Handling and Planting Container-Grown Trees

Although many experienced landscape professionals prefer field-grown, balled and burlapped trees for landscape plantings, the nursery industry is producing more container-grown trees each year. Container-grown plants are popular with the consumer. There are many reasons why:

- A tree grown in a container will suffer little, if any, transplant shock when removed from the container and planted properly. A high degree of transplanting success can be expected.
- A container-grown tree can be planted throughout the year when the soil and weather conditions permit.
- Container-grown trees are grown in a lightweight medium and are easy to ship and handle by the nursery grower and the consumer.

On the down side, there are two serious problems with container-grown trees. A knowledgeable consumer can overcome either problem.

Container-grown trees are often root-bound. They grow more rapidly than shrubs, ground covers, and flowers, which are also grown in containers, making it difficult for the nursery grower to keep up with necessary repotting into larger containers. If a tree is not sold quickly, it will become root-bound in its final container. A root-bound plant will often girdle itself with circling, deformed roots and may stagnate or die. It is critical that circling roots be eliminated before planting the tree. Circling roots will continue to circle, unless they are disrupted and redirected.

To lessen this problem, remove the root ball from the container and inspect for circling roots. If small, thin-diameter circling roots are detected, direct them away from the tree trunk by hand. If the root system is matted with fibrous roots, it may be beneficial to slice through the root system with a sharp knife from top to bottom in four to eight locations around the root ball and gently pull the roots away from the tree trunk. Plant the tree immediately.

If roots in the container are severely bound or so thick they cannot be straightened and directed away from the trunk, consider returning the tree to the nursery for a replacement.

Another root deformity that may warrant returning a container-grown tree to the nursery is the presence of stem-girdling roots. These roots encircle all or part of the tree trunk. If the tree can establish and grow, both the trunk and root could thicken to a point where the root compresses stem tissue and adversely affect the stem’s woody and nonwoody tissues.

The second problem involves the soil interface. The root ball potting medium in the container will differ greatly from the soil that surrounds

When a tree root system is in a container for too long before planting, roots can encircle the stem. When roots thicken in a circling position, it is not possible to redirect them away from the trunk during the planting process. These roots can later become stem-girdling roots. If a tree with this condition is planted, it is likely it will not live as long as it should.
Because lightweight growing medium will dry out before surrounding soil, it is important to check the root ball for dryness to determine when watering is necessary.

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