Selecting and Planting a Tree

A strong well-developed leader (or leaders in a multi-stem plant) is especially important in shade trees.

- Healthy buds
- Trunk and limbs free of insect or mechanical injury
- Wide 45 degree to 90 degree branch angle for strength
- Branches well distributed around trunk with adequate space between and no crossed branches.
- Low branches — they are temporary, but they help develop taper, promote growth, and prevent sunscald.
- Good trunk taper
- Height of tree is proportionate to rootball size.
- 10- to 12-inch rootball per 1 inch trunk diameter. Diameter is measured 6 inches above the ball

When choosing trees at the nursery, select a high-quality tree. This illustration identifies points to look for in a dormant tree 5 feet or taller.

**Container Grown Tree.** Avoid “root-bound” trees. Roots that circle around the edge of the container may become girdling roots. Pull the tree out of the pot to check if the tree is root bound. Before setting the tree into the planting hole, slice the root system and spread the roots out. Always remove the container when planting.

**Balled and Burlapped Tree.** Look for a firm soil ball with trunk securely tied. Do not accept a plant with a broken soil ball. Always carry balled and burlapped plants by the soil ball, not by the trunk, stems, or branches.

**Bare Root Tree.** Look for abundant root growth; numerous, fibrous small roots; good root color; and moist roots. Do not prune the crown or root system unless to remove dead plant parts.
Planting Depth

Planting depth is determined by location of root flare.

Original soil level may be too deep
Best to plant with root flare at soil level

Dashed line is ball of a balled and burlapped tree
Root ball depth

You may plant higher in heavy soils.

Step 1. Digging the Hole

Hand dig hole with tapered sides

Tapered sides top third
Scarify sides with shovel if glazed

Depth measured from root flare to bottom of root ball

Width 2 to 3 times wider than root ball
Step 2. Setting the Tree

Container Trees

Slice, loosen, and spread out

Lightweight growing medium

Container trees may be root bound. Remove the container, if any spiraling roots are pencil sized, woody, and brown, select another plant. If spiraling roots are smaller, fibrous, or light colored, simply spread them with a knife, claw, or hay hook. Slice deeply into the root ball from top to bottom in several locations to sever circling roots on the surface and in the interior. Loosen soil and spread roots out to prevent circling. Then follow backfilling steps for a balled and burlapped tree.

Balled and Burlapped Trees and Bare Root Trees

Gently backfill with loose soil; do not tamp

Hold bareroot tree while backfilling

Find root flare and place at soil level

After placing the tree, backfill the bottom half of the hole with the existing soil. Then, without losing the integrity of the root ball, cut and remove the top half of the wire basket. Remove all tying twine and the top portion of the burlap. You may remove the entire wire basket if the root ball will not fall apart when you place it into the hole.
Step 3. Backfilling

If your soil is heavy clay or pure sand, you may consider the addition of 25 percent by volume of organic matter and mix with the original soil in the tapered area of the hole only. If the soil is a loam and drains well, there is no reason to amend the soil.

Step 4. Finishing Touches

Place soil ring 4 to 6 inches high around hole edge to create watering saucer and protect tree from mower damage. A mulch of wood chips and organic matter may be used in the raised saucer. Apply mulch 2 to 4 inches deep with no mulch against the tree trunk. Do not prune unless dead branches exist. Stake if necessary. Anchor just the root ball, not the tree. Leave staking material on for first growing season.

Thoroughly water tree. Remember a bare-root tree needs frequent watering early. A container tree will dry out quicker than a balled and burlapped tree due to lighter soil. Be careful not to over water the tree by too frequent turf or landscape irrigation.

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