NEWSPAPER ARTICLES

Five Steps for Training Young Trees (February 8, 2025)

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This article outlines five simple steps that produce well-trained trees. The payoff is easy-care trees. What's your investment? It's minimal - a relatively small amount of time and some basic equipment like hand pruners, loppers, pole pruners, handsaw, and ladder. The steps apply to most deciduous and broad-leaved evergreen trees, regardless of species or use (for example, park, street, or residential), and should be followed in sequence.

Step One - Remove broken, diseased, dying, or dead branches behind the point of injury. Sometimes, the whole branch should be removed; sometimes, just the injured part should be cut off.

Step Two - Select a leader and remove competing leaders. The leader is the central stem of the tree. Carefully follow the trunk of the tree from bottom to top. The trunk should narrow into a single stem that is in a vertical position. This is the leader. There should be only one leader. If more than one leader exists, then the strongest and most vertical stem should be selected as the central leader, and the other stems removed, cut back, or possibly selected as permanent branches (see step four).

Step Three - Select the lowest permanent branch attached to the trunk that will remain on the tree throughout its lifetime. The location and use of the tree usually determine the position or height of the lowest permanent branch.

For a street tree, the lowest permanent branch over the sidewalk might be 8 feet, while over the street, at least 14 feet of clearance may be required. The lowest permanent branch for a tree in a park or yard often will be lower than that for a street tree, but the amount of clearance depends on specific use and maintenance considerations.

Look for a vigorous branch with a strong attachment that meets the height requirement. Its stem diameter should be one-half (or less) of the trunk diameter where the branch attaches to the trunk. If the tree is too small for you to select a branch at the desired height, then you'll have to wait until the tree grows taller. Save some temporary branches (see step 5).

Step Four – Select scaffold branches and cut back or remove competing branches. Scaffold branches are the permanent branches of the tree and constitute much of its framework. Scaffolds are located above the lowest permanent branch and are selected based on spacing and size considerations.

Vertical spacing between scaffolds depends on the expected size of the tree at maturity. Scaffold branch spacing should be 18 inches or more for large trees and 12 inches or more for small to medium-sized trees.

Scaffold branches also should be spaced radially around the trunk. Select scaffold branches, starting with the lowest permanent branch and proceeding up and around the trunk.

If scaffold selection is difficult because of the selection of the lowest permanent branch, then it might be better to determine which vertical and radial branches will provide the best overall scaffold system. In some cases, it is necessary to go back to step three and select another lowest permanent branch based on the best combination of scaffolds.

Selected scaffolds should have strong attachments. The branch diameter should be no more than one-half of the diameter of the trunk at the point of attachment. Remove branches that are close to the scaffolds (within 4 inches) and are of equivalent size. If competing branches are needed to maintain canopy size, reduce their length by 50 percent or more to subordinate and reduce growth. Leave small-diameter branches as temporaries. Be prepared to reevaluate scaffold selection as the tree develops.

Step Five—Some or all branches located below the lowest permanent branch can be retained as temporary branches. Remove branches with a diameter greater than one-third of the diameter of the trunk at the point of attachment. Shorten the length of temporaries to two to four buds.

What About Next Year?

You probably won't be able to develop the tree's permanent framework (central leader and scaffold branches) in the first year. In fact, you may not even be able to select the lowest permanent branch or scaffolds. Pruning in subsequent years is necessary in almost all cases. Plan to go through all steps each year until good structure and form are achieved

For more information on mature tree pruning:

Mature Tree Pruning: UC ANR Publication #28922 https://ucanr.edu/sites/gardenweb/files/28922.pdf

Pruning: UC ANR Publication #80117 -- https://ucanr.edu/sites/UrbanHort/files/80117.pdf

Video on Pruning Cuts: https://marinmg.ucanr.edu/CARE/HOWTOPRUNE/Cuts/

The Tulare-Kings Counties Master Gardeners will answer your questions in person:

Visalia Farmer's Market, 1st & 3rd Saturdays, 8 - 11 am, Tulare Co. Courthouse

Questions? Call the Master Gardeners:

Tulare County: (559) 684-3325, Tues & Thurs, 9:30-11:30;

Kings County: (559) 852-2736, Thursday Only, 9:30–11:30 am

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