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# THE OUTSIDER

Illinois Extension Horticulture serving Henry, Mercer, Rock Island, and Stark



### THE MANY BENEFITS OF TREES

Trees provide a multitude of benefits, especially in the urban context," said Emily Swihart, horticulture educator with Illinois Extension. "A healthy community forest helps clean the air, conserve energy, cool our communities, enhance human health, reduce violence, and improve community economics."

Planting a tree is certainly a noble effort and tree health, vigor, and longevity can be significantly improved by proper planting protocol. The good news is that following these recommendations does not increase difficulty in planting however it might add a few minutes to the process. These few extra minutes are worth the time when compared to the potential for decades of additional lifespan the tree gains, not to mention increased safety as the tree matures.

## **HOW TO PLANT A TREE**

What follows are steps to understand when planting a tree.

#### 1. Species Selection

Proper tree species selection is crucial. Before purchasing a tree, inventory the site to make sure tree needs and size at maturity won't interfere with existing site elements. Pay special attention to overhead powerlines and call 811, a free underground utility locate service, prior to digging any planting hole.



#### 2. Dig a hole

While this is not a particularly complicated part of planting a tree, there are a few key points that will help ensure your tree is planted properly.

- a. First, if present, remove the sod from the planting area and set aside. This is not going to be used as backfill in the hole.
- b. Locate the root flare and first lateral root. This is the area of transition from trunk to roots. This indicates the planting depth. Some trees may have a graft union along the lower trunk that resembles the swelling of the root flare. The presence of the first lateral root, will ensure you have identified the root flare.
- c. Measure the depth of the root ball from the first lateral root to the base of the root ball. Dig a hole no deeper than this depth. Dig a hole two to three times the width of the root ball, especially if the soil is compacted.



#### 3. Inspect the root ball

Planting is the one and only time available to correct any root ball issues so taking a few extra minutes to inspect and correct potential issues with the root system can pay dividends for long term health and vitality of the tree. Roots grow from the tip, therefore any root that has turned and is circling around the root ball needs to be corrected. If planted with circling roots, there is greater potential for tree failure due to girdling roots. In addition to water and nutrient absorption, roots function to anchor a tree in the ground. Girdling roots is similar to tying shoelaces together, it will greatly reduce resiliency against forces on the upper portions of the tree such as a windstorm and increase potential for falling over. or to planting.

To correct circling roots, cut the roots and tease out the root ball prior to planting.



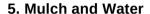




#### 4. Planting

It is time to place you tree in it's new home. Gently remove all container material and place the tree in the hole. If planting a balled-and-burlapped tree, remove the cage and material from the rootball once placed in the planting hole to minimize risk of the root ball falling apart. Double check planting depth to ensure the tree is not planted too deep. It is better to plant the tree an inch or two high than to plant it too deep.

Back fill the hole with soil previously removed from the hole, excluding the pieces of sod previously removed. Press the soil into the area around the root ball to remove large pockets of air while avoiding high levels of compaction. If additional soil is needed, sod pieces may be place around the very top of the planting hole, sod side down. While backfilling, make sure the tree is straight and remains upright after watering.



Your tree is technically planted at this point but providing water to newly planted trees is essential to survival and establishment. At the time of planting, thoroughly water the root ball and planting hole. As time passes, be sure to provide supplemental water to the tree if rain is inconsistent. Container grown trees will dry out faster than bareroot or balled-and-burlapped trees. The quantity of supplemental water required will be influenced by soil structure, seasonal temperatures, and natural rainfall amounts. Provide supplemental water when necessary to keep the root ball and surrounding soil from drying out. Continue during the first three years of establishment. All trees, established or newly planted will benefit from supplemental water during hot, dry periods.

Mulch helps keep moisture in the soil and soil temperatures down which promotes root development. Mulch also helps suppress weed competition around the root ball and keeps mowers and maintenance equipment away from the base of the tree, reducing chances of trunk injury. Apply mulch in a ring around the trunk of the tree, three to four inches thick without any touching the trunk. It should look like a donut around the tree.

Mulch is beneficial for newly planted and established trees alike. Reapply mulch each year, as needed, to your new tree and others in the landscape.











#### 6. Staking

Most newly planted trees should not require staking if planted properly and the root ball is of sufficient size to support the canopy. If staking is required, consider it a temporary application for use only until the tree is established. Removal is usually necessary one to two years after planting. Ties left on a tree can interfere with growth and create health challenges for the tree. Stake with three posts in a triangular pattern outside the root ball. Secure the tree to stop extreme movements, but loose enough that it can still sway in the wind, this helps promote root development and wood strength. Use a material that won't cause injury to the bark and check often for wound development. Remove the tie or relocate the tie if signs of injury begin to appear.



Congratulations, you have planted a tree. Now prepare to enjoy the fruits of this labor for decades to come.



## **OUTSIDER ACTION**

Try these activities to be more of an Outsider

- If planting a Balled-and-burlapped tree, check out this article for more information.
- Host an Arbor Day Celebration. here a few ideas: plant a tree, lead a tree walk, write a note of appreciation to your favorite tree.

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