

Intensive systems of apple growing

in the 18th and 19th centuries

By R. W. Sidwell

There is no doubt whatever that at the beginning of the 18th century Herefordshire was the main centre for large-scale commercial fruit growing in Britain. Cider was, perhaps, their most important product but fruit for direct consumption was also produced in quantity. However, we will deal with this in a future article. We will consider for the moment the more intensive systems of apple growing used in private gardens, for these methods had an influence on commercial fruit growing in the 20th century.

I mentioned in my last article that de Quintinye, who ran the fruit and kitchen garden for Louis XIV at Versailles, was outstanding among European gardeners of his time. Not only did Rose, head gardener to Charles II, have training there but George London, a young man who worked under Rose, was sent there also. London became the most important man in English horticulture of his day. He eventually directed work in all the royal gardens, was partner with Henry Wise in the Brompton Park nursery and was responsible for designing and planting many formal gardens in large estates throughout the country.

The Brompton Park nursery was enormous and John Evelyn wrote of it in glowing terms. The total stock was said to number ten million plants. They were suppliers of plant material of all sorts to most of the big estates in Britain. Fruit trees were an important part of their output and they brought together for trial all the varieties they could find. We will return to Brompton Park in the 19th century in connection with fruit varieties.

In 1701, London and Wise published a translation of de Quintinye's principal work and this served as a basis for much that was to be written later. Fruit tree pruning is described in heavily laboured detail.

A few years later (1717) the Rev. John Lawrence, rector of Yelvertoft, near Rugby, wrote "The Clergy-Man's Recreation," in which he dealt admirably with problems arising

from trying to keep a tree flat against a wall when its natural form was three-dimensional, although he didn't use quite the same words.

By now a clear pattern of intensive fruit growing in gardens began to emerge. The walled garden became a standard feature of all the best estates. By the middle of the 18th century, when "Capability" Brown swept away formal parterres and brought mown (or sheep-grazed) grass right up to the mansion wall, it was to the walled garden that the true "gardeners" were confined.

A typical walled garden would have been rectangular, but sometimes oval or even circular forms were constructed. These had the advantage of a lower ratio of wall length to area enclosed. Whatever the basic form, it was customary to divide the area into four sectors — perhaps with a centre feature such as a piece of statuary or fountain. A perimeter path would be constructed two to three yards from the boundary wall. All paths would be edged with dwarf box, which had been introduced to Britain at the end of the 16th century.

The south-facing wall would be used for peaches and nectarines and perhaps some of the more delicate French pears. Morello cherries were confined to the north wall, with plums, apples and pears on the east and west-facing walls. Lawrence advised turning the orientation 45 degrees so that no true north or south

wall existed. The stone fruits were fan-trained. Apples and pears were grown as espaliers and spur-pruned.

It was, however, along the cross-paths that most of the apples were grown. Two yards back from these paths, posts and wires were erected. There would normally be five horizontal wires, with the top one around head-height. A branch would be trained along each wire until the whole of the available space was filled. This was the espalier system. Now the problems began.

Trees left to grow naturally ultimately jettison their lower branches as growth proceeds. This results in a tree trunk, and a more or less domed head. A young tree shows apical dominance. That is to say, the leading shoot grows more than the laterals. This becomes modified to peripheral dominance as the tree matures. It is difficult to persuade an apple tree to maintain growth on its lower or inner branches. In modern times various systems of ringing, notching, or the use of wire twists have been tried to induce balanced growth. Spur-pruning in its most widely practised and degenerate

form consisted of shortening back all young shoots to within about a couple of buds of the base. This led to a forest of young shoots each year and was dubbed "hedgehog" pruning, by the more enlightened, for obvious reasons.

The sight, in old gardens, of weak, dead or dying lower tiers on espaliers while abundance of growth, well above the top of the wall, was produced from the upper tier, was regarded as normal. In spite of these difficulties, the espalier apple tree remained and even today we find that amateurs are persuaded to try them where space is limited.

It was, however, to the French that we had to turn once again to find the answer to intensive apple production. If a multi-tier tree produced most of its growth at the top, why not a single-tier tree with no top or bottom? The horizontal cordon had evolved. The full elaboration and ramifications of intensive training systems, which reached right into the 20th century and in some forms came into large-scale commercial use, require an article of their own and we will return to this at a later date.



An aged espalier apple tree. The two lower tiers have gone; the next two are unproductive. It is still being hard pruned each year. Almost all its companions have gone. It is doubtful if they ever earned their keep.