NEBRASKA FOREST SERVICE Tree Planting



Tree losses from severe storms can be heavy, and homeowners often lose large trees or trees that have sentimental value. These kinds of trees cannot be replaced. But new properly planted and maintained trees and shrubs add beauty, protection, diversity and value to almost any property. Trees and shrubs provide these benefits whether they are planted in a park, in front of your house or along a street or highway.

Successful tree and shrub planting requires knowing growth characteristics, site requirements and intended landscape function of each selected species. Landscape trees and shrubs are not difficult to plant, but proper species selection and planting techniques are necessary to ensure success.

Proper Selection is Key

Here are some tips to help you select and plant trees in your yard:

- Consider your location and watch for overhead and underground utilities. Remember that small trees grow into big trees.
- Foresters, arborists and nursery professionals are a good source of technical information when selecting and planting trees.

• It's best to choose plants that have been grown within your hardiness zone. Plants with seed sources grown in southern areas may find it difficult, if not impossible, to adjust to Nebraska's climate. In general, nursery suppliers north of Interstate 70 provide the best stock







for Nebraska's climate. Ask your nursery professional where the stock originated.

• While planting larger trees may create an immediate impact, smaller trees (2 inches or less in diameter) will recover from transplant shock more quickly and typically will catch up and outgrow the larger tree due to increased vigor.

Planting Tips

Storm Damage Series

• Locate all underground utilities before digging.

• Dig the planting hole substantially wider than the root system of the tree or shrub to be planted. The finished hole should be narrower at the bottom than at the top and be at least 2 feet wider than the root mass.

• During planting, place the root ball on solid soil at a depth where the root flare is at, or slightly higher, than the original grade.

Top: Smaller trees will recover from transplant shock quicker than larger trees.

Middle: Dig the planting hole 2 feet wider than the root ball; place the root ball on solid soil. Bottom: Remove all materials surrounding the root ball before planting.

The Nebraska Forest Service: Enriching lives by protecting, restoring and utilizing Nebraska's tree and forest resources.





• Do not use soil amendments such as compost, bagged garden soil, peat moss or fertilizer.

• After the plant is set at the proper level in the hole and sufficient backfill is placed in the hole to prevent any movement of the ball, cut and remove from the tree and planting hole all twine, burlap and basket wire or cage.

If the plant is in a wire basket, cut the wire and remove it where possible, as long as damage to the root ball can be prevented, and remove





Clockwise from top left: If roots are wrapped around the root ball, gently loosen them by hand and spread out as much as possible. Staking stabilizes the root ball in the soil.

the burlap. Containers (even peat pots) should be completely removed before planting.

If girdling roots (roots visibly wrapped around the root ball) are present, loosen them by hand and spread out as much as possible or cut with pruning shears. Add backfill soil in layers and use water to help settle the soil. Be careful not to tamp or work the soil after the plant has been watered or the soil will become too compacted.

• Prune trees at planting time only to remove branches damaged during handling and transplanting. Do not prune the main leader on singlestemmed trees unless it has been damaged. Do not remove lower branches completely because they manufacture critically needed food and help protect the lower trunk.

• Staking is recommended for most tree plantings. Staking and guying stems are designed to stabilize the root ball in the soil, not to secure the trunk and keep it from moving. Staking systems should be monitored throughout the growing season, adjusted as necessary to prevent trunk girdling. They usually are removed after one growing season.

• Do not wrap tree trunks.

• Water two or three times a week to keep soil moist but not saturated. Sprinkler systems that run daily will kill trees.

• Mulch with a 2- to 4-inch layer of wood chips or other organic material. Do not use grass clippings. Mulching conserves moisture, reduces weed competition and insulates roots from temperature extremes.

• Do not fertilize trees for three years after planting. After that, normal turf fertilization should be sufficient.

> This series is based on a previous storm damage series researched and written by David Mooter.



A 2- to 4-inch layer of wood-chip mulch is optimal for newly planted trees. Don't mound mulch around the base of the tree.

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