

Fruits and Nuts

Pruning Neglected Fruit Trees

David W. Lockwood, Professor
Plant Sciences

When trees have not been properly pruned and trained, fruit yields and quality may decline. As trees grow taller and more dense, lower limbs and interior limbs lose their ability to produce quality fruit, due to increased shading. Many of these weakened limbs will die. Over time, most fruit will be produced in the outer periphery of the tree, primarily in the top, as this is the only area exposed to adequate sunlight.

These trees often can be pruned back and restored to a point where quality fruit may be obtained once again. It may require several years to restore a tree to a manageable size. If the tree has been severely neglected for several years, it may not be possible to recapture its full productive potential.

The following sequence of pruning cuts applies to all types of fruit trees: (See attached diagrams)

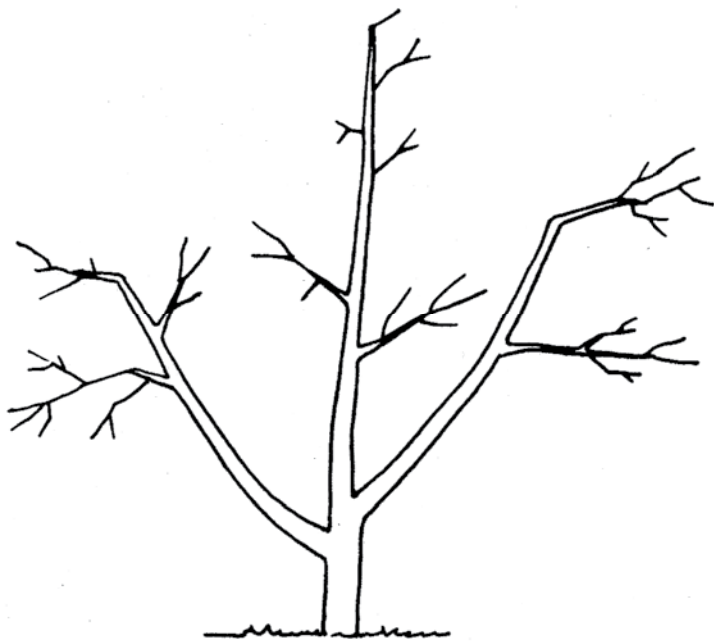
1. Remove root suckers arising at the base of the tree.
2. Always cut out dead, broken, diseased or insect-infested limbs. Their removal will make it much easier to determine which other pruning cuts should be made.
3. Remove low, drooping limbs. These limbs generally produce poor-quality fruit and may be low enough to interfere with maintenance of the area under the tree.
4. Remove upright growth from the center of the tree to reduce shading of lower limbs. For apples and pears, one upright limb might be left as a leader if a desirable limb exists (Diagram 4A). For peaches, nectarines, etc., remove all large, upright limbs from the center of the tree (Diagram 4B).
5. Where limbs grow parallel to or cross other limbs within 24 to 30 inches, one of the limbs should be removed to eliminate shading and bruising of limbs and fruit.
6. Tree height may be reduced by cutting limbs back to branches growing to the outside. Cut upper limbs back further than lower limbs to facilitate good light penetration to lower limbs.
7. Watersprouts, vigorous shoots growing off the tops of limbs, should be removed. They are slow to come into bearing and can shade out more desirable fruiting wood.
8. Once the larger cuts have been made, the smaller wood should be thinned out to encourage production of higher quality fruit (Diagram 8A). Drooping shoots should be pruned at the junction of a small branch that is growing slightly upward toward the outside of the tree (Diagram 8B). These branches have the ability to produce high-quality fruit.

When removing a large limb, care should be taken to prevent damage to the tree as the limb drops down near the completion of the cut. The following sequence of cuts (Diagram 9) is suggested to prevent tearing of the bark and wood at the base of the limb being removed. First, go out about 12 inches from the base of the limb and cut about one-third of the way through the limb on the underside. Second, go about 6 inches further out the limb and, starting at the top, cut the limb off. Near the completion of this cut, the limb is apt to drop down and tear back to where the bottom cut was made. It will then drop free of the tree. Finally, go back and cut the stub off (Diagram 10). Make this cut at the collar, or swelling, where the branch originates. Do not leave long stubs as they offer places for diseases or insects to invade.

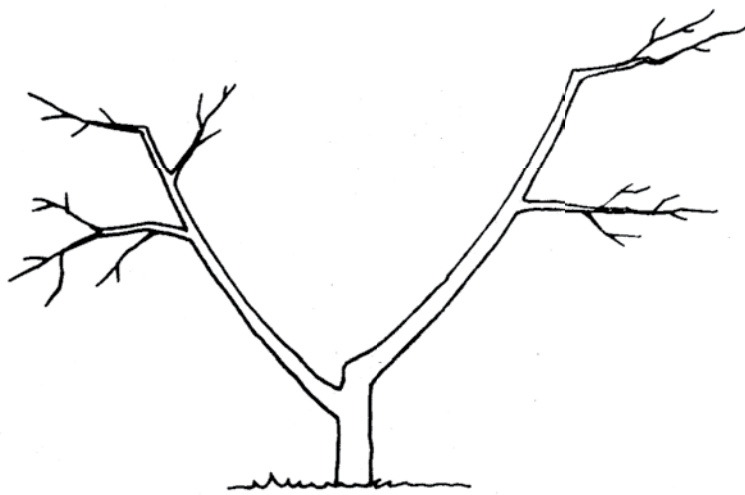




Pruning a neglected tree - Numbers refer to the sequence of cuts as outlined in the text.



4A For apple and pear trees, an upright limb in the center of the tree might be retained as a leader.

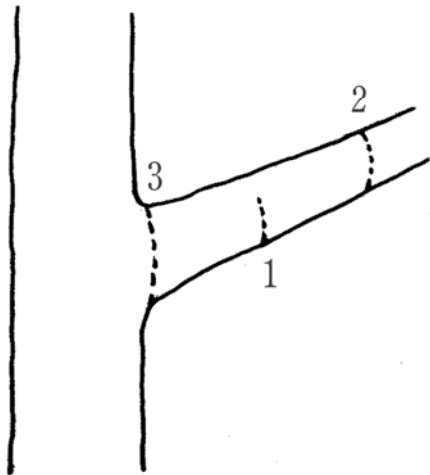
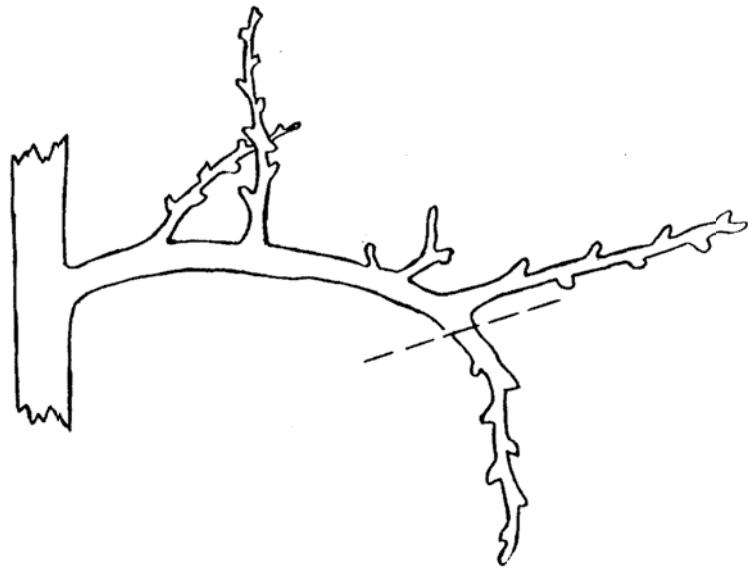


4B For stone fruit trees, remove all large, upright limbs from the center trees.

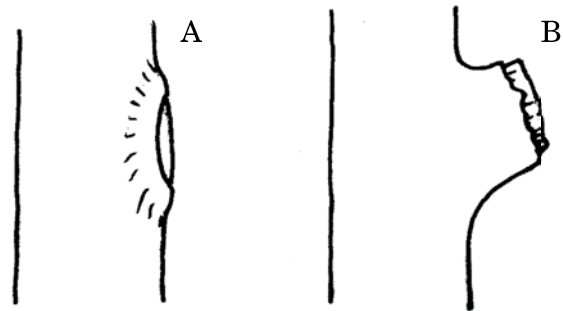


8A Thinning out smaller wood at the ends of limbs promotes the development of higher-quality fruit.

8B Prune drooping shoots just beyond a small branch that is growing upward and outward.



9 Sequence of cuts involved in removing a large limb.



9 Cuts made close to branches (A) heal quicker than when stubs are left (B).

a UT Extension Reminder...

Composting

According to the U.S. Environmental Protection Agency, nearly 70 percent of the solid waste stream in the U.S. is organic, and therefore compostable. Paper, paper board, yard waste, wood waste and food waste, as well as compostable materials from waste water and agriculture, can be converted into compost.

Due to legislative mandates and high recycling goals by communities, composting is becoming an increasingly important solid waste management option. Composting yard and food waste is easy, fun and can provide valuable learning experiences for both children and adults. In addition to using compost to improve soil quality for gardens and lawns, composting keeps these materials out of landfills, reducing the need for expensive new landfill facilities.

Contact your local Extension office for information on how to start composting.

Visit the UT Extension Web site at
<http://www.utextension.utk.edu/>

SP307K-2.5M-11/06 (Rep) E12-5115-00-009-07 07-0098

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.
UT Extension provides equal opportunities in programs and employment.