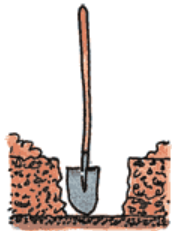


# Planting Bare Roots Trees

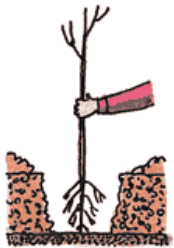
To insure that your trees survive follow these planting guidelines



**1.** Unpack your trees, remove all packing materials, carefully untangle the roots and soak the roots in water 3 to 6 hours. Do not allow the roots to dry out. You should plant your trees immediately within one day of receiving them.



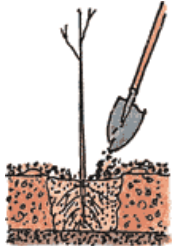
**2.** Dig a hole, wider than seems necessary, so the roots can grow outward without crowding. Remove any grass within a 3-foot circular area. To aid root growth, turn soil in an area up to 3 feet in diameter.



**3.** Plant the tree at the same depth it stood in the nursery, with plenty of room for the roots. Partially fill the hole, firming the soil around the lower roots. Do not add soil amendments such as peat or bark. Do not use fertilizer, potting soil, or chemicals on your new trees.



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



**5.** After the water has soaked in, spread protective mulch two inches deep in a 3-foot diameter area around the base of the tree, but not touching the trunk.



**6.** The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year. Water slowly at the dripline.

*\*from Arbor Day Foundation*

## Other Planting Tips

Keep seedlings in a cool dry place until ready to plant. Seedlings have better survival if planted as soon as you receive them. Be sure to pick an appropriate spot for your tree, at least 15 feet from any structure, walk, or drive. Dig a hole about 1 foot in diameter and about 1 foot deep. "Chop up" the removed soil so there are no big clods and remove all rocks. Plant the tree no deeper than the previous planting level. The top most lateral root should be about 1 inch below the surface of the soil. Replace the soil removed from the hole by hand to make sure the roots are evenly distributed. Do not add soil amendments. Cover the soil with 2 inches of mulch - pine bark or wood chips, keeping the material away from the stem of the tree. Water immediately after planting with 1 quart of water and continue watering weekly until plant is well established. That's it!! We hope you enjoy planting your trees!

**For More Information contact:**  
Soque River Watershed Association  
(706) 754-9382  
www.soque.org  
soque@windstream.net



Tree seedlings are made available by the Georgia Forestry Commission. You can order many other types of trees at [www.gfc.state.ga.us](http://www.gfc.state.ga.us)



*This is a project of the Soque Partnership with funding assistance provided by the GA EPD 319(h) grant program.*

This tree planting guide was developed with assistance from the Habersham County Extension Agent Steven Patrick. For specific questions on tree planting: (706) 754-2318 [stevep@uga.edu](mailto:stevep@uga.edu)

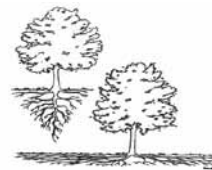


**Trees** make an incredible difference in our environments. Trees enhance air quality, improve water retention, beautify community aesthetics, create a cooling effect around heat island locations, absorb CO2, provide wildlife habitat, reduce or eliminate soil erosion, and in the case of fruit and nut trees provide nutrition and calories.

Planting trees is an incredibly simple and inexpensive way to enhance the environment. Bare root tree seedlings are an excellent way to become familiar with different tree species, and learn and how to plant them due to their economical costs and ease in planting. This guide will describe 4 tree species that will be made available to the public for the very low cost of just \$1 per tree. The project is an effort of the Soque Partnership, a collaborative of a dozen organizations working to improve water quality in the Soque Watershed.

After reading this guide, if you are interested in planting bare root trees as a home or community project, just select the trees that best fit your landscape and personal interests and place a reservation for trees by **Friday, January 3rd**. Reservations can be made on the website [www.soque.org](http://www.soque.org) or by telephone to **706-754-9382**. Trees will be picked up on January 10th at the Mauldin House Parking Lot across from the Clarkesville Library.

Bare root seedling trees are very young trees (usually just one year old) that will require some attention during the first year to insure that they obtain enough water to survive as they develop a larger root system. To insure tree survival, you never want to dig a small hole and cram the roots into it, so dig a deeper and wider hole than you think you need to allow the roots to extend downward and outward as they grow.



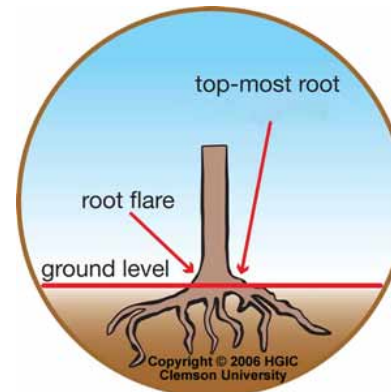
We often imagine that a tree's roots grow like the inverse of it's canopy (picture far left), when in fact, tree roots traverse laterally (picture left and lower) far beyond the tree's dripline (where rain drips from the leaves of the tree). This is important when considering how your tree will compete for space and resources.



## How Deep to Plant

One of the more common mistakes when planting trees is planting too deep. Roots and bark need to be able to exchange oxygen, and when buried too deep, this exchange is prevented and can cause the roots to grow upwards seeking air and girdling (choking) the tree.

First, locate the root flare before planting. The root flare is the point where the trunk begins to spread out as it meets the roots growing under ground. The root flare should be entirely above ground, even after the soil has been gently tamped back in the hole. Do not compact the soil by stomping on it. After watering the tree removing air pockets (see back page) you may add additional soil removed from the hole being careful not to bury the root flare.



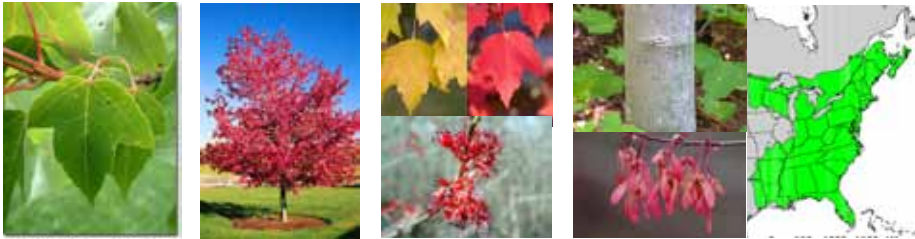
# Tree Descriptions, planting & care

We encourage you to do your own research on the trees that you select to plant. The better you understand the conditions that your trees prefer the better they will likely perform. The following are brief tree descriptions to help you select the trees that best fit your landscapes and interests.



**American Persimmon (*Diospyros virginiana*)** - The persimmon is a **slow growing** and **native** deciduous fruit tree that rarely exceeds 50 feet in height. This tree is widely adapted, for survival in swamps and along stream banks but also does well in upland forests, pine woods, or even dry scrub lands. It's ideal conditions are light sandy, well drained soil, or bottomland soils. The fruits are edible sometime around the frost each fall. It is the fruit qualities of this tree that make it appealing for wildlife enhancement or personal enjoyment. Trees typically begin fruiting around their sixth year. However, fruit quality is unpredictable from seedling trees. If you'd enjoy a hearty tree, with nice fall color, and plenty of fruit production, give this a try. Warning - you may not want to plant near walkways, driveways, or roof of buildings as the falling fruits can be messy.

**Planting & Care**- Select a location with **full sun or partial shade**. Soils should be slightly acidic. Persimmons prefer deep soils as they send out a deep taproot. Dig the hole at least 6-12" deeper than the longest roots (do not curl the roots in the bottom of the hole, they should be facing straight down). Backfill the hole to stabilize the tree. You can mulch with aged wood chips (at least 6 months), pine straw or leaves to reduce competition with weeds and grasses.



**Red Maple (*Acer rubrum*)**- The red maple is one of the most common deciduous trees in the eastern U.S (a **native**). Considered a **fast grower**, they can gain 2 feet each year (a 10 year old tree can attain 20 feet of height). Mature trees can reach a maximum height of about 50 feet and 35 feet wide. They are known for their brilliant scarlet leaves in autumn. They are tolerant of wet soils, but also can handle dry soils where they put out a deeper taproot. It flowers in February and winged fruit appear in March. This is the most ornamental tree of those selected, perfect if you'd like a tree that is commonly known and has beautiful fall color.

**Planting and Care** - Select a location with **partial sun / partial shade**. Maples prefer a neutral pH and thrive in very **moist soils**. Maples are more sensitive to dry conditions and may need watering during drought years until established, needing about 1.5 inches of water per week.

**Other Benefits** - Red maples provide cover to wildlife including the screech owl, pileated woodpecker, common flicker, and wood duck. Red maple can be used to make maple syrup despite its lower sugar content when compared to the sugar maple.



**River Birch (*Betula nigra*)** - River Birch is a **native** deciduous tree commonly found in wet areas, along streams, and in floodplains and swamps. It's a very **fast growing** tree (gains 1.5 to 3 feet per year) and often is multitrunked, maturing at 60 feet tall and width of 40 feet. River Birch is perhaps best known for its distinctive peeling bark. Of the trees listed here it is the best adapted for riverside planting (thus its namesake). It is a pioneer tree species (meaning it is adapted to colonize disturbed sites) and must have full sun to thrive.

**Planting & Care** - Should be planted in **full sun**. Prefers **moist soils** especially adjacent to streams, or other waterbodies. Allow at least 15 feet if planting near a structure. Birch is short lived relative to other trees attaining 40-50 years on average. You can mulch 2-4" with aged wood chips (at least 6 months old), pine straw or leaves to reduce competition with weeds and grasses and increase soil moisture. Mulch zones also reduce damage from trampling or mowing. Mulch as it decomposes also builds new layers of improved soil structure for water retention and oxygenation.

**Other Benefits** - The River Birch is too knotty to be of much commercial value. Wild Turkey feed on the seeds of river birch. The main advantage of River Birch is its pioneer species ability to establish in disturbed, highly acidic soils.



**White Oak (*Quercus alba*)** - White Oak is a Georgia **native** tree and is relatively short in height (65-85 feet) but laterally wide (40 to 60 feet) and considered to be long-lived reaching 500-600 years old. It has a **slow to medium growth rate** (under 2 feet height per year). It is a very durable and useful hardwood due to its dense cell structure and is used for whiskey and wine barrels, shipbuilding, and agricultural implements. Over 180 wildlife species have been reported to use white oak acorns for food, and they are considered less bitter than red oak acorns. The White Oak is considered one of the most common oaks in north Georgia and the most common tree species of the Eastern U.S. Leaves are silvery pink and covered in down in spring (inset photo above) blue green in summer turning wine red in the fall (larger photo). White Oaks are considered a stately shade tree and have few problems with dying limbs or disease. If you're interested in a tree to share with future generations, with great benefits to wildlife, the White Oak is a winner.

**Planting & Care** - White Oak prefers well drained upland soils and **full sun**. Since they are deeply taprooted, they prefer deep, moist, drained, slightly acid soils, but they are well adapted to survive in other locations. Transplanting is difficult because of the taproot.

**Other Benefits** - White Oak bark has become a popular herbal remedy used as an anti-inflammatory, antiseptic, astringent, and other uses. Consultation is recommended before use.