



## INSTALLING YOUR BARE-ROOT PLANTS

**Arrival of Shipment:** Our plants come to you dormant and bare-root, packed in peat moss. They should be planted as soon as possible. Unlike greenhouse-grown plants, bare-root plants can be planted during cold weather or any time the soil is not frozen.

**Storage Until Planting:** If you are unable to plant right away, it is important to keep your plants cool and moist (not wet). Do not allow roots to dry out. Store plants in a refrigerator (34-38° F) or in a cool, shady spot before planting. Warmer temperatures can cause premature growth or mold in the bag.

**Mark Your Plants:** We suggest marking the location of any new plant in a garden with a garden tag on a sturdy stake that will stay in place through the establishment phase. This will help to ensure that the plant receives the early care that it might require. It can also ensure that a garden plant is not mistaken for a weed.

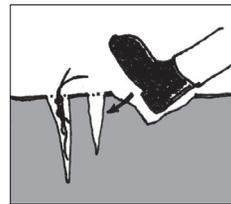


We sell **Permanent Garden Tags** which include a wire fastener and can be embossed with a pen. We have found these tags to be the best product to keep important information recorded for plants in the garden.

**Planting:** Try to plant on a cool, overcast day, if possible. While planting, keep the plants shaded and in a bucket with some water. This is especially important for fibrous roots and for all roots on sunny days. Soaking tree and shrub roots for up to 12 hours before planting can be beneficial.

- **Small Areas:** For a small number of transplants or when working in a flower bed situation, prepare the soil by loosening it with a fork, spade, or roto-tiller. Make a planting hole wider and deeper than the largest root. Hold the transplant at the proper depth (see line drawings here or root photos included with your order) and backfill hole with dirt, packing firmly as you do. Water thoroughly and be careful not to break buds or roots.

- **Large Areas:** For a large number of transplants, try working with a trowel, shovel or planting bar. Depending on the size of the roots, open a 6-7" deep slot in the soil. Spread out the roots and insert the plant into the soil slot. Position the crown at the appropriate depth (see root photos). To facilitate compaction, use the trowel, shovel or planting bar to create a second slot about 2" from the original hole. Now push the soil between the soil slots against the roots. Finally, firmly push next to the plant with your heel (being care-



ful not to crush the crown) this should finish closing the slot. This method works especially well for strong roots like tap roots and bulbs. Be aware that roots that are exposed and not-well anchored may not survive.

**Watering:** Water your transplants thoroughly as soon as possible after planting. If you are planting into a large area, stop periodically to water what you've already planted. This is especially important on warm, sunny or windy days. Your plants will overcome transplant shock more readily if they are **watered thoroughly** at frequent intervals for the first few weeks. If planting in moist soil in the fall or early spring, continued watering may not be necessary unless drought conditions follow. Late spring plantings may need to be watered throughout the first summer. Consider setting up an irrigation system or drip hose. Mulching can enhance retention of soil moisture. Be sure to leave an opening in the mulch for the plant's crown to emerge.

**Further Care:** Keep your plants well weeded. Providing shade or partial shade for a couple weeks after planting is helpful for early growing species, especially if they have new leaves when you receive them. Examples include: Pasque Flower, Columbine, Harebell, Shooting Stars, Prairie Smoke, Phlox, Buttercups, Blue-eyed Grass, Violets, Kittenails, Alexanders, Sedges and June Grass. Shade or partially shade any plants that continue to wilt after being watered. Once established, and barring any unusual weather patterns, your plants will need no further care if you have chosen the proper plants for your habitat. Some plants may benefit from being divided after 3-4 years.

**Root Photos:** Most of our bare-root plants will arrive with a root photo attached to the packing slip in the box. These photos illustrate the optimal depth and orientation for planting your roots, and can also be found at [www.PrairieMoon.com](http://www.PrairieMoon.com). The "Images" tab on each species page will show a large root photo. If a photo is not available, then choose from the five categories specified in "Root Photo Examples" section of this instruction sheet.

**Site Preparation & Planning:** Remove all perennial and biennial weeds and grasses. Existing weeds will compete with new plants for water, sun and nutrients. A more natural appearance will be achieved if plants are grouped by species or scattered randomly, as opposed to planted in rows. Large plants (3½' tall or more) need a spacing of 1½' to 2'; medium-size plants need 1' to 1½'; small plants need 6" to 1'.

**Growth in the Bag:** If you are receiving your plants later in the spring, they may have some new growth, which will straighten out as the plant matures. Follow the recommended planting depths.

***Most species will come with a root photo attached to the packing slip on the box.***

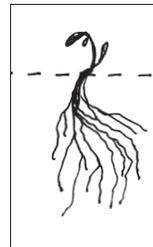
*Our plants are divided into categories with slightly different planting needs:*

### ROOT EXAMPLES:

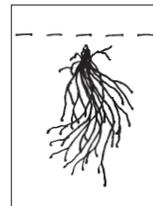
**Tap Root** - Plants with tap roots have a long, tapering central root system with few branches. The growing top or "crown" on tap-rooted plants should be planted no less than 1" below the soil surface. It is better to plant a little too deep than too shallow.



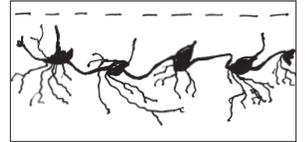
**Fibrous Root With Crown At Soil Surface** - These plants are usually identified by the presence of last year's top growth and should be planted with this old growth right at the soil surface. If no leaves are present, then cover about ½' to 1".



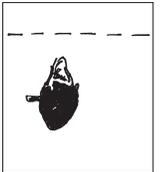
**Fibrous Root With Crown Below Soil Surface** - Most of our plants that do not keep top growth should be planted with their growing buds about 1/2 to 1" below the soil surface. Again, it is better to plant too deep than too shallow. *NOTE: Shooting Star species should be planted with the bud (not leaves) 1" deep and the roots splayed horizontally.*



**Rhizomatous** - Plants that are propagated by rhizomes should be planted with these "runners" spread horizontally, approximately 1" below the soil surface.



**Bulbous Root** - These plants produce fleshy, underground storage organs, much like a potato or tulip, and should be planted at a depth of about 3 times the diameter of the bulb. *Some exceptions are: Wild Hyacinth - bottom of bulb 4" deep; Yellow Star Grass - bottom of bulb 1 1/2" deep; Blazing Stars - depth of 2 times the diameter.*



**Ferns** - All ferns should be planted shallowly, approximately 1/2" below soil surface, except for the Ostrich Fern, which keeps its scaly growing top above the soil surface. Keep ferns well watered the first year.

**Cacti** - We sell unrooted pads which should be planted with the cut end inserted into the soil, buried up to about 1/2 of the length of the pad.

**Trees, Shrubs and Vines** - These should be planted at the same depth as they were grown in the nursery. The soil level is usually indicated on the stem where the color changes from a lighter brown to a darker brown.

**Grasses, Sedges and Rushes** - Most are planted with the crown just below the soil surface.