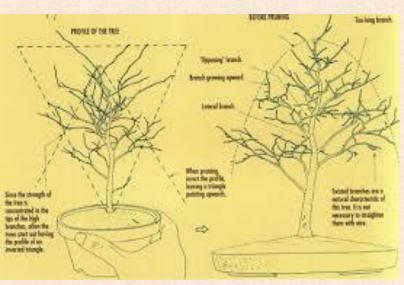




# **Shaping Trees**





# **Shaping Trees**

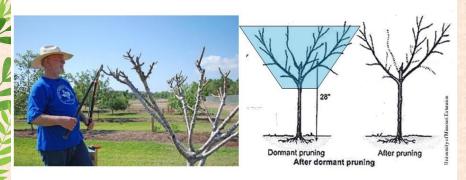


# Strong Branches, Strong Trees, Lots of Fruit!

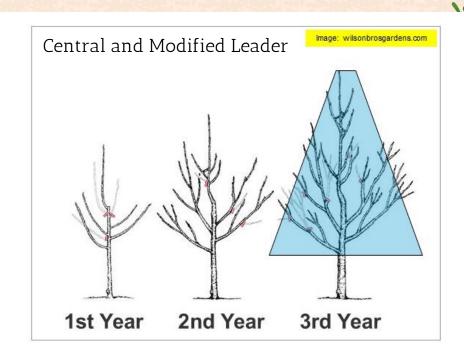


# **Shaping Trees**

### **Open Center Pruning**

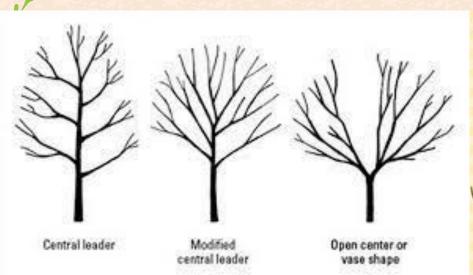


Peach, Nectarine, Persimmon, Plum Bloom from 1-year old wood; wait till flower break or



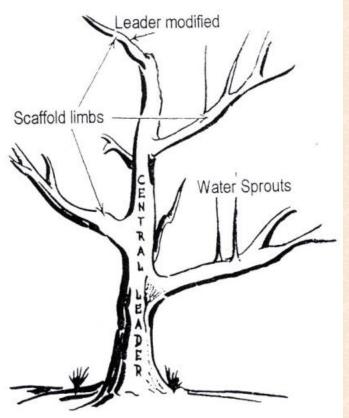
Apple, Pear, Pecan, Persimmon
Bloom from 2-year old wood

# **Shaping Trees**





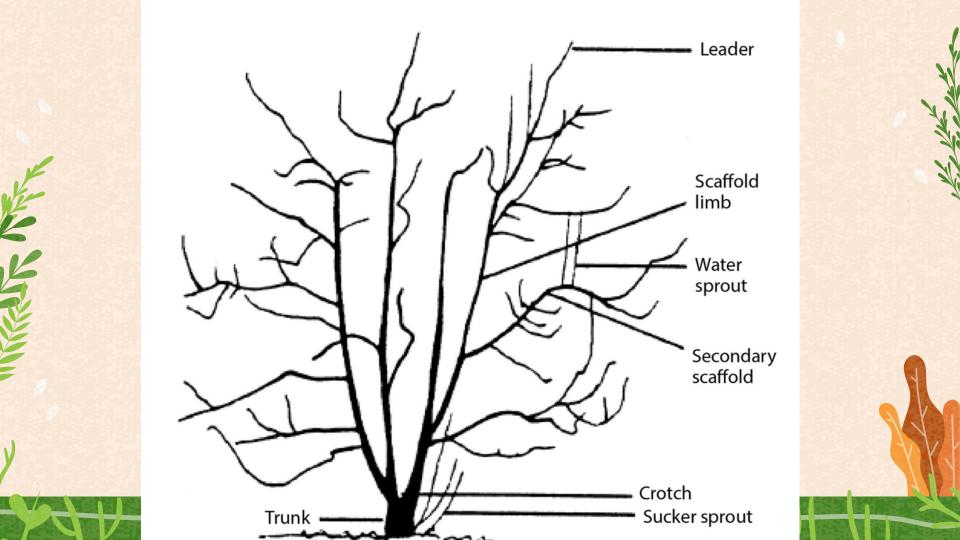
### **General Terms**



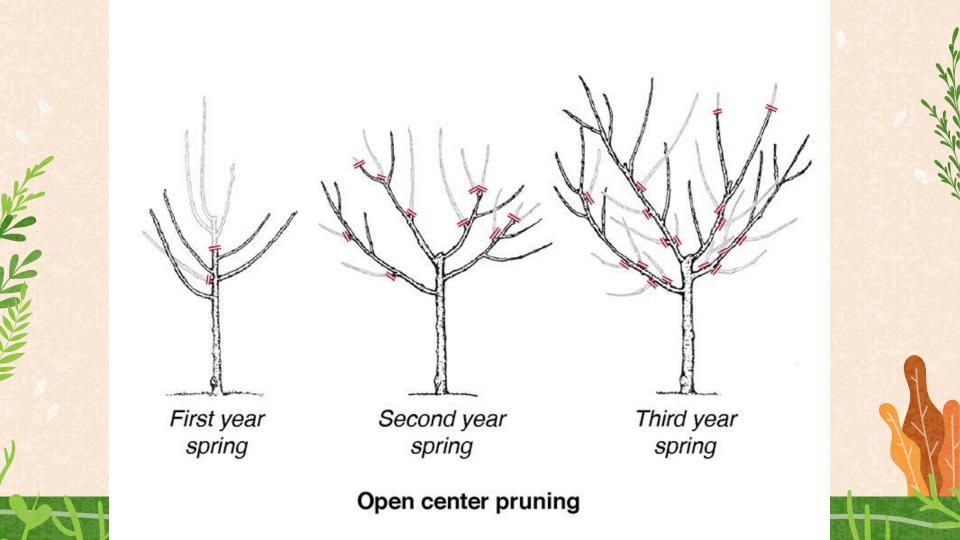
# **Open Vase - Peaches, Plums, Apricots**







### Before Any Pruning, Remove Unwanted Growth water shoots crossing branches diseased branches broken dead branches branches suckers growing from base of trunk and roots growth arising below the graft junction



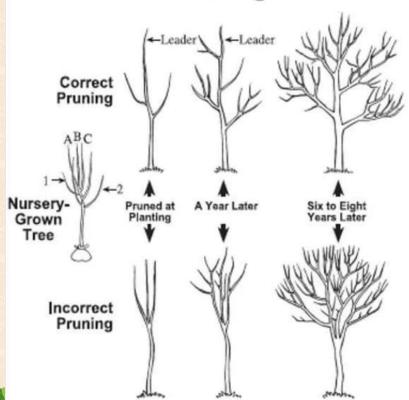
# **Central Leader - Apples, Pears**



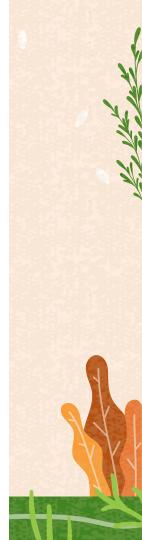


# **Apple and Pears**

### **Training**



- Objective is to develop a central leader with wide angled limbs around trunk
- Unbranched cut to 32 in.
- Branched remove broken branches, angles less than 45 degrees and competing leaders
- 2nd year head back central leader by 1/3 and select scaffolds
- · Develop scaffolds
- · Maximize light to spurs



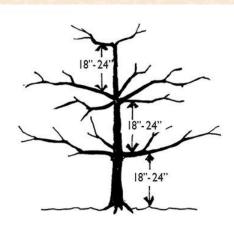
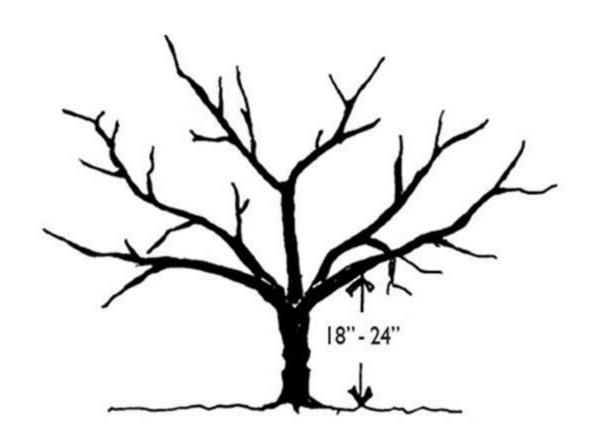
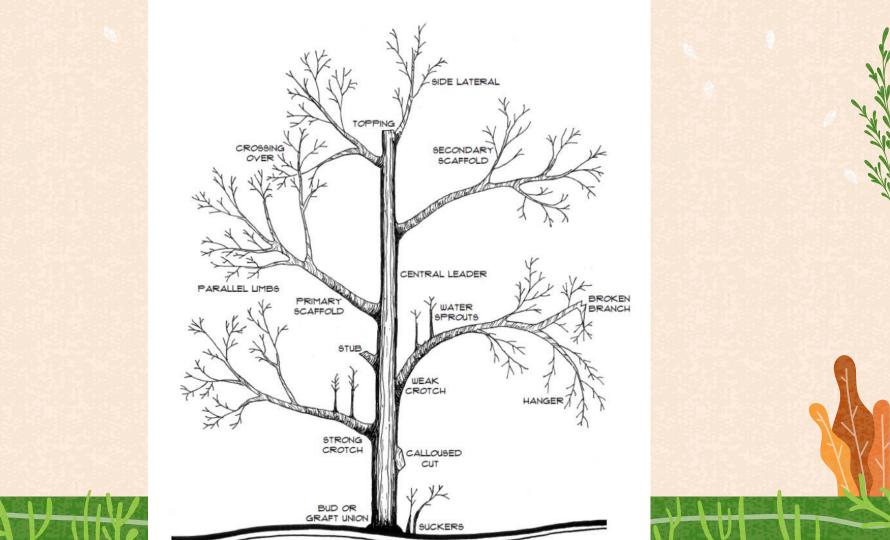


Figure N-13. Wide-angle crotches and properly spaced scaffold.



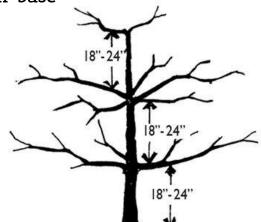


# **Water Sprouts**



### **Scaffold Limbs**

- Large limbs that form a tree's framework.
- Select 4-5 scaffolds that originate on different sides of the main leader,
- The lowest should be 18 inches from the ground and face the mountains.
- Scaffolds shouldn't be closer than 10-12 inches at their base
- Maintain Wide Angles (around 60 degrees)



# **Crowd Control**

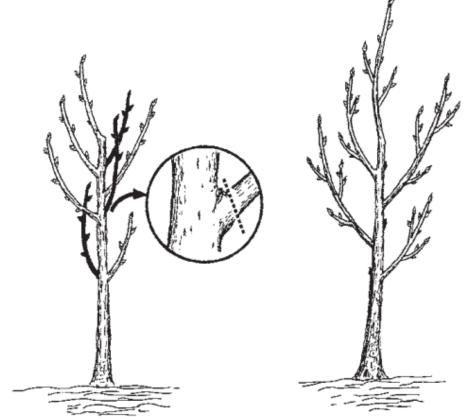


Figure 2: Prune interfering, weak or crowded branches. Stems in black are the ones to be removed (left). Make the cut outside of branch bark ridge and collar (circle insert)

# **General Strategy**

- Look for strong branches with wide branch angles.
- Remove branches that:
  - grow inward
  - are close together
  - don't fit the vision
  - Grow at a V-angle

# Where are the fruit buds? Plum Cherry

At least 2 year old wood

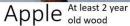




At least 2 year Pear old wood







# Less than 98 Degrees

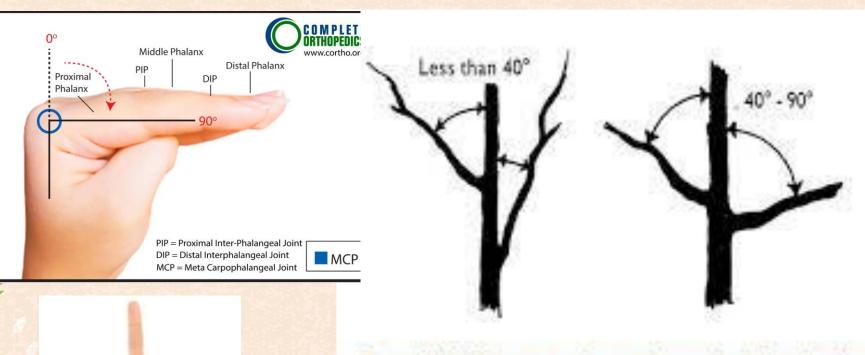


Figure N-14. Narrow-angle crotches on the left and wide-angle crotches on the right. The wide-angle crotches are stronger.

### **Tools & General Terms**

Hand Shears - Bypass style



Loppers

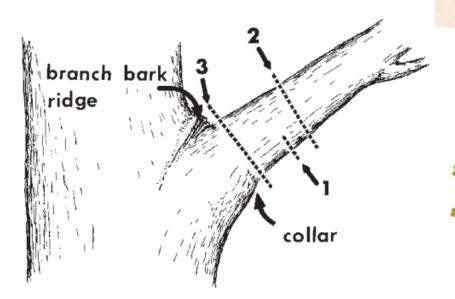


Hand Shears - Anvil Style



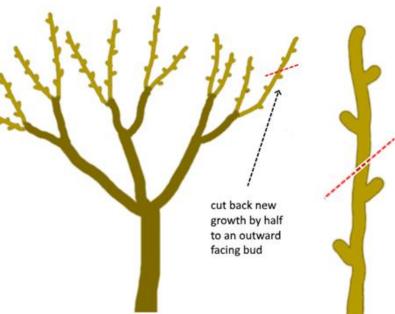


### Cuts



**Figure 3:** Use a three-step pruning method on large limbs. 1) Undercut to prevent bark stripping. 2) Remove most of limb. 3) Remove stub, making cut outside of branch bark ridge and collar.

Pruning Fruit Trees - The Basic Rule of Pruning



make cuts at a 45-degree angle and 6mm (1/4") above outward facing buds Cutting **vertical branches** encourages vegetative growth necessary and opens the tree to more sunlight.

Cutting **horizontal branches** is done to renew fruiting wood and to thin off excessive fruit.

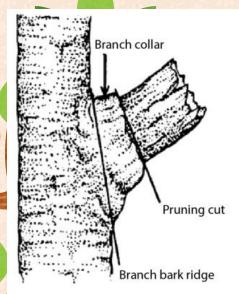


Figure 2. Always preserve the branch collar, the raised tissue at the base of every branch. The branch collar contains specialized cells that allow a tree to seal off pruning wounds and prevent rot from damaging the branch's heartwood. Make your pruning cut at an equal and opposite angle from the branch bark ridge.





# Fireblight





Figure 2. Characteristic fire blight symptoms on apple. Note the shepherd crook end and bacterial ooze in photo A and blackened spur in photo B. Photo credit: USU Extension IPM Program.



Remove branches shown with dotted lines. Remove competing main stems · Remove limbs that extend beyond to develop a single trunk. the natural outline of the crown Remove dead, broken Remove sharp, V-shaped branch attachments. or crossing limbs. · Always make pruning cuts on Remove limbs that turn the outside of the branch collar. inward towards the trunk. · Don't leave branch stubs. 2. second cut branch bark ridge · Shorten low branches to develop trunk thickness. 1. undercut · Remove root suckers and watersprouts. 3. final cut branch colla



### Sources & Additional Information

- https://homeorchard.ucanr.edu/The\_Big\_Picture/Pruning\_&\_Training/
  - https://extension.colostate.edu/topic-areas/yard-garden/training-and-pruning-fruit-trees-7
- https://extension.oregonstate.edu/sites/default/files/catalog/auto/PNW400.pdf
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