

## **Pruning in General**

The principals of pruning fruit trees is the same as for roses and for shrubs. Follow what I call the four “D’s”.

**Dead Wood.** Firstly examine the tree thoroughly for dead wood. It is essential that all dead wood is removed before proceeding to the next step.

**Damaged Wood.** Next examine your tree for damage, say from storms, birds, rubs from adjacent limbs and so on. Remove all damaged wood carefully from the tree. Soon you will see your tree start to open up.

**Diseased Wood.** Now you will be able to see any diseased wood which must be removed.

**Diagonal or crossing wood.** The last operation now before your detailed pruning can commence is to remove crossing or diagonal wood from the tree being pruned.

### **Hygiene. (Most Important)**

Before starting work in an orchard sharpen all tools then spray them with a 50% solution of methylated spirits and water. This will ensure tools carry no pathogens from previous work to the job at hand. It is also essential to repeat this operation each time we move from one tree to another. If disease is encountered in a particular tree clean tools before proceeding to a clean part of the same tree.

When purchasing young fruit trees it is most important to give them a good start by good pruning or in other words “training”.

Young trees come more often than not as “whips”, that is just a stick with a few branches protruding from the skywards pointing stick.

Firstly we must decide on the style of pruning we want for the tree we have chosen and there are several.

**Vase shape**, “a style most popular” (as Poroit would say).

**Central Leader**, less popular but useful in certain locations.

**Espallier**, a style very useful as a decoration or where space is an issue.

**Pleached**, popular overseas, but rarely used here.

Most fruit trees require setting up for their life journey and follow up pruning in early life. Some will then fruit successfully from say year ten on while others require regular pruning to bring new wood on each year so that fruit can set.

Some fruit trees are self pollinating, while some are not. I will cover this aspect as I go through each group's pruning requirements.

Fruit trees can be further divided down into groups for pruning.

**Pome Fruits;** Apples, Pears and Quinces.

**Stone Fruits;** Peaches, Apricots, Almonds, Nectarines, Cherries and Plums.

**Other Fruits;** Including Figs, Grapes, Persimmons, Loquats, Mulberries, Citrus and Berries.

Pruning Techniques

### **Stone Fruits**

#### **Peaches**

Peaches require pruning each year either straight after they finish fruiting or in winter. The reason we must prune peaches is simple. No prune, no peaches. Peaches grow on previous seasons wood, if we do not prune peaches back to encourage new growth, wood growth will eventually slow to a stop and fruiting will also stop.

Once we have planted our new fruit tree and got it through the first few years, we will have shaped the tree into a vase configuration with a very sound branching structure keeping in mind always the need for the tree to carry a full load of fruit say from year five onwards. It is difficult to put in words what has taken a lifetime to learn in the field, however a strong framework, four to six good strong branches, with a network of strong sub-branches is ideal for peaches. Laterals (short branches) are cut back to a bud to get the new growth for the next season.

You do not need multiple peaches for pollination as there are always flowering peaches and nectarines nearby. Remember, bees are our friends. A garden without bees would be a sad place to be "pardon the pun".

#### **Nectarines**

Nectarines are for all intents and purposes very similar to prune and manage as are peaches so I will not repeat the process.

There is one very strange quirk with Nectarines though. When cutting nectarines back sacrifice STRONG growth and ***retain weaker growth***. The reason will become obvious when you have fruit next year and your neighbour does not.

## **Apricots**

Apricots require pruning and training for the first five to ten years and then need to be left alone. Apart from cleaning up any storm damage, or removing any diseased wood it is highly detrimental to cut into apricots once they start to age.

Older apricots suffer from Bacterial Gummosis which enters the tree from open wounds. This disease is very hard to control, and if left unchecked will kill an old apricot tree.

I am not aware of any cross pollination issues with apricots. Bees normally pollinate in routine visits to flowers.

## **Cherries**

Once the initial pruning is undertaken for a cherry tree and a good framework is formed cherries are relatively easy to manage in the orchard. We have however a few important and unique issues with cherries. Cherries do not like heavy pruning. Cherries have two types of buds, fruiting and leaf buds. Always cut back to leaf buds, not fruiting buds otherwise the tree will die back. Do not do any heavy pruning other than storm damage after say ten years, otherwise gummosis will cause problems. It is a disease very hard to control.

## **Almonds**

The almond responds well to initial training, requiring just tidying thereafter. Upper foliage can become a problem and may require regular trimming to keep the plant in check.

## **Plums**

Plums require good initial training, getting them into a structure suited to the orchard situation. Plums are a busy plant requiring a lot of pruning. Old spent wood needs to be removed, to encourage new growth. Plums fruit on a variety of older and newer wood but not on wood that is very old and has "burned out".

## **Pome Fruit Group**

Apples, Pears and Quinces

### **Apples**

Apples are fun to prune, but have a few quirky twists. Most apples are spur bearers, some are lateral bearers, yet others fruit on a combination of both. It is knowing which apples do what and being able to identify them by their bare wood that sorts you out. It took me a long time to learn the different apples by their wood, particularly when they have no leaves and no labels.

Apples in general need good shaping when young to develop very strong framework, follow up for the first five to seven years with good pruning to set patterns then start to ease back

on pruning. In general very heavy pruning of apples will result in very heavy growth. Spur bearing apples include Granny Smith, Golden Delicious, Delicious and Crofton. An example of a lateral bearer is Jonathon. The Democrat apple will fruit on both spurs and laterals if left unpruned. Study the structure of the apple you are about to prune. It will normally tell you a lot of information about how to prune it.

## **Pears**

Pears bear fruit on a mixture of both fruiting spurs and laterals. Packham's Triumph should be pruned back quite hard early then ease off as they age. Good bottling and preserving pear.

Winter Cole is a large spreading tree if left to own devices. Keep pruned to desired shape early. This tree likes to bear fruit on longer than normal laterals.

Winter Nelis is a variety of pear responding to annual spur pruning easing off as it reaches maturity. At maturity laterals take over to bear fruit which is quite amazing.

## **Quinces**

Quinces are a very old plant less popular today but very worthy of a place in any orchard. Anyone who has tried a quince dumpling once will forever be hooked on quinces. Quinces are easy to prune. Quince wood is soft to cut. Cuttings of quinces can be taken in mid winter by taking 300mm hardwood cuttings and placing in a temporary bed of sharp river sand. After well established they can be planted out into pots or grown on in beds.

Pruning should be limited to crop reduction by shortening bud carrying shoots.

## **Figs**

Cut back old fig trees to rejuvenate and encourage new growth. Reduce the tree to about 1metre from ground and it will fruit the next season as if nothing has happened. Figs will require mild shaping when young, with general annual tidying thereafter.

Figs can be propagated from cuttings easily by taking hardwood cuttings in winter about 200mm long then placing the cutting in sharp sand. Good varieties include Brown Turkey, White Genoa and White Adriatic.

## **Grapes**

Grapes require training on wires for three to four years before any pruning is required. After this prune grapes by cutting laterals back to two buds. There is nothing better than walking amongst a well pruned vineyard. There is a major caution with grapes however though. **DO NOT PRUNE GRAPES LATE IN THE SEASON** as they will bleed after sap starts to rise. If you want to prune a grape later in the winter prune one or two laterals then come back in twenty minutes to half an hour. If there is no sap flowing from the cuts the grape is safe to prune. I have seen some disasters with late grape pruning.

## **Persimmons**

Persimmons require very little pruning after initial shaping. Follow the principles of pruning to ensure health and shaping.

## **Loquats**

Loquats need very little pruning other than tidying in the growing season. Care must be taken to ensure that growth from below the graft is removed. Remember this growth should always be pulled or bludgeoned off to break out the basal buds otherwise the growth will grow again.

## **Mulberry**

Mulberries require very little pruning other than shaping in early life. Follow good practice other than this to keep your tree tidy, ensuring that limbs are capable of bearing loads.

## **Citrus**

**Citrus** trees require pruning when planted to shape for life or when transplanted or when damaged. Other than this citrus are generally left alone. Citrus can be grown in Braidwood successfully if covered in the first few years.

## **PRUNING OLD TREES**

It is not uncommon to be asked to prune an entire “old orchard” in Braidwood. Most properties will have had a remnant orchard planted, which in some cases have had little attention done to the trees in 50 or 60 years.

Where to start is the question? Old orchards must be treated with respect, but also must be treated as tree surgery not pruning in the first instance. Most fruit trees can stand a heavy cut back if done in a professional way. Wood will grow from dormant buds on the pruned trees and it is from this wood that fruit trees are shaped into producing once again in subsequent years. It may take a number of years to bring old trees back into full production.

## **Exceptions**

Apricots and Nectarines neglected for years are a problem as when pruned heavily when old, will contract “Bacterial Gummosis” a very nasty fungal disease which causes die back to the point of ultimate death of a very old tree if untreated. Treatment while possible is very time consuming with anti-bacterial/fungal pastes which must be painted on infections. Untreated infections are an entry point for pathogens, then insects leading to the demise of the tree in question.

## **New Idea**

One suggestion might be to progressively rejuvenate an aged tree, by say heavily pruning half the tree one year and the other half two years later. The obvious advantages of this method would be that remaining foliage provides food and vigour to the tree as it builds new branches lower down.