Pruning Sweet Cherry Trees for Hand Harvest

By Robert L. Stebbins
Extension Horticulture Specialist, Oregon State University

Although sweet cherry trees will produce reasonably satisfactory crops without any pruning, growers have found several good reasons for a limited amount of training and pruning. Some objectives of training are different from those of pruning.

Train a young cherry tree to prevent its becoming excessively tall and difficult to pick, and to improve the structural strength of the crotch system. Acceptably low tree height can be obtained by causing extensive branching low on the tree. This is the direct opposite of training for mechanical harvesting.

Prune mature trees to reduce or maintain their height and to maintain vigor and fruit size. Pruning reduces overall tree size, which allows closer spacing of trees. On windy sites, pruning may be required to balance the tree and to reduce the amount of wind damage to fruit. Basically, pruning stimulates new growth in the area of the cut. It may stimulate other parts of the tree by increasing light penetration.

Pruning involves some risks. Occasionally, especially in rainy districts, bacterial canker (incited by 

Pruning in fall increases the susceptibility of trees to damage by an early freeze. Excessive pruning with large cuts will delay and reduce the production of young trees. Mechanical topping without follow-up hand pruning in

Training young trees

In districts where bacterial canker has been a problem in young trees, it is best to plant a budded tree of mazzard F-12-1 or mazzard seedling and graft or bud the trunk out on the limbs. Reduce the number of branches to four or five at planting time and head these directly back to compensate for shoot damage in transplanting. Trees budded in the nursery are generally planted as one-year whips. Head these at 18 to 24 inches at planting time to promote branching close to the ground, or at 24 to 36 inches if cultivation is necessary close to the trunk.

In districts where freeze injury has been a problem, trees with unusually narrow-angled crotches often have split trunks following a freeze. Splitting is caused by freezing and expansion of water which has accumulated deep in the crotch. This kind of damage can be prevented by selection of scaffold limbs with wide angles.

Remove all shoots which arise at narrow angles with the trunk in the first two seasons. For a low, spreading tree, it is desirable to grow from four to seven primary scaffold limbs and numerous secondary scaffold limbs. In this way, no individual limb becomes too vigorous and upright.

Compared to other kinds of fruit trees, sweet cherries naturally bud very little. Often only one or two buds located immediately below the terminal bud, in addition to the terminal bud itself, develop shoots. Sometimes there is no branching at all. The terminal bud exerts a strongly dominant influence on lateral buds below it by means of hormones. Removal of the terminal bud, either by light dormant season heading (Figure 1) or by summer pinching, will stimulate growth from two to five of the lower buds.

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this is usually offset by the disadvantages of very narrow-angled branches, weak shoots, and spurs which bear small fruit. When shoots are 20 to 24 inches long and growing rapidly, pinch out the tip 5 or 6 inches. If less of the tip is removed, narrow forks will be formed. For this technique to be successful, trees must be growing rapidly. Because all of the branches are not at the pinching stage at the same time, it is usually necessary to go over the orchard two or three times.

In dormant heading, do not remove more than the terminal inch or two of the shoots. Head only the upright branches that have grown 2½ to 3 feet or more. Heading may begin the first winter after planting and continue until the trees are five to seven years old. The only purpose of more severe heading is to bring the whorls of branches closer together. If there are enough branches, severe heading is not necessary. Less selective heading can be accomplished quickly and easily using a sickle-bar mower, hedge trimmer, or saw designed for pruning trees. To avoid undue delay in bearing, cut only very lightly and at an angle. Figure 2 shows the kind of tree developed by selective dormant heading.

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