

# Apple pruning

GWF374

Updated September 2007

**Pruning ensures better, more regular cropping and keeps trees within bounds. How you prune will depend on the variety, its vigour and its pruning history.**

**Q** Must apples trees be pruned?

**A** Pruning helps to maintain healthy growth and improves cropping. Unless there is ample new growth there will be fewer and fewer flowers. If light can't get into a congested tree, fruit won't ripen. However, if you overdo the pruning, the tree will grow back too vigorously, and there will be plenty of branches but few flowers.

**Q** It sounds rather tricky. Is this the case?

**A** Not really. All you need do is maintain the tree's shape and cut out the right bits - which depends on how much fruit it bears, and how much growth it makes.

**Q** How do I maintain its shape?

**A** Ideally, free-standing fruit trees should have an open centre, like a wine glass. Aim to limit the height to what can easily be picked. To achieve this shape, cut off all weak or crossing branches in winter. If the tree has been neglected, leave it at that for the first year. Then thin out the remaining branches until the tree has an open, or sparse centre. The ones for the chop are the strongly upright branches; aim to save those nearer the horizontal, as these crop best. Look at the natural shape too: 'Cox's Orange Pippin' spreads

naturally, but 'Egremont Russet' is more upright. The latter needs to be cut back to side-facing buds to force it to spread.

**Q** How do I balance fruit and growth?

**A** The more apples, the less growth; the more growth, the fewer apples. You need to promote more growth on heavily cropping trees, or the crop will eventually decline and may only occur in alternate years - called biennial bearing.

If the tree is very fruitful, cut out plenty of wood in winter, but if it's growing well, cut out little.

A neat trick to promote fruiting in vigorous trees is to tie down branches near the horizontal. Buds form on these and flower the following year.

**Q** Are all trees treated the same?

**A** No. Check if your tree is a tip bearer or a spur bearer. If you know the variety, check up in a book, or ask *Gardening Which?*, how it fruits. If you don't know what it is, you'll have to look closely during the winter to see where most fruit buds are formed.

Spur bearers form flowers on two-year-old wood. In the first year the new shoot only has growth buds. By the second year the new shoot has fruiting buds on the now two-year-old wood. Fruit

buds are fatter than growth buds. Growth buds form leaves, while fruiting buds produce flowers. The new wood formed that year will have only growth buds.

Most apples are spur bearers. Some spur bearers, 'Bramley's Seedling' for example, form fruiting buds on three-year-old wood only.

Tip bearers such as 'Discovery' and 'Worcester Pearmain', form most of their fruit buds on the tips of their new shoots, but they do form other fruit buds elsewhere too. Some varieties fruit on both spurs and tips - 'Lord Lambourn', for example.

**Q** Can I prune in the summer?

**A** Winter pruning is usual. But pruning in summer from late July until mid-September has a special purpose. By removing the leaves you reduce the tree's food supply. This method is very useful for keeping cordons and espaliers in check as winter pruning can stimulate too much growth for these restricted forms.

Summer pruning also removes strong, upright sprouts called water shoots often found in the centre of vigorous trees.

**Q** Should I paint wounds to protect them from infection after pruning?

**A** We no longer recommend wound paints unless the orchard

has a lot of canker present or silver leaf is a problem in your area. Generally, trees heal best if the cut is left open. In fact, paint can actually provide a sheltered environment for wood rotting organisms.

**Q How, exactly, do I prune my own trees?**

**A** We can't tell you precisely, as each tree is different, but we can guide you in general terms. Basically, we recommend the 'renewal system'. This aims to get a constant turnover of growth which is cut away after flowering to make room for younger shoots.

Cut out lower, drooping branches which have already borne heavy crops. Cut back to a strong side-branch. Future crops will then be borne on sturdy young wood. Select another side-shoot to eventually take over as the main fruiting branch. Cut it back, removing some new wood to encourage side-shoots which will fruit in two years' time.

In addition, you need to control vigorous upright growth or it will take over and ruin your plans. Either cut it right out or bend and tie it down. If it already has fruit buds on the lower part, cut back to a fruit bud, retaining plenty of fruit buds below the cut. These will crop for a while and the branch will not grow.

Be cautious when removing wood from a tip-bearer or you may cut out your future crop.

**Q How do I deal with my vigorous young trees?**

**A** With spur bearers, cut out unwanted upright growth from the centre of the tree to make that wine-glass shape. Then remove strong, upright branches to let light into the centre of the tree. If in doubt, don't cut, but

bend the branch down, tying it in a more horizontal position.

Get rid of thin, weak and crossing shoots to prevent overcrowding. Cut out branches that form at a narrow angle - these tend to split later when laden with fruit in high winds.

Leave some branches unpruned to form fruit buds, while snipping back some side-shoots hard to form new fruiting branches in future. Shorten the long shoots that grew during the summer to reduce leaf area and stimulate fruiting branches.

**Q Just how much should I cut back?**

**A** Cut back trees that are growing weakly fairly drastically to encourage more growth. Go easy on vigorous trees: just tip a few shoots and rely on tying down rather than pruning to promote fruit. Summer pruning can be useful for removing the energy from these trees.

**Q What about tip bearers?**

**A** Don't cut back or cut out young shoots unless they're really overcrowded.

First, cut out over-vigorous upright growth from the centre. Then remove strong upright branches to let light into the centre of the tree.

Get rid of thin, weak and crossing shoots to prevent overcrowding. Then remove old, weak fruiting wood to make room for new shoots. But spare those young shoots you would have cut back on a spur bearer.

**Q How should I make my cuts?**

**A** Aim to cut cleanly, with no jagged scars. Make your cuts just above a bud, but not so close that the bud dies, or so far away that

it leaves a stub that will die and let in disease. Always cut above a bud that is pointing in the direction you wish the shoot to grow.

**Q Any advice for dealing with established but neglected trees?**

**A** Often a vigorous old tree can be brought back into fruit-bearing, but don't expect miracles. It may take several years to do the job. First, get rid of thin, weak and crossing shoots. Pay particular attention to cutting out branches that form at a narrow angle and those infected with canker. Then remove some of the main branches to suitable side-branches letting in light and reducing the overall height of the tree. Don't hurry the process. Try taking out a few branches each year rather than all at once. Finally, cut out weak, old growth that has borne fruit already.

Weak trees are a harder proposition. Aim to boost growth by clearing weeds and grass away from around the base of the tree to the full extent of the branches. Add 120g a sq m of growmore each spring to the cleared area, and mulch.

**Q I am still a bit nervous about pruning - any other tips?**

**A** Some horticultural colleges and gardens hold pruning demonstrations.

Also, experiment a little on your own trees. Cut back and tip a few branches at first. Use a notebook and labels to remember what you did, and record the effects.

When you are a bit more confident, go ahead and prune the whole tree.