



Garden practice

Tree aftercare

Trees are planted for the long term: give them a little attention in the early years to ensure a vigorous, shapely addition to your garden

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To ensure success when planting trees, providing good after-care is as important as good planting practice. The first two to three years after planting are critical for a tree's establishment. Planted well and cared for correctly, it should flourish and become a valuable feature in your garden. It is an investment of time and money, and it would be a shame to lose the benefit of a fine tree through post-planting neglect.

The first challenge is moving the plant from the nursery to its new home: this can cause stress to any tree. Give it attention for the first few years to ensure re-establishment and survival in its new location. Watering, weeding, staking, mulching and formative pruning are important for successful establishment, but none are onerous or time consuming.

Tree aftercare

The guidelines on these pages apply primarily to ornamental trees: fruit trees are established in the same way, but pruned and managed differently to maximise fruit production.

Newly planted trees ideally need regular watering in dry spells for three to five years to ensure good root growth (see panel, p56).

After planting a tree, pruning may be necessary to enhance the natural shape or improve its structure and strength. In the first few years, identify and correct problems with the main framework of the tree – prune early (see panels, right), as this helps avoid future complications. With a young tree, one of the most common tasks is to remove lower branches that begin to interfere with other gardening activities, create shade or block views.

Look out, too, for pests such as aphids and diseases such as canker – they can reduce the vigour of your tree and make establishment slower. If you keep your tree vigorous and healthy, it is less likely to succumb to pests and diseases. ●

More from the RHS Search 'Trees and shrubs: planting' and 'Trees and shrubs: establishment problems' at www.rhs.org.uk

❖ See *The Garden*, October 2012, p37 for tree-planting recommendations.

Formative pruning

A catch-all term for several pruning techniques carried out at planting and in subsequent years, 'formative pruning' aims to establish good branch placement and a well-shaped tree with an open centre and, usually, a clear trunk, giving access for mowers and underplanting.

Raising the canopy

Clearing the stem of lower branches gives other existing plants room to grow, creates space beneath for planting, and exposes ornamental bark. However, it is not vital and can be carried out once, several times in a tree's life, or not at all, depending on the site, desired effect and personal preference.

❖ Canopy raising should not be required in the first few years after planting. If a standard tree (one with a clear lower stem) is required, select one that has been pruned already on the nursery.

❖ It is better to use a pair of secateurs early in a tree's life than to have to use a handsaw later. Cuts are smaller, wounds heal quickly, scarring is minimised and infection risk is reduced. Use sharp secateurs and do not cut too close to the stem.

❖ Do not remove more than a third of the branches at any one time. Cut back lower branches in stages.

❖ Summer is ideal to raise canopies: branches are weighed down with foliage and it is clear which should be removed.



Raise a tree's canopy in stages after planting.



Thin canopies in spring.

Thinning the canopy

From three to four years after planting, thin the canopy annually to allow sunlight to penetrate. Good air circulation reduces fungal diseases. Ideally, remove branches while their diameter is small (2.5-8cm / 1-3in).

❖ Assess the tree shape, removing dead, diseased, damaged wood and crossing branches.

❖ If there are two main leaders, remove the weaker (double leaders, or 'co-dominant stems', are prone to splitting or breaking as trees mature).

❖ Rather than shortening branches, prune to a secondary branch. Look for any imbalance and prune out badly placed branches.

❖ Remove no more than 25 percent of the canopy at a time. The tree should retain a natural habit, and not look like it has been pruned.

❖ Prune most trees March to early April as cuts will heal quickly.

❖ Prune birches in late summer to avoid sap 'bleeding', and cherries mid-summer to avoid silver leaf disease.

Making good cuts

Correct pruning technique minimises infection and decay entering a wound. Decay is most likely if either a branch stub is left or the trunk is damaged.

❖ If removing a limb, the first cut should be an undercut from below to avoid the weight of the branch tearing the bark and damaging the trunk.

❖ Make the undercut around 30cm (12in) from the trunk, about a third of the way through the branch.

❖ The second cut should be made from above, a few centimetres in front of the undercut. The branch should fall leaving a 'stepped' stub.

❖ Cut the stub back to just outside the branch collar (the slight swelling that appears at the junction of trunk and branch). This ensures the cut heals rapidly as the collar forms a callus.

Leave the collar for faster healing.



Removing dead, diseased and damaged wood

Good pruning first targets and removes access points for disease. Removing the 'three Ds' first enables you to step back and reassess the tree before you take the next step in pruning.

❖ Remove **dead** material, cutting back cleanly into healthy wood, ideally to a growth bud.

❖ Cut out **diseased** material, sterilising tools between cuts with alcohol. Cut back into healthy wood.

❖ Finally remove any **damaged** material, including crossing, thin and weak shoots.

❖ **Dead wood** can be safely removed at any time of year.



Prune out the 'three Ds' first.



Cut suckers at the root.

Sucker removal

Many trees, shrubs and woody climbers send up suckers from their roots; if trees are grafted, suckers may be different to the desired plant. *Populus*, some *Prunus*, *Rhus* and *Syringa* all sucker freely, taking energy from the tree.

❖ Use sharp secateurs to remove the sucker as close to the tree as possible (scrape away the soil if necessary). Leave the collar (where the sucker meets the root).

❖ Ideally, remove suckers in early summer, just after the tree has completed its spring growth.

❖ Removing suckers when plants are dormant usually results in many more arising the next spring.

Reducing the canopy

Trees look best when the canopy is intact; however, trees too close to buildings or overhead cables may require reduction. **Crown reduction** reduces the height and / or spread of the tree canopy by cutting branch tips back to suitable side branches while maintaining a natural shape. Some trees, such as beech, do not respond well to canopy reduction so remove no more than 10-15 percent.

Topping is when the main stem or stems are severed. It is bad practice, causing tree stress, decay and weakly attached branches. Regrowth after topping can be rapid, worsening shading problems and increasing the risk of a tree falling if the volume and density of the crown increases. The tree can return to near its original size in only two or three years after topping.

Pollarding from a young age is ideal to reduce tree canopies close to structures. *Fraxinus*, *Tilia*, *Eucalyptus*, and *Quercus* adapt well to annual pollarding. If this is not practical, remove and replace with a smaller tree.



A badly pruned suburban tree.

Tree maintenance

Aside from pruning, establishing trees can be helped by irrigation, mulching to conserve soil moisture, and regularly checking that stakes and tree ties are firm but not restricting growth.



Mulch spring or autumn.

Mulching

From initial planting, mulch annually in spring or autumn to suppress weedy competitors and help retain soil moisture.

- ❖ Organic or inorganic materials can be used; at RHS Garden Wisley we use composted wood chippings, leafmould and well-rotted manure.
- ❖ Organic materials should be part composted: six-month-old wood chip is ideal.
- ❖ Mulch should be 7-10cm (3-4in) deep; avoid piling it round the trunk as this can soften the bark.



Loosen over-tight tree ties.

Checking tree ties and stakes

New trees should be staked until their roots provide good anchorage - this can take several years. If loose, the tree will rock in the wind and its rootball will move, which hinders plant establishment and could even result in death.

- ❖ Check ties are secure and a padded cushion is between the tree and stake. Rubbing against a stake can create a scar, which leaves the tree open to disease.
- ❖ Check regularly: ties left too tight cause serious bark damage. Fast-growing trees may need ties loosening every year.

Water young trees weekly in dry spells in spring and summer.



Irrigate regularly

For the first two to three years, irrigate newly planted trees weekly during dry spells in spring and summer. Too much water, and roots will not extend in the search for moisture - but under-irrigation results in slow establishment and symptoms of stress, such as canopy dieback and bark splits on the trunk.

Water directly at the base of the tree and, particularly if the ground is dry, apply slowly to stop it running off. Make sure water has penetrated the soil; on our well-drained soil, we apply two to three full watering cans of water per week to new plantings.

- ❖ At Wisley we use Treegators (above) - plastic bags that fix around the tree. Their bases are covered in small perforated holes that allow water to seep out gradually (available from PG Horticulture: 01327 828373; www.pghorticulture.co.uk).

Different tree types and their aftercare

Selecting good-quality trees appropriate for the site makes successful aftercare easier. Trees should suit the soil, climate and aspect of their planting site. The right tree type can reduce the need for formative pruning; for a clear stem, for example, buy a **standard** tree rather than a **feathered maiden** (see Glossary, right).

Always check the root system: knock the tree out of its pot. Often **containerised** trees (grown initially in the field then moved to a pot) have restricted root systems and spiralling roots that continue to spiral after planting. **Container-grown** trees have small, fibrous root systems but also suffer from root spiralling. Avoid trees with a large canopy and small root system, or those obviously pot-bound.

Most trees planted are **standards**, 2-3m (6½-10ft) tall with trunks 10-18cm (4-7in) in girth. Often slow to establish, they require more aftercare (staking and watering) than smaller, **bare-root** trees. The bigger a tree is when it is planted, the more aftercare it needs. If you are patient, a short **bare-root whip** or **feathered maiden** will require less water long-term, and establish more quickly than one planted larger.

Take care when buying large **bare-root** trees: many of their roots can be lost or dry out during lifting and transportation. The small fibrous roots are most important because they absorb water and nutrients. Check the rootball when purchasing to ensure the roots have not dried out or been lost.

Glossary

- ❖ **Canopy:** a tree's branches and leaves.
- ❖ **Formative pruning:** pruning for good shape early in a tree's life.
- ❖ **Bare-root:** field-grown trees lifted while dormant with few roots.
- ❖ **Whip:** a year-old tree without side branches.
- ❖ **Feathered maiden:** a whip with side branches.
- ❖ **Standard:** tree with a lower trunk free of branches to 1-2m (3-6ft).