

Horticulture

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Rejuvenating an Old Apple Tree

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You are faced with a difficult decision. Do I save this old tree and try to bring the vigor back or do I remove it and start over with a new tree. Before undertaking this task you should evaluate the health, location and value of an apple tree before pruning. To help in this process ask yourself these few questions:

- Is the trunk of the tree healthy with no major holes or rotten center?
- Does the tree have minimal limb dieback or signs of disease?
- Is the tree in a location that fits into my lawn and garden plan?
- Does the tree produce a desirable variety of fruit that I will use?
- Will I be able to properly care for the tree with annual maintenance pruning?

If you answered no to these question you may want to replant with a healthy, young, semi-dwarf tree. If you decided to keep the old tree for its fruit or personal reasons, the first efforts should be aimed at clearing around the tree, so that the leaves and fruit get plenty of exposure to sunlight. In a situation where the tree has grown in a competitive forest, the apple tree should be pruned before competing trees are cleared from the area. Trees growing under these circumstances usually have shallow root systems and are easily wind blown.

Pruning should be done in late winter or early spring (March or April) before the leaves begin to appear. When there are no leaves on the branches, it is easier to see the structure of the tree and what cuts are necessary. By late winter, the tree is fully dormant and less susceptible to injury. Also, it has a chance to form a protective barrier behind the pruning cuts before insect and disease organisms become active.

It is best to renovate the tree over a three year period by removing a third of the excess branches each year for three years. If a tree has been abandoned for a long time, cut out diseased and damaged branches before removing one-third of the live wood. In a situation where the whole top needs to be cut off, the tree will be highly stressed and may not produce apples for a few years.

Pruning Guidelines

The following pruning rules will help improve the vigor and pro-

ductivity of an old apple tree.

- *Remove all dead wood and diseased branches. All diseased and insect-infested wood should be burned to prevent reinfestation. Coat cutting tools with a 10% bleach solution between cuttings to help prevent reinfestations.*
- *Prune more heavily in the upper part of the tree than in the lower. Sunlight will spread more evenly throughout the tree, helping to maintain the productivity of the lower limbs.*
- *Branches should be cut flush to the branch collar. The collar is the natural swelling that occurs where a branch connects to the trunk or to a larger branch.*
- *Take out branches that grow toward the center of the tree. This also allows sunlight to reach the fruit.*
- *Cut out branches with narrow crotches. Narrow crotches are weak, causing branches heavy with fruit to split.*
- *Remove all vertical growth. Upright branches do not produce fruit. Cut out water sprouts and root suckers; these are fast-growing, unbranching upright shoots.*
- *Encourage horizontal branches since they tend to bear more fruit. Branches at a 45 or 90 degree angle are the most desirable.*
- *Eliminate branches that hang below or across one another. A branch shaded by an upper one is not likely to be productive.*
- *Cut back drooping branches. Cutting a branch will strengthen it by encouraging growth further back along the branch. Shorten the spread of the tree by cutting the scaffold branches back one to two feet to a strong well positioned side shoot or riser.*

Inspect the cut surfaces in June and remove the young, vigorous, upright shoots that often develop in the area of larger cuts. If you do this when these shoots are only 4 to 6 inches long they can be removed by hand with a downward snap. If they are left to develop they will need to be cut out with pruners.

Once the tree is pruned back to a manageable size the job is not over. Mature, standard apple trees require annual pruning. This is restricted mostly to one-year-old shoots and the occasional damaged branch. Maintenance pruning will seem like a breeze compared to the task of reclaiming a neglected tree.