Tree Selection, Planting & Maintenance Guide

Selecting the "Right Tree for the Right Place"

Tree selection is one of the most important investment decisions you will make when landscaping a new home, replacing a tree lost to damage or disease, or adding a tree to the existing landscape. Matching the tree to the site is a very important consideration. After careful study of the landscape needs, soil, planting site requirements and wind and sun exposure, a number of suitable tree species, varieties or cultivars may be found for the site. The objective is to select a tree that will perform well and satisfy the landscape needs with minimal problems.

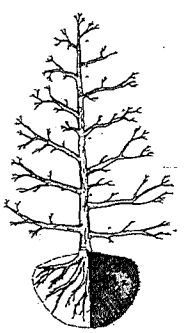
A question frequently asked of tree experts is "What tree should I plant?" Answering the following eleven questions prior to beginning the selection process will help determine which tree is the "Right Tree for the Right Place".

1. Why is the tree being planted?
2. Will the tree provide shade, fruit, seasonal color or act as a windbreak or screen?
3. What is the size and location of the planting site?
4. Does the space lend itself to a large, medium, or small tree?
5. Are there overhead or underground utilities in the vicinity?
6. Is there adequate clearance for sidewalks, patios or driveways?
7. Are there other trees in the area?
8. Is the soil type sandy, clay, loam, acid or alkaline?
9. Is the soil deep, fertile and well drained or is it shallow, compacted and infertile?
10. What type of maintenance are you willing to provide?
11. Will you have time to water the newly planted tree until it is established?

Tree Selection

After answering the eleven questions, you are ready to select a species, variety or cultivar for the planting site. Using the information gathered about the site conditions, balanced with your personal aesthetic preferences, select the trees suitable for the site from the City of Druid Hills Recommended Tree List. Select alternative trees because it is unlikely that a single retailer will have every tree on the list in the retailer's inventory. Before purchasing a tree not on the recommended list, call the City Arborist for additional information. Unless you enjoy experimentation, avoid hasty or impulsive tree purchases.

Finding Your Tree at the Nursery

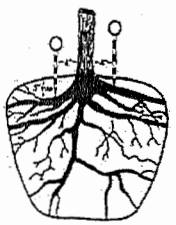


When choosing trees at the retailer, be sure to select a high quality product. Things to look for in a deciduous tree are healthy leaves or buds, a straight well-developed leader and healthy bark. Look to make sure the trunk and the limbs are free of insect damage or mechanical injury. The ideal spacing between branches is 10-18" for most species. Branches should be well distributed around the trunk. The trunk should be tapered. Low branches help develop trunk taper, promote growth, and prevent sunscald.

Tree Planting Tips . . .

When To Plant? The ideal time to plant deciduous trees is during the dormant season – in the fall after leaf drop or early spring before bud break. This period of cool weather allows plants to begin root establishment in their new location, before spring rains and summer heat stimulate new top growth. Tree planting may be extended through spring if trees receive regular care.

How Deep Should Structural Roots Be? Generally, the uppermost structural roots (two or more) of a young tree should be within 1 to 3 inches of the soil surface, measured 3 to 4 inches from the trunk. As a tree matures, roots thicken faster on the topside, reducing the amount of soil above the structural roots and forming root flare. For tree survival on landscape sites with poorly drained soil, structural roots may need to be shallower. Under extremely wet conditions, structural roots may need to be at, or slightly above, surrounding grade.



Planting Process: If the structural roots in the root ball are located within 3 inches of the soil surface (illustrated to the right), the top of the root ball should be placed no lower than the level of the existing grade, preferably one or two inches higher than existing grade to allow for settling. Dig the planting hole approximately two times wider and no deeper than the root ball. After preparing the site, place the tree in the hole by lifting the tree by the root ball (never by the trunk). Set the root ball on solid ground in the hole, not on loose backfill; this eliminates settling. Remove container-grown trees from the container and cut any circling roots to prevent the development of girdling roots, which may cause death of the tree in later years. When planting balled and burlapped trees remove all wire. When the tree is in the hole, carefully cut away as much of the burlap as possible and leave no burlap exposed to the air above the soil surface. It is not necessary to add peat moss or manure to the soil in the planting hole. Using the soil dug from the hole, backfill around the tree. Add water to settle the soil and prevent air pockets, filling from the bottom up.

Watering: Keep the soil moist but not saturated.

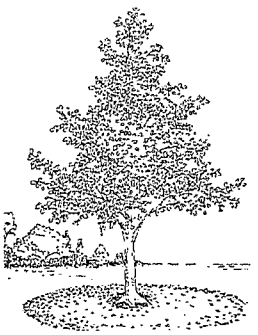
Staking: Stake tree properly to keep root ball from shifting. The main tree stem must be able to move; if it is too rigid, root growth, trunk diameter and tree height will be adversely affected. Remove stakes and straps after roots are established, usually one or two growing seasons. Check the straps at least twice each year and loosen if necessary to prevent girdling.

Fertilizing: **Fertilization at planting is not necessary - no nitrogen for at least one year!** Nitrogen, which encourages top growth, should only be applied after new roots are established.

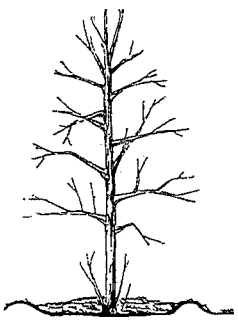
Mulching: **Mulching is one of the most beneficial things a homeowner can do for the health of a tree.** Mulch conserves soil moisture, reduces competition from other plants and prevents mower and trimmer injury. Mulch can give planting beds a uniform and well-maintained look. Mulch should be two inches in depth for 2- to 3- inch-caliper trees and not less than four feet in diameter. Later applications to "refresh" the mulch should not increase this depth. Keep the mulch away from the trunk of the tree. Avoid thick layers of mulch around the base of the tree (often called "volcano mulching"), which can promote diseases, root rot and restrict oxygen flow to roots. Do not pile the extra soil around the base of the tree and use mulch to hide it. Remove excess soil from the planting site. Avoid organic material that can mat down, like grass clippings.

Left Diagram:
Incorrect way to mulch.

Right Diagram:
Correct way to mulch.

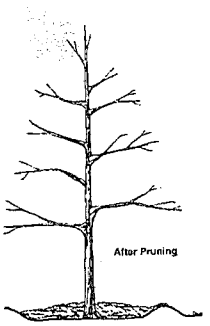


Pruning: At the time of planting, remove only damaged branches. During the first 3 to 10 years, foliage is necessary to establish new roots. Suckers and shoots may grow from the ground near the base of the trunk at any time and should be removed. Avoid excessive or severe pruning or thinning. Remember, leaves make food for the tree. Be systematic and spread major pruning over several years to avoid excessive shock to the tree. About every 3 years remove dead branches, branches with weak crotches and crossing or rubbing ("interfering") branches. When the tree is tall enough to begin pruning for structure, remove interfering branches, branches with weak, narrow crotches and select primary and secondary branches. This is the time to begin the process of raising the height of the lowest branch by pruning away some of the lower branches. After the first ten years, the tree should need pruning only once every 5 to 10 years. Remember, a branch that is 5 feet from the ground today, will be 5 feet from the ground for the life of the tree! After a tree becomes mature, only prune every 7 to 10 years to remove dead, defective and interfering branches. As the very mature tree begins decline, it may be necessary to increase the frequency of pruning to every 3 years to remove dead and defective branches.



Left Diagram:
Before Pruning

Right Diagram:
After Pruning



Illustrations courtesy of the Kansas Forestry Service

Issue: Fall 2006