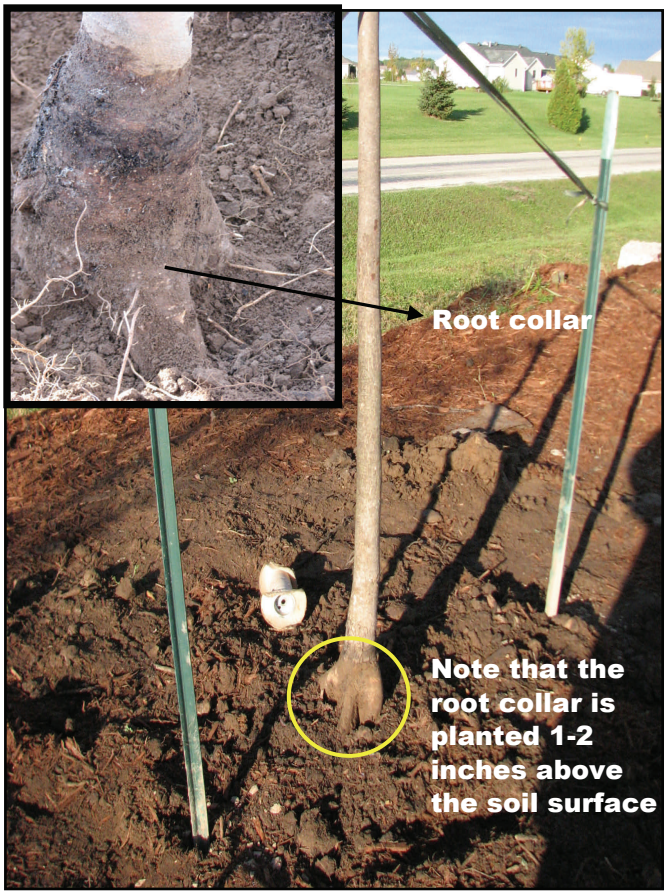
Don't bury the root collar of your tree



Root collar: The interface region of the tree trunk and root system where the trunk flares up near the soil line.

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Produced by Vijai Pandian, Brown County UW-Extension Horticulture Educator

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Proper Tree Planting Techniques (B&B)

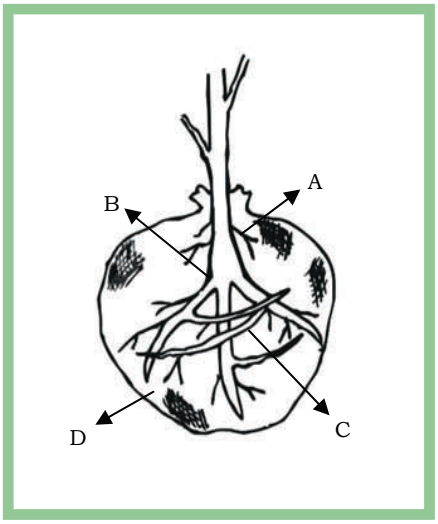
Brown County UW-Extension
Agriculture & Extension Service Center
1150 Bellevue St., Green Bay, WI 54302-2259
Phone: (920) 391-4610; Fax: (920) 391-4617
www.browncountyextension.org/horticulture

Trees play a tremendous role in protecting our environment. They improve our air quality by filtering airborne pollutants, reducing atmospheric carbon dioxide. They help prevent storm water runoff. Trees are essential for wildlife habitat and its survival. They conserve energy by shading buildings and paved surfaces and they even increase the value of our homes. Hence, each year individuals, communities, and private land owners take pride in planting new trees, as they play a vital role in balancing our ecosystem.

However, most trees in the urban environment are planted too deeply in the soil, leading to a gradual decline in their growth and development. Recent university research and field observations by arborists have led to the discovery that planting the root collar of trees too deeply contributes to the decline and failure of new and established trees in the landscape. Deep planting of trees acts as a primary stress factor. It can lead to stem girdling root development where the secondary (encircling roots) and adventitious root girdle the root collar region of the tree.

Adopting proper tree planting techniques ensures long survival and good health of your trees.

This publication is intended to guide homeowners, landscapers and individuals through the steps of proper tree planting techniques.



A—Adventitious root
B—Root collar region
C—Encircling root
D—Root ball

What <u>not</u> to do after your tree is planted

Flowers are pretty...
but not under your trees!

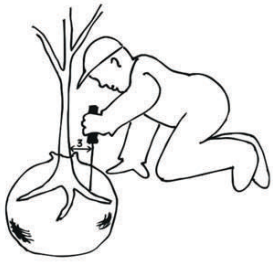
Do not pile mulch up like a volcano around your tree

Remove all twine and label tags from trunk and branches

Step 13: After the soil has been replaced, thoroughly water the tree, soaking the soil close to the trunk.

Step 14: Stake the tree using a wide strap attached to two sturdy stakes. Remove a year after planting. Mulch 6 inches away from the trunk with 2 inches of wood chips.

Step 15: Post planting care: Apply one inch of water to the soil surface near the root ball. This will wet the soil to a depth of 8-10 inches. When the soil is dry below the surface of the mulch, it is time to water. Keep the soil moist but not soaked. Continue watering at least once a week until mid-fall, tapering off for lower temperatures that require less-frequent watering.

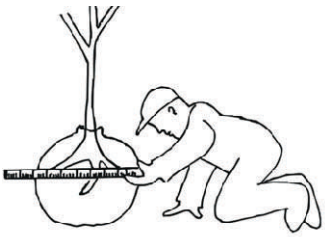


Step 1: With a tool (screwdriver, etc.), probe 3 to 4 inches away from the trunk to find the depth of at least two structural roots from the surface of the root ball. Find the average of the two depths that you measured.

Step 2: Measure the height of the root ball from the surface of the root ball to the bottom.

Step 3: Calculating the depth of the planting hole.

The depth of the planting hole will equal Step 2 minus Step 1.

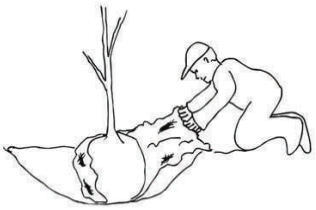


Step 4: Measure the diameter of the root ball.

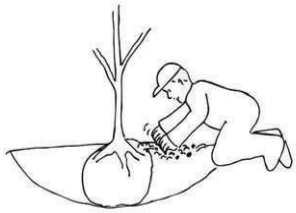
Step 5: Dig a saucer-shaped hole three times the width of the root ball diameter to the depth you calculated in Step 3.

Step 6: Gently slide the root ball into the center of the hole. Avoid lifting the tree by its trunk.

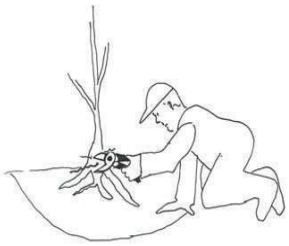
Step 7: Cut the wire basket vertically and remove it completely.



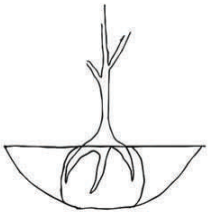
Step 8: Remove the burlap and twine attached to the tree. Remove any name tags attached to the trunk or branches.



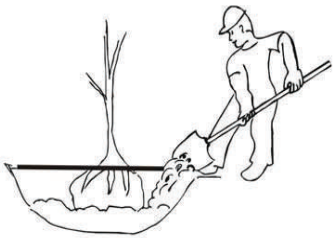
Step 9: Remove the soil above the root flare.



Step 10: Prune any encircling roots that are growing on the root flare with a clipper. Also prune any adventitious roots that grow above the root collar.



Step 11: Make sure the root collar is at or slightly above (1-2 inches) the surface of the soil.



Step 12: Backfill the hole with soil, gently but firmly packing the soil around the base of the root ball. Apply fertilizer if a soil test supports its application for newly planted trees.