

Central Leader and Modified Central Leader Pruning on Pome Fruit and Deciduous Fruit Trees not in the genus Prunus



PRUNING STYLES

Central Leader and Modified Central Leader

- Central leader and modified central leader pruning styles are used to maximize fruit production and fruit quality for all fruit trees **except** those in the genus *Prunus*. This style of pruning keeps branches in the center of the tree.



PRUNING STYLES

Central Leader and Modified Central Leader

- Each scaffold branch and its attached branches and limbs should occupy their own space in the tree.
- Branches should not cross, touch, rub or be excessively crowded.
- Adequate spacing should be maintained between branches to allow sufficient light and air to penetrate through the tree so that fruiting wood is produced and so that insect and disease problems are reduced.



PRUNING STYLES

Central Leader and Modified Central Leader

- Without proper pruning, branches become excessively crowded. Light penetration for fruiting wood is restricted and pests and diseases are promoted.



PRUNING STYLES

Central Leader and Modified Central Leader

- Trees should have sufficient branches remaining after pruning so that the bark of the trunk and scaffold branches is protected from strong, direct sunlight when the tree is full of leaves to prevent damage from sunburn or sunscald.
- Central leader shaped and modified central leader shaped trees will need to have an average of 20%-40% of growth removed on a yearly basis.
- Good pruning practices will help to reduce the amount of growth removed each year so that 10-20% branch removal is common.
- Fruit trees which are pruned to central leader or modified central leader shapes may bear fruit on fruiting spurs, as in apples and pears, on last years growth, as in mulberries and some figs, or on current season growth, as in figs and pomegranates.



PRUNING STYLES

Central Leader and Modified Central Leader

- A tree pruned into a central leader shape resembles the shape of a Christmas tree. Pruned to this shape, the tree will be the tallest and will produce the greatest amount of fruit.



PRUNING STYLES

Central Leader and Modified Central Leader

- The modified central leader pruning style differs from the central leader by having a more rounded top. The dominant leader of the central leader tree is suppressed with drop-crotch pruning or training techniques and secondary leaders are allowed to develop. Each outer leader becomes progressively shorter as they move outward from the center of the tree.
- These secondary leaders divide the growing energy or dominance between several growing points and the overall effect is a lower growing tree with a more rounded shape.
- The secondary leaders must be spaced along the trunk both radially and vertically to produce a tree with strong branching structure. Trees should never be topped!



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 1:

- Remove all suckers.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 2:

- Start pruning each scaffold limb one at a time, beginning with the lowest scaffold limb first. Start at the tree trunk and work your way towards the end of the branch.
- Prune for health, structural strength, and flower and fruit production and to thin out crowded branches.
- If branches are growing vertically and are crossing limbs which are growing above them or are crowding nearby branches, drop-crotch, train, or remove the limb to prevent overcrowding and crossing.

A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 2:

- If branches are growing vertically and are crossing limbs which are growing above them or are crowding nearby branches, drop-crotch, train, or remove the limb to prevent overcrowding and crossing.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 2:

- After being properly pruned, the overall appearance of the scaffold branch will often be feather-like where the branch is horizontal, with side branches and fruiting wood mainly attached to the top and sides of this branch. Small branches and fruiting spurs may be attached to the bottom of the scaffold, provided they are not too crowded.
- Where the branches are more vertical, side branches should be spaced along the branch in a spiraled arrangement with internode distance between branches. Adequate thinning of branches should be done to allow for air circulation and some light penetration.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 3:

- Move to the next scaffold branch and repeat the procedure outlined in step 2. Again start at the base of the branch and work outwards to the tip of the scaffold limb. Remember to focus on only the scaffold limb that you are currently pruning.
- Continue working your way around the tree, pruning one scaffold limb at a time.
- After moving around the tree by working on the lowest scaffold branches, continue up to the next higher scaffold branches and again work your way around the tree pruning each branch one at a time.

A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 4:

- Repeat steps # 2-3 until you have finally reached the central leader of the tree.
- Branch height should descend progressively lower from the central growing point, downward as the branches move further out from the center.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 5:

- If you are pruning to a modified Central leader shape, drop-crotch the highest, central leader to a lower lateral and round out the overall tree shape by drop-crotching the taller branches.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 5:

- Pruning to a modified Central leader shape will reduce the height and overall size of the tree, making it easier to pick the fruit and allowing the tree to fit into smaller areas.



A Systematic Method to Prune Central Leader and Modified Central Leader Trees:

Step 6:

- Stand back and examine the entire tree. Look for any crowded or crossing branches and drop-crotch, train, or remove these branches. Balance the overall tree shape by thinning, drop-crotching or training any scraggly branches.



Fruiting Spurs



Apple



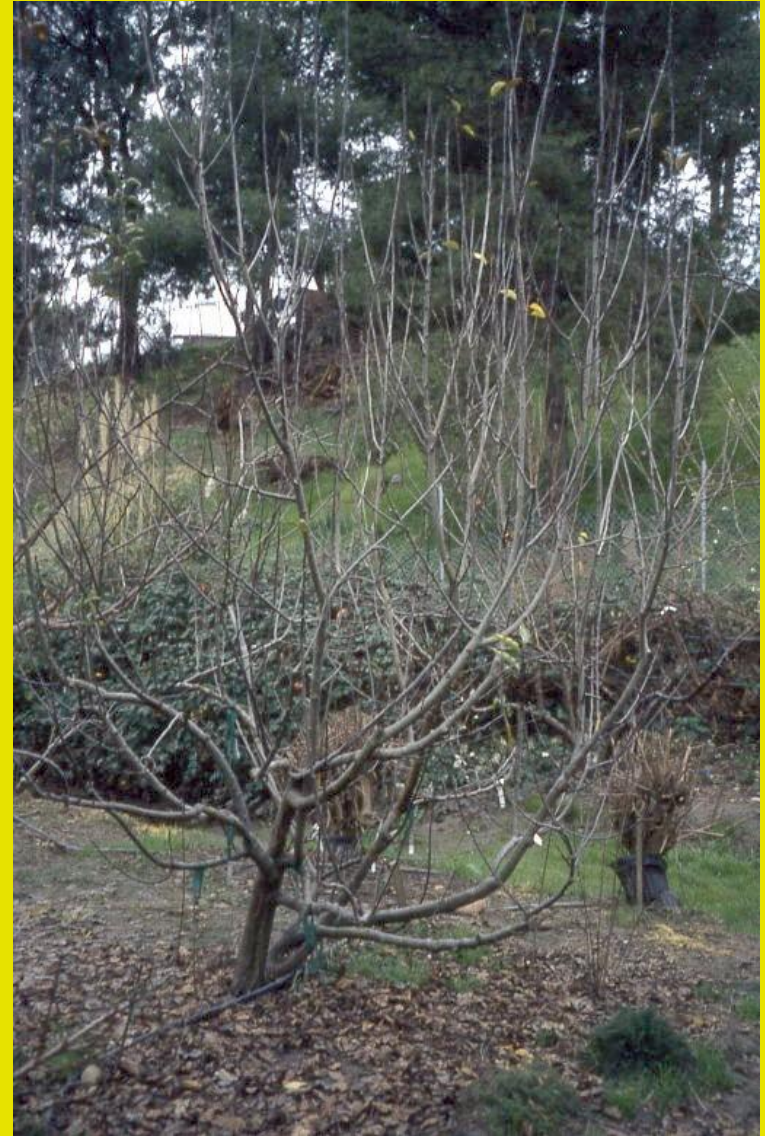
Pear



Modified Central Leader Apple



Modified Central Leader Apple



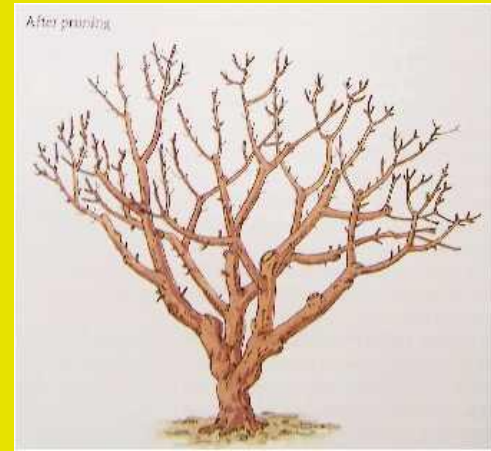
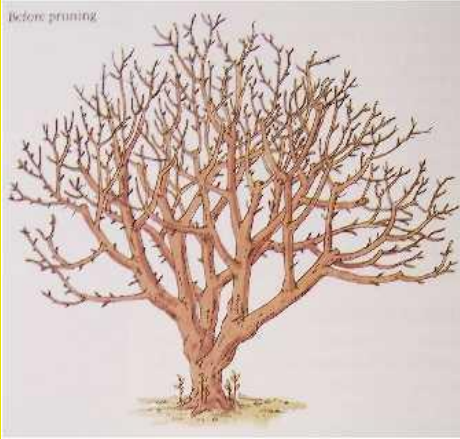
Modified Central Leader Apple



Modified Central Leader Apple



Modified Central Leader Apple



Modified Central Leader Pear



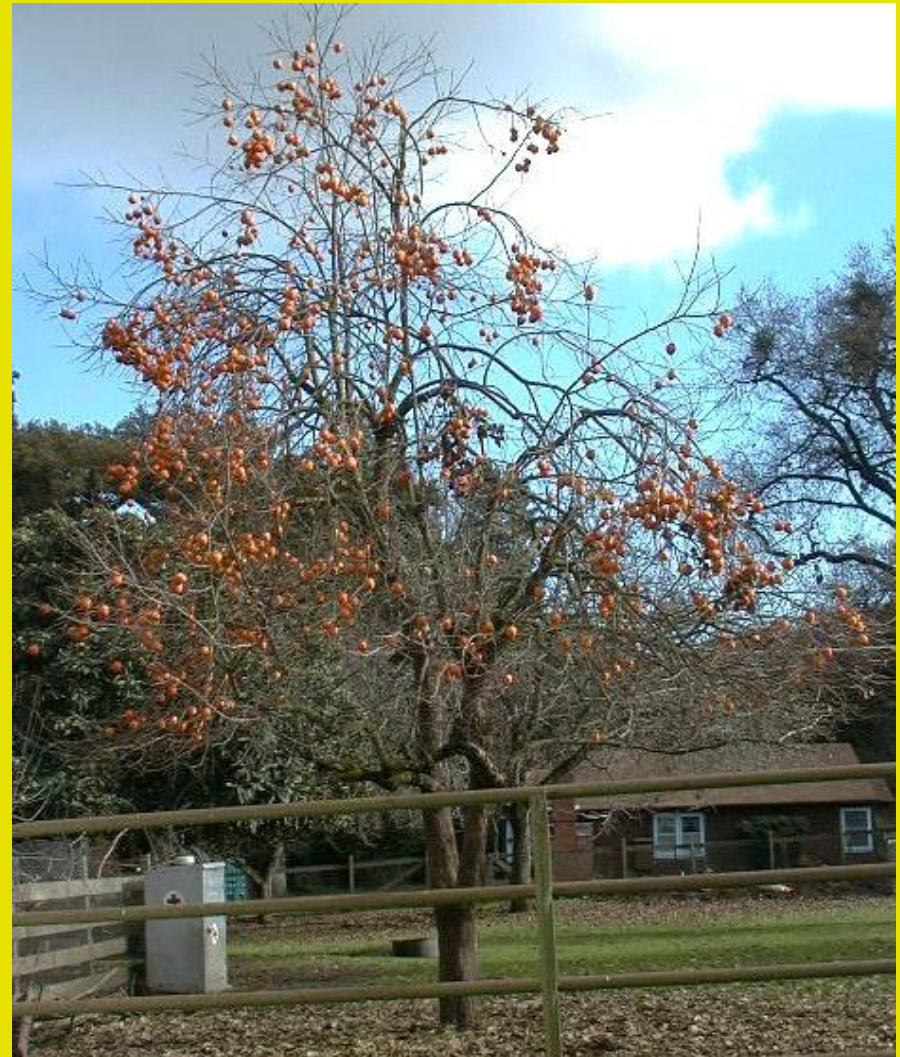
Modified Central Leader Pear



Modified Central Leader Pear



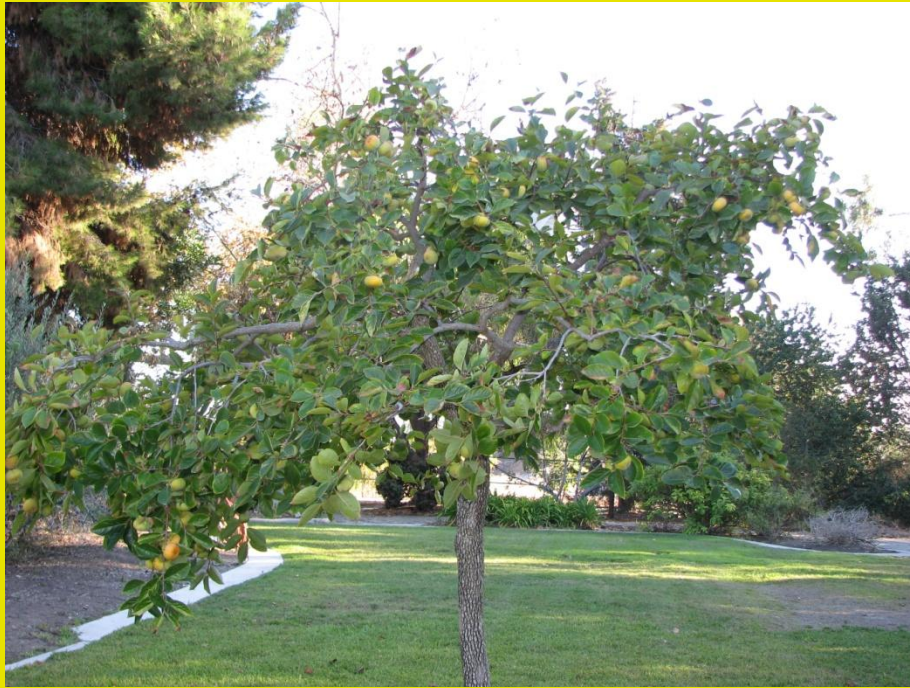
Modified Central Leader Persimmon



Modified Central Leader Persimmon



Modified Central Leader Persimmon



Modified Central Leader Fig



Modified Central Leader Fig



Modified Central Leader Fig



Modified Central Leader Fig



Modified Central Leader Pomegranate



Modified Central Leader Pomegranate



Modified Central Leader Pomegranate



Modified Central Leader Pomegranate



Central Leader and Modified Central Leader Pruning on Pome Fruit and Deciduous Fruit Trees not in the genus Prunus



Specializing in Edibles

for over 30 years

- * Fruit Tree Pruning
- * Landscape and Orchard Consultations
- * Home Orchard Management
- * Seminars, Lectures & Classes

Tom Del Hotal
(619) 454-2628

ISA Certified Arborist
CA State Qualified Pesticide Applicator
CA State Advanced Certified Nurseryman

email: fantasiagardens@gmail.com