

Basic Pruning of Fruit Trees

Purpose: To train trees to be structurally sound, shorter, easy to care for and produce more regular high quality fruit.

REASONS FOR PRUNING:

- Size control – ease in care, maintenance, and fruit harvest.
- Strength – Develop stronger limb structure.
- Distribution of sunlight – Sun shines more evenly throughout the tree.
- Regulate fruit production – removes excess fruiting wood.
- Renews fruiting wood – to continue production of strong budding and flowers.

WHEN TO PRUNE:

Dormant pruning (December and January) is the best for cuts that are 1-1/4 inch or larger (with the exception of Apricots). Summer pruning is done for size control as talked about in our handout about “Backyard Orchard Culture” (see web page). Apricots best pruned in late summer, not winter. Dead wood can be removed at any time.

TRAINING SYSTEMS USED IN HOME ORCHARD:

In all these systems, we want to keep the tree height below 8 feet (or as tall as you can reach from standing on the ground). This will result in heavier fruit production that will be easier to pick, pruning and spraying. (not typically used on nut trees)

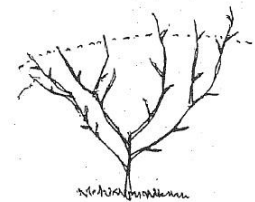
OPEN CENTER OR VASE SHAPE: Can be used in all fruit trees and some nut trees



When first planting, cut to a height of 3'-4'. Some trees may have already have branches, select 3 or 4 evenly distributed around the trunk. Cut these back leaving a 2" stub. Make sure there are at least 4-5 healthy live buds below your cut.

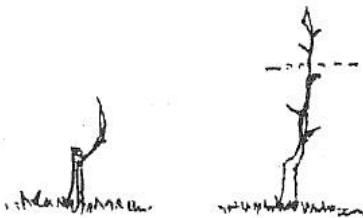


Winter or Summer-First year, select 3 or 4 limbs that are distributed evenly around the trunk. Leave small branches on these limbs for early fruiting and sunburn protection. Head (trim back) these limbs half their length end result should be 3'-4'.



Winter or Summer-Second year, select 1 or 2 limbs on each main branch. Head these back to half their length (12"-18"). Remove other limbs. 3rd year concentrate on maintaining vase shape. Don't allow the fruit trees get out of control any of the following years.

MODIFIED CENTRAL LEADER: For higher headed nut trees, Pecan and Walnut. 4-6 main branches are established from the trunk before the open center is developed



At planting, head to 4-5 buds above the graft union. After the first year remove all laterals and prune leader to half it's height



Winter or Summer-After second year, select 3-4 main branches. Prune these to a height of 5'-7'. Remove all laterals below lowest branch and cut all others to short stubs.



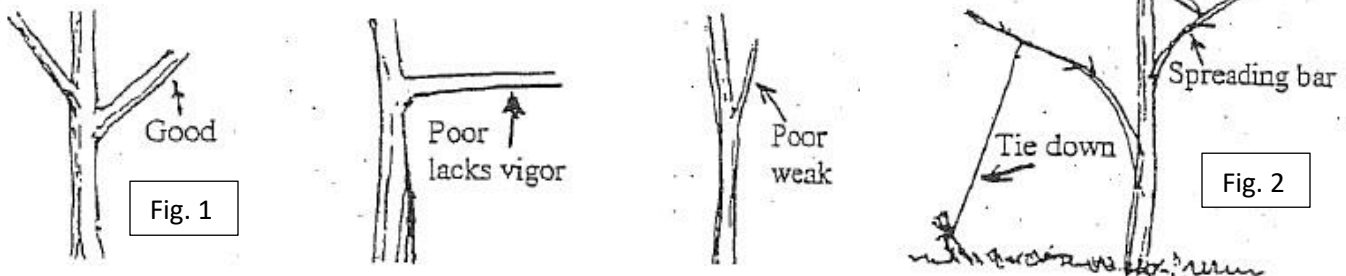
Winter or Summer-From third year on, select 5-6 main branches leaving the leader to remain the most vertical and tallest.

REDUCING HEIGHT OF OVRGROWN TREES (1/3rd RULE)

Heavy pruning of all branches the same will result in excessive growth the following season with little fruit. A better plan is to shorten or remove part the branches each year over a 3-4 year period. The unpruned part of the tree will still produce fruit. Keep in mind not to over prune while attempting to form a symmetrical tree. Each tree grows differently; few will develop into a perfectly shaped tree. Older (out of control) trees need to be shortened by the 1/3rd rule, which means "No more than 1/3rd of the lateral branches" in the winter if branches are 1 1/4" or larger.

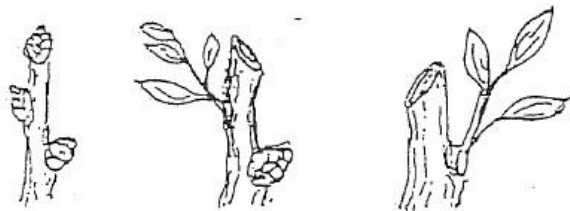
SOME IDEAS ON WHAT TO PRUNE AND WHAT TO SAVE

1. Main branches should form angles of attachment of 30-45 degrees. See Fig. 1

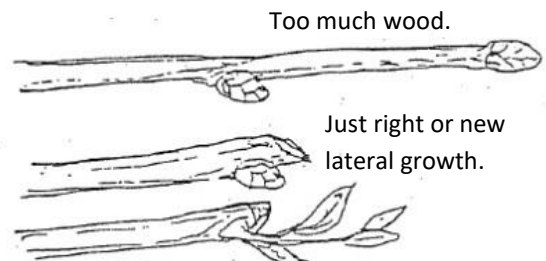


2. Spreading bars or tie downs (weighted or staked) should be used for a maximum of one growing season to help improve angle of the branch. This will be a necessity on trees that tend to grow upright. See Fig. 2
3. Remove suckers: shoots appear at the base of the trees and grow from the rootstock—below the graft—this is an ongoing process.
4. Most vertical shoots—waterspouts—should be removed entirely,
5. Spurs: are where the fruit is produced on Apples, Apricots, Cherries, Plums, Almonds, and Prunes. They last about 4-5 years some can last longer. They grow from 1/2" to 2" in one year. Learn to recognize spurs to estimate where to trim.
6. Remove *CROSSOVER* branches. Branches that are dead, weak, misshapen or too close together.
7. Reduce tree to desired height. Make heading (removing part of the branch) and thinning (removal of the entire branch) cuts. You should stand back, look at the tree several times, and visualize where to make the best cut that will develop and train the tree.
8. Use *BYPASS* type hand pruners for closest cuts (industry favorites are Felco, Bahco and Corona). Close, clean cuts heal faster. Stubs can be more susceptible to infection, a magnet for disease and insects. A cut should be 1/4" above a "bud" at a 45 degree angle.

Select the correct bud for new growth direction and location



Normally the bud points in the direction of the new branch. A bottom bud of a horizontal branch will likely continue horizontally.



The strongest growth goes to the terminal bud. When cut, the lateral bud becomes the terminal bud and growth continues in that direction.

PRUNING FRUIT VARIETIES

ALMONDS AND PRUNES: Spurs produce lasts about 5 years. Remove 1/5th of fruiting wood each season. Excessive pruning stimulates growth not fruit.

APPLE AND PEAR: Spurs produce well for 5 years, then should be renewed. Prune out upright shoots, weak wood, and excessive growth.

APRICOTS AND PLUMS: Spurs produce well for 4 years. Replace lateral shoots gradually. Shorten new growth from previous season, thin and shape.

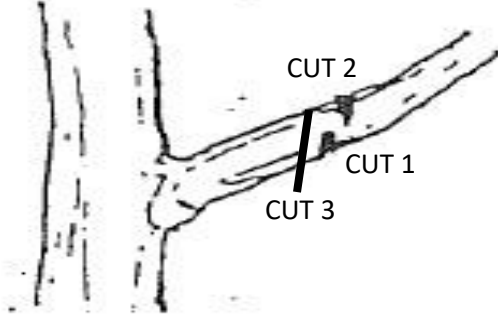
PEACH AND NECTARINE: Spurs bear fruit only once. Remove 1/3 to 1/2 of previous years' new growth, thin and shape to reduce chances of damage if fruit set too heavy. Force production of lateral shoots that can fruit next season.

PERSIMMON: Shape when young, thin lightly when older.

WALNUTS: Thin occasionally by removing branches 1" - 1 1/2" in diameter.

THE RIGHT EQUIPMENT

The larger the branch, the larger the tool. Hand shears or pruners are best for branches up to the size of your small finger. Long handled pruners called lopping shears can cut branches up to 1 1/2"-2" diameter limbs. Larger than this, a saw is necessary. Pruning tools can last a lifetime, so get quality tools.



When pruning larger branches the weight of the branch tends to "break" or "skin the bark" as you reach the end of your cut. To prevent this, make two (2) cuts. The first on the bottom side of the branch, the second from the top down no more than about 1/4 " forward from the first. You should follow up with a 3rd cut, to clean up the termination.