A Beginner’s Guide to Ripening, Harvesting, & Tree Care for Stone Fruits
Almonds, Apricots, Cherries, Plums, Peaches

One of the main goals of Portland Fruit Tree Project’s Fruit Tree Stewardship Program is to empower tree owners with the knowledge and skills to care for their fruit trees themselves. This first section provides a general overview of fruit tree care basics. Later in this document, you will find tips and info specific to fruit trees that are classified as stone fruits.

We provide this information free of charge to the general public. However, if you have found this document useful, consider supporting the work of the Portland Fruit Tree Project (PFTP) by donating through the “Support Us” tab on our website (www.portlandfruit.org). Also, please keep in mind that we have created this reference with PFTP-registered tree owners as our target audience. If your fruit tree is not registered with us and you would like to do so, please click on the “Tree Registration” tab on the homepage of our website.

PFTP also offers hands-on workshops on all of the tree care topics mentioned below. As a PFTP-registered tree owner, you may attend our Tree Care Workshops free-of-charge. Upcoming workshops are posted on our website and sent out in our monthly e-newsletter. If you are not already subscribed and would like to receive to our e-newsletter, please contact us to sign up.

YOUNG FRUIT TREES: SELECTION, PLANTING, & CARE
This resource is designed to educate owners of older, established fruit trees. In the future, this section will be expanded to include further information on fruit tree selection & planting. One important thing for owners of older trees to understand is that the variety and rootstock that was initially selected, the location where it was planted, how the tree was planted, and how it was cared for and trained while developing in its first five years, have all factored into the current health & productivity of your fruit tree(s).

WATERING
If your tree is still young (under 5 years), summer watering is very important. Here in Portland, it is generally a good idea to water young trees 10 gallons per week (a single, deep watering) between early June and late September. If your tree is older than 5 years, summer watering is not necessary but is recommended if your tree is planted in a parking strip (the area between the street and the sidewalk) or other location where it has limited access to water infiltration. Watering is also recommended if the weather has been especially hot and dry for more than a week.
**Pruning**

Pruning is most easily learned through hands-on demonstration. For this reason, we strongly recommend that you attend a pruning workshop before attempting to prune on your own. PFTP offers hands-on pruning workshops in winter and summer.

**Why prune?** Pruning is important for fruit tree health and productivity. Proper pruning can:

- Reduce tree size – so that fruit is reachable
- Improve structural strength
- Induce branching (when that is desired)
- Improve air flow – to decrease fungal susceptibility
- Increase light penetration - to increase fruit production and fruit ripening
- Prevent branches from breaking by decreasing weight on the lateral branches
- Concentrate the tree’s energy into growing and ripening its fruit.
- Improve the aesthetic/beauty of the tree

**When to prune?**

*Winter Pruning* is performed when the above-ground portion of the tree is dormant. This is a time for large “renovation” cuts and for invigorating the tree’s growth. January & February are the months when you can expect the greatest beneficial response from your winter pruning cuts. Early to mid-March is still good but the beneficial response is somewhat reduced. Note: It is not recommended to prune stone fruits during the early winter unless there are major wounds or diseased portions of the tree that should be removed to reduce surface area that is exposed to fungal infection. Any heavy pruning of stone fruits should be done in early to mid-March.

*Summer Pruning* is a time for smaller detail pruning of water sprouts, suckers, tip die-back, etc. The benefits of summer pruning will be greatest between June 21st & mid-August.

**How to prune?**

1) A good approach for those new to pruning is to focus on removing the 3 D’s: Dead, Diseased, or Disoriented branches. Dead branches show no signs of growth or leaves. Diseased branches have unusual growths or mal-formed leaves. Remove dead & diseased wood first. Then ‘disoriented’ branches, which include branches that are crossing, growing inward toward the center of the tree, or at an angle that might cause the branch to snap when loaded with fruit.

2) There are 2 main kinds of pruning cuts: Heading cuts shorten a branch; Thinning cuts remove a branch entirely. Heading cuts are made just above a bud, and thinning cuts are made at the branch collar. To learn more about pruning cuts, please attend a PFTP pruning workshop.

3) It’s best not to remove more than 1/3 of the tree in a single year.

4) Make sure that your blades are sharp, so that your cuts go straight through. Using dull tools can create rough wounds that are difficult for the tree to heal, and more prone to pests & disease.

5) Sanitize the blades of your pruning tools between trees, to avoid spreading disease. We recommend using a simple rubbing alcohol solution, applied with a clean rag or spray bottle.
PEST & DISEASE MANAGEMENT
Keeping your tree healthy is your first line of defense against pests and disease, because healthy
trees are naturally more resistance to pests & disease. Later in this document, you will find pest
and disease information specific to your type of fruit tree(s). Here are some general tips that
apply to all fruit trees:

Spring Pest & Disease control: Spring is a good time of year to focus energy on soil health and
managing existing pest & disease factors. Here are some basic tips.
• Remove grasses and other weeds in a 2-3 foot radius around the base of the trunk, so that
  they will not compete with your tree for water & nutrients.
• Apply organic mulch (straw, woodchips, compost) within that 2-3 foot radius, up to 10”
  thick. Leave 6” of space between the mulch and the base of the trunk to discourage crown
  rot.
• Traps can be set in the spring to reduce pests specific to your tree. More specific
  recommendations may be listed under the particular tree types, later in this document.
• Spraying may be necessary if your tree has severe pest or disease issues. Depending on your
  specific tree type, we may offer suggestions of organic options later in this document.

Fall Pest & Disease assessment & prevention: During and just after harvest season is a great
time to assess the pest & disease situation of your tree and to get your tree off to a healthy start
for the following year. A few things you might want to consider:
• Clean up all fallen fruit. This is very important for breaking (or preventing) the life-cycle of
  pests & diseases. Any fruit that isn’t harvested should be raked up and hot-composted away
  from the tree, or put in your yard waste bin for removal.
• Try to identify your pest & disease issues. If your fruit show signs of pests or disease, Fall is a
great time to get that diagnosed so you can take appropriate steps to address it. Please see
  the Tree Care Resources page on our website for a list of books, websites, and other local
  organizations that may be able to help you with this. In addition, PFTP offers a Fall Tree
  Care workshop each year.

FRUIT THINNING
For several species of fruit trees, thinning out some of the young fruit during May & June is
recommended. Later in this document, you can see if this is suggested for your particular type
of fruit tree. Fruit thinning provides the following benefits:
• Larger, sweeter fruit! Thinning concentrates the tree’s energy on producing a smaller
  number of high quality fruit, rather than a large number of small, lower quality fruit.
• Increased air flow between the fruit, reducing susceptibility to disease and limiting pests
  ability to infest multiple fruit
• Reduced load of fruit on each branch, decreasing the chance of broken limbs from fruit
  weight.
Harvesting & Ripening

- Almonds are ready to harvest once the outer hull begins to split.
- Harvest by knocking down or shaking tree.
- Once harvested, remove the hulls and allow kernels to dry in a well-ventilated area for a few weeks.
- Nuts are dry when kernel rattles in shell.

Tree Care

In addition to the General Fruit Tree Care tips provided in Part II, here are some specific tips for Almond trees.

Pruning

- Almonds are in the stone fruit family so it is not recommended to prune them during the early winter (December, January, and February) unless there are major wounds or diseased portions of the tree that should be removed to reduce surface area that is exposed to fungal infection. Any heavy pruning should be done in early to mid-March. Summer pruning is a time for smaller detail pruning of water sprouts, suckers, tip die-back, etc.
- The open-center or vase-shaped training system is recommended for Almonds.
- Increase light penetration by opening up the center and allowing light to reach the bottom fruiting branches.
- Remove fruiting wood that is older than 5 years old to stimulate growth of new fruiting wood.
- Reduce alternate bearing by pruning heavily before a heavy crop season to balance the cycle.

Pest & Disease Management

Peach Tree Borer is a pest that can affect Almonds that were grafted on a peach tree rootstock.

- The larval or immature stage of this insect are white with brown head. The larvae bores into the crown and trunk of the tree and mines the cambial layer by
the graft union. It only attacks the Peach Rootstock and does not touch the Almond Scion.

- Signs of Peach Tree Borers are small holes in the tree that are leaking sap. Stick a wire hanger in the hole to kill larvae
- Adults are clear-winged moths with blue-black bodies that have yellow or orange bands across the abdomen
- Pheromone traps are used to monitor adult emergence and to confuse males from mating with females

Shothole Fungus (Coryneum Blight) is one of the most common diseases that affect Almonds in the Portland area.

- Leaves, twigs, buds, and fruit affected by shothole show small, scabby lesions
- Infection is most severe following warm, wet winters when wet weather is prolonged into the Spring
- The fungus overwinters as spores in infested buds and twig lesions
- “Spots on young leaves have a narrow, light green or yellow margin and a center that often falls out as the leaf expands, leaving a hole something like what you would see if a buckshot pellet had passed through it.” (The Home Orchard)

**Fruit Thinning** - Almonds do not need to be thinned.

**Sources:**

*Fruit and Nut Research and Information Center* - University of California (2011)
http://fruitsandnuts.ucdavis.edu/almondpages/AlmondPruningTraining/?i=1

*The Home Orchard*, a University of California Agriculture & Natural Resources Publication (2007) – also mostly available online at http://homeorchard.ucdavis.edu/

http://oregonstate.edu/dept/nurspest/peach_tree_borer.htm

*UC Management Guidelines for Peachtree Borer on Almonds*. University of California(2009)
http://www.ipm.ucdavis.edu/PMG/r3302211.html

*Natural Insect Control*. Golden Harvest Organics (2010)
Harvesting & Ripening

- Cherries should be picked when they are fully ripe. Take a bite to test the ripeness. If it tastes good they are ready to pick! Full coloration is also a good indicator.
- If you want PFTP to harvest your tree, it is a good time to give us 2 weeks’ notice when 33% of the fruit has reached full size and coloration.
- Grab the stem or stems of one or more fruit and gently lift and twist upwards. The stems should easily detach from the fruit spur (the part of the branch that the stems grow out of.) Be careful not to break the fruit spur off.
- When harvesting, also be careful not to break the stem off of the fruit. If broken, this will act as a wound on the cherry and reduce the amount of time that the fruit will last on the shelf/in storage.

Tree Care

In addition to the General Fruit Tree Care tips provided in Part II, here are some specific tips for Cherry trees.

Pruning

- Cherries are stone fruits so it is not recommended to prune them during the early winter (December, January, February) unless there are major wounds or diseased portions of the tree that should be removed to reduce surface area that is exposed to fungal infection. Any heavy pruning should be done in early to mid-March. Summer pruning is a time for smaller detail pruning of water sprouts, suckers, tip die-back, etc.
- The highest quality cherries grow at the base of last year’s growth and on new spurs. Heading cuts will encourage new spurs

Pest & Disease Management

Cherry Fruit Fly

- Also known as the Apple Maggot, adults have a black head and characteristic black “zig-zag” pattern on their wings.
- They first emerge in July and are active through September.
- The fly lays eggs under the skin of the fruit. Once hatched, larva burrows into flesh and leaves behind brown tunnels. A small pin-point sting can be visible on the surface of the fruit.
Trapping, spraying Kaolin clay (which is non-toxic) to mask the fruit, fruit barriers (e.g. paper baggies or nylon footies,) fruit thinning, and cleaning up fallen fruit are all practices that can help to reduce fruit fly damage.

In the Portland area, the most common disease issues with cherry trees tend to be fungal-related. Following our general tips for fruit tree care should reduce the likelihood of fungal infection.

**Shothole Fungus (Coryneum Blight)** is one of the most common diseases that affect Cherries in the Portland area.
- Leaves, twigs, buds, and fruit affected by shothole show small, scabby lesions
- Infection is most severe following warm, wet winters when wet weather is prolonged into the Spring
- The fungus overwinters as spores in infested buds and twig lesions
- “Spots on young leaves have a narrow, light green or yellow margin and a center that often falls out as the leaf expands, leaving a hole something like what you would see if a buckshot pellet had passed through it.” (The Home Orchard)

**Fruit Thinning** -- Cherries do not require fruit thinning.

**Sources:**
2. Karen Tillou’s class outlines for the “Fruit Tree Short Course” at Clackamas County CC (Jan 2010) – http://depts.clackamas.edu/hort
Harvesting & Ripening

- Apricots & Peaches should be picked when they are fully-colored and tree-ripened but still slightly firm to the touch. You should not wait until the fruit gets too soft while still on the tree.
- When you think the fruit is ready to harvest, lift the fruit gently upwards. They’ll be ready to pick when the stem pulls easily away from the branch. If you need to pull hard on the fruit then it may not be ready to pick.
- When harvesting, be careful not to break the stem off of the fruit. If broken, this will act as a wound on the fruit and reduce the amount of time that the fruit will last on the shelf/in storage.

Tree Care

In addition to the General Fruit Tree Care tips provided in Part II, here are some specific tips for Peach & Apricot trees.

Winter Pruning

- Peaches & Apricots are stone fruits so it is not recommended to prune them during the early winter (December, January, February) unless there are major wounds or diseased portions of the tree that should be removed to reduce surface area that is exposed to fungal infection. Any heavy pruning should be done in early to mid-March. Summer pruning is a time for smaller detail pruning of water sprouts, suckers, tip die-back, etc.
- Peaches & Apricots are generally grown in either an open center or “fruit bush” training system.
- The approximate life span of branches that bear fruit is 1-2 years for peaches and 3 years for apricots. In order to maximize fruiting potential, remove older wood (~ 2/3 each year) in favor of new growth. Use heading cuts to promote new growth.

Pest & Disease Management

In the Portland area, it is very challenging to grow Apricots & Peaches organically because of susceptibility to fungal-related diseases, due to the rain. Following our general tips for fruit tree care (in section II) should reduce the likelihood of fungal infection but the selected variety and the planting location of the tree (in relation to the
sun, cover from the rain, soil drainage, etc.) will factor greatly into how well your tree resists potential fungal infections.

**Peach Leaf Curl** is the most common disease affecting Peaches in the Portland area.
- Fungus overwinters on the tree
- New infection occurs winter/early spring as buds are swelling
- Can kill a tree in several years from defoliation
- Remove diseased tissue as soon as you see it
- Cover tree December through April so less/no rain falls on it
- It can be difficult to avoid Peach Leaf Curl in the Portland area without applying annual applications of fungicide during the dormant season.

**Shothole Fungus (Coryneum Blight)** is one of the most common diseases that affect Apricots & Peaches in the Portland area.
- Leaves, twigs, buds, and fruit affected by shothole show small, scabby lesions
- Infection is most severe following warm, wet winters when wet weather is prolonged into the Spring
- The fungus overwinters as spores in infested buds and twig lesions
- “Spots on young leaves have a narrow, light green or yellow margin and a center that often falls out as the leaf expands, leaving a hole something like what you would see if a buckshot pellet had passed through it.” (Home Orchard)

**Fruit Thinning**
It is a good idea to check on your tree’s fruit set in mid-May to mid-June and thin out the developing fruit. Apricots should be thinned out to one every 3-5 inches. Peaches should be thinned out to one every 5 to 7 inches. This helps prevent fungal infection by improving air flow between developing fruit.

**Sources:**
2. Karen Tillou’s class outlines for the “Fruit Tree Short Course” at Clackamas County CC (Jan 2010) – [http://depts.clackamas.edu/hort](http://depts.clackamas.edu/hort)
Harvesting & Ripening

- Plums should be picked when they are firm-ripe and fully flavored. To determine ripeness, taste is the best indicator. If it tastes good to you then it’s ready to harvest!
- If you want PFTP to harvest your tree, it is a good time to give us 2 weeks’ notice when about 33% of the fruit has reached full size and coloration.
- When you think the fruit is ready to harvest, lift the fruit gently upwards. They’ll be ready to pick when the stem pulls easily away from the branch. If you need to pull hard on the fruit then it may not be ready to pick.
- When harvesting, be careful not to break the stem off of the fruit. If broken, this will act as a wound on the plum and reduce the amount of time that the fruit will last on the shelf/in storage.

Tree Care

In addition to the General Fruit Tree Care tips provided in Part II, here are some specific tips for Plum trees.

Winter Pruning

- Plums are stone fruits so it is not recommended to prune them during the early winter (December, January, and February) unless there are major wounds or diseased portions of the tree that should be removed to reduce surface area that is exposed to fungal infection. Any heavy pruning should be done in early to mid-March. Summer pruning is a time for smaller detail pruning of water sprouts, suckers, tip die-back, etc.
- Plums are generally grown in an open center training system but can also be grown as a “fruit bush” given the proper rootstock and seasonal maintenance.

Pest & Disease Management

In the Portland area, the most common health issues with plum trees tend to be fungal-related. Following our general tips for fruit tree care (in section II) should reduce the likelihood of fungal infection.
Shothole Fungus (Coryneum Blight) is one of the most common diseases that affect Plums in the Portland area.

- Leaves, twigs, buds, and fruit affected by shothole show small, scabby lesions
- Infection is most severe following warm, wet winters when wet weather is prolonged into the Spring
- The fungus overwinters as spores in infested buds and twig lesions
- “Spots on young leaves have a narrow, light green or yellow margin and a center that often falls out as the leaf expands, leaving a hole something like what you would see if a buckshot pellet had passed through it.” (Home Orchard)

**Fruit Thinning**

It is a good idea to check on your tree’s fruit set in mid-May to mid-June and thin out the developing fruit to one plum per cluster. This helps prevent fungal infection by improving air flow between developing fruit.

Rather than removing the plums by hand, hit the limbs with a PVC pipe or broom handle. Start softly and then increase severity. The under developed plums should easily fall down. About three-fourths of the developing fruit should be removed for best results.

**Sources:**

2. Karen Tillou’s class outlines for the “Fruit Tree Short Course” at Clackamas County CC (Jan 2010) – [http://depts.clackamas.edu/hort](http://depts.clackamas.edu/hort)