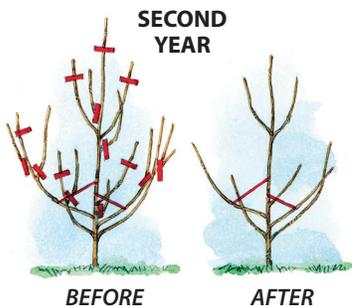
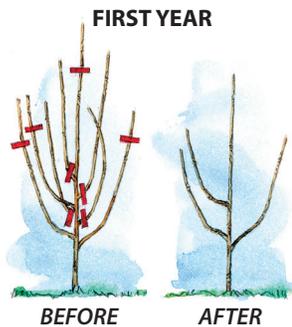


## Establishing a central leader apple tree

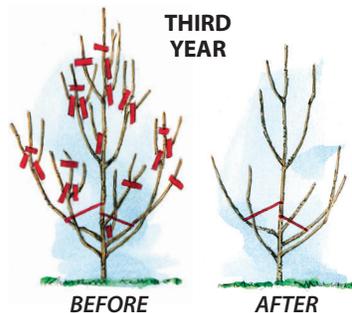
The standard central leader tree training system is ideal for medium density plantings of semi-dwarf apples. This system establishes two or three tiers of permanent scaffolds rather than the temporary scaffolds utilized in the French axe or slender spindle tree.

### To establish central leader trees:

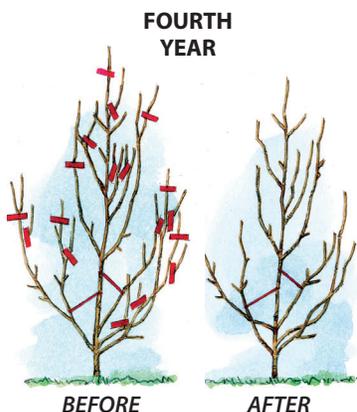
**FIRST YEAR:** Head at planting time to 30" to encourage development of the first tier of scaffold branches at a height of 20-30". If wide angle branches are available at planting time, select four and tip lightly. Remove the rest. If all existing branches are undesirable, remove them, leaving 1/4" stub, so as not to damage latent buds at base of branch. In early summer, widen crotch angles of potential scaffolds by spreading with clothespins when shoots are 3-4" long.



**SECOND YEAR:** Complete first tier as stated for first year tree. Remove all unwanted, poorly positioned or narrow angled branches. If central leader has obtained enough height, tip 36-42" above first tier to encourage second tier of 4 wide angled branches at 30-36" above first tier. Tip central leader and scaffolds to stiffen and encourage branching. Limb spreading to 45° off vertical should begin at this point.



**THIRD YEAR:** Remove all unwanted branches from central leader and treat established scaffolds similarly to the leader (single up forks, remove uprights, and tip) to develop more horizontal wood. If possible, tip to promote third tier 30-36" above second tier. Continue spreading as necessary.

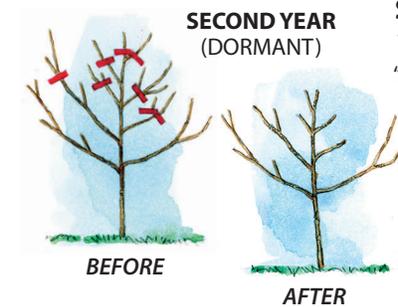
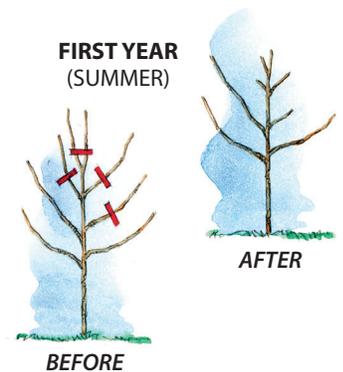


**FOURTH YEAR:** Complete second and third tier as stated for 3 year tree if necessary. Central leader will eventually be headed severely, probably into 2 year wood, to bring it into balance with the rest of the tree. As trees fill space allotted and approach bearing age, make fewer heading cuts and more thinning cuts. Shorten limbs reaching into drive isles or other trees by thinning back to less vigorous side branches. Maintain central leader and pyramidal form on into maturity. Never allow an upper tier to shade out or outgrow lower limbs.

## Establishing an open vase peach tree

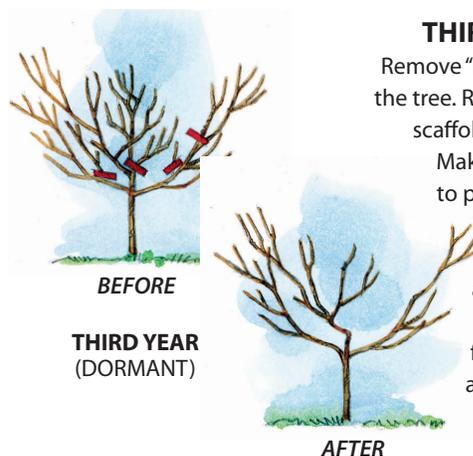
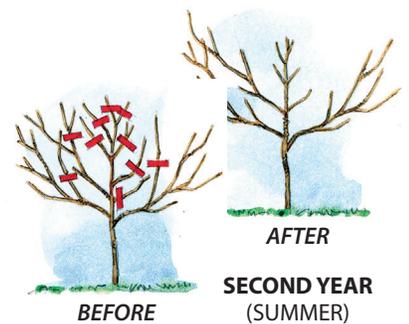
Open center or vase is the most common method of pruning peach and nectarine trees. Peaches will not produce fruit buds in shade, so a very open pruning system is required for best light and air circulation. In addition, most peach varieties are naturally spreading in their growth habit.

**FIRST YEAR (SUMMER):** Head at planting time to 30" and "whip" the tree by removing all branches to a 1/4" stub, so as not to damage latent buds. Early in the first growing season, strip lower shoots, leaving the top six to eight shoots. The top three to four shoots, near heading cut, will be upright and should be summer tipped by removing half the growth. This will encourage lower branches to form wider angles.



**SECOND YEAR (DORMANT):** Tip upper branches again to retain "bush" in top center of the tree and promote spreading of scaffolds. Choose two or three scaffolds avoiding branches headed into the southwest. Only tip scaffolds which are too dominant.

**SECOND YEAR (SUMMER):** Tip again on "bush" to promote vigor in selected scaffold limbs. Severely tip any upright growth which initiates within 15" of the trunk to promote vigorous extension of the scaffolds. Summer pruning during the first and second years may be required more than once.



**THIRD YEAR (DORMANT):** Remove "bush" from upper center of the tree. Remove uprights from main scaffold and "single up" any forks. Make heading cuts as required to prevent dominant scaffolds. Continue thinning and remove vigorous uprights as tree matures. Encourage renewal of first year's fruiting wood by tipping to an outward growing lateral.