



The University of Georgia



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Tree Planting Series

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YOUNG TREE SPECIFICATIONS

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Below are listed ideal specifications to consider in procuring young trees for shade and street tree plantings. Because no single tree is perfect, not all these specifications can be attained. Deciding which specifications are most critical to a specific planting program or site will require compromise.

As more specification are met, more expense was needed to reach this level of tree quality, and the more expensive a tree becomes. A cost-effective tree program looks beyond the initial tree cost to costs and benefits over time. Select individual specifications that could help meet your management objectives. Remember that after-care and continued maintenance is as important to a sustainable tree as are these ideal specifications. Planting after-care and tree maintenance are often not adequately provided for, or are neglected, which allows trees and sites to be stress ridden, wounded, structurally unsound, and pest susceptible.

The objective of these specifications is to improve the quality of life for both new trees and surrounding people over a long period of time. These specifications are intended to minimize both tree and site liability and management costs, as well as maximizing tree values and benefits. Good quality control on trees being produced and purchased are the foundation of a cost-effective and sustainable community forest management program.

Ideal New Tree Specifications

Species –

- 1) Tree should be certified in writing as to scientific, variety, and/or cultivar name and seed source location.

Tree Form –

- 2) Tree should be fully open-grown for wind-firmness.
- 3) Tree should not appear “leggy” or excessively slender. Tree must stand on its own and resist wind deflection.
- 4) Tree should not have been staked in the nursery.
- 5) Tree should be entirely free from stress / pest signs and symptoms.
- 6) Tree should have a single dominant leader with no side branches taller than the main leader. Tree should not have a flat top.
- 7) Trees should not have all branches growing from a single area on the stem (clustered or crowned). Trees with branches normally growing in whorls should have only 3-4 branches per whorl.
- 8) Tree should have branches distributed along the stem in an alternating pattern and not occurring horizontally opposite each other across the stem.
- 9) Tree should not be leaning or have significant sweep, crook, or bend.

Crown –

- 10) Tree should have a good crown shape and color (if evergreen).
- 11) Tree should have approximately two-thirds of its total height in living branches.
- 12) Tree should show vigorous and substantial growth for at least the last two growing seasons.
- 13) Tree should not have stem base sprouts, first-year stem sprouts, sprouts around wound areas, or sprouts around branch bases.

Pruning –

- 14) Tree should have been properly target pruned, never flush cut, stubbed back, flat-topped, trimmed, rounded-over, hedged, tipped, or topped.
- 15) Tree should have no stub or tip cutting wounds.

- 16) Tree should not have any visible branch stubs or internodal cuts present.
- 17) Tree should have no bark damage or basal, stem, or main root base scars.
- 18) Tree should not have vertical crack closures over old wounds. Proper pruning wound closures should be circular.
- 19) Tree should not have been treated at any time with wound paint.

Training --

- 20) Tree should have no forks or dead leaders even on opposite branching species.
- 21) Tree should have no narrow crotches with ripples and included bark.
- 22) Tree should have no side branches taller than the main leader.
- 23) Tree should have no branch more than one-third the diameter of the main leader where it is attached.
- 24) Tree should not have branches that cross-over each other or rub against each other.
- 25) Tree should not have branches growing upward inside the crown.

Roots –

- 26) Tree should have a root ball size that minimally meets nursery standards. Strive for a root ball at 150% of standard root ball size.
- 27) Tree should have been root pruned one or more times. The last root pruning should have occurred at least one full growing season before installation.
- 28) Tree should not have large roots cut close to the root crown / stem base.
- 29) Tree base should show (above soil) the top 1/3 of 2-3 large structural roots.

Packaging –

- 30) Tree should be unwrapped to examine. Stems should be wrapped for shipment and installation. Remove wrap promptly.
- 31) All holding and shipping materials should be easily removable without damaging the tree.
- 32) All loading should be focused on lifting by the roots while stabilizing the stem.