

Recent research and information on plant biology has given us new insights on how to improve the survival rate of newly planted trees and shrubs. Appropriate site selection, planting hole preparation and most importantly, planting depth are factors that will help ensure that your trees and shrubs are healthy, vigorous and add beauty to your landscape for many years.

1. SELECT THE SITE

Evaluate the needs of the plant and the conditions of the site before you make a purchase and make sure they are compatible. Consider whether the site's exposure is in sun, part sun, or shade. Know the ultimate size of the tree – will it be too close to the house or power lines when mature? Is the tree's purpose to provide shade, fall color, screen an unsightly view, be a windbreak or serve some other function? Is the plant hardy to minus 10 to 20 degrees F. in NE Ohio's zone 5? Is the soil texture sand, loam, clay, well drained, dry, or frequently wet. Site incompatibility will result in the certain decline and premature death of the plant.

2. PREPARE THE PLANT

One of the most common mistakes is planting too deeply, resulting in poor vigor and growth and also a major factor in the formation of stem girdling roots which in time can kill the plant. Locate the area at the base of the trunk where it flares out. This is the trunk flare zone where the roots meet the trunk. On balled and burlapped plants, the trunk flare is frequently one to several inches inside the rootball. Untie the twine and burlap and locate the trunk flare. Remove the excess soil above the flare zone. This will become the soil line. Measure the rootball height from trunk flare to the bottom of the rootball.

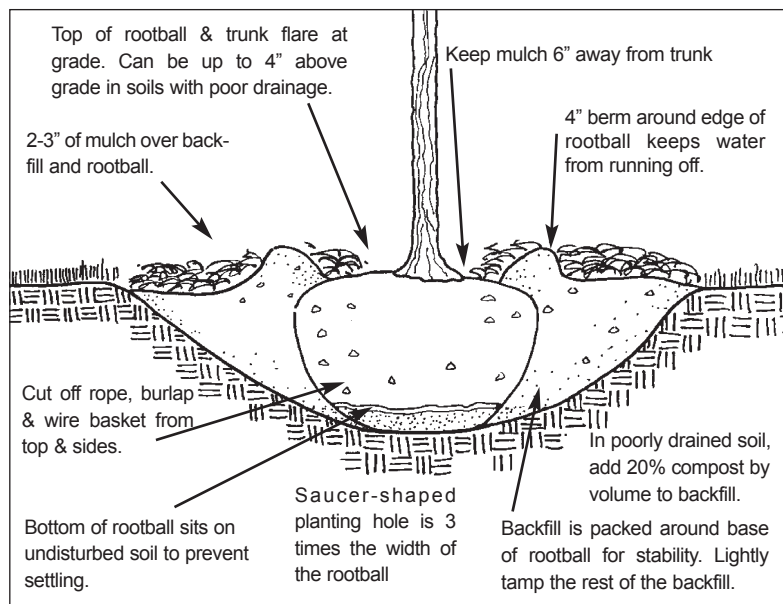
3. DIG THE HOLE

Dig a saucer-shaped hole 2 to 3 times the width of the rootball. Do not dig deeper than the measurement you made in step 2. Do not loosen the soil at the bottom of the hole. The rootball must rest firmly on undisturbed soil so the plant doesn't settle.

4. SET THE PLANT

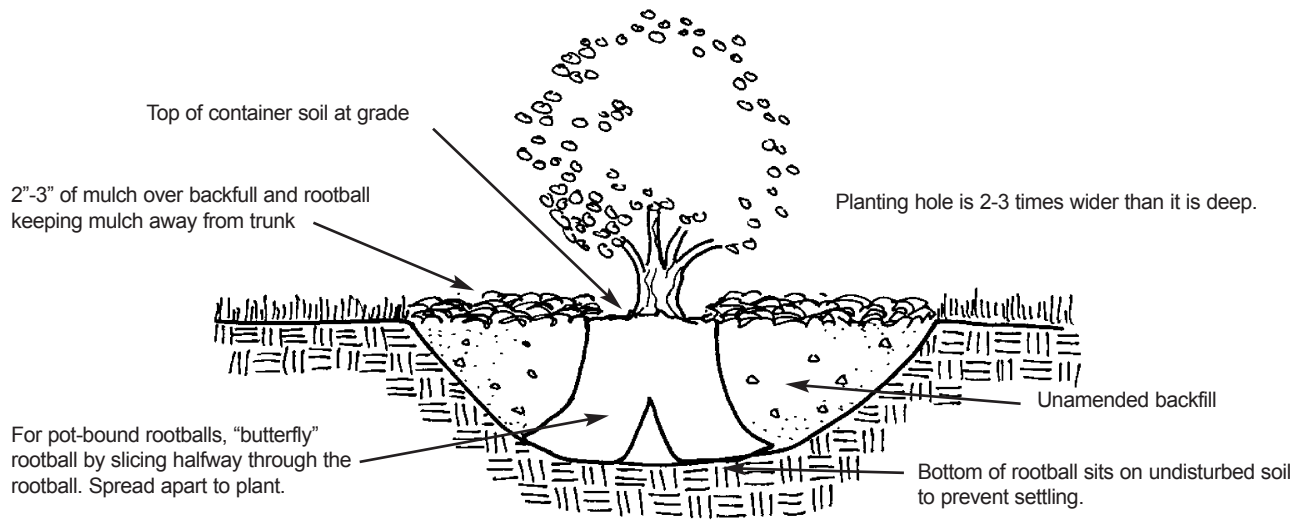
◆ Balled and Burlapped (B&B)

Lower the rootball into the hole, keeping the tree's soil line level with the top of the hole. Cut the wire cage and remove as much of it as possible. If it is left in place, the wires can girdle the roots. Cut and remove the burlap as far down as possible. Remove all tags, nails, and twine. Backfill with the original soil taken from the hole until the fill soil is level with the trunk flare and existing grade. Up to 20% organic matter (compost) by volume may be mixed with the soil used for backfilling. Firm the soil around the base of the rootball to stabilize it, then slightly tamp the rest of the backfill soil or just let it settle. Make a temporary soil "berm" 4 inches high, just outside of the rootball to create a watering basin.



◆ Containerized

Loosen and remove the container. If the roots are circling in the container, slice into the root mass from the bottom by about 1/3 to 1/2 of the depth of the roots with a spade and spread the roots apart. Place the “butterflied” plant in the planting hole. Backfill and firm as directed for B&B plants.



5. MULCH

Remove the grass and mulch an 8 ft. diameter circle 2 to 3 inches deep. Keep mulch 6 inches away from the trunk to prevent fungi and rodent injury. Maintain a 3-inch layer of mulch from year to year and apply it after the soil has warmed in the spring.

6. WATERING

Fill the “reservoir” made by the soil berm. Watering the rootball and backfill slowly. Use 20 gallons per tree within 8 hours of planting. Since a B&B plant may have had as much as 90% of its roots left at the nursery when dug, regular and sufficient watering the first two years until the plant is established is critical. Apply 10 to 15 gallons of water at a rate less than 3 gallons per minute once a week, May through November,

unless more than 1 inch of rain falls during the week as measured on your property.

7. STAKING

This is only necessary if the tree cannot support itself in the wind. Stake as low as possible on the tree to encourage flexibility and proper trunk flare development. To prevent trunk injury use flexible staking straps instead of rubber hose covered wire. All staking should be removed after one year.

8. FERTILIZING

Do not use fertilizer for at least one year after planting and then only if a soil test indicates it is needed.

REFERENCES

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