

BARE-ROOT NURSERY STOCK HANDLING GUIDE

How to Plant a Bare-Root Tree:

It is best to plant bare-root trees immediately, in order to keep the fragile roots from drying out. If you can't plant because of weather or soil conditions, store the trees in a cool place and keep the roots moist.



1: Unpack tree and soak in water 3 to 6 hours. Do not plant with packing materials attached to roots, and do not allow roots to dry out.



2: Dig a hole, wider than seems necessary, so the roots can spread without crowding. Remove any grass within a three-foot circular area. To aid root growth, turn soil in an area up to 3 feet in diameter.



3: Plant the tree at the same depth it stood in the nursery, without crowding the roots. Partially fill the hole, firming the soil around the lower roots. Do not add soil amendments.



4: Shovel in the remaining soil. It should be firmly, but not tightly packed with your heel. Construct a water-holding basin around the tree. Give the tree plenty of water.



5: After the water has soaked in, place a 2-inch deep protective mulch area 3 feet in diameter around the base of the tree (but not touching the trunk).



6: Water the tree generously every week or 10 days during the first year.

Sweating of Nursery Stock:

Most tree and shrub species can be stored bare-root all winter under refrigeration and develop normally once transplanted out in the spring. There are a few species though, whose buds become extremely dormant during refrigerated storage. These species must be forced into breaking bud before they are planted, or they will simply remain dormant in the ground, and eventually die.

The process to force species out of dormancy and into bud break before planting is called "sweating". The main goal is to increase the humidity and temperature surrounding the stock to force the buds to swell. There are three methods commonly used.

Method 1 - Place the plants in a warm, humid environment such as a greenhouse until they break bud. If you do not have access to such a facility method 2 or method 3 are equally effective.

Method 2 - Use straw or burlap. Place one or two layers of burlap, straw, or similar material on the floor of a garage or shed that can be maintained at a temperature between 60-70°F. Even a shady location outside can be used if the proper temperature range can be maintained.

- Lay the plants side by side on the burlap or straw and moisten them if they appear dry. Avoid letting the plants become too wet.
- Completely cover the bundles with several layers of damp burlap, straw or similar material and moisten the covering with water.
- Check the plants daily to see if they have broken bud. Also check to see that the covering is kept moist and that no mold has developed. (If mold develops, rinse off with clear water, and shake off excess moisture.)

Method 3 - Use the shipping box your plants arrived in.

Unpack order upon arrival, saving wet packing material and the poly sheet used to line the box.

- Soak roots of the species requiring sweating in water overnight. Hold the sweating box in an area protected from sun, wind, heating and freezing, ideally with temperatures between 60°F and 70°F.
- Place the poly sheet back in the box, remoisten packing material and place in box. Shake excess water off plants and place them on top of wet packing material.
- Secure poly sheet over the plants to hold moisture in, close box and check every day or so, keeping packing material moist and watching for bud swell and mold formation. If surface mold begins to form, rinse off with clear water, shake off excess water and return plants to box.

Plant your stock when the buds begin to swell or after about 14 to 21 days depending on temperatures (lower temps delay bud break). Sweating plants before planting is relatively easy and usually only takes a few days.

Far more important to the plants survival is when to begin sweating. Sweating forces new growth, after which the plants may be vulnerable to frost damage and to drying out. Species requiring sweating should be kept in a cool place that doesn't freeze, until the danger of frost has passed and adequate irrigation is available in the field. If sweated plants are transplanted too early or when it is too dry, all the care taken to break their buds may be wasted as the new growth freezes or dries.

**** Please keep in mind that plants may be partially or completely sweated during shipment if temperatures are warm while stock is in transit. If buds have begun to swell on arrival, indicating that plants have broken dormancy, further sweating is not required.***