

Fruit tree Pruning Notes:

Soil Structure

Soil must have a good structure if plants are to thrive.

Fruit trees can differ slightly, but as a general rule of thumb, a well drained soil is preferable. Fruit trees don't tolerate wet feet as it stunts growth and minimises bud production.

Working in a well rotted manure or compost will improve the drainage of a heavy clay soil and/or the retention of moisture on sandy soil.

Gypsum can also be beneficial on clay.

Soil PH

Soil PH is important for nutrients to become available for both growth and fruiting. PH of 6.5 which fruit trees prefer is neutral with a scale being PH4 strongly acid to PH 10 strongly alkaline.

The PH of acidic soils can be increased by adding lime and the PH of alkaline soils can be lowered by digging in organic matter. (Be careful not to disturb the roots too much).

Be sure to check the PH every few years.

(Add Picture on Page 18)

Aim of Pruning

Pruning is undertaken to keep the structure of the tree open and strong, therefore allowing light penetration and air circulation. This encourages the growth of new shoots, ripening of fruit and reduction of pests and disease.

Pruning Principles

The removal of any dead, damaged and diseased wood will help protect the tree from pest and disease.

Any crowded or crossing branches must be removed to maintain the open shape of the tree and to stop chafing of the bark which will create an open wound for potential disease to enter.

Reducing the trees canopy to one leader will reduce overall vigour and reduces shade, encouraging fruit to ripen and keeps fruit at a pickable height.

Renovation Pruning

It is not uncommon for orchardists to run into fruit quality problems after around 7 years. The reasons are usually that not enough sunlight is getting through the trees and the fruiting wood is getting too old.

It is better to avoid these situations, but if you run into these problems, you will have to open the trees up by doing some heavy cutting. This can mean removing whole limbs, taking out the forks, reducing the tree height and doing some branch spreading.

Add Picture Reno Prune

Recognizing Buds

Fruit trees have two different types of buds.

- (i) Vegetative buds produce new shoots and leaves, while,
- (ii) Flower buds produce fruit. These are larger than vegetative buds as they generally contain more than one flower.

Nutrition

There are three essential nutrients required for fruit tree health.

Nitrogen (N) – to promote growth

Phosphorus (P) – for development of shoots and roots.

Potassium (K) – encourages flowers.

Many minor nutrients are also required but are not as vital, for example:

Calcium (Ca) – needed for cell division enhancing skin thickness stopping fruit from splitting to promote a longer shelf life.

Magnesium (Mg) – essential for chlorophyll, ie, No Magnesium – No Green Plants.

Pollination

Almost all fruit trees need pollination in order to bear fruit. Some species of Fig are the exception as the flowers aren't visible and are enclosed in what becomes the fruit, they simply grow in size.

Self-fertile trees have flowers that contain both male and female parts, these include most apricots and peaches, some plums and cherries and a few apples. Pears aren't truly self-fertile

Some trees even though they have both male and female flowers still need cross pollination to set a good crop.

Most trees that flower at the same time can cross pollinate from one cultivar to another whether it be through bees or wind.

One of the greatest problems of pollination is frost, this affects developing buds, flowers and fruitlets. Fortunately in the home garden some protection can be provided. Trees grown against walls and fences are most protected. On nights when frost is forecast cover them with hessian or shade cloth. (Be sure to remove it the following day to allow bee access).

Common Pests and Diseases

It is essential to practice good hygiene in the pruning and care of trees as a lot of the basic problems can be minimized.

Always clean pruning tools with a disinfectant to reduce the spread of viruses. Make sure tools are sharp as this will help with clean cuts, dirty cuts introduce weak areas for pest and disease to enter.

Avoiding composting infected material as this has the potential to spread disease throughout the entire garden.

Untreated disorders may also spread to other plants or remain in the soil creating reoccurring problems in following years.