Tips for Planting Trees

James Gregory & Lloyd Singleton December 14, 2020

1. Tree selection

- a. Select a type of tree that is best for the planned location, "right tree for the right place".
- b. Choose a species of tree that is native to the Southeastern region of NC or a well-adapted cultivar of a native or an exotic (non-native) species. Native species are preferred.
- c. Choose a type of tree based on site characteristics and predicted mature size of the tree. Consider dry vs. wet sites, area of soil for root expansion, area above ground for tree crown expansion and desired characteristics such as prominent flowers.
- d. Avoid planting species of woody plants that are on the NC invasive exotic plant list prepared by the NC Forest Service and NC Cooperative Extension: https://projects.ncsu.edu/goingnative//howto/mapping/invexse/index.html. These woody plants should be removed where currently present.

2. Planting procedures

- a. Dig a large hole. The diameter of the hole for the tree should be at least twice the diameter of the root ball. Ensure that bottom of hole is flat and firm.
- b. If the soil is compacted, loosen the soil in the bottom and sides of the hole to promote normal root growth. Loosen the soil as deep as feasible for at least 4-5 feet away from the tree. A potato fork (digging fork) or similar tool works well for this task.
- c. For field dug "balled and burlap" trees, remove all wrapping, wire baskets, etc. prior to placing in the hole.
- d. For trees grown in containers, the root ball must be disturbed to prevent encircling roots to continue and to promote normal, outward growth of new roots from cut ends of roots in the root ball. Make at least six deep vertical cuts through the sides of the root ball. Loosen the roots. If roots are massed at the bottom of the root ball, make several deep cuts across that mass of roots or slice off the bottom of the root ball.
- e. Place the tree in the hole with the root collar (swelling at base of trunk just above first roots) at the soil surface. Fill the space around the root ball with the soil that was removed; do not add any amendments. Firm the soil as it is replaced.
- f. Water the root ball and surrounding soil and add 2-3 inches of mulch over the root ball. Keep mulch away from tree trunk.

3. Stabilize the tree

- a. For stabilization of a newly planted tree in a windy location, a root ball bracing method is best. Traditional stakes and strap systems are frequently not removed in a timely manner and serve to strangle the tree.
- b. Gather 4 2x2 3 ft. long stakes made of untreated lumber with pointed ends and 2 2x2 untreated lumber boards cut to length.
- c. Place the 4 stakes to accommodate a horizontal board crossing the root ball about halfway through the radius on each side of the trunk. Using a small sledge hammer, drive the stakes until firmly in the ground.

- d. Cut an appropriate length of 2x2 board to attach as a horizontal piece to the stakes with drywall screws. Hammer downward on the four stakes for complete soil contact with the horizontal boards.
- e. Use a reciprocating saw to cut the stakes flush with the horizontal boards.
- f. This safe, aesthetic, low-cost method can be viewed here: https://www.youtube.com/watch?v=yRXtKqj1Pdc.
- g. By firmly tacking the root ball in place, the tree trunk is able to develop normal strength for wind resistance by allowing natural movement. The bracing materials will decompose and do not hinder normal growth of the tree roots.