

UC MASTER GARDENER PROGRAM OF SAN LUIS OBISPO COUNTY



The UC Master Gardener Program is a public service and outreach program under the University of California Division of Agriculture and Natural Resources (UC ANR), administered locally by participating UC Cooperative Extension offices (UCCE). Our mission is to extend research based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of California.

FRUIT TREES: Deciduous Pruning

The purpose of this handout is to provide basic pruning concepts for home gardeners. The goals are to create a healthy tree with a strong structural framework and to control the size of the tree for ease of harvesting and care. Use of the pruning guidelines outlined below, along with the references, will help the homeowner develop skills which will allow them to manage their home orchard.

At The Beginning

Bare-root fruit trees are planted in the winter, typically in January. Perform initial pruning of bare-root trees at planting time by topping the tree at 20-24 inches to encourage low branching. Cut back any existing branches below this point to two buds. To protect your young tree from sunburn and borers, paint the tree from one inch below soil line to lower branches with indoor white latex paint diluted 1:1 with water.

The Basics

Usually, deciduous fruit trees are pruned at least once a year, but many benefit from pruning in both summer and winter. Both winter and summer pruning have basic rules in common: prune to remove any crossing, dead, downward growing, diseased or damaged wood. Make clean pruning cuts at 45-degree angles. The cut surface should angle down and away from the horizontal to prevent pooling of water on the cut surface. When removing a branch, make a close cut adjacent to, but not through, the branch collar (the swollen ring at the base of the branch). Do not leave stubs. Do not paint the pruning cut surfaces with any paints or emulsions. Let the pruning cuts dry and heal naturally. Assess your trees and develop a plan for pruning/managing each tree. This should include optimizing scaffold structure, tree canopy and tree size.

A strong scaffold structure will encourage the tree to produce quality fruit. This is accomplished using heading cuts, wherein the shoot is pruned about $\frac{1}{4}$ inch above an outward growing bud. New growth occurs within 1 to 8 inches of the pruning cut. At the same time, open up the tree canopy to sunlight for fruit development and allow sufficient airflow to prevent disease. This is done using thinning cuts to remove entire shoots and thus reducing branch crowding. This allows sunlight and air to penetrate into the interior of the tree, which not only prevents disease but also promotes bud and fruit development. Heading and thinning cuts will allow the home arborist to control both the amount of fruit produced and the size of the tree, as larger trees are more difficult to harvest.

Winter Pruning

Dormant pruning is done in the winter (usually January), but can be done any time after leaves have fallen and prior to spring bud break. Winter pruning has the advantage of good visualization of the tree's branches due to the absence of leaves. The main objective in winter pruning is to maintain strong tree structure with well-placed scaffolding branches and to remove

dormant buds to invigorate the remaining buds. Up to 50% of last year's growth can be removed on the fast growing fruit trees (such as peach and nectarine). Twenty percent of last year's growth can be pruned from fig, apple, pear and plum. It is best to time winter pruning during a 7-day rain free period to allow the pruning cuts to dry. Apricots and apriums should not be pruned in the winter as they are susceptible to disease if the healing cuts get wet from winter rains. Winter pruning time is also ideal for orchard clean up with removal of mummified fruit off the tree, fallen fruit and tree leaf debris.

Summer Pruning

Summer is the time to maintain a manageable tree size and open up the canopy and interior of the tree to light and air circulation (usually June or July in San Luis Obispo County). For mature trees, remove the vigorous upright shoots that are not needed as permanent branches. Head cut and thin branches to control tree height. Up to 30% of the foliage from the tops and sides of the tree can be pruned back without disturbing next year's shoot growth, flowering or fruit production. Keep in mind that semi-dwarf fruit trees can grow to 15-20 feet and summer is the ideal time to limit the size of the tree for ease of harvest. Figs and persimmons should not be pruned in the summer. This is also the time to bend and secure, with spreaders or tie downs, pliable branches to a desired 45-degree angle which will result in a stronger scaffold structure.

Tools

Sharpened pruning tools such as hand pruning shears, lopping shears and pruning saws should be disinfected between trees especially if disease is present. Clean tools should be soaked for 2 to 5 minutes, rinsed with clean water or allowed to air dry before use. Disinfecting solutions such as 25% solution household bleach (1 part bleach + 3 parts water) or full strength Lysol can be used.

References:

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Lamborn, Alicia R. Disinfecting Pruning Tools. PDF. University of Florida, IFAS Extension.

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