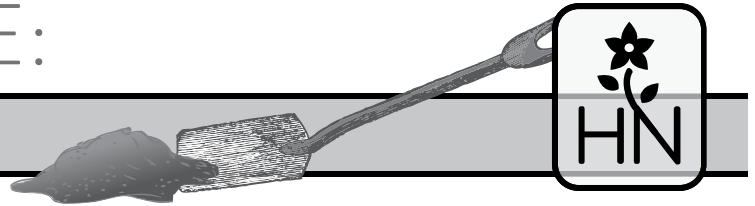


PLANTING GUIDE:

Trees & Shrubs



The Basics

One of the best guidelines you can follow is to put the right plant in the right place. Consider sun, wind, and frost exposure, as well as how the soil drains. Does the spot remain wet long after a rain, or tend to collect water? Many garden plants prefer well-drained soils and dislike constantly moist soil. (See 'Notes' section following to determine your soil's drainage.) Consider

also the plant's size at maturity. Will it outgrow the area? Can you keep it pruned to a desirable size? Think about whether the plant will do well with the sun exposure in the area. If you have a lot of trees around your house, sun exposures can be variable, not only from hour to hour, but also from season to season. Plotting the sun exposure will help you choose the right plants for a specific area.

METHOD 1: (Ideal)

The Planting Bed

Whenever possible, prepare the soil for planting by amending an entire plant bed:

1. Remove weeds and/or existing lawn by smothering (mulch, tarps, or a combo) or with an herbicide.
2. Till the entire area, ideally to 12" deep, but 8-10" is sufficient.
3. On top of soil, till in 2" of soil amendment such as Permatil (ideal but expensive; or similar sized porous stone/aggregate), pine bark soil conditioner, or a combination of the two (such as Daddy Pete's Planting Mix). Optionally, add 1-2" of compost for enhanced nutrient content and beneficial microbial activity. If drainage is poor, raise the bed by adding an additional 6-8" of compost/topsoil blend, tilling into the planting bed.
4. Use a rake to smooth out uneven areas. Avoid walking in the bed, which compacts the soil (walk on a board or a flattened cardboard box).

5. Dig a hole the size of the rootball. Gently loosen any compacted roots. (Exceptions: dogwood and azalea. If these are compacted, make 3-4 cuts into the roots at the base of the rootball). The top of the rootball should be slightly higher than the natural ground level, to allow for settling. Gently firm the soil into place, making sure there are no air pockets. Finish with a 2-4" layer of the mulch, making sure mulch does not rest against trunks or stems.

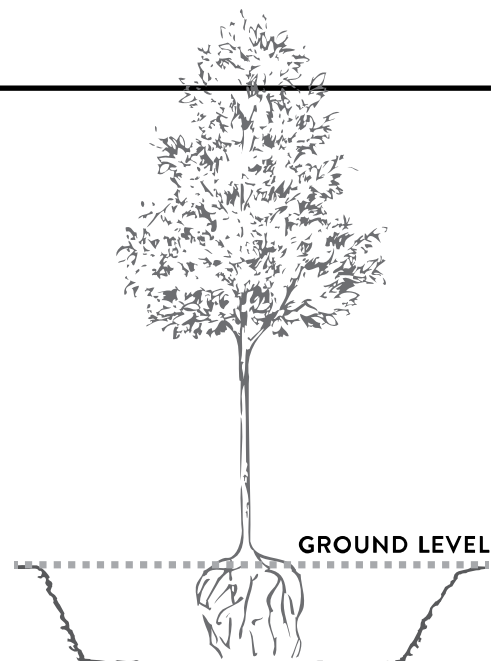
METHOD 2:

The Planting Hole

Choose an appropriate place to plant. (See 'The Basics' above, and 'Notes' following on soil drainage.)

1. Dig a hole at least 2-3 times the width of the rootball, but no deeper than the height. A wide hole is best to disperse excess water (4-5 times the width of the rootball is not too wide). Break up sides and bottom of the hole, leaving no slick or compacted surfaces.
2. Remove plant from container. Position in hole with top of rootball slightly higher than ground to allow for settling. In poorly drained soils, plant with 20-50% of rootball above soil line. Loosen roots (except with azaleas and dogwoods.)
3. To improve clay soil drainage, mix 50% soil with 40% soil conditioner and 10% cow manure or mushroom compost. Sandy soils require organic matter (composted manure or peat moss), to improve water retention, but little or no soil conditioner.

(continued)



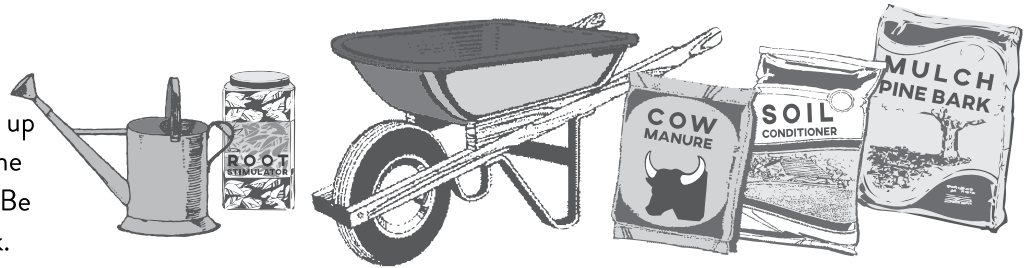
HOLE WIDTH EQUAL TO
2x-5x ROOTBALL WIDTH

METHOD 2: *The Planting Hole* (continued)

4. Fill the hole with the amended soil up to the sides of the rootball, gently firming the soil, and taking care not to compact. With extra soil mix, make a water retention ring around the hole to direct water to the rootball. If necessary, build up an island of soil mix to surround the rootball if it raised above the soil. Be sure not to cover any of the trunk.

5. Layer with 2-3" of mulch (pine straw, pine bark, composted leaves, etc.), but don't put mulch directly

against the trunk. Water thoroughly with a solution of water and root stimulator.



Planting Notes Supplemental watering is VITAL for new plantings.

Generally, watering will be required 1-2 times a week spring to fall, if there has been less than 1" of rain. A rain gauge is recommended to determine exactly how much rain you receive. When planting in late spring and summer, plan on watering plants 2 times a week, depending on how dry and hot it is. Check the soil to make sure water is needed. When planting in the fall, water plants about once a week, depending on the amount of rain received and weather conditions. Always check soil first to determine if watering is needed. If the soil is damp going to dry, or dry, when you put your finger in it to the second knuckle (or dig that deep with a trowel), then it is time to water. *A new rootball can be dry while the surrounding soil is relatively moist.* Mulch can dry out while a few inches below the surface, the soil is still moist. In general, hold off watering in winter. However, some evergreens, especially those planted the previous year, need winter watering. Water plants the following spring and summer during dry spells.

Top-heavy trees, such as flowering pear or Southern Magnolia, may need to be staked for support during the first few years. This helps roots avoid being shifted by a heavy canopy, and keeps the tree standing straight. Don't stake too tightly. A tree needs to move in the wind a bit, in order to strengthen the trunk. Tree staking kits are available at the nursery. Make sure the straps are wide and non-abrasive.

To determine if your soil is poorly drained, do the following test. Dig a hole as deep as your planting hole and fill with water. If the soil drains at a rate less than 1" per hour, consider installing drainage tiles, choose another location to plant, or opt for planting in a berm or raised bed.

Automatic sprinklers are good for lawns, but usually do not water trees and shrubbery well, and may even over water. It's better to water deeply but less frequently, than to water sparingly but daily. Deep watering encourages deep rooting. Drip systems are effective and efficient. See our *Watering Your Garden Care Guide* for more details.

Soil tests are helpful for evaluating your soil. Soil pH should generally range from 5.5-6.5. For acid-loving plants, such as azalea, camellia, mountain laurel, rhododendron, and blueberry, the target pH is 5. For roses, the target pH is 6.5. Percent of base saturation (BS%) should be between 70-90% for good soil fertility. Wet and poor smelling soils that are grayish in color usually have insufficient oxygen, and should be amended with soil conditioner and built up with fresh topsoil using Method 1. See our *How to Read Your Soil Test Report Care Guide* for more about soil tests.

Important! After planting, the rootball should be slightly above, or level, with soil. This prevents stem or collar rot that can kill plants. First, locate the trunk flare (a slight flare where the trunk meets the roots). A container grown plant may have a buried trunk flare, which requires removal of excess soil and roots. Don't be afraid to prune roots with a sharp knife or pruners.