. Using this material, Holmes presents some evidence to show that local manufacturers were developing implements to meet the local agricultural conditions.

The entries in the directory itself are described using up to 15 headings, but all entries have a minimum of three headings, those being the name of the business, the date(s) of activity and the sources of evidence. The extent of the entries depends on the size of each business and the evidence available.

Having explained the sources used to produce the directory, a survey of agricultural implements and machine makers is then presented, drawing out the key information from the data in the directory. An initial analysis considers the characteristics of makers' activities, the involvement of family members in businesses, the geographical distribution and the size of the business. The development of the industry and its reputation beyond Scotland is then considered before looking at the growth over time in the use of agents selling implements on behalf of one or more of the manufacturers. The survey ends with the identification of a number of themes running throughout the book.

Whilst the period covered by this volume is from 1843 to 1914, the editor does not explicitly state why 1843 was chosen as the start date: rather, the reader is left to note that this was the date of the first agricultural newspaper in Scotland, the *Ayrshire Agriculturalist*, and that a complete run of this title, and its successor the *North British Agriculturalist*, is available from 1843 to 1914.

This directory of Scottish agricultural implement and machine makers represents a *magnum opus* in terms of its production and content. Its usefulness has already been confirmed by this reviewer, who has used it to enhance his own research on English farms. Whilst a wide range of sources has been used to assemble the directory, Heather Holmes recognizes that there are other sources which have not yet been used. Its delivery

in electronic format means that revised versions can be made available in the future, without the need for another print run.

ALAN WADSWORTH  
*Evesham, Worcestershire*

GEOFF SANSOME (ed.), *The diary of a Claines Farmer, 1883* (Geoff Sansome, 2017). 78 pp. 37 illus. £12.95.

This book presents a transcription of a diary for the single year 1883 written by the Worcestershire farmer Isaac Sansome and in doing so provides multiple insights into the workings of a small farm on the outskirts of a large city. Extending to 70 acres, the farm is primarily pastoral in nature with orchards growing apples and pears. The city of Worcester provides a ready market for the hay produced on the farm, as well as the fruit and cider, and provides easy access to suppliers of feedstuffs, equipment for the farm, as well as the domestic victuals necessary to maintain life. Unusually for a farming diary, there is little reference to the weather, and certainly no daily commentary.

There is an extensive record of daily income and expenditure which the editor of the book has used to prepare an approximate balance sheet. In the year of the diary, the farm makes a small loss before domestic expenses and goes some way to explaining why he needed to approach his landlord for a reduction in rent at Michaelmas: this is not unsurprising given that this was a time of agricultural depression.

Short summaries are provided at the start of each month before the transcription is presented enabling the reader to understand the main activities in the farming year. Data from the 1881 census, along with local knowledge of the village and surrounding area, has been used to provide an extensive series of footnotes explaining who was who, amongst the farmers, tradesmen and individuals referenced in the diary entries, as well as definitions of terms used.

A number of clear black-and-white photographs are used to illustrate the area, as well as four of Isaac himself at different stages in his life, taken from the family collection. The daily detail of farming activities, sales and purchases, and the social side of life provide the reader with a degree of granularity below that provided in county summaries such as that in Gaut's *Agriculture of Worcestershire*. Although this is the only known diary written by Isaac, it is likely that other diaries would add to the story told here of one farmer's efforts to make a living in a time when making a profit was not the primary focus but rather to be part of the local economy and community.

ALAN WADSWORTH  
*Evesham, Worcestershire*

MARSHA O'MAHONY, *The scratch of the hop: Hop picking in Herefordshire, Worcestershire and Shropshire* (Logaston Press, 2021) 288 pp. illus. £15.

Marsha O'Mahony's book is an excellent social history of the hop industry, underpinned by meticulous research into the phases of the hop-growing year, based on a rich archive of oral history, much of which was recorded by herself, and photographic evidence and illustrations. Her book shifts the focus from Kent to the West Midlands and border counties as the centre of the hop industry. Hop and fruit-growing were often carried out side by side and for this reviewer there are some interesting comparisons to be drawn between these two small industries, which had such a big impact on rural life.

Like fruit-growing, hop cultivation was an intensive form of horticulture, with its own special skills and knowledge, which was passed through generations. It also transformed the farming landscape, with its dense pattern of hop poles and supporting frameworks upon which to train the plants, which grew perennially. This book shows how hop yards were constructed and maintained and how materials and techniques changed over time.

The centrepiece of the book is the necessarily long and detailed chapter on hop-picking – harvest time. Until just after the Second World War, hop growers employed a large seasonal army of pickers, drawn from the traveling community and from poorer districts of nearby urban areas (South Wales and Birmingham). For a short, intense season hop-picking connected town and country, urban and rural, in a way which no longer exists. The author looks at how the pickers were recruited and organized, how they were accommodated and cared for, how they worked, what they were paid, why they did it. Post-war mechanization of hop-picking brought about a revolution in the industry, drastically reducing the labour requirement for harvesting, but not for the care and maintenance of the hop yards. There is an interesting chapter on the British engineering firms who developed the new picking machinery, starting just before the war, and how this gradually took over the picking process in the late 1940s and 1950s.

At the end of the hop-growing year there is the process of drying, an arcane, magical process, with its own skilled workforce, operating the kilns, which were such a distinctive feature of hop-growing districts. A chapter on hop-drying describes this process in excellent detail, through to the bagging and bailing of the finished product, ready for brewing. Again we see the replacement of traditional methods through the introduction of new techniques, automation and

modern sensing equipment to control temperature and humidity.

The marketing of hops is then considered and here we have a brief summary of the economic history of hop-growing, which could have been developed further, or perhaps here is scope for a different book. The chain of distribution was a complicated one, in which hop factors graded and sold the hops on behalf of growers to merchants who acted on behalf of the brewers. There was no direct selling from producer to customer. The process of buying and selling took place in wholesale markets, such as the Corn Exchange in Worcester. Comparisons with fruit growers are interesting, as they often engaged in direct selling locally or to fruit processors under contracts, but also sold on commission to agents and wholesalers, who carried out a grading function, operating in wholesale markets in large urban areas. Some brewers, such as Guinness, maintained their own hop farms, and we see the same vertical integration in the fruit industry, with jam makers such as Chivers & Sons Ltd, and Wilkin & Sons Ltd, managing their own orchard land.

The author notes the decline in the hop acreage from a late nineteenth-century highpoint of 77,000 acres to 16,500 by 1932, due to foreign imports and new tastes for lighter ales, which reduced demand for traditional domestic hops. This pushed growers into voting for the creation of a Hop Marketing Board. The Board fixed guaranteed prices with the brewers and allocated quotas for growers, which helped to stabilize the industry. At this time fruit growers were also being pressured by government and the NFU to adopt a marketing board, which was firmly rejected in a ballot in 1935. Fruit growers looked askance at the controls hop growers now faced. Instead, a number of fruit cooperatives were set up on a county basis, to pool grading, packing and selling. This trend strengthened in the post-1945 period. This did not occur in the hop industry until well after entry to the European Economic Community (EEC), when in 1982 the Hop Marketing Board was deemed a monopoly in violation of EEC trade laws. Five grower-led hop cooperatives were formed, now reduced to three, members of the British Hop Association, formed in 1996.

There is a good chapter on the brewing industry, which describes the renaissance in independent micro-breweries in more recent times and the positive impact this has had on hop-growing. A final chapter focuses on hop research and developments in the future. This considers the history of control of pests and diseases from the nineteenth to the twentieth centuries, which parallel similar methods adopted by fruit growers. Much of this research and plant breeding took place at

the hop department of Wye Agricultural College, later privatized as Wye Crops Ltd, under the aegis of the British Hop Association. The most significant recent development in hop breeding has been the introduction of dwarf varieties, now accounting for 23% of the domestic acreage. A similar trend has occurred in the modern fruit industry, replacing the traditional orchard with intensive plantings of dwarf spindle bushes, quick to grow to maturity, cheaper to manage, spray and harvest. Dwarf hops have led to similar changes in crop management systems and harvesting, with the introduction of new mobile picking machines. In order to survive, both the hop and fruit industries have been innovative, open to new techniques and practices, based on sound practical science. Marsha O'Mahony's book is in itself an essential archive on the hop industry, whilst offering an optimistic vision of its future, albeit it on a small scale.

JONATHAN SPAIN  
*Shepreth, Cambridgeshire*

SIMON GOOCH, *Edwin Gooch: Champion of the farmworkers* (Poppyland Publishing, 2020). 138 pp. 90 illus. £9.95.

Simon Gooch's biography of his grandfather, Edwin Gooch, the President of the National Union of Agricultural Workers (NUAW) and Labour MP for North Norfolk, is a touching and very personal account of the life of a man who worked tirelessly for improvements in the lives of agricultural workers in his county and nationally. The book is richly illustrated with numerous images from the author's personal collection, and is punctuated with points of humour and personal recollections from family members which make it a very readable account. Many of the other characters who appear in the text have already been the subject of biographies, and the author ably demonstrates that Edwin Gooch's work is worthy of similar attention.

The book's key strengths lie in its personal approach, showing the development of the agricultural trade union movement through the lifetime and experiences of one man. This allows it to cover a lot of ground in terms of intriguing links to wider social and political histories, while retaining a sharp focus on the matter at hand. It also serves as an accessible introduction to the topic for a non-specialist reader. Over the course of 18 chapters, Gooch details the life of his grandfather, and his impact on the agricultural trade union movement in the mid-twentieth century. This period saw a great deal of change, politically, socially, and agriculturally, and more details in the referencing or direction to further reading would have been a welcome addition

to a work which incorporates tantalizing glimpses of the wider history of inequity between landowners and labourers prior to the nineteenth century, wartime, journalism, the Great Depression, women's suffrage and entry into political life, Communism in Britain and the history of the Labour party, to name but a few topics.

The first four chapters set the scene for Gooch's involvement in the NUAW. Gooch's world and work is immediately placed in the context of the writings of Adrian Bell and George Ewart Evans, and the work of Joseph Arch and George Edwards, in a county with a long history of protests from agricultural labourers stretching back to Kett's Rebellion in 1549. Acknowledging this local history, the author establishes that the book's focus is to be on 'the attempted resolution of those ancient inequities in the mid-twentieth century', and uses some of the tributes paid to Gooch after his death to demonstrate his place among these names.

The chapter 'Mr Edwards with his Agent' explores the relationship between Gooch and the veteran trade union pioneer George Edwards, which shaped much of his life and approach to politics. This leads well into a potted history of the agricultural trade union movement. Here this complex history is condensed into an easily digestible form by focusing on the personal experiences of Edwin Gooch. This gives a useful summary of the salient points of the wider story without becoming excessively bogged down in the politics and overwhelming the reader.

From here, the book follows Gooch through his rise to local prominence and the development of his conciliatory approach to relations between workers and landowners. The following chapter, 'The Great Strike', gives us the first substantial quotation from Gooch's own pen, in which he links his own work and the legacies of Joseph Arch and Robert Kett, making the connections to local labour history explicit. In this chapter, the author recognizes the criticisms Gooch received in the period after the Great Strike regarding his conciliatory role in the negotiation. He uses these to demonstrate the impact of Gooch's personal 'Methodism-derived Socialist ethos' on his approach to his role in the NUAW.

Matching Gooch's move to prominence in the NUAW, the next chapter, 'Our County Work', opens with the first full page portrait. From this chapter onwards, the author discusses the conflicting requirements on Gooch's time, forcing him to juggle his union and paid commitments with his family time, against a background of local, national and international events. These chapters are helpful in distilling the multiple

challenges facing the government through the wartime and immediate post-war years down to their effects on one man. The book cleverly weaves national and international events into the events which loomed large in Gooch's private life: wartime agricultural policy, the devastating 1953 East Coast floods, and Britain's relationship with Russia contrast with the deeply personal in the loss of Gooch's wife Ethel.

The penultimate chapter, 'Champion of the farmworkers', is largely dedicated to tributes to Edwin Gooch following his death in 1964. It concludes with the words of Bert Hazell, Gooch's successor as NUAW president and MP for North Norfolk: 'he was never aggressive enough from the farmworkers' point of view. He was too kindly.' 'Maybe so,' the author notes, 'but he achieved much through his patient negotiations and could write and speak stirringly in public on the farmworkers' behalf'.

The concluding chapter discusses the changes which took place in the decades after Edwin Gooch's death in the world of the farmworkers which he had known so well. The author relates the development of the National Union of Agricultural Workers through various incarnations, into the Rural, Agricultural and Allied Workers' Trade Group, within Unite, noting the irony that an amalgamation with the Workers' Union had been one of the suggestions made by Edwin Gooch as early as 1924, demonstrating the prescience and deep level of understanding inherent in Gooch's approach to his work and the community he served.

The personal and family history aspect of the book means that the author risks straying into 'rose-tinted' territory, and, indeed, he acknowledges in the early pages that the book has become something of a tribute to the land workers of the past. However, the text skilfully blends a personal story with wider industrial, social and political history, drawing the reader in and bringing Edwin Gooch to life, while using his career as a window to shed light on the competing forces at play during this period. The book largely relies for academic comment on Alun Howkins' *Oxford Dictionary of National Biography* entry on Edwin Gooch, while more critical pieces about him are dismissed rather than dismantled. Nevertheless, the book makes a compelling case for the inclusion of Edwin Gooch as one of the key players in the movement for agricultural labourers' rights and fair treatment. It is to be hoped that in future his legacy receives greater attention in historical investigations of rural life in the mid-twentieth century, as well as in the developing historiography of the trade union movement itself.

JANE ROWLING  
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WISEARCHIVE, *Water, mills and marshes: Life and work on the Broads, 1920–2020* (WISEArchive, 2020). 294 pp. £15.

*Water, mills and marshes* presents the work of WISEArchive, a volunteer oral history group set up in 2005 to record accounts of working lives in Norfolk. The book forms part of the Heritage Lottery-funded ‘Water, Mills and Marshes Project’, managed by the Broads Landscape Partnership Scheme, with Broads Authority involvement. Oral history here takes its place within a wider engagement with the heritage of the Norfolk Broads region, and this well-produced book presents a range of voices recounting their working lives. Short introductory and concluding essays by Tim O’Riordan bookend individual testimonies grouped in sections on ‘Life and Childhood on the Marshes’, ‘Water’, ‘Mills’, ‘Marsh’ and ‘Conservation and Ecology’. A website at [wisearchive.co.uk](http://wisearchive.co.uk) documents the wider work of the WISEArchive group.

For readers of the *Agricultural History Review* the book is notable in including accounts of agricultural working lives, although male voices predominate in the land-working sections of the book. The ‘Marsh’ section includes occupations commonly covered in accounts of the Norfolk Broads, such as reed-cutting, thatching and the maintenance of remote grazing marsh by ‘marshmen’, but also covers wider work in agriculture, animal health and knackerage. In a region where grazing marsh is a valued landscape in terms of ecology and amenity, such accounts allow appreciation of the organization and management of the grazing which shapes the marsh. Broadland appears not only as a valued ecological region but as a working agricultural landscape, shaped by wider historical connections such as the cattle brought annually from Ireland via Birkenhead to graze on the marshes, and Scottish farmers moving to the region in the 1920s. A set of accounts cover the Cantley sugar beet factory in the Yare valley, recounting harvest, processing, engineering and managerial labour, the agricultural life of the region generating an industrial processing plant in a rural area (though only ten miles or so from the city of Norwich). The book also shows livings from the land made through seasonal work; thus Bernard Shepherd appears in both the reed-cutting and sugar beet sections, moving from one to the other through the year. Since the publication of this volume at least one of the marsh voices featured has died, in the process demonstrating how a private life, once recorded, can go public. Marshman Bill Lacey died on 5 July 2021 aged 94, his passing as one of the ‘last marshmen’ noted in the local and national press, and with an item on BBC Radio Four’s obituary show, ‘Last Word’, using recordings from WISEArchive.

The ‘working’ voices in this oral history are not only working-class voices. *Water, mills and marshes* includes testimony from those whose working connection to Broadland derives from professional expertise in science and conservation, whether around ecology or heritage. The campaign to rid the area of introduced coypu is thus covered by accounts from both trappers on the ground and scientists in the lab and field. O’Riordan’s framing essays give a valuable background to the region’s history, ecology and management, and its possible future under climate change, with a possible flooded return to the ‘Great Estuary’ of Roman times, a Broadland without broads. The book could also however be given a cultural framing with reflection on the history of the recording and expression of voices speaking of and for the place. This is not the only recent oral history project, for example the 2009 Marsh workers of the Broads project by Paul Mace for the Broads Reed and Sedge Cutters Association gave a parallel coverage of a specific form of marsh labour, with a book and accompanying DVDs, again with Heritage Lottery funding. A few individuals appear in both projects. There is also a history of voices styling themselves as local, notably through the performance of dialect, most famously in Broadland the mid-twentieth-century Potter Heigham garage owner, dialect performer and writer Sidney Grapes. Beyond attention to some local working terminology, however, dialect has a very minor presence in *Water, mills and marshes*, the local voices communicating in plain English.

*Water, mills and marshes* thus gives a regional portrait of great variety and value, although there is one notable group of people with significant connection to the region whose voices are absent. Tourism is a major element in the regional economy, and while boatbuilding, boatyards, river inspection and heritage sailing receive attention here, the voice of the holidaymaker is seldom heard. Occasional celebrity visitors are noted, as when Brundall boatbuilder Roy Forder recalls: ‘Our clerk came from Potter Heigham where Cliff Richard moored his boat, *Pamanda*. He persuaded Cliff to store *Pamanda* at our yard and I put in a new bilge pump for him’ (p. 82). For a project devoted to working lives within the region the lack of summer holiday voices is perfectly appropriate, but it would be interesting, if challenging, to move beyond the conventional oral history remit of exploring deep and intimate working connections to place to gather voices of those with more passing understanding, not least given that holiday encounters with the region have profoundly shaped its economy, and therefore the working lives of its residents. Holiday voices beyond those of the professional travel and guidebook

writer are hard to trace, indeed in conducting my own research on the region's cultural landscape these were in some ways the most elusive of voices, though Norwich library holds a series of inter-war holiday diaries and personal boating logs which give insight into the place connections shaped by leisure. An oral history of Broads holidaymaking, from the one-off weekend cruiser to the year-on-year repeat sailor, would be instructive in complementary fashion to *Water, mills and marshes*. The boatbuilding, wherry-restoring, beet-processing, coypu-killing, mill-wrighting, cattle-tending, dyke-cleaning lives recounted through WISEArchive have been lived alongside those taking a break from work, spending their money on the waterways. *Water, mills and marshes* itself records many pleasures, of childhood and work, sailing and craft, but in a regional portrait the pleasures (and anxieties) of Broadland holidays would also be telling.

DAVID MATLESS  
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JUDITH CURTHOYS, *Cows and curates: The story of the land and livings of Christ Church, Oxford* (Profile Books, 2020). 288 pp. 16 illus. £35.

*Cows and curates* is an engaging, comprehensive and well-documented study of estate and clergy management by Christ Church Oxford, a unique institution being both the cathedral for Oxford diocese and a college of the university. The estates have financed its educational and ecclesiastical functions from 1564 to today. Christ Church has excellent archival records of its work in 185 parishes and its landholdings across counties from Devon to Yorkshire and Montgomeryshire to Norfolk but with the majority in Oxfordshire and surrounding counties. Originally founded by Cardinal Wolsey in 1525 as Cardinal College, funded by the suppression of more than twenty monastic houses, it ceased to exist with Wolsey's fall in 1529 but in 1546 Henry VIII re-established it as Christ Church.

Corporate landlords faced similar agricultural challenges of depression, prosperity and innovation but their management style was different. The wide dispersal of Christ Church's estates made estate management challenging and, as a result, the dean and canons appeared remote from the farmers of their land. They made progresses but much land was tenanted by aristocracy and gentry whom subtenants regarded as their real landlords. Fixed rents meant that income was partly generated by fines on renewal of leases or copyholds, which compensated landlords for inflation, in a system known as beneficial leasehold. Being 'hands-off' landlords meant the dean and canons did not share the desire of many sixteenth- and

seventeenth-century landlords to convert copyhold to leasehold tenure but rather appreciated their subtenants continuing to pay court dues. In common with other landlords, the dean and chapter realized the value of their timber for construction and ship building.

Christ Church was disrupted by the seventeenth-century civil wars with many of its lands damaged by fighting. Charles I lived very expensively in the College in the 1640s replacing fee-paying students. The dual function as a university college saved it from abolition in 1646. After the Restoration the chapter clerk transcribed all deeds and lease registers into the *Book of Evidences*, described by Curthoys as Christ Church's *Domesday Book* – a very valuable record still in the archives. However, a lack of terriers made it difficult to establish property boundaries and ownership. The dean and chapter needed more income to maintain college buildings and run the cathedral. Professional surveyors and land agents were employed to make terriers and accurate valuations of each property to justify increased renewal fines payable every seven or fourteen years by reluctant tenants. Beautifully drawn maps recorded the estate from c.1700, many of which are illustrated in the sixteen pages of excellent colour plates in this volume.

Students from the College were presented to the 100 parishes where Christ Church held the advowson and great tithes but many employed curates to perform the parish duties. Some parishes complained of neglect and argued this encouraged non-conformity. Parsonage houses were often in disrepair until improvements were made in the late eighteenth and nineteenth centuries. Similarly, many churches were almost rebuilt in the Victorian period. In 2020 Christ Church still had links to 80 incumbencies as widely dispersed as in 1546.

Enclosure on College lands mirrored what happened in the rest of England with Tudor enclosures for sheep pasture and seventeenth- and eighteenth-century enclosures for improved arable and stock rearing. Christ Church, like many colleges, was slow to embrace enclosure and never initiated the process. In some parishes tenants initiated enclosure without the knowledge of the College which then needed to protect tithes and ensure that increased yields led to raised renewal fines. In 1811 renewal fines were increased to one and a quarter times the real annual value of the property. If tenants failed to renew after 14 years the College ran out leases and issued a new lease at market or rack rent. Christ Church suffered the effects of Swing riots in 1830–31 against enclosure and agricultural mechanization.

In common with the crown and the church, colleges were slow to run out beneficial leases and embrace

more profitable rack rents. Colleges from 1858 were encouraged to sell lands and convert to rack rents but by 1886 Christ Church had borrowed £200,000 (three times its revenue budget) to compensate for lack of entry fines while leases were run out and for repairing properties as tenants losing leases ceased to maintain them. Agricultural depression followed from 1870 when cheap imports of grain and livestock, combined with new cattle diseases, caused many tenants to default, but the College retained them as it lacked the resources to manage farms in hand.

Bequests of land and money alongside sales of some properties continued. They were given a farm in Arreton on the Isle of Wight in 1732 to found Portsmouth Grammar School, whose pupils could progress to Christ Church. Christ Church benefited from sales of land to canal and railway companies. After 1858 the College was able to offer long building leases and also profited from the construction of hotels for travellers. At the beginning of the nineteenth century, Kentish Town was a farm but by 1850 Christ Church had 500 houses on long building leases in the area. Urban rents increased hugely averting bankruptcy for the College.

Increased horticulture, especially on College estates in the Vale of Evesham and vegetable crops compensated for falling prices for traditional produce, and improved transport and food preservation techniques facilitated delivery to urban centres. In 1913 agricultural land still contributed two-thirds of the College income. The College also profited a little until 1939 from leases to mine coal under its lands. Some colleges sold their land, but Christ Church still owned 10,500 acres in 2020 which are professionally managed and provide half the College's income with commercial and residential property yielding more than rural. This book, as well as being a fascinating study of a unique institution, contributes to debates on the effectiveness of collegiate and ecclesiastical landlords.

JEAN MORRIN  
*University of Winchester*

DAVID CROUCH (ed.), *The Victoria County History of the counties of England. A history of the County of York: East Riding, X, Part 2, Howden Town and Liberty* (Boydell and Brewer, 2020). 178 pp. illus. £95. This second volume completes the study of Howden Township and Liberty, which form a complex region involving competing and anomalous jurisdictions. Formerly one of the two liberties of the Bishop of Durham, it is examined along with Wallingfen, which in Roman times had formed part of an inlet of the Humber at the feet of the Wolds. Though not a part of Howdenshire it offered important resources to the

surrounding townships. The rich pasture, fish, game, peats, rushes, reeds and turves of Wallingfen were managed by an elected body of gentry and yeomen outside either ecclesiastical or royal control. Distancing from the usual controls imposed by royal officials or clergy can be seen in other aspects of the East Riding of Yorkshire, and particularly in Hull where there was no proper legal quay for the accurate assessment of duties until the construction of the first enclosed dock, opened in 1778. Though it had no approved assay office, Hull had its own system of marking for silver and gold which persisted until the early eighteenth century without any external regulation.

Frequent inundations from the Ouse and the making of banks and dykes in response are recorded as early as 1274. In 1445–46 a staith was completed at Howdendyke revetted with stapled faggots and detailed records survive for the reigns of Henry VIII and Elizabeth I. These staiths were a hazard to navigation and also affected the river's behaviour; the tidal bore, known as the Aegir, associated with the equinoctial high tides was exaggerated wherever the river narrowed. The lead wave could reach a meter in height and resulted in the scouring of the banks at the bends in the river. Maintenance was expensive and repairs to the Wet Flood Staith in 1531 required no less than 80 oak trees, 600 timber piles, 4,000 brushwood faggots, and 800 corded bundles of thorn.

The Liberty of Howden was a detached estate of the Bishopric of Durham and the bishops officers eventually established their authority after various disputes with representatives of the crown during the thirteenth century. The area known as Bishopsoil provided some 4,000 acres of common land to the north of Howden township, and was enclosed in 1777.

There was a twice-yearly Bishop's court and the remains of one court building survives next to Langley Gate, but the old Moot Hall was demolished in the early nineteenth century. The Bishop's manor house survives and the parish church of St Peter, Howden Minster, is an impressive reminder of the power and influence of the see of Durham, though much reduced from its collegiate form. After the Reformation, and the return of royal authority to Howdenshire, the choir and chapter house fell into disrepair, though the latter was reroofed in 1984 to preserve the stonework.

The settlement of Howden apparently originated as a river landing on the lower Derwent and river transport via the Ouse was crucial to its existence, both for movement of goods and people. Until the middle of the nineteenth century most riverbank settlements had jetties and Howdendyke became a thriving river port. Road access was poor, and before 1800 it was necessary

to use a ferry at Bubwith in order to reach the Wolds and Beverley while the Bishop's manor controlled a ferry between Howdendyke and Hook. It was 1929 before the development of a modern highways system linked by bridges was achieved. A railway connection had, however, been established by the construction of the Hull-Selby railway in 1840. This encouraged the development of the Howden horse fairs in an area with some fame in the eighteenth and nineteenth centuries for horse-breeding.

Howden claimed a moment on the national stage in 1924 when the former Royal Naval Air Service airfield was acquired by the Airship Guarantee Company. Despite the successful flight, from Howden, of the R100 – designed by Barnes Wallis, inventor of the 'bouncing bomb' – the loss in 1929 of the R101 – an airship designed by a government team – resulted in the cancellation of the entire national airship programme.

The volume also includes Welton, Welton Soke, and Welton cum Melton, and is divided into sections describing landscape, settlement, land ownership, economic history, river defence and drainage, social and religious history, and local government.

ARTHUR G. CREDLAND  
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## Europe and Elsewhere

J. ESCALONA MONGE, O. VÉSTEINSSON, and S. BROOKES (eds), *Polity and neighbourhood in early medieval Europe* (Brepols, 2019). 446 pp. 26 illus. 39 maps. 6 graphs. €110.

The last few years have seen a flurry of publications focusing on the 'local', inequality, and peasants (more recently referred to as the subaltern). Contributions from scholars such as Juan Antonio Quirós Castillo, Nicolas Schroeder, and Thomas Kohl have helped us to approach otherwise hard-to-see groups in new and revealing ways. One significant part of this effort has been edited volumes collecting the fruit of many scholars' labours, e.g., Castillo *et al.*'s *Social inequality in early medieval Europe: Local societies and beyond*, or Bernhard Zeller *et al.*'s *Neighbours and strangers: Local societies in early medieval Europe*. This volume complements these works, seeking to bridge the gap between the local and the supralocal. Something that has enabled such a wide view is that this volume represents the culmination of knowledge from three funded collaborations across a decade and follows two previous volumes (Andrew Reynolds, Wendy Davies, and Guy Halsall's *People and space in the Middle Ages* and Julio Escalona and Andrew Reynolds's *Scale and scale change in the early Middle Ages*).

Accordingly, their collective focus has shifted from the local worlds with which they began to tracing out the pathways of power from their foundations to the summit. As the editors make quite clear, while this volume seeks to unpick relationships *between* the top and base of the superstructure of society, it attempts to do so carefully, well aware of the risks of teleological arguments surrounding the issue of state formation (p. 3). They acknowledge that we should not assume that states were inevitable or all-encompassing developments. Indeed, this project has gone quite some way to illustrate the unevenness of 'state' power across early medieval polities (I use the word state here as a convenient shorthand to denote the governing structures of medieval polities).

The essays of the fourteen scholars who have contributed to this volume cover, via a rather generous reading of the 'early medieval' time-frame, the fifth to the thirteenth centuries and focus on regions ranging from Iceland to Italy. Rather than attempting to group them together chronologically or regionally, the editors have opted to divide the material into three sections: the first focuses upon society at the local level; the second examines the supralocal; and the third surveying connections between the two.

In the first part, examining the evidence from the local, are contributions by Grenville Astill, Margarita Fernández Mier, Alexandra Chavarria Arnau, and Iñaki Martín Viso. These essays argue, in one form or another, for the standardizing effect of the state. Where the state's touch is at its lightest we find greater divergence in local farming or organizational practices. It may go without saying that in order to find evidence of local, rural neighbourhoods, the scholars in this volume have made extensive use of archaeological evidence. Astill uses evidence of land reallocation, open-field systems, and settlement nucleation, to reconsider James Campbell's maximalist interpretation of the early English state from an archaeological point of view. Mier contrasts the evidence from two villages, Vigaña and Villanueva, one near a 'power centre' and the other deep in the mountains, to highlight the differences in the communities' experiences of supralocal power. Arnau and Viso use burial evidence from northern Italy and western Iberia respectively to draw out local agency and the ways in which these methods of interment were erased or adopted by the state.

The second section, focusing on the supralocal, comprises essays by Frode Iversen, Alfonso Vigil-Escalera Guirado, Orri Vésteinsson, Letty Ten Harkel, Stuart Brookes and Andrew Reynolds. Iversen begins the section with an examination of the Thing (public

assemblies) in Iceland and its role as an ideological centre for state formation in the region. Unlike the supralocal communities in Iversen's analysis which had the potential to influence state decisions, Guirado's examination of similar small, supralocal groups in Central Spain shows that, in the face of a complex, post-Roman state, it could be much harder for regional collectives to shape state-level processes. The work of both Vésteinsson and Ten Harkel, examining Icelandic identity under Norwegian rule and Carolingian control of Frisia respectively, illustrates how light the touch of the state could be in early medieval Europe. Brookes and Reynolds's co-authored chapter brings the focus back to England and the issue of the intrusive early English state. Supporting the idea that the complex territorial and political divisions of early medieval England, such as the shire, served to reinforce top-down power, they argue that the manifestation of these systems differed on the ground.

The third and final part, examining interactions between the local and supralocal, are papers by Wendy Davies, Álvaro Carvajal Castro, Julio Escalona, and Alexander James Langlands. Central to interactions between the local and supralocal is the transference of land, a process which is best seen in charter material. Accordingly, all four chapters make extensive use of such evidence. While it is important to avoid teleological arguments for state formation, Davies flips this issue somewhat on its head. She argues that the longevity of charter practices indicates that the apparatus of the state can be surprisingly resilient even when we might expect it to have disappeared i.e., during the failure of the state itself. Reminding us that paying close attention to terminology matters, Castro suggests that the ubiquitous term 'villa', used in charters from tenth-century León and which once referred to a nebulous unit of aristocratic landholding, only came to denote a physical villa with the intensification of lordship. Escalona and Langlands both utilize the concept of Dense Local Knowledge to posit that local actors possessed a valuable asset – detailed knowledge of boundaries and the landscape – which was not accessible to lords without consultation. This proved to be a pinch point which offered ground for negotiation.

Given that this volume covers so much space and time, it is a testament to the slow form of scholarship used throughout the project that it has remained a cohesive, rather than a discursive, volume. As a result, it offers a vital window into the world of medieval European agrarian societies, both local and supralocal. One comes away from this volume, or at least this reviewer did, with a deeper appreciation for

the granularity of polity formation in early medieval Europe.

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SYLVIE BÉPOIX and HERVÉ RICHARD (eds), *La forêt au Moyen Âge* (Les Belles Lettres, 2019). 424 pp. 114 illus. €26.90.

Soon after the fire that tragically consumed much of Notre-Dame of Paris's roof in 2019 there were widely reported fears that it would be impossible to find trees large enough, at least in France, to rebuild the cathedral the way it was. Such fears reflect the astonishingly persistent myth that primeval forests survived into the Middle Ages. While experts are not always capable of banishing such popular misconceptions, in this case some of the confusion may derive from the fact that, for long, even scholars have lacked an updated survey of French medieval woodlands. By helping to make better known the countless advances in research that have been made over the last generation, this collection of essays succeeds in providing such an update, even if its 27 distinct contributions do so in a fragmented way. The publication of this important book is therefore cause for celebration.

The volume's intended geographical focus, as noted on p. 7, is the territory of modern France and Belgium. Chronologically, the Middle Ages are understood here in a traditional sense as the millennium between 500 and 1500 CE. Along with endnotes, the table of contents, and indices of proper names, the book contains three brief prefaces (pp. 7–21), two concluding remarks (pp. 349–56), and three main parts.

Standing apart from the rest of the volume's historical approach, Part I, entitled 'La forêt rêvée' ('The imagined forest', pp. 25–103), addresses how woodlands are portrayed in medieval literature and hagiography. Its two chapters provide an engaging survey of the ways in which medieval writers represented arboreal spaces, and they are superbly illustrated with 47 colour images from medieval manuscripts. Part I is less impressive, however, as a scholarly update. The notes reflect recent work, at least in French, but there is no sustained discussion of methodology; there is mention neither of recent ecocritical interpretations nor of the use of hagiography as a source for environmental history by, for example, Albrecht Classen and Ellen Arnold amongst others.

From a historical perspective, then, the value of this book lies in its Parts II and III, which are organized around a series of regional studies, spread across seven chapters and many unnumbered subchapters. Part II focuses on northeastern France and Belgium,

while Part III turns to the North West, the South (the Pyrenees and the Mediterranean littoral), and three zones of low or moderately high mountains (the Vosges, the Jura, and the Morvan in Burgundy). While covering many regions, the volume omits a wide swath of south-central France, stretching from the Atlantic coast to the Alps.

Although the book lacks a substantial, synthetic introduction, Part II's first chapter, 'La forêt resources' ('The forest resources', pp. 107–21), by Corrine Beck and Fabrice Guizard, along with a subchapter by Sylvie Bépoix on 'L'évolution des espaces cultivés' ('The evolution of cultivated spaces', pp. 180–90), together provide a survey of medieval French forest history. The outline of this history consists of alternating phases of woodland expansion and retreat, according to a rhythm that is familiar from older accounts. For example, the most substantial medieval attack on woodlands took place from the eleventh to the thirteenth centuries, after which woodlands regained ground during the crises of the later Middle Ages. That current research confirms this familiar sequence is in itself a valuable finding. But Beck and Guizard also emphasize a point echoed elsewhere in the volume: even in periods of less anthropogenic pressure, few woodlands resembled the dense, wild forests of medieval and modern legend. They instead comprised multifunctional, mosaic landscapes, thoroughly shaped by already age-old practices of agro-pastoralism.

In terms of the sources used, about half the essays of parts II and III rely mostly or entirely on texts, almost always to good effect, especially for the later Middle Ages. For periods before the fourteenth century, however, the penury of written sources makes it difficult to advance significantly our understanding of French (and European) woodlands.

It is here that this volume makes its greatest contribution: it includes ten essays that present recent archaeological and paleo-scientific findings, all accompanied by helpful figures and clear, colored illustrations. These essays will familiarize readers with burgeoning research in the study of such things as pollen deposits (palynology), tree rings (dendrochronology), charcoal deposits (anthracology), and mills, furnaces, kilns, and other industrial sites. Some essays also address settlement patterns and other anthropogenic modifications of the landscape by drawing on either archaeological surveys of pottery fragments and other artifacts or the new method of LIDAR (Light Detection and Ranging), which uses airborne lasers to detect hidden features of the earth's surface. The value of combining such methods is perhaps best illustrated in an essay by Vanessa Py-Saragaglia and her co-authors, who

reconstruct in impressive detail the forest history of several sites in the Pyrenees (pp. 276–99).

The most noteworthy contributions, however, are five of the scientifically oriented essays that study the forests of northern France and Belgium through dendrochronological analysis of oak timbers from churches, castles, manor houses, and other archaeological sites. Thus, Vincent Bernard and his co-authors, making use of more than 7000 core samples of timbers from almost 400 sites across the northwestern quadrant of France (pp. 243–58), present a graph showing the average age at which oak trees were cut down across the entire millennium from 500 to 1500 CE (Figure 4, pp. 252–53). Although samples from the early Middle Ages are still too few, this single chart provides a more scientifically-grounded snapshot of medieval French forest history within a broad region than anything previously available of which I am aware. It suggests, for example, that the use of very old oaks of 200 years or more was mostly limited to the period before 750 CE, and that the most intensive phase of felling occurred between about 1180 and 1230, when the average age of oak timbers fell to only 30–35 years.

Moreover, as these five essays show, the insights to be gained from the study of surviving construction timbers go far beyond just the age of the trees used. The variations in the widths of a tree's annual growth rings, along with the length of the trunk used and the frequency of forks, branches, knots, etc., all provide evidence concerning the environment and system of management within which the tree grew.

For example, both the above essay by Bernard *et al.* and another by Frédéric Épaud on the Paris region (pp. 142–53) show that the churches built in the new, Gothic style of the late twelfth and thirteenth centuries typically include large numbers of similar, very long and thin roofing beams, averaging 8–14 m long and 20–30 cm in diameter. Yet the trees from which these beams were made were only 50–60 years old, much younger than the 80 years or so required to reach an equivalent height in this region's forests today. These authors argue persuasively that these medieval trees must have grown not from seed, but rather from pre-existing root systems (coppice stools), which allow for rapid growth during a tree's first decades, and then continued to grow tall and straight within dense, homogenous stands of timber. This timber was produced, therefore, in well organized and protected timber 'reserves', to use a term that was only then beginning to appear in texts referring to forest management.

Épaud goes on to note that this research casts doubt on contemporary complaints about a timber shortage: it would take a reserve of only about three hectares

to supply all the beams needed for the cathedral of Bourges's gigantic roof (p. 150). This work also shows that these well-managed timber reserves—some of which Bernard *et al.* have traced to as early as the tenth century (pp. 256–7)—were established centuries before any surviving texts record how they were regulated.

These examples provide only a sample of the insights to be gained from this collection. Its editors and contributors are to be congratulated for publishing this stimulating book.

RICHARD KEYSER

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DAVIDE CRISTOFERI, *Il reame di Siena. La costruzione della Dogana dei Paschi e la svolta del Tardo Medioevo in Maremma (metà XIV-inizi XV secolo)* (Istituto Storico Italiano per il Medio Evo, 2021). xii + 345 pp. 3 maps, 7 diagrams, 20 tables. €30.

In late medieval Italy, Tuscany represented the third most important region for transhumance, right after the Kingdom of Naples and the Papal State, and the first, in the case of Siena, whose pasturelands were managed by a communal institution – the Dogana dei Paschi di Siena. In his remarkable book, Davide Cristoferi presents a data-saturated analysis of the transformation of the Maremma from a depopulated and uncultivated landscape after the Black Death to Siena's most profitable source of income in the early fifteenth century. The driving force behind this development was the Dogana dei Paschi of Siena, a communal institution that increasingly exercised monopoly control over the pastures and the access of transhumant herds from the Apennines to winter grazing in the Maremma.

The volume is structured into five chapters and an extensive appendix. After contextualizing Siena's Dogana dei Paschi and the 'realm' of the Maremma against the crisis of the late Middle Ages, the author discusses the fragmentary source situation prior to the onset of the Dogana's institutional preservation in 1419. Given this lack of institutional sources from 1353 to 1419, Cristoferi draws on a wide range of archival records from Siena, Florence, Prato, Orvieto, and Volterra. The rich documentation of Siena's communal offices and magistrates in particular allows for a detailed examination of the institutional formation and financial performance of the Dogana. Moreover, it offers important new insights into the complex interactions between Siennese institutions, the pastoral economy, state-building processes, and the socio-economic transformations and redistributions following the crisis of 1348.

The first main chapter (pp. 21–90) reconstructs the development of the pastoral economy and transhumance

in the Maremma and the institutional formation of the Dogana in light of the economic recession following the Black Death. In the long fourteenth century, Cristoferi identifies a multitude of crises – two floods, 22 famines, 14 epidemics, 13 wars and 50 passages of mercenary armies in Tuscany (p. 26) – that had devastating effects on the region's economic and demographic capacities. Siena thus sought to compensate for its decreasing fiscal revenues by exploiting the untended arable and pasture lands of the Maremma. In 1353, the city council of Siena introduced the direct management of pastures by a new public office – from 1366 onwards called the Dogana dei Paschi – that licensed the access of transhumant herds to road networks and to common and private pasturelands in the Maremma against payment of a tariff based on species, herd size, and season. Examining its normative development, territorial expansion, and financial performance, Cristoferi underlines that Siena's initiative to centralize the management of its Maremman pastures stood out due to its degree of pervasiveness compared to other European regions. While the economic relevance of pastoralism increased across late medieval Europe, the enactment of the first statute of the Dogana in 1419 led to a 'complete re-organisation' (p. 85) of access to and use of common pastures in the Maremma.

The second main chapter (pp. 91–143) examines the acquisition of common pastures and grazing rights from local communities and the increasing presence of foreign transhumant herds in the Maremma. Cristoferi elaborates four key strategies of either acquiring possession or appropriating and regulating the *ius pascendi* of common and private pastureland used to different degrees between 1300 and 1419: military/political subjection (conquests, pacts, privileges), acquisition/expropriation of land and the associated rights of use, legislation, and jurisdiction. From 1353 onwards, Siena seized local rights to lease the use of pastures and limited the number of animals to be kept by the local population without paying for herbage. The commodification of commons and the allocation of grazing lands to the Dogana led to a significant loss of grazing areas for local working animals and to increased debt exposure and tax evasion by local communities. This not only caused large-scale competition between transhumant herds and local crops and livestock, but also the overexploitation and exhaustion of pastures. As the strain on arable and grazing resources increased, conflicts arose between local farmers and transhumant shepherds and between local communities and the Dogana.

The third main chapter (pp. 145–86) presents a synthetic analysis of the administrative organization

and the financial performance of the Dogana of Siena, including a comparison with the papal Dogana del Patrimonio di S. Pietro. Cristoferi discusses the tasks, number, and salaries of a wide range of magistrates and officers working for the Dogana in Siena and the Maremma, among them livestock counters, scribes, officers controlling the payment of herbage (*erbatico*), and armed guards securing pastures and livestock while preventing fraud and damage. The cost of the latter's salaries alone amounted to up to 1,000 fl. per year, prompting intervention by the General Council in 1356 and 1365 (p. 157). On the financial side, however, the Dogana benefited from its increasingly profitable management of transhumance. In the 45 financial years between 1353 and 1419, for which account books have been preserved, revenues from herbage, tolls, fines, and pasture rents, etc., came to 396,000 gold florins, whereas annual expenditures represented only 21% of its income (pp. 164–74). Compared to the papal Dogana, Siena licensed significantly fewer animals and still generated more income due to the higher pasture rents and herbage rates it demanded (8–8.5 fl. vs. 5–5.5 fl. per 100 sheep in 1419). Moreover, the two institutions differed in the development and extent of their monopoly claims on local pastures in the light of state-building processes in late medieval Italy (175–86).

The conclusion (pp. 187–201) discusses the exceptionality of the Dogana dei Paschi as a monopolist over common pastures in the 'realm' of Siena in the broader context of crises, socio-economic transformations, and state-building processes in late medieval Europe. The volume is supplemented by an extensive appendix which, in addition to three maps and seven diagrams, contains 20 comprehensive tables, amongst others on legal issues, collective resources, and officials, as well as on the revenues and expenditures of the Dogana (pp. 205–300). The book concludes with a list of archival sources, a bibliography, and indices of cited authors, persons, places, and central terms (pp. 301–42).

Cristoferi's splendid monograph is a must-read for scholars of transhumant pastoralism and highly recommended for interdisciplinary readers interested in the great transformations of rural societies in late medieval Europe and the Mediterranean.

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FABIAN KÜMMELER, *Korčula: Ländliche Lebenswelten und Gemeinschaften im venezianischen Dalmatien (1420–1499)* (De Gruyter, 2021). 516 pp. illus. £63.50.

This lively and well-researched monograph surveys the legal and socio-economic conditions on an island

located near Ragusa/Dubrovnik in the Adriatic sea. Coverage extends from 1420, when it voluntarily moved under Venetian overlordship, until the end of the fifteenth century. The Serenissima respected Korčula's pre-existing statutory law and sent a *comes* as its sole representative to act as the supreme judge and mediator between local and central concerns. Typically serving for two years, these Venetians presided over a high court with six domestic judges (hearing cases from the whole island) and a complex constitution composed of the island's eponymous town (governed by a set of civic officials and a large council made up local patricians) and four *casalia* (village districts), each with intricate administrative structures. Much of the information – exceptionally rich for the region – derives from jurisdictional proceedings, supplemented by notarial records, council minutes, deeds, wills and petitions. Following surveys of existing scholarship (as yet lacking such a detailed account for components of the Venetian *stato da mar*) and the historical background (tracing the growth of Ottoman influence in the Balkans), the core chapters deal with the island's system of government, the profile of village society and the 'special case' of the shepherds. Three maps and eight photographs taken by the author provide helpful illustrations.

Drawing on an extensive conceptual review, the chosen approach combines micro-historical enquiry (to recover the personal contexts and networks of select individuals appearing in the sources) with an anthropological interest in the *Lebenswelt* of the islanders more generally (comprising elements like everyday routines, social customs, material culture and codes of honour). The analytical focus lies on the multi-layered notion of *Gemeinschaft*, understood here as the symbolic construct emerging out of the dynamics of social practice (p. 70). This definition encompasses a variety of manifestations, including not just the spatially circumscribed island *universitas* as a whole, the urban commune of Korčula in the narrower sense and the four rural districts of Blato, Čara, Smokvica and Žrnovo (each with shared responsibilities and collective capacity) but also a socio-professional subgroup like the shepherds. The latter resided in one of the villages but developed a distinct identity linked to seasonal labour patterns, contractual ties with animal owners from all over the island and collective interests often at variance with those of neighbours working in fields or vineyards. Court disputes reveal both overarching ties rooted in Korčula's statutes, age-old customs and communal institutions on the one hand, and tensions between patricians and plebeians, peasants and vintners and shepherds and those with and without offices on the other. The biggest bone of

contention was the damage inflicted on lands and crops by grazing: an inordinate amount of time and effort had to be invested to demarcate fields from pasture, identify transgressors, calculate losses, determine penalties and secure compensation. Illustrating the delicate balance between inclusion and exclusion, shepherds were often viewed with suspicion and considered less trustworthy than other villagers.

The argument offers numerous further insights along the way. One of the most notable is the substantial stake rural inhabitants held in the island's public affairs. Town-based bodies stood at the pinnacle of the constitution, but each rural district had its own assembly, lower court and legal/fiscal officials plus four constables and a host of field and vineyard wardens, not to speak of ad-hoc additions for particular tasks. While all positions were filled by the large council, the personnel changed every six months, meaning that dozens of men obtained positions of responsibility in each village every year. On some occasions, furthermore, *comes* and court went on circuit to hear cases in the localities (there was a purpose-built loggia next to the church of All Saints at Blato; Figure 5); on countless others, communal officials exercised influence over proceedings held in town; sometimes, rural representatives even petitioned the Venetian doge or senate directly. The surviving volumes of records testify to a remarkable diffusion of at least basic literacy and multilingual capacity way beyond the city walls. Written notes transmitted specific information and instructions from centre to periphery and vice-versa. Alongside, we catch glimpses of oral exchange (e.g. in a series of lawsuits over public insults hurled at the newly wed couple of Marussiza and Radovanus de Craina on 20 August 1459) and the significance of material media (in the form of tally sticks used to record contractual agreements between animal owners and shepherds). In Korčula, therefore, popular participation was extensive and the urban-rural boundary porous indeed.

As acknowledged by the author (pp. 62–3), the biggest and most regrettable thematic gap is religion. The island had its own Roman Catholic bishop and it would have been fascinating to see how ecclesiastical dimensions intersected with the multiple forms of affiliations outlined above. Given an almost total loss of church records, the emerging narrative inevitably veers towards the secular, with very little to say on parochial organization, congregational worship, fraternity life and spiritual practices, all of which must have differentiated the experience of *Gemeinschaft* further. Stylistically, to move to a few quibbles, there are rather too many recapitulations of the same points, some over-elaborate passages packed with quotations

(chapter 2) and tendencies to jump from micro-historical findings to generalizing conclusions (chapter 5).

Overall, Kümmeler offers an engaging journey into the world of a fifteenth-century island society. His concluding remarks point to wider comparative potential, be it with other areas along the Dalmatian coast (such as Poljica, where feudal structures lingered more strongly), the *terraferma* around Venice or case studies even further afield. Anyone interested in concepts of community, rural economies and town-country interactions will find *Korčula* a stimulating read.

BEAT KÜMIN

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FABIEN GAVEAU, *Propriété, cadastre et usages locaux dans les campagnes françaises (1789–1960): Histoire d'une tension légale* (Presses universitaires de Franche-Comté, 2021), 480 pp. €40.

Fabien Gaveau writes about the land from an unusual perspective having managed a family farm on the eastern edge of the Paris basin whilst studying and teaching agricultural history. His book can best be described as a social history of French land law, but one with a message. The message or argument is contained in the sub-title: the history of land ownership and possession reflects a series of long-standing tensions between owners, exploiters, legislators, jurists and real estate professionals (surveyors and public notaries).

By the standards of most European countries, seigneurial lordship over the land ended quite abruptly in France. The Declaration of the Rights of Man of 1789 established the principle of private property and in 1804 the Civil Code defined ownership unambiguously as the 'faculty to enjoy the use of, and to dispose of, things in the most absolute manner' (article 544). Hence the fetishizing of the status of 'proprietor': a word which carries a special resonance in French to this day. In reality, of course, matters were not quite so simple. As the author shows, the slogan belied the reality and it was left to nineteenth-century officialdom to try and bring custom and practice into alignment with the letter of the law. A series of tensions arose which threw into question the rigorously individualistic definition of private property: disputes over collective rights (grazing, gleaning, etc.), stock transhumance, afforestation, land reclamation, marsh drainage, fishing, hydro-electric schemes and so on.

The gap between the vision of administrative elites who wished to make the countryside 'legible' and those who actually lived and worked there was never really bridged, but simply narrowed. Over time (the study extends to the 1950s) the agenda shifted and new issues emerged. The issue of legal ownership yielded – in the

face of productivist pressures – to a preoccupation with actual possession and exploitation. In 1946, for instance, a revised Statut de Fermage which had originally been an initiative of France's Vichy government placed a considerable restriction on property owners: share-crop farmers acquired a right to conventional leases and tenant-farmers a right of pre-emption should their holdings be put up for sale. In more recent decades policies of environmental management have placed further restraints on ownership.

Much of what Fabien Gaveau has to say is encapsulated within the fraught history of the Rural Code. Unlike other attempts at codification by the revolutionaries and by Napoleon, rural law proved stubbornly resistant to standardization. The first effort, in 1791, was wrecked by the inability of legislators to find a viable means of ending collective rights. Not until the final decade of the nineteenth century was a solution of sorts found for the practice of collective grazing, without which the right of landowners to enclose their property remained a dead letter. Even so, an agricultural enquiry of 1898 disclosed that nearly a quarter of rural councils had voted to maintain *vaine pâture*. While a regulation of forests reached the statute book as early as 1827, the long-anticipated Rural Code was not legislated until 1955. It is true that the extraordinary complexity of property structures in France posed a formidable obstacle. The sales of Church- and noble-owned property during the revolutionary decade created around 600,000 new owners, many of whom were micro-proprietors, and in any case much of the arable land surface was heavily subdivided.

The huge task of mapping and registering land holdings was envisaged as a corollary to the abolition of seigneurial lordship in 1789, but it only made significant headway in the early decades of the nineteenth century. These *cadastres* were initially conceived of as fiscal tools: they only evolved into a type of standardized register of land holdings subsequently. Nevertheless, they were nearly everywhere in place in France almost a century before compulsory title registration was introduced to England and Wales. Agricultural historians will probably find the pages relating to mapping and surveying the most interesting feature of the book: how property boundaries were reconnoitred and how disputes between adjacent parishes and municipalities were resolved. After the Revolution the task of defining territory was handed to surveyors with mathematical training whose understanding of space differed markedly from that of those who actually tilled the land.

Throughout his study Fabien Gaveau provides well documented illustrations of the 'tensions' that give shape to his investigation. Indeed, these illustrations

often amount to substantial case studies in their own right. They serve as a reminder that this is not a book for general readers to dip in to. There is simply too much information on offer and it threatens to overwhelm the interpretive structure. From a specialist's point of view, most of the findings are not particularly new: the author synthesizes existing research, adds examples and provides a connecting chronological narrative. His use of the considerable body of English-language scholarship on the countryside in France is rather patchy, and it is a matter for regret that the study draws to a close just as the biggest land reorganization undertaken since the Revolution started to make headway. Confronted with no fewer than 145 million ownership parcels of an average area of 0.33 hectare in 1946, legislators put the authority and resources of the state behind a massive programme of plot consolidation (*remembrement rural*) in the late 1950s and 60s. To date some 15 million hectares of agricultural land has been reshaped and reallocated.

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DANIEL Bensaïd (trans. ROBERT NICHOLS), *The Dispossessed: Karl Marx's debates on wood theft and the right of the poor* (University of Minnesota Press, 2021). 160 pp. \$25.

In October 1842 Karl Marx, aged 24 years, became editor of the *Rheinische Zeitung*. Founded a few months before, the newspaper lasted barely fourteen months before the Prussian State closed it down. Under Marx's editorship the paper became one of the most widely read German publications, and he used the newspaper to develop radical critiques of important contemporary issues.

For Marx these were transformative times. As Robert Nichols explains in his introductory essay to *The Dispossessed*, Marx later explained that while editor he

experienced for the first time the embarrassment of having to take part in discussions on so-called material interests. The proceedings of the Rhineland Parliament on thefts of wood, and so on ... provided the first occasion for occupying myself with the economic questions.

The 'discussions' that Marx took part in during 1842–1843 in the pages of the *Rheinische Zeitung* might seem obscure, mark a period of intellectual transition for the young radical. As Nichols says, it was a period that saw 'Marx's break with Hegelian philosophy' and the start of Marx's embracing of socialist ideas and his development of a radical critique of political economy.

*The Dispossessed* is in three parts. The bulk consists of an extended article by the French Marxist Daniel Bensaïd that uses Marx's 1842 work as a jumping off point to explore issues of ownership, dispossession and the state. Bensaïd (1946–2010) was a prolific author and activist. A key French Marxist intellectual, he is less well known in Britain, so Nichols' autobiographical introduction provides useful framing for Bensaïd's essay.

The final part of the book is Marx's article, 'Debates on the Law Concerning the Theft of Wood', published in five parts from late October to early November 1842. It is an extraordinary piece. Working from fragmentary reports of the Assembly, Marx constructs a detailed critique of the transformation of property relations in the countryside. Superficially the issue seems simple – the rights of the peasantry to use wood from forests.

The issues arises, Bensaïd says, 'as a consequence of rural pauperism in full bloom'. Yet the complexities of the debate arise:

from the fact that the integration of timber into an exchange market rendered its use-value and exchange-value inseparable from one another. At stake in the new legislation was the need to assert property rights, rigorously distinguishing property titles from entitlements based on need and thus the exchange economy from the subsistence economy. The evolution of an apparatus of penal sanction thereby institutionalised new forms of delinquency and social criminality.

In other words, what was at stake in the Assembly discussion on wood theft was a vision of how society should be organized. Emerging capitalist interests were keen to transform economic and social relations in their interests. This meant destroying old, customary, and communal organization and connecting nature to the market economy.

Marx shows how there was a contradiction between the desired new relations and the existing laws. Having 'become conscious of the conflict between the interest of forest protection and the principles of law', the Assembly voted on 'whether the principles of law should be sacrificed to the interest of forest protection or whether this interest should be sacrificed to the principles of law'. The Assembly 'trampled the law under foot', says Marx. He continues:

The Rhinelander ought to have been victorious over the estate, the human being ought to have been victorious over the forest owner. [The estates] are legally entrusted not only with the representation of

particular interests but also with the representation of the interest of the province... The sense of right and legality is the most important provincial characteristic of the Rhinelander; but it goes without saying that a particular interest caring no more for the province than it does for the Fatherland, has also no concern for local spirit.

Instead, Marx complained of the 'immoral, irrational and soulless abstraction of a particular material object and a particular consciousness that is slavishly subordinated to this object'.

Through the debates on wood, Marx begins to break with an approach that sees the law and the state as being above society. Instead, he starts acknowledging the way that the law is a tool of social forces. The process he is describing was mirrored elsewhere. It is worth noting the similarities between the situation in the Rhineland and England. The seventeenth and eighteenth centuries saw similar changes in social and economic relations in the countryside, and the mass criminalization of poaching. There is even a parallel between the provisions in the Prussian legislation for punishment based on whether criminals had blackened their faces with the Black Act of 1732 in Britain.

Bensaïd shows how Marx's conception of property goes through a transformation, breaking with cruder explanations such as Proudhon's 'all property is theft' and evolving into a more complex understanding where 'two conceptions of law that have come to clash, the rights of the property owners against the rights of the owned'. In this situation, Bensaïd concludes following Marx, 'Only force can decide'.

In the final section of his essay, Bensaïd develops Marx's insights into a contemporary critique. In an era when conservationists try to assign exchange-value to nature through a process of commodification known as 'Natural Capital', when institutions like the UN see market mechanisms such as carbon trading as the solution to climate crisis or when corporations try to privatize knowledge, Bensaïd uses Marx's work to explore the ongoing destruction of the commons. He concludes that it is 'no longer about the comparative advantage of rational economic solutions. It is rather a test of political strength'.

*The Dispossessed* is thus of interest on several levels. The work by Marx explore the role of the state in driving through a new set of property relations that facilitated the further development of capital. For historians of the rural economy, the parallels between nineteenth-century Prussia and Britain in the eighteenth and nineteenth centuries are fascinating. Secondly, Bensaïd's essay draws out the importance of

the debates for Marx's own development as a socialist and then applies these to contemporary capitalist society. Finally, Robert Nichols provides, for readers in Britain, an introduction to the insights and importance of Daniel Bensaïd's life and work. All together this is an insightful and compelling work.

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ANDREW A. ROBICHAUD, *Animal City: the domestication of America* (Harvard University Press, 2019). 352 pp. 30 illus. £31.95.

The apparent absence of animals from twenty-first-century urban environments is a convenient illusion which, in some ways, allows urban dwellers to avoid the realities of animal suffering which sits at the core of industrial capitalism and consumer cultures. In fact, cities are ecologically diverse places, pulsing with many forms of life which entwine with and shape what we tend to think of as wholly human spheres of influence and affect. As Andrew Robichaud shows in his deeply researched and thoroughly persuasive book, though, the texture of urban multispecies engagements has its own history that needs to be uncovered, not only to allow historians to trace the roots of human-animal engagements in their present form but also to inform deeper understanding of much broader historical phenomena.

A critical intervention in the fields of urban, environmental and animal histories, *Animal City* provides a compelling analysis of the ways in which domesticated animals vanished from American cities by the turn of the twentieth century, while other forms of life – from horses put to work to provide essential transport to wild things displayed in ‘civilizing’ captive spaces – found new places to be seen, driven by emerging forms of consumption. In a sense, Robichaud's style of analysis and storytelling conjures a dynamic multi-species mosaic, whose configurations fluxed over the course of the nineteenth century in response to a wide range of social, economic and political influences. In doing so, the book sits alongside works such as Joshua Specht's *Red Meat Republic* (Princeton University Press, 2019) and, indeed, it also brings to mind Hilda Kean's classic treatment of the British humane movement, *Animal rights* (Reaktion, 1998), which similarly addresses the vexed connections between visibility, sentiment and politics.

Robichaud's illustration of the changing animal city is split into three key parts, tracing animal presences in several American cities, but with a focus on New York and San Francisco. The first three chapters focus on the apparent banishment of livestock from the

urban environment, beginning with an examination of the forces underpinning the development of dairies in New York in the 1820s and 30s. This is followed by an analysis of spatial regulation in San Francisco, where transforming attitudes to the presence of livestock generated shifts in the organization of the city itself, leading to the creation of an ‘instant animal city’, the social, political and economic ramifications of which were far reaching. The second part (chapters 4 and 5) focus on the humane movement, illustrating the development of humane societies, their motivations and actions across the middle decades of the nineteenth century, while simultaneously pointing to the ways in which the human-animal relationships at the core of this work interacted with – and came into tension with – the processes identified in earlier chapters where animal suffering was rendered increasingly invisible. The focus of the final part (chapters 6 and 7) moves from the humane movement to forms of consumption rooted in curiosity and amusement, tracing the disappearance of ‘uncivilized’ forms of animal entertainment to the emergence of more ‘enlightened’ entertainments in the form of zoological gardens towards the later decades of the nineteenth century. The section begins with an especially compelling/disturbing vignette concerning an 1827 event at Niagara Falls, in which vast crowds gathered to watch a boatload of animals tumble to their deaths into the watery chasm (pp. 197–8). This is convincingly contrasted with the later emergence of zoos (focusing on Robert Woodward's zoo in San Francisco) as places associated with a mode of looking at wild animals that was supposedly far removed from earlier forms of brutalizing vicarious consumption.

Across a series of city-focused case studies, the book ably evokes a compellingly visceral sense of the realities of nineteenth-century cities, conjuring an understanding of times and places characterized by the incessant multi-sensory interactions between people and animal others in American cities. Indeed, the book is especially impressive in its ability to recognize and historicize an astonishing multitude of species. At one point, Robichaud argues that the story of human-animal engagement in the modern city matters because ‘their ghosts still haunt the places in which we live’ (p. 12). Throughout the book, the author masterfully directs the reader's gaze towards teeming urban animal shades, bringing them to life in ways which remind us that these were vibrant living beings whose suffering was very real (see the description of cows' physical reactions to being fed distillery mash, for example, p. 22), whether or not they were visible to people bustling through the streets of nineteenth-century American cities.

Despite deep research and expansive analysis, there are some areas where questions are evoked rather than fully answered. For instance, while the book alludes to the shifting rhythms of the city itself, pointing in limited cases to elements of the nocturnal city, for example, the seasonal dynamism of urban environments remains unexplored. Like all environments, cities warp in response to the wider conditions in which they are entangled. Illuminating this instability is, of course, a mammoth task, and not within the remit of the book's analytical and conceptual lens. Nonetheless, thinking along these lines may be a way for future scholars to build on Robichaud's work. Striking, too, were questions about other American cities, particularly those with situated in specific environmental milieus. Were urban developments similar in the deep south to those in the cities that formed the focus of this work? Robichaud's work provides an important inspiration to scholarship that might attack the question of local urban multispecies specificity.

In sum, Robichaud's *Animal City* is significant in its contribution to scholarly understanding of the nature of cities and the diverse and transforming character of historical human animal relations. This book is comprehensive in its analysis, but also focused enough to leave room for provocation which, I suspect, will generate a burgeoning of historical analyses of city-focused human-animal relations beyond the cities which are the core focus of this work. Moreover, the ways in which social, economic, political, cultural and legal forces provide the contexts of human-animal entanglements renders this work ideal for the teaching of undergraduate courses across the fields of animal, American, environmental and urban histories. Beautifully written, the work is an accessible and wholly convincing introduction to the value of studying human-animal relationships in the pursuit of a wider understanding of place and the forces that generate historical change.

ANDREW FLACK  
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VIVIEN EDWARDS, *A path through the trees: Mary Sutherland – Forester, botanist and women's advocate* (Writes Hill Press, 2020). 202 pp. £23.

This is a book about a period of pioneering forestry, mostly in New Zealand. It is set in the first half of the twentieth century when timber supplies from indigenous forests were projected to run out and this catalysed a huge state planting programme in New Zealand. Mary Sutherland was at the heart of this initiative. It must have been an exciting time to be a professional forester. However, this book is much

more than a study of forestry in New Zealand in the mid-twentieth century. It is about changing attitudes to forestry, about innovative research, education and silviculture, and it is also about one woman's struggle to overcome gender bias and prejudices in what was a profession traditionally dominated, indeed almost exclusively populated, by men.

Vivien Edwards has provided a well-researched and detailed account of the life of Mary Sutherland. Born in 1893 in Stoke Newington on the outskirts of London, Mary studied forestry at the University College of North Wales, Bangor, enrolling in July 1912 and graduating in 1916. In 1918 she joined the newly created Interim Forest Authority, transferring to the experimental and research branch of the newly formed Forestry Commission in 1919. Her first job was being in charge of the Windsor Crown Woods experimental nursery. In a scenario all too familiar to modern audiences, a few years later, government expenditure was drastically reduced and many skilled and experienced foresters, including Mary, lost their jobs. Unemployed servicemen returning from the First World War were given priority for any jobs and Mary began to look overseas for work, notably to New Zealand where her sister Kate was living. Edwards points out that Mary was already well respected. John Sutherland (no relation) Assistant Commissioner for the Forestry Commission in Scotland, wrote to William Massey the prime minister of New Zealand informing him that Mary had given good service in connection with timber work during the war and in her subsequent Forestry Commission employment and that 'she is capable and enthusiastic about whatever work she has to undertake'. Harold Dale, assistant secretary at the Ministry of Agriculture and Fisheries also wrote on Mary's behalf to the assistant director of New Zealand's Department of Agriculture, Frederick Pope. Nevertheless, it was without a job to go to that at the age of 30 Mary left Liverpool for New Zealand in 1923.

Three months after arriving Mary obtained a temporary position with the New Zealand State Forest Service, initially in a clerical role, and so began her long association with forestry in New Zealand. By 1924 Mary had been transferred to the silviculture branch, and sent to Rotorua on the North Island to undertake a study of the region's forestry operations, from seed collection to plantation forestry. Unsurprisingly, the local conservator Halbert Goudie treated her arrival with suspicion. Not only had Mary been sent by Head Office, namely by Leon McIntosh Ellis, the Director of the New Zealand State Forest Service, but she was a graduate and a woman. Ellis however, was a supporter

and something of a mentor for Mary. He complimented her on the report and she was then sent to assist at a Ranger School and then to Hanmer Springs on the South Island. Here she became very involved in promoting educational programmes for children, in particular school tree nurseries. Ironically, Mary told Ellis that the Forest Service should establish holiday camps for boys where they could learn about forest management. The proposal was not adopted.

Mary's work on the programme of afforestation was recognized and her position was made permanent by the end of 1926. Goudie had been replaced by William Morrison and he was also unhappy about Mary reporting directly to Ellis. Clear lines of authority are essential in any organization and this apparently muddled management structure was not helping any of the staff, least of all Mary Sutherland.

Mary played an important role in ensuring that science was incorporated into New Zealand's forest management programme. She was at the meeting in 1927 which began the process of forming a professional body, and was to play an active role in the Institute throughout her life. At this time, as well as her other duties, Mary was putting together a manual of forestation. Progress on this could not have been helped by the sudden resignation of Leon Ellis who left for Australia. He was replaced as Director by Edward Phillips Turner and Mary found herself caught between two masters, Turner and Arnold Hansson, making the completion of the manual an almost impossible task.

Forestry in New Zealand was then hit by the economic crisis of the late 1920s and early 1930s and Mary again lost her job. Whilst in the forestry service, however, she had developed contacts with the Dominion Museum in Wellington and she was offered a post as a librarian and botanist a position that became one of full-time botanist in 1935. Her work was interrupted by World War II and Mary left to do national service at the Woburn YWCA hostel. In 1946 she joined the Department of Agriculture as the department's first farm forestry adviser. Specifically, her job was to offer advice and guidance for farm shelter, tree plantations and wood lots and to write for the *New Zealand Journal of Agriculture*. Her work on farm forestry was ahead of its time, and it is clear that her gift for communication and her passion for public education coupled with her innate capacity for hard work made this a halcyon period in her career. Sadly, Mary Sutherland's work was brought to a premature end. She became ill and died early in 1955 at the age of 61.

Vivien Edwards has produced a valuable biography of Mary Sutherland. It is a story of someone's deep love of trees who had a determination to overcome

antagonism and mistrust about both her gender and her graduate qualification. The book is to be recommended for anyone with an interest in land use policies in the early to mid-twentieth century, and also to those with an interest in social history and the struggle of women forging a career in a male dominated profession.

GERRY BARNES

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AMANDA MCVETY, *The rinderpest campaigns: A virus, its vaccines, and global development in the twentieth century* (Cambridge University Press, 2021). xiii + 294 pp. £22.99.

This book undertakes an informative critique of the history of rinderpest, a bovine disease more commonly known as cattle plague. It focuses on the provision of vaccines and their relationship with global development in the twentieth century. At first glance, such a subject may not necessarily appear of relevance to many readers. This is particularly true for those in the United States, a country which avoided the ravages of the disease. In a similar way, the western industrialized nations of the world were barely affected compared with the way the disease devastated not only cattle, but also bovine populations in Africa and Asia. This lack of interest also reflects the fact that humans are immune to rinderpest. Under such circumstances, it may be tempting to relegate the disease and the literature which accompanies it to a mere footnote in the annals of agrarian history.

However, such an assessment would not only be naïve but grossly misleading, doing a grave injustice to McVety's informative and perceptive critique. In six detailed chapters, complemented by extensive footnotes, the book explores how researchers on a global scale acted together to develop new vaccines. There were significant landmarks along the way: Robert Koch's immunological experiments in South Africa in the late nineteenth century; the creation of the first 'inactivated' vaccines by Kakizaki (Japan) and Kelser (Philippines) in the 1910s and 1920s; the development of more potent attenuated vaccines by researchers in India, Kenya, Canada, and China in the 1930s and 1940s. This involved growing the virus in living organisms (goats, eggs, and rabbits). This in turn heralded the development of a tissue culture-based vaccine (TCRV) in the 1960s, followed by the thermostable vaccine (ThermoVax) in the late 1980s which did not require constant refrigeration.

McVety perceptively explores how each significant step in vaccine development impacted on national and international rinderpest control programs. Inactivated vaccines prompted governments to shift from isolation

and sanitation measures to mass vaccination schemes as the main mode of rinderpest prevention. In turn attenuated vaccines made eradication possible, while the development of TCRV and ThermoVax, made it cost effective. The result was a remarkable success story, when after decades of intense vaccination campaigns, the World Organization for Animal Health and the UN Food and Agriculture Organization (FAO) declared the world free of rinderpest in 2011.

The main strength of the book is the way in which McVety integrates the history of vaccine research with a broader and perceptive critique of the role of non-human actors in this story. In particular, the book provides a valuable insight into the interrelated issues of the development of scientific internationalism and national security, exploring how this resulted in the creation of the Office International des Epizooties (World Animal Organisation) and the global circulation of rinderpest viruses and vaccines during the interwar years. It explores how this subsequently became enmeshed in the tensions of the Second World War, the Cold War and global decolonization. McVety expands the standard Cold War narratives to show how these tensions were framed not only by economic and political concerns, but also by biological ones. During the Second World War, for example, several countries undertook research into the possibility of using rinderpest as a biological offensive weapon, but also developed defensive responses if it was used against them. Furthermore, the book also highlights contrasting postwar responses to rinderpest, showing how an international coordinated response was far from evident. The colonial powers in Africa tried to resist Food and Agriculture Organisation interference by creating a special branch for veterinary health within their CCTA (Commission for Technical Cooperation in Africa south of the Sahara). As such, McVety's study makes a significant contribution to the emerging historiography on late colonial resistance against UN agencies.

By adopting a top-down approach, focusing primarily on political elites, international institutions and high-level scientists, *The rinderpest campaigns* does not cover all aspects of the eradication story. Scant attention is paid to the field work of vaccinators (their routines, difficulties etc.) and the attitudes and response of livestock owners to rinderpest and the vaccination campaigns. It is only towards the end of the book that the author begins to tentatively investigate the crucially important role played by community-based animal health workers in dealing with the disease in the 1990s and 2000s. As the author briefly explains, their contribution was considerably more successful than both

national and international groups in vaccinating and monitoring the incidence of disease.

*The rinderpest campaigns* does not by any stretch of the imagination constitute a definitive history of rinderpest control and eradication. It is however an accurate, authoritative and accessible, account of the way in which the virus and its vaccines became enmeshed in the machineries of national security, international cooperation and development. In light of COVID-19 McVety's account provides a very relevant, perceptive and enthralling insight into the trials and tribulations of vaccine research and the inherent multi-faceted obstacles to its widespread adoption. The author should be congratulated for enhancing our understanding of a subject which is relevant to our current circumstances.

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CLAAS KIRCHHELLE, *Pyrrhic progress: The history of antibiotics in Anglo-American food production* (Rutgers University Press, 2020). 450 pp. 22 illus. \$120.

Claas Kirchhelle's book *Pyrrhic progress: The history of antibiotics in Anglo-American food production* is a substantial and useful historical analysis of the controversies associated with the use of antibiotics in animal husbandry in the United States (US) and the United Kingdom (UK) since the end of World War II. The book reveals and discusses the politics surrounding the use of antibiotics in animal husbandry, showing how it has been oriented towards profit, served the interest of Western economies, and been instrumental to the production of cheap food, shaping the broader productivist agricultural paradigm that persists today. The book should be of great interest to a wide variety of audiences, even if its content and not always jargon-free language are mostly targeted at academics who wish to explore this emerging field of research.

One of the merits of Kirchhelle's book is the rich diversity of materials on which the author draws, which range from more traditional sources such as archival material from government and industry publications, newspaper articles, to agricultural and veterinary manuals, consumer and activist publications, fashion and lifestyle magazines, and cookery books. Antibiotic use in animal husbandry is approached in the book as a multifaceted cultural phenomenon, intersecting science, industry, governments and society. Kirchhelle reminds us that the production and use of technologies such as antibiotics in animal husbandry materialize what Sheila Jasanoff has called 'practices of state-making', where science and technology are interwoven with power,

norms and hierarchies. The author's comparative and international approach is particularly valuable here as it supports an in-depth investigation of the broad and complex issue of antibiotic culture in animal husbandry.

This approach guides the structure of the book: divided into four parts, alternating between the US and the UK, Kirchhelle divides each part identically into three chapters or 'spheres – public, agricultural, and regulatory' (p. 10). After a very brief introduction on 'the antibiotic dilemma' and the author's theoretical and methodological framework, Kirchhelle plunges into the heart of the matter with the case of the US, where the "antibiotic era" truly began' (p. 15). The story told in the first part begins in 1949, when two researchers from the American laboratory Lederle made public their first observations on the growth-promoting effects of continuous low-dose antibiotics (AGPs) in animal feed. It ends about two decades later, when the Food and Drug Administration (FDA) organized a Symposium on the Use of Drugs in Animal Feeds to address 'public concerns about AMR' (antimicrobial resistance) in 1967 (pp. 71–72). The second part focuses on the UK, spanning from the end of World War II (a key period in the Western industrialization and intensification of animal husbandry) to 1969, when the famous British Swann report officially 'called for pioneering precautionary restrictions of medically relevant antibiotics in AGPs' (p. 75). Kirchhelle then returns to the US between 1967 and 2013, before completing the fourth and final part of the book looking at the UK between 1970 and 2018, when Europe decided to phase out the prophylactic use of antibiotics in animal husbandry.

The very rich and exhaustive analysis of the four parts ends with a surprisingly short conclusion in the form of a 'four-story' note. Albeit interesting, this note does not seem to live up to the expectations that the reader may have at this point on a continuation of the conversation with the scholarship alluded to in the introduction, such as the works of Sheila Jasanoff, Ulrich Beck, and Niklas Luhmann. Whereas the choice of 2018 for the last part of the book on the UK case seems to coincide with a regulatory decision in Europe, that of 2013 for the US seems less obvious: rather than ending with another failure of the US administration to put regulatory restrictions in place, Kirchhelle's empirical and theoretical contributions would have benefited from an exploration of the mechanisms that ultimately drove the US (like the UK, 11 years earlier) to ban the use of antibiotics as food supplements in 2017. Further, although serving as opening and closing of the book, the experiences and practices of farmers also seem to have been overlooked in the book. It feels

as if they are quickly conflated with, if not replaced by, a series of dominant and often limited discourses and media representations of trade unions and the farming press. While the author admits that 'many of [the sources] are elite and were written *about* rather than *by* actors themselves' (p. 11), more could have been imagined and done to bring out the less visible actors and rather marginal voices in Kirchhelle's stories. This purpose would have been better fulfilled by including other sources of information, such as videos, images, diaries, and interviews, for a more critical and comprehensive exploration of the role of different publics and their perceptions on the topic. Could the linear, and perhaps too rigid, chronological organization separated by types of actors (as stable and definable entities) have prevented the author from navigating more freely across different publics and epistemologies? This question is not just limited to humans as actors. Indeed, the book offers many anecdotes and images in which farmed animals are represented, and their individuality and relationship to humans could have been further highlighted and explored.

Kirchhelle succeeds, however, in producing a clear and comprehensive descriptive review of the Anglo-American history of agricultural antibiotics from the perspective of science, industry and government. Careful cross-referencing between sections and chapters undoubtedly helps the reader navigate the complexity across different spheres of technocratic powers, interests, and their co-production. Not everything can be covered in one single book and the meticulous work done by Kirchhelle is certainly commendable: the book stimulates the reader imagination for developing further stories and historical investigations of farmed antibiotics that would be more-than-Western, more-than-elitist and more-than-human.

CAMILLE BELLET  
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ANDREW N. CASE, *The organic profit: Rodale and the making of marketplace environmentalism* (University of Washington Press, 2018). xv + 272 pp. £22.99.

*The organic profit* is not just the story of Jerome Rodale ('apostle of nonconformity' as Carlton Jackson termed him in his 1974 biography), but of the Rodale commercial brand: established by Jerome and maintained by his son Robert. And because the book is a study of 'marketplace environmentalism', Andrew N. Case has chosen a punning title, to indicate the ambivalence at the heart of the Rodales' achievement. Jerome Rodale had no doubts about his own central significance for the American organic movement. In 1964, he wrote: 'The whole organic farming and gardening

movement in the United States owes its existence to me. I am its acknowledged leader'. Rodale was asserting himself against the impact of Rachel Carson's *Silent Spring* (1962). Twenty years earlier he had launched the journal *Organic Farming and Gardening*, and was evidently piqued that Carson made no reference to his early warnings about the dangers posed by industrial-chemical farming methods. Case demonstrates that Rodale was justified in considering himself a prime mover in the creation of US organicism.

Given the anti-semitism displayed by certain sections of the early organic movement in the UK, it is somewhat ironic that the movement's chief American spokesman was Jewish. Rodale was born Jerome Irving Cohen in 1898, anglicizing his surname in 1921 in order to improve his career prospects. A man richly endowed with the entrepreneurial spirit, he was variously an accountant, a businessman running an electrical manufacturing company, the publisher of diverse magazines, a playwright, and, most importantly for the purposes of this review, a gardener and farmer passionately interested in nutrition and health. His 1945 book *Pay Dirt* is a major text of the American organic canon.

Although city-bred, Rodale seems always to have wanted affiliation with the land, and in 1930 seized an opportunity to move his business to Emmaus in Pennsylvania. A keen gardener, he had also developed a concern for personal health, and responded enthusiastically to an article he chanced upon written by Sir Albert Howard. He wrote to Howard and their correspondence led him to buy a farm in order to practise the Englishman's 'Indore' method of soil enrichment. Case sets Rodale in the context of US agricultural developments of the 1930s and '40s: the Dust Bowl, the rapidly increasing influence of industrial-chemical farming methods, and the articulation of an alternative approach, based on return of biological wastes to the soil. Another of Howard's American disciples was the novelist Louis Bromfield, whose Malabar Farm in Ohio was a factor in persuading Rodale to take up farming. Other influences included Edward Faulkner's *Plowman's Folly* (1943) and the homesteader Ralph Borsodi.

When in 1942 Rodale founded *Organic Farming and Gardening*, it was gardeners rather than farmers who proved receptive to his message. Within a few years he was claiming 50,000 readers, and they provided him with a body of evidence and experience outside the conventional pathways of science. This openness of approach helped to create a sense of community and provide a means of gathering information. But, as Case points out, 'While [the readers] were building a method,

they were also helping Rodale build a market' (p. 39). The organic movement has always been about fostering health, and Rodale's first article about agriculture, in 1942, was titled 'Are Food Crops Fit for Human Consumption?' The answer was of course that those produced with chemical inputs and pesticides were not, and his gardener-readers provided much information about how their change to eating organically-produced food helped improve their health.

To protect them against other hazards, Rodale in 1950 founded the magazine *Prevention*, challenging the food industry, doctors and nutritionists with a natural health philosophy. *Prevention's* pages were increasingly full of advertisements for 'natural' goods such as vitamin supplements, and Rodale 'tested the boundary between selling advice and selling products' (p. 75). He became a figurehead for the environmental movement, challenging powerful commercial forces in the food and farming industries; but he was also an entrepreneur who knew how to make money and embodied a very American spirit of self-promoting capitalism.

I have concentrated on Rodale's links with the organic movement, but Case's book is an exercise in wider social history. It analyses the way in which 'marketplace environmentalism' reflected changes in American cultural life and shopping habits, with the term 'organic' coming to represent a 'personal style of living that reflected and enacted environmental values' (p. 149): a form of consumerism arguably incompatible with the organic movement's original radicalism. Anyone who visits the Daylesford Organic farm shop in Oxfordshire can observe the same process at work in England, turbo-charged.

Was Jerome Rodale someone who saw a bandwagon on which he could make a name for himself? Case is scrupulously fair-minded in his assessment of the Rodales' achievements and motives. There is no reason to doubt the genuine commitment of Jerome and Robert to the principles and practice of organic farming, but Robert was less combative than his father and helped detach 'organic living' from the counterculture and situate it within a more conventional lifestyle. In Case's view, this development has resulted in organic food becoming a niche brand which makes its consumers feel better about themselves, but has a minimal impact on America's food production methods. Ultimately, market forces cannot be relied on to protect the environment and provide people with healthy food; which implies that the Rodales' strategy may in fact have been misconceived.

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MARÍA JOSÉ SEVILLA, *Delicioso: A history of food in Spain* (Reaktion Books, 2019). 344 pp. 97 illus. £25. When I told a colleague that I was reviewing a book on food in Spain, her first reaction was, 'Really, another book on Spanish food?' I can see her point. Go to any bookshop and one can find a plethora of books on the subject. But few in English have so far made a profound, deep investigation into the history of food in Spain. That is the goal of María José Sevilla's new book, *Delicioso*, promoted as the first in English to do so. The latest volume in Reaktion Book's series on the history of different national cuisines, the book succeeds in the difficult task of being both a well-researched, academic tome on an often side-lined topic, while also being an enjoyable book that appeals to the general reader. Spain is a land of extraordinary diversity, a consequence of both its geography and a complex history of trade, migration, and invasion. This is the main point of Sevilla's introduction, where she also explains her connection with Spanish cuisine as a native food writer who has lived outside the country for many years, giving her insight both as a local and an outsider.

The book then follows a historic trajectory, presenting Spanish cuisine from prehistory to the present day, with the final chapter on the contemporary regional *cocinas* (cuisines) of Spain. Chapters generally begin with a description of the historical events and political scene in the relevant period of Spanish history under discussion. This discussion follows onto a consideration of Spanish agricultural economy of that era. Except for the introduction of agriculture into the peninsula (interestingly, later than the rest of Europe), a sense of disappointment often pervades this sub-section. The mismanagement of this area of economic life since medieval times was to cause many of Spain's problems going into the modern era. The description of the *Mesta* system of livestock rearing at the expense of cereals and crops in chapter 3 is particularly useful, and later chapters update the reader on its unfortunate consequences in ensuing centuries.

On occasion food is interwoven with this historical backdrop from the beginning, such as in chapter 4 on the Spanish Habsburgs (sixteenth to eighteenth centuries) and chapter 5 on eighteenth-century cuisine and its role in the new Bourbon monarchy. In others the history is so complex that it needs a thorough analysis before food enters the text, such as in the second chapter entitled 'Moors, Jews and Christians', which addresses a major theme in Spanish history, the Moorish invasion in 711 AD and ensuing occupation over the ensuing centuries. It is interesting that Sevilla emphasizes the difficult relationship that contemporary

Spaniards have with this era, despite its formative influence on Spanish culture, as well as its food.

An interesting feature of the book is the short overviews of 1–2 pages of important culinary elements in Spanish cuisine today, such as 'Bitter Oranges', 'Saffron' or 'Marzipan', which have their origins in the era under discussion. These are enjoyable asides that reveal much about the connectedness between past and present in Spanish cuisine. The only downside is they occasionally interrupt the flow of the narrative in the rest of the chapter. I should emphasize that the book is beautifully illustrated with detailed colour pictures and photographs, a feature that is especially important when talking about food, where a visual representation is more effective than a lengthy description.

Another strength of the book is the emphasis Sevilla places upon cookbooks and culinary literature. As a food researcher myself in Catalan cuisine (one of Spain's regional cuisines), I welcome this development, as understanding culinary literature is so important when studying food and cuisine. This is a theme throughout *Delicioso* from the third chapter onwards. Important cookbooks and culinary manuals of each era are treated with an in-depth analysis of content and the influence of these texts on Spanish society in the time, furthering understanding of the period and the development of food.

There are some rare moments where the phrasing or word choice is awkward. For instance, the earliest Catalan king, normally called 'Wilfred the Hairy', is called 'Wilfred the Shaggy'. Occasional factual errors also appear, such as on page 112 the reference to the death of Charles I's father in 1516, when it was in fact his grandfather who died. As a specialist in Catalan cuisine, I can say that Sevilla manages to cover this area well enough, however it becomes clear that her expertise is situated in different areas of Spain (her reference to chickpeas as an important ingredient on page 282 would send some Catalan chefs into paroxysms).

The final chapter on the regional cuisines or *cocinas* of Spain is the weakest, albeit the most relevant for today. Perhaps because of the author's background as a food writer, the writing here tends to stray into food and travel writing. This happens occasionally in earlier parts of the book (such as 'the taste for flowers, the cool patios bursting with colour, the soothing sounds of fountains ... are all still imprinted on the fabric of the people of Andalusia', p. 45) but becomes most evident in this chapter. While understandable considering the mouth-watering delicacies under discussion, some readers may find this change uncomfortable, especially when contrasted with the more business-like tone of previous chapters. The final sub-section on the future

of Spanish cuisine is the closest this book gets to a conclusion, and some readers may be disappointed to find that there is no grand argument that pervades the work. But that was never the intention. Instead, Sevilla has succeeded admirably in providing an historical overview of food, agriculture and cuisine in Spain from prehistory to the present day. It will be of use to scholars of Spain, food, and agriculture, as well as general readers interested in this area. On a personal level, I wish this book had been available to me when I made my early research into Spanish and Catalan cuisine.

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WILLIAM R. CARLETON, *Fruit, fiber, and fire: A history of modern agriculture in New Mexico* (University of Nebraska Press, 2021). 228 pp. \$55.

New Mexican farmers have been known for producing apples, cotton, and chile. During the twentieth century, these crops defined the state's agriculture and the people who raise them. William Carleton, editor of *Edible New Mexico*, traces the emergence of apples, cotton, and chile from traditional crops raised by Hispanic farmers to heavily capitalized Anglo, industrial-scale production. In each case, while university scientists developed new varieties, processors and marketers changed the history of each crop to help make them appeal to a broad spectrum of consumers, often by promoting them as traditional crops while using science to change them for commercial purposes.

Carleton argues that industrial agriculture and traditional farming systems co-exist and influence each other in New Mexico. He examines apple production during the early twentieth century regarding the quality of the fruit and its cultural and environmental landscape as well as its association with Anglo-driven modernity and sense of virtue. His development of cotton farming between the wars emphasizes immigration from the South and reliance on the state's land-grant college and experiment station for the development of new varieties. As a result, a Southern-style paternalism developed that aligned with modern concepts of scientific management and industrial efficiency to create a new agricultural landscape. Carleton also traces the transition of the state's most iconic crop, chile pepper, from a traditional crop raised by small-scale farmers for home use to a crop bred for Anglo tastes and a national market.

Carleton emphasizes the ways that apples, cotton, and chile changed the agriculture and culture of New Mexico. The success of each crop depended on modernization in the form of technology, specialization, and government assistance. Newcomers

considered traditional crop varieties as inferior and indicative of agricultural based on tradition rather than science. Anglo investors and farmers homogenized the crop varieties. Railroads shipped the produce to distant markets. The traditional, small-scale Hispanic farmers could not compete. Improvement meant the adoption of Anglo varieties which, in turn, meant white cultural superiority. New Mexico's commercial apples represented whiteness, science, and cultural superiority over Hispanic varieties, farmers, and cultural practices. Large, well-ordered rows of apple trees changed the landscape. New apple varieties required social controls, such as mandatory spraying for insects and orchard inspections, that changed the culture of apple raising. Apple production became identified with Anglo not Hispanic agriculture. Marketing also belied the truth about traditional varieties and ignored Hispanic and Native apple raisers. Many small-scale apple producers, however, blended traditional methods and new technologies to establish New Mexico as a major apple producing state.

Cotton also became an important crop between the two world wars. State land-grant scientists developed varieties suitable for the dry climate that also proved protective from the boll weevil and cross pollination. Federal government expenditures for irrigation, transportation, and research also made large-scale cotton farming possible. Newcomers often displaced Hispanic farmers, and tenancy and sharecropping emerged as new agricultural labour systems. Hispanics became the cotton workforce managed by Anglos. Racial tensions increased. Cotton farming became one-crop farming with a migrant labour force, and New Mexico became a winter waystation between the southern Great Plains and Arizona and California thereby changing the human geography of New Mexico as well as the look and physical use of the land.

Chile also represented New Mexico's Hispanic and Native cultural heritage which Anglos denigrated in racist terms. When Fabián García at New Mexico's land-grant college developed a new chile variety more appealing to Anglo tastes, it blended Hispanic and Anglo culture and gave New Mexico a new identity. His new variety had superior canning qualities compared to traditional varieties. Canned chile peppers meant progress and modernity. García drew upon the Mexican-U.S. borderlands for seed varieties that he crossed until he achieved the desired strain. The development of a new chile, however, also required changing consumer tastes and conveying that the new variety was mild, flavorful, and represented the best ingredient for authentic New Mexican cuisine. By the 1950s, farmers no longer merely raised chile pepper

for local, seasonal consumption. Chile peppers had become a major crop for commercial sale. Marketers promoted chile-based foods and identified chile as a gourmet dish and rather than a poor Mexican crop and food. A north-south competition among chile farmers in the state developed over modern and traditional varieties, but fears of genetic engineering threatened to displace traditional and hybrid varieties and ruin place-based recognition for the crop. Hispanic farmers considered chile a symbol of their cultural heritage, but Anglo farmers associated their cultural identity with newly developed university varieties and touted them as traditional crops.

During the twentieth century, science merged with traditional practices to produce a new form of agriculture in New Mexico. Although Anglo elites intended to raise apples, cotton, and chile as evidence of white, cultural superiority and expertise, environmental and cultural realities forced adjustments based on unforeseen circumstances. Carleton emphasizes that agricultural industrialization and modernization does not preclude the incorporation of traditional practices. He also contends that boosterism and advertising created false cultural identities regarding these crops that frequently departed from the scientific truth.

This clear and well-written, solidly researched study traces the ways in which traditional agricultural practices have influenced science-based, industrial agriculture regarding the production of apples, cotton, and chile in New Mexico. Science and the spoken and written word combined to explain the development of these crops often defined by cultural differences between Hispanics and Anglos. American agricultural historians will find this study revealing and suggestive for similar investigations regarding the development of modern agriculture across cultural borderlands where competing ideas and traditions merge to change the agricultural landscape for crops, people, and the land. It also is essential reading for anyone interested in the history of New Mexico. Carleton has written an informative and engaging agricultural history for New Mexico that significantly contributes to the larger agricultural history of the United States.

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STUART MCCOOK, *Coffee is not forever: A global history of the Coffee Leaf Rust* (Ohio University Press, 2019). 306 pp. 28 illus. \$34.95.

From the late nineteenth century, Coffee Leaf Rust (CLR) has posed the largest environmental threat to coffee production worldwide. CLR reduces the yield of coffee plants by disrupting the production of nutrients

that allow the plants and their fruit to develop. The pathogen, a fungus called *Hemileia vastatrix*, is endemic in many parts of Africa, but it only becomes an effective disease when it finds a susceptible host and under specific environmental conditions. The preferred host of the fungus is *Coffea arabica*, which is less genetically variable and therefore more vulnerable to pests and disease than its main cousin and commercial rival, *C. canephora*, also known as robusta coffee. Rainfall, temperature, sunlight and cropping patterns are the main conditions influencing spore germination and dispersal. At high altitudes, the fungus causes little damage to coffee plants, while at low altitudes, in warm and humid climates, co-existence is almost impossible. The triangular relationship between pathogen, host and environment sits at the heart of Stuart McCook's superior study of CLR's devastating trek across the global south after its first outbreak in 1869 and the efforts of scientists, farmers, and coffee companies to contain its impact.

Since this is in large part a study of disease control, the book mainly focuses on historical events in the climatic middle belt, 'the space where coexistence is possible but requires effort' (p. 6). McCook examines the global distribution of CLR chronologically, starting with a chapter on the pathogen's natural environment in Ethiopia, giving valuable historical background to current theories of coffee agro-forestry systems. While the fungus was present in the coffee forests of southwest Ethiopia, it was contained by the conditions under which coffee was grown: the forests sheltered plants from heat, wind, and heavy rainfall, while low coffee population densities and the presence of counter-fungi further prevented rust from developing. From Ethiopia *C. arabica* travelled to Yemen. While the fungus possibly never joined its host across the Red Sea, it would in any event have struggled to survive in Yemen's dry environment, as it needs droplets to germinate. During the eighteenth century, arabica moved, still free of rust, from Yemen to farming systems across Asia, the Indian Ocean, and the Caribbean. In India and Java, coffee was initially grown by smallholders as a garden or forest crop, but as the global coffee trade expanded in the nineteenth-century, colonial regimes across the global south began to favour mono-cropping and forest clearing to expand outputs, thereby increasing the vulnerability of the coffee plant.

Subsequent chapters document the first outbreak in Asia and the Pacific, the effects of CLR in colonial Africa, and its long-foreseen arrival in South and Central America in the 1970s. The chapter on Ceylon, the epicentre of the global leaf rust epidemic, introduces many of the book's key arguments. The first

lesson is that the outbreak and spread of the disease must be explained historically. McCook argues that the fungus arrived from East Africa in Ceylon through colonial maritime networks in a period of intensifying trade in the Indian Ocean region. On top of Ceylon's wet climate and strong monsoon winds, the spread of the fungus was helped by the development of estate farming, which posed few physical or genetic barriers for rust spores to disperse and reproduce. The effects of deepening global integration and the ecological risks of monocropping are recurring themes in the book. The second lesson is that CLR alone seldom causes coffee production to collapse, but in combination with low coffee prices it can be fatal. From the first outbreak, farmers have devised different strategies to live with CLR, ranging from chemical control to the introduction of rust-resistant coffees. But low coffee prices could quickly make these expensive strategies unsustainable, forcing planters to abandon coffee. In Ceylon, smallholders swapped coffee for cash crops they could integrate in their farming systems, like spices, rubber, coconuts, and palm products, while estate farmers switched to tea.

The third lesson is that while CLR has thus far not affected total global coffee outputs, it has caused fundamental shifts in the world coffee market. A fascinating illustration of this is the rise of robusta coffee after 1900, which tastes rather bitter in the cup but has come to represent almost half of global coffee production. In the Dutch East Indies, CLR forced coffee farmers in the lower climatic belt to abandon coffee completely and turn to rubber instead, but growers higher up began experimenting with disease-resistant varieties introduced from Africa, most notably robusta. Within decades, most farmers in Java and Sumatra had replaced their arabica stands with robusta, forcing European and American coffee markets to adapt. This period also witnessed the start of scientific efforts to breed disease-resistant hybrids of robusta and arabica varieties, of which Timor and Catimor are successful examples. The turn to robusta continued in Africa, where colonial governments began to stimulate coffee production based on naturalized and introduced cultivars as global demand for coffee increased after World War One. It soon became evident that endemic rust limited settler-dominated arabica cultivation to a few highland areas, whereas predominantly African-grown robusta thrived in the lower climatic belts. Major African producers, like Angola, Congo, Côte d'Ivoire, and Uganda, pushed increasing amounts of robusta onto the market, shaping the taste of ordinary coffee blends and southern European espressos alike.

The final chapters of the book, dealing with the post-war period, are strongly focused on efforts to manage CLR in Latin America, for which McCook has been able to rely on a large body of scientific literature. While they lack the compelling narrative flow of the earlier chapters, McCook effectively highlights the similarities between recent and earlier containment strategies, especially the expense and limitations of chemical control and the vulnerability of coffee farmers to the vagaries of the global market, with economic uncertainty resulting in poor crop management, neglected farms, and continued planting of varieties susceptible to CLR. The book ends on the sour note that coffee companies and consumers push farmers to grow high-quality arabica coffees, whereas the threat of CLR and global warming makes this increasingly difficult. This is a magnificent study that should of interest to global and environmental historians as well as social and agricultural scientists.

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ALANA MANN, *Food in a changing climate* (Emerald Publishing, 2021). 272 pp. £16.99.

CHRIS OTTER, *Diet for a large planet: Industrial Britain, food systems, and world ecology* (Chicago University Press, 2020). 400 pp. 65 illus. \$49.

Alana Mann's well-timed, compact book provides a persuasive critique of the complex interrelationship between ecologies, cultures and political economies in respect of the globalized food supply industry. The central thesis is that the commodification of food has accentuated climate change and, in turn, made consumers more vulnerable to the impact of extreme weather events and even pandemics. Mann explores the origins of this fossil fuel-based system of food production and how international trade in food has become increasingly dominated by a declining number of mega-companies which have focused on producing crops for the industrialized, developed global north. This, according to the author, is the prime reason for the emergence of the exploitation of the environment and, the poverty and hunger which is evident in the global south. This has led to widespread monoculture and in its wake environmental harm and misery for local communities, with the marginalization of farmers and food workers and a corporatized, globalized system of food production and supply. For the industrialized nations in the north, this has in turn contributed to unhealthy diets, surplus production and hyper-consumerism. Throughout, Mann cites, but does not always necessarily fully endorse, the findings of an extensive raft of sources which often castigate the prevailing food industry in a multiplicity of forms.

The unsustainability of this industrial food system is perceptively argued and the solutions, according to the author, are self-evident. These include the application of new technologies, the revival of traditional knowledges and the promotion of diversity among food producers to protect their livelihoods. Mann provides a critical assessment of, for example, engineering nutrition, where the damaging effects of food production might be mitigated by the application of genetically modified organisms which enables the production of cultivated meat replacements in laboratories. Cultivated meat can produce significantly lower emissions than the meat produced from methane-burping cattle or grain-eating pigs and poultry. Such a solution would have dire implications for the dominant industrial livestock industry which, some sources claim, is one of the most important causes of global warming. Mann explores the causes and consequences of what is identified as the industrial grain-oilseed-livestock complex with its focus on meat production for the wealthier nations of the world. Cutting the overconsumption of conventional meat in rich countries will not only reduce obesity, but is also seen as vital in helping to alleviate the climate crisis. This would also have implications for many developing countries whose populations aspire to consume more meat. However, how such a change could be implemented in practice receives scant attention.

The author's unashamedly politically-inspired critique advocates for the pressing need for a rejuvenation of local and regional food systems which have been eroded by the overwhelming quest for global economic efficiency. Mann recognizes that agricultural practices which include indigenous and local knowledge can contribute, to a greater or lesser extent to overcoming the combined challenges of climate change as well as ensuring a more robust system of food security. The ways in which this revival can be achieved in practice are covered in a rather general sense and focus mainly on Australian examples.

*Food in a changing climate* is primarily concerned with providing a critique of what is portrayed as the present malaise rather than exploring the historical long-term causes of international specialization, which was facilitated by the development of free trade and colonialism. It deals with colonialism in a rather general way without specifically identifying and evaluating the crucially important role Western Europe played in this process. The neglect of Britain is particularly noticeable. It was in effect Britain's dietary transformation, with the outsourcing of the country's nutritional needs that was responsible for transforming international trade and establishing the global food system.

Overall, this account based on a critical appraisal of the causes for the existing precarious system of globalized food supply significantly enhances our understanding of the complexity of these issues. This book will appeal to the tastes of those interested in the history of food, environment, industrial consumption and global capitalism, particularly those committed to changing it. For those living in the industrialized north who are the main beneficiaries of the present system, the stark and uncompromising message it conveys may prove rather unpalatable, particularly to those who have the power to create a more sustainable global food system.

Complementing the critical analysis of the existing global food system is Chris Otter's *Diet for a large planet*, which explores the historic shift to a diet rich in animal proteins and refined carbohydrates, particularly white bread and sugar. As Otter notes, these developments cannot be categorized as being exclusively confined to modernity, the Anthropocene or the Great Acceleration. Instead, their origins can be traced back to the 'large planet' philosophy of the nineteenth century, and the British food system which allowed more people to enjoy a more calorie-rich diet. Here Otter covers what Mann omits: the historic role of Britain's dietary transformation in the shaping of our present global food system.

In this persuasively argued critique, Otter traces the origins of the modern diet to Britain's eating habits and the way different types of food were perceived in the nineteenth century. Focusing on Britain's desire for meat, sugar and wheat, *Diet for a large planet* shows how the country's almost insatiable historic desire for these commodities has transformed global land use and, in turn, increased carbon emissions and facilitated extinctions. The outsourcing of the country's nutritional needs and the foodways which emerged paved the way for a global agri-food system that consumes more resources than the planet is able to sustain. Otter's perceptive analysis shows how prevailing diets of choice, consisting of red meat, wheat bread and sugar are linked to luxury, wealth and power, and contribute to environmental degradation and climate change.

Otter is primarily concerned with exploring the long-term causes of international specialization which was facilitated by the development of free trade and colonialism. The historical ideological foundations which underpin the emergence and dominance of the British commitment to free trade are perceptively explored. In his seminal work *The wealth of nations*, the ardent supporter of free trade, Adam Smith, persuasively argued that government intervention in the food supply system was responsible for causing rather than

preventing famines. More importantly, he argued that if commodities could be acquired more cheaply from overseas then it was in Britain's interest to import them. This was further refined by the Ricardian model of comparative advantage which was practised, vindicated and perpetuated until well into the twentieth century. Otter's historical perspective significantly enhances our understanding of how and why the prevailing global system has become politically and epistemologically so firmly ingrained.

Implicit in Otter's thesis is the idea that these changes occurred in a linear fashion without any significant reversals. Scant attention is paid to the non-trivial changes in the British diet which were implemented by the state in response to the food shortages of both the First and Second World Wars, especially the latter. The enforced reduction in imports of staples such as wheat, meat and sugar necessitated an unprecedented state-directed transformation of the nation's diet. The experience of state-directed food production and food distribution of the Second World War reveals the extent to which the country's eating habits can be successfully transformed in order to deal with a food shortage of unparalleled proportions. To cite but a single example, the enforced reduction in wheat which took place during the Second World War led to considerable efforts to change the type of bread baked. As introducing bread rationing was considered unacceptable, efforts focused on increasing the extraction rate (the amount of flour extracted from the wheat) so that it contained a greater amount of bran, used in what was called the national loaf. In the longer term, this led to the development of milling varieties of British wheat, which could be used instead of hard-grained varieties used in bread production. In a similar way, Otter pays scant regard to the post-war scientific efforts to enhance the output and productivity of British agriculture in order to reduce dependency on imported food. Consideration of the wartime and post-war developments, largely neglected by Otter, would have enabled a slightly more positive interpretation of the inherent weaknesses in the prevailing global food system. Overall, *Diet for a large planet* offers a rather frightening, pessimistic prognostication into the future of what is deemed to be our unsustainable global food supply system and its adverse impact on the environment. The book will be particularly appealing to those interested in Britain's role in the global food system, environment and patterns of food consumption.

*Diet for a large planet* and *Food in a changing climate* complement each other well and provide informed assessments of the workings and development of our present global food system. Together they enhance our

understanding of its vulnerabilities and why reform is so essential.

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MARY VIRGINIA ORNA, GILLIAN EGGLESTON, and ALVIN F. BOPP (eds), *Chemistry's role in food production and sustainability: Past and present* (Oxford University Press, 2020). 256 pp. £115.

This edited collection examines the past, present and future of the role of chemistry in food production. The collection is split into four parts: 'Setting the Context', 'Sustainability in the Past', 'Sustainability in the Present', and 'Food and the Future'. Sixteen substantive chapters examine chemistry in food production from different perspectives, ranging from Eggleston's chapter on the history of sugar and sweeteners through to Sarkadi's chapter on the effects of fertilizer on food supply.

Chapter 1 sets the scene for the whole edited collection, describing the past, present and future of chemistry in food production. The past describes the history of agriculture, food additives, and the development of fertilizers. The present provides an overview on nutrition and diet, food analysis, food and the environment, and packaging and preserving food. The final section discusses the future of chemistry in food production.

Chapter 2 moves on to discuss the role of the United States Department of Agriculture (USDA) in food production. This chapter is less about chemistry per se, but more about how the USDA manages food security, food safety, and nutrition alongside environmental stewardship. The history of agriculture is examined in chapter 3. A chronology of agricultural breakthroughs from the eighteenth century through to the twenty-first century is provided in tabular form. This is followed by a discussion of the introduction of some of these scientific and technological developments such as the seed drill, pasteurization, the creation of fertilizer through the Haber-Bosch process, and the development of pesticides such as DDT.

Chapter 4 changes focus to the history of sodium chloride, or what is commonly known as 'table salt'. The different histories of salt are described including the use of salt as a meat and fish preservative, the use of salt in medicine, salt taxes in Egypt, China and North America, and salt in religious beliefs and practices. Salt as a nutrient is also examined along with controversies surrounding salt consumption in the twenty-first century. Chapter 5 focuses on the history of sugar and sweeteners. Seven phases of history are examined dating from 8000 BCE through to the twenty-first century.

Attention turns to Harvey Wiley and the transformation of the American diet in chapter 6. Harvey

Wiley brought the adulteration of food and potentially harmful additives, to the attention of the American public at the turn of the twentieth century. His ideas concerning the purity of food are a lasting legacy, and continue to shape the manufacturing and marketing of products today. The theme of adulterated food continues in chapter 7. This describes the history of the use of colourants in adulterated food.

Alcohol is the subject of chapter 8. This chapter explains how examples of alcohol consumption for medicinal purposes have been found dating back to 100,000 years ago. Often, dissolved botanicals were mixed with alcoholic drinks to treat many different ailments.

Chapter 9 discusses the effects of fertilizer on food supply. This chapter provides a brief overview of the history of fertilizers before introducing the reader to some of the chemical compositions of fertilizers. A very brief paragraph explains the positive benefits for using fertilizers, and then the discussion moves to the risks of fertilizer use.

The evolution of flour in America is the focus of chapter 10. This chapter describes wheat, gluten, milling and bleaching. The discussion then moves to examine the gluten-free movement and explains how this has had a detrimental effect on wheat production, and on the flour and milling industries. In chapter 11, attention turns to nutritional advice and how chemistry may assist. This chapter examines the science of nutrition, as well as some of the problems associated with eating such as diabetes and obesity.

The use of chemical analysis in food safety and food authentication is the focus of chapter 12. In this chapter, the focus returns to the adulteration of food and food safety. Heavy metals, mycotoxins, and pesticides can be found in foods, and these can be deadly. Chapter 13 has a complete change of focus and is a relatively short chapter discussing rising sea levels and the consequences for Louisiana fisheries.

The history, controversy and hope of genetically modified organisms is discussed in chapter 14. This

chapter describes genetic modification and genetically modified food. The debates surrounding genetically modified food are also briefly discussed. This discussion is quite dismissive of some of the valid concerns around genetically modified food. The chapter concludes by arguing that genetically modified foods are required in order to feed a growing population.

Chapter 15 discusses food preservation and packaging. It starts by discussing hunter-gatherers before moving on to the domestication of plants and animals. This discussion about domestication also covers mechanization, and the green revolution. Attention then turns to food spoilage caused by a range of mechanisms such as pests, time, and oxidation. The final section of this chapter discusses food packaging. A detailed review of packaging materials is presented including paper, metal containers, polymer-based packaging, and active packaging. In the final chapter, the discussion focuses on the past, present and future of food chemistry. This examines 'natural' ingredients, especially as consumers are demanding products that contain simple and recognisable ingredients. This is another chapter that discusses food adulteration, although this chapter also describes some of the processes which can be used to detect food fraud.

This edited collection covers a range of topics. The chapters are all very informative and work well as stand-alone pieces. However, there is no flow between the chapters. For example, there are four chapters which discuss adulteration of food, but these are spread throughout the book. It would have been easier for the reader if these had been grouped together. The edited collection could also have been improved by including a concluding chapter. This would have helped because the book covers such a wide range of different chemical applications in food production. However, this edited collection will prove useful and informative for those undertaking research in the area of chemistry in food production.

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