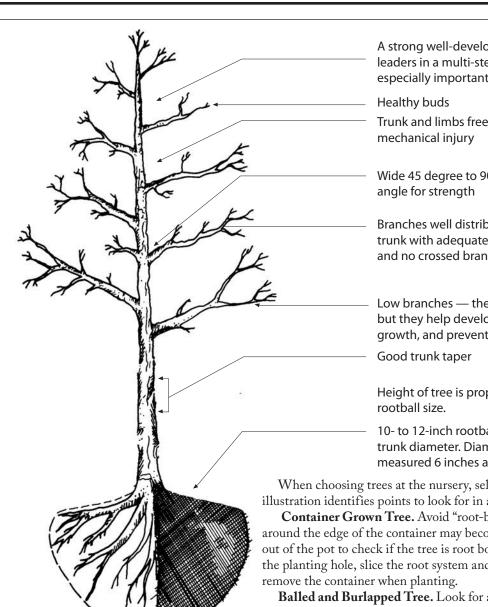


# Selecting and Planting a Tree



A strong well-developed leader (or leaders in a multi-stem plant) is especially important in shade trees

Trunk and limbs free of insect or

Wide 45 degree to 90 degree branch

Branches well distributed around trunk with adequate space between and no crossed branches.

Low branches — they are temporary, but they help develop taper, promote growth, and prevent sunscald.

Height of tree is proportionate to

10- to 12-inch rootball per 1 inch trunk diameter. Diameter is measured 6 inches above the ball

When choosing trees at the nursery, select a high-quality tree. This illustration identifies points to look for in a dormant tree 5 feet or taller.

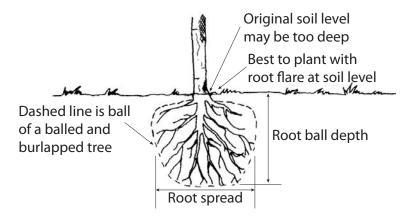
Container Grown Tree. Avoid "root-bound" trees. Roots that circle around the edge of the container may become girdling roots. Pull the tree out of the pot to check if the tree is root bound. Before setting the tree into the planting hole, slice the root system and spread the roots out. Always

Balled and Burlapped Tree. Look for a firm soil ball with trunk securely tied. Do not accept a plant with a broken soil ball. Always carry balled and burlapped plants by the soil ball, not by the trunk, stems, or branches.

Bare Root Tree. Look for abundant root growth; numerous, fibrous small roots; good root color; and moist roots. Do not prune the crown or root system unless to remove dead plant parts.

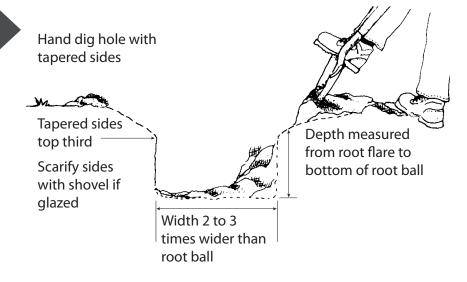
# **Planting Depth**

Planting depth is determined by location of root flare.

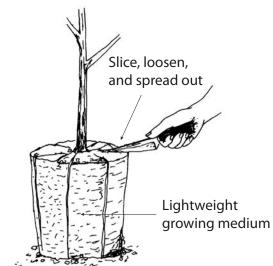


You may plant higher in heavy soils.

# Step 1. Digging the Hole

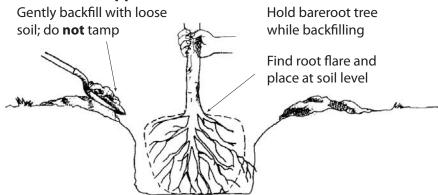


#### **Container Trees**



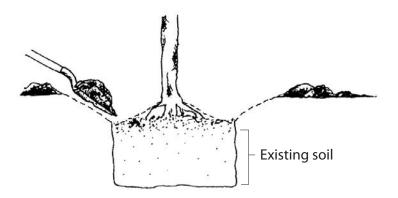
Container trees may be root bound. Remove the container, if any spiraling roots are pencil sized, woody, and brown, select another plant. If spiraling roots are smaller, fibrous, or light colored, simply spread them with a knife, claw, or hay hook. Slice deeply into the root ball from top to bottom in several locations to sever circling roots on the surface and in the interior. Loosen soil and spread roots out to prevent circling. Then follow backfilling steps for a balled and burlapped tree.

## **Balled and Burlapped Trees and Bare Root Trees**



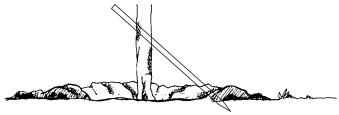
After placing the tree, backfill the bottom half of the hole with the existing soil. Then, without losing the integrity of the root ball, cut and remove the top half of the wire basket. Remove all tying twine and the top portion of the burlap. You may remove the entire wire basket if the root ball will not fall apart when you place it into the hole.

#### Step 3. Backfilling



If your soil is heavy clay or pure sand, you may consider the addition of 25 percent by volume of organic matter and mix with with the original soil in the tapered area of the hole only. If the soil is a loam and drains well, there is no reason to amend the soil.

## **Step 4. Finishing Touches**



Place soil ring 4 to 6 inches high around hole edge to create watering saucer and protect tree from mower damage. A mulch of wood chips and organic matter may be used in the raised saucer. Apply mulch 2 to 4 inches deep with no mulch against the tree trunk. Do not prune unless dead branches exist. Stake if necessary. Anchor just the root ball, not the tree. Leave staking material on for first growing season.

Thoroughly water tree. Remember a bare-root tree needs frequent watering early. A container tree will dry out quicker than a balled and burlapped tree due to lighter soil. Be careful not to over water the tree by too frequent turf or landscape irrigation.

## Tim McDonnell

Kansas Forest Service 2610 Claffin Road Manhattan, KS 66502 Phone: (785) 532-3300

Web site: www.kansasforests.org



This publication is made available in cooperation with the USDA Forest Service.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available on the World Wide Web at: www.ksre.ksu.edu

Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Tim McDonnell, *Selecting and Planting a Tree*, Kansas State University, August 2008.

#### Kansas State University Agricultural Experiment Station and Cooperative Extension Service

L870 August 2008