



Planting Bareroot Trees and Shrubs

What Are Bareroot Plants?

Bareroot trees and shrubs are a type of nursery stock that are delivered without soil or a pot around the roots. These plants are grown in nursery beds, lifted from the ground while dormant and shipped in bags. Bareroot trees and shrubs should be planted before the buds open in spring.

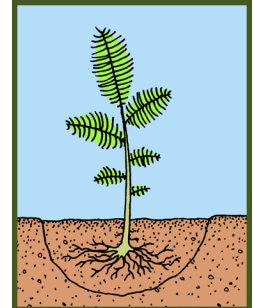
When selecting plants for a project, choose plants grown from seed collected in western Washington or Oregon and avoid plants from the east side of the state or another part of the country. Plants grown from these more local seed sources are better adapted to the growing conditions in King County.

Keep plants cool and roots moist until planted. Moisten roots with water and store in a shady location or refrigerator.



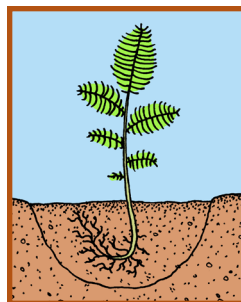
Steps for Successful Planting

- ◆ Scrape a two foot circle in planting area, removing all sod and weeds.
- ◆ Dig a hole wide enough and deep enough for roots to spread out. Remember that roots grow down and laterally.
- ◆ Mound some soil in the center of the planting hole. Drape roots over the mound.
- ◆ Position the roots so they hang down over the mound and are not turned up or crowded.
- ◆ Plant trees and shrubs to the depth they were planted in the nursery. The junction of the stem and root should be level with the ground.
- ◆ Back fill the planting hole with soil and gently pack the surface of the filled hole.
- ◆ Use mulch to create a ring around the edge of the planting hole to retain moisture.
- ◆ Water the plant thoroughly to eliminate any remaining air pockets.

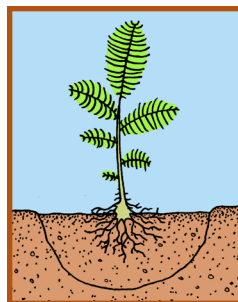


Properly Planted

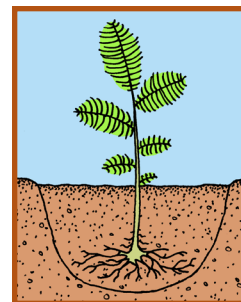
Common Planting Errors to Avoid



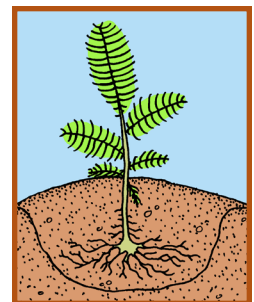
J-Roots



Exposed Root



Buried Stem



Mounded Soil

Bareroot Stock Handling Guide

Caring for Bareroot Stock

Bareroot plant materials need to be handled efficiently in order to promote the best health and survival rate of seedlings. Pay close attention to keeping stock cool, roots moist and protected from direct sunlight, wind, and extreme temperatures. This ensures the best results. Several situations require specific attention and are listed below.



Storing Stock

If plants must be stored prior to planting, be sure the selected storage area maintains the correct temperature, has good ventilation and plants will be protected from drying out, heating or freezing. Remove the plants from bags or boxes and keep roots moist and the tops of plants dry. Do not store stock near fresh produce or cut flowers, both of which release ethylene gas which is deadly to live plant material.

- ◆ **Broadleaf Deciduous Stock:** Inspect plants to see if they have broken dormancy (plants will often 'sweat' in transit). If buds are swelling or stretching, plants should not be stored for more than one or two days before planting.
- ◆ **Broadleaf Evergreen Stock:** Process and plant these species immediately. Do not attempt to store for more than 36 hours. Keep plants cool, moist and shaded until ready to plant.
- ◆ **Conifer Stock:** Conifers can be held for short periods if stored immediately upon arrival in an area kept 34-38°F. Tops and roots should be kept moist and shaded, and planted within 24 to 48 hours.

Planting Bareroot Stock

When stock arrives, have the transplanting plan prepared. Roots should be soaked a minimum of four to six hours before planting to ensure proper hydration. If possible, continue to soak roots while transplanting. Plants should be transplanted within 24 to 48 hours of receiving them. The first two weeks after planting are the most crucial for survival. Keep plant materials properly irrigated. Additional shade and wind protection may benefit certain species.



Considerations for Broadleaf Evergreens

Problems with transplanting broadleaf evergreens and some conifers usually stem from desiccation (drying out) of the stock after transplanting. may includes Kinninnick, Oregon Grape (low and tall), salal, long needle pines, and others. Your results with these species may be improved by utilizing the following procedures:

- ◆ For Tall Oregon Grape, remove or clip off most leaves prior to transplanting. It may seem severe, since they are often purchased for the foliage. Removal of leaves will help survival by reducing transpiration. New leaf buds will push and grow as stock begins new root growth.
- ◆ Soak the root system for four to six hours before transplanting to ensure the plants are properly hydrated.
- ◆ During the first two to six weeks, water transplants frequently. If possible, feed plants with a very light nutrient level organic fertilizer. During dry season for the first two years make sure plants get adequate water to help with establishment.
- ◆ Once new leaves emerge and root systems have re-established, remove any covering and irrigate and care for the plants as you would any other newly transplanted deciduous tree or shrub.