Orchard NURSERY

LAZY K & ATRIUM

Pruning Fruit Trees
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Why Prune Fruit Trees?

- The objective for winter (dormant season) pruning is for shape and structure
- Remove dead, diseased, damaged and crossing branches
- Develop strong limb structure
- Distribute sunlight evenly throughout the tree
- Renew fruitwood (spurs)

When to Prune (winter):

- December through mid-February (before the buds start to swell) is the best time to prune deciduous fruit trees
- This is when you do your "detail work"
- Discard old "mummified" fruit to help prevent bacteria, diseases and insects
- Apricots and Cherries should be pruned in the dry months of July and August to prevent a branch-killing disease called Eutypa dieback

When to Prune (summer):

- The objective for summer pruning is to maintain a smaller tree
- July and August – is the time to prune all deciduous fruit trees to help maintain a smaller tree (when excess leaves and branches are removed in late summer, growth slows down as we go into fall and winter)
- Throughout the season the tree may need some light pruning to maintain an open center

Terms to Know:

- Graft Union – a swollen area just above the soil level where one variety has been grafted onto the rootstock of another variety (note: the graft union is not always swollen and on older plants it can be difficult to find)
- Heading Cut – removing a portion of a shoot or branch, leaving only buds or tiny twigs – results in an increased number of branches

- Open Center System or Vase-shaped System - with this method the center of the tree is kept free of large branches and vigorous upright shoots in order to allow sunlight to reach the lower fruiting wood and for better air circulation
- Primary Scaffold Branches - main support branches which are developed directly out of the tree trunk
- Secondary Scaffold Branches - main branches which are developed out of the primary scaffold branches
- Spur - short twig that is specialized for bearing flower buds and fruit on many fruit species
- Sucker - vigorous upright shoot that arises below the graft union from the rootstock or roots
- Thinning Cut - removing branches at their point of origin - results in a reduced number of branches
- Watersprout - vigorous upright shoot that arises from a latent or adventitious bud on older wood

Young Trees:

- When the tree is young the first pruning phase consists of cuts to get the desired main branching structure
- Use heading and thinning cuts to create the secondary scaffold

Older Trees:

- Trees over 5 years old: the second pruning phase begins in which fruiting wood is maintained and renewed by thinning and heading fruiting and non-fruiting wood.
- Trees that are 15' and taller should be pruned by a professional arborist.
- Some old trees are beyond their peak productive years and the trauma of a drastic reduction in size could make them more susceptible to other problems.
- If you wish to try to reduce an older tree to a manageable size, remove no more than 1/3 of the tree after harvest in the summer.
- If you love the fruit and choose to keep the aging tree, it is essential to maintain its health with the right amount of watering and removing diseased limbs (it would also be a good idea to plant a replacement).

How Much to Prune:

- Heavy pruning (in winter) encourages the formation of water sprouts and vegetative growth at the expense of fruiting wood.
- Light pruning encourages heavy fruit set which results in smaller fruit of poorer quality and possible broken branches.
- Strive for a balance between heavy pruning and renewing fruiting wood.

Tools Needed:

- Hand Shears
- Loppers
- Pruning Saw
- Gloves
- Pole Pruners
- Knee Pad

- Trug
- Disinfecting Bleach Wipes

How to Prune:
- Step back and look at the tree from all sides
- Remove dead, broken and crossing branches
- Thin out the tree to open up the center
- Make pruning cuts at a 45-degree angle (to prevent water from sitting on the cut) towards an outside bud - about 1/4" above the bud
- Step back and look at the tree again, prune more if necessary

Almonds:
- Produce on spurs that remain productive for up to 5 years
- Remove water sprouts, dead, diseased and crossing branches
- As the trees matures, remove older, unproductive spurs to generate new spurs

Apples:
- Normally bear on the terminal end of spurs located on wood 2 years old and older.
- Produce on spurs that remain productive for up to 5 years
- As the trees matures, remove older, unproductive spurs to generate new spurs

Apricots:
- Take out 2-year or older branches that begin to bend down - cut them back entirely to an upright growing branch (do not head them)
- Remove shoots from the center of the tree and cut out crossing, dead and diseased branches
- All new growth can be cut back approximately by two-thirds. This wood will grow fruit spurs the second year and produce fruit the third year
- Apricots should be pruned in July or August to allow time for the pruning wounds to close (to help prevent a branch-killing disease called Eutypa dieback

Cherries:
- Cherries bear fruit on long-lived spurs that are productive for 10 to 12 years.
- Pruning consists mainly of thinning out interfering branches, removing dead and diseased branches and thinning out new shoots lightly each year
- Once fully established, mature cherries will require very little annual pruning
- Proper pruning can help prevent diseases such as powdery mildew and bacterial canker
- Do not over prune as this may lead to sunburn, which may make trees susceptible to borers
- Cherries should be pruned in **July** and **August** to allow time for the pruning woods to close before the winter rains to help prevent diseases

Figs:
- Mature fig trees set fruit on the current season's growth in late summer (sometimes you get a small crop in the spring called "Brebas")
- The objective for dormant-season pruning is to remove dead, broken and interfering branches
- Trim structural limbs that are weeping too far down
- Figs are tolerant of very heavy pruning and very little pruning

Nectarines and Peaches:

- Bear fruit on 1-year old wood (wood that grew from last season)
- Remove about 50% of current season's growth annually
- Head back long shoots by 1/4 to 1/5 and remove small short shoots out completely
- Thin out center to improve light penetration

Pears:

- Bear fruit on spurs on 3- to 10-year-old wood. Main limbs are usually headed each year and side limbs are lightly headed or left un-headed, producing spurs and fruit in future years.
- Remove older, unproductive spurs as the tree matures.
- Up to two-thirds new growth can be cut back annually.
- Proper pruning can help to prevent diseases such as fire blight, bacteria blast and canker. Do not over prune as this may lead to sunburn, which may make trees susceptible to borers

Persimmons:

- Bear fruit on the current season's shoots
- Pruning consists of thinning shoots to promote growth for next season's crop and heading cuts to keep fruit within reach

Japanese/Italian Plums (Prunes):

- Bear on fruit spurs which live 5 to 8 years
- For varieties that bear heavy crops, remove one-half of the shoots each year - other varieties like Santa Rosa, bear moderate to light crops so remove only ¼ of the shoots
- Thin out the center of the tree to improve sunlight

Genetic Dwarf Trees:

- Grow 6' to 10' tall and wide at maturity
- Easy to manage and provide an adequate amount of fruit for a single family
- Usually available in apples, nectarines and peaches

Semi-Dwarf Trees:

- Semi-dwarf trees are on rootstock that can reach up to 20' tall (not semi-dwarf as we think, semi-dwarf as compared to its 30' cousin!)
- Can be kept relatively small with an initial hard pruning when very young and **annual** Summer Season pruning

Full-Sized Trees:

- Full-sized trees are on standard rootstock that grow 25' to 30' tall
- Can be kept relatively small with an initial hard pruning when very young and **annual** Summer Season pruning

Chilling Hours:

- **What Are Chill Hours?**
  Chill hours are the cumulative number of hours of temperatures lower than 45°F that are required by deciduous fruit and nut trees for fruit production. The hours are tracked during the traditional dormant season, measured from November 1 to February 28.
- **Why Are Chill Hours Needed?**

Dormancy is broken when sufficient cold temperature breaks down the growth inhibitors within the tree.
A specific number of cumulative hours of chilling, are required to break dormancy, which varies from variety to variety.

Average Amount of Chilling Hours required for the following fruit trees:

- **Apple 300-1000**
- **Apricot 300-500**
- **Cherry 300-700**
- **Fig - 100**
- **Nectarine 300-700**
- **Peach 200-700**
- **Pear 300-800**
- **Plum 300-800**
- **Pomegranate 100-300**

Central Contra Costa County typically receives 700-1100 chill hours, while warmer winter areas such as Oakland and Berkeley typically receive 400-700
***Please refer to Orchard Nursery's Bareroot Fruit Tree list for specific variety chill hours**

Pest and Diseases:

- To help control **Peach Leaf Curl**, spray with **Copper Fungicide** at bud swell (late winter) and popcorn stage (buds just showing pinkish color – Thanksgiving, Christmas and Valentine's Day. Reapply if it rains within 24 hours of application.
- To help control **Fire Blight**, a bacterial disease that causes the branches and fruit on apple and pear trees, evergreen pears, pyracantha, and members of the rose family to turn black and die.
- Prune off blackened branches 18" below the Fire Blight
- To help reduce Fire Blight on apples and pears, spray with Liquid-Cop when blossoms begin to open (this might help). Reapply every 5-7 days during the bloom period
- To help control other pests and diseases, see our **"Fruit Tree Care Calendar"**

Fertilizing:

- January - apply **E.B. Stone Organic Ultra Bloom** to maximize root development and improve fruit production and quality
- March – September - apply **E.B. Stone Organic Citrus and Fruit Tree Fertilizer**