

## Tree Planting for Success

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Proper planting is critical for the establishment of healthy, thriving trees. The following planting guidelines have been developed to help new trees get off to a successful start. The recommendations are based on nationally recognized standards as well as experience compiled by the Nebraska Statewide Arboretum and the Nebraska Forest Service. The recommendations assume an appropriate tree has been selected for the planting site and the site is suitable for planting.

### Digging

Dig a saucer-shaped hole wider than the root system but no deeper than the root mass. Most holes do not need to be deeper than about one shovel's depth (10-14 inches). The bottom of the hole should be firm enough to prevent the tree from settling deeper after planting. Using an auger is not recommended since trees often settle too deep and the sides of the holes become glazed. If using an auger, don't drill deeper than needed and loosen the sides of the hole.

### Planting

Plant so the base of the trunk is at original ground level or slightly higher. The first lateral roots should end up just under the soil surface (1-2 inches deep) and the trunk should flare visibly at ground level.

- Always locate the first main lateral roots and remove any excess soil above them before setting the plant in the hole. The first main roots are often several inches below the top of the container or root ball.
- All graft unions should be visible above the soil line.
- Remove all pots and containers before planting.
- For balled and burlap (B&B) stock, try to remove the wire basket and burlap before placing the tree in the hole. If maintaining the integrity of the soil ball is important, then remove the bottom part of the burlap and wire basket before setting the plant in the

hole and then remove the remaining burlap and wire basket after stabilizing the tree in the hole. Remember to check for and remove any excess soil at the top of the root ball before planting.

- Loosen and spread circling roots before backfilling (especially important for potted trees). It may be necessary to cut larger roots that cannot be straightened to prevent girdling, but this should be done with caution. Reject plants with severely circled or girdled root systems.
- For potted trees, try to remove as much of the original growing medium as possible before planting to help achieve good soil-root contact. Dunking in water or spraying with a hose will help in this effort.

### Backfilling

Backfill with the original soil dug from the hole. Large clods and soil chunks should be broken up as much as possible. Adding water during backfilling can help remove air pockets and better moisten the roots.

### Mulching

Mulch individual trees with a 2-4 inch layer of wood mulch extending from the trunk to at least the drip line of the tree. Where possible, mulch trees and other plantings together en masse to help separate from surrounding turf. Don't pile the mulch deeply over roots or against the base of the trunk and don't mulch with rock or use plastic weed barriers under the mulch.

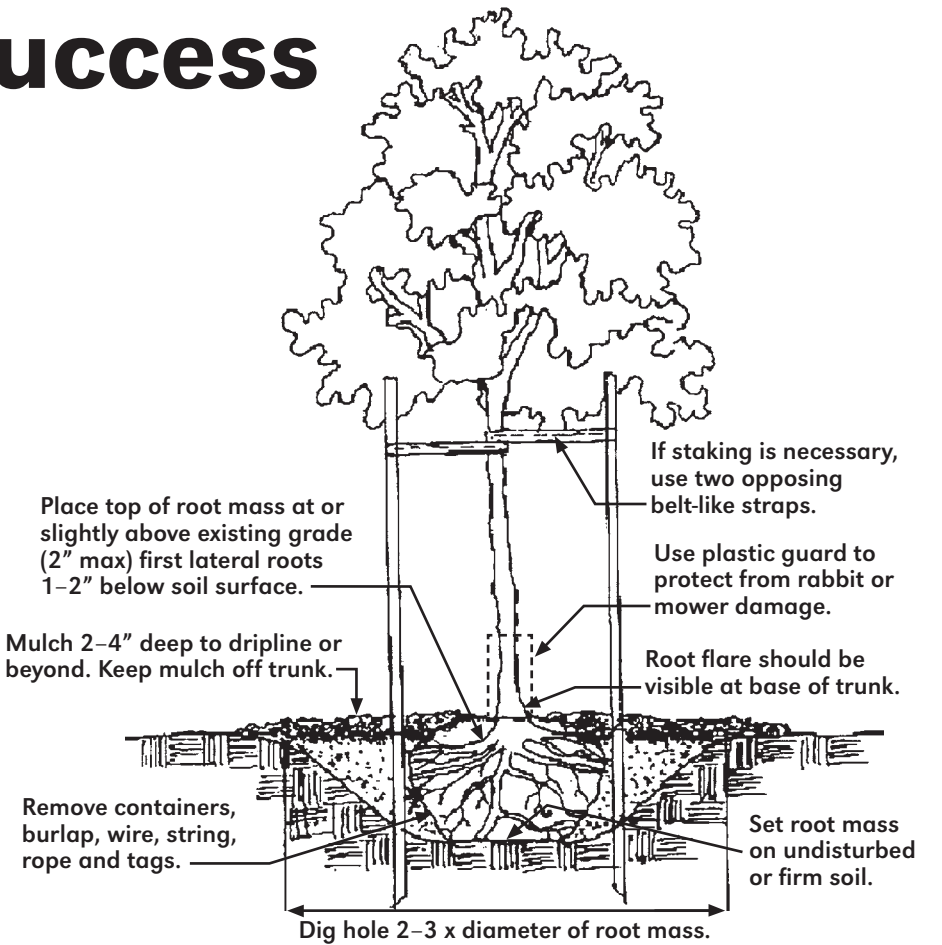
### Staking and Bracing

Brace the tree if it might dislodge or blow over in the wind (most trees typically benefit from staking). Some sway should be allowed in the tree after staking. Use only broad, belt-like materials to attach the bracing to the trunk to help prevent rubbing injuries. Do not brace with wire, rope or wire through hose. Remove staking within one year.

Once the tree is planted, there's still work to do. Here are some tips on post-planting care:

### Watering

After planting, keep the root zone



TYPICAL TREE PLANTING DETAIL  
(no scale)

moist but not water-logged. In general, a newly planted tree should receive about one inch of moisture per week, including rainwater, during the first growing season. Check the root zone frequently for moistness—don't just guess. Many trees are lost to either under- or over-watering. Containerized trees often need more watering than bare-root or B&B stock, because the porous growing medium they are potted in dries out faster.

### Fertilizing

If the right tree was selected for the planting site, fertilizer is generally not needed. If fertilizer is desired, use only a slow-release, low-nitrogen fertilizer applied to the soil surface after planting.

- Never add fertilizer to the planting hole since it can damage newly transplanted roots. In addition, excess nitrogen in the soil can cause newly planted trees to add top growth at the expense of proper root development.

- Address major soil problems before planting. Adding organic matter to the planting site before planting can be very beneficial for poor, inorganic and/or compacted soils.

### Pruning

At planting time, prune only to remove dead or damaged branches and to correct structural defects. Never cut back healthy branches or trim the tree to try to "balance" the top with the roots. The tree will benefit from having as many food-producing leaves left on as possible. Also, try to leave lower branches on a tree for as long as possible after planting. Lower branches help protect the trunk from cracking, sunscald and animal damage and they aid in developing good trunk taper. If needed, limb the tree up gradually over a matter of several years after planting. Monitor the tree when young and prune, sparingly but properly, to prevent structural defects.

## Successful Composting

Don Janssen

UNL Extension Educator

Leaves falling from trees along with vegetable and bedding plants dying off as the season closes means there can be lots of plant material accumulating around the yard. That means now is the ideal time for starting a compost pile.

Composting is not difficult. Composting offers more than just a way to get rid of plant material. Compost is an excellent way to improve yard and garden soils, in particular the clay soils which dominate our area. Composting is also an excellent project for kids.

Follow a few simple rules and the compost project should be a success. Start by constructing some type of bin to hold the materials. Bins may be as simple as poultry wire cylinders held up with a few stakes or elaborate constructed wood and wire bin systems. Piles need to be a minimum of about 3 cubic feet to function well. Bins also need to be constructed so air can reach the compost materials.

Mixing green and brown mate-

rials together is the basic rule to get the compost process going. Green materials, such as grass clippings or fresh green plant parts, supply nitrogen. Brown materials, such as dead leaves, are high in carbon. Mixing the two assures good conditions for microbes, which actually decompose the composting material. The smaller the plant materials are, the faster they will decompose. Shredding them before putting in the bin is helpful.

Moisture and air are also required for the composting process, and too much or too little of either one can cause problems. Compost materials should be about as moist as a wrung-out sponge. If kept too wet, compost piles encourage anaerobic bacteria and start to smell. If too dry, the pile "just sits there."

Assure adequate air by designing a sturdy bin and turning the pile frequently. Turning helps mix the materials well and also is a good way to monitor progress of the bins. Tend to your compost pile often to keep the process moving. The finished compost product is worth the small amount of effort!

## Fall Composting Workshops



Learn how to be successful with composting by attending a composting workshop sponsored by UNL Extension in Lancaster County and the City of Lincoln Recycling Office. No cost to attend. Composting workshops will be held:

- Tuesday, Oct. 6, Gere Library, 2400 S. 56 St. 6:30 p.m.
- Wednesday, Oct. 7, Eiseley Library, 1530 Superior St., 6:30 p.m.
- Thursday, Oct. 8, Anderson Library, 3635 Touzalin Ave., 6:30 p.m.