



Tuscola Conservation District
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Tree Planting Guide

Proper care of planting stock often contributes to the survival and growth of the trees.

- Never store in direct sunlight.
- Keep trees cool and out of the wind.
- Keep one side of each container exposed to the air.
- Spray containers with water if temperatures rise above 40 degrees.
- If unable to plant all seedlings, heel your trees in. Find a place in the shade, protected from the wind, dig a trench, and place roots in the trench, covering them with soil.

"The net cooling effect of a young, healthy tree is equivalent to ten room-size air conditioners operating 20 hours a day." -U.S. Department of Agriculture

"In laboratory research, visual exposure to settings with trees has produced significant recovery from stress within five minutes, as indicated by changes in blood pressure and muscle tension." -Dr. Roger S. Ulrich Texas A&M University

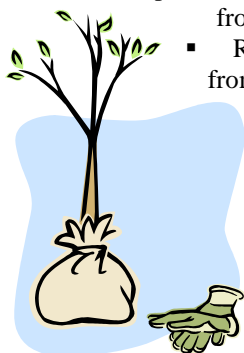
During planting

- Avoid planting when the ground is hard, frozen, or dry, or when excessively wet and sticky.
- Allow frozen seedlings to thaw naturally in bundles before attempting to separate.
- Bring only the number of trees necessary for the day of planting to the site.
- Moisten the planting stock containers before they are removed from storage.
- Shield containers from the sun/wind. Seedlings should be carried in protective containers or bags to protect roots from exposure to sun and air.

- Do not place seedlings in a bucket of water. This will remove soil particles from the seedlings which will speed up the drying out of the roots.
- TAKE CAUTION WHEN PLANTING TO ASSURE THAT ROOTS ARE PLACED PROPERLY.

"Trees properly placed around buildings can reduce air conditioning needs by 30 percent and can save 20 - 50 percent in energy used for heating." -USDA Forest Service

"The planting of trees means improved water quality, resulting in less runoff and erosion. This allows more recharging of the ground water supply. Wooded areas help prevent the transport of sediment and chemicals into streams." -USDA Forest Service



- Remove only one seedling at a time from protective container and plant immediately.

Transplants may have a surplus of root length. Root length exceeding the height of the tree can be trimmed. Damage from trimming is less than if roots are twisted or become "J-rooted".

Spacing and planting guidelines: Following rates and spacing will allow trees enough growing room.

SOLID PLANTINGS

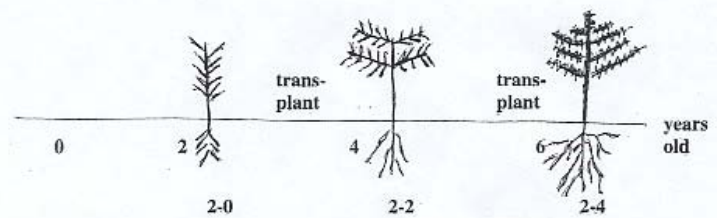
Species	In row	Between row	Needed per acre	Rate per acre
Spruce	6'	9'	725	600-800
Pine	7'	8'	900	800-1000
Hardwood trees	10'	10'	435	400-500
Black walnut	10'	12'	350	300-400
Shrubs	4'	6'	1800	1500-2000

WINDBREAKS/SCREENS

Species	In rows	Between rows
Spruce	7'	9'
Pine	8'	9'
Hardwood trees	10'	12'
Black walnut	10'	10'
Shrubs	5'	7'

Based on two rows planted and staggered.

What does 2-0, 2-2, or 2-4 mean?
First number indicates number of years in nursery,
second is number of years transplanted into nature.



"One acre of forest absorbs six tons of carbon dioxide and puts out four tons of oxygen. This is enough to meet the annual needs of 18 people." -U.S. Department of Agriculture

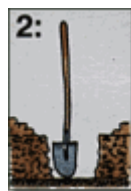
"Landscaping, especially with trees, can increase property values as much as 20 percent." -Management Information Services/ICMA

How to Plant a Bare-Root Transplant Tree

It is best to plant bare-root trees immediately, in order to keep the fragile roots from drying out. If you can't plant because of weather or soil conditions, store the trees in a cool place and keep the roots moist.



1: Unpack tree and soak in water up to 3 hours. Do not plant with packing materials attached to roots, and do not allow roots to dry out.



2: Dig a hole, wider than seems necessary, so the roots can spread without crowding. Remove any grass within a three-foot circular area. To aid root growth, turn soil in an area up to 3 feet in diameter.



3: Plant the tree at the same depth it stood in the nursery, without crowding the roots. Partially fill the hole, firming the soil around the lower roots. Do not add soil amendments.



4: Shovel in the remaining soil. It should be firmly, but not tightly packed with your heel. Construct a water-holding basin around the tree. Give the tree plenty of water.



5: After the water has soaked in, place a 2-inch deep protective mulch area 3 feet in diameter around the base of the tree (but not touching the trunk).



6: Water the tree generously every week or 10 days during the first year.

"There are about 60-to 200- million spaces along our city streets where trees could be planted. This translates to the potential to absorb 33 million more tons of CO2 every year, and saving \$4 billion in energy costs." -National Wildlife Federation

Avoid these mistakes when planting seedlings:

