PLANTING & WATERING GUIDELINES



NICHOLSONS

STEP 1

Understanding the Site

Aspect

How much sunlight does the site receive each day, on average? Is it shaded by trees or buildings?

Exposure

Is the site susceptible to hard frosts or strong prevailing winds?

Access and space

How much space is available for a plant to grow? Is it easily accessible for watering and other care requirements?

Soil

What type of soil does the site have? Does it need improving?

Understanding the Soil

Topsoil

The friable top 13-25cm of soil, which contains most of the organic matter where most soil organisms live.

Subsoil

The layer beneath the topsoil consisting of a mixture of sand, silt and clay, from which the dominant particle type determines the type of soil.

The roots of most herbaceous perennials and shrubs will be found within the topsoil.

The roots of trees may penetrate the subsoil but most species do not exceed 2m in depth.



Understanding when and how to improve the soil

Use the 'Red, Amber, Green' system below when deciding when to improve soils.

STOP	If soils are compacted, water-logged, heavy clay, have excessive stones or are contaminated.
ACTION	Incorporate organic matter (such as compost or manure), dig to relieve compaction, add soil improvers (such as grit for drainage or fertilizer for nutrients).
GO	If soil has good organic matter content and moisture retention, free-draining with few stones.

We stock a wide range of bagged soil composts and mulch to improve soil condition, as well as bulk load options.

STEP 2

Choosing the right plant

The first step in successful planting is choosing the correct plant. To do this, you need a reasonable knowledge of your soil and conditions; for example, the exposure, sun/shade, etc. You also need to know the purpose of the tree (screening, feature, etc.) and the features you enjoy looking at. Buy a tree that you love and it will be easy to care for it.

Choosing the right compost

This is very dependent on your soil. A well-rotted organic matter will improve drainage on a heavy soil, help retain moisture on a light one and add slow-releasing nutrients. Topgrow is specifically created to aid in planting trees and shrubs in open ground.

STEP 3

Timing

Pot-grown plants can be planted all year, but late September to late April is ideal.

Bare-root plants should be planted between November and March.

Root-ball plants should be planted between October and March.

STEP 4:

Preparation

Pot-grown plants should be kept moist prior to planting.

Bare-root plants should be kept in their bags and kept out of direct sunlight, wind and frost. They should be planted within a few days of purchase.

Root-ball plants should be kept out of direct sunlight, wind and frost. They should be kept well watered and planted within a few days. If possible, provide additional protection around the roots when storing.



STEP 5 - PLANTING

Dig the hole one-and-a-half times the width of the container/roots/root ball.

Loosen the soil in the bottom of the hole to aid drainage and good root establishment. You can add grit/gravel, but not compost as this will rot over time and cause the tree to sink.

Remove pot and position the plant so that the soil level is at the same depth as it was in the pot or field. It is important to plant at the correct height and the root collar must remain clear.

Use a mixture of soil taken from the hole and some planting compost/well-rotted manure to backfill the hole.

You could also add a fertiliser, such as Growmore (in the summer), or slow-release Osmocote (in the winter). Bonemeal added at recommended rates will aid root development. Mix the fertiliser thoroughly with soil and backfill.

Backfilling should be done evenly, whilst gently firming the compost around the roots (staking should be done at this point). Be careful not to over-compact the soil.

Smaller bare-root trees and hedging can be planted in a similar way, or if planting large numbers, they can be notch planted (into a narrow slot just big enough for the roots). Apply mulch at this stage to protect against weeds. More information on mulching on the back page.

Root-balled trees often have their roots wrapped in hessian and wire. Disturb the root ball as little as possible.

Once the plant is in the ground, the hessian/wire around the root collar should be undone and folded back. **The hessian/wire around the rest of the root ball should be left in situ.** This will rot in due course without restricting the growth of the tree at all.

Planting in Containers

- Aim for a planter 1.5 times the width and slightly deeper than the plant to be potted. Ensure not to go too far over 1.5 times as this can be damaging.
- Ensure the planter has sufficient drainage holes.
- Crocks or horticultural grit may be used as a base dressing to aid drainage.
- Use a 50/50 mix of multi purpose peat free compost with a soil based compost, such as Melcourt Sylva Grow peat free compost with added John Innes.
- Fill one third of the pot with compost mix.
- Insert plant, backfill, and firm gently to eliminate air pockets.
- Apply mulch to retain moisture and restrict weed growth.
- Place in final position on raised pot feet.
- Water thoroughly and regularly assess moisture levels – see 'Squeeze Test' diagram. Each spring, replace top 10cm of compost and apply a balanced, slow releasing nutrient fertilizer.

ALWAYS CHECK FOR WATER PIPES, GAS PIPES AND ELECTRIC CABLES BEFORE YOU DIG



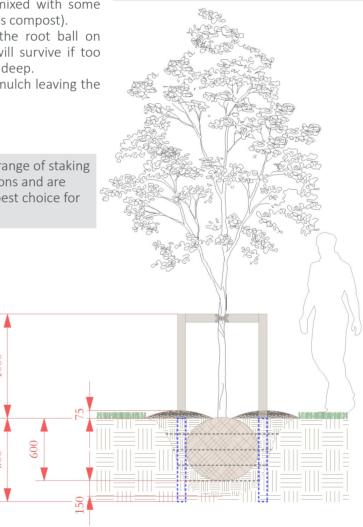
Planting Trees

- Dig a square hole one-and-a-half times wider than the pot or root ball.
- Dig to the depth of the root ball and loosen the soil at the base of the hole.
- Subsoil must be compaction free and well draining. If clay, consider adding horticultural grit, or sand, to improve drainage capacity.
- Water the hole with the equivalent amount of water as the container or size of root ball. This will indicate whether the hole will drain.
- Place the root ball in the centre.
- Backfill with topsoil mixed with some organic matter (such as compost).
- Leave the crown of the root ball on the surface - Trees will survive if too shallow, but **not** if too deep.
- Apply 75mm of bark mulch leaving the neck of the tree clear.

Nicholsons have a wide range of staking and tree protection options and are happy to advise on the best choice for your plant.

H-Frame Staking

- Drive stakes vertically at least 600mm (or deeper than the root ball if larger) into the ground either side of the tree, a shoulder width apart.
- Fix the rail on windward side of the tree as close as possible to the stem, 1m above ground.
- Secure the tree to the crossbar firmly, but not too rigidly.
- Re-water with the equivalent amount of water as half the container or size of the root ball.



STEP 6 - WATERING

Trees

Watering in the first season is vital for all freshly planted trees, although specimen trees may take 2 to 3 years to establish a complex fibrous root system. In some cases, a watering tube can be fitted (please contact Nicholsons for details). Check the moisture daily using the 'Squeeze Test' (right), and water accordingly. During a hot summer, trees will need a good soaking twice a week. Water well once a week rather than a little every day.

Flower Beds

Shrub and herbaceous borders will benefit from the use of a drip pipe or 'leaky hose'. This is easy to install, and should lie discreetly under a layer of bark mulch. A typical drip pipe will have small holes every 30cm and will deliver roughly 1.5-2 litres of water per hour. During very dry spells, be wary of whether your irrigation system is providing enough water. Also, please refer to your water provider for news on local hosepipe bans.

Hedges

Hedges greatly benefit from the use of a drip pipe. The drip pipe should be installed prior to mulching and then covered. This ensures that the water reaches the soil and is not subject to evaporation. It is important to regularly check the soil as it is easy to overwater with drip pipe.

Waterlogging

Too much water can be just as harmful as too little. Air in the soil is as vital

as water. Many plants will not tolerate sitting in water-saturated ground. Be especially careful with Taxus (Yew) and Ilex (Holly). If in any doubt, please ask. However, there are some plants that can thrive in waterlogged conditions (such as Alnus), so it comes down to picking the right plant for the right place.

Rain

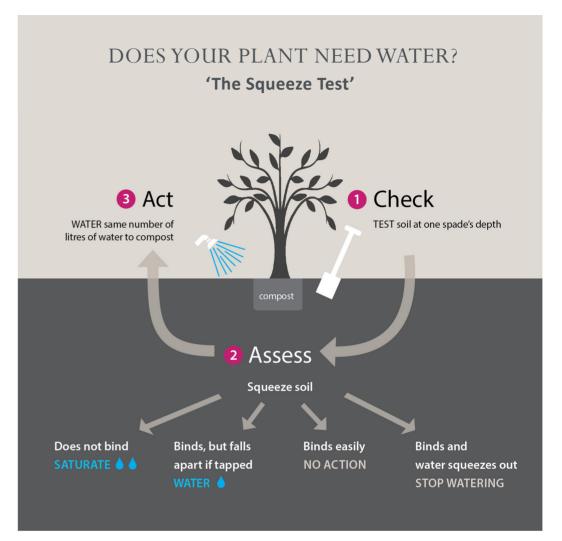
Summer rain doesn't often soak deeply into the ground, but simply wets the surface and evaporates, sometimes not even reaching the root ball. Occasionally, the underlying soil can be very dry, but the soil surface appears wet, especially after rain. Always carry out the 'Squeeze Test' (right) to check.

Winter Watering

Evergreen plants transpire all year round, so attention needs to be paid to watering, even through the winter months. When the soil freezes the plants can struggle to take up water and can eventually die of drought. This is more of an issue with evergreens in containers or those that are more sensitive to cold conditions. If frost is forecast, put them undercover and insulate them. If they become frozen, you can water with lukewarm water to thaw them out.

Buckets

The most appropriate way to deliver water to a tree is the bucket method. The bucket method requires ten-litre buckets with 2mm holes drilled in the bottom. This means the water drains slowly and enters the root zone with no run-off. For a 30-litre tree, use three bucket loads.



The amount of irrigation required is dependent on weather, soil and the plant. In order to apply the correct amount of water, you must carry out the 'Squeeze Test', detailed above.

*Rough guide - Each plant will need the same number of litres of water per week as the compost volume. i.e a 75 litre tree may need 75 litres of water on average per week (all in one go). But this guide must not replace the 'Squeeze Test'.

We stock all the components needed to install trickle irrigation so that you can simply plug it into your hosepipe and let it water.

STEP 7 - AFTERCARE

Aftercare

Weed control is vital to the successful establishment of a plant. Mulch helps to reduce weeds but other types of weed control may be needed. Grass needs to be kept clear of the base of any tree to a minimum diameter of 1 metre.

Spiral guards used to prevent damage by rabbits will need to be checked annually and removed as appropriate. The timing of the removal of the spiral guards will depend on the potential for damage to commence after the removal. Removal of a small number, or sample, of the spiral guards will indicate if damage by browsing mammals is still a risk.

Trees that have been staked and tied will need regular checks. Loosen the tie as the tree grows and ensure that the stake isn't rubbing the tree.

Mulch

Mulch not only suppresses weeds, reducing the plant's competition for water, but it also helps to retain moisture in the ground. A well applied mulch will help to prevent water loss through evaporation. Apply a 75mm depth of bark mulch, allowing a 50mm gap around the base of the trunk.

Staking

Stakes should be used for trees over 1.5m high, or with a pot size of 8 litres and over. Stakes should be driven well into the hole prior to backfilling, avoiding all roots. If it is too difficult to position the stake close to the main trunk, two stakes can be used

with a cross-rail and a rubber belt and block. If the stake needs to go through the root ball, make a guide hole with an iron spike, then drive the stake in. This minimises root damage. Don't worry if the tree bends in the wind, but check for excessive wind-rock and re-stake if concerned (re-firm soil if rocking has occurred). Stakes should be removed by the third season as trees need to be allowed to move to encourage the stem to strengthen and take the full strain of the wind themselves.

Guards

Trees and shrubs may need protection against rabbit, vole, hare, and deer. Guards should be appropriate to the size of plant and type of pest. They should be fitted at the time of planting and may require canes or stakes. Please ask for further advice.

Top Dressing

Top dress with fish blood and bone in March at the rate of 75g/m2 (approximately a dessert spoonful). Mulch annually to ensure maximum growth and quick establishment. To avoid a late flush of weak growth, do not feed in late summer.

Visit our site in North Aston to speak to our horticultural experts and view our range of plants. Find out more about our offering on our website:

www.nicholsonsgb.com