

Review Article

Where we are with Wood-Pasture: Two Recent Books and the Current State of Research.

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European Wood-Pastures in Transition: a social-ecological approach. By T. HARTEL and T. PLIENINGER (eds) 2014. Routledge Earthscan, 303 pages, 58 illustrations, ISBN 978-0-415-86989-8, £90 hbk.

Trees, Forested Landscapes and Grazing Animals: a European perspective on woodlands and grazed treescapes. By I. D. ROTHERHAM (ed.), 2013. Routledge, 412 pages, 106 illustrations, ISBN 978-0-415-62611-8, £75 hbk.

These two edited volumes both deal, from a variety of perspectives, with the history and ecology of ‘wood-pastures’ – grazed woodlands – a type of habitat which once covered vast tracts of Europe but which has been declining at various rates for many centuries, and with increasing rapidity over recent decades. Wood-pastures have recently become a key area of research as a consequence, in particular, of the work of Frans Vera (Vera 2000). As most readers will probably be aware, the ‘Vera hypothesis’ proposes that the pre-Neolithic landscape of northern Europe was not dominated by closed-canopy ‘forest’, as was once assumed, but by more open environments - dynamic savannas characterised by grassland and more thinly scattered trees, with only limited stands of true woodland. The key ecological ‘drivers’ in such landscapes were herds of herbivores, their numbers kept in check by predators like the wolf and lynx. Their grazing was sufficient to prevent large-scale woodland regeneration without entirely suppressing tree growth, especially where young trees were protected by areas of thorny vegetation. The assumption inherent in many of the contributions to these two important books is that there is a close and direct connection between these ‘natural’ environments, and the managed wood-pastures of recent centuries. The latter can thus provide a model for the kinds of unmanaged grazed woodlands that advocates of ‘Rewilding’ believe we should be creating in order to ensure a future for nature in Europe (Soulé and Noss 1998; Foreman 2004; Monbiot 2015).

European Wood-Pastures in Transition provides a magnificent over-view. It will be of particular interest to landscape historians in Britain because traditional forms of management have declined more recently in some other parts of Europe and practices recorded there can arguably throw light on systems which once existed here. A well-written introduction by the editors rightly emphasises the extent to which ‘social and ecological processes and treed landscapes in a human-shaped Europe cannot be separated’ (p.3), and this includes the circumstances of the demise of such landscapes over recent centuries through the adoption of more intensive forms of agriculture and forestry. A series of chapters then explores current threats to European wood-pastures; the history of wood-pastures across a

variety of timescales in France, Spain and Switzerland; and aspects of the biodiversity and ecology of wood-pastures (including an excellent contribution by Steven Falk which, for the non-specialist, neatly explains why ecologists seem so obsessed with dead wood and veteran trees). Chapters on 'socio-cultural values' describe the communal management systems still operating, or only recently lost, in Greece, Hungary and Romania, emphasising their complexity and sophistication. The final sections of the book address current initiatives to protect remaining wood-pastures at both national and EU level.

Trees, Forested Landscape and Grazing Animals has a rather more British focus, although it does include important contributions relating to Germany, central Europe, Scandinavia and Spain. It also contains more detailed historical analysis. The editor's clear and succinct introduction is followed by a series of broad over-views which include contributions from many of the most important names in the field. The late Oliver Rackham provides a summary of different woodland management traditions, written in his characteristically clear and arresting style; Derek Yalden gives a particularly useful discussion of the post-glacial history of grazing animals in Europe; Ted Green explains the importance of ancient trees for biodiversity; while Keith Alexander is immensely informative on deadwood and wood decay invertebrates. Ian Rotherham's own chapter, discussing varieties of wooded landscapes, is characteristically full of insights and makes the important observation that historical understandings of surviving wood-pastures are often simplistic, with ecologists tending to lump together, as one, landscape types which actually have diverse histories. Ancient deer parks are thus often confused with landscape parks of eighteenth- or nineteenth-century origin which have no continuity with the grazed woodlands of the early middle ages, because 'for many ecologists, a park is a park' (p.77). In addition to such broad, themed chapters, this volume also contains a number of important case studies. These include Péter Szabo's discussion of pannage systems in medieval Hungary, Adrian Newton and his colleagues' examination of the relationship between grazing intensity and vegetation in the New Forest, Martin Goulding on the effects of wild boar on the ecology of the Forest of Dean and Gareth Browning and John Gorsht on the impact of Galloway cattle on the 'rewilded' Ennerdale valley. Almost without exception, particular studies have a wider relevance which the authors duly highlight.

Wood-pastures are important for numerous reasons but many contributors to both volumes appear to agree that a key significance is the connection they provide with the deep past: Vera's open grazed woodland developed directly into the managed wood-pastures of the historic period, and surviving examples of these habitats can throw important light on these lost landscapes. Knowledge of the past can thus, in turn, 'better inform contemporary management and conservation' (p. 4 in Rotherham's volume) of surviving wood-pastures. Yet while in general terms both volumes buy into this core narrative of continuity/survival, they also contain much that subverts it. In particular, that narrative only makes sense if we accept the main thrust of the 'Vera hypothesis', that Europe before farming was dominated by relatively open, grazed woodland. This view is restated by Vera himself, with minor qualifications, in Rotherham's volume, but is contested or extensively qualified elsewhere in the book, and it is good to see this further evidence of a fight-back (following, e.g., Hodder *et al.* 2009) against what was in danger of becoming an ecological orthodoxy. The discussion by Kirby and Baker, about whether herbivore numbers would indeed have been enough to

prevent substantial woodland regeneration, is particularly useful; so too are Yalden's observations concerning the effects that the late Pleistocene extinctions of the 'megafauna' may have had on the post-glacial vegetation – 'Not surprisingly, the evidence of savanna is stronger in past interglacials' (p.65).

These objections could, in fact, be amplified. The extinction of the Pleistocene megafauna was almost certainly in large measure a consequence of human predation (Lyons *et al.* 2004), and it is hard to believe that the herds of large herbivores which constituted the main 'drivers' in Vera's grazed landscapes did not have their numbers firmly kept in check by human populations which were, after all, substantially larger than those of the late Palaeolithic. While it is almost certainly true that the pre-Neolithic landscape of northern Europe was more varied than we once assumed, including some quite extensive areas of open ground, the majority of the land area probably comprised closed-canopy forest. As Samojlik and Kuijper put it, 'The prehistoric landscape in Europe most likely consisted of large stretches of closed high forest dominated by browsing ungulates, interspersed by open or part-open landscapes dominated by large herbivores' (p.157, Rotherham ed.)

As Yalden emphasises in his contribution to Rotherham's volume, the density of domestic animals in the landscape following the adoption of farming was much higher than that of wild grazers before it. It therefore follows that the wood-pastures of the historic period were not necessarily the surviving fragments of essentially natural landscapes. They were more intensively grazed and more intensively managed than anything that had existed in the Mesolithic. Indeed, even if Vera is correct, and grazed woodlands did indeed dominate the pre-Neolithic landscape, centuries of exploitation and management must have ensured significant changes, in terms of structural character and species composition. By the middle ages, across much of Europe, the extent of this transformation must have been considerable. In England, the area covered by grazed woodland contracted dramatically from the later Saxon period (converted to farmland or enclosed coppice-with-standards woods) and while significant tracts survived as wooded commons or as private deer parks they were now highly managed, as well as intensively exploited, environments. In deer parks, interventions intended to enhance deer populations must have drastically altered the character even of those examples which had been reclaimed directly from the wooded 'wastes' and it is noteworthy that early lists of parkland timber often include species which were rare, or absent altogether, in the surrounding woods and wooded commons, in the surrounding countryside, and in the prehistoric pollen record of the immediate area. Common wood-pastures, grazed common woods, were also shaped by conscious management so that, for example, in some regions commoners were allowed by custom to fence off portions of common land (usually near their own properties) to protect newly planted trees, as Patsy Dallas has demonstrated (Dallas 2006). The kinds of complex management practices documented in recent times in Greece or Hungary and described in *European Wood-Pastures* were evidently widespread in England until the eighteenth or nineteenth centuries, and must over time have served to increasingly differentiate common wood-pastures, in numerous ways, from the woodlands of prehistory.

In this context, perhaps the most important contribution to Rotherham's volume is that by Péter Szabo, which uses both palaeoenvironmental and documentary evidence to suggest that the species composition of the woods in the Carpathian basin changed significantly during the middle ages.

Traditional management, in contrast to modern forestry, is not normally seen as a driving factor of the distribution of various forest types. Oakwoods might prove to be a counterexample. Because of the economic potential of acorns, woodland owners may have decided to conserve oakwoods or even to transform other type of forests into oakwoods (p.56).

It is perhaps worth emphasising here the remarkable fact that the dominant tree species in the pre-Neolithic landscape over large areas of lowland England was small leaved lime (*Tilia cordata*), rare by historic times, in grazed woodland or indeed anywhere else. At a more local level, significant differences between primeval and historic woodlands are suggested by the case of hornbeam. This is the dominant species in the understorey of coppiced woods in much of south Norfolk and north Suffolk, and across south Essex and south Hertfordshire. In the latter districts hornbeam was, by the late middle ages, also the dominant wood-pasture tree both on common land and in many deer parks. Yet it was poorly represented in the prehistoric landscape, to judge from pollen evidence, and it does not seem to feature in documents before the second half of the fourteenth century. In fifteenth-century manorial accounts for the parks at Great Munden and Knebworth in Hertfordshire the bailiffs recorded receipts for ‘trees called hornbeam’, as though the name was unfamiliar (Rowe 2009, 34). The earliest use of the tree in an English place-name is thought to be Hornbeamgate in Hatfield, first recorded as late as 1366 (Austin 1995, 2). Hornbeam may thus only have become widely established in the district during the middle ages, and there are indications that its importance increased still further thereafter. In 1538 Hatfield Great Park in Hertfordshire was said to contain 2,000 oaks and beech, but no hornbeams are mentioned. By 1626, however, the Great Park – now described as the Great Wood - contained 5,227 hornbeams ‘of all sorts’, ten times the number of beech, the next most numerous species (Austin 2013, 143). By this time, huge numbers were present on the local commons, such as the 24,000 recorded on Cheshunt Common in 1695 (Rowe and Williamson 2013, 156-7). It is hard to account for hornbeam’s rather late rise to prominence in this area unless it was being actively planted or otherwise encouraged, in both woods and wood-pastures, and Anne Rowe has recently argued that it was being deliberately established on common land as late as the seventeenth century by manorial lords (Rowe 2015, 310-14). The frequency of this tree in the coppiced understorey of enclosed woodland, and as a pollard in both private and common wood-pastures, in Hertfordshire and Essex clearly owed less to the composition of the woodlands of prehistory than to economic factors operating in the historic period. Hornbeam makes excellent charcoal, ideal as both an industrial and a domestic fuel, and it may be no coincidence that the two main concentrations of hornbeam woods and wood-pastures in England – in south Norfolk/north Suffolk, and south Hertfordshire and south Essex - are close to the country’s two largest medieval cities, Norwich and London (Barnes and Williamson 2015, 80-85).

It could thus be argued that the role of the landscape historian is to research the probable differences between the ‘natural’ woods and the managed wood-pastures of the historic period, as much as to emphasise the similarities and continuities between the two. And the critical importance of humans in the formation of surviving wood-pastures needs to be kept in mind when we come to consider the concept of ‘rewilding’. The creation of large tracts of land in which human influence is minimised or removed altogether was first

advocated in the United States but is a concept which has gained ground steadily in Europe and the UK over recent decades. It has been put into practice at Oostvaardersplassen in Netherlands, and in England at Ennerdale in Cumbria and on the Knepp Castle estate in Sussex, and has recently been popularised by George Monbiot in his book *Feral* (Foreman 2004; Jepson 2015; Soulee and Noss 1998; Monbiot 2015). This is not the place to consider the innumerable practical and philosophical objections to what is becoming a popular movement in natural history circles. Suffice it to say that rewilded landscapes could never closely resemble the grazed woodlands of the pre-Neolithic or, to use George Peterken's terms, 'future nature' would of necessity be radically different from 'past nature' (Peterken 1996, 13). Rewilded reserves would contain a range of animals which were not present in Mesolithic times, including both species of rat, the brown hare, the rabbit, the grey squirrel, fallow deer, muntjac, sika deer, and Chinese water deer (Yalden 1999); and they would boast a flora featuring an even greater range of naturalised species such as sycamore and rhododendron – especially the latter, given that areas currently targeted for large scale rewilding are mainly in upland districts, where this plant has become seriously invasive. In an important way rewilded reserves would still be *cultural* landscapes, for the motley array of plants and creatures living within them would represent a dim memory of specifically human actions and desires, ranging from medieval hunting fashions to Victorian gardening fads. But this in turn raises the question of how far even the landscapes of the Mesolithic were really 'natural', in the sense of being unshaped by human activities, given the sheer scale of the impact made by hunter-gathers on the environment recorded by ethnographers elsewhere in the world (Lewis 1982), together with the evidence for such an impact in Britain before the Neolithic (Brown 1997; Edwards 1990; Mellars 1976; Innes and Bickford 2002; Smout 2009, 114-5).

Other problems and issues with the concept of rewilding are highlighted by Della Hooke in her contribution to Rotherham's volume. The conversion of the 'natural' landscape – whatever its precise character – to farmland may actually have *increased* rather than lessened biodiversity, and agricultural landscapes, managed on 'traditional' lines, arguably provide a greater diversity of habitats and niches, at a range of spatial scales, than would be afforded by the secondary grazed woods of rewilded reserves (see also Williamson 2013). Hooke also makes the point – an important one for all landscape historians at a time when the popular enthusiasm for 'rewilding' is increasing - that the creation of extensive rewilded reserves would inevitably involve the wholesale disappearance of many elements of the historic landscape – hedges, traditionally managed woodland, field patterns. Indeed, the erasure of such signs of the human past appears to be actively welcomed by some 'rewilders' precisely because it serves to foster the 'experience' of wilderness. All this marks a significant and worrying shift in the relationship between ecology and landscape history, for in the twentieth century a succession of conservationists and historical ecologists, most notably the late Oliver Rackham, saw the landscape as something which embodies both natural *and* human history, the two interacting in complex ways (Rackham 1986).

Wood-pastures are thus an important area of research, topical and relevant and likely to become more so over the coming years, and these two volumes deserve to be widely read by all those with an interest in the landscape, past, present and future. Yet what is curious is that nowhere does either provide a clear definition of a 'wood-pasture' in terms of tree

densities; or to put it another way, no attempt is made to define, however vaguely, the point at which any given area of land ceases to be a wood-pasture and becomes instead an open pasture containing only a small number of free-standing trees. Of course, lines are hard to draw when the objects of enquiry occupy a continuum, with no sharp breaks, but the issue is, nevertheless, in urgent need of attention. Failure to address it ensures that environments very different in appearance, ecology and history are discussed as one. A place like Staverton Park in Suffolk, essentially a wood comprising densely-set oak pollards, is not the same as the kind of open, thinly-treed savannas depicted in many of the illustrations used in these two volumes. Lack of definition also renders problematic the distinction usually made between ‘primary’ and ‘secondary’ areas of ancient woodland. How thinly-treed must an area have become in the past, before we can assert that it had ceased to be a wood, and that the woodland occupying it today must in consequence be defined as being ‘secondary’ rather than ‘primary’ in character? A very great deal of work remains to be done on this crucial landscape type, by landscape historians in particular. But these two important volumes both summarise admirably the present state of our knowledge, and clearly illuminate avenues for future research.

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