**Poodle:** A plant that is pruned and trained into balls or other formal shapes.

**Root-ball diameter:** The average diameter of the widest portion of the root ball and that perpendicular to it. This shall be measured near the top of the root ball.

**Roots growing out of the container:** Trees can be downgraded if roots greater than \( \frac{1}{5} \) the diameter of the trunk are growing out the bottom of the container or out of the grow bag (Fig. 9).

![Fig. 9. Two roots greater than \( \frac{1}{5} \) the diameter of the trunk growing out the bottom of the container.](image)

**Secondary branches:** Branches originating from primary or major branches.

**Sturdy in the root ball:** When the trunk bends along its vertical length instead of pivoting at the base of the trunk, or moving in the root ball when the root ball of a container-grown plant can be slipped from the container with all or most of the media intact with the roots.

**Temporary branches:** Short branches meant to be pruned from the tree in the near future as the tree grows and produces major branches.

**Topiary:** A formal, man-manipulated plant form, either tree or shrub, developed and maintained by frequent clipping and shearing. Such forms include standards, sheared pyramids, espaliers, columns, animal topiaries, large bonsai and other special shapes. Enter the grading process at Step 6, skipping steps 1-5, when grading topiaries. Trees planted as topiaries are usually maintained in that form in the landscape by regular trimming of the branches. They are not meant to be grown out in the landscape to the natural shape or size of the plant. The natural form is not allowed to develop (see Fig. 10).

![Fig. 10. A topiary is sheared or trimmed to a variety of shapes, including a pyramid.](image)

**Tree height:** Tree height is measured from the ground to the topmost portion of the tree (see Fig. 11). Height must be measured before pruning the tree. On small, multitrunked trees such as crape-myrtle, Japanese ligustrum and wax-myrtle, tree height is measured to the top of the main body of the crown.

![Fig. 11. Measuring tree height.](image)

**Trunk dogleg:** A significant ‘s’-shaped deformation in the trunk (see Fig. 12). A dogleg in the crown is not a downgrading factor.

![Fig. 12. The angle ‘A’ can be no more than 30°. The distance ‘B’ can be no more than the trunk diameter.](image)

**Trunk wound:** A trunk injury that is open and not sealed over, or closed. A properly executed pruning cut that is not closed over is not considered a trunk wound.
REFERENCES FOR TREES


SHADE TREE APPENDIX

1. Florida Fancy live oak in winter. There is one dominant leader.

2. Florida Fancy live oak in late spring. The dominant leader curves slightly up through the canopy. This is perfectly acceptable for a Florida Fancy.

3. Florida Fancy live oak recently transplanted. Major branches are spaced apart nicely along a dominant trunk.

4. Florida Fancy live oak in spring. Dominant leader curves up through the canopy of this 9-inch diameter tree.
5. Florida Fancy live oak in spring. Major branches are all less than 2/3 the trunk diameter so none are considered competing leaders.

6. Florida Fancy live oak. Major branches are all less than 2/3 the trunk diameter and are spaced at least 6" apart along the trunk. Several small-diameter branches are growing upright at the top of the tree. These can be removed, or preferably cut back to a more horizontal branch, to ensure the leader remains dominant.

7. After two or three of the small-diameter upright branches at the very top of the tree are removed or cut back to a more horizontal branch, this tree becomes a Florida Fancy.

8. Looking up the trunk of a Florida Fancy tree.

10. Florida #1 live oak. There is one dominant trunk in the lower half of the tree, but the trunk forks in the top half. If one of the two small trunks at the top of the tree were removed, the tree would probably grade to a Florida Fancy. Another alternative which takes less foliage out of the tree is to cut one of the two trunks back to a more horizontally oriented branch. As the tree grows in the months after pruning, the trunk will grow faster than the cut branch. As a result, the branch will become less than 2/3 the diameter of the trunk which makes the tree a Florida Fancy.

11. Florida #1 live oak. Diameter on all branches is less than 2/3 the trunk diameter but the trunk has a 10 to 15 degree bow in it making the tree Florida #1.

12. Florida #2 live oak. The large branch on the right is larger than 2/3 the trunk diameter and is in the lower half of the tree making it a Florida #2. Prune the top of the branch back about halfway to the small, more horizontally-oriented branch. Next year the tree will grade a Florida Fancy or #1 because the trunk will grow at a faster rate than the branch. This will make the branch diameter less than 2/3 the trunk diameter.
13. The tree has a double leader in the top half of the tree about four feet from the top making it a Florida #1. Reduce the height of the smaller leader on the left by pruning it back to a more horizontal branch or removing the leader altogether. This will make the tree a Florida Fancy next year.

14. Take out the right hand fork at the top of the tree and this Florida #1 becomes a Florida Fancy trunk and branch structure. However, the canopy is not full and is a bit one-sided which will keep this a Florida #1.

15. The large branch in the upper half of the tree on the right side is larger than 2/3 the diameter of the trunk making this a Florida #1.

16. Florida #2 live oak. There is one central trunk and no branches have a diameter larger than 2/3 the trunk diameter. This would make the tree a Florida Fancy except for the two major branches that are within 4' of each other four and eight feet off the ground.
17. The large branch at left in the bottom half of the tree is greater than 2/3 the trunk diameter. This makes the tree Florida #2. Remove the upper half of this branch now by pruning back to a more horizontal branch. This allows the tree to fill in the void space with foliage from branches above. The rest of the large lower branch can be removed next year. This process will upgrade the tree.

18. Two equally sized trunks originate from the lower half of the tree, making this a Florida #2. Remove the left trunk now and in about 18 months the canopy will probably be upgraded to at least a Florida #1.

19. The diameter of the large branch in the lower half of the tree on the right is larger than 2/3 the trunk diameter. This makes the tree a Florida #2. Remove the top half of this branch by pruning back to a more horizontal branch. Remove all secondary branches growing in toward the main trunk. Six months later, remove the rest of the branch back to the main trunk. The tree that remains has one trunk to the top of the tree. About 12 months later the tree will be filled in on the right and could be a Florida Fancy.

20. The diameter of a branch relative to the trunk is an important comparison that is made in the tree grades and standards. Measure the branch diameter just beyond the crotch and beyond any swelling that may be present at the base of the branch. Measure the trunk diameter just above the branch crotch. The tree is downgraded if the branch diameter is greater than 2/3 the trunk diameter.
21. Two major branches of nearly equal size originating from within 6" (Florida Fancy) or 4" (Florida #1) of each other is a downgrading factor.

22. Two major branches of nearly equal size originating from within 6" (Florida Fancy) or 4" (Florida #1) of each other is a downgrading factor.

23. This is a double leader because one is at least 2/3 the diameter of the other.

24. This is a Florida Fancy trunk because branches are spaced apart and none are larger than 2/3 the diameter of the trunk. Note that the trunk does not have to be straight on a Florida Fancy.
25. This trunk has a slight dogleg but not enough to downgrade it to a lower grade.

26. This trunk has a dogleg nearly bad enough to downgrade the tree. If the dogleg was any worse, the tree would be downgraded.

27. Note the included bark in the branch crotch. The branch bark ridge is not visible because it is included inside the crotch. The crotch is shaped like the letter "V".

28. Note the included bark in the branch crotch. The branch bark ridge is not visible because it is included inside the crotch. The crotch is shaped like the letter "V".
29. There is no included bark in this crotch. The branch bark ridge is clearly visible in the crotch as a raised area of bark tissue.

30. There is no included bark in this crotch. The branch bark ridge is clearly visible in the crotch as a raised line of bark tissue. The crotch is more or less shaped like the letter 'U'.

31. This is a properly executed pruning cut leaving the branch bark ridge intact on the trunk.
NARROW, UPRIGHT TREE APPENDIX

Araucaria spp.
Betula nigra and cultivars
Cryptomeria spp.
Cunninghamia
X Cupressocyparis leylandii and cultivars
Cupressus spp.
Gordonia lasianthus and cultivars
Ilex spp.
Juniperus virginiana and J. silicicola
Liquidambar spp. and cultivars
Magnolia grandiflora and cultivars
Magnolia virginiana and cultivars
Nyssa spp.
Pinus spp.
Pyrus calleryana cultivars
Taxodium spp.

SMALL, ORNAMENTAL TREE APPENDIX

Acacia farnesiana
Acer palmatum and cultivars
Caesalpinea pulcherrima
Callistemon spp. and cultivars
Cassia bicapsularis
Chionanthus retusus
Chionanthus virginicus
Citrus spp.
Guaiacum spp.
Ilex vomitoria and cultivars
Lagerstroemia cultivars
Ligustrum japonicum
Magnolia x soulangiana
Malphigia glabra
Malus spp. and cultivars
Myrica cerifera
Parkinsonia aculeata
Photinia spp. and cultivars
Platycladus orientalis
Plumeria spp.
Prunus spp. and cultivars
Psidium spp.
Tecoma stans