

ASK THE MASTER GARDENER

Winter Pruning Makes Healthy Fruit Trees

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By Jane Billinghamurst



All fruit trees, even Italian prune plums, benefit from winter pruning. It's just a matter of timing and technique.

When to prune:

Most fruit trees, except cherries, are pruned in the dormant season, after leaves have dropped and before blossoms appear. In the Pacific Northwest, this traditionally has been any time from mid-December to mid-April. A deep freeze after pruning, however, can be detrimental to the tree, so if you are pruning before February, keep an eye on the weather forecast before you get out your pruners.

How to prune:

The goal in pruning a fruit tree is to create a structure that allows light into the center of the tree and to strengthen branches that bear the weight of fruit. Ideally, you start when the tree is young to create the framework you want.

Most fruit trees require only maintenance pruning once they are mature. But some, such as peaches and apricots, bear fruit on one-year-old wood and need to be pruned vigorously every year to stay productive.

When you prune trees, you either cut out complete branches (thinning) or you cut the ends off branches (heading). For fruit trees, most cuts you make should be thinning cuts, opening channels of light into the center of the tree and helping the fruit ripen.

Thinning means reducing the number of branches rather than encouraging the tree to grow more branches. When you thin-cut a branch, you remove it. But when you head-cut a branch, side branches grow from the site of the cut, and the younger the branch, the more vigorous this extra growth will be.

Pruning first aid:

Pruning cuts need not be treated. Pruning wounds made late in the dormant season heal faster than those made earlier, allowing less time for disease organisms to infect the wound. Furthermore, spores of many organisms causing branch diseases are more prevalent with early season rains than later.

The key with thinning cuts is to remove branches flush with the branch collar, but don't leave a stub — and don't make the wound larger than necessary, which happens with a "flush cut." Cut just outside the tapering portion of the branch, where it's inserted in a larger branch or the trunk.

For pruning technique illustrations, look up the publication "PNW 400: Training and Pruning Your Home Orchard" at skagit.wsu.edu/mg.

When choosing which branches to thin and which to retain, first cut out any dead or diseased wood. Then remove branches that overlap or shade the branches below, and branches that have narrow crotch angles.

For heading cuts, make the cut at an angle so water doesn't collect on the fresh cut; the drier the cut stays, the better it will heal. Avoid heading cuts unless you want to stimulate branching at the ends of the limbs you are cutting. Remember that trees grow from the top, so branches remain the same height from the ground no matter how tall the tree grows.

Many fruit trees are pruned as vase shapes with open centers. Once mature, they need only annual pruning to maintain the open center by removing excess branches with thinning cuts and cutting out any

water sprouts (thin branches that usually grow straight upright). There are a few differences between trees, and the accompanying sidebar offers some specific pruning instructions.

FROM APPLES TO PLUMS

Different trees need different pruning techniques to help them stay consistently productive year after year. Here are some guidelines:

Plums

Prune to open center with three to four scaffold branches. Prune lightly for the first five years. Head only those limbs that will become permanent scaffolds. Mature trees need only enough pruning to control height and spread and prevent limb breakage.

Sour cherry

Prune to open center with three scaffold branches. It's important to keep wide angles between branch and trunk because sour cherry wood is brittle. In the first and second years, keep all growth on the scaffold limbs, then prune as necessary in later years. Mature trees need little pruning.

Sweetcherry

Prune after harvest but before rain to avoid bacterial infection. Prune to open center with many scaffold branches. Promote branching by heading shoots. Mature trees require little pruning.

Peaches and Apricots

Prune to open center with three to four scaffold branches, choosing wide crotch angles to prevent splitting. Head scaffold limbs in first and second year to promote branching. You need to stimulate new growth each year because the trees fruit on one-year-old wood. Up to 50 percent of previous season's growth can be removed each year.

Pears

Prune to open center with three or four scaffold branches. Little pruning is required until the trees begin to bear fruit. Then prune to thin and remove upper branches shading the lower ones. Asian pears are susceptible to bacterial infection, so avoid pruning during rainy periods.

Apples

Trees with a naturally upright growth habit, such as apples, can be grown with a central leader and end up with a profile looking like a Christmas tree. Apples usually bloom on spurs or shoots from 2-year-old wood.

Many older apple trees have been pruned into the shape of an umbrella. If you have inherited one of these trees, your main task is removing 80 percent of the water sprouts that grow vertically each year. Remove the largest and most upright ones.



Photo courtesy Jackie King / WSU NWREC
Washington State University tree fruit specialist Gary Moulton shows how to prune a dormant pear tree.

Leave well-spaced smaller sprouts. Bend them over so they grow horizontally rather than vertically, which will encourage these branches to bear fruit. When you cut water sprouts, prune them out completely, don't just head them or they will grow more branches, creating shade from the top of the tree.



Photo by Scott Terrell / Skagit Valley Herald

Larry Johnson, whose family owns Cedardale Orchards, prunes a row of Melrose apple trees in January along Conway Frontage Road south of Mount Vernon. Johnson's family produces cider from a stand of apple trees that also includes Jonagold and Jonamac varieties.



Photo by Scott Terrell / Skagit Valley Herald

Left: A properly pruned Melrose apple tree shows the classic pyramid shape with larger branches at the bottom and smaller branches towards the top.

Know & Grow Workshop

Pruning Dormant Fruit Trees

- De Arbogast of the Western Washington Fruit Research Foundation will answer specific questions about how to prune your home and backyard fruit trees after they go dormant. Disease prevention and spraying schedules will also be covered.
- When: 1 to 2:30 p.m. Tuesday, November 17
- Where: WSU Mount Vernon NW Research and Extension Center, 16650 Memorial Highway (State Route 536)

References

- Pruning Tree Fruit – The Basics: <http://maritimefruit.wsu.edu/Pruningbasics.html>
- Training & Pruning Your Home Orchard PNW 400: <http://extension.oregonstate.edu/catalog/html/pnw/pnw400/>
- Easy Steps to Fruit Tree Pruning (55-minute DVD). Order online at: <http://pruning.com/default.htm>
- In Spanish: Pruning: <http://extension.oregonstate.edu/catalog/pdf/ec/ec1543-s-e.pdf>

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