BAREROOT FRUIT TREE CARE

- How should I take care of my bareroot tree until it is planted? What happens if it gets frozen?
  You should keep trees above the freezing point until they are in the ground. Once planted, trees are safe from freezing temperatures. Keep trees in a cool, dark location, out of direct sunlight until they are planted. Make sure packing material around the root system stays damp, not dripping wet. Store in a cool basement, shed, or unheated garage. Check periodically. If the tree happens to get frozen while above ground, let it thaw slowly and avoid handling it when it is in this state. Chances are it will still push out come spring if the freezing duration was not long or frequent.

- When should I plant?
  ASAP, within a week's time. If you cannot plant for several weeks or more, plant as soon as you can get a shovel in the ground. Continue to store trees in the conditions listed above. Or, heal the roots of the trees in a temporary planting bed until you can re-plant in the proper location later.
  Note: DO NOT store trees in the same room with fruit or produce. Ethylene gas is emitted from certain fruits (like apples) that will eventually kill stored trees.

- How should I prepare the hole and how deep should I plant the tree?
  The deeper and wider the hole the better. Soils around many new homes have been compacted from the equipment used in house construction. This compaction lessens the oxygen in the soil. Loosening up the soil around the new root system aerates this soil. This extra oxygen in the soil plays a key role in root initiation. Plant your tree so that the graft union is visible at the soil line, not out of the ground and not buried under the soil. Why? Planting too low would cause suffocation from the lack of oxygen. Planting too high may cause anchorage problems, excessive sucker growth and a possible entry point for borers. Fruit trees like well drained soil, not soils that stay boggy or wet. This is especially true of peaches, cherries, plums and apricots (stone fruits) which will not tolerate wet ground at all. Pear trees will tolerate the most water, while apple will tolerate some. At planting, you may amend the soil with either peat moss or compost. Use 1/3 organic matter with 2/3 of your existing soil when back-filling the hole.

- Now that the tree is planted, how do I care for it?
  **Fertilization**
  The first year you can fertilize with a water soluble fertilizer which has to be applied more frequently for best results. The second year you can fertilize with a granular fertilizer applied 2-3 weeks before bud break - late March in south central Pennsylvania. Once a year should be sufficient.

  **Watering**
  Water your trees weekly with a slow, deep watering. Do not give your trees one gallon of water every day. It is much better to slowly apply 5 gallons once a week, more in cases of severe drought conditions. Why? Frequent, light watering will moisten the top roots of the tree, but neglect deeper roots and may force rooting near the surface where they are more drought susceptible. The tree
can become stressed, weakened and more susceptible to disease and insects. A slow, thorough watering enables those deeper roots to be nourished and promotes healthy, strong growth.

**Mulch**
Mulch can be laid around the tree in a 3 foot diameter circle to hold in moisture, control weeds and prevent lawn mower damage.

**Pruning**
At Boyer Nurseries, we believe that pruning back a bareroot fruit tree at planting time by 1/3 will help lessen the transplant shock. One fourth of the root system was lost in the digging process. To compensate, reduce one third of the growth to reestablish the plant’s previous shoot to root ratio. This can be done several ways.

One way would be removing an entire limb such as a competing central leader on an apple tree. This would lessen the amount of leaf buds that the tree must push the first year. For example, if the tree has two leaders in the center, we remove one so that only one remains. Apple trees should be shaped like a Christmas tree with longer limbs on the bottom and shorter and shorter limbs as you proceed up the tree.

Another way would be to head back or shorten various limbs. Heading back limbs will force them to shoot side limbs approximately 12 inches below the new cut. The optimum angle for a side limb originating off the central leader would be 45 degrees. Peach and plum trees are trimmed to an open vase most often. In this case, a newly planted tree could be headed back, leaving 4-5 side limbs for the main structure of the tree. This pruning at planting time helps reduce the bud count, but also is used to start developing the ultimate shape of the tree.

- **What do I do to take care of pests?**
  Protect your new trees the first year from leaf eating insects like gypsy moths and Japanese beetles. Sucking insects such as aphids, mites and leafhoppers can drain those new leaves of color and vigor. These little fellows may require a hand lens to identify. Penn State puts out a good publication *Fruit Production for the Home Gardener* ([https://extension.psu.edu/fruit-production-for-the-home-gardener](https://extension.psu.edu/fruit-production-for-the-home-gardener)) which is invaluable in identifying diseases and pests, as well as other cultural information. Pesticides are tools that should be used wisely. Using the best material on the market at the wrong time or on the wrong pest or disease will surely fail its expected task.

  Keep those new leaves healthy! A young tree does not have many leaves and if they are damaged, you are reducing the food production potential of that tree which supplies energy and strength to the tree. Inspect weekly (when you are watering works nicely!)
  Look closely and carefully at both sides of the leaves to see if holes are appearing or if the color of the leaf is different.

We recommend an all purpose fruit tree spray for most problems that occur on fruit trees. These sprays have a mix of fungicides and insecticides in them already blended to cover a wide range of problems. The first year you can spray on an “as needed” basis (controlling insects). The second year, or once the tree starts to produce fruit you would spray more often or on a schedule to help control fungus diseases on the fruit and leaves. Most directions recommend once every 10-24 days. Shorten the time period between sprays during wet weather, as rain removes the protective coating of the fungicide.