



## Apple Trees: Pruning Techniques

Pruning the aging, high-topped apple tree is largely a job of renovation, followed by renewal of fruiting wood. The pruning must be moderate and spread over a two- or three-year period to avoid excessive growth and/or injury to large limbs from sudden over-exposure to sunlight. Such pruning consists of gradually lowering tree height to 18 feet or less, removal of surplus scaffold limbs, and the elimination of weak wood. Prune during the dormant period, late winter or early spring. March and April are the best months. Use clean and sharp tools that are designed specifically for pruning. Make all cuts smooth and close leaving the collar but not a stub. Many aging apple trees will bear heavy fruit on alternate years. Any pruning should be done just before the heavy bearing year.

The first step in renovation is to remove all dead and broken branches and branch stubs. Once this job is accomplished, pause and look at the tree. The interior and outer portions of the tree will be filled with many small branches that either droop towards the ground or crowd one another. The tree is probably so dense, it is difficult to walk into its center without pushing aside branches. Now note that there are an excessive number of large branches arising from the trunk and main leader; six to eight main scaffold branches are sufficient.

Remove, by pruning at point of origin on the trunk or central leader, several of the large branches that cause crowding in the lower two-thirds of the tree. A chain saw may be used for this job. The tree now has been "opened up" considerably. This should allow improved light conditions during the growing season and make thorough spray applications possible. Probably the number of scaffold limbs is still excessive, but this condition can be gradually eliminated over the next year or two.

### Removal of Weak Wood

The next step is pruning out drooping branches and much of the bushiness caused by the excessive number of smaller, secondary branches. Then "thin out" the remaining secondary branches by removing a third of them. This procedure further enhances penetration of sunlight and spray materials.

### Lowering the Tree Height

To reduce height, remove any tall, upright branches entirely or cut them back to well-placed strong lateral branches that extend horizontally below the height of 18'. These cuts generally involve removing limbs 6" or more in diameter. If a tree has several of these tall branches, consider thinning them out over a 2-3-year period. Cut back branches in the upper 2/3 of the tree to produce a pyramid or 'Christmas tree' shape.

## Follow-up Pruning

Lowering tree heights requires follow-up pruning yearly to take advantage of newly developing fruiting wood and to avoid a return to the previous problem. Water sprouts that develop near the larger pruning wounds and on the trunk should be removed. Those that appear on the on branches and bend to the outside of the tree may develop fruiting wood.

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