

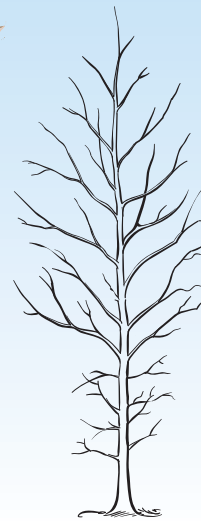
QUALITY NURSERY TREE SELECTION

The quality of a nursery tree for planting can be as important in its success as the maintenance and species selected.

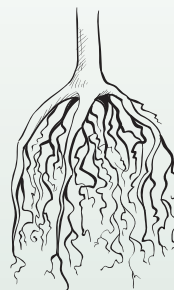
When selecting a tree from a nursery, take into consideration its overall health. Check over the roots, top to trunk characteristics, foliage and branch distribution and be sure it's free from injury and pests.

Root Structure:

Root characteristics have the greatest influence on the survival, vigor and health of a tree. To check for healthy roots, wash or push away the surface soil to examine the root flare. Roots should flare out evenly from the trunk. Checking for other root deformations is difficult without washing away the soil.



Poor root structure



Better root structure

Remove the nursery stake. If the trunk falls over or is loose at the soil line when pulled upwards, it indicates root deformities. These are often not repairable so avoid planting. Then, also examine the periphery roots. If roots appear to be heavily matted, it is overgrown. Overgrown container trees may have poor root structure with kinked or girdling roots.



Trunk characteristics:

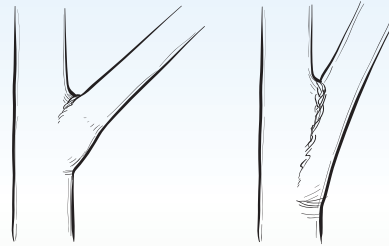
The trunk should have a gradual taper and caliper appropriate for its height. Taper is the decrease of the trunk diameter (caliper) with increasing height. Following are suggested caliper at 6" above soil surface:

| <u>Container Size</u> | <u>Trunk Diameter</u> |
|-----------------------|-----------------------|
| 5 gal | 0.5" to 0.75" |
| 15 gal | 0.75" to 1.5" |
| 24" box | 1.5" to 2.5" |

Trees with taper and appropriate caliper are better able to withstand wind load and stand upright unsupported.

Foliage and branching:

The tree should have healthy foliage free of pests and diseases with good leaf color, size and appearance. The canopy should be free of dead or broken branches. A central leader should be evident and free of co-dominant stems. Branches should be well spaced with appropriate distribution both radially around and vertically along the trunk. Branch diameter should be no larger than $\frac{2}{3}$ the diameter of the trunk at 1" above the branch. Temporary branches should be retained on the upper $\frac{2}{3}$ of the trunk to aid in trunk development.



Good scaffold

Bad scaffold

Freedom from injury, stress and pests:

The tree trunk, branches and leaves should be free of wounds, lesions, diseases, bleeding, insects, and sunburn. The tree should appear free from water stress. The container should have even soil moisture. Some signs of inconsistent soil moisture are root discoloration, shriveling, and foul odors.

When selecting a nursery tree, knowing what is normal for the species is of value. Refer to nursery personnel and other tree resources to assist in selecting a tree.

For more information on tree care refer to the ANR website at <http://anrcatalog.ucdavis.edu>, your local UC Cooperative Extension office or consult a certified arborist.



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