

# Tree Planting Is Easy

---



## Why Plant Trees

- To grow timber and wood products
- To provide wildlife food and cover
- To prevent soil erosion and protect our streams, rivers, and lakes
- To beautify the landscape
- To shield us from the wind, sun, noise, or unsightly areas
- To celebrate special occasions such as Arbor Day or Tree Planting Week

## Where To Plant Trees

- In cut-over woodlands
- In small openings in forests
- In woodlands where low-quality trees need to be replaced by faster-growing trees
- In and around eroded gullies
- In abandoned fields
- In and around homes, schools, churches, factories, parks, cities, and towns
- Around garbage dumps and along highways

## What Kinds of Trees To Plant

- Some kinds of trees are best suited for certain types of soil or certain sections of the state. For instance, longleaf pines are best suited for the southern part of Mississippi.
- Some kinds of trees, such as loblolly pines, are better and faster timber producers than others.
- Some kinds of trees are better suited for landscape purposes.
- Some trees, such as swamp white oaks and shagbark hickories, are better wildlife food-producers.
- For more information about kinds of trees, their growth habitats, and uses, see a copy of Extension Publication 146 Know Your Trees, and consult your county agent or county forester.

## How and Where To Get Seedlings

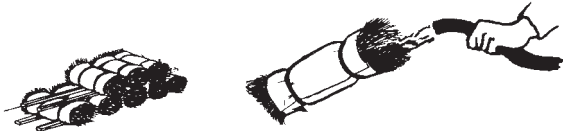
- Seedlings are usually sold in bundles of 100 to 1,000. You may want to order seedlings as a group, such as landowners, homeowners, youth groups, civic groups, church groups, etc.
- Extension Forestry publishes an annual directory of forest tree nurseries. Contact your local Extension office to request a copy of MTN 4E Forest Seedling Availability from In-State and Regional Nurseries.

## Care and Handling of Seedlings Before Planting

- Seedlings usually are packed in bundles (open to air) or bags (sealed).
- If seedlings are in sealed bags, keep seedlings refrigerated until planted (33 to 38 °F).
- Open bags only as needed for planting.
- Plant seedlings as soon as possible after you receive them.
- Do not haul seedlings in open trucks. Excessive drying and needle burn can occur because of too much wind.
- If seedlings are to be planted within 2 or 3 weeks, leave them in the bundle and moisten roots with water.
- Stack bundles to allow enough air circulation to prevent heat buildup.
- Store the bundles in the shade, but where they will not freeze. Seedlings can be stored in bundles for several weeks if the temperature remains at 35 to 40 °F.

## Watering Seedlings

- Water seedlings stored in bundles every 2 or 3 days. You can use a garden hose. Water one end of the bundle until the water runs out the other end. Turn the bundle over to be sure all parts of the bundle are watered. Prop one end of the bundle up to let the excess water drain out.
- If your seedlings are shipped in a sealed bag, no watering is necessary until after the bag is opened. Plant all seedlings in the bag as soon as possible, preferably by the end of the day the bag is opened.



## Handling in the Field

- When transferring seedlings from the bag or bundle to a planting bag, dip the roots in water or a root slurry before putting them in the planting bag or bucket.
- Use a planting bag or bucket to carry the seedlings in the field, and cover the roots with mud, wet moss, or root slurry.



Correct: Put in mud or moss to cover roots.



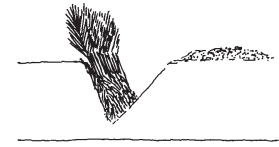
Incorrect: In hand, the roots dry out.

## Heeling In

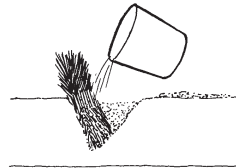
If seedlings must be stored on-site without refrigeration for a long period of time, they can be heeled into the ground.



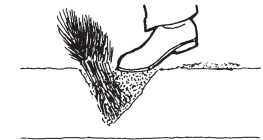
1. Dig V-shaped trench in shady place.



2. Break bundles and spread out evenly.



3. Fill in with loose soil, and water well.



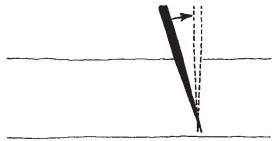
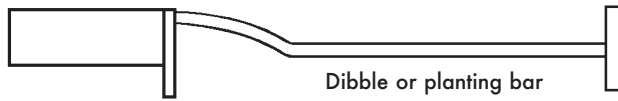
4. Complete filling in trench, and firm soil with feet.

Heeled in seedlings can be removed from the trench when you are ready to plant. Remove only as needed, and immediately place the seedlings in a planting bag or bucket. Keep seedling roots covered with mud, wet moss, or root slurry until you plant them.

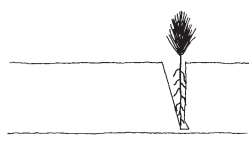
## Planting Seedlings by Hand

Planting by hand is best suited for very hilly terrain and/or rough, cut-over sites.

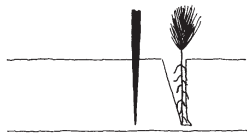
### With Dibble or Planting Bar



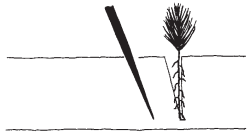
1. Insert dibble at angle shown, and push straight up.



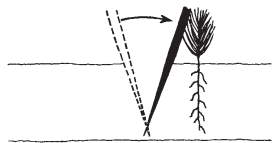
2. Remove dibble, and place seedling at correct depth.



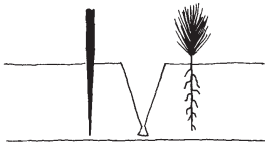
3. Insert dibble 2 inches toward planter from seedling.



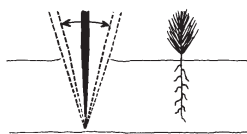
4. Pull handle toward planter, firming soil at bottom of roots.



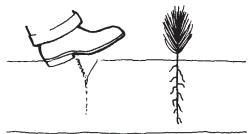
5. Push handle forward from planter, firming soil at top of roots.



6. Insert dibble 2 inches from last hole.

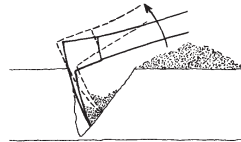


7. Push forward, then pull backward to fill hole.

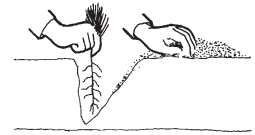


8. Fill in last hole by stamping with heel.

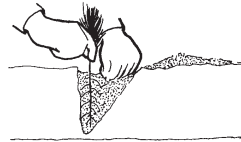
### With Mattock or Grub Hoe



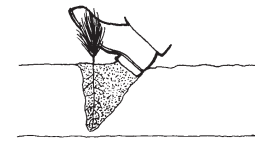
1. Insert mattock, lift handle, and pull.



2. Place seedling along straight side to correct depth.



3. Fill in and pack soil to bottom of roots.



4. Finish filling in soil, and firm with heel.

### Other Tree Planting Tools

- Post-hole digger
- Shovel
- Iron bar
- Spade

## Machine Planting

### With Mechanical Tree Planter

These planters are pulled by tractor. This process is often called machine planting. Machine planting is best suited to retired farm land or mechanically prepared planting sites.

Several mechanical tree planters have been developed and adapted to Mississippi conditions. In some counties, local boards of supervisors and industries have bought tree planters and made them available to farmers. Your county agent or county forester can tell you if one is available for your use.

## How Many Seedlings To Plant?

- The number of tree seedlings to plant will vary with the seedling type and landowner objectives. Spacing determines the number of seedlings planted per acre. Wider spacing between rows (9 feet or more) permits equipment access into the stand.
- With first-generation pines, plant 600–750 seedlings per acre. Spacings to consider include 6 by 12 feet or 8 by 9 feet (605 trees per acre), 7 by 10 feet (622 trees per acre), 7 by 9 feet (691 trees per acre), or 6 by 10 feet (726 trees per acre).
- With second-generation pines, container-grown pines, or oak seedlings, plant 500–550 seedlings per acre. Spacings to consider include 9 by 10 feet (484 trees per acre), 8 by 11 feet (495 trees per acre), 7 by 12 feet (518 trees per acre), 9 by 9 feet (537 trees per acre), or 8 by 10 feet (544 trees per acre). For more information, read a copy of our management note MTN 4K What Are Genetically Improved Seedlings?
- With cottonwood or sycamore seedlings, plant 300 per acre. A suggested spacing would be 12 by 12 feet (302 trees per acre).
- When ordering seedlings, add 10 percent to the calculated total to allow for cull trees that are too small to plant, or shortages in packing.