



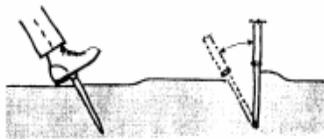
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## Hand Planting Bare Root Tree Seedlings

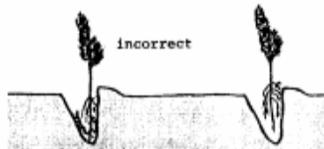
For convenience and speed in hand planting both evergreen and hardwood seedlings, we recommend the O.S.T. PLANTING BAR. It is also referred to as a dibble bar. This is a hard-to-get item, not usually carried by hardware stores or garden centers. It will reduce your planting time greatly. The blade is 3 inches wide, 10 inches long, and 3/4 inch thick at top. The weight is 8 1/2 pounds. It has a welded step with offset tubular steel handle.



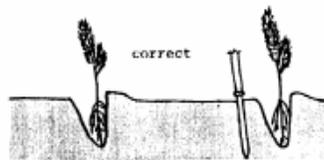
### Planting Seedlings



1. Insert dibble blade 1-2" deeper than the length of the seedling's roots at angle shown and push straight up.



2. Remove dibble and place seedling at correct depth (same as or 1/2" deeper than at nursery). Make sure there is no dry grass sticking in the hole with the tree that could act like a wick and dry out the soil around the tree.



3. Insert the dibble 2 inches toward you from seedling and pull the handle toward you, firming the soil at the bottom of the roots. This is important to prevent an air pocket at the bottom of the hole that will dry out the roots and kill the tree

4. Push the handle away from you, firming soil at top of roots.

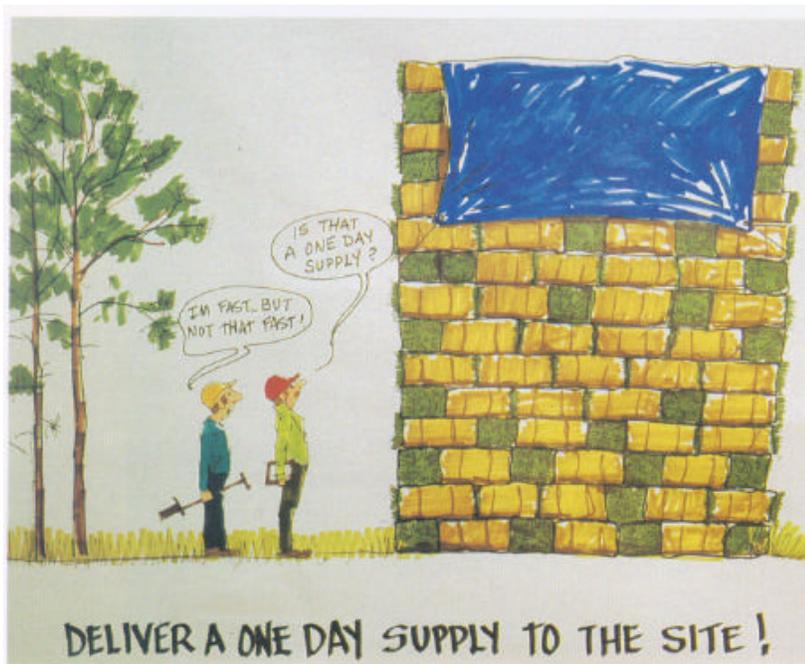
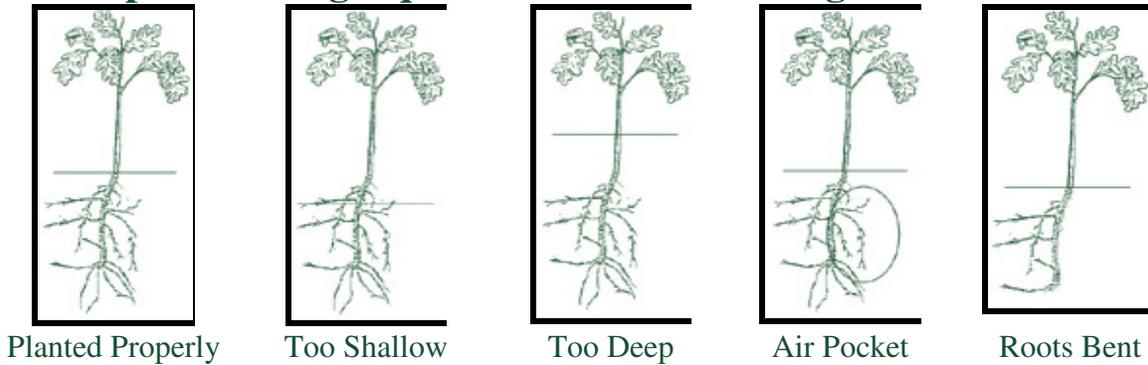


5. Repeat steps 3 and 4 about 2 inches on the other side of the tree to firm the soil evenly (not shown).

6. Fill in the hole by stamping with heel. Heel in all around the tree to make sure there are no air pockets.

It is important to plant seedlings at the proper depth. The figure below illustrates proper and improper planting of bare root seedlings.

### Proper Planting Equals Successful Seedling Establishment



Only order the number of trees you can reasonably plant in about 3-10 days. Remember that in the spring some of those days are likely to be rainy. In addition, if you are not going to plant all the trees within two days you will need a cool dark place to keep the trees till planting time. Leaving the bags closed and laying flat on the cool surface of a basement floor is a good approach. Flip each bag once per day to reduce moisture condensation and rot inside the bag.

### Moisture Dip

Another important step that can aid in tree survival is the use of a moisture dip such as Water Keep Polymer Crystals. The material is highly water absorbent and will hold moisture against the root both during and just after planting and for the first few years, which can be critical to a tree's survival. A small amount of Water Keep added to 2 gallons of water in a five gallon bucket is a great way to transport your trees during planting. Carry the bucket with ~50 trees, roots in the dip, in one hand and your planting bar in the other. If you can work in teams of 2-3 people it is easy and fast to coordinate one person opening the hole, the next placing the tree in the hole and a third with another dibble bar closing the hole and healing it in. One person can plant up to 50 trees per hour. An assembly line approach with 2-3 people can significantly increase that speed.

For seedling with limited root structure, such as black walnuts, rooted cuttings, such as poplar and small container plantings with containers that are ~1 inch in diameter and 6-8 inches long the planting bar can be inserted vertically into the ground if it is soft soil. This will open a slot that the tree roots can be inserted into and then the hole can be heeled shut. A similar procedure can be performed with a soil sampling tube, extracting a narrow diameter core that the rooted portion of the seedling is placed in.

### **Fertilizer**

Fertilizer tablets can be a convenient way to boost your seedling's growth during the first few critical years. They should not be placed in the hole with the tree but can be placed in the adjacent hole made when using the dibble to close the first hole. In soft soils they can simply be pressed 1-2" into the soil about 2" from the tree seedling. There are different sizes available depending on the size of your seedlings.



PHOTO: DAVID MOORHEAD

*Dipping seedling roots in a gel solution restores lost moisture.*

### **Common Mistakes That Will Kill Seedlings**

- store seedlings in a bucket of water for more than 1-2 hours
- planting seedling too deep or too shallow
- allowing roots to curl back toward the top of the hole
- not allowing proper root spread
- planting in sod without good site preparation
- leaving trees in boxes exposed to the sun
- planting in dry soil
- planting a species not adaptable to the site
- planting where brush competition will crowd out the seedlings
- planting seedlings where they won't receive sufficient sunlight
- keeping trees in boxes more than a few days without cold storage

**Please contact [TreeFarmProducts.com](http://TreeFarmProducts.com) for tree planting tools and supplies. We carry a complete line of products including dibble bars, Water Keep water gel, Hot Pepper Wax deer and rabbit repellent, and tree tube protectors and oak stakes. You can buy from us online or at our storefront with our sister company ChemRight Laboratories, Inc. in Maquoketa, Iowa – an independent environmentally conscious soil and water-testing lab.**