

Good Morning Brad,

The investment in trees for the home landscape can be a considerable expense. But replacing trees that have died because of old age or damage from either machinery, lightning, disease, or pests is a continual process. So losses due to poor selection, incorrect planting practices, or improper care should be minimized.

So apart of that is timing, the best time to plant trees is before they break dormancy in spring or as leaves begin to change color in fall. This is when maximum root growth occurs. But with proper care, planting can occur anytime the ground is not frozen.

Simply finding a tree at a local nursery does not ensure survival in your landscape. Trees are often sold with a hardiness zone rating based on average minimum winter temperatures. The hardiness zone should only be used as a guide, rather than a set in stone rule, in the selection process.

Other than selecting a plant that is adapted to your area, also find one that fits the site and serves the intended landscaping function. Keep in mind the ultimate size and shape of the tree to ensure it does not outgrow the space and become a nuisance down the road. Be sure the canopy will not interfere with utilities, structures, or road signs, and consider the root zone that the tree will need. The root system of a shade tree is extensive, and restricting its growth can shorten the life expectancy. Give the tree as much unrestricted space as possible for root development.

Trees are packaged for sale by nurseries balled and burlapped, container-grown, potted, bare-root, and tree spade. But the most common types bought are the balled and burlapped and container- grown trees.

Balled and burlapped trees are dug from the nursery when dormant, leaving a firm ball of soil around the roots, which is held together by burlap. Begin by digging the hole for Ball and Burlapped trees two to three times wider than the root ball diameter. Depth of the planting hole should be equal to the height of the root ball from the first set of lateral roots (root flare) to the bottom of the ball. Often soil will need to be removed from the top of the root ball to find the first lateral roots. Never plant a tree so the top of the root ball is below the surrounding soil.

Once the hole is complete, situate the tree so it is standing upright. Remove string or twine from the top of the root ball and trunk. You may have to backfill the hole halfway to help stabilize the tree while these tasks are accomplished. If the root ball is being held firm with a heavy wire basket, it is a good idea to remove at least the top half of the basket with wire cutters. While the basket may degrade, we have seen instances where wire has girdled the emerging roots. With a sharp knife, begin removing the burlap. At a minimum, remove the burlap from the top of the root ball. Many retailers or landscapers will not honor the traditional one-year guarantee if the wire basket or burlap has been removed. Ultimately, this is the homeowner's decision, but removal of those products is highly recommended.

When backfilling the hole, break up the large soil clods that create large air pockets. Once the hole is half full, water to settle the soil around the root ball. Continue backfilling the hole being mindful not to place soil on top of the root ball. Use excess soil to create a raised ring (3 to 4 inches) at the outer edge of the root ball. This ring will hold water and allow it to soak into the root ball as the tree is watered. Avoid tamping or stomping backfill around the root ball. Instead just allow the water to settle the soil in place.

The other style we will talk about a bit is Container-grown plants. Although many people are hesitant to plant container-grown trees, there is no reason to shy away from them. Container-grown trees offer advantages for the homeowner over ball and burlapped trees. In general container grown trees are lighter, smaller, and more readily available.

Overall, the hole for a container-grown tree is similar to the hole for a ball and burlapped tree. It should be two to three times wider than the container and only as deep as the distance from the root flare to the bottom of the container.

Regardless of material, the container must be removed before planting. Once the tree is free, inspect the root system. Circling roots at the perimeter is normal on a vigorous plant. Use a sharp knife or spade to cut into the root ball from the top to the bottom in three or four places. The cut should be made 2 inches deep. While this seems drastic, it will not hurt a well-grown tree, but it will prevent future girdling roots, and new roots will arise from the cuts.

If you have questions regarding planting trees give me a call at the office at 785.448.6826 or shoot me an email at [reschaub@ksu.edu](mailto:reschaub@ksu.edu) and we will see if I can help you out!