Alamosa Trees: Don't plant your tree as if it were a tomato. Marilyn Loser 2009 May 5

You've selected a tree that can gracefully reach adult size in the location you've chosen (refer to April 29 Alamosa Trees column). Now it's time to plant. The most common planting mistakes are to dig a hole that is too deep and too narrow and then to backfill with top soil or potting soil.

Site Preparation: Decide how deep to plant the tree. You're not planting a tomato. Tomatoes can develop roots all along their stems so they are commonly planted very deep; up to the top few leaves. This doesn't work for a tree. Most of the important fine absorbing roots will develop in the upper 12 inches of the soil. Trees should be planted so that the top of the root ball is 1-2 inches above the surrounding grade. Nearly everyone is aware that trees need adequate water, but many don't realize that oxygen for the roots is just as important. It's a myth that trees develop a deep root system that is a mirror image of the above ground growth. Even species that have a taproot develop more than 95% of their roots laterally in the top 12-18 inches of soil, often extending 2-3 times the width of the canopy.

If the tree is burlapped, in a container, or wire basket measure the height and width and dig the hole to a depth slightly less than the height of the root ball, but 2 to 3 times as wide with sloping sides. That's a lot of digging, but you will be rewarded several years from now with a healthy tree.

Planting: Lift or move the tree by the root ball, not the trunk, to avoid damaging the tree. If the tree is in a container, gently remove the container or cut it away. Carefully place the tree in the prepared hole and stabilize it with some of soil removed from hole. Before backfilling the hole, make sure the tree is straight.

If the tree is burlapped or in a wire basket, backfill about ¼ of the hole. Cut off and remove the burlap and twine from the top and sides of the root ball, but not from beneath the root ball. If there is a wire basket remove the top tiers by cutting them away to allow roots to spread. Remove any string around the trunk or stem.

Girdling roots (those that grow in a circle around the inside of a container) are a major reason trees die within eight years of planting. Once they've started growing in a circular manner, they continue to do so, eventually choking the tree to death. Disrupt the circling roots by making several vertical cuts on the outside of the root ball or by loosening the outside roots with your hands. To see a sad example from my yard – I didn't know any better 11 years ago – visit http://www.alamosatrees.net/jat/planting-and-care-guide.htm and scroll down to the middle of the article.

Backfill the hole with the native soil unless the soil is dreadful. Scientists have found that alternating layers of native soil with new, enriched soil can actually be harmful to tree growth. Roots will grow in the enriched layer and are less likely to extend out into

surrounding native soil. Gently push soil around the roots and water to eliminate air pockets. Make sure there is no backfill on top of the root ball, which should be at or just above grade. Do not pack the soil after you water. Thoroughly water your newly planted tree.

Fertilizing newly planted trees is not recommended. It takes energy for a tree to absorb the fertilizer and the energy is better used for establishing new roots. Staking will typically not be required if you planted your tree on a firm soil foundation and backfilled appropriately. However, staking may be necessary in very windy locations.

Mulching: Fertilizing and staking aren't recommended, but mulching is key in Alamosa's dry, windy climate. A 2-4 inch layer of organic mulch reduces soil moisture loss from evaporation, moderates soil temperature extremes, reduces competition from grass and weeds, improves soil aeration and soil structure, adds organic material to the soil, and will help prevent lawnmower and weed whip damage to the trunk. Apply organic mulch within the drip line, keeping it off the root ball of newly-planted trees, to a depth of no more than 4 inches. Insure the mulch is loose so roots can receive oxygen.

Protection: Protect your newly planted tree from damage by such threats as deer and lawnmowers. Many people in Alamosa are now surrounding tree trunks with chicken wire or some other material that prevents deer from grazing on the trunk and damage from lawnmowers or trimmers.

"A man has made at least a start on discovering the meaning of human life when he plants shade trees under which he knows full well he will never sit." Elton Trueblood

Much of the information in this column is from the International Society of Arboriculture (http://www.treesaregood.com/pressrelease/press.aspx) and Colorado State University Extension (http://cmg.colostate.edu/gardennotes.htm). Information on trees suitable for Alamosa available at: http://www.alamosatrees.net.