



Figure 2. Tree planting diagram*

1. Select trees with a single, straight trunk.
2. Plant trees 1.5" to 2.5" in caliper (diameter).
3. Make the planting hole 2 to 3 times the width of the root ball and only as deep. Be careful not to plant too deep. Trees should be planted with their root flare (the base of the trunk where it meets the root system) even with the soil line. If the soil is compacted, make the upper portion of the hole wider.
4. Leave a mound of undisturbed soil in the bottom of the hole, to support the root ball and prevent settling.
5. Remove or cut and fold down half of the burlap and/or wire basket, once the tree is in the hole. Allow the roots to lay naturally.
6. Use good native soil or topsoil for refilling the planted hole.
7. Apply 2" to 3" of wood chip or bark mulch.
8. Keep mulch away from base of tree.
9. If staking, tie with a slack rubber hose or strap; be sure to remove ties within one year.

* Tree planting diagram adapted from Elmendorf, Gerhold, and Kuhns (2001) courtesy of Pennsylvania State University.

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Resources

Binghamton University Urban Tree Resource

<http://environ.binghamton.edu/urban/>

City of Binghamton Street Tree Planting Program

<http://www.cityofbinghamton.com/dept-parks-recreation.asp>

City of Binghamton Green Binghamton Webpage

<http://www.cityofbinghamton.com/department.asp?zone=dept-planning&pid=78&pm=page>

Arbor Day Foundation

<http://www.arborday.org/>

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www.vtcommunityforestry.com

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Caring For Young Trees



A Basic Guide To: Planting, Watering, Mulching, Fertilizing, & Tree Health

City of Binghamton Shade Tree Commission



Caring For Young Trees

Planting

Proper planting is one of the most important steps to a tree's long-term success. Follow the guidelines in this pamphlet and the included tree planting diagram to make sure trees survive and thrive.

Watering

Regular water is important for tree survival after planting. During the first three years after planting, regular watering is necessary. Too little or too much can kill a tree.

- Water where the roots are. The first year they are right around the base of tree. Make sure to expand the watering area as the tree and roots grow.
- Watering devices such as TREEGATORS™ or a five gallon bucket with holes release water slowly, soaking the soil while minimizing surface runoff.
- A good rule of thumb is to **apply ten gallons of water per week (or twenty gallons if there is not rain)**.
- Giving the tree a lot of water every few days is better than a little water every day.

Mulching

Mulch is a protective covering, usually of organic matter such as wood chips, bark, straw, or peat, placed around plants to prevent the loss of moisture, the freezing of roots, and the growth of weeds. Maintaining a mulch layer can significantly improve the health and lifespan of your tree by:

- keeping moisture in the soil
- preventing soil temperature extremes
- controlling weeds
- protecting trees from lawn mower damage

- adding soil nutrients
- showing people where not to walk, preventing the soil from being packed down
- Most tree species are meant to grow in forests, where grass does not grow. Grasses growing close to a tree can hurt its growth and success.
- Mulch an area roughly three times the width of the root ball. This makes sure that growing roots benefit from the mulch layer.
- Lay mulch to a depth of 2-3 inches. Add mulch over time to maintain this depth; doing so will also improve the soil.
- Never mound mulch around the base of a tree like a volcano. This can result a tree infection and rotting. Mounding around the edge of the mulched area to keep in water is OK.



Figure 1. Mulch Volcano Excavated to Expose Buried Trunk. Mulch should not be touching a tree's trunk. Note the discoloration on the stem just below the mulch line. This discoloration may develop into disease and decay (© Copyright TLC for Trees).

Fertilization

Most New York soils contain enough nutrients to successfully grow trees without the addition of fertilizer. However, fertilizing can help to improve the growth and health of young trees if done properly. Obtain a soil test (available from the Broome County Cornell Cooperative Extension) to determine if the soil is missing important nutrients. If so, keep the following in mind:

- Only apply those nutrients that are missing in the soil. Applying unnecessary nutrients may be harmful to the tree.
- Don't over-fertilize young trees. Nitrogen, in particular, can cause more leaf growth than the roots cannot support.
- Use fertilizers with a low salt index. Expanding roots of young trees are highly sensitive to salt.

Tree Health

It is important to monitor your tree regularly for health problems. Early detection and proper diagnosis helps prevent unneeded treatments and minimizes damage.

- If the tree comes with protective wrapping around the trunk, leave it on for 2 years.
- Check the tree several times each year. The symptoms of various health problems appear at different times.
- Check the tree for discolored leaves, reduced leaf size, early fall coloration and branches dying.
- Check the stem for holes, scars, and changes.
- Avoid using lawnmowers and weed whackers close to the tree. They can cause damage to tree bark and create openings for insects and diseases. Maintain mulch to eliminate the problem.
- If you do detect a problem, consult a professional as soon as possible for an accurate diagnosis and treatment plan.