

Planting fruit trees

Guidelines for Colwall Orchard Group volunteers

Time of year for planting

- Bare-rooted fruit trees should be planted from December to early March.
- Container trees can be planted all year round.

Storing the tree before planting

- Keep your bare-rooted trees in a shady place out of sunlight and frost.
- Keep the roots moist but not waterlogged.
- If trees need to be stored for longer than a couple of days before planting, they should be heeled into a shallow trench so that the roots are covered with damp soil.

Preparing the ground

- Avoid planting in heavily shaded or boggy areas.
- Allow sufficient space between trees, according to their full-grown size (see appendix B)
- All grass and weeds should be removed in a 1m diameter circle around each tree station before planting.

Planting

Bare rooted trees

- On the day of planting, dig a hole, to fit the roots. The hole should be no more than 50cm deep and wide enough to accommodate the roots without bending them.
- If the tree roots are dry, stand the tree in a bucket of water for 15 minutes.
- Keep topsoil for filling in the hole. Discard any weeds, grass turf, rubbish, stones and old tree roots.
- Break up the soil in the bottom and sides of the hole with a digging fork to aid drainage.
- If the tree is *not* going to have a wire tree guard, drive a 1.2m x 30-50mm chestnut post into the bottom of the hole, on the south-west side of where the trunk will be. This post is for the tree tie to be secured to. If the tree *is* going to be protected with a wire tree guard, securely drive in a 1.8m x 75-100mm chestnut post into the southwest edge of the hole using a post rammer. This post is for the protective fencing to be secured to.
- Place topsoil in the bottom of the hole to bed the roots on. Place the tree in the hole so the root collar (the original soil mark on the trunk) is level with the top of the hole and the tree is 200 mm away from the timber post. Prune any damaged or overly long roots. The graft union should be at least 75mm above the ground level.
- Backfill the hole with the remaining topsoil, whilst ensuring it stays vertical. Shaking the tree gently as you do this will allow particle of soil to fill the gaps between the roots.

- Gently firm the soil as it is added, to remove any air pockets and firmly anchor the roots, taking care not to compact it. Overfilling the hole by about 50mm will allow for the soil compressing and settling slightly, so the final soil level in the hole is not below the surrounding ground level.
- Unless the soil is very moist, water the tree generously during and after planting.
- To help protect against rabbit or vole damage fit a plastic tree spiral around the base of the tree, firming the bottom of the spiral into the soil.

Container grown trees

- If the tree is container-grown tease out the roots from the container.
 - Damaged or excessively long roots should be trimmed with secateurs to fit the hole.
 - Then proceed as for bare-rooted trees and backfill with the remaining topsoil soil as above.
- Mulch with cardboard and wood chippings. Place two layers of cardboard (all tape removed) over a 1.0m x 1.0m area around the tree. Cover with wood chippings at least 10cm deep. Keep the base of the tree clear of mulch.
 - Wrap a loose cylinder of chicken wire round the tree if protection against rabbits and sheep is needed. Secure the sides together with reusable cable ties.
 - If the tree does *not* have a fencing wire guard, nail a strong rubber tree tie to the central post and shape it into a figure of eight.
 - Prune the tree if required (see Appendix C)

Protecting the tree from animals

Consider the site where the tree is being planted - which animals may damage the tree?

Voles are almost certain to be present; the spiral tree guard is effective protection and should be put on all newly planted fruit trees.

Rabbits are very common; effective protection against rabbits is the spiral plus a tube of chicken wire, 1.2m high, loosely circling the tree, with the edges held together with re-usable cable ties.

Sheep and deer - if either of these may be present now, or anytime in the future, the tree will need a metal mesh guard. The holes need to be smaller than standard sheep fencing (which sheep and lambs can get their heads through) - we recommend 'badger' fencing.

- The piece of fencing wire should be 1.5m high and 2m long.
- A second chestnut post is needed to secure the fencing wire in a circle, placed at the north east side of the tree (opposite the first post). This should be 1.2m high x 30-50mm.
- Fix the shorter side (1.5m) of the fencing wire to the larger post using permanent staples.
- Offer up the fencing wire in a circle round the tree to judge where to drive in the second post (inside the wire cylinder). Mark the position.
- Drive in the second post.
- Now wrap the wire around the second post and attach to the main post to join it up. Secure the two edges with several re-usable cable ties. Tuck the ends of the cable ties inside the fencing wire so that sheep cannot chew them.

- Tie the middle of the tree trunk loosely to the 2 posts with flexible tie, so that the tree can move within the cylinder but never rubs against it.
- If there is any chance of the tree rubbing against the top of the fence, run a split plastic tube around the top.
- Prune the tree if appropriate (see Appendix 3)

Adapting these guidelines

There are situations where these guidelines will need to be modified. For example, a funding body such as DEFRA may have their own particular specifications which must be followed, or the orchard owner may have their own requirements which must of course be respected.

Further guidance

If you need further help please email members@colwallorchardgroup.org If you would like more in-depth guidance, go to <http://publications.naturalengland.org.uk/publication/26001>. For Countryside Stewardship guidelines go to <https://www.gov.uk/countryside-stewardship-grants/planting-fruit-trees-te3> and [TE8: Tree guard \(wood post and wire\) - GOV.UK \(www.gov.uk\)](#) .

These guidelines are largely based on Natural England Technical Information Note TIN014 and Countryside Stewardship paper TE3: Planting fruit trees.

Appendices

- 1) Equipment to take when tree planting
- 2) Spacing of trees according to rootstock and variety
- 3) Formative pruning at planting time
- 4) Ongoing care of young trees

Appendix A

Equipment needed for tree planting

Planting fruit trees -

guidelines for Colwall Orchard Group volunteers

Ready-cut pieces of badger fencing wire 1.58m high x 2m wide, sufficient for all trees needed protection from sheep and/or deer.

Chicken wire 1.5m high, sufficient for all trees needing protection from rabbits and sheep.

Plastic spiral tree guards for all trees.

Strong, reusable cable ties.

Chestnut posts: for trees *without* wire fencing, 1 per tree of 1.2m x 30 - 50mm; for trees *with* wire fencing 1 per tree of 1.8m x 75 - 100mm plus 1 per tree of 1.2m x 30 - 50mm

Flexible tie (strong).

Split tubing to cover wire spikes on top of cage (2m lengths)

Strong rubber tree ties for any trees *without* wire fencing

Spades, forks and half-moon edging iron for turf removal and digging holes

Digging bar

Cardboard for mulching (tape removed)

Woodchip for mulching

Post-rammer (if using larger posts)

Strimmer

Fencing tool boxes (should contain secateurs, lump hammer, wire cutters, staples, fencing pliers, claw hammer)

Trugs for rubbish

First Aid kit

Appendix B

Spacing of fruit trees

Planting fruit trees - guidelines for Colwall Orchard Group volunteers

It is very common to plant fruit trees too close together, as it can be hard to picture how big the trees are going to be when fully grown. Trees planted too close together will suffer from reduced light and air and from rubbing of branches and their health and productivity will be adversely affected.

The optimal planting distance depends on the species of tree and also the rootstock. For standard (ie full size) trees:

- Standard dessert, cooking and cider apple should have a planting distance of 8-10 m.
- Standard dessert pears should be 10m apart. Perry pears tend to grow very large so require even more space.
- Standard cherry trees should be planted 10m apart.
- Standard plum and damson trees should be planted 7m apart

For detailed advice on planting distances for smaller trees such as half-standard or less see:

<https://www.frankpmatthews.com/advice/tree-planting-distances>

<https://www.orangepippintrees.co.uk>

Appendix C

Pruning at planting time

Planting fruit trees - guidelines for Colwall Orchard Group volunteers

Pruning takes a bit of explaining! This is a simplified outline of what to do at planting time.

When planting bare root trees (which will be in the winter), do not prune cherries, plums or damsons at all; wait until the summer.

With apples and pears, on a standard size tree, remove completely the branches (feathers) below 2m if there are any. If the tree is already taller than 2m and single stemmed (a whip), cut it off at this height to a strong bud so that it begins to branch. If there are already branches formed above 2m these can be kept as framework branches. Cut each one back by about a third, to a downward facing bud.

When planting a half-standard tree, the technique is the same, but the main stem (leader) is cut off at 1.2-1.5m.

For more information see the COG guidelines: <https://colwallorchardgroup.org/resources> 'Guide to Formative Pruning'.

Appendix D

Care of fruit trees in the early years

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Watering

- Newly planted trees may need watering when planted, and regularly in the first weeks after, with the ground thoroughly wetted to ensure the water reaches the roots.
- Depending on soil and weather conditions further watering may be necessary during the first few summers.
- In hot, dry conditions watering needs to be done before the trees shown any signs of stress (drooping or dropping leaves). Cherry trees in particular are shallow rooted and need watering earlier, and more, than other species.

Regular checks

- Check the rubber tree tie (if used) and loosen as required.
- Check the chicken wire guard and loosen as required.
- Check trees for rubbing against metal tree guards and tie up with flexible tie or prune as required.
- The mulch should be replenished as necessary maintaining a layer 10cm deep.
- Remove any weeds inside the wire cage (or within 0.5m of the tree if there is not a cage).