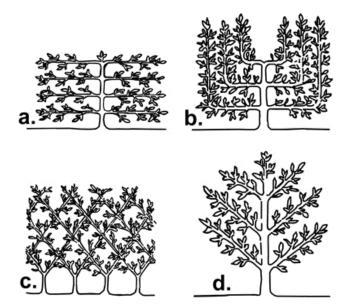
Pruning: Fruit Trees for Small Spaces (Espalier)

Getting Started

- Site Selection
- Structure
- Design
- Spacing
- Fruit type
- Pruners
- Ties
- Weights



Training and maintaining an espalier requires two different kinds of pruning: winter and summer. In winter, you make your major 'heading back' cuts, which on scaffolding branches (other than the vertical trunk) is always done just above a downward-facing bud. Summer pruning--the pinching back of twigs that form along the scaffold branches is es-

Training Year 1

Tie to frame work

Cut terminal back to a bud

Rub off upward facing buds

Pinch back to 5-6 leaves during summer

Training Subsequent years

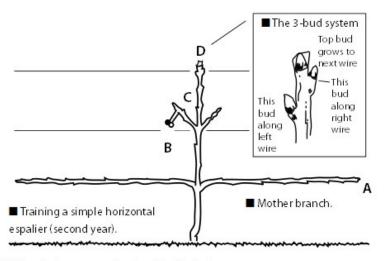
Allow laterals to increase in length about 9-12"

Keep lateral branch tipped so it keeps growing.

Attach scaffold Branches to supports through out the summer (approx. 3x)

Remove suckering branches immediately

Repeat steps from year 1



- A The first year growth along the first wire.
- B The new shoots are tied down to the second wire.
- C The trunk proceeds to the third wire.
- D The top bud grows to the next wire (using 3-bud system).

Apples, pears and plums

Fruit is mostly produced on 'spurs' which form on second year wood. These spurs continue to produce for many years and should be regarded as permanent fruit spurs. Encourage as many spurs to the form on the 'mother' branches as possible.

Watch for 'water-shoots'; they grow vertically and are easily recognised by their vigour. As the 'water-shoot' takes off vigorously from the horizontal 'mother' branch, it can be tied or weighted down to assume a more horizontal pattern.



Apple Spur

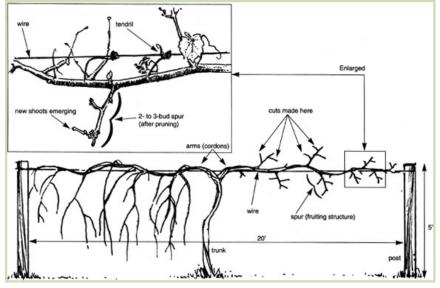
Peaches and nectarines

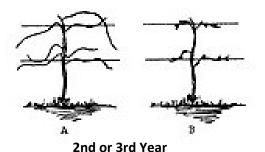
The fruiting wood of peaches and nectarines is the wood that grew in the previous season. These are called one-year-old laterals and you need to keep new laterals growing from the 'mother' branches each year, to keep the fruit close to the strong branches.

To espalier a peach or nectarine, it is necessary to firstly encourage 'mother' branches along your chosen design lines, then start a system of lateral renewal all along the 'mother' branches.



Peach bud wood





4th vear

Grapes

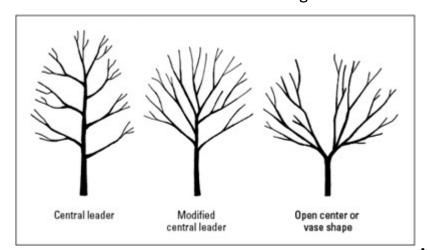
1st year- Tie to the support system.

2nd year- Select the most vigorous cane and remove all others. If the cane is long enough to reach the top wire, cut it off at that height and tie tautly to the wire. Flower or fruit clusters are best removed as noticed.

3rd year- Select two of the best canes at each wire and remove the others. Shorten the selected canes leaving two to four buds on each.

4th year-Select a fruiting cane and where possible a renewal spur at each of the four arms. The number of buds left per cane may be increased to about 10 to 12 on plants of good vigor.

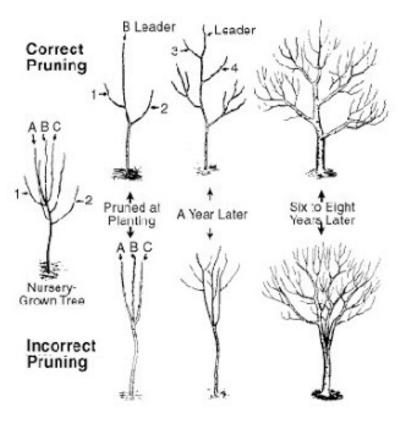
Pruning Fruit Trees



Timing

Spacing

Fruit type



Apples and Pears

Pruning

Apple trees are trained to a modified leader system. The tree should be trained with one central leader or main trunk in the center, with several wide-angled limbs spaced around the leader. The tree should mature to a pyramidal shape.

Summer pruning is advised, especially for removing waterspouts, rootsuckers and fire-blight-infected wood. Summer pruning can also be used during the first three years of tree training to produce the desired tree shape. Undesired growth should be removed in early summer or after harvest between late August and early September.

The first three years should be spent on training only, but by the fourth and fifth years, the trees can be allowed to produce a light crop.

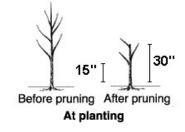
Thinning

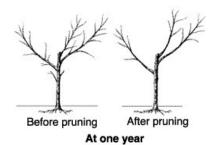
Fruit should be removed by hand to one or two per cluster. Space fruiting clusters about every 6 inches along the limb. To remove the fruit without damaging the spur or other fruit on the spur.

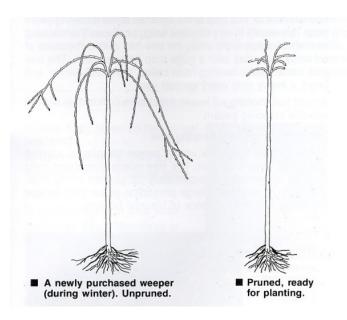
Peaches, Apricots and Nectarines

Pruning- Peaches are usually trained to an opencenter system

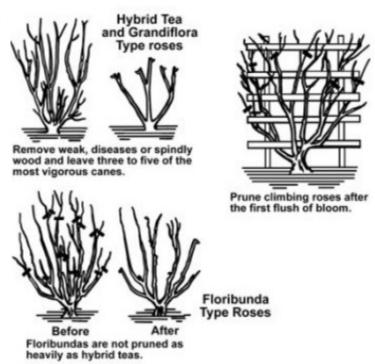
Thinning- Hand-thin the tree about four weeks after full bloom, spacing the peaches about 6 inches apart on the limb.

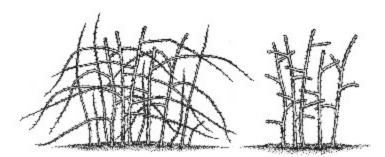




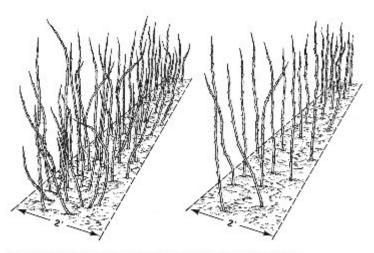








Spring pruning of black and purple raspberries



Spring pruning of summer-bearing red raspberries