

Tree Planting

Whether it's Spring, Summer, or Fall, if you are planning to work on your landscaping, remember these tips.

Planting trees for efficiency:

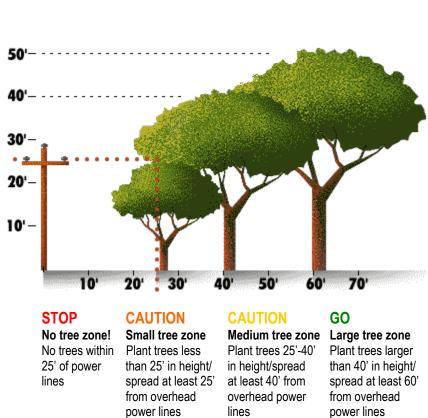
Deciduous trees (trees that shed their leaves in winter) are best planted on the west or southwest side. There, they will provide shade

in the summer, helping to cool the building. In the winter, the bare branches of these trees will let sunshine through to provide warmth.

Evergreen trees planted on the north and west can help shield outside walls from winds in winter. This can help reduce your heating costs.

How trees affect electrical service:

Tree limbs can short-circuit your electricity if they rub against your power lines. This may cause your lights to flicker or your digital clocks to stop. The best way to ensure your trees never rub on your lines is to do some simple planning before you plant.



Choosing trees:

Plant small trees at least 25 feet away from power lines. Flowering trees including dogwood, redbud, and crab-apple; small fruit trees; cedar.

Medium-size trees should be kept at least 40 feet away from power lines. Sugar maple; Norway maple; English oak.

Large trees should be kept at least 60 feet away from power lines. Pine; pin oak; walnut; hickory; sweet gum; pecan.

Safety:

Before digging or planting, please locate your underground utilities by calling your state One Call system.

Missouri—800-DIG-RITE Arkansas—800-482-8998 Kansas—800-DIG-SAFE Oklahoma—800-522-OKIE

Cutting a power line can be deadly. Never trim tree limbs near power lines, call us first. Our linemen will be happy to come to your home to take down lines while you trim.

Liberty

Vegetation Management

VegetationManagement@libertyutilities.com

1-800-206-2300

libertyenergyandwater.com

Tree Planting Tips

Think of the tree you just purchased as a lifetime investment. How well your tree and your investment in the landscape grows, depends on the type of tree and location you select for planting, the care provided when the tree is planted, as well as follow-up care the tree receives after planting.

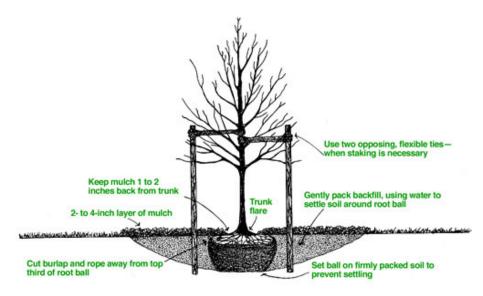
Steps in planting a tree

The ideal time to plant trees and shrubs is during the dormant season-in the fall after leaf drop or early spring before bud break are the best times to plant.

Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulates new top growth. However, trees properly cared for in the nursery or garden center, and given the appropriate care during transport to prevent damage, can be planted throughout the growing season. In either situation, proper handling during planting is essential to ensure a healthy future for new trees and shrubs. Before you begin planting your tree, be sure you have had all underground utilities located prior to digging.

Whether the tree you are planting is balled and burlap, or bare root, understand the root system has been reduced by 90 to 95% of its original size during transplanting. The trauma caused by the digging process results in transplant shock.

Transplant shock is indicated by slow growth and reduced vigor after transplanting. Proper site preparation before and during planting along with good follow-up care, reduces the time the plant remains in transplant shock. Proper care allows the tree to quickly establish in its new location.



Eight simple steps that reduce stress placed on the plant:

1. Dig a shallow, broad planting hole.

Make the hole wide, as much as three times the diameter of the root ball but only as deep as the root ball. It is important to make the hole wide because the roots on the newly establishing tree must push through surrounding soil in order to establish. On most planting sites in new developments, the existing soils have been compacted and are unsuitable for healthy root growth. Breaking up the soil in a large area around the tree provides the newly emerging roots room to expand into loose soil to hasten establishment.

- 2. **Identify the trunk flare.** The trunk flare is where the roots spread at the base of the tree. This point should be partially visible after the tree has been planted (see diagram). If the trunk flare is not partially visible, you may have to remove some soil from the top of the root ball. Find it so you can determine how deep the hole needs to be for proper planting.
- 3. Place the tree at the proper height. Before placing the tree in the hole, check to see that the hole has been dug to the proper depth-and no more. The majority of the roots on the newly planted tree will develop in the top 12" of soil. If the tree is planted too deeply, new roots will have difficulty developing because of a lack of oxygen. It is better to plant the tree a little high, 2" 3" above the base of the trunk flare, than to plant it at or below the original growing level. This planting level will allow for some settling (see diagram). To avoid damage when setting the tree in the hole, always lift the tree by the root ball and never by the trunk.
- 4. **Straighten the tree in the hole.** Before you begin backfilling, have someone view the tree from several directions to confirm that the tree is straight. Once you begin backfilling, it is difficult to reposition the tree.
- 5. **Fill the hole gently but firmly.** Fill the hole about 1/3 full and gently but firmly pack the soil around the base of the root ball. Then, if the tree is balled and burlap, cut and remove the string and wire from around the trunk and top third of the root ball (see diagram). Be careful not to damage the trunk or roots in the process.

Fill the remainder of the hole, taking care to firmly pack soil to eliminate air pockets that may cause roots to dry out. To avoid this problem, add the soil a few inches at a time and settle with water. Continue this process until the hole is filled and the tree is firmly planted. It is not recommended to apply fertilizer at the time of planting.

6. **Stake the tree, if necessary.** If the tree is grown and dug properly at the nursery, staking for support will not be necessary in most home landscape situations. Studies show that trees establish faster and develop stronger trunk and root systems if they are not

staked at the time of planting. However, protective staking may be required where lawn mower damage, vandalism, or windy conditions are concerns. If staking is necessary for support, two stakes used in conjunction with a wide, flexible tie material will hold the tree upright, provide flexibility, and minimize injury to the trunk (see diagram). Remove staking and ties after the first year of growth.

Trees do best when not tied to a stake, just make sure that the hole has been filled in properly.

Backfill all planting holes with the soil that's been dug out of the hole. Backfill, breaking up all soil particles to the size of golf balls or smaller. Water in well and as the soil-filled hole fills up with water, take a shovel and work the back filled soil up and down to settle it in place. This will cause the soil clump to become securely locked into its new home.

- 7. Mulch the base of the tree. Mulch acts as a blanket to hold moisture, moderate soil temperature extremes (both hot and cold), and reduces competition from grass and weeds. Some good mulch choices are leaf litter, pine straw, shredded bark, peat moss, or wood chips. A 2" layer is ideal. More than 2" may cause a problem with oxygen and moisture levels. When placing mulch do not pile it up against the trunk. Doing so may cause decay of the living bark at the base of the tree. A mulch-free area, 1" 2" wide at the base of the tree, is sufficient to avoid moist bark conditions and prevent decay.
- 8. **Provide follow-up care.** Keep the soil moist but not soaked; over-watering causes leaves to turn yellow or fall off. Water trees at least once a week, barring rain, and more frequently during hot weather. When the soil is dry below the surface of the mulch, it is time to water. Continue until mid-fall, tapering off for lower temperatures that require less-frequent watering.

Other follow-up care may include minor pruning of branches damaged during the planting process. Prune sparingly immediately after planting and wait to begin necessary corrective pruning after a full season of growth in the new location.

Continue with routine care. Hopefully, favorable weather conditions will ensure that your new tree will grow and thrive and become a valuable landscape asset. Appropriately selected trees provide a long-lasting source of beauty and enjoyment for people of all ages. When questions arise about the care of your tree, be sure to consult a local ISA Certified Arborist, a tree care specialist, or a local garden center professional for assistance.