## Bare Root Fruit Tree Tips: Receiving, Planting, and Early Care

## Receiving

As soon as you get your bare root tree, please keep the roots moist! You can give the roots a quick water rinse, then store them in wet, shredded newspaper in a plastic bag, and definitely store in the shade. The roots should be fully covered and kept moist until you are ready to plan, but do not leave in a bucket of water!

Please keep your tree cool. Because we live in Hawai'i, the ideal temperature of 30-40 deg F which maintains dormancy, is not realistic, so your tree will naturally break dormancy and should be planted as soon as possible, but without rushing site selection, fencing, irrigation install etc.

## Planting

Each type of tree has it's own light requirements, but chances are your tree will want a **full sun location** and don't forget trees grow and can get big, so make sure you do not regret your tree's location in two, five or twenty years from now!

Before planting, inspect your tree's roots and branches and remove any damaged roots or branches by making a clean cut with sharp and clean pruning shears. We have already pruned the branches of your bare root tree to have an ideal root:shoot ratio, so you should not have to do too much pruning. Here is a link to a video that goes deeper into this topic if you are interested or want to prune more: www.youtube.com/watch?v=r0vd5DsEdw0

Overly saturated soil is probably the biggest issue with planting your bare root tree. If you have a high clay soil or you are planting in a poorly drained area, mounding and amendments may be necessary.

Dig the hole a little deeper than the root is tall and make it wide enough to accommodate the longest roots without bending any of the roots. Make sure that the hole is tapered from ground level at the edges to full depth at the center, like a wide, shallow cone. If lime is needed to change the pH of the soil, thoroughly mix it into the bottom of the planting hole. Do not mix fertilizer into the planting hole, since it could burn the new roots. Do not add peat moss, compost, or other organic materials into the hole. Shovel enough loose soil back into the planting hole to create a mound on which to set the tree. The top of the root ball should stand slightly higher in the soil, to allow for settling. Backfill with native or slightly amended soil until the bottom of the hole is at the right planting depth for the tree. Place your tree in the planting hole and backfill with native or slightly amended soil. Be sure that the graft is sitting at least a few inches above the final soil level. Once backfilled, the top of your root ball should be just below the native soil level. Do not make a circular berm to catch and flood the root area!

The initial watering should be slow and thorough to soak the ground and allow the water to seep in and completely soak the root zone. After



the initial watering, DO NOT WATER AGAIN UNTIL the tree breaks dormancy and begins to leaf out. Once the tree leafs out, maintain a weekly watering schedule of roughly one gallon per week per square-foot spread of the roots.

## Early Care

Once your tree is planted, you can revisit pruning to establish long term scaffold branching, reduce wind shear, and promote vigorous bud break and first year growth. The goal is to have a canopy that is roughly as large as your root mass. By balancing the root mass with the canopy, you will see much less dieback on your branches and a higher success rate with your new tree. If you want the fruiting wood to begin low, smaller trees may be cut back at planting time to a height as low as the knee (15-20 inches). Any remaining side limbs should be cut back to one or two buds. Larger trees may be cut above existing well-placed low limbs, or they too may be cut back low to force new, lower limbs. If this step is skipped, you will likely see low vigor from the first season, dieback from these long branches, or even complete failure to break dormancy.

Keep the ground free of weeds or encroaching grasses for a 3' radius around the trunk of your tree. Spread 3" of wood chips or straw over the bare ground. Keep mulch away from the trunk to prevent the trunk from rotting. Keep this mulch area weed free for at least a year and keep in mind that long term tree health is improved when there is no competition for water and nutrients from weeds and grass that are allowed to creep in.

Stake your tree if you are in a very windy area for at least one year or until the roots grab a firm hold of the soil. Be careful not to let the staking scrape and scar the bark and it is good to allow for some movement of the trunk.

With proper planting and care, new buds will soon push out and your tree will start to grow. If your tree does not break dormancy by March/April, you will want to check for signs of life on your tree. One of the best ways to determine if a tree or any plant is dead is the scratch test. With your nail, gently scratch off the top layer in a small spot on a branch or on the trunk. Just beneath the dry, outer layer of bark in a tree's trunk lies the cambium that transfers nutrients throughout the tree. In a living tree, this is green; in a dead tree, it is brown and dry. If the tree is green and still living, stop watering for the next 14 days. Bare root trees have no leaves and no way to expel excess water. If your tree is dead or does not push after 14 days, contact us for more guidance.

Each type of fruit tree has it's own optimal fertilizer requirements. When you compound that with the diverse soil types and fertility of our native soils, it is very difficult to give a single prescription. Early on it is very important to not over do it with fertilizer, compost, or other soil amendments. Keep it simple! By year two, you can start to develop a fertilizer program for the life of your tree or orchard.

