Hertfordshire Orchard Initiative

THE HISTORY OF HERTFORDSHIRE'S ORCHARDS

'Hertfordshire is not a county into which visitors flock to see the orchards in bloom; the wild cherries of the Chilterns and the carpets of bluebells are a much greater spring attraction'. Gardner's view in his description of Hertfordshire Agriculture in 1967 is probably a true reflection of the general perception of orchards in the county. However, Hertfordshire does in fact have a much greater heritage and role in fruit production than most would have imagined, and an understanding of this history will play an important role in encouraging the future use and conservation of orchards within the county.

The first cultivated orchards in this country are thought to have their origin in Norman Britain, when monks grew apples for their aesthetic, alcoholic and financial benefits. One of the earliest known examples is from the thirteenth century. Eleanor of Castile, the first wife of Edward I, developed a new orchard in the grounds of the Palace at Kings Langley in 1280. She imported grafts of the Blandurel apple from France, a variety which had so entranced the Queen on a visit to Ponthieu in Aquitaine.

The end of the 16th and onset of the 17th centuries saw a great rise in the interest in horticulture and fruit growing. Many more varieties were beginning to be imported during the 17th century, with individuals such as John Tradescant, the former gardener at Hatfield House, travelling abroad on plant collecting trips.

In 1732, William Ellis of Little Gaddesden wrote 'The Practical Farmer or the Hertfordshire Husbandman'. On the 'nature and improvement of the Black Cherry', he claimed that Hertfordshire – especially the western parts – was as famous for the Black as Kent was for the Red. After extolling the virtues of the fruit as a 'corrector of several sorts of liquors', he also praised it 'as a wood that is next serviceable to the oak for the inside building of houses, barns etc…' However, in 1730 'this fine useful fruit met with many miserable instances of discouragement'. Ellis describes how one tenant between Chipperfield and Rickmansworth, who paid £25 per annum for a cherry plantation, left the rest of his cherries to spoil after having gathered 'such a quantity as to lose five pounds by them'.

Perhaps the earliest general map evidence for the presence of orchards is the Dury and Andrews 1766 map of Hertfordshire. This clearly shows plantations of trees in geometric patterns associated with farms, hamlets, the kitchen gardens of stately homes, and adjacent to buildings within the more 'urban' areas of the day. Perhaps the most dramatic evidence, however, can be seen in the detailed town maps of both St.Albans and Hertford prepared by Andrews and Wren. Indeed, orchards of one form or another clearly dominate the whole landscape of Hertford and its immediate environs in 1766.

The earliest detailed description of orchards if found in Young's 'General view of the agriculture in the County of Hertfordshire' of 1804, where a small but specific chapter provides a fascinating account of fruit growing at this time. It is worth repeating it in full: 'In the south-west corner of the county, and particularly in the Parishes of Rickmansworth, Sarrat, Kings Langley, Abbots Langley, Flaunden, Bovingdon, and partly in Watford and Aldenham, there are many orchards; apples and cherries are their principal produce. Every farm has an orchard, but the larger the farm the smaller the orchard. Orchards are found chiefly in farms from 20 – 50 acres. The apples are the most profitable; but cherries very beneficial to the poor in the quantity of employment in the gathering of this crop, for which the poor are paid from 4d to 8d per dozen pounds. In 10 years after planting, cherry trees begin

to bear: each tree should have nine square perches of land. A full grown tree will produce 50 dozen pounds in a good year; and from 10 – 20 years, 6 dozen. Prices vary from 10d to 3s a dozen. The Caroon and small black are the favourite sorts. The Kentish will not thrive here at all. None of the apples are for cyder; they sell for 1s6d to 8s the basket, or bushel: a tree produces from two to 25 bushels. The orchards, whether of cherries or apples, should be under grass and fed with sheep; mowing the hay is so bad for the trees, that some orchards which were very productive while fed, have produced nothing after a few years of mowing. For ten years after planting, great care should be taken to keep the trees from the sheep, as their rubbing injures them. No orchards are worth above 4l.per acre. They rarely exceed four or five acres, as I am informed.'

With the formation of organisations such as the London (later Royal) Horticultural Society in 1804 and the British Pomological Society in 1854, fruit growing became increasingly technical during the second half of this century. Individuals such as Thomas Rivers became increasingly important nationally in instigating plant-breeding programmes.

Hertfordshire Nurseries

Rivers Nursery, Sawbridgeworth.

Thomas Rivers, born at Sawbridgeworth in 1798, was responsible for consolidating the reputation of the nursery that his grandfather founded. Although renowned for rose culture, Thomas Rivers' major interest was fruit production and the breeding and introduction of new varieties, particularly during the period between 1850 and 1875. He was responsible for the introduction of 31 peach and 16 nectarine varieties for glasshouse production, over 20 plum varieties, 6 pears and various apples, apricots, cherries, raspberries and strawberries. Perhaps Hertfordshire's most famous cultivar – the world renowned Conference Pear – was launched by Thomas Rivers at the 1885 National Pear Conference, after which it was named. His apple Rivers' Codlin was awarded a First Class Certificate by the RHS in 1892; introduced in 1894, it was renamed 'Thomas Rivers' in 1897. In Haggard's 'Rural England, Being an account of Agriculture and Social Researches' published in 1906, the nursery was described thus: 'At Sawbridgeworth I went over the nurseries of Messers Rivers, who in past years have introduced so many new sorts of fruit trees to the British Public. To the lover of horticulture, their houses, gardens and orchard grounds were full of interest. The Duchess of Oldenburg apple was, I noticed, setting very well in the bad season of 1901, while Early Rivers seemed to be the best and most promising plum. Mr Rivers told me that young men were going away a good deal from the neighbourhood and that labour was generally scarce'. The nursery closed towards the end of the 1980s, but is currently being developed as a Community Orchard.

Lane's Nurseries, Berkhamsted

This was founded in 1777 by Henry Lane and continued by his son John, and was a big employer in the town and subsequent nurseries in the Potten End area. By 1902 they were growing around 20,000 apples, pears, plums and cherries including their own variety of apple, the 'Prince Albert'. In 1841 Queen Victoria and Prince Albert travelled through the town and called at the King's Arms for a change of horses. A neighbour of Mr Lane, Thomas Squire, who experimented with seeds and cuttings, transplanted a small apple tree to his front garden at his home to commemorate the visit and named his seedling 'Victoria and Albert'. The tree regularly bore heavy crops, but remained small and neat, impressing John Lane who obtained grafts and introduced it as Lane's Prince Albert when it was exhibited at the British Pomological Society in 1857. It was awarded a First Class Certificate by the RHS in 1872, and had become a popular garden apple by the 1880s. It was also planted for market, and was named as a top apple in an 1899 magazine for fruit growers. When interviewed for the 'Gazette' on 5 July 1902, FQ Lane stated 'the original tree is growing still. We subsequently planted a hundred trees in the enclosure to make sure of them...It is a good bearer, a good cooker, good keeper and a good eater after Christmas. Another good point is that it will thrive on any soil and grows

almost like a weed. We have trees all over the place, probably not less than 5,000. Incidentally, we may say that it pays to do orchards well. We have planted 30 acres of orcharding in eight years and we have found that there is nothing like young stuff which soon catches up the old. We have 60 acres of orchards'. The original tree still stood in the town until 1958 when Thomas Squire's home – the Homestead at 250 High Street – was demolished. Along with it went its very own Victoria and Albert apple tree.

History of a typical Hertfordshire orchard

Stone's Orchard, Croxley Green

Typical of one of the many cherry orchards in the south west of the county was Stone's orchard, near Rickmansworth. On 11th November 1893 Walter Stone became the tenant farmer of 12 acres of orchards, meadows, buildings and arable land, for an annual rent of £48 10s, to be paid quarterly. Part of the tenancy was to 'in a proper and husband-like manner, after taking a second crop of hay from the land, immediately manure the land with at least 10 tons of good rotten manure to every acre of land. To keep all trees properly pruned and when necessary substitute and plant young trees of good varieties. These should be properly planted, manured, protected, staked and screened from damage by cattle or wind'. The main orchard consisted of several types of fruit trees – pears, walnuts, plums (Victoria, Kirkes Blue), apples (Lane's Prince Albert and Bramleys Seedling cookers, King of the Pippins, Laxton's Superb,and Worcester Pearmain eaters) and cherries (Hertforshire Black, Carroon), for which the orchard is best remembered. During late June into July when the cherries were ripe and ready for picking (shotguns at the ready to scare away the birds), the familiar long ladders were used to reach the fruit in the tall trees. During this time, families would go to the Green especially on a Sunday to buy cherries – these were known a Cherry Sundays. Stalls would be set up on the Green next to the orchard where freshly picked fruit would be sold, and picnics on the Green made the cherry harvests memorable family occasions. Walter Stone died in 1939, and with the decline in orchards after World War II, the tenancy was surrendered in 1960. The land was eventually sold for development, and all that remained of the original site by the 1970's was about 3.5 acres. Further development was applied for, but fortunately turned down. The site was sold to Three Rivers District Council for the sum of £1, and is presently managed as a Community Orchard for the benefit of all.

Until the recent survey undertaken by the Hertfordshire Biological Records Centre, the only information on orchards in the late 19th and 20th centuries comes from information obtained through the various agricultural surveys or census returns. Although this published data does not provide the details of the locations or size of individual sites, it does provide a reliable guide to the acreage of what were considered by owners or surveyors as productive orchards. These indicate that there were 1,334 acres in 1885, 1,749 acres in 1924 and 1,656 in 1929. In 1931, 50% of all holdings of 1 – 5 acres had orchards, and 29% of all larger farms, a pattern consistent with Young's description over one hundred years earlier. Stamp (1955 and 1962) states that in the 1931-4 Hertfordshire Land Utilization Survey, orchards amounted to 500 acres. In 1949, Hertfordshire orchards with grass crops amounted to 1,700 acres, and orchards with small fruit, 60 acres.

Gardner's 1967 'Agricultural Survey of Hertfordshire' for the Royal Agricultural Society of England describes the orchard acreage in the county in 1962 as being 1,170 acres, 0.6% of the total arable acreage. This contrasts with Kent, where in 1960 there were 84,000 acres of orchards, 20% of the total arable acreage. At this time cultivated cherries were known to have been more extensive in the Chiltern Parishes, although a number had been grubbed up for various reasons including the high cost of labour for the protection of the crop against birds and for picking the fruit. At this time, only 2 Hertfordshire parishes had over 50 acres of orchard, Abbots Langley and Hormead. Indeed, Hormead had 340 acres of recently planted apple trees owned by the Co-operative Wholesale Society, accounting for nearly a third of the county's 1962 acreage. 11 other Parishes had between 20 –50 acres, while all other orchards consisted chiefly of small, dispersed plots.

The changes in Hertfordshire orchards should also be seen in the context of the national picture. The boon in orchard planting continued into the first half of the 20th century. In around 1908, the total area of orchards in Great Britain was in the region of 250,000 acres, peaking in 1950 at 273,000 acres. Since then, dramatic declines have seen orchards collapse to 238,000 acres by 1960, 195,000 acres by 1965, 153,000 acres (62,000 hectares) in 1970, and 45,000 acres (18,407 hectares) by 1998 – an overall decline of around 82%. This happened despite the fact that commercial yields (for all types of fruit) increased – from an average of 3.5 tons per acre in 1955, to 4.1 ton per acre in 1965. Rather ominously however, at the same time imports were also increasing; 195,000 tons of dessert apples were imported in 1959, 228,000 tons in 1964, and 255,000 tons in 1966. Consequently it would appear that despite the increased productivity of British orchards, home produced fruit was still undermined by cheaper imports.

Along with the loss of orchards there has been an equally dramatic loss of fruit varieties. There are 6,000 apple varieties on the UK National Apple Register, but recent surveys have revealed that 70% of all the dessert apples were varieties of Cox's Orange Pippin, and 90% of all cooking apples were Bramley. There could also have been up to 200 varieties within a single orchard. The orchards themselves have also changed immensely in character. Traditional orchards consisted of around 48 standard trees per acre, depending on condition, variety and form, and lasted for 50 years or longer. Modern orchards can consist of up to 1300 dwarfing stock trees per acre, and would be grubbed up every 10 to 15 years or so to maintain a vigorous supply of the most productive young wood which it reaches after only five years. It takes 12 years or more for a standard tree to reach full productivity. It was quite clear that in the 1960s MAFF were encouraging the grubbing of old orchards greater than 25 years, which was seen to be essential in maintaining productivity. Furthermore, even with modern environmentally-friendly pest control methods which aim to reduce spraying and encourage beneficial insects, the average Cox's Orange Pippin will still receive 15 – 20 spray applications before it leaves the orchard.

Set against the national declines of orchards and our increasing understanding of their importance for ecology and local distinctiveness, Hertfordshire Biological Records Centre have been undertaking a detailed study into recent history of orchards in the county. This has several main aims:-

1. To understand the changes in the orchard resource over the last 100 years;
2. To use historic maps and aerial photographs to identify surviving orchards;
3. To undertake field work to confirm condition and quality;
4. To raise the profile of orchard decline and the importance of those that remain;
5. To promote appropriate orchard management following contacts with owners;
6. To undertake ecological studies of the more important sites identified;
7. To protect the best sites through appropriate mechanisms;
8. To use the data to help develop 'cottage industries' to further orchard conservation.

The work which underpins all of this is a desk study using historical maps. The earliest map used is the 1st Ed. O.S. 6" to 1 mile. These clearly show orchards in a variety of situations, but all characterised by a uniform and regular pattern of tree symbol spacing. The detail on these maps is very accurate, and has enabled several types of site to be identified. 'True' orchards – where specific parcels of land enclose a block of such tree symbols, 'garden orchards' where uniform rows of trees are clearly present within the curtilage of houses, and 'nursery' sites where collections of fruit trees were very likely to have been present. The relative location of each has been described, along with its area. The 3rd or 4th Ed. 6"-1 mile was chosen next - according to availability – to include orchards planted after the first world war. The cartography of this series was in fact less detailed, which resulted in the omission of previous orchards which did in fact exist. However it does clearly include

new plantings of this period, an important time for smallholdings. Finally, a modern base map is used to plot all historic sites from both periods which still show tree cover according to the 1990 aerial photographs.

The results of this work have yet to be fully analysed, but to date 9 Districts have been completed. Data from some of these has been used to compile the following description of orchards. The total extent of true orchard sites from 6 Districts has dropped from 671ha in 1880s to 245ha in 1990s, a decline of 64%. This is consistent with the national picture. Numbers of sites are even more dramatic – for different reasons. The total number of true orchards (from 9 Districts) in 1880s is 3,643, dropping to 2,304 in 1990s, a decline of 37%. This represents a far higher number of sites than anyone would have ever imagined to be present in the county, both 100 years ago and today. However, simple changes in numbers of sites are not a good indicator of 'loss or gain', and need considerable interpretation. Change to the resource can occur in numbers, size and quality. As an example, the number of garden sites (in 9 Districts) have increased from 1,546 in 1880, to 6,837 in 1990. This apparent increase demonstrates one very profound trend – the fragmentation of former sites from being discrete orchards to being divided and enclosed within new gardens following increased residential development. Consequently the importance of residents recognising such features in their gardens cannot be over emphasised; their conservation could be even more threatened in such circumstances if they are not seen as valuable contributions to gardens.

In terms of size, 72% of surviving sites within Dacorum are less than 0.5ha, while 18% are between 0.6 and 1 ha. Only 2% are now greater than 2ha. This indicates a declining resource of increasingly very small and fragmented sites, smaller even than the sites 200 years ago even though the overall pattern has remained similar. It clearly places a great importance on surviving sites of any significant size. In terms of %tree cover on 1,845 surviving sites, 50% of sites now have tree cover of less than 10%; 39% of sites have between 10% and 50% cover, while only 11% have tree cover greater than this, indicating that orchards considered relatively 'intact' are rare. Similarly, 71% of (98) sites have less than 10 trees, 24% have less than 50 trees, while only 4% have more than this. Within Dacorum, 65% of sites were present 100 years ago while 32% of sites first appeared 50 years ago. Most surviving sites are therefore old features and represent a profound resource for our cultural heritage.

Whilst this only represents a brief summary of some of the data and other information on Hertfordshire's historic orchards, it is clear that the county does indeed have an important legacy which dates back over 700 years. Although always rather small, orchards were a commonplace and widespread feature of both rural and urban areas alike, an integral if somewhat peripheral part of mainstream agriculture. However, they are still continuing to be lost, are becoming smaller and more fragmented, and generally now contain relatively few surviving trees. Nevertheless, despite this declining resource we now know that there are still a large number of surviving sites of one form or another across the county. These support collections of old fruit trees which, even though few in number, can still produce many hundreds of pounds of fruit in a good year. Given our understanding of what has happened and what remains, the challenge must be to conserve the best examples and encourage management and new planting so that future generations can experience the fruits of a living heritage.