



Orchard management cycle

Selecting a Scion

Pick the variety of fruit that you'd like, this is known as the scion. A scion consists of the fruiting section taken from the fruit variety you wish to grow. The variety of fruit can be chosen for taste, season or suitability to the area. Once a variety has been chosen, obtain a scion from last year's growth.

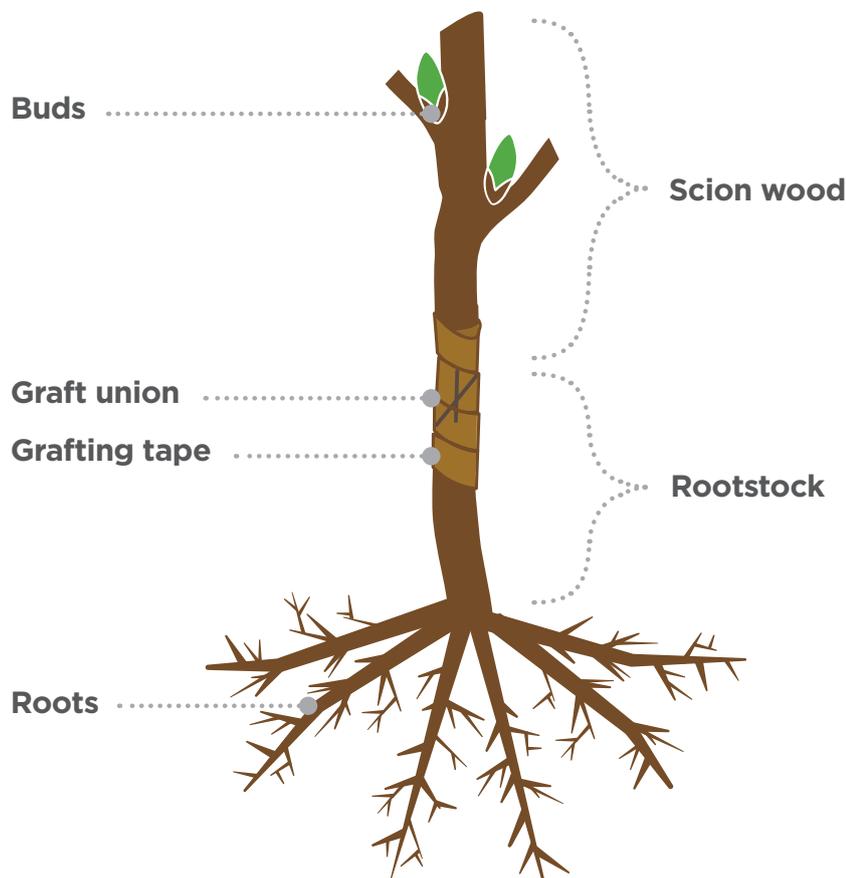
Selecting rootstock

A rootstock is essentially a root system onto which a separate fruit tree can be joined through grafting. Rootstocks are used to restrict the height of fruit trees to allow more fruit trees to be grown in a smaller area and they can be selected for disease resistance. When selecting a rootstock, ensure that the rootstock is of a related species to the scion you wish to graft to it.

Grafting

Once a rootstock and a scion have been selected, they can be grafted together. Grafting is the technique of joining the tissues of the two species so they can continue to grow together. The most common type of grafting is known as a whip graft. The grafted point is then bound with tape and covered with grafting wax to seal it.

See our [Information note - Rootstock and grafting](#) for more information.





Designing an orchard

Before you plant an orchard, you must find a suitable spot for it, you'll have to consider light availability, soil and space. Draw and measure out a design best suited for your area.

See our [Information note - Designing an orchard](#) for more information.

Preparing the ground

Once a design has been created, dig a hole for each tree, which should be the same size as the rootstock. While digging a hole you can also remove any large rocks that may impair the roots ability to spread. Depending on the type of soil you have, you can also add organic matter at this stage to improve the soil.

See our [Information note - Improving soil for an orchard](#) for more information.

Planting a grafted fruit tree

Carefully hold the tree in the hole and fill in around the roots with soil. While infilling the hole, gently shake the tree to avoid air bubbles forming in the soil. The notch where the rootstock joins the top part of the tree should be above the ground. Add some mulch around the base of the tree, leaving a clear ring around the stem to prevent it rotting from becoming too damp.

The primary roles of mulch are conserving soil moisture and preventing competition from unwanted plants. Mulch rings can smother grass and weeds around the tree which prevents them from competing for nutrients and water. Mulch not only reduces competition for nutrients it also adds nutrients back into the soil as it can be easily broken down by fungi.

Another benefit of a mulch ring is that it acts as a visual barrier, especially for younger and smaller trees. It also ensures ground maintenance work e.g. strimming, doesn't need to be undertaken too close to the trees, preventing damage.

Protecting the tree

A stake can be placed next to the tree to support it during high winds. Carefully place the stake in the ground, avoiding the roots and tie very loosely to the tree. This must be checked regularly to ensure that the tie used doesn't get too tight around the tree. After a few months, if when untied the tree can be pushed gently and it returns to the upright position, the tie and stake can be removed.

Another way of protecting the tree is by placing a guard around the base of the tree to protect the trunk from damage caused by small animals. A guard can be a plastic spiral tree guard or a metal screen which will protect the young, outer bark. Once the tree is a few years old you can remove this guard as only the young bark tends to be a target for small animals. Clean and store the tree guards so they can be reused.

Pruning

Pruning is an important step in managing orchards, it allows light and air to reach the tree which minimises disease outbreaks. It helps the tree produce better quality fruit and controls the size and shape of the tree.

Apple and pear trees can be pruned at any time of the year, but they are easier to prune when the tree is dormant in autumn or winter as the lack of leaves makes it easier to see what you are doing. While stone fruits such as plums, cherries and damsons should be pruned in the spring/ summer as the increased sap at this time of year prevents silver leaf, a fatal fungal disease.

See our [Information note - Types of pruning](#) for more information.



Thinning the fruit

If your tree has a heavy crop (lots of fruit) it's a good idea to thin the fruit. Thinning allows sunlight and air to penetrate the branches which improves the evenness of ripening and improves the quality and size of the remaining fruit. There is also a risk of branches breaking if the weight of the fruits becomes too great. Initially remove the fruit that has been damaged or is smaller than the rest. It's good to leave a gap between individual fruits to optimise their growth.

Harvesting and collecting fruit

Once ripe, fruit can be collected, washed and consumed. Different fruit trees ripen at different times of the year.

Fruit type	Best time to harvest
Apples and pears	August to November
Cherries	June to August
Plums	August to September
Crab apples	Late September to October
Sloes	October to December



Removing fallen fruit

Fallen fruit should be collected from the ground to reduce the risk of diseases affecting the trees. One of the most common fungal diseases is brown rot. Brown rot can kill stems, reduces the growth of the tree and limits fruit production. Any infected fruit must not be eaten.

Removing the fallen fruit reduces the risk of this disease spreading to the remaining fruit and protects next year's crop. The rotten fruit can be added to a compost heap and reused as a fertiliser once decayed.

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