

# Pruning Handout Mid Klamath Foodsheds

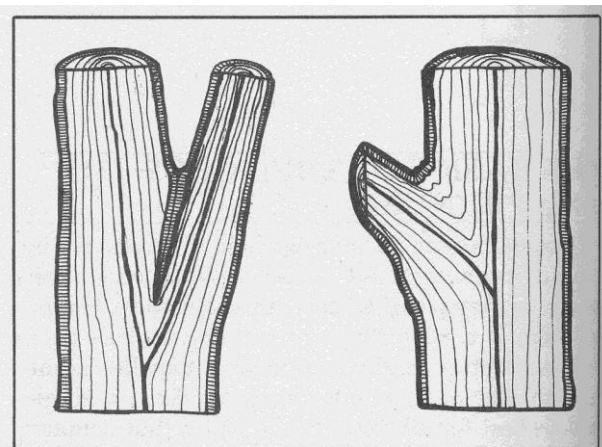
The MKWC Foodsheds website has a lots of info on fruit trees in the Mid Klamath: [www.mkwc.org](http://www.mkwc.org)  
**Growing Fruits, Nuts & Berries** – <http://mkwc.org/programs/foodsheds/growing-fruits-nuts-berries/>  
**Peach Leaf Curl** - <http://mkwc.org/programs/foodsheds/pests-and-diseases/>  
**Resources** - <http://mkwc.org/programs/foodsheds/resources/>

## Tools:

- ◆ **Hand pruners** - **Felco** makes the best pruners. **No 2** is the basic model, **No 13** is the larger pruner for bigger diameter branches
- ◆ **Loppers** are used just as much, if not more, than hand pruners. My favorite brand is Fiskars. They make a large, **extendable lopper**, as well as a **smaller lopper** that is light and extremely efficient at cutting due to it's geared design.
- ◆ **A good saw** is essential. **Silky** makes the best, though there are a number of good pruning saws available at cheaper prices. Get a good scabbard.
- ◆ **An orchard ladder** is necessary for pruning, don't try to use regular folding ladders, they are unstable and potentially dangerous. Stokes is a good brand.

## Books:

- ◆ ***Pruning Manual by Dan Lurie***, , (on the MKWC website) Filoli Gardens Newsletter - This is the *best* pruning manual we've seen. Divided into three sections - Principles of Tree Growth, Training Young Trees, and Pruning Mature Trees
- ◆ ***Pruning to Restore an Old, Neglected Apple Tree***, by R. L. Stebbins and J. Olsen, Oregon State University - This completes the manual above by showing how to restore an old tree that has not been pruned for years; (hint: it takes a few years).
- ◆ ***Pruning and Training Plants, A Complete Guide***, David Joyce, Royal Horticultural Society, One of the best books on pruning available.
- ◆ ***Designing & Maintaining Your Edible Landscape Naturally***, Robert Kourick, Edible Landscaping Project, PO Box 1841 Santa Rosa CA (707) 874-2606. Great info on fruit trees, with lots of tables on variety selection, rootstocks, pollination, planting, pruning & care. Highly recommended.
- ◆ ***Sunset Pruning Handbook***, Sunset Publishing Corporation, Menlo Park. Primarily dedicated to ornamentals, but lots of good, solid info on fruit & nut trees, presented in encyclopedic format; older editions tend to be just as good and can be had for cheap in used book stores.



**Figure 14.3** A narrow-angled fork forms a fissure that weakens its attachment to the trunk. A fork angle of 45° to 90° is much stronger.

## Pruning Guidelines:

Here are the major ones.

**All trees are not equal.** Two 'Golden Delicious' apple trees growing side by side in different soils may have noticeably different growth and fruiting habits. And the growth of the 'Red Rome' is very different from that of the 'Golden Delicious.' The experienced pruner avoids forcing a single style on every tree, and, instead, combines a variety of techniques to suit the needs of each tree.

**Prune for shape.** Visualize the form you desire. Beauty is as important as productivity for fruit trees in an edible landscape. Make as few cuts as possible to achieve the effect you desire.

**Pruning delays fruiting.** Pruning early in the life of a tree, and removing substantial amounts of wood, delays the start of fruiting. Unpruned trees tend to bear a few seasons earlier than heavily pruned ones.

**Dormant-season pruning promotes growth.** Pruning deciduous trees when they are dormant encourages leafy, vegetative growth, not flower buds. Winter pruning causes new branches to form and stimulates the rapid extension of branch growth.

**Summer pruning stunts growth.** Removing foliage during the time of active photosynthesis reduces the tree's vigor and advances the formation of fruit buds on all sizes of trees. Summer pruning is an important part of caring for dwarf fruit trees. It also opens up the tree's canopy, letting in sunshine, which encourages fruit bud formation and keeps spurs healthy. However, summer pruning sometimes causes succulent new growth which is vulnerable to damage from winter freezes.

### Pruning Rules of Thumb

There are also standard, age-old rules to remember, regardless of the pruning style you choose.

**Remove dead and diseased wood.** With any tree, the first order of business is the removal of dead and diseased wood. Pests and diseases enter damaged wood, then spread into the heart of the tree. Catch diseased wood early through periodic inspection. Prune it out, and to prevent the spread of spores and insects in your landscape, take it to a dump.

**Remove crossing wood.** The constant rubbing of two crossed branches leaves a raw, unhealed wound, another possible entry for pests and diseases. Remove one of the rubbing branches. Crossing branches that don't rub still crowd each other. Remove one and allow the other to receive more sunlight.

**Remove weak wood.** With standard-size trees,

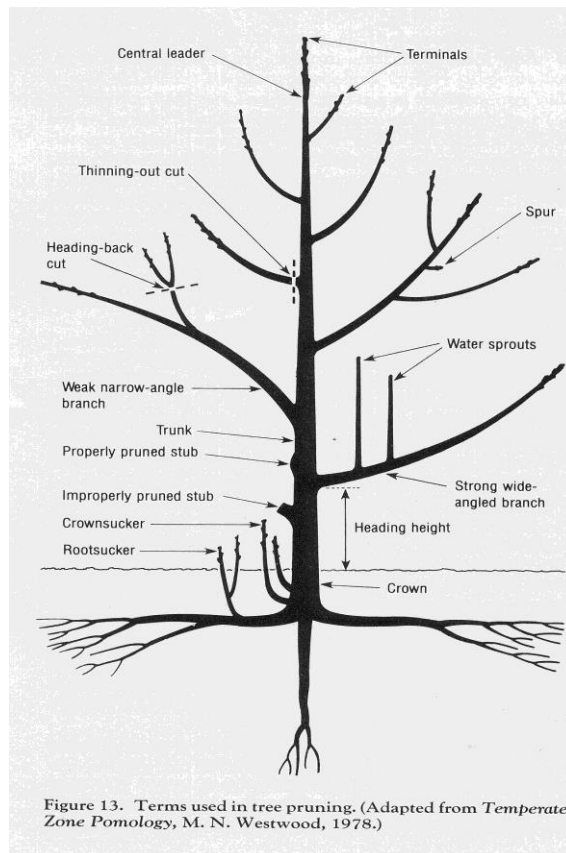


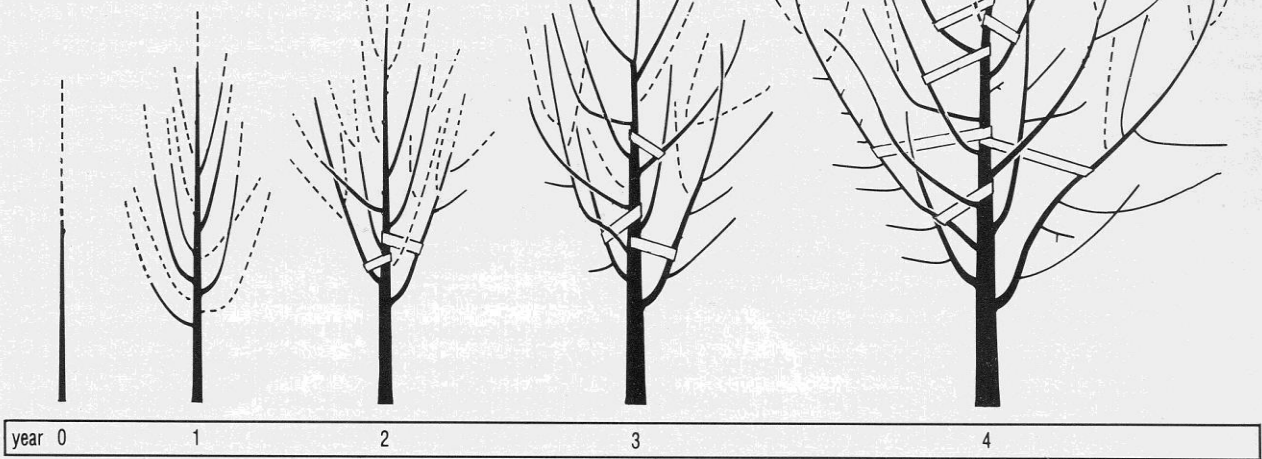
Figure 13. Terms used in tree pruning. (Adapted from *Temperate Zone Pomology*, M. N. Westwood, 1978.)

pruning all but the most vigorous wood is important to a long-lived tree. Still, weak growth is not always bad. Within limits, leaving less-vigorous branches on dwarf trees is a technique preferred by some horticulturists, since it furthers the dwarfing effect.

**Remove suckers.** Some trees produce tall, spindly shoots that head straight to the sky and form scant fruit. These shoots are often called suckers, or water sprouts. Those that originate from the base of the tree are sprouts from the rootstock. Shoots higher up dominate and shade the lower portion of the tree. Cut out suckers in mid- to late summer to avoid stimulating additional spindly growth.

**Avoid spreading disease.** Pruning shears can pick up and spread certain diseases, among them fire blight (*Erwinia amylovora*), bacterial canker (*Pseudomonas syringae*), and viruses. To disinfect them, dip your shears in a 10 percent solution of laundry bleach or 100 percent alcohol after each cut. (It helps to oil the shears beforehand because the bleach corrodes the metal, especially aluminum. After you are done pruning and dipping, rub steel wool on all metal surfaces, sharpen the cutting edge, and oil all metal thoroughly.) As a cau-

a CENTRAL LEADER SYSTEM



b MULTIPLE LEADER SYSTEM

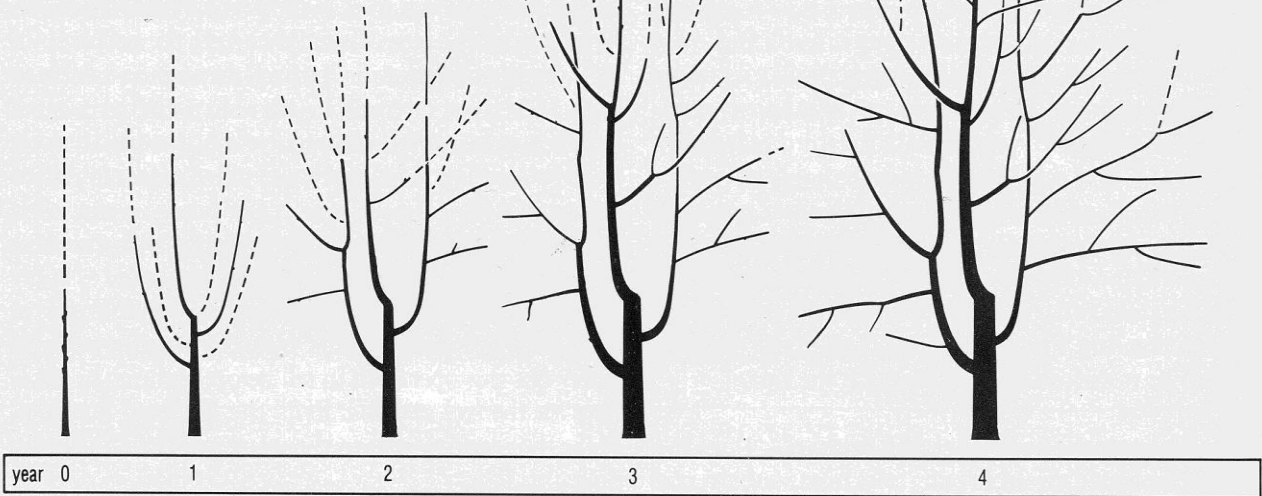
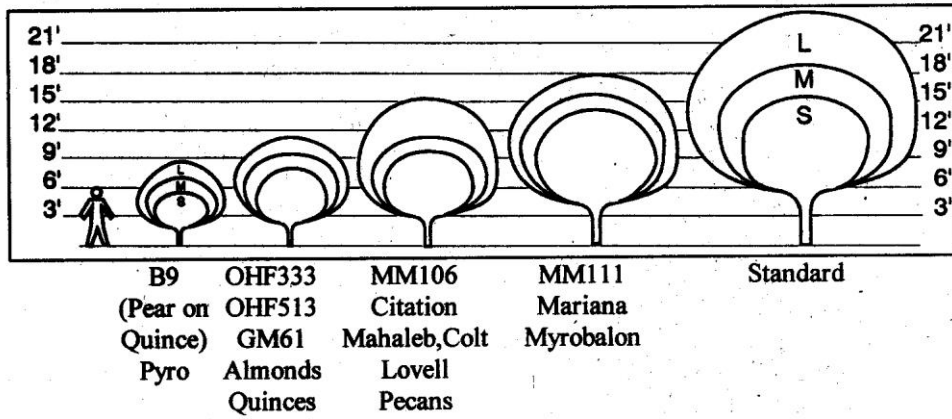


Figure 14. Growth of trees trained to a central leader system (a) and a multiple leader system (b). (Central leader system adapted from Pacific Northwest Publication 156, March 1983.)

### CHOOSING AN APPLE ROOTSTOCK

Mature tree size is determined by the rootstock in combination with the vigor of the variety. For example, a Northern Spy or Gravenstein on semi-dwarf rootstock will be larger than a Jonathan or Lady on the same rootstock. Spacing, fertilization, pruning, irrigation, soil and climate are all factors determining tree size. Dwarf apple trees are on B9. Semi-dwarf trees are on MM111 or MM106. See the diagram and rootstock chart below for more information.



**ROOTSTOCK CHART**

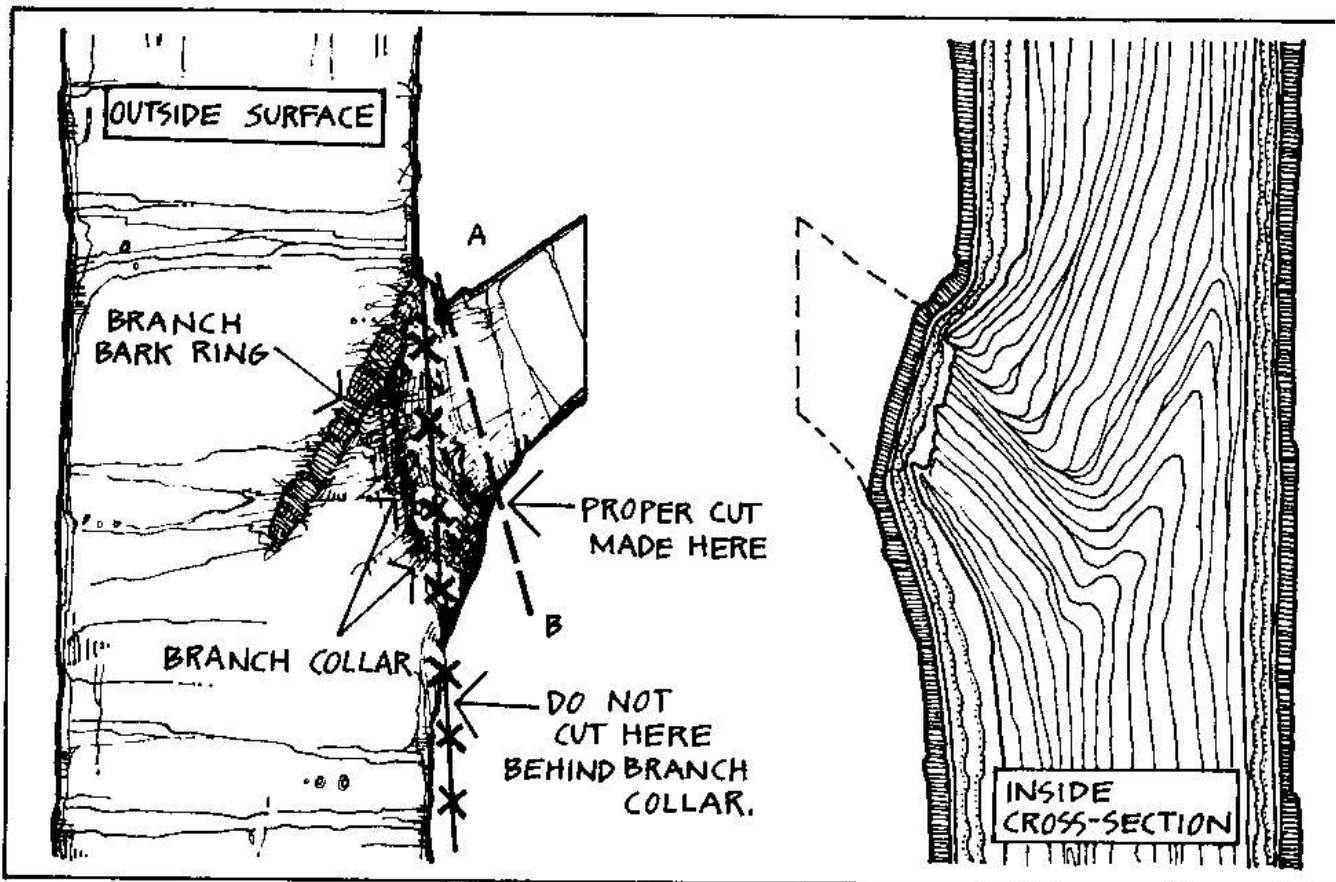


Figure 14.10 Prune at line A – B for a healthy, fast-callusing cut.