



Waldo County
Soil and Water
Conservation District

Planting and Growing Guide



For more resources visit
Waldocountysoilandwater.org

How to Plant a Tree or Shrub

- Plant your tree as soon as possible after you receive it. Do not let the roots dry out! Store in a cool shady place until planting. Keep the roots moist but don't put them in standing water. See other side for bare root pre-planting instructions.
- Be sure to place your tree in the right place so it gets the amount of sunlight it needs and put it in soil that is well drained (dries out and doesn't stay wet) or moist depending on the species. Most young trees benefit from sun for part of the day with some light shade okay. Seedlings can be planted close together and then transplanted further apart in 1-2 years.
- In a very open windy area, some pine branches can be woven into protective fencing around the tree to shelter it, especially in winter. Remove branches in summer. Burlap can also be used.
- Clip off any roots that are much longer than the others or are twisted around the other roots or the pot soil.
- Roots should be at least 8 - 10 inches long for every 1/2 inch of stem diameter, in general. Your seedling may have shorter roots.
- Use the soil from the hole you dig and don't add compost or fertilizer. Keep the top few inches of soil from the hole in a separate pile and put that back last. You can add a small amount of top soil or organic matter to the mix if the soil is very poor. Make sure water drains out when poured in the bottom of the hole before you plant there. The hole should be 2-3 times the diameter of the pot or roots, but only as deep as needed to keep the the stem just above ground level and the longest roots or the root ball touching the bottom of the hole. Place the tree so the bulge at the base of the stem is just below ground level, then add the soil. Hold bare root seedlings at the right level as soil is added. Then, lightly pull the tree up until this bulge (the root collar) is about 1 inch above ground level. With light hand or finger pressure, push the soil down while keeping the tree straight. The bottom of the stem bulge should be right at ground level. Do not push hard to compact the soil but just enough to stabilize the tree. Water the tree immediately to remove air pockets from the root area.
- Placing some leaf litter on top around the tree to mulch it, but keep the leaves away from the tree's stem. The mulch layer should be thin, around 2 inches deep. If you want a formal look, you can add 1 inch of leaves and then 1 inch or so of bark mulch on top of that. Additional leaves can be place around the tree just for winter.
- Water your tree the first three days, then twice a week for a month, then once per week for the rest of the growing season (through October 15), unless it's raining that week. Water twice a week during any very hot dry periods the first year, otherwise water weekly when it doesn't rain for 3-5 years.
- For forest plantings where frequent watering isn't an option, water for the first month then expect some mortality and plant additional trees assuming some won't survive.
- To protect from deer, add fencing that is 4 or 5 feet tall and at least a foot from the tree on all sides. Stake the fencing. Add wire mesh around its stem from the ground to 1 foot high or more. These steps are necessary to protect your tree from browsing including winter browsing of the trunk by rodents. Tree guards and tubes can be used.
- Learn more at <https://www.arborday.org/trees/index-planting.cfm>. See our website for more resources at waldocountysoilandwater.org.



Care of Bare Root Trees and Shrubs

Bare root plant material has some special handling requirements to ensure the best health and survival rate for your seedlings.

In General:

- Pay close attention to keeping stock cool, roots moist and protected from direct sunlight, wind and extreme temperatures.
- Most plants break bud easily after cold storage, but some require a little help, such as “sweating (see below).”

Before planting:

1. Keep plant roots moist, cool and out of the sun.
2. Plants should be transplanted within 24 to 72 hours of receiving them, either in their permanent location, in a pot, or “heeled-in” until they can be planted permanently.
 - a. Planting within 72 hours: Keep plants in plastic packing and moisten packing material around roots; store in a cool, dark place.
 - b. Planting between 3-5 days: Re-pack plants in a box –or other container with drainage –in damp mulch, sawdust, shredded newspaper; compress to remove air; keep well-watered in a cool, shady place.
3. Remove dead or withered roots and stems with a knife or shears.
4. Soak roots before sweating or planting.
 - a. Deciduous trees & shrubs: Roots should be soaked for 4 to 6 hours before planting to ensure proper hydration. If possible, continue to soak roots while transplanting.
 - b. Conifers: Roots should be soaked for only 20-30 minutes.

5. Sweating

Most trees and shrubs show no adverse effects from being harvested in fall and stored under refrigeration until spring planting. Some species, however, enter super dormancy and must be forced into bud just before being planted. “Sweating” is a process that creates a super-humid, warm environment that coaxes buds to open. Species known to sometimes need sweating: Basswood, Birch, Black gum, Hackberry, Hawthorn, Hornbeam, Hickory, Lilac, Maple, Mountain ash, Oak, Pear, Rose, Redbud, Sassafras, Serviceberry.

- a. Method 1 –small stock: in a pot:
 - i. Pot up plants (after soaking roots), water well and place in plastic bag
 - ii. Secure top of bag loosely with twist-tie or rubber band to keep moisture in
 - iii. Keep in a warm, shaded location(60F+)
- b. Method 2–larger stock: wrap in moist packing material:
 - i. Place layer of plastic or tarp on the floor of a garage or cellar that stays above 55F. Cover with moistened material like burlap, straw or shredded newspaper. After soaking roots, lay plants side-by-side.
 - ii. Completely cover plants from tip to root with several layers of moistened packing material and cover with plastic or tarp.
 - iii. Fold bottom plastic layer over edges of top layer to keep moisture in.

Planting : See reverse side for planting instructions.

Activities and Resources for Planting

See our website at waldocountysoilandwater.org > 2022 Plant Sale post for links to planting resources and activities for families.

Our [Conservation Landscape Certification Resource Guide](#) also has a wealth of information for growing plants on your property.

Activities to Do After You Plant your Trees and Shrubs

Get a sign and certificate when you certify your property as a Conservation Landscape.



It's easy and fun. Just download and complete our checklist and contact us. The program includes a free site visit from our staff to guide you in your process of making your landscape wildlife friendly and healthy. Our checklist and online resources guide you in a step by step process. There is no pass or fail!

Find out more at

Waldocountysoilandwater.org > Conservation Landscape Certification

Become a citizen scientist and tell us how your trees are doing.

Help us study nearby native trees planted here to help with climate change research. Just fill out the form on our website, or use our [Report a Tree](#) app on Anecdota.

We need your help!

Find out more at

waldocountysoilandwater.org > Get Involved > Field and Science Assisting

