## Pruning Fruit Trees, Grapes \& Berries

## Fruit Trees - Apples


\& Pears

- Newly set trees

1. Prune immediately after planting in the spring
2. Train to a single stem and cut back to 30 " high;
 remove the second and third shoot from the top, once they start to grow
3. Leave two to three well-spaced branches where they occur and prune these to three buds each
4. Train young trees to a conic shape; select scaffold limbs positioned 8-inches apart along the trunk

## - Mature trees

1. Remove diseased, dead or dying branches.
2. Remove branches of small diameter and with few leaves in the inner portions of trees
3. Remove drooping branches and branches growing downward from the bottom of larger branches
4. Remove a branch that lies directly above or below another limb; remove the less vigorous branch of the two
5. Remove branches that rub together
6. Remove upright growing vigorous suckers arising inside the tree and from the lower portion of the trunk
7. Maintain the conic shape of the tree
8. To lower the height of old neglected trees, remove the top $1 / 3$ of the tree by cutting above large side branches

## Fruit Trees - Stone Fruits



- Newly set trees

1. Prune cherries, plums or prunes to a central leader as for apples and pears
2. Prune peaches to a height of $18-24$ " and remove all laterals. In June when shoots grow, select three that are well positioned around the trunk with $3-5$ " between them to result in an open centered tree

- Bearing trees

1. Prune bearing trees of stone fruits in late spring
2. Cherries, plums and prunes require the least Prune lightly to head back strong lateral

pruning of all fruit trees.
growth, thin out branches to maintain good light exposure for remaining limbs and remove dead, diseased or broken limbs.
3. Prune peaches by heading back all the main branches except the fruiting shoots. The most desirable fruiting shoots are 12-18" long; thin and space fruiting shoots to about 6-8" apart

## Vines - Grapes

- Young vines


Training young vines to the four-arm Kniffin system

1. At planting - prune to best single cane
2. April to May - remove top bud, leave next two buds and remove all other buds
3. Planting season - two shoots will develop to form the vine framework
4. Summer - remove flower clusters and watersprouts
5. Second season, early spring - select the better cane of the previous year's two shoots, prune it to leave 4-6 buds ( 2 at bottom wire, 3 at top wire); tie the cane vertically to the trellis
6. Summer - remove flower clusters, secure shoots along trellis wire; remove watersprouts
7. Third season, early spring - leave short canes with 3-5 buds along each wire on opposite sides of the trunk; allow one cluster per shoot to bear


Stages in the development of the four-arm Kniffen system of training on a two-wire trellis.

## - Mature grapevines

1. Prune the mature grapevine in late winter-early spring.
2. A mature vine should be pruned to support $20-55$ buds. The objective of pruning is to maintain a balance between vegetative growth and a productive fruit crop. Balanced pruning is a technique which takes the guess work out of pruning and achieves the desired results.

Balanced Pruning Formula for Mature Vigorous Vines

| Grape Variety | No. of buds to leave for <br> $\mathbf{1}^{\text {st }} \mathbf{l b}$. of cane prunings | No. of additional buds to leave for <br> (each additional lb. of cane <br> prunings |  |
| :--- | :---: | :---: | :--- |
| Concord | 30 | + | 10 |
| Niagara | 25 | + | 10 |
| Delaware, Catawba | 20 | + | 10 |

## - French Hybrids

All of these require severe "sprouting and suckering" during spring and early summer for satisfactory growth, plus crop and wine maturity with the formula suggested below.

| Grape Variety | No. of buds to leave for <br> $\mathbf{1}^{\text {st }}$ lb. of cane prunings |  | No. of additional buds to leave for <br> ea. additional lb. of cane prunings |
| :--- | :---: | :---: | :--- |
| Small-clustered varieties <br> such as Foch | 20 | + | 10 |
| Medium-clustered such <br> as Aurora Chelois | 10 | + | 10 (Weak vines need pre-bloom |
| and severe sprout thinning) |  |  |  |$|$

## Brambles

- Late March

1. Remove weak, broken or diseased canes
2. Shorten canes to the following heights:
$\checkmark$ black raspberry 7"
$\checkmark$ purple raspberry .......... 10-12"
$\checkmark$ blackberry .................... 20-25"
$\checkmark$ red raspberry ...............thin canes to 6" apart \& shorten to 40-50"

- June - Remove 2-3" of shoot tips when canes reach the following heights:
$\checkmark$ black raspberry 18-20"
$\checkmark$ purple raspberry .............. 24"
$\checkmark$ blackberry .................. 36-40"
$\checkmark$ red raspberry. do not pinch
- Summer

1. Remove diseased canes if they appear
2. Remove fruiting canes immediately after harvest; cut canes off close to the ground

## Blueberries

- Late March

Require little pruning until plant is 5-7 years, then prune annually according to the following guidelines:

1. Remove weak twiggy branches
2. Leave 6-9 main branches per plant
3. Cut these vigorous branches back $1 / 3$

## Currants, Gooseberries

- Dormant season

1. Require little pruning until the plant is 3-4 years old
2. Thereafter, remove weak branches and those older than 4 years
3. Leave 12 branches per bush with an equal number of one-, two-, three- and four-year old branches

## Elderberries

- Dormant season

1. Remove dead, broken and weak branches and those four years old or older
2. Leave an equal number of one-, two- and three-year old branches

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