

Train Young Landscape Trees For Structural Strength And Beauty Ed Perry, UC Cooperative Extension

Pruning is a cultural practice that must be done properly to get the best performance out of your landscape trees. The most important pruning you do takes place while your tree is still fairly young, usually when the tree is three to five years old. This early "training", which is done to develop a strong trunk and framework of well-placed branches, helps prevent many serious structural problems later on, when your tree is full grown.

Having said this, my first recommendation is to only prune lightly, or not at all, immediately after planting. At most, you may want to prune at planting time to remove broken branches, or to remove a side branch that is outgrowing the central leader. Pruning at planting time removes leaves that the tree needs to help replace roots that were lost during transplanting. In order for your tree to become successfully established in its new location, it needs to grow new roots as rapidly as possible; this happens best when there are lots of leaves to produce the plant foods necessary for root growth. The recommendation that the top of the tree must be pruned to "balance the top with the root system" has been proven wrong by several horticultural researchers. Remember that roots cannot grow without leaves.

You may want to wait until the following late summer or fall to begin training your landscape tree. The tree's growth habit and landscape use determine how and to what extent you must prune to obtain the desired form. Trees with a strong central leader and a conical shape, like liquidambar, may need little or even no pruning. On the other hand, trees with a more irregular, spreading form like ash, Chinese pistache or most oak species may need some pruning for the first few years.

Trees with a spreading growth habit should ultimately have 5 to 7 main branches main branches spaced 12 to 24 inches up and down the trunk. For very large trees such as Valley oaks, a spacing of 30 or 36 inches between major branches is even better. These branches should also be spaced evenly around the trunk so they don't shade each other. Not all of your tree's main permanent branches are going to be present a year after planting, but keeping this model in mind when you prune will help you train your tree. The first permanent branch can be a few inches to as much as 12 feet above the ground, depending on the tree's use. Allow enough room under the tree for mowing, weeding, or other cultural activities. After you've selected the lowest branch, work your way up the trunk choosing other well-placed permanent branches.

When selecting permanent branches, choose those that are smaller in diameter than the trunk. Branches that are the same diameter as the trunk may outgrow the central leader and cause structural problems later on. For the first three to five years, keep the central leader dominant. If lateral branches start to grow too fast, thin some of the foliage out at the ends of the branches to slow them down. Smaller branches along the main limbs should be left unpruned. You should also leave small, temporary branches along the trunk for a couple of seasons. These branches shade, and help nourish and strengthen the trunk. Remember that pruning is a dwarfing process. The more branches and leaves you remove while the tree is young, the slower your tree will grow in trunk and limb diameter and overall strength. Prune your tree only enough to establish a strong, attractive framework of trunk and limbs. Keep in mind that you are pruning to accentuate your tree's natural growth tendencies, not to change them.