# Guide to Pruning Apple Trees



Curran Apple Orchard Park

#### Introduction



- This guide was created to provide the basics of pruning Apple Trees at the Curran Orchard.
- People interested in improving basic skills to seek out Master Gardners available on scheduled pruning days.
- Pruning tools, wheel barrows are available on work days.

## Key Points for Curran Orchard

- Orchard trees are 70+ years old
- No Ladders allowed for safety reasons.
- No Climbing Trees
- Do not disturb Irrigation tubing around the ground outer area of each tree.



#### When To Prune

- In Western Washington, with its mild winters, begin in late Fall after leaf drop and before bud burst in Spring.
- Ideal time: February through April
- June-September: Limited pruning to remove deadwood, reduce sprouts and increase light.

# Why Prune?

- Maintain tree health
- Improve fruit quality and quantity
- Establish basic tree structure
- Enable greater sunlight penetration and air circulation
- Discourage disease
- Control tree height for easier harvest



# **Pruning Tools**

- Hand Pruners for branches up to
   1/2 inch
- Loppers for branches up to 2 inches
- Hand saws for branches greater than 2 inches and up
- Pole loppers/saws for high prune branches
- Work gloves and safety glasses are highly recommended

Note: Sterilize tools with rubbing alcohol after contact with diseased branches and between trees to avoid spreading disease.





# **Pruning Safety**

- Before use, ensure all tools are functioning properly and blades are sharp.
- Wear safety glasses, gloves, hats, long sleeves/pants and boots.
- Do not use ladders.
- Before making cut, always know the location of your hands and fingers.
- Maintain safe working distance from other people.



# Pruning Basics: Step by Step

Step 1: Inspect Tree

Step 2: Establish entry bays for harvesting access

Step 3: Remove Any Dead, Diseased, or Damaged Limbs

Step 4: Prune Suckers and Water Sprouts

Step 5: Prune crossing branches Step 6: Thin Growing Branches

Step 7: Heading- Prune desired Branches to fruit bud areas



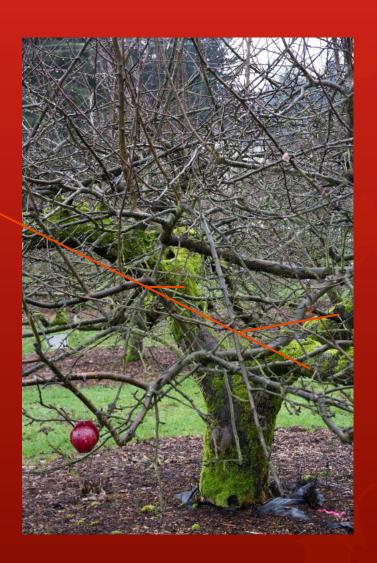


#### Examine the Tree

Walk around the tree and examine the branches. Look into the interior of the tree to view the overall structure.

Trees should have several primary scaffold branches to form the shape of the tree growing from the central trunk.

Identify possible entry bays into the tree to enable easy access and future harvesting.



# Remove Dead, Diseased or Damaged Branches

- Dead branches are brittle and easily broken.
- Diseased branches are indicated by a different color around a portion of the wood.
- Damaged branches are partially broken from heavy harvest or when two branches have crossed and rubbed against each other.
- Prune defective branches back to the nearest bud where the wood is still healthy.



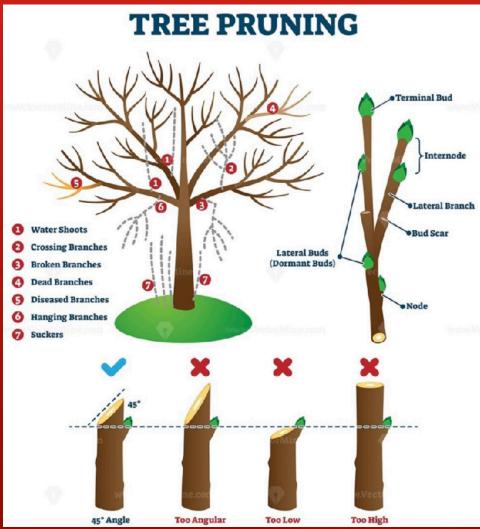


Example of Diseased Branches. After removing diseased branches, immediately sanitize your tools to avoid spreading disease.

# Prune Suckers, Water Sprouts and Cross Branches

- Remove one of the crossing or rubbing branches.
- Prune up to one-third of water sprouts: remove all water sprouts at the base of the tree.





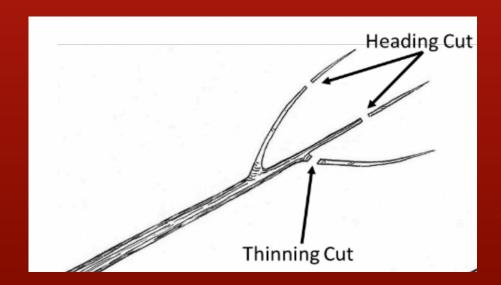
#### Heading and Thinning

#### <u>Heading</u>

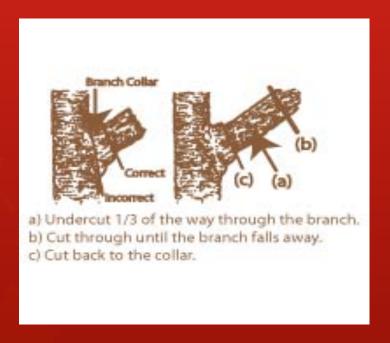
- Removes part of a shoot or branch to increase new growth at the point of the cut
- Stiffens the branch and makes it stronger to support future growth on limb
- May reduce overall tree size

#### **Thinning**

- Removes an undesirable branch at its point of origin from parent stem
- Increases interior sunlight, reduces density
- Promotes greater flowering, better fruit
- Reduces shoots and directs growth to other parts of the parent branch



# Branch Cut and Trim to Fruit Buds



Make a 45 degree angle cut flush to the collar but not into the limb.



Fruit Buds are "fatter" than leaf buds. Each piece of fruit needs approximately 30 leaves to nourish it. Cut at angles just above each bud when pruning.



# Example Tree in need of Pruning



# Initial pruning left side



# Properly pruned left side



# Properly Pruned Tree



## Additional Pruning Points

- No branches beyond drip line which are located where the bark chips meet the grass.
- Maximum tree height 12 feet
- No Ladders used
- Get tarp from the barn and drag all branches to the dumpster



## Fruit Thinning: Extremely Important

Occurs Late May/early June

Fruit should be the size of a nickel

Remove fruit except the single best and biggest fruit

Leave 4-6" between each fruit to avoid branch breakage

Dispose of other fruit in dumpsters to reduce future insect damage to fruit.



# Fruit Thinning Examples

Lack of thinning can result in branch breakage due to weight.





### Windfalls and Harvest Signs

Adopters are required to pick up all windfalls and place in the dumpster to reduce future insect infestations.

Adopters who wish to harvest their apples must tape their trees in early August with 'neon" tape along with laminated or plastic sleeves containing signs stating:

PLEASE DO NOT PICK.
ADOPTER WILL PICK.

The public is allowed to harvest apples from any untaped trees after our Cider Squeeze each year.





#### Apple Espalier Trees

- Espalier is a controlled growth of apple trees resulting in improved production by tying and pruning branches to a frame.
- Allows apple trees in limited space
- Provides easier access for pruning, picking and pest control
- Bears fruit at an earlier age

### Curran Orchard Espaliers

There are three espaliers at the Curran Orchard:

- The Curran Apple Orchard sign along Grandview Drive
- The High Density area near Rock Road
- The diamond espalier west of the barn



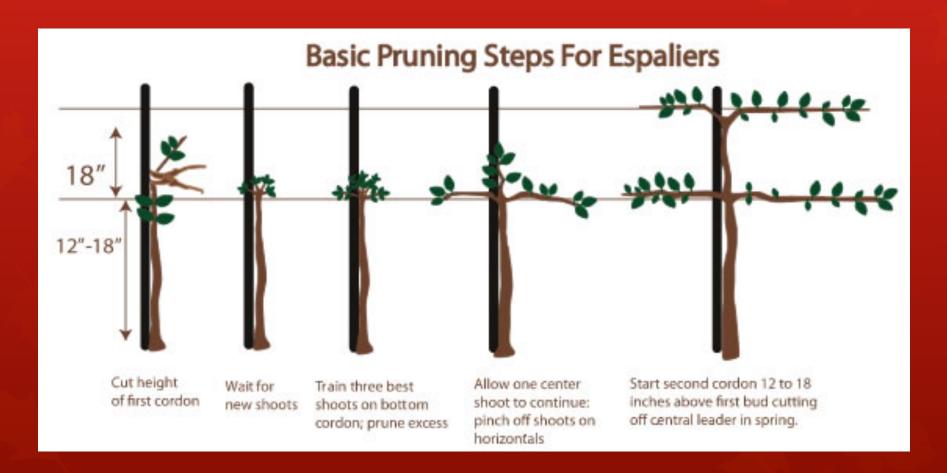
# Diamond Espalier near Curran barn



# **Espalier**

- Targeted pruning and grafting can result in largely two-dimensional growth to create decorative patterns
- Use dwarf rootstock so the tree doesn't outgrow its space
- Water accordingly since this technique is very sensitive to drought
- Support trees with a wall, fence, or wire trellis
- Train trees while branches are young and flexible
- Prune to develop a uniform structure and form fruiting spurs

#### Espalier demonstration area



# Slender Spindle Technique

- Managed height keeps trees small and productive
- Prune and positions small, lateral fruiting branches
- Uses mini-dwarf rootstock
- Only prunes shoots and branches growing in the wrong direction
- Requires a permanent support



Slender Spindle and V-trellis techniques are used in the high density area near Rock Road.

Two full grown apple trees previously occupied the area which now has 40 trees on mini-dwarf rootstock



#### <u>CORE</u> Curran Orchard Resource Enthusiasts!

- Volunteer group dedicated to the Curran Orchard
- Adopt A Tree Program
- Pruning Parties
- Educational Classes and School Tours
- Summer Concerts
- Cider Squeeze
- Community Harvest

#### CORE needs YOU!

- Volunteers are ALWAYS welcome!
- CORE meets the 1<sup>st</sup> Tuesday of each month at 6pm University Place Civic Building 2nd floor 3609 Market Place W

Free parking underneath library

- www.curranappleorchard.com
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