## **Bareroot Planting Guide**

#### **Pre-Planting Considerations**

**TIMING**: January through April is normally ideal for planting bare root plants. If possible, plant on cloudy, cool, humid days.

"The best days for planting are the worst for the planter."

Avoid sunny, warm, dry, and windy conditions that desiccate seedling roots. Plant sensitive species like conifers in the early morning. Avoid planting when there is a risk of freezing the roots. If temperatures are above freezing, and the ground is workable, January and February are ideal times for planting bare root trees and shrubs. The most important thing to remember is to keep the roots damp and plant before the tree or shrub breaks dormancy. Note that bare root plants are slow to "wake up." Expect to wait four to six weeks after planting until you see signs of growth.

SITE: Consider objectives for planting. Are the plants to be used for landscaping? Gardening? A buffer strip? Soil stabilization? Food and/or habitat for wildlife? How much sun exposure do the plants need? What soil type and moisture/drainage needs does the plant have? Where will they be planted? A slope? A riparian zone? Upland? What competition will the plants have? Weeds? Wildlife browsing? Other vegetation?

The PMC has a valuable Plant Selection Guide on its web site, http://www.wacdpmc.org/ The USDA Natural Resource Conservation Service also has the PLANTS web site that is a valuable

source of information for conservation species throughout the country.

Remember, a little planning can go a long way. BEFORE PLANTING: Store any plants in a refrigerated location, 30 to 40 degrees Fahrenheit, until ready to plant. Seedlings are perishable, so we recommend planting the seedlings as soon as you can after receiving them— within 5 days of receiving them. Until you are ready to plant, keep the roots of your plants covered in sawdust and/or other packaging and moist. Place the root portion of the plant in water and let it soak before you plant - several hours for woody plants. Protect the seedlings from freezing temperatures.

#### **How to Plant**

**STEP 1** Dig the planting hole as deep as the roots and at least twice as wide. The roots should be able to dangle and should not be bent, twisted or bundled. Loosen the sides of the hole with a shovel or spade fork, especially if your soil is heavy clay.

**STEP 2** Form a cone of loose soil in the center of the hole and spread the roots over it. Position the plant's height so that the crown (where the roots meet the trunk) is at or slightly below the soil surface. If the trunk has a conspicuous graft, it should be kept at least 1 inch above the soil surface. Make sure that the seedlings are protected from direct sunlight and wind before and during planting.

**STEP 3** Slowly fill the planting hole and cover the roots with loose amended soil. Avoid large clumps, rocks and/or air pockets. It's beneficial to mix the amended soil with native soil along the sides of the planting hole as much as

possible. Very lightly tamp down the soil around the tree, checking for any planting mistakes and securing the plant.

**STEP 4** Slowly and deeply soak the area with water in order to settle soil and moisture.

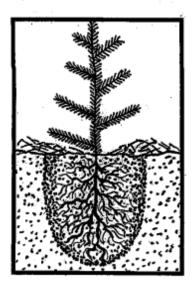
Newly-planted trees and shrubs need consistent deep watering for at least 2 years, if possible, to make sure they become established. A thick layer of mulching helps to reduce weeds and water loss. After your plant is watered in and settled, you can build up a ring of sawdust, bark, wood chips or soil at the edge of the planting hole to form a saucer which will help hold surface water in the root zone. Mulching with 4 inches to 1 foot in radius of compost is ideal, but keep mulch at least several inches away from the crown to prevent rot.





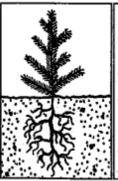
### **HOW TO PLANT**

- Store plants in refrigerated location until ready to plant.
- Allow ventilation around stored packages.
- Protect seedling from freezing temperatures.
- Mend any tears to seedling bags with tape
- Protect seedling from wind and sun before and during planting.
- Plant seedlings within 5 days of receiving them.



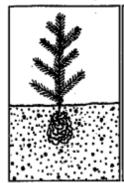
- Dig large enough hole for roots to dangle making sure roots are not bent, twisted or bundled.
- Slowly fill around roots with loose soil avoiding large soil clumps, rocks and air pockets.
- Very lightly compact soil around tree checking to see that you haven't made any "planting mistakes."
- Water deeply if possible to settle soil and moisture.
- Mulching helps reduce weeds and water loss
- 6. Tree protectors help with wildlife browse.

# PLANTING MISTAKES



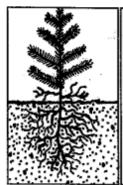
#### AIR POCKET

- Dries out
- Creates extreme moisture stress
- Less anchor



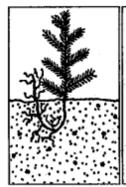
### **ROOT BOUND**

- Decrease in proper rooting
- Limited moisture
  & nutrient uptake



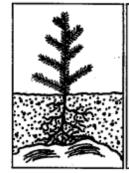
## **TOO SHALLOW**

- Dries out
- Susceptible to frost heave
- Less anchor



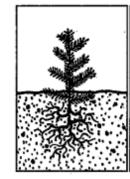
# "J" ROOT

- Dries out
- Reduced moisture and nutrient uptake
- Less anchor



#### ON ROCK

- Decrease in proper rooting
- Limited moisture
  & nutrient uptake



#### TOO DEEP

- Suffocates plant
- Prone to collar rot