

# Home & Garden Education Center



**UConn** | COLLEGE OF AGRICULTURE,  
HEALTH AND NATURAL RESOURCES  
PLANT SCIENCE AND LANDSCAPE ARCHITECTURE  
EXTENSION

## Fall is a Great Time to Plant Trees

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Autumn is an ideal time to plant a tree as the air temperatures have cooled but the soil is still warm. Warm soil temperatures encourage root growth while decreasing light and day length signal the plant to stop producing top growth. Roots will continue to grow until the soil freezes and the tree enters dormancy. Growth will pick up again in spring as the plant continues to get established in its new location.

The mechanics of planting a tree are pretty standard: dig a hole, put the tree in the hole (root end down) and backfill the hole. Just how each step is done will determine the long term success of the tree's survival. New trees may be sold as bare-root, container grown, or balled-and burlapped. Trees purchased through the mail typically arrive as a bare-root stock. Local garden centers and nurseries often sell smaller trees in a plastic container filled with a soilless mix. Balled-and-burlapped trees are larger, field-grown specimens. They are dug and the root-ball is wrapped in burlap, which is then tied around the base of the trunk. Sometimes balled-and burlapped trees also have a metal cage placed around the burlap to make transport easier and hold the root-ball together.

The planting hole should be dug only as deep as the root ball or bottom of container but two to three times as wide. Most trees do not grow taproots, but rather the majority of roots will grow in the top 12 to 18 inches of soil, spreading out in all directions. Planting depth is the most critical part of the planting process. Roots belong below ground and all bark should be above the soil line. Look at the tree to find the point where the bottom of the trunk flares out. This basal flare should always be exposed and not buried in the soil. More trees are killed each year by planting them too deep. Don't let your new tree become one of them.

Before planting, remove the plant from the container and examine the roots. Loosen the roots slightly by gently pulling them apart. If the roots are circling the inside of the container, coax them apart and give them a trim. This will encourage them to leave the circular shape in which they were growing and enter the new surrounding ground. Bare-root trees should be placed atop a cone of soil mounded on the bottom of the planting hole before spreading out the roots.

Balled-and-burlapped trees must have all of the burlap, caging and twine removed for long-lived success. Today's burlap is treated with chemicals to keep it from decomposing and lasts much longer in the soil than the old, untreated version. The burlap will restrict the roots from reaching into the surrounding soil. Twine can

girdle the tree, eventually killing it. Root cages are made of metal and will take many decades to decompose. Roots can become girdled once they grow through the openings in the cage, effectively choking the tree after a decade or more. There is also the danger of broken and rusty metal poking up when working around the tree. Cut all packing material off, even if this has to be done after the tree is placed into the hole.

Loosen the soil in the hole and water well to prepare the hole for the placement of the tree. Adding compost or other organic matter is not needed. Limestone and phosphorus may be mixed with the backfill soil if determined necessary by a soil test. Set the tree's basal flare slightly above soil line to account for any settling. Back fill hole with existing soil. Create a ring or berm of soil about a foot away from the trunk to hold water and let it soak into the root area. Mulch can be placed outside of the berm to retain moisture. Never place mulch against the bark or rot of the bark can happen. Water again immediately after planting and then weekly, if no natural precipitation occurs, for at least one year during fall, spring and winter to ensure a well-developed root system. Do not add water if ground is frozen.



Good planting depth image by Dawn Pettinelli

Staking plants is no longer a recommended practice as trees develop stronger trunks and root systems when allowed to sway and move with wind. Trees can be fertilized once a year in the spring. If the tree is planted within a fertilized lawn, it will usually receive adequate nutrients from lawn fertilizer applications so additional sources of nutrients may not be needed.

If you have questions about fall plantings or on other gardening topics, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our [website](#) or contact your local Cooperative Extension center.