Arbor Day
A workshop for teachers of grades 4 – 8

Tree Planting and Early Care

Flanting and Early Care

Robert J. Northrop Extension Forester

NOTES

Selecting the right tree for the right place is the best approach to tree planting and establishment ...

It reduces costs, increases long term values and helps to ensure success.

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Correlations to state standards have been developed and are available at this website

10 - Steps to Successful Tree Planting

- 1. Select the correct tree
- 2. Find the top-most root
- 3. Dig shallow/wide hole
- 4. Place tree in hole
- 5. Position top root 1-2" above landscape soil
- 6. Straighten tree
- 7. Add backfill soil and firm
- 8. Add mulch
- 9. Stake if needed
- 10. Irrigate



Select the Correct Tree

- 1. Soil type wet/dry
- 2. Root and crown space
- 3. Hurricane resistant
- 4. Florida grade #1 or fancy



Use the City of Tampa's Tree Matrix to understand the trees most suitable to your school planting site.

Remove Tree From Container



Rest the tree on its side and slide the root ball from the container.

Try not to pull using the tree trunk, rather cut the container.

It is nice to have a companion help.

Cut Circling Roots



Look for roots that circle the outside of the container.

These should be cut before planting.

Do not over look this step. Circling roots are a major cause of tree decline and death in the Tampa region.

Find the top root



Brush some of the soil from the surface to locate the top root.

The point where the top-most root emerges from the trunk is at the soil surface for this tree and will guide you on the planting depth.

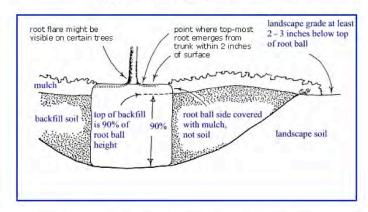
Measure from Top Root to Bottom of the Root Ball



Measure the distance from the top root to the bottom of the root ball.

Adjust the hole depth to about 2 to 3 inches less than this distance.

Dig Shallow and Wide



- · Dig the planting hole as wide as possible
- The depth of the hole should be 2 inches less than the height of the root ball.

The depth of the planting hole in the illustration above is about 90% of the depth of the root ball.

This results in the point where the top-most root meets the trunk several inches above the landscape soil.

Make the hole at least 1.5 times the diameter of the root ball.

Break up compacted soil in a large area around the tree tp provide the newly emerging roots room to expand into loose soil. This will hasten root growth translating into quicker establishment.

Set tree in the hole



Set the tree in the hole preferable by lifting by the root ball or sliding the ball in.

If you measure carefully the root ball will not have to be removed to adjust hole depth.

If the hole is too deep you will need to remove the tree and adjust hole depth by adding soil.

Straighten the tree



 Before adding backfill, be sure to check that the tree is straight by looking at it from two perpendicular directions

Before you begin filling in the planting hole have someone view the tree from two directions perpendicular to each other to confirm the tree is straight.

Then fill in with soil to secure the tree in the upright position.

Once you beginning filling the hole, it is difficult to reposition the tree.

Do Not Place Soil Over the Root Ball



Placing soil over the tree's root ball or planting it too deeply will stress and possibly kill the tree in certain situations.

Soil over the root ball intercepts water and air meant for the roots.

Water the backfill to settle



Add water to the root ball and soil after filling the hole to settle loose soil.

Don't stump the fill soil or root ball.

As shown in the photo, a one-inch pvc pipe, attached to a hose is an effective means of eliminating air pockets around the root ball.

Mulching



Apply a 2 - 3" thick layer of mulch to at least an 8 ft. diameter circle.

Apply a thinner layer of mulch over the root ball, but keep it at least 10" from the trunk.

If the mulch touches the tree's trunk it can lead to rot and/or may harbor animals that will feed on the tender new tree.

Irrigation

Size of nursery stock	Irrigation schedule for vigor <i>1,3</i>	Irrigation schedule for survival <i>2,3,4</i>
< 2 inch caliper	Daily for 2 weeks; every other day for 2 months; weekly until established.	Twice weekly for 2-3 months
2-4 inch caliper	Daily for 1 month; every other day for 3 months; weekly until established.	Twice weekly for 3-4 months
> 4 inch caliper	Daily for 6 weeks; every other day for 5 months; weekly until established.	Twice weekly for 4-5 months

How much?

Saturate the root ball and then stop.

If proper irrigation can be provided for only three months after planting, trees no larger than one inch in caliper should be planted – this is a five gallon container.

Add a Berm?

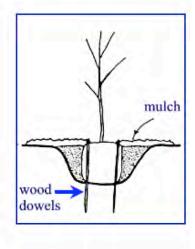


 Prevent soil from being washed over the root ball by covering soil berms with a 3" to 4" layer of mulch or, most preferably, by constructing the berm entirely from mulch

The berm will ensure that water penetrates to where it is needed most, i.e. in the root ball.

If soil is sandy or very well drained, a berm may not be needed.

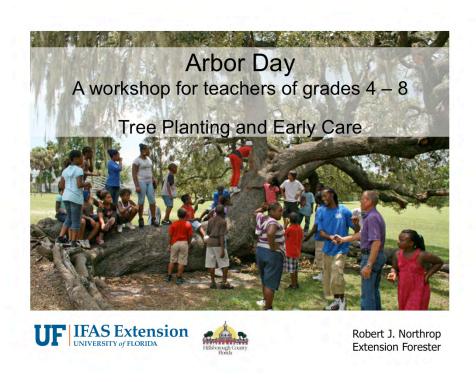
Berm can be made from mulch or soil. Constructing it from mulch reduces the chance of too much soil being placed over the roots. An Easy and Inexpensive Staking Method



Two or three (2 shown) wood dowels driven through edge of root ball.

These do not have to be removed because they simply rot in place.

There is no danger of this system girdling the trunk since nothing is attached to the trunk.



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