

TREE PLANTING 101

The saying goes, “The best time to plant a tree was 20 years ago, but the next best time is now.” Planting your tree properly is one of the best things you can do to ensure the successful establishment of your tree in the landscape. Prior to planting, treat your tree gently and protect it during transport. Keep it in a cool, shaded place and keep the root ball moist. Plant the tree as soon as possible. Follow these steps for a successful planting. And remember, call Dig Safe® at 811 before you dig.

- 1. Take Stock!** Examine your tree and remove packaging around trunk and branches.
- 2. Find your Flare!** Locate the trunk flare (also called root flare or the root collar). The ANSI A300 defines this as “the area of transition between the root system and the trunk,” and it should be at or just above the finished grade. It is where the trunk will typically start to curve and where structural roots become distinct from the trunk. This is often highly visible on trees in the woods, and can be less conspicuous on young, nursery-grown trees. There may be excess soil on top of the trunk flare, so you may have to remove soil from the top of the root ball to identify the flare. You can gently probe the root ball with a chaining pin, skewer, screwdriver, or wire in order to locate structural roots.
- 3. Determine the size of the planting hole.** Measure the width and depth of the root ball and use this to determine how wide and deep to dig, keeping in mind that the flare should be at or just above grade. The hole should be 2 to 3 times as wide as the root ball. In hard, compacted soil, the hole should be closer to 3 times as wide.
- 4. Get digging!** Dig a wide hole with sloped sides. If the sides appear smooth or “glazed,” use a shovel to rough up the sides. Dig only as deep as the root flare. Periodically check your depth and width by comparing with the root ball.
- 5. Remove packaging from the root ball.** For container trees, this means removing the tree from the container. For balled and burlapped trees (B&B), this means removing the burlap and wire basket. For in-ground fabric, this means removing all of the bag. If it seems like the root ball of a B&B tree will fall apart, you may want to place the tree in the hole and then remove packaging. For all trees, remove trunk wrap and check the canopy for flagging tape, rope, or other items, and remove.



Trunk flare on mature tree



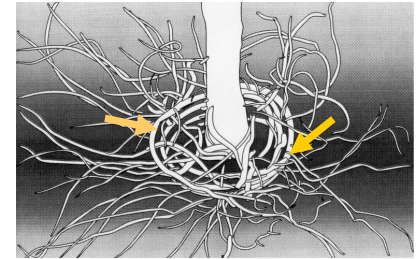
Removing excess soil from the top of the root ball using a hand cultivator



B&B trees with trunk wrap

TREE PLANTING 101

6. **Examine the roots!** For all trees, cut circling roots. For container trees, remove roots growing against the container and remove a thin layer of roots from the side and bottom. For B&B trees, straighten, cut, or remove circling roots. If you plant trees a lot, you may want to dedicate a pair of cheap hand pruners for this purpose.
7. **Place the tree in the hole.** Roll or place the tree in the center of the hole. Check the depth of the root flare and adjust hole depth, if necessary.
8. **Check the placement of the tree.** Examine the tree from two sides, 90° apart. Is the trunk straight? Are branches facing the way you want? You can backfill with a little soil to help stabilize the tree as you check the placement.
9. **Backfill and water.** Once the tree is stabilized, continue to backfill with the soil that you dug out. Halfway through the backfilling process, water the tree to help remove air pockets and reduce future settling. Continue to backfill. To aid in watering, you can build a low dirt berm around the edge to help guide water to the root ball. Water thoroughly after planting.
10. **Mulch.** Use an organic mulch in a ring around the tree. Mulch should be 2 to 4 inches high. Once mulch has settled, the depth should not be greater than 2 inches. Keep mulch 3 inches away from the trunk. Do not apply mulch against the trunk of the tree so that it appears like a volcano; this is incorrect and detrimental to the tree, though is often observed in the landscape.



Circling roots



Correct mulch technique. Wide ring, away from trunk.



Improper mulch technique

Caring for your New Tree

The next two years are critical for the successful establishment of your tree. Make sure you water your tree, but be careful not to overwater. During hot, summer months, your tree may need 10 gallons per caliper inch per week. When it is cooler, that amount may be 5 gallons per caliper inch per week. You can check the soil moisture of the root ball by probing the soil with a chaining pin or stiff wire. If the rod goes in easily, there is likely adequate moisture, but if it is difficult, that may indicate the soil is dry. As you remove the rod or chaining pin, if you notice suction has developed, that may indicate the soil is too wet; likewise, if the leaves are wilting, but you are watering regularly, you may be watering too much. Newly-planted trees typically do not need to be fertilized or pruned.

Bureau of Forestry
Urban & Community Forestry Program
Massachusetts Department of Conservation and Recreation
251 Causeway Street, Suite 600, Boston, MA 02114
www.mass.gov/dcr/urban-and-community-forestry

In Partnership with:
USDA Forest Service and
the Massachusetts Tree Wardens' &
Foresters' Association

