Natalia Bjorklund
Extension Educator
serving Dodge County

Horticulture In the News

Pruning Fruit Trees

Productive fruit trees with an abundance of high quality fruit result from good cultural practices, including pruning. However, fruit tree pruning is often neglected either due to a lack of pruning skills and knowledge, or a fear that the tree will be damaged or killed by incorrect pruning. Regardless, now is a good time to do fruit tree pruning.

The goals of fruit tree pruning are many, including 1) to obtain maximum light exposure for both leaves and fruit; 2) provide uniform distribution of fruiting wood along the scaffold branches; 3) control the size and vigor of the tree; 4) reduce limb breakage due to excessively heavy fruit loads; and 5) produce high quality fruit of good size.

Most fruit tree pruning is done during the dormant season when no leaves are on the tree. Cultivars or varieties of trees susceptible to winter injury are pruned in late spring before growth begins, rather than in January or February. Regardless of the cultivar grown, do not prune any tree before January or winter injury will occur. Besides dormant pruning, you may prune at planting; during July and August to restrict growth; to remove water sprouts; and to remove diseased or damaged wood. Once the basic structure of a fruit tree is developed, avoid pruning until fruiting occurs.

If the tree has side branches at planting, then completely remove any branches that form narrow angles (less than 45 degrees) with the trunk. Measure the vertical distance between branches on the main trunk and remove them as necessary to achieve at least a 6" vertical spacing. Branches should also be spaced evenly around the trunk, like the spokes of a wheel. Finally, head back or shorten any remaining branches to about half their length by making a slanted cut just above an outward facing bud. Assuming the tree is planted in spring, after completing this initial pruning required at planting, the tree will not be pruned again until the following March.

Selecting Scaffold Branches

The lowest scaffold branch should be 20-24 inches above the ground, so remove any lower branches or shoots from the trunk. Choose the most vigorous upright-growing branch at the top of the tree to become the central leader. Among the remaining branches, remove those that form narrow angles, less than 45 degrees, with the trunk. Select for permanent scaffold branches 2 or 3 well placed branches that are spaced evenly around the trunk, like the spokes of a wheel, and are vertically spaced at least 6 inches apart. Remove all remaining shoots or branches. Apply branch spreaders to the scaffold shoots if needed to widen the trunk-branch angle. The central leader shoot should be two times as tall as the longest side shoot, so prune any long lateral branches back so that they are a foot shorter than the tip of the central leader when held in an upright position.

Second Year Pruning

During the second dormant season following planting, choose 2 or 3 additional scaffold branches at the top of the tree. Maintain the dominance of the central leader shoot by again cutting by any excessively long lateral branches. Secondary shoots may have started to develop on the main scaffold branches. Treat each of the main scaffold branches as a small tree, in regards to choosing secondary scaffold branches. Don't allow the secondary shoots, or laterals, of the scaffold branches to compete with the leader of that branch; so head back any extra long secondary lateral branches. Also, don't prune out the short fruiting branches known as spurs.

Prune the tree as little as possible in the next few years prior to fruit bearing. Excessive pruning will delay bearing, and result in fewer and smaller fruits in the first few years of production. Maintain the dominance of the central leader and upper branches by heading back long, lower laterals. Likewise, do not let the upper branches overgrow and shade the lower portion of the tree. Remove suckers and dead, diseased or damaged branches as needed. Remove branches growing toward the center of the tree, and the weakest of crossing or closely parallel branches.

When pruning, use tools made for the purpose and keep them sharp and clean. To disinfect pruning tools, use either a 70% denatured alcohol solution or household bleach at one part bleach to nine parts water. Either use a sponge or dip the equipment into these solutions between cuts.

Natalia can be reached at the Extension office here in Fremont at 1206 W. 23rd, or by calling 402.639.8405, or by emailing her at nbjorklund3@unl.edu