



Based on notes prepared by Peter Blackburne -Maze – Garden writer and adviser.

## THE PRINCIPLES OF PRUNING FRUIT.

Top of the 'must' list is that there has to be a reason for every pruning cut that you make. Don't just snip at the tree in the same way that Margot in 'The Good Life' might have done. She was much more concerned with impressing the neighbours than doing the right thing to the tree. There is also a lot of confusion about the different kinds of bud you find on a fruit tree. All buds start life as growth buds but, if they don't grow into shoots within a year or two, they either go dormant or develop into fruit buds. Growth buds are usually small, flat and triangular. They certainly are on apples and pears.

If you cut back a shoot in the winter to a growth bud, one or more shoots will grow from it in the next year. Fruit buds are completely different. They stand out from the shoot, are fat and often furry. If you cut back to a fruit bud, you may get no new growth at all. If a fruit tree is growing too much, the way to overcome this is not to prune it hard. In fact, the very opposite is true; hard pruning encourages even stronger growth. Where there was just one strong shoot before, cutting it back causes it to send out from two to four more shoots. At the same time, the pruned shoot thickens and becomes stiffer. This is very important because it demonstrates that cutting back a strong vertical shoot at the top of a fruit tree will result in an even taller tree in a year's time. Under those circumstances, and unless you are dealing with a very young tree and forming its skeleton of branches, you should normally either remove the shoot completely, which is not always necessary, or leave it alone. That may appear to be lunacy but it is most definitely not. During the next 3-4 years, the shoot will, admittedly, grow but it will also produce fruit buds and fruit; the weight of which will cause the shoot to bend right over. By leaving the shoot unpruned, you have encouraged it to produce fruit that has greatly reduced its vigour. Are those not the two things that you wanted it to do? The final point to be made is to leave alone, for the most part, all those untidy, bent and twisted shoots. These are called 'spurs' and the fat buds on them are fruit buds. Now to a much more mechanical side. When you cut off a shoot or branch, always cut it back cleanly to either a bud or another shoot or branch. Never leave a snag with few, or no buds at all, left on it. Snags can become diseased and die back and, if the disease is a fungal rot, this can spread back into the branch or even the tree. Those are just some of the things to remember about pruning but the most important of all is that, if you haven't a reason for cutting something off; don't. There are also a couple of principles that you should understand:-

- (1) You must know what a shoot or branch will do if you prune it back and,
- (2) You must learn what action to take if you want a shoot or branch to do a certain thing. Once you have mastered these two skills, the rest will fall into place.

The following text provides information on how these principles are put into action.



## REGULATED PRUNING OF FRUIT TREES.

There is a system of pruning called the 'regulated' system which should be the very least that you do if you want efficient fruit trees. It involves the removal of branches. Never mind about the little stuff, that will take care of itself; it's the saw cuts that count. Regulated pruning includes a lot of looking because it is the overall tree that matters, not the detail.

First, remove any dead, dying, broken or badly diseased (cankered) shoots and branches, large or small. With these compulsory removals gone, the way is left clear for more 'thinking' pruning because you then have to attend to branches which are too low, too spreading or possibly too high. Those that do will be growing more or less vertically and are quite thick and unlikely to bend. Saw these out at their point of origin. Keeping them is a waste of time because you will never be able to reach them to pick, prune or spray. Those that are still young, flexible, and unpruned, even if they are tall, can often stay because they will bend over when they start to carry reasonable amounts of fruit. If they don't, then that is the time either to get rid of them or to pull them down (if possible) and tie them. With the unreachable and tall ones gone, turn your attention to those branches that are causing problems and those which are hindering others. The usual problem is one of overcrowding and it is up to you to judge which ones are the culprits. If, for example, three branches are all rubbing together and clearly there are too many for the space available, then it is frequently (but not always) the one in the middle that is best removed. That often allows the other two enough room to grow unimpeded. Crossing branches are a common cause of overcrowding, as well as annoyance to other branches, and, if this is the case, they also should go. However, don't cut out a branch simply because it's crossing. By itself, this is no crime. It is only a problem if it is unmanageable or causing trouble to others, and shortening it may solve the problem. However, those branches that are growing across the centre of large trees are usually best removed. As with tall branches, these can seldom be looked after properly because they cannot be reached. Remember, also, that the best fruit is carried on young branches and that every one you cut out will reduce the crop. Only perform surgery if that is the best answer. Which brings us on to having a good reason for every cut you make. Regulated pruning, therefore, 'regulates' the growth of the tree so that it is of the right size and shape, contains no useless or out-of-place branches and whose fruit has room to develop to the proper size and colour. It is the art of creating a balance between growth and fruiting as well as old wood and young wood. An important side issue concerns the painting of wounds made by cutting out branches. As a general rule, and unlike with ornamental trees, covering saw wounds

with, for example, the fungicidal material 'Medo', is of enormous benefit to fruit trees. It will protect the wound from invasion by, most commonly, 'silver leaf disease. This is a very serious problem which will ultimately kill trees that it attacks.

## 'HELP THE AGED'.

The first thing to decide is whether or not a tree or bush is worth keeping. In the case of bush and cane fruits, it's unlikely. If they are fifteen years or older, they don't owe you anything. Less than that, they might be worth it and one course is to cut bush fruits right down to the ground and build up new ones. The alternative is to propagate new bushes from hardwood cuttings and then grub out the originals. This would apply to gooseberries and all currants. Another point is the variety of bush fruits. If you want a change, don't waste any time on them at all. Dig them out and replant with new varieties; if possible, elsewhere. The same applies to cane fruits, except that about ten years is old enough, as opposed to fifteen for bushes. The age of any fruit plant is seldom easy to establish. If you have no idea, go by the fruiting. If good crops of good-sized fruit are produced, there's no point in replacing them. If you are getting neither, then it's time for a change. Strawberries are a law unto themselves. You would normally reckon on three crops from both summer and perpetual (autumn) fruiting varieties and then replant. The best time to replant summer varieties is in July/August; certainly by mid-September. Perpetuals can be planted in the spring. Age doesn't mean much with a fruit tree; it's their size and condition that counts. If you don't know much about them, it's worth getting advice from someone who does. A local nursery or garden centre will be able to help. The same parameters exist for tree as for bush fruits. If crops are good and fruit size is acceptable, the tree is probably worth keeping. If not, then I would try to find another use for it rather than getting rid of it; it takes tens of years to build another. So long as it's structurally safe, one of the best uses is to grow one or more climbing plants over it. A strong-growing clematis is terrific. Climbing roses and wisteria are also good. It must be strong growing. Having to wait half a lifetime for it to climb up into the tree is frustrating and unnecessary, given the range available.

Assuming that a tree is safe, cropping well, still growing a little and that you have the will and ability to restore it, then it really isn't as difficult as you might think. The larger the tree, the more the work; and this should go into the 'is it worth it' calculation when you're considering the feasibility of restoration in the first place. If a lot of work is involved, it is wise to spread it over two winters. Firstly, you would remove all the dead and dying branches. Don't worry about the small stuff too much, just those that need a saw. In fact, there's no reason why you shouldn't make a start whilst the leaves are still on. At least you'd be able to see which are dead and which aren't. If there's a lot of dead wood to cut out, and there often is, the removal of this should be sufficient. The admission of light into the tree could well start it growing again in the following summer. Whether it does or not, the next winter is the time to start clearing out the unwanted living growth. This is along the lines of 'regulated' pruning and it involves the removal of all branches that are too high, too low and too spreading. This will give the tree the shape and size that you want. After that, remove all branches which are causing overcrowding and which are interfering with others by crossing or actually rubbing against them. You are clearing out the inside of the

tree, so that new growth is encouraged, and making sure that there is room for it to develop. This is also the pest and disease side to consider. Years of neglect allow these to flourish. This is one of the few occasions when a tar oil winter wash should be applied after the initial pruning but before the end of January. It will kill a lot of pests and diseases but most of all; it will kill all the moss and lichen that has built up over the years on the trunk and branches. The tree will now start to look more like a living being and less like an ancient monument. Prune plum and cherry trees when there are in leaf to reduce the risk of infection by the 'silver leaf fungus'. This is an occasion when I you should prune either in the very early or very late winter so that you can see better what you're doing but before there is serious

activity in the tree. Be especially careful to paint all saw cuts with a fungicidal paint, such as 'Medo'. This kills any fungal spores landing on it rather than just stopping them (unreliably) from entering the wounds.