

Winter Pruning of Fruit Trees

Guidance notes from the West Wight Landscape Partnership.

This is a brief and simple guide to the pruning of established apple and pear trees. It is intended for the amateur gardener and is not comprehensive. It does not relate to choices of grafted plants or varieties, however, it should be noted that no apples or pears are reliably self-fertile and for good fruit production, there should be a nearby pollinator. More detailed information can be found in the RHS book *'Fruit'* by Harry Baker or the RHS *'Encyclopaedia of Gardening'*.

There is a lot of mystique and confusion about the pruning of fruit trees, basically the most important points are:

- 1) To understand why you are pruning and what you are trying to achieve.
- 2) Not to over prune, as this will lead to the opposite of what you wish to achieve. As a general rule, never remove more than a third of the total amount of wood in the tree in one season.
- 3) Winter pruning of fruit trees should take place between November and February. Winter pruning stimulates growth, whereas summer pruning restricts growth, therefore summer pruning, as a general rule is only carried out on restricted forms.

The main techniques are:

- Spur pruning,
- Spur thinning,
- Renewal pruning and
- Regulated pruning.

On most apples and pears, fruit is borne on spurs which, on established trees are spaced along the branches at regular intervals. On neglected trees these may be harder to spot and instead of appearing as short, gnarled finger like projections may have developed long whip like stems off the main branches. If a tree has been incorrectly pruned or not formatively pruned, these may have failed to develop at regular intervals and may be rather sparse. It should be noted that a few apples and pears are tip bearing ie. they do not bear fruit on spur systems and benefit from renewal and regulated pruning only. A list of tip bearers can be found in the two books mentioned above. Fruit is borne on two year old or older wood.

It should always be remembered that the more vigorous the growth of a tree, the lighter it should be pruned and the weaker the growth, the harder it should be pruned, bearing in mind the no more than one third rule.

Spur pruning; the aim of this is to stimulate the growth of fruiting spurs along the branches and prevent the plant's energy from producing vegetative growth. To this end, pruning involves shortening branch leaders (main branches) at appropriate points and also pruning young laterals (secondary, younger growth), usually growing vertically from branch leaders to encourage them to form spurs. These should be shortened to between 3 and 6 buds, depending on vigour.

Spur thinning; this is carried out on overgrown trees where the spurs themselves have become congested, resulting in the formation of small, crowded fruits. Older wood should always be removed in favour of younger wood. Sometimes it may be necessary to remove whole spur systems; those on the undersides of branches and weaker systems should always be removed in favour of stronger and more upright systems.

Renewal pruning; the purpose of this is to stimulate new young wood which will gradually form a new branch framework. It involves the removal of a proportion of older fruited shoots to the base, usually close to the centre of the tree to keep it open. It also involves the selective removal of some laterals to encourage others to form new branches.

Regulated pruning; this applies to the whole of the tree and probably involves the most major work on a neglected tree. It involves the removal of crowded, crossing, dead, diseased and damaged wood, particularly in the centre of the tree to keep the branch framework open.

Important points:

- Appropriate tools should be selected for each type of pruning; in general secateurs should not be used for anything more than pencil thickness. Tools should be sharp and clean.
- Prevent the spread of diseases such as canker by cleaning tools before pruning unaffected parts of a tree or moving to another tree. Jeyes fluid, bleach or alcohol may be used.
- Do not prune plums or cherries in the winter, although some techniques are similar, because of the danger of silver leaf entering the pruning cuts.
- You are not necessarily trying to create what you think of as a good shaped tree, therefore the worst pruning often involves 'trimming' the tree, therefore removing a number of fruit buds. Similarly, over pruning the tree will lead to the production of excessive vegetative growth and it may take a number of years to bring the tree back to productivity.