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Improving Successful Establishment of Transplanted Trees and Shrubs Annette Meyer Heisdorffer, PhD Extension Agent for Horticulture Education – Daviess County

It seems like it is too late, but it is not. Fall is the best time to plant trees and shrubs.

Common questions about planting trees and shrubs are what is the best way to plant them, should the burlap be removed, and should the soil be amended before planting?

November and December are the best months for planting most trees and shrubs. The soil temperature is warm enough for good root growth during these months. With cooler temperatures in the fall, trees and shrubs will not require as much water as in the spring.

When planting trees and shrubs, carefully select a site that meets the plant's needed growing conditions. Make sure they can reach maturity without growing into overhead wires, buildings, fences, driveways, and other plants.

At the selected site, dig a hole a minimum of two and a half times the width of the soil ball. In tightly compacted soil, dig the planting hole four to five times wider than the width of the soil ball to provide loose soil for easier root growth and establishment.

Dig the hole as deep as the depth of the soil ball. Score the sides of the planting hole with a spade or shovel to prevent it from becoming slick like a glazed pot which prevents roots from penetrating the soil. Otherwise, the roots grow around and around in the hole strangling the tree or shrub.

Make sure to plant the tree or shrub at the same level it was growing in the field or container or set it slightly higher to account for soil settling. Roots must have oxygen to take up water and mineral nutrients from the soil. The deeper, the less oxygen present. To determine the previous soil line, look for an abrupt change in coloring near the base of the trunk and plant to that depth or slightly shallower. It may be necessary to scratch the top of the soil ball to find where the roots begin to avoid planting it too deep.

At the nursery trees and shrubs are available in plastic containers and balled-and-burlapped. Plastic containers must be removed from the container-grown plants. Tap the container on the bottom and sides to loosen it from the soil ball. If the container-grown plant material is root-bound, the roots may continue to spiral around within the planting hole. To prevent this, pull the roots apart or use a sharp knife to make vertical cuts 1 inch deep in four to six locations around the root ball.

When handling a balled-and-burlapped plant, don't drop it off a truck or into the planting hole because the ball will crack and break the roots. Do not pick up the plant by holding the trunk since the roots cannot support the weight of the soil ball. Move the plant carefully by handling the soil ball.

On a balled-and-burlapped plant, once in the planting hole, cut the twine from around the trunk and remove it. Cut away as much of the burlap covering the soil ball as possible without the ball falling apart. The burlap may contain synthetic materials that will not degrade in the soil. Also remove the wire basket, if present, with wire cutters. Removing these will allow the plant to grow without strangling the trunk or major roots, which could lead to a poorly growing plant and possibly eventually kill it.

When filling in the planting hole, it is best to put back the same soil that came out of it. If the soil is amended in a small hole, water may pool in the hole and possibly drown the plant. Amending heavy soils with finished compost, peat moss, or well-rotted, weed-free manure is a good idea only if an entire bed for trees or shrubs is being prepared.

As the existing soil is filled back into the hole, tamp it lightly around the root ball. Water the plant when the hole is half full of soil and again after filling it in completely.

Add a layer of mulch 2 to 3 inches deep around the plant to help control weeds, conserve soil moisture, and keep lawnmowers and weed eaters away from the trunk. If the mulch is too deep, the roots will not be able to get oxygen and the tree or shrub will suffocate and die.

Allow the plant to remain in its new site for one year before fertilizing. Plants generally do better if allowed to recover from the initial shock of transplanting before fertilizer is applied. Fertilize them in the fall of the second year after it is dormant if needed.

Trees and shrubs should be staked only when there is a likelihood they will blow over with high winds. Trunk diameter and strength increase faster on unstaked plants which are

allowed to move with the breeze. If staking is necessary for top-heavy trees, three stakes are recommended. Usually, the stakes can be removed after one year.

For more information about planting trees and shrubs, contact the Daviess County Cooperative Extension Service at 270-685-8480 or annette.heisdorffer@uky.edu.

Annette's Tip:

Continue to check yourself for ticks after walking in tall grass, in locations where wildlife frequents, or along the edge of wooded areas. The larval stage of the lone star tick, often called "seed ticks" are hard to see on your feet, legs, and other parts of your body. Also, we are getting into adult season for black-legged deer ticks, which are known to transmit the pathogen that causes Lyme disease.

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