

# Tree Pruning

## Pruning for Fruit Production

Pruning a tree grown for fruit is somewhat different than it is for pruning a landscape tree such as a birch. Although there is more than one way to prune a fruit tree, home gardeners in Minnesota commonly prune and train using a “central leader” system. With this system a single central trunk runs the entire height of the tree and supports the fruiting branches.

The ideal central leader fruit tree has a single main trunk and a number of well-spaced branches. The tree’s form is conical or Christmas tree-like. This form allows light and air to penetrate the canopy, aiding in fruit ripening and disease prevention. Prune to keep enough open space between each level of scaffold branches that you can imagine tossing a football between the branches or at least a foot of vertical space between branches on the same side of the tree.

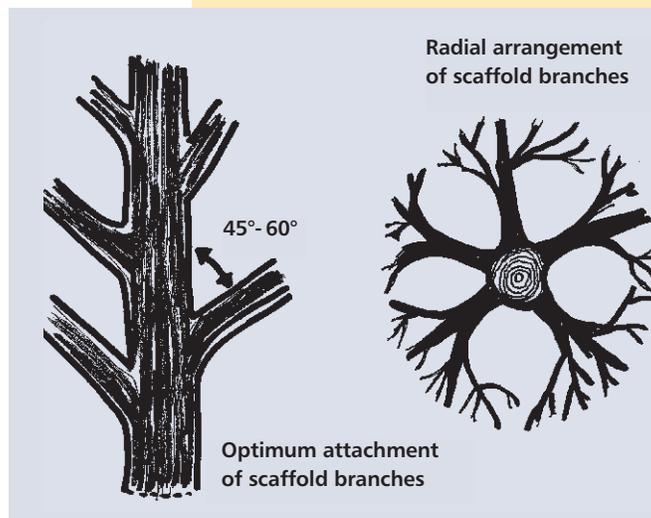
In order to develop this framework, the first pruning task is to select and develop what we call “scaffold branches.” These four to five scaffold branches should begin about 30 inches from the ground (40 inches if turf will be located beneath the branches and needs to be mowed), should be spaced as equally around the trunk as possible and should be spaced vertically at least six inches from one another.

Begin pruning your fruit tree the spring after you plant it by removing any suckers originating from the base of the tree, removing any branches lower than 30 inches and removing or reducing any branches that are competing with the leader. If possible select four or five scaffold branches from those that remain, pruning out any “duplicate” branches that are growing just above or just below scaffolds. The scaffold branches should have wide angles, at least sixty degrees relative to the trunk.

Fruit trees should be pruned on an annual basis in late winter – preferably after the coldest weather is past – before they break bud. Prune minimally, especially with young trees, as excessive pruning may delay or reduce fruiting and create too much leafy growth.

Once all scaffold branches have been selected, pruning consists mostly of removing the following:

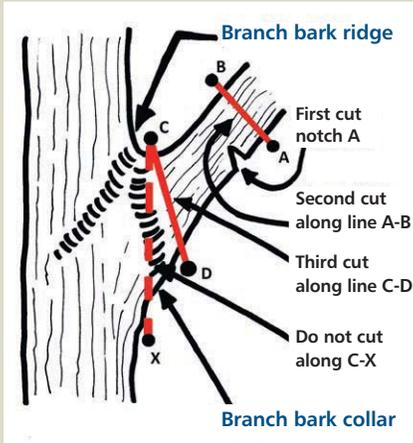
- Any vertical branch competing with the central leader
- Dead, broken, or obviously fire blight-infected branches
- Suckers coming up from the roots or low on the trunk
- Watersprouts, which are vigorous vertical branches
- Downward-growing branches
- Vigorous new growth in the middle or upper levels of the tree. Such growth can ruin the desired cone shape of the tree. The lowest branches should always be the longest.



## Tree Pruning *continued*

### Cut Outside the Branch Collar

Cuts should be done as follows:



## Fruit Pruning Tips

### Prune with a Purpose

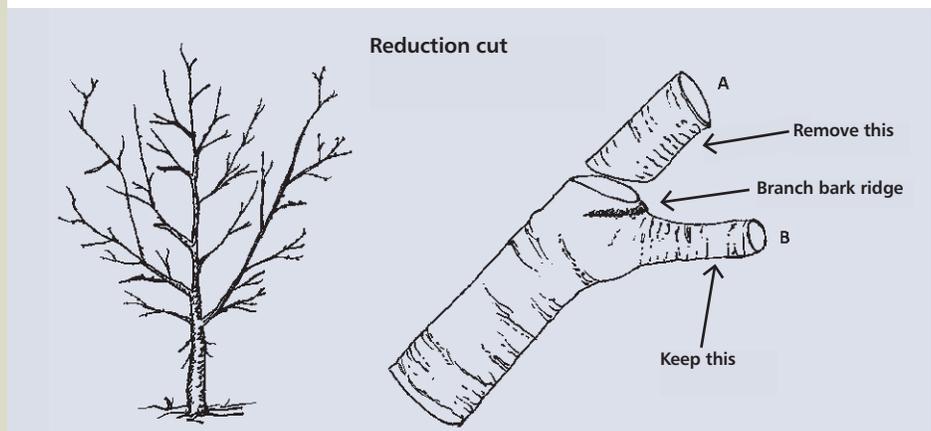
Things to think about when pruning:

- **Sanitation:** Remove dead, broken, and crossing branches. Allow for good air flow.
- **Structural:** Minimize weak branches that aim downwards or are too vertical.
- **Frame:** Space branches radially and vertically.
- **Clearance:** Make room for traffic only as necessary.
- **Balance:** Unify texture and density. Remove duplicators.

### The 1/3 Rule

- Thin to a branch at least one-third the diameter of the branch removing.
- Thin no more than one-third of the live wood in any year.

For example, branch "A" is no more than three times the diameter of branch "B."



### Guidelines for Pruning

- **Young trees:** Remove less than or equal to one-third leaf area
- **Immature trees:** Remove less than or equal to one-quarter leaf area
- **Mature trees:** Remove less than or equal to one-tenth leaf area

Join us to learn many tips like these, in detail, at our regular Fruit Tree Pruning classes. For more about classes, see the next page.

For more information about pruning, see:

[www1.extension.umn.edu/garden/yard-garden/fruit/apples-and-pears-in-minnesota-home-gardens/#pruning](http://www1.extension.umn.edu/garden/yard-garden/fruit/apples-and-pears-in-minnesota-home-gardens/#pruning)