It is argued that orchards and groves are components of a wider landscape heritage. Indeed they may share key attributes with either or both grasslands and woodlands, and their closest analogues are perhaps parks. Wonderfully diverse and a rich component of both ecological and cultural heritage, they have been sadly overlooked and misunderstood for decades. This has been to their ultimate disadvantaged and many have been lost or damaged beyond repair. I suggest that a further loss has been of a wider and totally neglected resource of trees in smaller farms and in domestic gardens. With many cultural aspects that relate to woods and parks, the abandonment of traditional uses and values threatens the long-term future of the sites and areas that remain. To be successful, future conservation must recognise the nature of the resource and seek to place it in a framework that is socially, economically and ecologically sustainable.

Introduction

Orchards and groves and their trees are extraordinarily rich habitats and also heritage features in the landscape. With this in mind it is strange how so few books on woodlands and trees or on historic landscapes make any serious mention of them. Not only this, but with specific reference to orchards, for many decades in the UK planning system they were totally ignored and almost never received any protection. During my time as a local authority ecologist in Sheffield, any attempt to protect or conserve orchards and other fruit trees was met by the response of ‘….they are not real trees anyway, and besides they are all short-lived’. A direct consequence of this and of the trend to urbanisation and abandonment of rural landscapes during the late twentieth century has been what I would regard as a catastrophic loss of a unique heritage. Furthermore, the heritage itself has a rich local and regional flavour and characteristic; something which national conservation agencies have supposedly sought to protect in recent times.

There has been some recognition of the importance of traditional orchards where they are larger and of regional economic significance, so perhaps Gloucestershire, Herefordshire, Worcestershire, Somerset, Cambridgeshire, and Kent. In these situations the associated biodiversity has been belatedly recognised with Mistletoe (Viscum album) and obvious and high-profile plant associated and often dependent on this habitat. As often the case Mistletoe itself is host to associated species such as six insects uniquely dependent on it. These include a Red Data Book insect the Mistletoe Tortrix Moth. Another species often overlooked is the shrubby lichen called Sticta limbata, and associated with clean air and old trees. It has declined with habitat loss and air pollution, particularly by nitrogen and sulphur. On the trunks of orchard trees grows a distinctive and rare feather moss called Supine Plait Moss (Hypnum resupinatum). However, it is not just the trees that are important. The grassland in which the trees stand may be ancient and valuable habitat in itself, and there can be rare species associated here too. In this context the Waxcap Fungi (Hygrocybe) are now recognised as very important indicators of ancient and unimproved grassland, and orchards can be good for them. Clarly in many situations too, orchards are important habitats for more commonplace wildlife such as Foxes and Badgers, and a host of birds like Bullfinch and Greenfinch.

The conservation of the large orchards raises particular issues of social and economic sustainability, since protection is not enough. They need to be actively used and managed and

Without an economic function and driver, this cannot be maintained. This is why initiatives such as organic and traditional drinks and fruits are so vital, and where they lack to tourism promotion too, then there is hope for a halt to the decline and perhaps even recovery. Yet worthwhile and important though such initiatives are, they don’t address the other resource that concerns me. Until relatively recently, along with the big and sometimes industrial scale of fruit growing, every farm, every big house and hall, and many lesser homes and cottages all had fruit trees and often orchards. Most of these have been at the very least neglected in recent decades, but the majority have been actively destroyed. These range from historically a significant old Walnut Trees in Sheffield, to ancient Mulberry Trees, to old farm-based orchards with unique and unrecorded varieties of Apples and Pears. This is bad enough but there is more. Until quite recently, and certainly during the 1800s and early to mid 1900s, it was common practice to stock new houses with local varieties of fruit trees. So every 1920s semi-detached house in Sheffield would have its complement of Apples, Pears and Cherries. These even become hosts to the now regionally rare Mistletoe as it was squeezed out of decline larger orchards across the region. Again though there has been no protection or even advice or guidance for householders and developers on these wonderful trees. I suspect there is hardly any basic information on where they are or indeed what varieties they are.

Despite the lack of interest or recognition in key texts on historical ecology, on archaeology, or on conservation, there is a rich literature on orchards and especially on fruit. Examples include Anon. (2000), Arbury & Pinhey (1997), Blackburne-Maze (1986 and 2003), Greenoak (1983), Hawthorne et al. (2007), Juniper & Mabberley (2006), and Roach (1985), to mention just a few. These give insight into both fruit cultivation and into its history. They also provide guidance on conservation and management but not necessarily on aspects of either ecological interest or on archaeology.

A Matter of Definition

We deliberately titled the conference and the book ‘Orchards and Groves’ in order to emphasise the relationships and wider context beyond just fruit trees. It is also clear that across Europe for example, worked trees (sometimes still working), occur in a range of situation from orchards to parks, to hedgerow and boundaries, to terraces and lane-sides, to meadows and riversides. Furthermore, they produce fruit but also nuts, bark, wood and timber, tree fodder, and a variety of other associated outputs. In many cases, and still visible in southern and eastern Europe in particular, these are multi-functional landscapes with the products of the trees, plus grazing for livestock, and sometimes arable crops too. In these complex and sophisticated systems everything has a value and everything is used. It is also clear that trees other than fruit trees are also grown in ‘orchards’. So the Cork Oak (Quercus suber) (De Oliveira & De Oliveira (1991)) is cultivated in extensive orchards to harvest the bark. Again with changes in technologies these landscapes are under threat.

According to the Shorter Oxford English Dictionary an orchard was formerly ‘a garden for herbs and fruit-trees’, and now ‘an enclosure for the cultivation of fruit-trees’. A grove is ‘a small wood; a small group of trees affording shade or forming an avenue or walks’. There is even an adjective ‘grovy’ which means ‘of, or pertaining to, or resembling a grove; abounding in groves; situated in a grove’. However, a quick search of classic forestry texts such as James (1991) An Historical Dictionary of Forestry & Woodland Terms makes no mention of orchard. It does give a useful comment on the term grove. Apparently Evelyn used the word but with reference to ornamental planting. By the eighteenth century, the meaning of grove had evolved so that groves, close groves, and closewoods, all mean the same and were used for the equivalent of a modern forestry plantation. William Marshall in 1796 noted ‘The timber grove is the prevailing plantation of modern time. Woods or coppices are seldom attempted’ and ‘where a straightness and length of stem and cleanness of grain are wanted, closewoods or groves are more eligible’. Grove plantations are said to differ from forest
Fruits and other products have for millennia been harvested from the wild, and perhaps even managed in the wild to enhance their crop. It would have certainly made sense for ancient peoples to foster and to protect trees that produced a desirable harvest. The Wild Service tree is such an example with a deep-rooted cultural and ecological history. The berries were taken as a staple crop by Neolithic people, and the use of berries as a sweetener and as the flavour for certain alcoholic drinks, persisted until the late 1800s or early 1900s (Mabey, 1996). The use was most likely for a spirit flavoured by the berries in the same way as Blackthorn berries steeped in gin produce sloe gin. The ‘Chequers’ inn name derives from the fruit and the name itself from the speckling on the surface of the berries. Similarly, soft fruits such as Blackberries, Bilberries, and Cranberries have always been gathered free from moors, heaths, bogs and woods, and in times past they were harvested commercially. Now the crops are from managed sites and ‘orchards’.

Orchards and Groves in the Landscape

As already noted, there is a surprising lack of attention to orchards in the main works on historical ecology and landscape history. Rackham (1986) for examples makes almost no reference to orchards, though noting that in 1347-8 the lord of Petworth in Sussex for his orchard purchased ‘2 ½ gallons of tar ….. for greasing the …..young trees to protect them from rabbits’. He does note orchards as one of six ways in which people have managed trees throughout history, and raises the issues of confusion within the plantation landscapes in that twentieth century forestry statistics include planted trees with grass beneath them as ‘plantations’ but not if they have fruit trees. His seminal book Ancient Woodland its history, vegetation and uses in England (1980), places orchards in the category for trees, of ‘non-woodland’. In Trees & Woodland in the British Landscape (1976) he states that orchards and trees of streets and gardens are outside the scope of the book, but he does suggest that planted trees of garden and orchard could go back as a tradition to Roman times. He also noted that ‘forestry’ tree planting is relatively modern, and earlier tree planning in say the 1200s or 1300s, was generally in hedgerows or in parks. The case of Sweet Chestnut, a Roman introduction coppiced or pollarded, makes an interesting case. Rackham suggests that the huge Tortworth Chestnut in Gloucestershire may have begun life in a medieval orchard, and surely this begins to make the link between orchards and gardens and the wider historic landscape. On the same theme he notes how ancient trees from former gardens or orchards may be markers of deserted medieval settlements. In The Nature of Mediterranean Europe (2001) Grove & Rackham give an overview of many of the trees and cultivation systems in the region and discuss for example, the Italian ‘Chestnut Orchards’ with both managed ‘natural’ forest and orchards on constructed terraces. The Chestnut is an example of rich multi-functionality, producing nuts for food and flour, wood, and timber. He notes how Chestnut woods are still coppiced for poles and firewood on a vast scale. Along with the Olives, the Mediterranean Chestnuts are famous for their longevity. Whilst the reticence of Rackham and others to include orchards and fruit trees in their core studies is understandable, it has undoubtedly disadvantaged the recognition and conservation of the resource.

It is not always clear where a coppice for example begins, and an orchard ends. Hazel in the UK is generally a hedgerow or woodland shrub or small tree, and is often coppiced. One of its main products and an important crop in times past was the harvest of Hazelnuts. In the
cloughs of the Upper Derwent valley in the Peak District for example, in the 1800s, Hazel was so abundant that the harvest was collected and loaded into panniers or peaters carried by packhorses. These were taken over Cut Gate to Penistone Market some miles north. In a good year the harvest more than paid the rent for the farm, and ‘The trees were so plentiful that hey collected the nuts every year by the bushel load’ (Byford, 1981). This was an important crop and the use probably outlived that of the cutting of poles for fuelwood or charcoal. In the 1980s Meg Game described the development of the ‘Kentish Cob’ a variety of Lambert’s Filbert developed by the Victorians and grown in orchards across Kent. These were incredibly popular. By the late 1800s the gathering of wild Hazel nuts had become a major industry, employing ‘a great many poor families in the Autumn who might otherwise have very little to do, and of course be a burden to the public’. The nuts were gathered and sent to markets in London and other towns and cities. However, it is not clear whether these were ‘wild’ Hazel nuts or cultivated Filberts in orchards. It is known from archaeological evidence that Hazel nuts were important as food for people from a very early time, and this is the nut gathered from hedgerows and woods everywhere until recent times. The Filbert, which is preferred in cultivated orchards, is related to the Hazel but is not native to Britain. One 48-year old Filbert tree in a Kentish orchard, unpruned, was reputedly thirty feet high and fifty feet ‘through’, taking six people a quarter of a day to gather 110 pounds of nuts. Although Hazel was commercially important it seems that nuts were gathered wild until quite late. It was not until the 1660s that they were grown in plantations or orchards. Evelyn described their planting in plantations twelve feet apart and pruned to five feet high, and by 1794 there were several hundred acres of Filberts just around Maidstone. The Hazel, the Cob, and the Filbert give a nice example of the dilemma of when is an orchard is a wood. Clearly the earlier harvest was from nature, though perhaps managed woods, often as an additional product along with poles for building, for fuelwood, and for charcoal. However, through the 1800s into the 1900s, in Kent at least, they were grown in orchards. Whilst many orchards have been swept away through abandonment and modernisation, one wonders the extent to which an abandoned Filbert or Hazel orchard might resemble a Hazel coppice wood.

The omission also means that to understand the history of these trees and their landscapes we must look elsewhere, and the rich literature on gardens and garden history is perhaps the best starting point. Nan Fairbrother for example in Men and Gardens (1956) described how a medieval monastic garden might look: ‘……and the cemetery is laid out as a pleasure orchard, with ornamental and fruit trees formally arranged between the graves’. Indeed it is probably in the monastic establishments of the medieval period that the traditions of formal orchards and the growing of fruit trees were maintained. All the great abbeys and the monastic houses and granges would have had herb gardens, vegetable gardens, and orchards. Many also had vineyards and some had parks to provide hunting, food, wood and timber and fish from fishponds. Again there is a crossing over, in this case between the functional and productive, and the ornamental and recreational. So the formal orchard, with its blossom and fruits, and grassy walks between the trees, was also valued as a place for recreational walks. Large houses might have a great park, but perhaps also a ‘little park’ with ornamental trees planted and collections of animals and birds for ornament rather than the chase. It must be a strong possibility that some of the ornamental trees were fruit trees. As towns grew during the medieval period they too would have included gardens and orchards. In the ancient core of old Sheffield there is still a Fig Tree Lane named after the famous large Fig Tree in a garden there in perhaps the 1600s or 1700s. As early as 1180, William FitzStephen wrote of Holborn that ‘Everywhere without the houses of the suburbs, the citizens have gardens and orchards planted with trees, large and beautiful, and one joining to another’. Medieval towns were relatively spread out with pools, streams, areas of grass, and with orchards and gardens of many sizes. As society grew and became more sophisticated the great and the good developed their interests in gardens and planting. For example at Thornbury Castle in Gloucestershire the Duke of Buckingham had constructed a fortified inner garden that had a galley leading out into a walled orchard. This was described as ‘Full of young grafftes, well laden with frute,
many rooses, and other pleasures; and in the same orchard ar many goodly allyes to walk ynne openly’. The orchard was surrounded by a bank with planted Whitethorn and Hazel (Uglow, 2004). One wonders how such a garden or orchard might appear today if abandoned and overgrown and set in a wooded landscape. Some of the town gardens were enclosed perhaps like Italian gardens in cities like Florence, and were a refuge from the stench of the city and the threat of plague and other diseases. This is an interesting line of enquiry but space and time do not permit more than a fleeting glimpse here. But the point is established about the longevity and the lineage of orchards and how they must have been embedded in the wider landscape context.

Mixed Management and Multi-functional Use

My thesis here is that some, though not all, orchards were multi-functional in much the same way as were the medieval parks (see Rotherham, 2007, 2007a). Such mixed management is still seen in Southern, Mediterranean and Eastern Europe, and must have been widely practiced in Britain too. In the Northern Pomona (Hawthorne et al., 2007), Barry Potter makes just this point with his descriptions of old orchards in Yorkshire. He also notes the issue of the lack of written records of say farm orchards and the importance therefore of oral histories where they are possible. As is the case with many traditional and ‘cultural’ uses of the landscape, once they cease there is little record remaining. I suspect that this is the case with the older orchards, large and small. Some clearly have much of the character of great medieval parks, with ancient trees and grass sward beneath, plus a boundary of varying character enclosing them. This intimate usage along with obvious influences of topography and climate, and thereby the fruit that it was possible to cultivate, lend to orchards a strong degree of regional and local character. There are also ways of managing fruit trees and orchards that complicate further the image of the fruit tree in the landscape. Potter notes for example, the practice of grafting good fruit stock onto self-sown wild Crab Apples in hedgerows. Over time the hedge becomes a linear orchard, and it is hard to imagine that this didn’t happen with Crabs on the edges of old woodlands too or perhaps in medieval parks. It may be that many of the supposedly accidental fruit trees that occur in hedges and other places, often assumed to be from a cast-away apple core, are actually deliberate grafts. Another aspect raised by Potter is that it was less common in the north of England for old orchards to be grubbed up and re-planted. Old stumps might also be left in situ to decay and rot away or to sucker; resulting in an old orchard of great character and potentially genuine antiquity. Associated with old orchards is a variety of buildings for storage and processing of the harvest. These include barns, cellars and lofts on the farm or even out in the woods or orchards, for example the chestnut drying sheds in Tuscany. These now form a part of the heritage and archaeology of the industry.

Old orchards were multi-functional and Potter for example, describes how sheep were kept in Yorkshire orchards to keep the grass down, or to be close by the farm for special attention or care. Problems of grazing of bark off the trees were solved by tying bunches of thorns around the bases of the trunks. Similar grazing under orchard trees is common elsewhere in Europe, and in a large old orchard produces a landscape similar in many ways to a medieval park: large old trees with grassy plains and grazing stock.

Discussion and Conclusions

This brief survey attempts to raise issues and to promote a wider discussion of the place of orchards and ‘groves’ or other productive landscapes of worked and working trees in their broader context. It seeks to highlight the fact that many aspects of these rich and often ancient sites have been overlooked or misunderstood. Furthermore, it suggests that the omission has led to serious loss of the resource and that this has occurred at many levels from very small local sites to major and significant orchards. Furthermore, many of the trees are working
trees, and even where they survive a lack of appropriate management may be damaging. However, it is also suggested that the scale of the losses over the twentieth century have been grossly under-estimated simply because of this lack of recognition. There are simply no estimates of former occurrence of small domestic orchards or those attached to every farm and farmstead or cottage. There are data from the early 1900s on the extent of larger and more recognisable orchards at a county level, and a simple inspection of these more than makes the point (Hurst, undated). The returns for areas under orchard were first collected in Britain in 1871, and these included returns from all agricultural holdings of a quarter of an acre or more. These included quite small sites but of course only ones classed in some way as ‘agricultural’. From 1890, the statistics changed to include only those of more than one acre. It was noted that this therefore omitted the fruit grown on allotments or in other small orchards. The report also notes ‘that great progress in recent times has been made in planting in orchards and gardens which are not represented in the agricultural returns’. This implies a lot of activity in smaller orchards and fruit growing during the late 1800s and early 1900s. There were also considerable inaccuracies in the data collected. However, it was suggested that in around 1873 there were 148,221 acres of orchards in Great Britain and this increased to 250,686 by 1911. In 1888, the greatest acreages of orchards were in Devon, Hereford, and Somerset, followed by Worcester, Kent, Gloucestershire, Cornwall, and Dorset. Yorkshire for example had 3,323 acres of orchards in 1888, and 1,729 acres of soft fruits, the figures are about the same in 1911. From 1907, the statistic attempt to separate out the different types of fruit in the various areas, but it was also noted that often different kinds of fruit were grown together in the same ‘fields’. In 1911, there were 170,154 acres of Apples, 9,420 acres of Pears, 16,788 acres of Plums, 12,005 acres of Cherries, and 42,319 acres of other varieties and mixtures. These figures are huge, but exclude the smaller on more complex occurrence of fruit trees in smaller sites, in hedgerows, and as components of other wooded landscapes.

This brings the discussion back to the questions of recognition and context. It seems there are clear differences in age and function and character between many orchards and other wooded landscape features. However, it also seems that there are many areas of overlap and similarity. Much seems to depend on the perception of the product of the landscape, be it fruit, nuts, wood, or timber. Yet a medieval park might have great value for its production of Chestnuts, or of Beech mast or acorns for pannage. Around and within enclosures in the park were coppices that would produce wood but also Hazel nuts. There were also ‘hollins’ that produced vital leaf fodder for deer and maybe for cattle too. It seems sensible that there would have been other fruit trees planted within the parks and in the boundaries of coppice and hollin enclosures etc too. These would have been truly multi-functional cultural landscapes. Over recent times in particular, much of the diversity has been lost, either abandoned or deliberately ‘improved’. As with many cultural landscapes, all but the most recent memories of traditional uses have long since gone too. In the Mediterranean there are still rich multi-functional cultivation systems in place, but many are being abandoned or are under threat. Oliver Rackham (pers. comm.) has raised the serious matter of the imminent threat to such landscapes in Crete and elsewhere, and Sylvia Haslam (pers. comm.) has described threats in Malta.

In the contemporary landscape, orchards may still be present but not necessarily recognised. In Sheffield there are examples of the dilemmas that these pose. In the now urbanisation rural landscape of the Gleadless Valley for example, there are several old orchards. Not one of these is presently managed as an orchard, yet all contribute very positively to the historical resource and to the present-day ecology. In some cases the abandoned fruit trees together with other markers of long-gone farmsteads, provide diversity and are noted attractions to locally uncommon bird species. They are gradually being re-absorbed into the local wooded landscape. In one case the trees are maintained in a short-mown grass sward with other ornamental trees as indicators of a former large house. Replacement planting however is with totally inappropriate species and the concept of the orchard is not recognised. One of the most

Exciting examples are at Woodhouse in Sheffield where an old orchard now abandoned has colonies of both Snowdrop and native Wild Daffodil both well-established. These were undoubtedly taken from local woods and therefore of local genetic stock; incredibly rare in the district. As the orchard now merges with woodland establishing from abandoned hedgerows with old woodland plants like Dog’s Mercury and Bluebell, this site gives an idea of how a regenerating wooded orchard might appear; and the apples are delicious. I would argue that the species involved are equally deserving of conservation and protection as if they were in there now depauperate native sites.

Other local sites also raise difficult questions for conservation. The restored old orchard at Beighton in Sheffield is renowned for its feeding Parakeets; controversial though because this is an establishing non-native species. The importance of fruit trees for this bird runs deep though. As a regular visitor every autumn to a garden in Meersbrook, Sheffield, a single old Apple tree (perhaps 100m years old), was the attraction. Now felled by an unsympathetic landlord, the fruit apparently attracting too many pests, the Parakeet will need to look elsewhere. These examples are merely anecdotal, but they do demonstrate the shadow of old orchards left imprinted on the landscape, in many different and diverse ways. In most cases these sites would not be recognised in any land management or planning assessments as ‘orchards’ yet that is what they are. They are irreplaceable and invaluable contributors to cultural and ecological diversity in the landscape.

The British and European approaches to fruit orchards and fruit cultivation were exported around the globe in the 1700s-1900s with huge impacts on ecosystems. Particularly in North America there is a further issue of the major environmental impact and also the heritage, and the historic or cultural legacy of these systems and their exploitation.

Finally, because these are landscapes and associated features evolved with and driven by social, economic and cultural needs, their future conservation requires an economic value. These developed as working landscapes and if it is to have any long-term significant impact, conservation must recognise the need to value them both economically and culturally.

References


Plate 1. a. Manningham Park and its famous Pear orchard, early 1900s
b. Multiple use of an English orchard 1915. Spring ploughing and planting
c. Sheep grazing under a Cherry orchard near Maidstone, Kent, early 1900s
d. Working in the Orchard

Plate 2. The Cranberry Girl

Plate 3. Hop Pickers in Kent, 1876

Plate 4. Wild Pear, Sowerby 1864

Plate 5. Wild Cherry, Sowerby, 1864