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Michigan State University Extension-Oakland County

Pruning Bearing Fruit Trees in the Home Orchard



Many persons who have a few bearing fruit trees in a home orchard may wish to increase the quantity and the quality of the fruit. This may be done in previously neglected orchards by spraying and fertilizing the soil and pruning. The home orchardist seldom wishes to spend as much time and effort in pruning his trees as does the commercial fruit grower; yet by following a few of the fundamentals of pruning, he may considerably improve the fruit crop and the appearance of the trees.

Time to prune

The best time to prune most kinds of fruit trees is in the early spring before the leaves appear. Should the trees produce leaves before the work can be done, the pruning may be finished after the leaves are present, provided care is taken to avoid unnecessary damage to the buds and spurs while removing the branches from the tree.

Water sprouts and dead or diseased branches that may have been missed at the time for the spring pruning may be removed during the summer, but as a general practice summer pruning is not recommended.

Amount of Pruning

Bearing fruit trees should be pruned regularly and lightly; — a little every year or at least every other year. A common mistake is to neglect the trees for several years and then prune them too severely. Vigorously grow-

ing trees should be pruned less severely than slowly growing trees. Old bearing trees usually need more pruning than young, vigorous trees that have just come into bearing.

Peaches, which bear their fruit on 1 year old twigs or shoots, need more pruning than other fruit trees which bear mostly on spurs found on woods 2 or more years.

Purpose of Pruning

Usually a better job of pruning will be done if the orchardist has some definite purposes of objectives in mind. Some of the objectives that may be accomplished by pruning are to:

- 1. Prevent overbearing.
- 2. Thin the crop and improve the grade of fruit.
- 3. Remove dead, diseased and broken branches.
- 4. Remove suckers, water sprouts and other superfluous growths that are undesirable in the tree.
- 5. Remove weak, unproductive wood and promote a more vigorous growth of young fruiting wood.
- 6. Thin the centers enough to admit sunlight, permit good air circulation and allow thorough spraying to control insects and diseases.
- 7. Lower the tops, if necessary, to facilitate spraying, thinning and harvesting.

How to Prune

Avoid leaving stubs — all pruning cuts should be made close and parallel with the main branch so that there are no stubs left to decay and carry disease to the main branch or trunk. If the end of a branch is to be removed, the cut should be made just beyond a side branch.

Removal of Large Limbs

Large limbs that may strip the bark when they fall may be removed without damage to the tree by first making a cut extending about one-third through the limb on the under side; then a cut which meets the first one should be made from the upper side. Removing broken or dead limbs should be removed by making a cut just above a sound lateral branch.

Suckers and Water sprouts

Vigorous, upright growths that originate at the ground level on the trunk, and on the main branches usually should be removed. If, however, a water sprout appears where there is an open space that might well be filled in by a bearing branch, it may be left to occupy the place and become a fruitful limb.

Weak wood

Cut out slowly growing wood that has a small diameter and few leaves for its age, and which is usually found in the lower and inner portion of the tree. This weak wood should not be confused with fruit spurs which are short growths with club-shaped swellings; these should be allowed to remain on the tree.

Lowering the Height

Trees that are growing too tall may be made lower by cutting back the upright branches in the top to side branches that are about an inch in diameter and which have a more or less horizontal position. Lowering the top by heavy pruning (dehorning) is not advisable. Sometimes it is best to lower the top gradually over a period of 2 or 3 years.

Low-hanging Branches

The large lower branches on a tree will often lie on the ground when loaded with fruit. Some of these which have no large side branches should be cutoff close to the trunk. Others that have good side branches may be headed back to just beyond a sided branch that tends to grow in a more or less upward direction and is at least 3/4 inch in diameter. A branch that lies directly over another should be removed. Constant rubbing results in injury, and the part above eventually dies.

Pruning Specific Fruits

Apple

The bearing apple tree may need to have the top lowered and the lower branches that sweep the ground removed or headed back to an upward growing lateral branch. If the tree is over 20 or more years old, considerable weak wood in the lower and inner parts of the tree may need to be removed. Usually this weak wood is attached to the underside of the scaffold branches. In general, very little work needs to be done in the top of the tree, except for the occasional removal of crowding or overlaying branches.

Pear

The pear tree usually requires less pruning than the apple. Some varieties tend to grow too high and somewhat pole-like branches in the top should be cut back to good outward growing lateral branches. Fruit spurs which may develop on the trunk or on the bases of the main branches should be removed in order to prevent the entrance of fire blight through the blossoms.

Sour Cherry

The sour cherry seldom needs much pruning other than the removal of weak, dead and broken branches. The annual or biennial pruning should be a very light thinning out in which no large cuts are made. Trees that grow too tall may need heading back occasionally to good lateral branches.

Peach

The peach tree should be pruned annually and more severely than other tree fruits. The pruning should be delayed as late as possible in the spring until it is known how many blossom buds have escaped weather injury and spring frosts. Buds that have been injured by freezing have black centers. If the proportion of injured buds is large, the work should be delayed until the trees are in bloom, when the full extent of the injury can be determined. If no injury has occurred and the bloom is heavy, the tree is pruned severely. In doing this, about one-third of the wood that grew the previous summer should be removed. The small, weaker side branches are removed and the more vigorous side and terminal branches headed back, by making cuts just beyond a vigorous side branch or shoot in the upper portion of 2vear old wood. The small weaker branches that are attached to the remaining 2-year old wood are removed. Cutting back the tallest branches to side branches is an effective way of preventing the tree form growing too high. If the tree is old and only short weak growth has been produced, the tree will probably respond to heading back and a light thinning out of branches. This is in addition to an application of nitrogen fertilizer.

Plums

The type of tree growth varies with different varieties. Trees of some varieties that

tend to grow rather tall should have the upper terminal branches cut back to good laterals that tend to grow in an outward direction. Those with very spreading horizontal branches should have the longer branches headed in, to stimulate a more upright growth and keep them more compact. Varieties that make a thick, bushy tree should be pruned by thinning out the weaker growths and undesirable branches.

Wound Treatment

Recent research indicates that wound dressings provide little benefit to the tree. If you still prefer to use a wound dressing on larger pruning cuts, use a suitable asphalt base. Avoid tars, grease, or toxic oil paints.

Pruning Tools

The tools needed for pruning are a curved saw with a single cutting edge, long handled lopping shears, and hand shears. Keep all tools well sharpened. A smooth, clean cut heals more readily than a rough, ragged cut.

Would you like additional information?

Additional information is available on-line. Please see <u>MSU Extension-Oakland</u> <u>County's publications</u> as well as the <u>MSU Extension Bookstore</u> on campus.

Please contact our office (248/858-0880) for assistance.



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