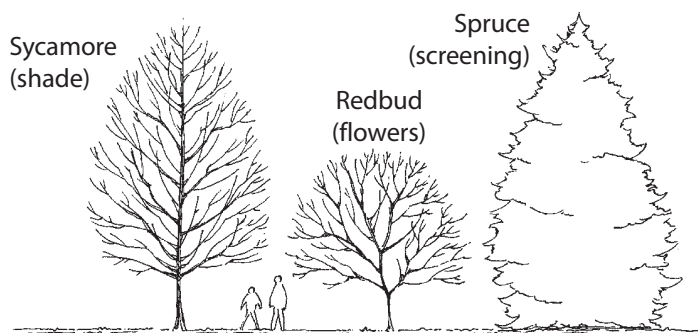


Purchasing Trees

Finding the right tree

Species selection is critical to ensure that a tree will “fit” its planting site. You should know a tree’s future size, shape and overall appearance before purchase. Other characteristics to consider are foliage texture and density, flowers, fruits and fall coloration. Some kinds of trees are very particular about sunlight, moisture and soils; others are less so. Consult good references or talk to a nursery owner or other professional about selecting the right tree for the site.

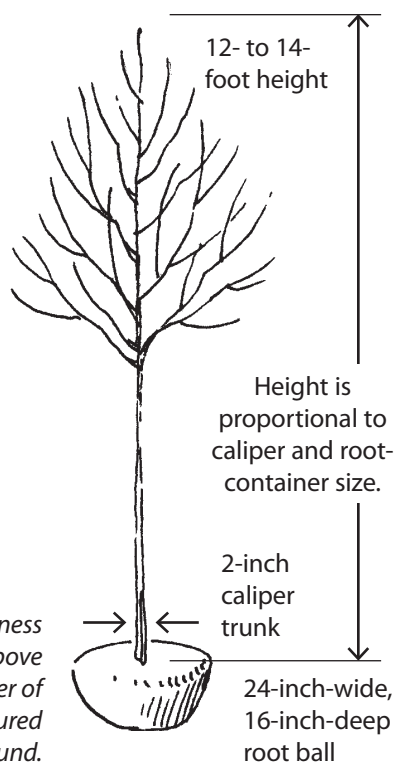


So trees may be used to their—and your—best advantage, it is important to know how they will develop as they mature.

Purchase size

Tree sizes are measured by height or caliper. Height is used for deciduous trees up to 8 feet tall and for evergreen trees. Caliper, or trunk diameter near the ground, is used for deciduous trees taller than 8 feet. Tree sizes increase by one-quarter-inch or one-half-inch caliper increments.

Caliper is the stem thickness measured 6 inches above ground. Trees with a caliper of 4 inches or greater are measured 12 inches above ground.



Before choosing a tree’s size, it is important to consider where it will be planted, along with its purpose, availability, cost and difficulty of handling. It’s best to let a landscape contractor install very large trees.

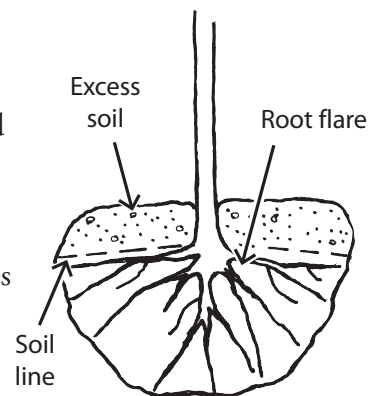
Root-packaging choices

Several methods are used to package tree roots—each influenced by tree species, size or ease of transportation.

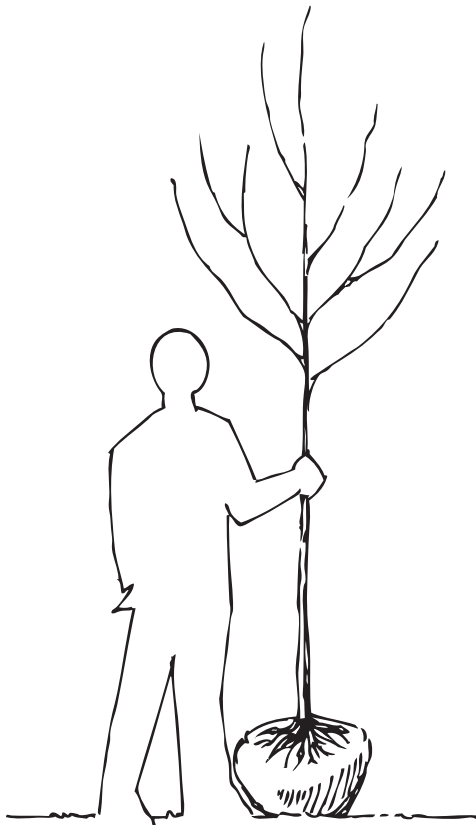
- **Balled-and-burlapped trees** are dug from a nursery bed, with roots in a ball of earth; they are then wrapped in burlap. Even though trees may be carefully grown and lifted, many roots are lost. The earth ball must be kept moist to prevent drying.
- **Potted trees** are dug from a nursery bed, then placed into a container. Containers may be hard or soft walled, but should be removed before planting. Soil in pots must be kept moist before planting.
- **Bare-rooted trees** also are dug from a nursery bed, but soil is removed. They are easier to transport, but much more susceptible to drying. Roots may be wrapped in sphagnum moss or other packing material to hold moisture. Bare-rooted trees usually are less costly, but must be handled and planted carefully.
- **Container-grown trees** are raised directly in a pot or container. Although the entire root system is maintained, roots may become tightly encircled if left too long in the container. This may cause future problems for the tree.

Check root depth before you buy

Before purchasing balled-and-burlapped or container trees, check to be sure that the new tree does not have a great deal of soil added over the root flare. The flare is the point where the top major roots extend out from the tree trunk. Unfortunately, many new trees have the root flare buried under several inches of soil; avoid such trees, if possible.



All containers should be removed prior to planting.



1 ¼-inch-caliper balled-and-burlapped tree.

Purchased trees should have these desirable characteristics

- Root flare visible at soil surface on balled-and-burlapped, potted or container-grown trees
- Long, vigorous branches on current year's growth; well-developed buds
- Pleasing proportion of height to spread; well-developed lateral branches
- Generally straight trunk, with absence of wounds
- Firm, moist root ball or container soil

Costs

Tree costs depend on size, root condition, species, origin and method of growth or culture. Relative prices of trees generally indicate quality, but not always. When estimating the total cost of a planting project, also be sure to include the expense of labor, tools, materials and delivery. In addition, don't forget to include tree maintenance costs after planting.

Transporting and storing trees

Remember that trees are *alive* and should be treated with respect. Protection from drying is critical; roots must be kept moist. Foliage, branches and trunks also can dry out. If trees will be transported by truck, be sure to keep them covered for protection from winds.

It is best to plant trees as soon as possible after they are received. If they must be stored, place them away from excessive exposure to sun and wind. Cover balled-and-burlapped or bare-rooted tree roots with wood chips, sand or loose earth.

Lift trees by their containers or root balls to avoid breaking fine roots and to protect trunks.

Planting your tree

For detailed planting instructions, see our publication, *How to Plant a Tree*.

Standard tree sizes and root-ball weights

Deciduous Trees

Size	Root ball
5 to 6 feet	55 pounds
6 to 8 feet	90 pounds
8 to 10 feet	130 pounds
1 ¼-inch caliper	185 pounds
1 ½-inch caliper	225 pounds
2-inch caliper	390 pounds

Evergreens

Size	Root ball
3 feet	90 pounds
4 feet	130 pounds
5 feet	225 pounds



Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age or disability. Questions should be directed to the Department of Conservation, P.O. Box 180, Jefferson City, MO 65102, (573) 751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.

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