

PRUNING DECIDUOUS FRUIT TREES – SIMPLIFIED

WHY PRUNE?

To Guide the Growth and Adjust the Crop

*Train Young Trees

- (1) for structural strength and balance
- (2) shape for easy access for thinning and harvesting
- (3) provide maximum fruiting area and fruitfulness

*Prune Mature Trees

- (1) to maintain and renew fruiting wood
- (2) to distribute fruit wood throughout tree
- (3) to reduce excess fruit wood for larger fruit
- (4) remove broken limbs, water sprouts, and diseased branches
- (5) thin out branches as needed to open tree to sun

WHEN TO PRUNE

*Annually

*In fall or winter dormancy, major pruning

*Removing suckers and water sprouts, anytime

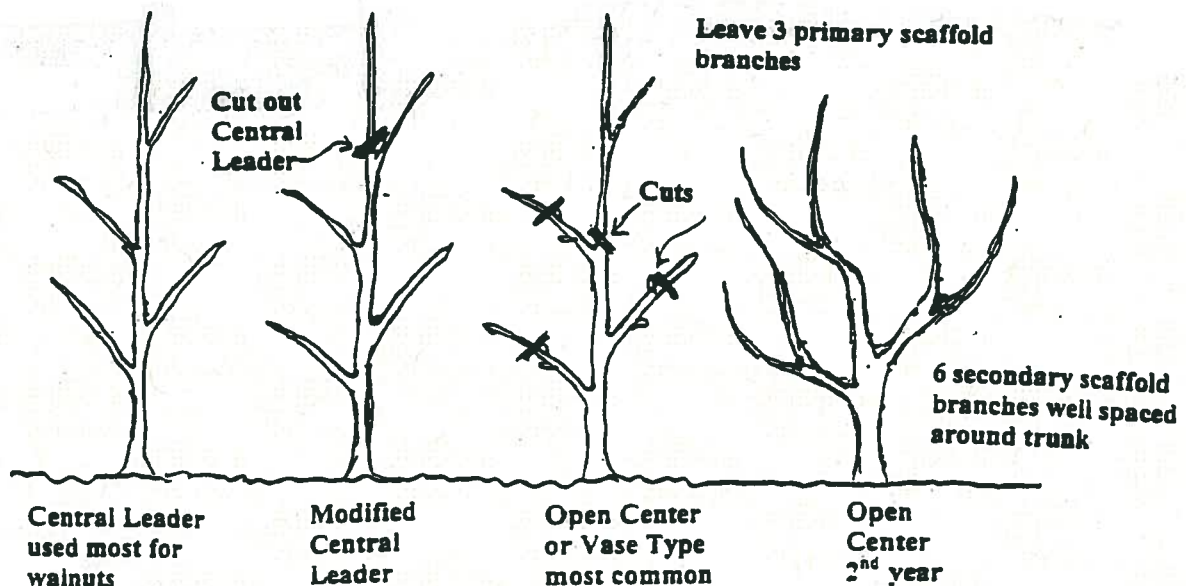
*Minor summer pruning and pinching may be done during growing season to stop unwanted growth.

TRAINING SYSTEMS FOR YOUNG FRUIT TREES

*Open center or vase shape; most common for stone fruits

*Central leader – apples and walnuts

*Modified central leader – apples and pears



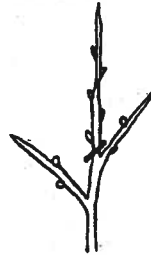
PRUNING CUTS

*Thinning – cutting to a lateral branch (recommended)

- (1) reduce length of a branch by cutting to a lateral branch large enough to assume the terminal role
- (2) removal of branches to point of origin

*Heading back (not recommended for most trees)

- (1) cutting to leave a stub so that new branches arise from lateral buds just below cut.
- (2) the smaller the branch the better.



Thinning
Cut

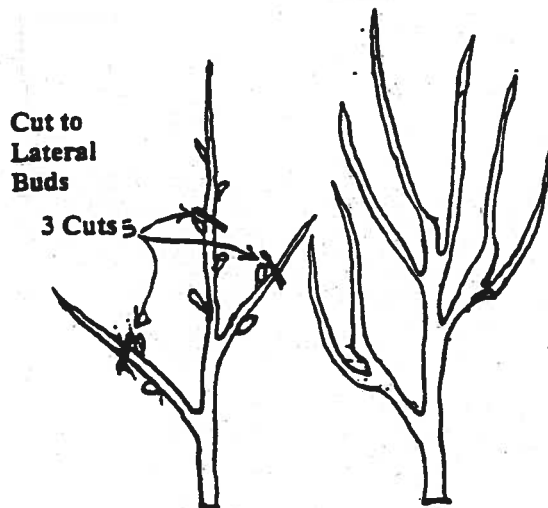


Heading
Cuts

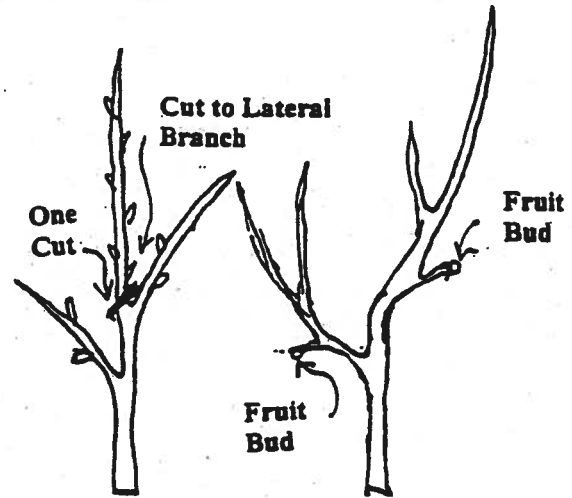
TRAINING THE VERY YOUNG TREE

*Establish basic tree framework of scaffold branches

- (1) lowest branch about 18 inches from ground
- (2) leave 3 or 4 branches evenly spaced around trunk to balance weight
- (3) space 6 to 8 inches apart up and down trunk for strong attachment
- (4) leave a few lateral branches on the scaffold limbs for early fruiting and sunburn protection



1st Year 2nd Year
Heading or stubbing causes
many new shoots too closely
spaced and no fruit buds



1st Year 2nd Year
Thinning causes open new
growth and promotes
formation of fruit buds

PRUNING THE MATURE TREE

*Thin out branches to let in light and air, leave shade to prevent sunburn.

*Select upward and outward growing branches

*Eliminate crowding, crossing, rubbing and diseased or broken branches

*Save adequate fruit wood but thin it if too abundant

(1) on apples and pears, bear fruit is borne on long-live spurs (5-10 years)

(2) peaches and nectarines bear fruit on one-year shoots that have flower buds produced during the prior summer

(3) almonds, apricots, prunes, plums and cherries bear most of their fruit on short-live spurs (2-5 years)

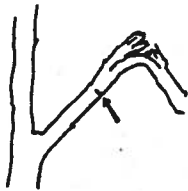
(4) persimmon, figs, quince and pomegranate bear fruit on current season's growth (green shoots)

*Winter pruning promotes tree vigor: removing about 20% of last year's growth.

*Prune to keep tree reasonable for crop management and harvesting (10-15 feet)

LARGE CUTS

*Use only when a large limb dies or breaks.



Cut under to prevent bark tear



Cut off to remove weight



Trim clean at bark ridge

PRUNING TOOLS

*Pruning shears

(1) hand shears

(2) long handled shears called "loppers"

(3) pole pruners

*Pruning saws: curved blade cuts on the pull stroke, teeth wide set

*3-legged orchard ladder (never use 4-legged ladder – they are unstable on uneven ground). Do not use 3-legged ladder on pavement – 3rd leg will slide out

Additional Reading:

Pruning Deciduous Fruit Trees, W.P. Tufts and R.W. Harris, UCCE Circular 444, 1995.

Pruning Home Deciduous Fruit and Nut Trees, M. Gerdt, A.A. Hewitt, J. Beutck, J. Clark, and F. Cress, UC ANR Leaflet #21003, 1977.

The American Horticultural Society, Pruning and Training, by Brickell and Joyce, D.K. Publishing, Inc., 1996.

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