English Orchards in History: production, aesthetics and myth

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Introduction

Until comparatively recently, orchards were a common sight throughout England, a familiar part of the landscape. Some were associated with farmhouses and were filled with tall, spreading trees. Others were old commercial enterprises, mainly established since the mid-nineteenth century, or were planted close to hospitals, colleges or other institutions to provide food for the residents. Many were intensively-managed fruit farms, with low-growing trees, closely spaced. Whatever their type, since the 1960s numbers have fallen, steadily and drastically, for a variety of reasons: the rise of the great supermarket chains, increasing levels of foreign imports, the decline of small farms, changes in agricultural subsidies and, perhaps most importantly, changes in lifestyles and attitudes to food. Not only have we lost the majority of our orchards. The wide range of fruit varieties once available has dwindled. Most shops now only sell a limited number, many with recent origins. This is not simply a matter of losing some odd-looking fruit with strange, evocative names – D'Arcy Spice, Dr Harvey, Norfolk Beefing. It also means that a diverse range of tastes has been lost to our experience, almost unnoticed.

The wholesale disappearance of orchards from the landscape – their replacement by arable fields or housing, their conversion to gardens or pony paddocks – is a significant change. For centuries orchards were an indispensable part of everyday life, a central part of our culture, valued not only for their fruit but also for their blossom, so cheerful a sight after the long winter months. Moreover, particular areas of the country – because of their soils, climate or access to markets – developed dense concentrations of orchards, which became a defining aspect of their local landscape: the cherry orchards of Kent, the cider orchards of Somerset. Orchards were woven into the fabric of local life, and their presence both encouraged, and might be stimulated by, particular local industries, such as cider making.[i] In some districts – the Vale of Evesham in the west Midlands, the East Anglian Fens around Wisbech – orchards still form an important element of the cultural landscape. But in most others they have largely or even entirely disappeared.

Old orchards are also of some importance for biodiversity, with their combination of old, herb-rich grass and 'veteran' trees of species which, while not themselves indigenous, have close native relatives.[ii] Fruit trees age more quickly than other trees, becoming filled with the cavities and the rot required by a large number of rare organisms, especially saproxylic insects. Lichens, mosses, and fungi all flourish in old orchards. But although they are sometimes described as 'semi-natural habitats', orchards inhabit the world of culture more than that of nature. They are inherently short-lived – apple trees will seldom exceed an age of 120 years, cherries 80 years and plums 60 – and have limited powers of regeneration. A neglected orchard, if grazed by livestock or mown, will become a paddock. If completely left to its own devices, it will soon develop into secondary woodland. Nor can the particular varieties of fruit sustain themselves unaided. As most readers will be aware, the majority will not 'breed true' so that a pip from, say, a Cox's Orange Pippin will not

grow into a tree bearing fruit of this variety. Instead, every pip will represent a new genetic variation. Only by grafting wood from an existing Cox's tree, onto a rootstock, can a new tree of this variety be obtained.[iii] Most of the chance variations arising from sown pips will be hard, bitter, or at best bland. But some seedlings will produce attractive and useful fruit, while new varieties also emerge from 'sports', that is, as genetic mutations on the tree itself. They might then be grafted, propagated and exchanged with friends or neighbours or marketed commercially. In addition, however, fruit breeders also deliberately developed novel types, by cross-pollinating established varieties with desirable characteristics. A vast range of varieties was developed in these ways over the centuries to fulfil particular functions in terms of storage or modes of consumption. Such uses, as well as aspects of appearance, are often reflected, in apples in particular, in nomenclature: 'russet' (as in Rosemary Russet) thus refers to areas of brown, rough skin on the fruit; a 'codlin' or 'codling' (as in Keswick Codlin) is an apple which will cook to a smooth pulp. However named, and however used, all such varieties need to be perpetuated by grafting onto rootstocks if they are to survive into the future.

Rootstocks come in a variety of forms. In the case of apples, early writers made a distinction between 'crab' or 'wilding' stocks, and 'paradise'. The former produced tall, vigorous, spreading trees; the latter, dwarfing or semi-dwarfing specimens. During the twentieth century a range of improved, more disease-resistant rootstocks was developed at the East Malling Research Station in Kent, some in conjunction with the John Innes Institute, then based at Merton in Surrey.[iv] Most remain in use, variously producing small, 'dwarf' trees, and larger vigorous ones, although how fast and how tall a tree grows is also a function of the variety of the graft. Bramley's Seedling apple trees, for example, almost always tower over their neighbours. Pears, which often grow much taller than apples, were originally grafted onto wild pear stock, but from at least the nineteenth century onto rootstocks of quince. Most cherries, plums and other fruit are similarly grafted on rootstocks although some, such as greengages, can be grown 'true' from seed.

In addition to grafting, orchards require regular, highly skilled pruning to ensure that the maximum crop is obtained from orchard trees, as well as protection from pests and disease. Orchards are thus, in many respects, highly engineered environments. Yet while shaped by the rigorous requirements of production, orchards have also acquired other significances and meanings. They were, and are, regarded as objects of beauty; they have become entangled in myth. These various aspects of English orchards – production, aesthetics and myth - and the connections between them, are the subject of this short article.

Production: Farmhouse Orchards

For centuries, the majority of English orchards were associated with farms and produced fruit for domestic consumption and a small surplus for local sale. They usually covered between half an acre and an acre (c.0.2 and 0.4 hectares), but some were smaller, like the example of 15 perches (400 square metres) recorded in Great Henny in Suffolk in 1669:[v] Below this size, collections of fruit trees certainly existed, in the yards and gardens of cottages, but they were usually too small to be recorded on maps or in documents. Wordsworth memorably described 'these plots of cottage-ground, these orchard-tufts' in his 'Lines Composed a Few Miles Above the view Tintern Abbey' of 1798.[vi]

Although orchards were ubiquitous, in most areas, before the nineteenth century, they covered a relatively small proportion of the land area, generally less than one per cent of the total acreage. Thomas Tusser in 1570 nevertheless emphasised their importance to the farmer:

Good fruit and good plentie doth wel in thy loft,
Then make thee an orchard and cherish it oft.[vii]

Indeed, the central role of orchards in the domestic economy of early modern England is clear from the attention paid to their design and management in general books on husbandry, gardening and related matters, as well as in more specialised texts. In his *A New Orchard and Garden* of 1618 William Lawson advised that 'trees should be well spaced', at a distance of 20 yards, in order to provide the room which they needed to mature. He also recommended surrounding the orchard with a hedgerow planted with filberts, that is, domesticated hazel nuts.[viii] Gervaise Markham, writing in 1613, thought that the trees could be planted just twelve feet apart, 'sufficient enough for their spreading', and in 'such arteficiall rowes that which way soever a man shall cast his eyes yet hee shall see the trees every way stand in rows making squares, alleyes and divisions according to a man's imagination'.[ix] Such advice was either widely followed or based on established practice. When, in 1734, Mary Birkhead laid out a new orchard for her daughter at Thwaite in Norfolk she appears to have followed Markham, describing how 'The orchard is an acre of land very near square. The trees planted in rows look which way you please'. But she inclined more towards Lawson regarding the actual spacing of the trees, allowing '36 foot one way and 26 the other'.[x] Inside the perimeter fence she planted, not just filberts as recommended by Lawson (and Ralph Austen in his 1653 *Treatise on Fruit Trees*) but also plums, quinces and barberries. On one side – probably the north – there was a single row of six walnut trees. Birkhead also placed a filbert bush between the trees in the grid formed by offsetting rows of odd and even numbers of trees. She described a second orchard in her memorandum books, with eleven rows of varying length, each containing from ten to twenty trees – 152 in all. Here pear trees were more interspersed within the rows of apple trees, but filberts, walnuts, cherries and plums were again consigned to the margins of the plot.

Other early plans and descriptions, admittedly few in number, suggest that these examples were typical. In particular, apples always appear to have been the most common fruit in domestic orchards, followed by pears. Cherries, plums, cob nuts and filberts were often present, but mainly planted around the margins; walnuts, mulberries and medlars also featured, but sporadically. In some cases, it is true, particular orchards may have been dominated by apples because other fruit trees were placed in the gardens. All the fifteen trees recorded in an orchard at Carleton Rode in Norfolk – probably at the parsonage – in 1758 were apples, but plums, pears, and cherries were all to be found growing beside the walks in the garden, along with two almonds and a mulberry, although even here apples made up nearly half of the trees.[xi] The dominance of apples, the secondary significance of pears and the tertiary place of other fruit reflects the varying extents to which different kinds of fruit could be successfully stored, without having to be preserved, bottled or converted to jam, although in the west of England especially it also reflects the fact that much of the crop was made into cider or perry.

Farm orchards were complex, multi-use environments. Bee keeping was discussed by both Lawson and Markham; hives or skeps placed in the orchard ensured pollination as well as providing honey. William Baker of Great Chishall in Essex, who died in 1598, left his wife Alice '1 hive of bees standing

in my orchard….'.[xii] Maps occasionally suggest that the ground between the trees was cultivated, for vegetables or soft fruit, but the overwhelming majority of farm orchards were under permanent grass. This was often cut for hay, to judge from tithe payments and other documentary references.[xiii] The will of Margaret Haward of Writtle in Essex, drawn up in 1729, refers to apples, walnuts and plums in the orchard, and to 'one hay cock' standing there.[xiv] But orchards were also grazed, whether routinely or after the hay harvest. Sheep and poultry were kept there rather than larger stock like cattle or horses, presumably because of the potential damage which the latter could cause to the trees. Indeed, leases often instructed tenants to exclude them from orchards.[xv] Regular grazing partly explains why farm orchards were characterised by tall trees on vigorous rootstocks, of the kind which still characterise the older planting in surviving examples (Figure 1). Trees on dwarfing stocks would have been more vulnerable to grazing, even by sheep.[xvi]

Orchards were useful places but many owners, as writers like Lawson suggest, must also have regarded them as places of beauty. Farm orchards were, almost without exception, located in close proximity (often immediately adjacent) to the farmhouse, and this may not have been entirely due to considerations of convenience or security. Nevertheless, as we shall see, it is in the ornamental grounds of the elite that the aesthetic role of the orchard is most obvious.

Production: Commercial Orchards

In 1577 William Harrison described how the nation's orchards 'were never furnished with so good fruit nor with such variety as at this present', and by this time some areas of the country were producing a surplus of fruit, beyond the needs of local consumption, for processing into cider or perry or sale in urban markets.[xvii] Orchards for cider apples were well established by 1600 in parts of the West Country and the West Midlands; the cherry orchards of Kent were already famous, William Bullein describing in 1595 how 'In the country of Kent be growing great plentie of this fruit'.[xviii] Cherries were also widely cultivated in south Buckinghamshire and West Hertfordshire by the early decades of the eighteenth century. [xix]By the end of the eighteenth century, and probably for some time before, orchards were extensive in the damp Fenlands of Norfolk and Cambridgeshire, in 'Ely, Soham, Wisbech &c. … the chief growth, apples and cherries ; Soham is remarkable for the latter.'[xx] But examination of the map evidence suggests that even in these districts fruit-growing, although an important side-line for farmers, was never a principal concern. While the orchard acreage was generally above the 1 per cent of land area representing normal domestic production, it seldom rose above 3 and never above 5 per cent, except occasionally within, or in the immediate vicinity of, major cities. Thomas Fuller famously declared in 1682 that it was impossible to tell whether Norwich was 'a city in an orchard or an orchard in a city', so full was it of fruit trees. [xxi]Large-scale production was held back by the limited extent of urban markets and the poor character of transport systems. There was no point producing a surplus of fruit if it rotted before reaching its destination. The first moves towards commercial production thus occurred not simply where environmental conditions were favourable – on loamy or silty soils overlying chalk or some other permeable geology (or, in the Fens, where loamy land was artificially drained) - but also where markets could be accessed.[xxii] The Fen orchards were concentrated close to the inland port of Wisbech; the cherry orchards of Kent and the Chilterns lay within easy reach of London.

The real development of specialised orchard landscapes began in the middle decades of the nineteenth century. By this time, industrialisation had led to the emergence of major industrial

conurbations in the Midlands and the North of England while London had experienced phenomenal growth. These concentrations of people, many of whom lived with little or nothing in the way of gardens, constituted a substantial market for milk, vegetables, eggs and fruit. From the 1840s the progressive development of the rail network provided a means of reaching them. Further expansion was stimulated by the agricultural depression which began in the 1870s and which continued with only limited interruptions until the Second World War, which encouraged small farmers to diversify production. It was also encouraged by early twentieth-century government schemes to create smallholdings, especially to house demobbed veterans following the 1914-18 conflict; and locally by the development of fruit dependent industries, such as cider production, jam making and canning.[xxiii]

Existing areas of production expanded dramatically. Already by 1900 there were more than 7 square kilometres of orchards within 5 kilometres of the centre of the Cambridgeshire town of Wisbech.[xxiv] By 1939 the plum and apple orchards of Worcester accounted for over 7 per cent of the county's land area.[xxv] But entirely new orchard landscapes also developed, such as the 'Aylesbury Prune' district of south-west Buckinghamshire and south Bedfordshire. By 1900 the 'prune' - a small dark cooking plum or late eater, a cultivar of the damson – was extensively cultivated in a band, 2 or 3 miles (*c*. 3 – 5 kilometres) wide, extending for some 12 miles (*c*. 19 kilometres) from Weston Turville in Buckinghamshire in the south-west to Stanbridge in Bedfordshire in the north-east.[xxvi] Vast areas of orchards existed in the local villages, those in Eaton Bray alone extending collectively over 50 hectares (Figure 2).[xxvii] Most of the fruit was taken, packed in baskets, to nearby railway stations on the London to Manchester railway line, opened in 1838. The arrival of the railways was the main catalyst for the development of a fruit-growing industry here – orchards had been small and few beforehand - and the same was true in many other districts, such as south Cambridgeshire.[xxviii]

As well as the emergence of such specialised areas, the twentieth century saw a more widely scattered expansion of new orchards, initially associated with smallholdings and market gardens but increasingly, from the 1930s, taking the form of large fruit farms, extending in some cases over several hundred acres. Commercial orchards were heavily sprayed with insecticides and pesticides, and by the 1940s the largest were planted with a small number of varieties, grafted on dwarfing rootstocks, in large continuous blocks (Figure 3).[xxix] Under growing levels of government supervision, the orchard acreage in the UK continued to increase through the middle decades of the century, with little interruption from the Second World War, rising from 257,000 acres (104,000 hectares) in 1940 to 274, 000 acres (111,000 hectares) in 1950. Only then did it begin to decline, falling to 234,000 acres (95,000 hectares) by 1960, largely because of the scale of imports, especially from Canada and the USA.[xxx]

Yet as commercial orchards flourished, small 'traditional' farmhouse orchards were in decline. Already, by 1941, Butcher was able to describe those in Suffolk as 'usually old and neglected'.[xxxi] From the 1940s government subsidies were made available for their clearance, as well as for the grubbing out of many of the older-style commercial orchards planted before the War, unsuited to this age of agricultural modernisation.[xxxii]

> What can be done with these worn out orchards, those orchards which are so small that they do not warrant the expenditure on spraying tackle and equipment for grading and packing? What can be done with those mis-sited orchards where frost claims the crop three

> years out of four? … There can only be one answer - grub out and put the land to more profitable use.[xxxiii]

Following Britain's accession to the European Economic Community, in the face of continuing foreign imports, over-production of fruit, and improvements in the profitability in arable farming, even large, modern orchards began to be removed, something which has continued until the present day. In consequence, as already noted, while orchards remain significant in a few areas, over great swathes of the country they have all but disappeared. But it is also important to note that in most of the areas in which they visually dominated the landscape, their reign was short, largely restricted to what might be described as the 'orchard century', between 1850 and 1960.

Other significant changes occurred during and after the Second World War. Both farmhouse orchards, and most of the smaller commercial concerns established before the War, usually contained a diverse range of fruit varieties, providing a long fruiting season which spread both expenditure on labour and income from sales over a long period. Such arrangements were now regarded with hostility by policy makers and by the 1960s fitted poorly with the demands of supermarket chains and processing industries. All should now conform to 'modern' standards. In 1944 the government published lists of apples recommended for commercial planting. The 'Primary list' included only seven varieties, although a further two were on extended trials, and another dozen were thought to be suitable for particular localities.[xxxiv] In a BBC radio broadcast in 1948 the chairman of the Essex Farmers' Union urged his fellow fruit growers to change their ways:

> Now I appeal to anyone who is listening and has some of these old things-put the saw through them this winter and either grub them out or top graft them to good kinds. It will pay you in the end you know.[xxxv]

By the 1970s, government advice was more extreme. 'For the English fruit industry to survive it is vital that the number of varieties is reduced as a matter of urgency'. Only a handful were now being recommended: Cox's Orange Pippin, Discovery and Bramley were now the officially preferred apples, Conference and Comice the recommended pears, although the apples Crispin, Spartan and Idared might be planted with caution, and research was underway into the viability of Golden Delicious, Worcester Pearmain, Tydeman's Early and Egremont Russet. 'Growers are strongly urged to consider grubbing varieties not listed above'.[xxxvi]

Aesthetics: Orchards as Garden Features

Orchards were thus profoundly important in a practical, economic sense but they also had an aesthetic appeal, especially in terms of blossom and birdsong, and they accordingly formed prominent features of designed landscapes, particularly those of the sixteenth and seventeenth centuries. As Lawson put it, 'whereas every other pleasure commonly fills some one of our senses, with delight; this makes all our senses swim in pleasure, and that with infinite variety, joined with no less commodity'.[xxxvii] Orchards also had an appeal as part of the wider display of features which were at once productive and aesthetic in the immediate vicinity of country houses. Circular 'basons' and linear 'canals', for example, also served as 'stews' in which fish were kept prior to consumption, while dovecotes were proudly displayed within the gardens and elaborately constructed.[xxxviii] Barns, farmyards and kitchen gardens were located in close proximity. All signalled that the owner was fully involved in the productive life of his estate, and ate more food, and more exotic food, than his more

lowly neighbours.[xxxix] Beauty and production were inextricably connected. Yet garden orchards also carried symbolic meanings or at least, would have evoked among contemporaries memories of references in the Biblical and Classical texts which framed early-modern culture. As Liz Bellamy has recently pointed out, not only was the 'forbidden fruit' in Genesis commonly if erroneously described as an apple; the pre-lapsarian garden of Eden was in part depicted as an orchard, planted with 'every tree that is pleasant to the sight, and good for food'.[xl] Various classical myths of a Golden Age of plenty and abundance make similar references, with Homer's description of the grounds of King Alcinous rendered, in George Chapman's translation of 1616, as 'a pretty orchard-ground … of near ten acres'.[xli] The apples – and dates and figs – 'described in the *Idylls* of Theocritus … and the *Eclogues* of Virgil… function as metonyms for natural beauty in an essentially benevolent world'.[xlii] Orchards were not only represented as, but to a large extent really were, beautiful places of peculiarly gentle, leisurely production, clearly distinguished from wider arenas of bitter agrarian toil.

Jan Woudstra has recently highlighted the importance of fruit cultivation in the grounds of Hampton Court in the sixteenth and seventeenth centuries.[xliii] Cardinal Wolsey's mansion stood on a partly moated site which was shared with the orchard; when Henry VIII expropriated the place in 1529, this became the Privy Orchard, ornamented with carvings of heraldic beasts on posts, and a further area called the Great Orchard was added to the north. Such arrangements, if on a smaller scale, were widely shared. Well into the seventeenth century, moats continued to be acceptable settings for country houses and maps and documents suggest that the central 'island' was often occupied not only by the residence and its gardens but also by an orchard, as at Hoxne Hall in Suffolk in 1619 (Figure 4).[xliv] Documents tell a similar story. A lease drawn up for a substantial property in Everton in Bedfordshire in March 1712 bound the tenant to plant the ground between the house and the 'mote … with fruit trees for an orchard'.[xlv] Several sixteenth and seventeenth-century writers recommended placing orchards within moats which 'will afford you fish, fence and moisture to your trees; and pleasure also'.[xlvi] Trees laden with fruit needed to be protected from trespassers, both animal and – in a hungry world – human. In some cases the orchard was placed within a separate but adjoining moat, as shown on a map of Channonz Hall, Tibenham in Norfolk, surveyed in 1640 (Figure 5).[xlvii]

Orchards, moated or otherwise, are probably depicted by maps in immediate proximity to major houses more often than we realise. Many show, beside the house, geometric arrangements of paths planted with trees, and while in most cases these evidently represent formal gardens some are specifically labelled as orchards, as in the case of New Peverels Hall, shown on a map of West Hanningfield in Essex surveyed in 1601.[xlviii] Documentary descriptions again support cartographic evidence. At Redgrave Hall in Suffolk, the great mansion of the Bacon family, the new garden laid out in 1540 was divided in two sections, the half nearest the house comprising an orchard dissected by walks or *allées.*[xlix] At Stiffkey in north Norfolk, another of the family's residences, the orchard – which again lay adjacent to the house - was 'pared' in 1570 to create paths of sifted gravel. Lawson in 1618 recommended a square shape for an orchard principally because this made it easier to lay out walks, and 'one principall end of orchards is recreation by walks'.[l]

More usually, at least by the seventeenth century, orchards lay at a greater distance from the house, although still forming a prominent part of the ornamental grounds. The gardens at Somerleyton in Suffolk, apparently laid out around 1619, are shown on a map of 1652 and described in a contemporary survey (Figure 6).[li] Their plan was clearly based on close observation of contemporary

Italian gardens and was organised symmetrically around a long, long north-south axial path. Immediately beyond the Great Garden, overlooked by a transverse terrace and ranged either side of the axial walk, lay the extensive North Orchard, beyond which lay other, less regular areas of the grounds. Rather similar, perhaps, were the gardens at Moor Park in Hertfordshire in the 1650s, as described by William Temple in his *Upon the Gardens of Epicurus* of 1685. Here there was a series of terraced gardens, arranged down a slope below the house, the lowest of which was 'all fruit trees ranged about the several quarters of a wilderness which is very shady'.[lii] Wildernesses - areas of ornamental shrubbery and woodland, dissected by paths – became more prominent features of gardens from the late seventeenth century and were not always distinct from orchards.[liii] At Stow Bardolph in Norfolk in 1712, for example, the wilderness 'quarters' were planted with '14 pears, 14 apples, 14 plums, 7 cherries all for standard trees'.[liv]

Woudstra has emphasised that at Hampton Court by the seventeenth century 'fruit was present in varying forms in virtually every part of the garden', and innumerable illustrations, including those published in Kip and Knyff's *Britannia Illustrata* of 1707, show that fruit trees were routinely trained, as fans or espaliers, against the walls of the ornamental as much as those of the productive gardens.[lv] When Harrold Hall in Bedfordshire was leased in 1653 the tenant was bound:

> From tyme to tyme [to] preserve and keepe the Orchyards, Gardens, Cort yards and the Mounts and Walkes therein with prunninge, weedinge, new gravellinge and rollinge in such sort as the beauty thereof may be preserved and maynteined and in case any of the fruite trees either in the Orchyards or Gardens shall happen to decaye from tyme to tyme to plant new trees of the like goodnesse in the roome of such as shall see decay and to preserve and cherish the same.[lvi]

The attached schedule describes how the grounds included a garden containing '30 trees of wall fruit'; how there were 28 fruit trees 'in quarters'; and how there were '4 grass quarters encompassed with an apple hedge before the door opening out of the chief house eastward'. The distinction between the 'wall fruit', and the fruit trees planted in the 'quarters', is an important one. As Bellamy has recently emphasised, while the trees found in walled gardens might include apples and pears, they were more likely to comprise stone fruit like peaches, apricots and nectarines, which required the micro-climate provided by the walls to thrive.[lvii] They were one of the features which distinguished the grounds of gentlemen from those of farmers, few of whom could afford the luxury of a walled garden. Cherries and plums, generally coming into blossom early and thus vulnerable to frosts, were also often grown in walled enclosures rather than orchards, as were pears – but seldom apples. A plan of the fruit trees growing in the gardens of Wormley Bury in Hertfordshire in 1741 thus records that there were seven nectarine trees, 15 peach, five apricots, 17 plums, 21 cherries and 12 pears.[lviii] Other seventeenth and early/mid eighteenth-century lists – such as those from Sharnbrook and Hinwick in Bedfordshire, and Honing and Carleton Rode in Norfolk – similarly suggest that peaches were roughly twice as numerous as nectarines and apricots, which were themselves present in roughly equal numbers, accompanied by variable numbers of cherry, plum and pear.[lix] There were relatively few apples, and these mainly planted on the outside of the walled enclosures.

At Wormley, the nectarines and the peaches were partly standard but mainly dwarf trees; the plums were mainly and the pears and apricots entirely on dwarfing stocks. Only the cherry trees were all standards. Fruit trees grafted onto dwarfing or 'paradise' rootstocks seem, in general, to have characterised the walled gardens of the sixteenth and seventeenth century. Orchards in contrast contained tall, spreading trees on vigorous 'crab' rootstocks. Cherry trees have a particularly vigorous habit and, while they might be grown in walled gardens, or on the margins of an orchard, were sometimes placed in separate enclosures. A map of Hethel Hall in Norfolk from 1756 shows the 'Cherry Ground' lying within a courtyard adjacent to the hall.[lx] Many large houses also had separate 'nut grounds', as at Buckenham Tofts Norfolk in 1700.[lxi]

From the middle of the eighteenth century, under the direction of landscape designers like 'Capability' Brown, geometric gardens, walled enclosures and productive facilities were swept away from the walls of the mansion, so that it appeared to stand within an extensive expanse of parkland, a landscape of nature and leisure rather than one of production.[lxii] But the wealthy still needed vegetables and fruit. Walled kitchen gardens continued to exist, although now in more hidden locations, usually screened by shrubberies or plantations and sometimes moved a discrete distance from the residence. Fruit continued to be espaliered against their walls and orchards were usually planted beside them. Richard Milles, owner of North Elmham Hall in Norfolk, made a detailed list of the trees planted in his new kitchen garden in 1765. They included six different varieties of nectarine, 12 of peach, 19 of pear, 14 of plum, 13 of cherry and a medlar, but only one apple.[lxiii] When the new kitchen garden was constructed at Shottesham in the same county in the 1780s the plan – by the architect John Soane, no less – specified the position of four varieties of nectarine, four of apricot, eight of plum, nine cherry, and no less than 15 peach.[lxiv] As in previous periods, the more tender and exotic fruit were thus grown against garden walls, with the apples – and many of the pears and plums - separately, in an adjoining orchard. But apples on dwarfing rootstocks might on occasions be planted within the walled garden. In 1791 the Duke of Bedford bought 80 dwarf apple trees and 80 dwarf pear trees from Samuel Swinton's nursery in London for his new kitchen garden at Woburn Abbey.[lxv] The importance of fruit trees in eighteenth and early nineteenth-century kitchen gardens explains much about their layout and construction, including not only heated walls, to protect blossom from frost, but also the sporadic construction of gardens with polygonal shapes or curving north walls, all apparently intended to increase the length of south-facing walls for the benefit of the fruit trees trained against them. Richard Woods, a rival and contemporary of Capability Brown, designed many examples, as at Newsells in Hertfordshire or Hengrave in Suffolk.[lxvi]

Although fashionable taste decreed that walled gardens and orchards should not appear in the same view as the house, or interrupt the views from the house across the park, maps leave little doubt that they were usually accessed directly from the ornamental pleasure grounds. They had an ambiguous place in the polite landscape and were regularly visited, especially in the winter or early spring when, as Humphry Repton noted in 1806, 'a warm, dry but secluded walk, under the shelter of a south wall, would be preferred to the most beautiful but exposed landscape.[lxvii] Repton himself often laid out walks leading to, and around the outside of, kitchen gardens as part of his 'improvements', and at places like Woodhill in Hertfordshire recommended that space should be left between walls, and shrubbery screens, to allow light to reach fruit trained against the external walls.[lxviii]

Repton on a few occasions actually integrated fruit growing more thoroughly into the ornamental areas. At Woburn Abbey in Bedfordshire in 1816 his new pleasure ground included an area for 'Orchards, Espalier Fruit gardens'.[lxix] But this was unusual and, as pleasure grounds in England became more complex, geometric and structured once again through the nineteenth century, productive areas usually remained separate from ornamental ones. Nevertheless, owners continued to spend lavishly on their fruit and vegetable grounds and apples and other fruit were often elaborately displayed, lining paths or trained on arches (Figure 7). In this age of famous head gardeners like Donald Beaton or Joseph Paxton, many new varieties of fruit, and especially of apple, were first developed in the grounds of country houses. The Golden Noble was found and developed by the head gardener of Stow Bardolph in Norfolk; 'Lady Henniker' (an excellent dual purpose apple) was discovered in 1873 by Mr Perkins, the head gardener at Thornham Hall in Suffolk, as a seedling growing in the discarded waste from cider making.[lxx]

Only towards the end of the nineteenth century did orchards begin to feature once again as an integral part of the ornamental grounds, in the work of 'Arts and Crafts' garden designers like Gertrude Jekyll. They fitted in well with the broader aesthetic of the 'house in the country', and with the architecture of residences vaguely imitating and referencing the vernacular style of an idealised old English farmhouse. In 1899 Jekyll advocated the creation of 'orchard gardens' with irregularly scattered fruit trees, plentifully planted with daffodils and cowslips, and mown for hay once or twice a year.[lxxi] In 1919 she asked:

> what is more lovely than the bloom of orchard trees in April and May, with the grass below in its strong, young growth; in itself a garden of Cowslips and Daffodils. In an old orchard how pictorial are the lines of the low-leaning Apple-trunks and the swing and poise of their upper branches… But the younger orchard has its beauty too, of fresh, young life and wealth of bloom and bounteous bearing.[lxxii]

William Robinson devoted a whole chapter of his book *The English Flower Garden* of 1890 to 'The Orchard Beautiful', filled with fruit trees but also planted with 'Daffodils, Snowflakes, Snowdrops, wild Tulips' .[lxxiii] The grandest Arts and Crafts houses were almost invariably provided with extensive orchards, and smaller examples appeared in the grounds of many large suburban residences, built in a style broadly derived from these, which were erected in the first half of the twentieth century.

It is noteworthy that the trees proposed for these orchard gardens were grafted not on dwarf rootstocks, but on the vigorous ones characteristic of old farmhouse orchards. 'Where we plant for beauty we must have the natural form of the tree. Owing to the use of dwarfing stocks, fruit gardens and orchards are now beginning to show shapes of trees that are poor compared with the tall orchard tree'. 'In the orchard beautiful they have no place'.[lxxiv] The image aimed at was the same as that portrayed in contemporary paintings, such as Helen Allingham's *The Orchard* and *The Apple Orchard*, or Sir James Guthrie's *In the Orchard* and *Cattle in the Orchard*. But as Robinson implies, by this time commercial orchards involved in the real business of production were beginning to use trees on dwarfing or semi-dwarfing rootstocks. In other ways they were growing distinct from farmhouse orchards, especially those of the imagination. Spraying was an 'essential feature of modern fruit-growing', universally employed. 'The control of pests and diseases involves … the work of spraying the trees with insecticidal, ovicidal and fungicidal washes. Furthermore, the trees are

often sprayed with cleansing and "cover" washes, such as caustic-soda preparations, hot lime or lime and salt'.[lxxv] In addition, in many commercial orchards - in the east of England especially – the trees were inter-planted with soft fruit or vegetables, rather than being surrounded by permanent pasture.

Inventing the Heritage Orchard

The reduction in the commercial orchard acreage, and especially the destruction of old orchards, in the post-War period was part of a more general onslaught on the English countryside. Through the 1950s, 60s and 70s farming became more mechanised, with the widespread adoption of tractors, combine harvesters and other machinery, and increasingly dependent on pesticides and artificial fertilisers. Supported by subsidies from the UK government, and after 1973 from the EEC, the arable acreage expanded significantly, and hedges were uprooted, ancient copses grubbed out, ponds filled in, marshes drained and old pastures ploughed.[lxxvi] The agricultural depression which had continued, with few interruptions, since the 1870s was over, and farming was pervaded by a sense of optimism in the possibilities of science and by a hostility to the old and the traditional.

But by the 1970s a reaction was well under way against the impacts of modern farming on the landscape. Publications like Marion Shoard's *The Theft of the Countryside* (1979) and Richard Mabey's *The Common Ground* (1981) emphasised the deleterious effects not only on the environment but on the very quality of life. Such concerns soon embraced the fate of 'traditional' orchards.[lxxvii] The title of Mabey's book was, in 1982, adopted for a new organisation, Common Ground, which was not only concerned with the conservation of species and habitats but had a wider agenda. It was an alliance of nature conservationists and individuals from an arts background, 'propelled by worries about widening gaps between nature and culture, between the special and the commonplace, increasing detachment from decision making'.[lxxviii] By 1988 the organisation had become actively involved in the conservation of old orchards, 'intuitively recognising the richness of culture and nature held in the traditional tall tree orchard'.[lxxix] Orchards were important because they formed a key aspect of 'local distinctiveness', that particular character of place which arose from the interaction of people, over long periods of time, with their immediate environment. 'Orchards are more than formal collections of fruit trees, they are a manifestation of our long relationship with fruit cultivation in different localities'.[lxxx]The varieties of fruit grown in old orchards were themselves an important part of this, and on 21 October 1990 the first Apple Day was held, at which members of the public could have their own fruit identified. In Clifford's words:

> When you lose an orchard you sacrifice not simply a few old trees (bad enough, some would say) but you might lose for ever varieties particular to that locality, the wild life, the songs, the recipes, the cider/perry/cherry brandy, the hard but social work, the festive gatherings, the look of the landscape, the wisdom gathered over generations about pruning and grafting, about aspect and slope, soil and season, variety and use. In short the cultural landscape is diminished by many dimensions at one blow.[lxxxi]

Common Ground played a major role in the burgeoning enthusiasm for orchards, not least through its publication of a range of books, pamphlets and advice notes. [lxxxii]It encouraged, in turn, the development of many local and regional organisations devoted to old orchards and old fruit varieties, and over the last few decades the number of apple days and similar events has grown steadily, some important old orchards have been brought back into management and many new

orchards have been planted by local community groups, parish councils and others, with 'traditional' fruit varieties and often on old-fashioned, vigorous rootstocks (Figure 8). The old folk custom of 'Wassailing' has even been revived, with groups assembling at orchards in winter to shout and bang pots and drums.

Although few of those involved in the planting of these new orchards would probably make the connection, there are clear echoes of Jekyll's 'orchard garden', and of Robinson's 'orchard beautiful', although the latter at least would have had reservations about the sheer number of different varieties crammed into these comparatively small areas. These are, indeed, a new form of designed landscape.

Orchard as Modern Myth

One of the dangers we face when conserving or recreating the past in the landscape is that of confusing the ancient with the not so old. This is a particular problem with 'traditional' fruit varieties, a concern for which lies at the heart of the orchard heritage movement, and it is this aspect – and varieties of apple in particular – that I will focus on briefly here. It is easy to think of the ancient apple or pear trees growing in an old orchard as representing a direct link with a pre-modern, intensely local, peasant culture, in which varieties were curated over decades and centuries and passed from neighbour to neighbour. But by the time that most of the oldest surviving orchard trees were planted, around the start of the twentieth century, such a world had long gone. Even in the seventeenth and early eighteenth centuries people from quite lowly backgrounds might source trees from a distance: Mary Birkhead of Thwaite in Norfolk, whom we met earlier, recorded that some of hers came from the Brompton Park nursery in London, and some even 'from France', although not presumably obtained directly.[lxxxiii] More important, however, is the fact that the varieties listed in seventeenth and early eighteenth-century sources are rather different from those found in old orchards today.

Some had distinctly local names: Mary Birkhead's orchard included apples called Thwaite, Freethorpe and Halvergate, all the names of neighbouring villages; in 1710 an orchard at Westmill in Hertfordshire contained the 'Girton Pippin', named from a village twenty miles away; as late as 1809 the apples in the orchard of Ayott St Lawrence parsonage in the same county included 'Fair Maid of Widford', named from a village 12 miles distant. [lxxxiv]Most names of this kind never appear again in our sources. The named trees were presumably cuttings taken from those of friends or relatives living in the village in question, rather than being long-lived 'varieties' in the modern sense. A similar status might be suggested for trees bearing the names of individuals ('Mrs Walker') or ones which are whimsical or evocative ('Lady's Longing').[lxxxv] Such essentially local types were not restricted to farms and parsonages. The trees planted by Roger Pratt at Ryston Hall in Norfolk in the 1670s included Baford Pippins (probably named from Barford in Norfolk), and Wisbish Russetings (after Wisbech, a few miles away in Cambridgeshire).[lxxxvi]

More numerous were apples bearing vague or descriptive names. Many of these were later applied to particular varieties but, in the period before 1750, they seem to have been more loosely employed, to describe groups of apples with broadly similar uses, appearance or flavour, such as Golden Russeting, Nonsuch, Nonparail, Golden Pearmain, Aromatic Russeting and the like. Close definition of varieties was difficult before the emergence of a national nursery industry, and the rector of North Runcton in Norfolk bemoaned in 1720 how 'The true Aromatick Golden Russeting is

so scarse in this Countrey that I perceive they give the name to any ordinary fruit if it have butt a Russett coat. I'm sure that no fruit in this garden is fitt to be compared with it.'[lxxxvii] When the agricultural writer William Ellis discussed some of these 'varieties' in 1732 he employed the plural, implying something more diffuse and varied than might be understood a century or so later, referring to 'the Golden Rennets, Pippins, and Pearmains'.[lxxxviii] Of course, none of this is to deny that a number of fruit names before c.1750 were used to denote something more closely defined, 'varieties' in the modern sense, such as the London Pippin and the Lemon Pippin, recently developed by or imported by the big London nurseries. But for the most part, apples appear to have been more loosely classified, or existed as short-lived and local types.

Local nurseries were already widespread, in the south and east of England at least, by the early eighteenth century, even if the wealthy sourced their trees from prestigious London establishments like Brompton Park. But the second half of the century saw the rise of numerous large nursery companies in the provinces, such as River's of Sawbridgeworth in Hertfordshire or Mackie's of Norwich, selling widely and eventually producing printed catalogues – part of the more general 'commercial revolution' of the period.[lxxxix] They marketed a wide range of fruit trees – Mackie's 1790 catalogue offered no less than 111 different kinds of apple alone.[xc] The vague and generic names all still appear in late eighteenth-century lists, together with old standards like the London Pippin. But those named from places in the immediate locality are few or absent, except for a few which were now marketed throughout the country, such as Blenheim Orange, Ribston Pippin or Norfolk Beefing.

The nineteenth century saw the emergence of yet more large nursery companies, many selling nationally with the help of the rail network, and all in fierce competition. The old, 'general' names gradually disappeared from their catalogues, to be replaced by novel varieties at a faster and faster rate. Of the apple varieties offered by the Hertfordshire firm of Lane's in 1862 only 27% were still available in 1901. But, by the time that the oldest surviving orchard trees were being planted, in the first decades of the century, the range on offer was declining once again. In 1900 Daniels of Norwich regularly advertised around 100 apple varieties for sale but by 1910 this had dropped to 74 and by the 1920s to less than 60. River's peak in offerings in 1906, of 161 varieties, had fallen to 147 by 1926, to 112 by 1931 and to 100 by 1935. Pearson's of Stamford, also peaking at 161 apple varieties in 1906, declined to 155 by 1908, 120 in 1911, 82 in 1919 and a mere 64 by 1921. The Kentish firm of Bunyards bucked the trend slightly, with numbers falling from 179 in 1900 to 114 in 1914, before recovering to 136 by 1929, but the overall pattern is clear enough, and the decline continued into the post-War years. By the 1970s Daniels, for example, were advertising a mere 25 varieties. The shake-out of varieties mainly involved the older types. Of the apple varieties offered by Daniels in 1874 only 12% were still available in 1917, 10% in 1939 and just 1.5% in 1974.[xci]

Given all this, it is hardly surprising that most fruit varieties found in old orchards today, and the majority planted in modern heritage orchards, are relatively recent in date. Emneth Early, Beauty of Bath, Ellison' Orange, Howgate Wonder, Stark's Earliest, Worcester Pearmain, Allington Pippin, Lord Lambourne may all have quaint and evocative names, but all are apple varieties first developed by late Victorian or Edwardian nurseries. Most of the others – such as Lane's Prince Albert, Granny Smith, Rosemary Russet, or Sturmer Pippin were first marketed since 1800.[xcii] Examples of earlier varieties can be found in old orchards, and are widely planted in new 'heritage' ones, such as D'Arcy Spice, Norfolk Beefing, Blenheim Orange or Dr Harvey. But all were being marketed nationally by the main nursery firms by the later nineteenth century. Our veteran fruit trees are not the product of

some timeless traditional culture, but of the busy commercial world of the late nineteenth and early twentieth century – the world of railways, the first cars and buses, printed catalogues and public limited companies. This is not to deny that the heritage orchard movement has done a great service, by keeping alive, and resurrecting, a diverse and wonderful world of tastes almost destroyed by retail capitalism. But 'traditional' varieties are not, for the most part, quite what they seem (Figure 9).

Indeed, in more general terms it is arguable that, in our attitude to orchards, we often conflate the timeless world of 'tradition' and the relatively recent past. In part, this confusion arises from the essential character of orchards as landscape features, and in particular the speed with which their trees mature and then age. Plums and cherries, as we have seen, grow fast and die young but even apple orchards, especially if dominated by fast-growing varieties like Bramley's Seedlings, can convey an erroneous impression of antiquity. The wonderful Tewin Orchard in Hertfordshire, managed as part of a larger wildlife reserve by the Hertfordshire and Middlesex Wildlife Trust, is described in publicity material as a 'traditional village orchard' and this seems reasonable given the huge size of its great spreading Bramleys (Figure 10). But the orchard was planted as recently as 1933 as a business venture by one William Stenning Hopkyns; his daughter, educated at the Slade School of Art in London, gave it to the Trust in 1984.[xciii]

Other aspects of our attitudes to old orchards, and to their modern recreations, are worthy of examination. Their significance for biodiversity, for example, has in some respects been challenged. Recent research thus suggests that the range of bryophytes found in orchards, rather than being unique or special, is close to that found in any area of 'elder scrub and sallow carr'; while Powell, Harris and Hicks have argued that the lichens in Hertfordshire orchards closely resemble those associated with young secondary woodland, a very common habitat in England.[xciv] More importantly, the extreme artificiality of orchards, and the rapid growth and short life of fruit trees, raise in acute form issues relevant to many other semi-natural habitats in England, and in Europe more widely. Old orchards may be important for wildlife *now*, in derelict form; but were they as good in the past, when they were more intensively managed, with trees being removed and replaced, before they attained veteran status? And what does that imply for the future role of new heritage orchards? These are complex issues which cannot be discussed in detail here but, as so often with habitat conservation, they are questions for the landscape historian as much as for the ecologist.

Today, Tewin orchard is seen as an appropriate place in which to hold the ancient ceremony of wassailing, although traditionally a feature of other parts of England and unrecorded in Hertfordshire.[xcv] It is one of the many places that the custom has been, not so much revived, as reinvented over the last two decades, including heritage orchards planted in urban parks. Cynics might interpret all this, along with Morris dancing and folk singing, as nostalgia, and as middle class escapism from the tedium and ugliness of modern life. But as Edward Wigley has recently argued, like other re-inventions of tradition this one involves more than simple nostalgia: the wassailing ceremony has been mobilised, and adapted, to assert new forms of social identity.[xcvi] Orchards, residing at the junction of nature and culture, seem a peculiarly appropriate locale in which to stage reinvented 'traditions'.

Conclusion

Orchards have taken many different forms and fulfilled a wide range of functions in England over the centuries. The different types of orchard are easily conflated, without historical research, although in reality there was much overlap between them, and their roles changed significantly over time. Similarly varied and shifting have been the meanings attached to orchards and fruit trees, and the ways they have been appreciated and enjoyed. Meaning and value on the one hand, and productive functions on the other, were closely related. The aesthetic role of orchards in the designed landscapes of the early modern period, in particular, was part of a more general display of superior resources of production in the grounds of the landed elite. But meaning also arose, as it did in the biblical and classical texts which shaped contemporary appreciations, from specific qualities inherent in orchards: not only the beauty of blossom, birdsong and ripe hanging fruit in season, but the particular character of fruit production, more leisurely and pleasurable than most horticultural or agricultural activities. Rather different meanings and myths are now attached to old orchards in England. They are valued as 'traditional' habitats and as a way of connecting with a deep, stable and rural past. While these new roles are part of a wider upsurge of environmental concern, and dissatisfaction with modernity, they also arise from the intrinsic character of orchards, albeit in this case those in a neglected and over-mature state, with ancient and hollowed trees. This derivation of meaning from inherent qualities, while obvious enough, perhaps deserves more emphasis in landscape studies: meaning is seldom attached to structures, styles or spaces in a random or arbitrary fashion. But either way, while the current enthusiasm for 'heritage' fruit and old orchards is easily criticised as essentially romantic and unhistorical, it is not without value. For we live in a country, and a world, in an advanced state of environmental degradation, and in which landscapes, tastes and experiences have become impoverished and homogenised.

Acknowledgements

I would like to thank Gerry Barnes, Liz Bellamy, Howard Jones and Bob Lever for help, advice, and information.

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[i] Ian Rotherham (ed.), *Orchards and Groves: their History, Ecology, Culture and Archaeology* (Sheffield: Wildtrack Publishing, 2008).

[ii] Keith Alexander, 'The Special Importance of Traditional Orchards for Invertebrate Conservation', in Rotherham (ed.) *Orchards and Groves*, pp. 12-18; Albert Henderson, 'Lichens in Orchards', in Rotherham (ed.) *Orchards and Groves*, pp. 76-85.

[iii] Joan Morgan and Alison Richards, *The New Book of Apples* (London: Ebury, 1993), pp. 11, 18, 296-8.

[iv] Morgan and Richards, *New Book of Apples*, pp. 128-9.

[v] Bury St Edmunds Record Office, Suffolk, 613/411.

[vi] Thomas Hutchinson (ed.), *The Poetical Works of William Wordsworth* (Oxford: Oxford University Press, 1975, p.164, l.11.

[vii] Thomas Tusser, *A Hundreth Good Pointes of Husbandry* (London, 1570), p.21.

[viii] William Lawson, *A New Orchard or Garden* (London, 1618), pp.14, 23.

[ix] Gervase Markham, *The English Husbandman* (London, 1618), 36-7.

[x] Norfolk Record Office BRA 926 122.

[xi] Norfolk Record Office PD 254/60.

[xii] Frederick George Emmison, *Wills of the County of Essex. Vol 2. 1565-1571*. (Boston: New England Geneaological Society, 1983), p.194.

[xiii] Patsy Dallas, Gerry Barnes and Tom Williamson, 'Orchards in the Landscape: a Norfolk Case Study', *Landscapes*, 16/1, 2015, pp. 26-42, 35.

[xiv] Emmison, *Essex Wills*, p.265.
[xv] See for example the leases from Rushden, Herts, 1697, Hertfordshire Archives and Local Studies 74499; and from Croxley Green in the same county, 1893, in M.Pomfret, *Stone's Orchard, Croxley Green* (Croxley Green 1994: Croxley Green Parish Council.
[xvi] Dallas, Barnes and Williamson, 'Orchards in the Landscape', p.35.
[xvii] Lothrop Withington (ed.), *Elizabethen England, from 'A Description of England' William Harrison (in 'Holinshed's Chronicles'* (London, 1876), p.32; L.Dudley Stamp, *The Land of Britain: its Use and Misuse* (London: London: Longmans, Green and Co. 1948), pp. 108-24).
[xviii] William Bullein, *The Government of Health* (London, 1595), p. 59.
[xix] William Ellis, *The Practical Farmer or the Hertfordshire Husbandman* (London, 1732).
[xx] William Gooch, *General View of the Agriculture of the County of Cambridge* (London, 1811), p.195.
[xxi] Thomas Fuller, *The History of the Worthies of England* (London, 1662), p.274.
[xxii] A.H.Hoare, *The English Grass Orchard and the Principles of Fruit Growing* (London: Ernest Benn, 1928.
[xxiii] Richard Perrin, *Agriculture in Depression, 1870-1945* (Cambridge: Cambridge University Press, 1975; C.W.Rowell, 'County Council Smallholdings 1907-58', *Agriculture* 60 (1959), pp. 109-14.
[xxiv] Ordnance Survey 1:10560 (6-inch: 1 mile) map, 1904.
[xxv] Stamp, *Land of Britain*, p.114.
[xxvi] M.Farnell, 'The Neglected Aylesbury Prune', *Buckinghamsire and Bedfordshire Countryside*, March 1972, pp. 14-16.
[xxvii] Ordnance Survey 1:10560 (6-inch: 1 mile) map, 1902.
[xxviii] George Henry Norman Pettit, *The Land of Britain: Cambridgeshire* (London: Geographical Publications), p.399.
[xxix] Stamp, *Land of Britain*, pp. 108-13.
[xxx] Agriculture: Historical Statistics. Research Briefings. House of Commons Library. 25 June 2019. https://commonslibrary.parliament.uk/research-briefings/sn03339/; accessed 23 January 2020.
[xxxi]Roger William Butcher, *The Land of Britain: Suffolk, East and West* (London: Geographical Publications, 1941), p.326.
[xxxii] The National Archives/Public Record Office MAF 55/51, MAF 137/15, MAF 302/39, MAF 302/40, MAF 272/252.
[xxxiii] The National Archives/Public Record Office 302/39.
[xxxiv] The National Archives/Public Record Office MAF 43/54.
[xxxv] Essex Record Office D/F 152/7/2.
[xxxvi] The National Archives/Public Record Office MAF 302/154.
[xxxvii] Lawson, *New Orchard and Garden*, p.56.
[xxxviii] Christopher Currie, 'Fish Ponds as Garden Features', *Garden History* 18 (1990), pp. 22-33.
[xxxix] Tom Williamson, *Polite Landscapes: Gardens and Society in Eighteenth-Century England* (Stroud: Sutton Publishing., 1995), pp. 31-5.
[xl] Liz Bellamy, *The Language of Fruit: Literature and Horticulture in the Long Eighteenth Century* (Philadelphia: University of Pennsylvania Press, 2019), p.16.
[xli] George Chapman, *Chapman's Homer: the Iliad and the Odyssey*, ed. Jan Parker (Ware: Wordsworth Editions, 2002), Book 7, l.155.
[xlii] Bellamy, *Language of Fruit*, p.27.
[xliii] Jan Woudstra, 'Fruit Cultivation in the Royal Gardens of Hampton Court Palace 1630-1842', *Garden History* 44/2 (2016), pp. 255-71.
[xliv] Suffolk Record Office, Ipswich branch, 110 40 422.
[xlv] Bedfordshire Record Office BRO 333.
[xlvi] Lawson, *New Orchard*, p.14
[xlvii] Norfolk Record Office MC/177/4.
[xlviii] A.C.Edwards and K.C.Newton, *The Walkers of Hanningfield: Surveyors and Mapmakers Extraordinary* (London: Buckland Publications, 1984), Plate XIV.
[xlix] Arthus Hassell Smith, 'The Gardens of Sir Nicholas and Francis Bacon: an Enigma Resolved and a Mind Explored', in P.Roberts (ed.) *Religion, Culture and Society in Early Modern England* (Cambridge: Cambridge University Press 1994), pp. 125-60, p.144.
[l] Lawson, *New Orchard*, p.11.
[li] Suffolk Record Office, Ipswich branch, 295 and 942.64 Som.
[lii] William Temple, *Miscellanea: the Second Part* (London, 1690), p.129.

[liii] James Bartos, 'Wilderness and Grove: Gardening with Trees in England 1688-1750', unpublished PhD thesis, University of Bristol, 2013; Jan Woudstra, 'The History and Development of Groves in English Formal Gardens, 1600–1760', in J. Woudstra and C. Roth (eds) *A History of Groves* (London: Routledge, 2018), pp. 67–85.
[liv] Norfolk Record Office HARE 5531 223 X 55.
[lv] Woudstra, 'Fruit Cultivation at Hampton Court', p. 260.
[lvi] Bedfordshire Record Office TW685.
[lvii] Bellamy, *Language of Fruit*, pp. 46-54.
[lviii] Royal Institute of British Architects Library, London, Mylne Drawing Collection SC 122/21.
[lix] Bedfordshire Record Office OR 2331/11 and X800/32; private collection; and Norfolk Record Office PD 254/60.
[lx] Private collection.
[lxi] Norfolk Record Office Petre Box 8.
[lxii] David Brown and Tom Williamson, *Lancelot Brown and the Capability Men: Landscape Revolution in Eighteenth-Century England* (London: Reaktion, 2016), pp. 164-6.
[lxiii] W.Roberts, 'Richard Milles' New Kitchen Garden', *Norfolk Archaeology* 62 (1937), pp. 501-7.
[lxiv] Norfolk Record Office FEL 1115, L5.
[lxv] Bedfordshire Record Office R3/2114/534.
[lxvi] Fiona Cowell, *Richard Woods: Master of the Pleasure Garden* (Woodbridge: Boydell, 2009), pp. 207-8, 221.
[lxvii] H.Repton, *An Enquiry into the Changes of Taste in Landscape Gardening* (London, 1806), p. 16.
[lxviii] Humphry Repton, 'Red Book' for Wood Hill, Hertfordshire. John Soane Museum Collection, London, sm (163) 64/6/2.
[lxix] Humphry Repton, 'Red Book' for Woburn Abbey. Woburn Abbey Collection, Woburn Abbey, Bedfordshire.
[lxx] https://www.fruitid.com/#main, accessed March 10 2020.
[lxxi] Gertrude Jekyll, *Wood and Garden* (London: Longmans, Green and Co., 1899), pp.181-3.
[lxxii] Gertrude Jekyll, *Colour Schemes for the Flower Garden* (London: Country Life, 1919), p. 140.
[lxxiii] William Robinson, *The English Flower Garden*, (London: John Murray, 1890), p. 382.
[lxxiv] Robinson, *English Flower Garden*, p.376.
[lxxv] Hoare, *English Grass Orchard*, p.161.
[lxxvi] Marion Shoard, *The Theft of the Countryside* (London: Temple Smith, 1980); R.A.Robinson and W.J.Sutherland, 'Post-War Changes in Arable Farming and Biodiversity in Great Britain', *Journal of Applied Ecology* 39 (2002), pp. 157-76.
[lxxvii] Shoard, *Theft of the Countryside*; Richard Mabey, *The Common Ground* (London: Hutchinson, 1980).
[lxxviii] Sue Clifford, 'Save our Orchards: One Insight into the First Two Decades of a Campaign', in Rotherham (ed.) *Orchards and Groves*, pp. 32-41; p.32.
[lxxix] Clifford, 'Save our Orchards', p.33.
[lxxx] Sue Clifford and Angela King, *Local Distinctiveness: Place, Particularity andIdentity* (London: Common Ground, 1993), p. 73.
[lxxxi] Clifford and King, *Local Distinctiveness*, p.75.
[lxxxii] Common Ground, *Orchards: a Local Action Guide* (London: Common Ground, 1989); Common Ground, *The Common Ground Book of Orchards* (London: Common Ground, 2000).
[lxxxiii] Norfolk Record Office BRA 926 122.
[lxxxiv] Hertfordshire Archives and Local Studies, DP/10/1/3 and DP/120/3/1.
[lxxxv] Norfolk Record Office BRA 926 122.
[lxxxvi] Norfolk Record Office MF/RO 219/1,
[lxxxvii] Norfolk Record Office PD 332/20.
[lxxxviii] Ellis, *Practical Farmer,* p.179.
[lxxxix] Neil McKendrick, John Brewer and John Plumb, *The Birth of a Consumer Society: The Commercialization of Eighteenth-century England* (London: Europa Publications, 1982); John Harvey, *Early Nurserymen* (Winchester: Phillemore, 1975).
[xc] John Mackie's Catalogue, Norwich, 1790. Accessed online at https://archive.org/details/JohnMackieSonsNorwichACatalogueOfForestTreesFruitTreesEvergreenAndFloweringShrubs1790/page/n8/mode/2up
[xci] This paragraph is based on the collection of nursery catalogues at the Library of the Royal Horticultural Society, London (Bunyard's and Pearson's); Norfolk Museumn of Rural Life, Gressenhall, Norfolk (Daniels'); and Dacorum Heritage Centre, Berkhamsted, Hertfordshire (Lane's).
[xcii] https://www.fruitid.com/#main, accessed March 10 2020..

[xciii] Michael Clarke, *Apples: a Field Guide* (Tewin: Tewin Orchard, 2015), p.10.
[xciv] R.Stevenson and J.Rowntree, 'Bryophytes in East Anglian Orchards', *Field Bryology* 9 (2009), pp.10-18; p.16; Mark Powell, Andrew Harris and Martin Hicks, 'Lichen Ecology in Traditional Hertfordshire Orchards and the Implications for Conservation', *The Hertfordshire Naturalist* 43/2 (2011), pp. 69-79; pp.72-3.
[xcv] Clarke, *Apples*, p.17.
[xcvi] Edward Wigley, 'Wassail! Reinventing 'Tradition' in Contemporary Wassailing Customs in Southern England', *Cultural Geographies* 26/3, pp. 379-393.