



Pruning Apple Trees

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The following are the key things you need to know to prune apple trees for fruit production:

1. **Sunlight**

To put more fruit on your trees, prune to open them up so direct sunlight hits all the leaves on the tree.

2. **Producing fruit buds**

Most new apple fruit buds are produced on small, short, side shoots. These small shoots grow one inch to a few inches long in the first year, and produce a fruit bud the next year. In the year after that, the fruit bud produces flowers and hopefully fruit. These small fruiting branches are called fruit spurs.

3. **Apical dominance**

This is the control exerted by the apical (topmost) bud of a shoot over the growth of the buds below it. The apical bud produces plant hormones that flow downward inside the shoot, suppressing the growth of the lower buds. The growth of trees can be decreased or increased by various types of pruning and bending branches to control apical dominance.

4. **Controlling apical dominance to produce more fruit spurs**

Apical dominance is strongest in vertical shoots, and these fast-growing vertical shoots do not form many fruit spurs. Bending upright shoots to 30-60 degrees from horizontal, or pruning out the upright branches leaving branches at this angle, weakens apical dominance and more side shoots will grow and develop into fruit spurs.

5. **When to prune your apple trees**

- a. **Dormant season pruning:** Pruning fruit trees during the dormant season (when the leaves are off the tree) has a stimulating effect on the tree. If your trees are large and overgrown, this is the time of year to remove some branches to increase sunlight penetration throughout the tree. All large branch removal should be done at this time of the year.
- b. **Summer pruning:** Pruning during the summer slows tree growth, the opposite of dormant season pruning. This type of pruning results in weak re-growth that often produces fruit buds one or two years later. The most common summer pruning technique is to cut vertical shoots over 6" long back to 5 leaves (or 5 buds) in late July. Summer pruning will control trees that are growing too fast.

6. **When to bend branches to produce more fruit buds**

The month of April is the best time to bend branches that are too upright down to between 30 and 60 degrees from horizontal. If you tie them down firmly for about 6 weeks, they will stay at that angle. April is also the month when the small side branches that become fruit spurs start to develop.

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