



LEE COUNTY
SOUTHWEST FLORIDA

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July 8, 2008

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Distribution to: Tree Service Contractors
Property Management Companies
Landscape Architects
Landscape Installation Contractors
Lawn Maintenance Contractors

FORMAL WARNING

This letter is to formally warn all parties associated with tree care that excessive or severe tree pruning; such as hat racking, topping, shaping, balling or poodle tailing of trees on development sites will be subject to swift and increased enforcement.

In November of 2001, the Lee County Board of County Commissioners unanimously directed staff to increase enforcement efforts through court citations and seek court injunction against repeat excessive tree pruning offenders. This enforcement action is pursuant to Lee County Land Development Code Section 10-421(c). Severe pruning is considered irreparable damage to trees. No further warning tickets will be issued. Citations, to both property owner or manager and the tree pruning contractor will be issued for all violations of this requirement. The citations will have the following fines:

| | |
|------------------------|--------------------------|
| First offense: | \$100.00 per tree |
| Second offense: | \$250.00 per tree |
| Third offense: | \$500.00 per tree |

Please note that the fine will apply to **each** tree excessively pruned. As an example, for a first offense, if 15 trees are excessively pruned on a commercial site, a citation will be issued to the tree contractor for \$1,500.00 and another citation will be issued to the property owner for \$1,500.00. If the trees are so severely pruned that corrective pruning will not structurally conserve the tree, an additional Notice of Violation will be issued to the property owner requiring three trees be replanted for every tree excessively pruned.

The correct pruning of trees is a needed and appropriate maintenance function. If an occasion arises where severe pruning must occur to meet a particular functional problem, call the Division of Environmental Sciences at 239-533-8389 to discuss the issue and the issuance of a tree removal permit.

Regards,
DEPARTMENT OF COMMUNITY DEVELOPMENT

Mary Gibbs

Mary Gibbs, Director
mxg/rtn

Attachments

S:\1 Environmental Sciences\FORMS\Tree Pruning Letter.wpd

Lee County Tree Maintenance Requirements

The conservation of existing trees and the planting of new trees on development sites is required by the Lee County Land Development Code. Both retained and new trees provide breaks in the urban landscape and offer many benefits. These benefits include: providing oxygen, conserving energy, filtering water, creating a cooling canopy, absorbing noise, reducing glare, creating areas for wildlife and increased property values.

Trees can be pruned to address visibility and safety while maintaining their structural integrity. The intent of tree maintenance is to allow required trees to grow into normal, mature landscape features and is required by Section 10-421 (c) of the Lee County Land Development Code which states:

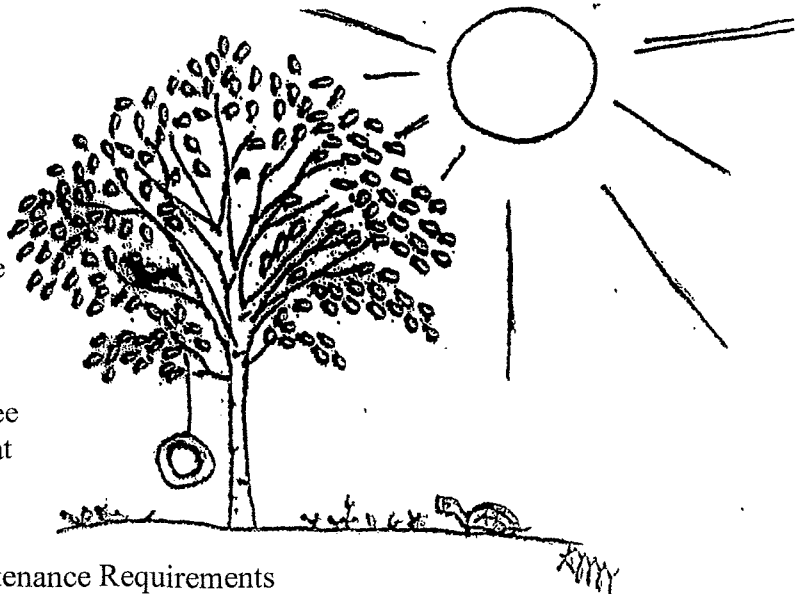
(c) Pruning. Vegetation required by this code may only be pruned to promote healthy, uniform, natural growth of the vegetation (except where necessary to promote health, safety, and welfare) and be in accordance with "American National Standard for Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices (Pruning) (A300, Part 1)" by the American National Standard Institute, and "Best Management Practices: Tree Pruning" by the International Society of Arboriculture (ISA).

Trees must not be severely pruned to permanently maintain growth at a reduced height or spread. Pruning must not interfere with the design intent of the original installation. Severely pruned trees must be replaced by the property owner. Replacement trees must meet the tree size requirements of LDC section 10-420. A plant's growth habit must be considered in advance of conflicts which might arise (i.e. views, signage, overhead power lines, lighting, circulation, sidewalks, buildings, and similar conflicts).

Tree topping and severe crown pruning practices are a threat to trees. This type of pruning is also known as hat-racking, balling, rounding over, poodle tailing and lollipopping. This practice shears off the top part of the tree crown regardless of branching structure causing dense new growth that is weakly attached. As the tree grows, the weakly attached branches can split from the tree, especially in high winds. Some topped trees are so severely injured that they must be replaced, but most can be properly pruned to improve the health and strength.

It is extremely important to plan your landscape to avoid future pruning problems. Appropriate plant selection can result in a reduced need for extensive pruning and maintenance.

For information regarding plant selection and tree protection contact the Lee County Division of Environmental Sciences staff @ 239-533-8389. Information on landscape maintenance and plant pruning can also be obtained by contacting the Lee County - University of Florida Extension Office at 239-533-4327.



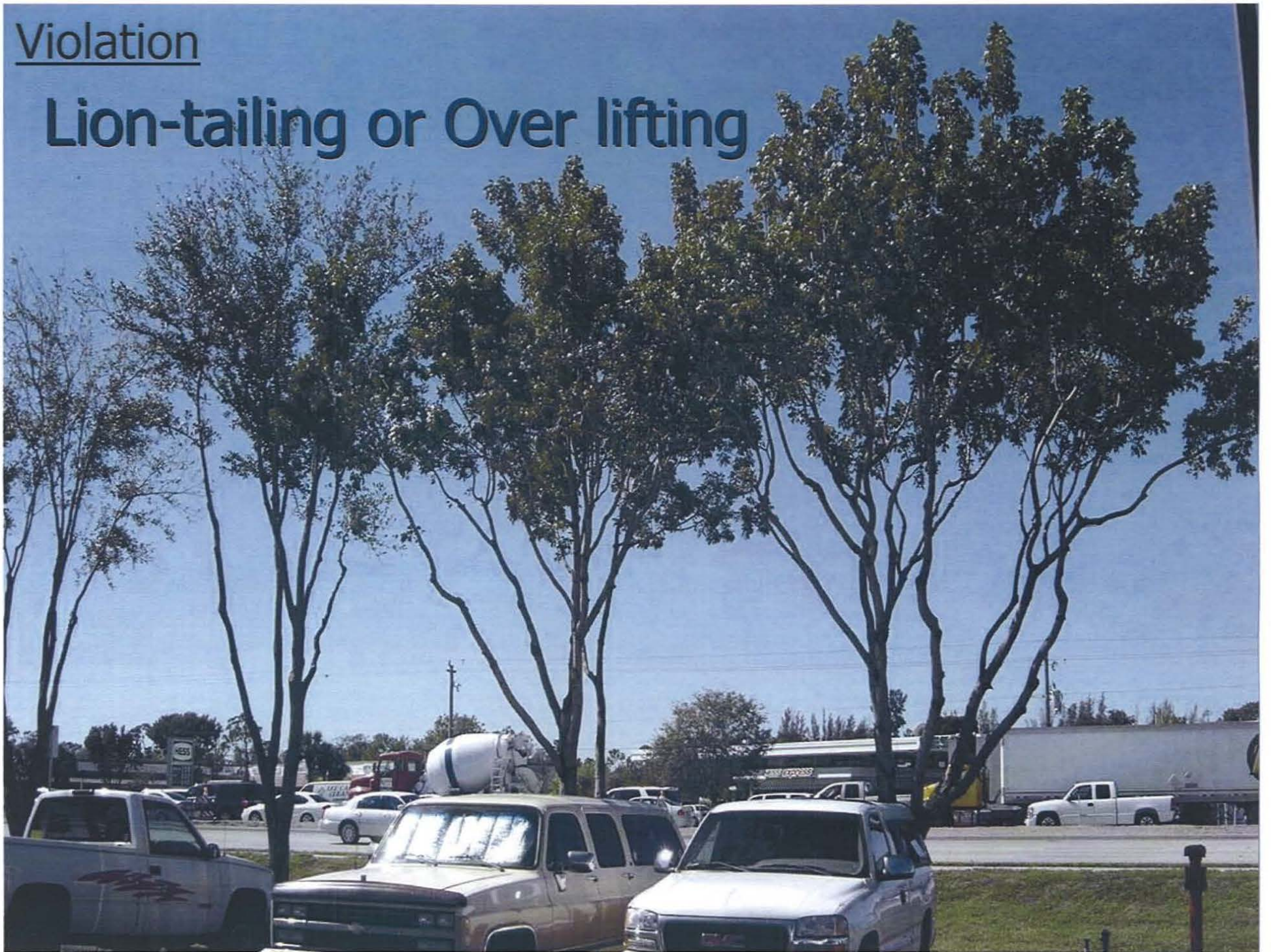
Lee County Land Development Codes

- 14-411 - No person, organization, society, association, corporation, or any agent or representative thereof, shall deliberately cut down, destroy, remove, relocate, defoliate through the use of chemicals or other methods, or otherwise damage any tree that is protected under this article and located in the unincorporated areas of the county, without first obtaining a permit as provided in this article.
- 10-421 (c) - Vegetation required by this code may only be pruned to promote healthy, uniform, natural growth of the vegetation (except where necessary to promote health, safety, and welfare) and be in accordance with "American National Standard for Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices (Pruning) (A300, Part 1)" by the American National Standard Institute, and "Best Management Practices: Tree Pruning" by the International Society of Arboriculture (ISA).

Most Common and Severe Tree Pruning Violations in Lee County

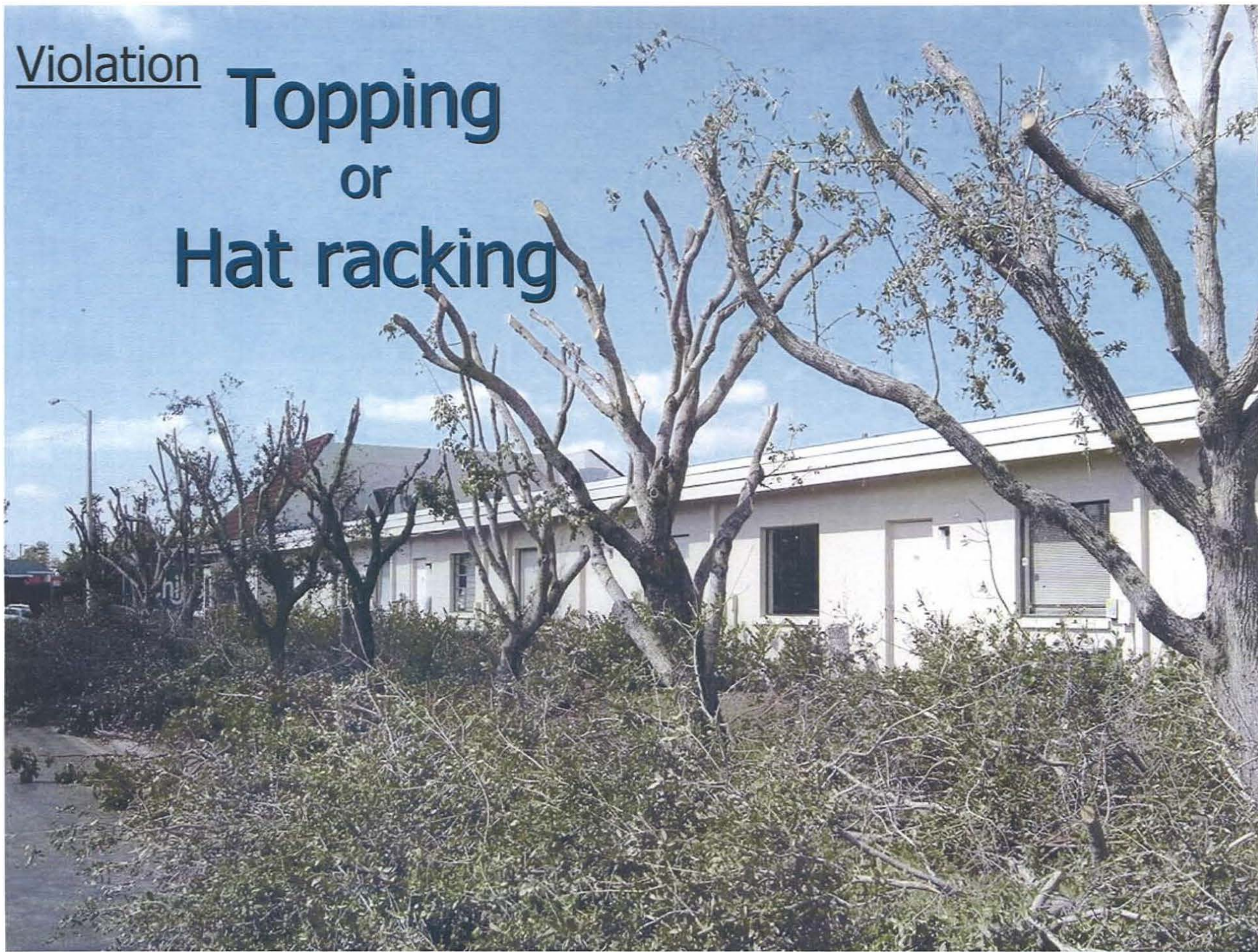
Violation

Lion-tailing or Over lifting



Violation

Topping or Hat racking



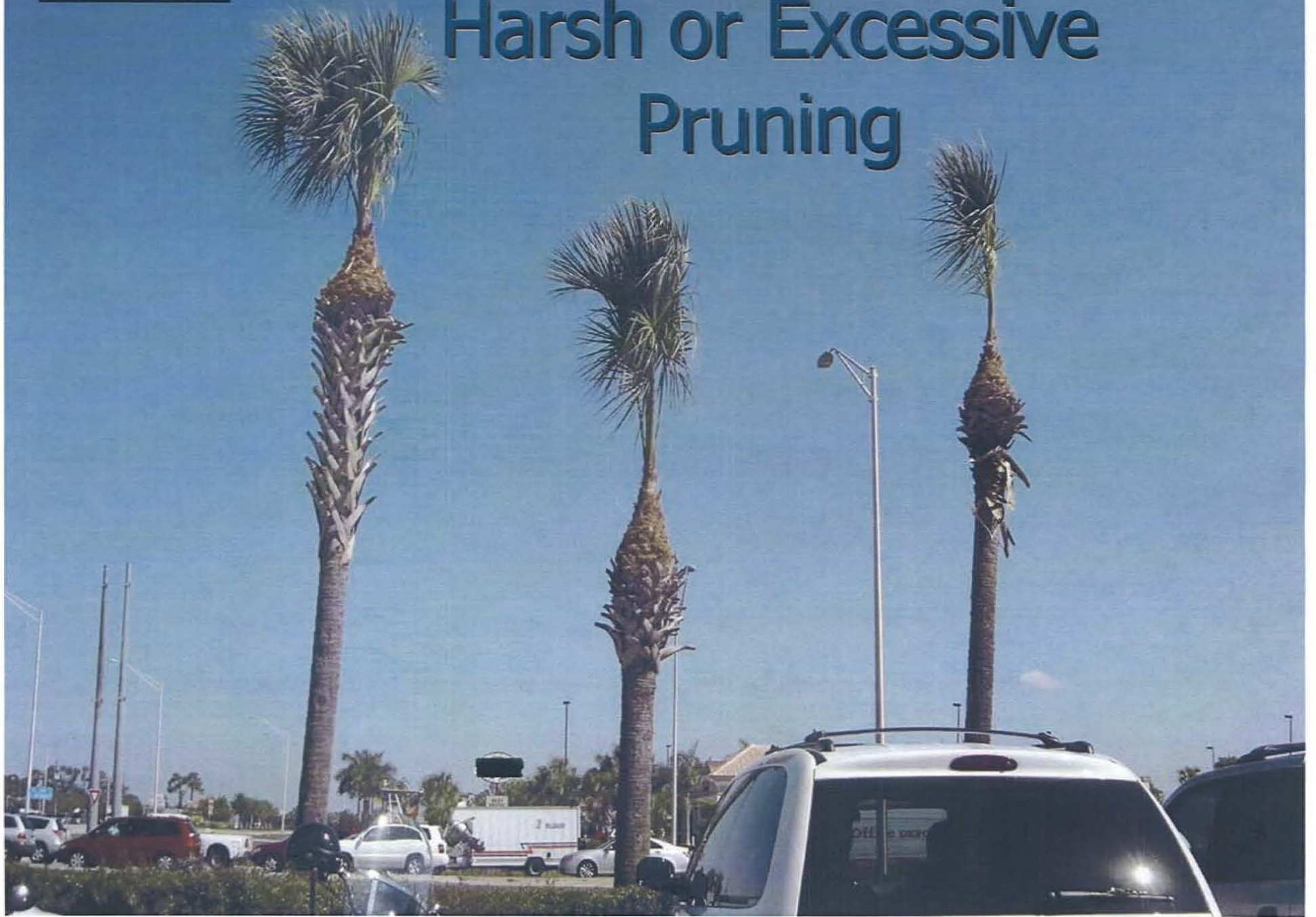
Violation

Rounding, Shaping, Balling



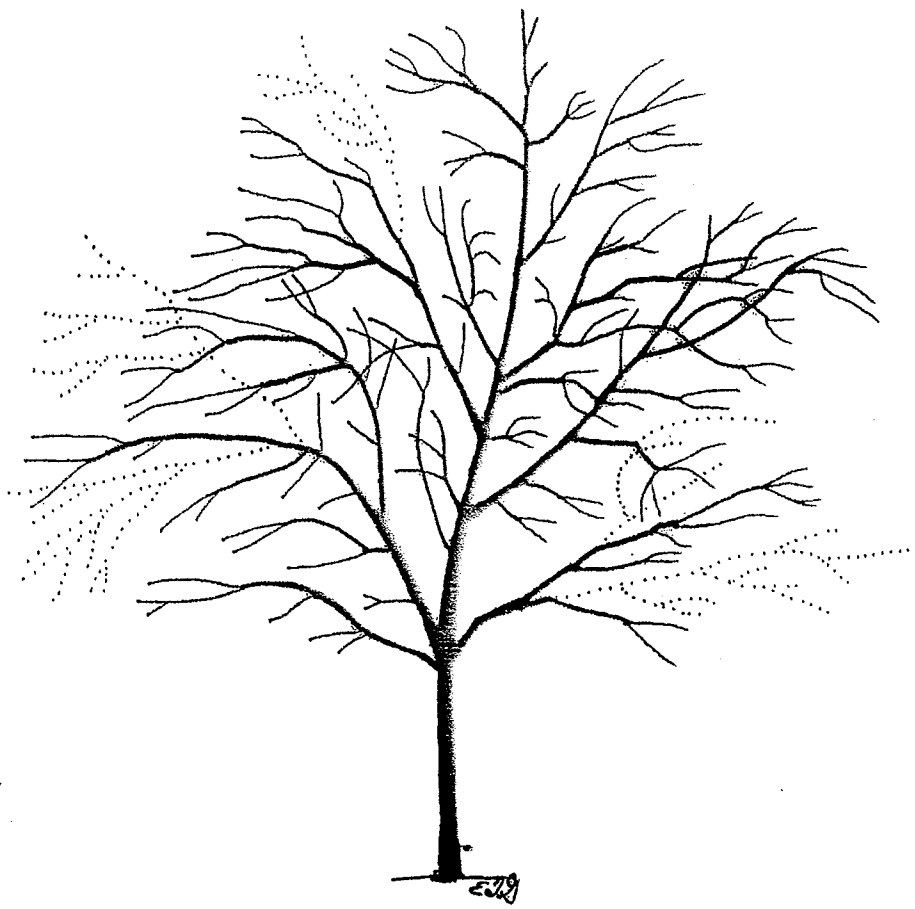
Violation

Harsh or Excessive Pruning



Best Management Practices

TREE PRUNING



Companion publication to the ANSI A300 Part 1: Tree, Shrub, and Other Woody Plant Maintenance—Standard Practices, Pruning



■ Professional arborists can determine what type of pruning is necessary to improve the health, appearance, and safety of your trees.

Hiring an Arborist

Pruning large trees can be dangerous. If pruning involves working above the ground or using power equipment, it is best to hire a professional arborist. An arborist can determine the type of pruning that is necessary to improve the health, appearance, and safety of your trees. A professional arborist can provide the services of a trained crew, with all of the required safety equipment and liability insurance.

When selecting an arborist,

- check for membership in professional organizations such as the International Society of Arboriculture (ISA), the Tree Care Industry Association (TCIA), or the American Society of Consulting Arborists (ASCA). Such membership demonstrates a willingness on the part of the arborist to stay up to date on the latest techniques and information.
- check for ISA arborist certification. Certified Arborists are experienced professionals who have passed an extensive examination covering all aspects of tree care.
- ask for proof of insurance.
- ask for a list of references, and don't hesitate to check them.
- avoid using the services of any tree company that
 - advertises topping as a service provided. Knowledgeable arborists know that topping is harmful to trees and is not an accepted practice.
 - uses tree climbing spikes to climb trees that are being pruned. Climbing spikes can damage trees, and their use should be limited to trees that are being removed.

This brochure is one in a series published by the International Society of Arboriculture as part of its consumer information program. You may have additional interest in the following titles currently in the series:

- Avoiding Tree and Utility Conflicts
- Avoiding Tree Damage During Construction
- Benefits of Trees
- Buying High-Quality Trees
- Insect and Disease Problems
- Mature Tree Care
- New Tree Planting
- Plant Health Care
- Proper Mulching Techniques
- Pruning Mature Trees
- Pruning Young Trees
- Recognizing Tree Hazards
- Treatment of Trees Damaged by Construction
- Tree Selection
- Trees and Turf
- Value of Trees
- Why Hire an Arborist
- Why Topping Hurts Trees



Developed by the International Society of Arboriculture (ISA), a nonprofit organization supporting tree care research around the world and dedicated to the care and preservation of shade and ornamental trees. For further information, contact ISA, P.O. Box 3129, Champaign, IL 61826-3129, U.S.

www.isa-arbor.com
www.treesaregood.com

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Why Topping Hurts Trees

Topping is perhaps the most harmful tree pruning practice known. Yet, despite more than 25 years of literature and seminars explaining its harmful effects, topping remains a common practice. This brochure explains why topping is not an acceptable pruning technique and offers better alternatives.

What is Topping?

Topping is the indiscriminate cutting of tree branches to stubs or lateral branches that are not large enough to assume the terminal role. Other names for topping include "heading," "tipping," "hat-racking," and "rounding over."

The most common reason given for topping is to reduce the size of a tree. Home owners often feel that their trees have become too large for their property. People fear that tall trees may pose a hazard. Topping, however, is not a viable method of height reduction and certainly does not reduce the hazard. In fact, topping will make a tree more hazardous in the long term.



Topping Stresses Trees

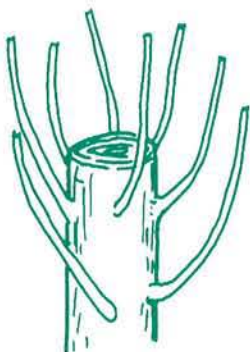
Topping often removes 50 to 100 percent of the leaf-bearing crown of a tree. Because leaves are the food factories of a tree, removing them can temporarily starve a tree. The severity of the pruning triggers a sort of survival mechanism. The tree activates latent buds, forcing the rapid growth of multiple shoots below each cut. The tree needs to put out a new crop

■ Topping is cutting branches back to stubs or lateral branches not large enough to sustain the remaining branch.



of leaves as soon as possible. If a tree does not have the stored energy reserves to do so, it will be seriously weakened and may die.

A stressed tree is more vulnerable to insect and disease infestations. Large, open pruning wounds expose the sapwood and heartwood to attacks. The tree may lack sufficient energy to chemically defend the wounds against invasion, and some insects are actually attracted to the chemical signals trees release.

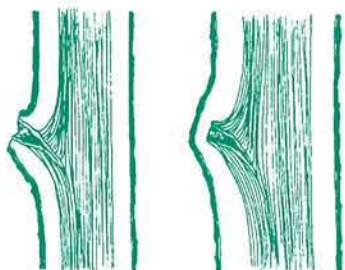


■ New shoots develop profusely below a topping cut.

Topping Causes Decay

The preferred location to make a pruning cut is just beyond the branch collar at the branch's point of attachment. The tree is biologically

equipped to close such a wound, provided the tree is healthy enough and the wound is not too large. Cuts made along a limb between lateral branches create stubs with wounds that the tree may not be able to close. The exposed wood tissues begin to decay. Normally, a tree will "wall off," or compartmentalize, the decaying tissues, but few trees can defend the multiple severe wounds caused by topping. The decay organisms are given a free path to move down through the branches.



■ The tree will close a well-positioned cut as new wood is produced. Normally, it will compartmentalize any internal decay.



■ Leaving a stub maintains an open pathway to decay.

Topping Can Lead to Sunburn

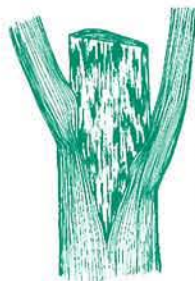
Branches within a tree's crown produce thousands of leaves to absorb sunlight. When the leaves are removed,

the remaining branches and trunk are suddenly exposed to high levels of light and heat. The result may be sunburn of the tissues beneath the bark, which can lead to cankers, bark splitting, and death of some branches.

Topping Creates Hazards

The survival mechanism that causes a tree to produce multiple shoots below each topping cut comes at great expense to the tree. These shoots develop from buds near the surface of the old branches. Unlike normal branches that develop in a socket of overlapping wood tissues, these new shoots are anchored only in the outermost layers of the parent branches.

The new shoots grow quickly, as much as 20 feet in one year, in some species. Unfortunately, the shoots are prone to breaking, especially during windy conditions. The irony is that while the goal was to reduce the tree's height to make it safer, it has been made more hazardous than before.



■ Stubs left from topping usually decay. The shoots that are produced below the cut are weakly attached and often become a hazard.

Topping Makes Trees Ugly

The natural branching structure of a tree is a biological wonder. Trees form a variety of shapes and growth habits, all with the same goal of presenting their leaves to the sun. Topping removes the ends of the branches, often leaving ugly stubs. Topping destroys the natural form of a tree.

Without leaves (up to 6 months of the year in temperate climates), a topped tree appears disfigured and mutilated. With leaves, it is a dense ball of foliage, lacking its simple grace. A tree that has been topped can never fully regain its natural form.



■ Trees that have been topped may become hazardous and are unsightly.

Topping Is Expensive

The cost of topping a tree is not limited to what the perpetrator is paid. If the tree survives, it will require pruning again within a few years. It will either need to be reduced again or storm damage will have to be cleaned up. If the tree dies, it will have to be removed.

Topping is a high-maintenance pruning practice, with some hidden costs. One is the reduction in property value. Healthy, well-maintained trees can add 10 to 20 percent to the value of a property. Disfigured, topped trees are considered an impending expense. Another possible cost of topped trees is potential liability. Topped trees are prone to breaking and can be hazardous. Because topping is considered an unacceptable pruning practice, any damage caused by branch failure of a topped tree may lead to a finding of negligence in a court of law.



■ If the height of a tree must be reduced, all cuts should be made to strong laterals or to the parent limb. Do not cut limbs back to stubs.

Alternatives to Topping

Sometimes a tree must be reduced in height or spread. Providing clearance for utility lines is an example. There are recommended techniques for doing so. If practical, branches should be removed back to their point of origin. If a branch must be shortened, it should be cut back to a lateral that is large enough to assume the terminal role. A rule of thumb is to cut back to a lateral that is at least one-third the diameter of the limb being removed.

This method of branch reduction helps to preserve the natural form of the tree. However, if large cuts are involved, the tree may not be able to close over and compartmentalize the wounds. Sometimes the best solution is to remove the tree and replace it with a species that is more appropriate for the site.



**NO
Harsh
Pruning!**
a harmful and unnecessary
practice

Information gathered from:

Bertrock's Guide To Landscape Palms
Alan Meerow, 1992

An Illustrated Guide to Pruning
Delmar Publishers, 1997

The Sabal Palm A Native Monarch
Barbara Oehlbeck, 1996

Bernie Peterson
"Rockledge Gardens palm expert"

And Supported by:

Brevard County Cooperative Extension Service
(407) 633-1702

The Indian River Audubon Society
(407) 452-3609

The Central Florida Palm and Cycad Society
(407) 724-8417


The Florida Native Plant Society
(727) 856-8202
www.flmnh.ufl.edu/fnps/fnps.htm

The Marine Resources Council of East Florida
(407) 504-4500



Brochure created by Amy Mosher and friends
in an effort to save Florida's natural landscape.

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 Printed on recycled paper

Protect Florida's
Vulnerable
State Tree



The Sabal Palm
Sabal Palmetto

Consider the Facts of Harsh Pruning

- **Cutting healthy green fronds** steals the palms' source of nutrients, permanently stunts growth, invites disease and reduces the palms' natural resilience to high winds.
- **Cutting fronds** reduces valuable shade, increases ground water evaporation and creates a need for irrigation.
- **Over-pruned palms** develop bottleneck trunks. In high winds and hurricanes this stressed and weakened point will cause the palm to break off and die.
- **Pruning of protective green fronds** makes the palm's heart cold-sensitive and susceptible to winter frosts and freezes.
- **Harsh pruning** causes native and migratory songbirds, woodpeckers, butterflies, honey bees, treefrogs, bats, anoles, squirrels, and other wildlife to lose valuable food, shelter and nesting area.
- **Work boots with climbing spikes** incur wounds in the

trunk, leaving the palm prone to disease.

- **Sabal Palms** (commonly known as cabbage palms) are self-pruning palms, shedding dead fronds in high winds. They have survived droughts, fires and floods, enriched the soil and adapted to coastal and inland environments for thousands of years. Their spring flowers and winter berries are vitally important to the survival of migratory birds and Florida's indigenous wildlife species.



*Acceptable Pruning

Harsh Pruning

Long Term Effects

*Though not necessary, it is acceptable to prune brown and yellow fronds hanging below an imaginary horizon line. Pole pruners work best. Prune stems away from the trunk.

Green fronds should not be pruned.

You Can Make A Difference

- **Do not cut green fronds.**
- **Say NO to landscapers who want to prune green fronds. Exclude annual harsh-pruning from your landscape contract.**
- **Keep lawn mowers, weed eaters and chain saws away from the trunk. These wounds are permanent and allow disease to enter the palm.**
- **Mulch around palms to conserve water and keep out weeds, eliminating the need for weed eaters.**
- **Enjoy your landscape, add fallen fronds to your compost or brush pile for wildlife. Fronds make rich soil for use in garden beds!**
- **Work together to save and protect our valuable Sabal Palm, an integral part of Florida's ecosystems.**
- **Help spread the facts. Copy this information to help educate others!**

APPENDIX E PROTECTED TREE LIST

LEE COUNTY PROTECTED TREE LIST*

***Note:** All members of these families are not included on the Lee County Protected Tree List, only those species listed in this appendix.

TABLE INSET:

| Scientific Name | Family Name | Common Name |
|---------------------------------|--|--------------------|
| | ACERACEAE (MAPLE FAMILY) | |
| <i>Acer rubrum</i> | | Red Maple |
| | ANACARDIACEAE (CASHEW FAMILY) | |
| <i>Rhus copallina</i> | | Southern Sumac |
| | ANNONACEAE (CUSTARD-APPLE FAMILY) | |
| <i>Annona glabra</i> | | Pond Apple |
| | AQUIFOLOIACEAE (HOLLY FAMILY) | |
| <i>Ilex cassine</i> | | Dahoon Holly |
| | ARECACEAE (PALM FAMILY) | |
| <i>Coccothrinax argentata</i> | | Silver Palm |
| <i>Cocos nucifera</i> | | Coconut Palm |
| <i>Roystonea elata</i> | | Florida Royal Palm |
| <i>Sabal palmetto</i> | | Cabbage Palm |
| | AVICENNIACEAE (BLACK MANGROVE FAMILY) | |
| <i>Avicennia germinans</i> | | Black Mangrove |
| | BETULACEAE (BIRCH FAMILY) | |
| <i>Carpinus caroliniana</i> | | Iron Wood |
| | BORAGINACEAE (BORAGE FAMILY) | |
| <i>Cordia sebestena</i> | | Geiger Tree |
| | BURSERACEAE (TORCHWOOD FAMILY) | |
| <i>Bursera simaruba</i> | | Gumbo limbo |
| | CAPPARACEAE (CAPER FAMILY) | |
| <i>Capparis cynophallophora</i> | | Jamaica Caper |
| | COMBRETACEAE (WHITE MANGROVE FAMILY) | |
| <i>Bucida buceras</i> | | Black Olive |
| <i>Conocarpus erecta</i> | | Buttonwood |

| Scientific Name | Family Name | Common Name |
|-----------------------------|---|----------------------|
| Laguncularia racemosa | | White Mangrove |
| | CORNACEAE (DOGWOOD FAMILY) | |
| Cornus foemina | | Swamp Dogwood |
| | CUPRESSACEAE (CYPRESS FAMILY) | |
| Juniperus silicicola | | Southern Red Cedar |
| | EBENACEAE (EBONY FAMILY) | |
| Diospyros virginiana | | Persimmon |
| | FABACEAE (PEA FAMILY) | |
| Acacia farnesiana | | Sweet Acacia |
| Lysiloma bahamensis | | Wild Tamarind |
| Piscidia piscipula | | Jamaica Dogwood |
| Pithecellobium unguis-cati | | Cat Claw |
| | FAGACEAE (OAK FAMILY) | |
| Quercus chapmani | | Chapman Oak |
| Quercus incana | | Bluejack Oak |
| Quercus laevis | | Turkey Oak |
| Quercus laurifolia | | Laurel Oak |
| Quercus myrtifolia | | Myrtle Oak |
| Quercus nigra | | Water Oak |
| Quercus virginiana | | Live Oak |
| Quercus virginiana geminata | | Sand Live Oak |
| | HAMAMELIDACEAE (WITCH-HAZEL FAMILY) | |
| Liquidambar styraciflua | | Sweet Gum |
| | JUGLANDACEAE (WALNUT AND HICKORY FAMILY) | |
| Carya aquatica | | Water Hickory |
| Carya glabra | | Pignut Hickory |
| | LAURACEAE (LAUREL FAMILY) | |
| Persea borbonia | | Red Bay |
| Persea palustris | | Swamp Bay |
| | MAGNOLIACEAE (MAGNOLIA FAMILY) | |
| Magnolia grandiflora | | Southern Magnolia |
| Magnolia virginiana | | Sweetbay |
| | MELIACEAE FAMILY (MAHOGANY FAMILY) | |
| Swietenia mahogoni | | West Indian Mahogany |
| | MORACEAE (MULBERRY FAMILY) | |
| Ficus aurea | | Strangler Fig |
| Ficus citrifolia | | Short-leaf Fig |

| Scientific Name | Family Name | Common Name |
|-------------------------------|---|--------------------------|
| Morus rubra | | Red Mulberry |
| | MYRTACEAE (MYRTLE FAMILY) | |
| Eugenia axillaris | | White Snapper |
| Eugenia confusa | | Ironwood |
| Eugenia rhombea | | Red Stopper |
| Eugenia myrtoides | | Spanish Stopper |
| Myrcianthes fragans | | Simpson Stopper |
| | NYSSACEAE (SOOR GUM FAMILY) | |
| Nyssa sylvatica | | Black Gum/Black Tupelo |
| | OLACACEAE (XIMENIA FAMILY) | |
| Ximenia americana | | Tallowood |
| | OLEACEAE (OLIVE FAMILY) | |
| Forestiera segregata | | Florida Privet |
| Fraxinus caroliniana | | Pop Ash |
| | PINACEAE (PINE FAMILY) | |
| Pinus elliottii var densa | | South Florida Slash Pine |
| Pinus palustris | | Long-leaf Pine |
| | PLATANACEAE (SYCAMORE FAMILY) | |
| Platanus occidentalis | | Sycamore |
| | POLYGONACEAE (BUCKWHEAT FAMILY) | |
| Coccoloba diversifolia | | Pigeon Plum |
| Coccoloba uvifera | | Sea Grape |
| | RHIZOPHORACEAE (RED MANGROVE FAMILY) | |
| Rhizophora mangle | | Red Mangrove |
| | ROSACEAE (ROSE FAMILY) | |
| Prunus caroliniana | | Cherry Laurel |
| | RUTACEAE (RUE FAMILY) | |
| Zanthoxylum clava-herculis | | Hercules Club |
| | SALICACEAE (WILLOW FAMILY) | |
| Salix caroliniana | | Coastal-Plain Willow |
| | SAPOTACEAE (SAPODILLA FAMILY) | |
| Bumelia celastrina | | Buckthorn/Saffon Plum |
| Bumelia tenax | | Buckthorn/Tough Bumelia |
| Chrysophyllum oliviforme | | Satinleaf |
| Mastichodendron foetidissimum | | Mastic |
| | SIMAROUBACEAE (QUASSIA FAMILY) | |

| Scientific Name | Family Name | Common Name |
|---------------------|--------------------------------------|---------------|
| Simarouba glauca | | Paradise Tree |
| | TAXODIACEAE (BALD CYPRESS FAMILY) | |
| Taxodium ascendens | | Pond Cypress |
| Taxodium distichum | | Bald Cypress |
| | THEACEAE (CAMELIA FAMILY) | |
| Gordonia lasianthus | | Loblolly Bay |
| | THEOPHRASTACEAE (JOEWOOD FAMILY) | |
| Jacquinia keyensis | | Joewood |
| | ULMACEAE (ELM FAMILY) | |
| Celtis laevigata | | Hackberry |
| Ulmus americana | | American Elm |