

Orchard - Advice and Guidance

Tree planting on the Gwent Levels

Traditionally, orchard trees on the Levels were planted in rows on the higher ground between grips (open surface drains in fields). Some trees were raised higher on low earthen mounds to keep the roots as far above the water table as possible. Where possible, this is the manner that new trees should be planted.

When planting the trees ensure the hole is big enough to avoid bending roots as this can cause damage and stunt growth.

Tree guards and mulching

Trees should be guarded when young to avoid damage by animals, such as livestock or rabbits.

Weeds can grow within the tree guard which can cause damage to the tree, compete for water and nutrients, and be a harbour for pests. This growth needs to be removed or suppressed; mulch mats or mulching can help to reduce the growth of vegetation around the trees when they are young and retain water within the soil during warm, dry weather. Guards should be replaced or removed as soon as they are no longer required to protect the bark.

Tree stakes

Trees are best not staked as they grow stronger root systems and trunks when allowed to naturally move. There may be circumstances where staking would be prudent, such as in very exposed positions. The stakes should be removed as soon as the tree is established.

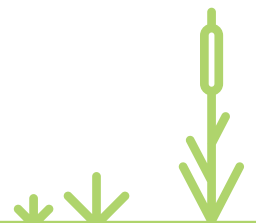
Where the tree is braced to the stake owners should be aware that as the tree grows this may become tight and damage the tree. This will need to be loosened and removed as soon as possible.

Orchard management

It is advised that the grass and vegetation immediately around the base of the trees should be kept at a manageable level. Long grass can encourage pests; during the winter many pests live in the grass around the tree, in Spring they then ascend the tree causing damage.

Short swath heights make it easier to collect the fruit and see damage to the tree.

Brambles and ivy can easily get out of hand and choke the tree and need to be kept under control.



Stock

Traditional orchards on the levels were usually under-grazed by stock. If this is the plan the owner must protect the trees with stock fencing to avoid damage until the trees are large enough to be out of reach.

Be aware, even larger mature trees can be damaged by stock. Ring barking will seriously damage the trees and possibly kill them. Ring barking can also be caused by using a strimmer too close to the tree.

If stock is used to manage the orchard, other methods should be employed around the trees depending on the size of the orchard and habitat.

Managing grass

Best practice is to manage the grass immediately under the trees with hand cutting and mulching, using cardboard, compost, weed mats, and under seeding with plants such as comfrey or yellow rattle. These will all help regulate the grass levels under the trees. Comfrey, compost, and cardboard will break down and feed the tree. Commercial fertilisers are too rich in nitrogen for fruit trees and will encourage too much unhelpful rapid growth.

If the grass is of **meadow quality**, it is best to leave it growing until late summer and take a late cut after allowing the wildflower seeds to set, and then remove the cuttings or hay.

Companion planting is recommended to increase interconnectivity and sharing of nutrients, as well as encouraging pollinators into the orchard who will help with pollination the fruit trees.

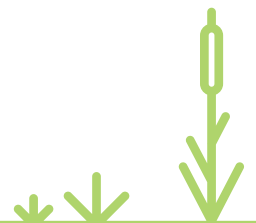
Hedges and ditches around the orchard should be maintained and not allowed to get out of hand. Large trees can over-shade the fruit trees or be too much competition, and brambles can choke orchards.

Pruning

Regular pruning needs to take place throughout the year. The type of pruning you undertake depends on the age and health of the tree.

- **Formative pruning** for young trees encourages strong growth of tree and roots, and establish a good shape. This type of pruning is not to encourage fruit production. Young trees should have any fruit that develops removed in the first 5 years.
- **Regular winter and summer pruning** will ensure a healthy strong tree establishes and will encourage fruit production to begin after the tree has started to mature. The tree will then need maintenance pruning.
- Older trees that have been more neglected will require **restorative pruning**.

Remember do not take more than 30 % of the tree off in anyone prune, it can kill the tree.



Deadwood and old fruit

Removal of dead fruit, diseased branches or dangerous dead wood is important. Remember when pruning fruit trees, increasing the light and air circulation helps keep them healthy and produce good quality fruit.

Biodiversity and wildlife habitats

The orchards on the Gwent levels are not only recognised for their rare old trees but for the important ecosystems they support. When managing your orchard this should be a priority. Traditional orchards and old fruit trees can be a valuable habitat for a multitude of wildlife.

- Where safe, leave standing dead wood for as long as possible as it supports a myriad of life, from the small invertebrates that feed on the wood to the larger birds and animals that feed, nest and shelter there.
- The fruit is an important food source for wildlife, as are plants such as mistletoe. Find a balance that suits your needs and that of the local wildlife.
- Dead fruit that is left in the trees or around the base will need to be removed as it can encourage pests and disease. Best practice is to collect unwanted fruit and pile it away from the trees, so it is still within the orchard as a source of food but not a source of immediate disease under the trees.
- When dead wood must be taken down for safety reasons or falls, it is best for the wood to be stacked in low piles and allowed to rot down, providing a valuable habitat for a host of animals, plants, and fungi.
- Excessive mistletoe or ivy can cause a sail effect in old trees, causing them to lose branches or fall during high winds or heavy snow fall. Some clearance to protect the tree is important. Again, finding a balance between the tree's health and the needs of local wildlife is the priority.

