

New Tree Planting Procedures: What a Difference

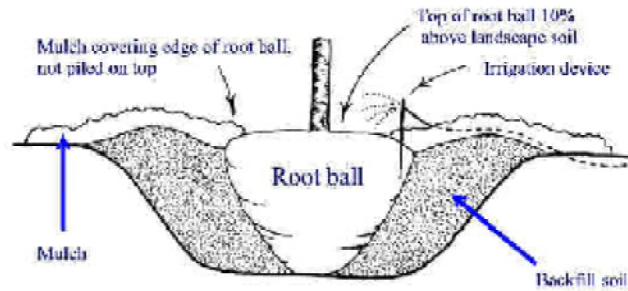


Image: *Planting Trees*, by Dr. Ed Gilman, UF-IFAS

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Much has been learned about tree growth and development over the past ten years. Research at the University of Florida and at other institutions has provided information that is sure to help improve transplant survival and long term health of newly established trees. Let's compare a few of the older tree planting practices with current recommendations:

Old: Plant the tree at such a depth that the top of the root ball is even with the top of the ground.

New: Shallow is better than deep! A hole about one and one-half times the diameter of the root ball is recommended. Wider holes should be used for compacted soil and wet sites. The depth of the hole should be less than the height of the root ball, so that ten percent of the ball is above ground. On small trees, one inch of the top of the root ball should be showing above the backfill soil. On larger trees, up to three inches of the top of the root ball should be visible. Once finished, the point where the top-most root emerges from the root can be visible.

Old: As you add backfill soil, tamp the soil around the root ball to firm it and remove air pockets.

New: Slice a shovel down into the loose soil twenty to thirty times as it is being replaced around the root ball. Do not step on the backfill because this can result in compaction and restrict root growth. Air pockets can be removed by watering heavily following transplanting. Once planting is finished, add ten to twenty gallons of water to the root ball and backfill.

Old: When transplanting is complete, mulch heavily over the top of the root ball to conserve moisture.

New: Do not place mulch on top of the root ball. Begin mulching at the edge of the root ball and apply mulch to at least an eight foot diameter circle around the tree. Construct a berm out of mulch at the edge of the root ball to create a basin for facilitating irrigation. Do not construct a berm of soil since this soil would end up over the root ball several months later. Water the mulch well after it is spread.

Old: Stake newly planted trees so that the trunks will not move until well established.

New: Trees can establish more quickly and develop a slightly stronger trunk if not staked. However, if the root ball moves in the wind, emerging roots often break. In this case, staking would be necessary.

New Tree Planting Procedures

Old: Add lots of peat, manure or compost to the planting hole in order to get the tree off to a fast start.

New: Extensive research on trees clearly shows that there is no need to incorporate any amendments, fertilizers, living organisms, dusts, powders or organic products into the backfill soil. Simply use the loosened soil that came out of the planting hole. The only exception to this rule is where existing soil is so poor or contaminated that it must be replaced with good quality soil. This soil condition is sometimes found in a parking lot island or a similar site.

Old: Mix fertilizer with the backfill soil to “kick start” the trees.

New: Slow-release fertilizer can be applied by placing it on top of the root ball and backfill soil or on top of the mulch. Adding fertilizer has not been associated with either improved survival or increased growth of trees after planting in fairly good soil. There has been little research on the effects of fertilizer on trees in poor soil.

More details on this new information about planting trees can be found at
<http://hort.ifas.ufl.edu/woody/planting>

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