



Training and pruning young trees pays off in the long run

There's much more to tree care than digging a hole, planting the tree and watering it. To give a tree the best chance at a long and healthy life, training and pruning are essential.

Newly planted trees typically don't need pruning unless branches have been damaged but is important once they start to grow. Research shows removing tips and buds of young trees slows root growth. If trees are left unpruned the first year after planting, expanding buds and new leaves help root expansion and tree establishment. Damaged branches can be removed at their point of origin, or they can be cut back to a lateral branch that will yield foliage and bolster establishment in the first growing season.

Proper pruning when a tree is young will ultimately result in a tree that is structurally stronger, longer-lived and less costly to maintain. Training a tree early in its life may help prevent or reduce storm damage when the tree approaches maturity in 15 to 20 years. Oklahomans are very familiar with what high winds and ice can do to a tree. Training can also help reduce expensive tree trimming later on.

Training begins the year after transplanting, continues through the next three to five years and should be complete within eight to 10 years. Following the training period, only maintenance pruning should be needed.

At planting, decide on the system of guidance or training you will follow based on the tree species' growth habits. For instance, most oaks and sycamore develop a central leader, whereas species such as elm and mulberry will always fork somewhere in the main trunk. For these species, develop a modified central leader. The modified central leader is the most desirable system for fruit trees doubling as yard trees.

Walk around the tree before making any cuts and inspect the overall branching structure. Remove branches that are rubbing, shooting inward or competing too closely to another branch. Narrow branch angles may also need to be removed as they can be weak joints susceptible to breakage. However, some species, such as zelkova, have narrow branch angles and still have strong joints.

Early in the tree's life, decide which closely spaced scaffold branches to keep. Scaffold branches are large branches that form the main structure of the tree. Try to visualize how the tree will look as it thickens in years to come. Know the natural form of the species. Remember – branches don't slowly rise above the ground. As a tree grows, branches retain their position on the trunk, though they increase in diameter and become more crowded. Spacing scaffold branches radially

and vertically allows growth to be channeled where it will be more effective. No more than one-fourth of the canopy should be removed at any one time.

Frequent inspections during the training years will help you channel growth in desirable directions. The more vigorous species require more frequent inspections. At the end of the season after leaf fall, inspect the tree and make any necessary corrective cuts.

The tip of the main trunk of a young shade tree should not be cut back. Heading back, as is practiced, is not beneficial to most trees and often results in undesirable forks in the main trunk. This is especially true of species that already fork, such as elm and maple.

For more information about training shade and ornamental trees see Oklahoma State University Extension's fact sheet [HLA-6415 – Training Young Shade and Ornamental Trees](#).