Thinning Fruit

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The reasons for thinning fruit are as follows:

1. Increases annual yields of high quality fruit.
2. Improves uniformity of fruit size at harvest.
3. Improves color.
4. Improves eating quality.
5. Reduces limb breakage.
6. Promotes tree vigor and maintains a balance between vegetative growth and fruiting.
7. Minimizes the handling and storage of low grade or cull fruit.
8. Permits more thorough spraying of fruits during late season applications.
9. Expedites all handling operations at harvest and reduces their respective costs.
10. Prevents trees from becoming biennial producers.

A fruit tree commonly produces many more blossoms than should be permitted to set. Dwarf trees, especially, have a strong tendency to produce more fruit than necessary or even proper for the tree. Ten percent of the flowers on apples and pears are sufficient to produce a full crop; apricots, cherries, peaches, nectarines and plums may be allowed to set 20 to 30 percent of their blossoms. Although the natural competition between fruitlets may reduce the crop somewhat, this natural reduction in fruit set will not be enough.

Trees should not be allowed to fruit too heavily at too early an age. If a dwarf type tree is permitted to over produce, the leader of a central leader type tree may be bent severely, and a low, scraggly tree may develop. In the case of dwarf apple trees, it is considered wise to remove all blossoms the first year.

When apple and pear trees bloom and set a heavy crop of fruit, they may become biennial (alternate) bearers; that is, they bloom and fruit well one year and bloom and fruit poorly the following year. This habit continues year after year, producing a crop every other year. Dwarfed apple and pear trees can easily become biennial. Therefore it becomes important to prevent too heavy a set of fruit on apple and pear trees. Blossom thinning or thinning of the young fruits shortly after bloom will help avoid alternate bearing. Thinning done in midsummer is too late to affect next year's crop, since the time is then past when next year's blossom buds are initiated.

The first opportunity to thin is during the dormant period. Pruning is one type of thinning commonly used on peach and nectarine. These trees bear fruit on one-year old wood, thus excess buds can be reduced by cutting back or removing some of the shoots. See the fact sheet on pruning stone fruit at http://coopext.colostate.edu/TRA/PLANTS/pruningstonefruittrees.shtml for more information. Pruning to thin only removes a certain percentage of blooms and does not control the distribution of the fruit.

The next opportunity to thin is at blossom time. Delay thinning until all danger of winter injury to buds has passed, and after examination of the buds has been made to determine how many are alive. If the bloom is potentially heavy some of it can be knocked off with a rubber-tipped pole or a clean toilet bowl brush. This is an efficient and practical method for peaches and nectarines, plums, apricots, and cherries. This technique can be used for apples and pears, but is less satisfactory because of the spur-bearing habit of these fruits. Hand thinning is often necessary with apples and pears.

When thinning apples and pears leave the largest fruit in the cluster unless it is damaged. The fruit can be clipped off the fruiting spur using micro-tip pruning snips or by grasping the fruit and using a twisting motion, snapping the fruit off the fruit spur. Fruit spurs are short stubs on which the cluster of flowers and fruits are borne. If the fruit spur is broken you will never have an apple or pear produced at that point again so use care when thinning.

How do you know you need to thin?

Apples and Pears

1. When fruitlets are 3-5 mm (~1/5th inch) in size cut open a few and count the number of live seeds. You will need a hand lens to see the seeds.
    a. If the seeds are tan or brown they are dead.
    b. If there are fewer than 5 live seeds per fruitlets thinning may not be necessary.
2. If the clusters of live fruitlets are within 6 to 8 inches of each other and there are more than two live fruitlets per cluster, they are too close and thinning is necessary.

Stone Fruits

1. Peaches and Nectarines
    a. If live fruitlets are closer than 5 to 8 inches apart, they need to be thinned.
    b. Cut several of the fruitlets open to determine if the seed is viable. Brown seed is dead.
    c. Early maturing peaches should be thinned to 10 inches apart; other varieties should be thinned so there is from 6 to 8 inches between each peach.
2. Apricots and Plums
    a. If live fruitlets are closer than 2 to 4 inches apart they should be thinned.
3. Cherries
    a. While thinning is usually not necessary this practice will result in larger fruit.