

How To Plant A Tree—There's More To It Than You Think

I know that most people think they know how to plant a tree. But it is also true that a major cause of the loss of newly planted trees and shrubs is improper planting. Here is a 12 step procedure based on directions from my friend Robert Edmonson of the Texas Forest Service.

1) Select an appropriate location for the tree.

Use a tree that will grow well under local environmental conditions and provide it with plenty of space to grow and mature. This includes both vertical and horizontal space for the canopy and plenty of room for root growth. Don't try to grow water-loving plants on rocky, sunny slopes, or xeric plants next to water.

2) Dig the hole at least twice as wide as the root ball (wider is better).

Wide areas give roots a place to spread and grow. Dig the hole no deeper than the root ball to keep the tree from settling too deep and dig square holes to allow for root penetration out of the hole and into the surrounding soil. (Round holes tend to cause the roots to grow in a circle inside the soft fill dirt.)

3) Fill the hole with water and check the drainage.

If it takes longer than 24 hours to drain, select another site. A tree will die if its roots are underwater for long periods of time. Tree roots need air.

4) Prune the tree sparingly only if necessary.

Remove dead, broken and diseased branches and crushed and girdling roots only. Removing even a small portion of the healthy canopy actually slows root growth and delays establishment. A well-selected tree requires no pruning.

5) Remove all foreign materials from the tree.

This includes wires, twine, cords, containers, tags and especially non-biodegradable bags. If planting a balled and burlapped tree, remove as much of the burlap as possible to allow for water infiltration into the bag and root penetration out of the bag.

6) Set the tree in the hole with the root collar flush or slightly above natural grade.

Planting too deep is a leading cause of mortality of newly planted trees. Do not pick the tree up by the trunk. Always handle by the container or root ball.

7) Gently backfill with the same soil that came out of the hole.

Create a natural environment, not an artificial one. Do not add soil amendments or fertilizer. Too much nitrogen will burn tender young roots, slowing growth and delaying establishment. Settle the soil with water. Tamping the soil causes compaction and damages roots.

8) Stake the tree only if necessary.

Staking is required only for very flexible, floppy young trees. Stakes should not be left in place longer than 1 year.

9) Mulch the tree out to the drip line. Spread mulch 1-2 inches deep up to but not touching the trunk. Wood chips, pine bark, leaf litter, hay, etc. are great mulches. Mulch keeps soil temperature fluctuations to a minimum and increases soil moisture retention. Mulch also

suppresses weed growth and organic mulch adds nutrients to the soil.

10) Water the tree for at least one year, preferably two.

A newly planted tree requires 6-8 gallons of water per diameter inch of trunk per week, less often in late fall or winter. A thorough soaking is much better than light, frequent waterings.

11) Protect the tree from animals (this includes humans).

A wire-mesh cage at least 3 feet in diameter and 4 feet tall staked to the ground works miracles. Deer and livestock will eat your tree if it is not protected and weed-whackers will kill your tree in an instant.

12) Perform routine maintenance for at least two growing seasons.

This includes biannual weed control, yearly mulch replacement, weekly watering, and protection maintenance.

Good Luck.

Until next time....

Jim Stanley is a Texas Master Naturalist and the author of the books "Hill Country Ecology," "Hill Country Landowner's Guide" and "A Beginner's Handbook for Rural Texas Landowners." He can be reached at jstmn@kctc.com. Previous columns can be seen at www.hillcountrynaturalist.org , or at Riverside Nature Center at <https://riversidenaturecenter.org/past-blogs-from-a-friend/>