

RPG Times

Summer 2006

A Publication of the Roots Plus Field-Growers Association of Florida



GRADES AND STANDARDS: PASSING THE INSPECTION

By Michael Marshall, Marshall Tree Farm

Florida tree farms have experienced significant changes in production demands during the last decade. One of the major factors contributing to this change has been the publication of the second edition of the Florida Grades and Standards for Nursery Plants. While the Grades and Standards for Nursery Plants have been in Florida since 1955, it was the publication of the second edition in 1998 that has had a tremendous impact on the level of quality that buyers are requesting and expecting. The impetus for the second edition was to improve the structural and aesthetic quality of trees. Due to the popularity and acceptance of the second edition by landscape architects and municipalities it has, for all practical purposes, become the universal tree specification throughout Florida. This has led to a significant increase in the level of tree quality throughout the state.

The Grades and Standards provides for a 10 step process that ends with all trees being graded in one of four grades: Florida Fancy, Florida #1, Florida #2 or Cull. These grades are determined by looking at trunk structure, branch structure, canopy uniformity, root ball size, root quality, overall health, and many other factors. One of the greatest benefits to the Grades and Standards is that our industry now has a universal specification and can share common terminology. This common terminology has been a tremendous benefit to both buyers and sellers since we can now communicate about trees and have confidence we are discussing a similar product and product quality.

Grades & Standards, continued page 4

Topping trees: do we really need to go there?

By Dr. Ed Gilman, professor, University of Florida

Recent hurricanes have created demand from the public for topping shade trees. Allowing urban trees to be topped is misguided and would set back arboriculture in Florida 30 years!

I can not even imagine turning back the clock to the days when we taught that topping was inappropriate and short sighted, can you? I have not given that lecture in more than 10 years! Our combined educational efforts are advancing tree care in Florida to the point where some look to Florida as a model for the country. But I can feel the earth vibrating from the discussions that consider topping as appropriate for trees in the "hurricane belt." We might have to dust off our presentations that teach the myriad of reasons why topping is so bad.

I have heard the comment that "recently topped trees were still standing following the storm so this is a good way to manage trees". Of course recently topped trees will not be affected by strong winds because there is no canopy to catch the wind. However, as you know the issue is not that simple.

Consider this. The disadvantages of topping include hotter urban environments (urban heat island effect), increased storm water volume and flooding, increased run-off into wetlands, more leaching of nutrients and pesticides into groundwater, less shade, more CO2 in the atmosphere (contributing to global warming), less attractive urban landscapes, less wildlife habitat, less sign visibility, increased energy

Topping Trees, continued page 2



costs for air conditioning and in some cases dead trees. These documented costs are huge! Also, we know that many topped trees decay in the cut branches and trunks and in the long run they can break apart more easily than trees appropriately pruned. Topping also generates large volumes of brush requiring chipping or landfilling. Since topping keeps trees small there is less shade in parking lots resulting in more volatilization of gasoline from gas tanks. In addition, asphalt in the sun breaks down quicker than asphalt in the shade, requiring replacement more often. As you can see, topping is not simply a tree issue.

Now let's list the advantages of topping.....
I can't think of any!

There are proven proactive methods for reducing tree damage in storms, and restoring trees following the storm. These include appropriate reduction of the canopy or portions of the canopy, structural pruning, pollarding, appropriate landscape design, appropriate tree placement, species selection, and other arboricultural practices. These and many other strategies are addressed at the University of Florida's urban tree care center at <http://hort.ifas.ufl.edu/woody/stormprep.htm>. Unfortunately, few trees receive appropriate care and many are misplaced; this largely contributed to the problems experienced during recent hurricanes.

As an advance civilized society most communities have decided that the risks of planting large maturing shade trees is balanced by the benefits they provide. Communities might decide that in light of the recent cyclical increase of hurricane activity that planting large shade trees is not in the best interest in their community. I think this is short sighted and misguided. In light of the overwhelming benefits trees provide we must continue to stress the importance of APPROPRIATE pruning and other strategies to reduce storm damage. We know that structural pruning reduces storm damage but unfortunately few trees in our urban landscapes receive this treatment. And the reasons for this are many, chief of which may be lack of understanding and demand by consumers. We have to work on the demand side.

Remember that about 41,000 people (1999 statistics) in the US die each year in more than 6 million car accidents! The best way to avoid being killed in a car accident is to not drive. Most people decide that this is impractical. Is cutting down our urban forest to stubs practical and in good public interest? I don't think so. 🌳

RPG Notes for Growth

by Jack Siebenthaler



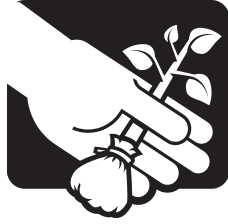
My Gosh! Just 6 months ago we were considering ourselves fortunate that most of us had escaped serious damage from the multiple hurricanes of 2005. Now here we are looking at another stormy season with forecasts of possibly as many as sixteen major storms and/or hurricanes headed our way. While it shouldn't be necessary to remind any of you of the standard preparations and preventative maintenance procedures to ensure against excessive loss, it still remains a fact of life that some owners and managers just don't get with it as much as they should!

Fortunately, RPG is going great guns and we are all looking forward to another year of growth. It continues to be a source of amazement that cooperative effort can result in success which is so bountiful.

Lately we have been seeing forecasts for the population growth of Florida which is amazing! Soon, it is predicted, Florida will surpass New York State and rank third in the United States in total residents. Some states are losing overall – a sorry portent for their future. What does it mean for all of us? Why, we have a steady increase in overall demand for our products and services. That only means a fine business future for our industry. And RPG is in the enviable position of having planned ahead to meet the needs of this market.

When one speaks of “planning ahead” it brings to mind the question, “What are all of us doing to make sure we can fully meet the future market demands?” Does our inventory include all the practical plant varieties which can (should) be grown with RPG methods? Is our reason (excuse) for not altering our growing methods due to realistic facts? Or are we just hanging on to the old inventory list because we haven't energized our business to “go with the flow”?

Now is the ideal time to review our business plan for the future! Planning is the real key to long range success. Don't put off 'til next month or next year what needs to be done now! RPG requires a good long range business plan. Get to it! 🌳



Roots Plus News

RPG Welcomes New Members!

The Roots Plus Growers Association is still growing! We welcome three new Grower Members, **Cannon Trees, Inc.**, **SMR Farms**, and **Turner Tree & Landscape**. RPG is now 21 grower members and 10 associate members strong. If you are interested in membership or in learning more about the Roots Plus Growers Association, please give us a call at 352-528-3880. For member locations and phone numbers please see page 6.



RPG Busy in 2006 with Conferences and Trade Shows

Roots Plus Growers continues a strong showing around the state and southeast with a busy Trade Show and Conference schedule in 2006. We began in June visiting with over 500 attendees at the Trees Florida Conference in Fort Myers. Next up was the ASLA conference in Sandestin where we continued to spread the RPG message to over 200 landscape architects. Two trade shows followed with SNA in Atlanta in the month August and FNATS in Orlando during September. We will finish out the year with the Great Southern Tree Conference in Gainesville in November. Please come visit us at the RPG booth at any of these shows or conferences in the future.

2006 RPG Field Day a Success; 10th Annual event planned for May 2007

The Annual RPG Field Day on April 27th, 2006 was a huge success once again. Over 80 people were in attendance to learn about many aspects of the tree industry at RPG member nursery Marshall Tree Farm. RPG, ISA and University of Florida Extension are already hard at work planning next year's field day. The 10th Annual RPG Field Day is scheduled for May 10th, 2007 at Stewart's Tree Service. Look for more information in the Winter 2007 edition of the RPG Times. Registration brochures will be mailed in Spring 2007. Call 352-528-3880 for more information.

Sixth Annual Great Southern Tree Conference Scheduled for November

The Sixth Annual Great Southern Tree Conference (GSTC) will be held November 30th and December 1st, 2006 at the University of Florida Hilton Hotel and Conference Center in Gainesville, Florida. GSTC is a unique educational program developed through the joint efforts of the FNGLA and the University of Florida. The conference is devoted entirely to tree selection, landscape, production, establishment and marketing issues in the Southern United States. The complete program and registration information is available at www.greatsouthernconference.org or call the FNGLA office at 800.375.3642.

RPG Sponsors FNGLA Certification Reception at TPIE and FNATS

Roots Plus Growers continue to be a strong supporter of FNGLA Certified Landscape Professionals by sponsoring receptions held at the Tropical Plant Industry Exhibition (TPIE) and Florida Nursery and Allied Trade Show (FNATS).

What is Hardening-off?

Quality field-grown trees should be hardened-off, or cured, after harvesting. This hardening-off process lasts 3 to 4 weeks and it simply involves providing the tree with optimum irrigation during the few weeks after harvesting. After the tree is hardened off it is ready to ship to the landscape site. New roots that have begun to develop are ready to grow immediately into the landscape. This may sound like a simple idea but research has shown that hardened off field grown trees are a superior performer in the landscape. Research conducted from Florida to Italy continues to confirm that quality field grown trees outperform container grown trees in landscape settings. Research has shown that field grown trees use water more efficiently at planting (need to be watered less), establish faster after planting (start growing in your landscape faster), and when planted with container trees in a situation of limited water or irrigation will have dramatically higher survival rates. All of these results are from peer reviewed research that has been published in various trade journals.

This benefit of a common terminology or a “tree glossary” can also become a disadvantage because we are using words to describe a living tree and how it has grown. By using terminology to describe a tree we are inherently entering into a subjective process. The challenge our industry faces is to continue to communicate and clarify the subjective aspects of the grades and standards through education and training. As we make the process less subjective and more widely understood the consistency of grading from job to job and municipality to municipality will begin to increase. This consistency of grading can only happen if we as an industry read the document, learn the document and develop a working knowledge of the grades and standards.

Grades and Standards and increased tree quality can sometimes lead to the challenge of unrealistic expectations. An example would be when a buyer (or seller) considers any one negative aspect of tree structure outlined in the grades and standards to be unacceptable to them. Essentially these folks are saying that if a tree has any potential downgrading factor it is no longer acceptable to them. Let me stop here and say that I believe a buyer or seller has every right to ask for the highest quality product possible. The key word is “possible” and the key to understanding what is possible is communication. Our industry, both buyers and sellers, needs to work together to understand that it is “possible” to grow, buy, plant, and maintain great trees for our landscapes and urban forests. An unrealistic expectation demands “perfect” trees as if they are assembled in a factory, instead of the realistic expectation of trees grown in nature.

The expectation of buyers for high quality trees has increased dramatically over the past decade. We should view this as an opportunity to continue growing as an industry and continue looking for ways to improve tree quality. As growers consider new issues such as planting depth, improved production systems, and root system quality, we should embrace those issues and continue on our course of improvement. The bottom line is the Grades and Standards is a communication tool to help buyers and sellers communicate better about trees. The best way to pass the inspection when it comes to grading trees is to communicate openly with each other and help each other learn along the way. 🌳

Do trees need to be staked after planting?

- Anchor staking should be done only when necessary and in most instances should be removed within a year after transplanting. Trees with root balls which are light in weight often need to be staked to ensure they are anchored in the soil and will not blow over during a storm event or simply on a windy day. Field-grown trees rarely need staking due to their deep and heavy root balls, which securely anchor them in the ground. An often overlooked component of staking is scheduling of the removal. If stake removal is not accomplished in a timely manner the stakes could girdle the trees.

ESTABLISHMENT

How much water does a tree need after planting?

- Trees should receive 1.5 to 3.0 gallons (depending on time of year) of water per inch of trunk diameter per day. For example, a three inch caliper tree planted in summer should receive 9 gallons per day. Container-grown trees require more water than field-grown trees during establishment due to the porous nature of the container growing media. Ideally, watering should continue daily for one month, every other day for 3 months and weekly until the tree is established.

How long does it take for a tree to establish after planting?

- The tree establishment time for most trees in central Florida is 3 months per inch of trunk diameter. For example, if a 3 inch caliper tree were planted it would require 9 months until it was completely established. Establishment means that the tree has rooted into the new landscape and started growing at the same rate it was growing prior to transplanting. Established trees could still need supplemental irrigation during times of drought.

Does any one production method establish quicker?

- Research conducted from as far away as Italy and as close to home as Florida continues to confirm that quality field-grown trees outperform container grown trees in landscape settings. Research has shown that under optimum as well as limited water conditions hardened-off field-grown trees establish quicker than container-grown trees. Research has also shown that RPG or hardened-off trees use water more efficiently at planting (require less water), establish faster after planting (start growing in your landscape faster), and when planted with container trees in a situation of limited water or irrigation have significantly higher survival rates. 🌳

TREE Q & A

PRODUCTION

What is root pruning and does it really do anything?

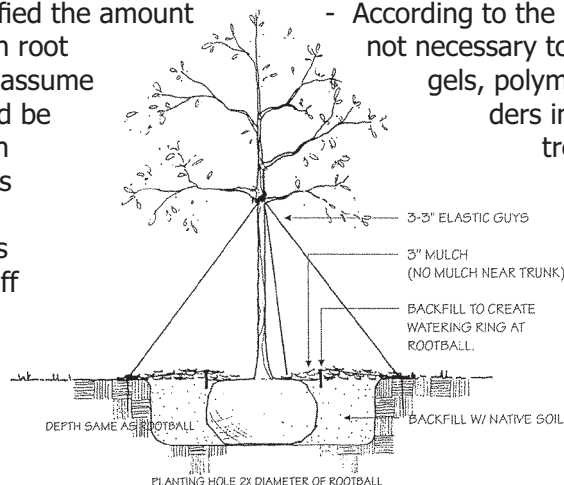
- Root pruning is the physical cutting of roots at the appropriate length in the ground during production. When a root is cut it then regenerates more roots from the cut end. Research has shown that root pruned live oaks had a 6-fold increase in the density of fine roots in the root ball. Root pruning has also proven beneficial on other species even if they have a more fibrous root system than live oak. However, root pruning is only beneficial if done at the right time and in the right location so that roots have started regenerating and are inside the harvested root ball.

What about circling roots?

- Circling or deformed roots are formed when a tree is grown for too long in a container. Research has shown that deformed roots can have a long term effect on the health and stability of the transplanted tree. Circling roots in the top portion of the root ball could, as the tree and root grow, eventually girdle the tree. Products designed to control root circling such as copper compounds and air-pruning containers have proven to reduce, but not eliminate, the problem of circling roots. Field-grown trees are grown without the use of a rigid container, therefore, the root system develops a more natural form.

Don't B&B trees lose 90% of their root systems at harvesting?

- Recent research (1996) found that field-grown oaks and hollies have 80% of their entire root system weight when they are harvested (unroot pruned trees). No research has quantified the amount of the root system harvested on root pruned trees but it is logical to assume the percentage harvested would be increased. Research has shown that roots begin regenerating as soon as one week after being cut. Therefore, by the time it is shipped, a properly hardened off root pruned field-grown tree has already begun to replace any roots that were removed at harvesting.



TRANSPLANTING

When planting trees, should they be lifted by the trunk?

- Trees should never be lifted by the trunks during transport or planting. Lifting by the trunk places the weight of the entire tree on the trunk. This sometimes leads to wounding or girdling of the trunk. Lifting by the trunk can also cause unseen damage to the tree's cambium, signs of which may not be visible for some time after transplanting. Trees should always be carried or lifted by the root ball and padding should be placed around the necessary branches as well as the trunk to avoid injury with equipment.

How big does the planting hole need to be?

- The wider the planting hole the greater an area of disturbed soil for new roots to grow into. It is especially important in compacted soils to dig out an area as wide as possible (possibly 3 times the width of the root ball) around the root ball. In Florida's sandy soils it is common to dig a hole that is 1 to 2 times the width of the root ball. This allows enough room to properly plant and wash in soil surrounding the root system. One of the most common errors in planting trees is planting too deep. It is very important that the tree be planted even with the ground level or slightly higher. In sites with a high water table or compacted soil it is safer to plant the tree slightly above grade and then raise the soil level around the tree by bringing loose soil up to the edge of the root ball.

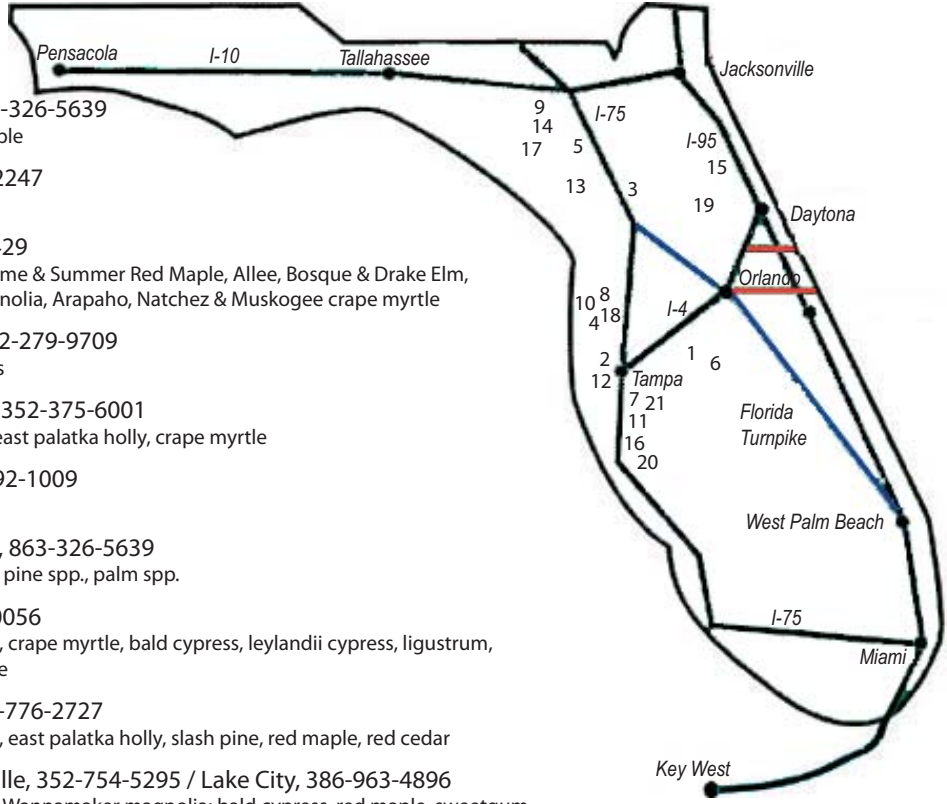
Should soil amendments be added to the planting hole?

- According to the best information available, it is not necessary to incorporate amendments such as gels, polymers, mycorrhizae, or other powders into the backfill when planting a tree. Research continues to show very little or no long term effect of soil amendments on tree growth. This outcome is not unexpected as tree roots grow well past the soil amendment in a short period of time. The best backfill in most situations is loosened original soil from the planting hole.

TREE Q&A, continued page 4

RPG Grower Members

locator map and available species



1. Alturas Native Nursery - Alturas, 863-326-5639
bald cypress, live oak, laurel oak, red maple
2. BE-MAC Farms - Odessa, 813-920-2247
live oak, pine, sycamore, sweetgum, elm
3. Bent Oak Farm - Ocala, 352-245-5429
Cathedral, Highrise & Hightower Oak, Flame & Summer Red Maple, Allee, Bosque & Drake Elm, Bracken, DD Blanchard & Little Gem Magnolia, Arapaho, Natchez & Muskogee crape myrtle
4. Cannon Trees, Inc. - Brooksville, 352-279-9709
live oak, southern magnolia, bald cypress
5. Champion Tree Farm - Gainesville, 352-375-6001
live oak, southern magnolia, red maple, east palatka holly, crape myrtle
6. D.H. Keen, Inc. - Lake Wales, 863-692-1009
live oak, laurel oak
7. Ellenton Nursery Growers - Parrish, 863-326-5639
sycamore, ligustrum, red maple, live oak, pine spp., palm spp.
8. FMT Farms - Brooksville, 352-799-0056
live oak, laurel oak, sycamore, sweetgum, crape myrtle, bald cypress, leylandii cypress, ligustrum, Bracken & DD Blanchard magnolia, maple
9. Fort Drum Growers - McAlpin, 386-776-2727
live oak, laurel oak, sycamore, sweetgum, east palatka holly, slash pine, red maple, red cedar
10. Huntsman Tree Supplier - Brooksville, 352-754-5295 / Lake City, 386-963-4896
live & laurel oak; DD Blanchard & Claudia Wannamaker magnolia; bald cypress, red maple, sweetgum, southern red cedar, winged elm, slash pine
11. John Deere Landscapes - Parrish, 941-737-2305
live & laurel oak; east palatka holly; Bracken, DD Blanchard, MigTig, & Claudia Wannamaker magnolia
12. Keystone Farms - Odessa, 813-920-0894
live oak, ligustrum, variegated ligustrum
13. Marshall Tree Farm - Morriston, 800-786-1422
Cathedral, Highrise & seedling live oak; DD Blanchard, Little Gem, Coco & Claudia Wannamaker magnolia; East Palatka, Eagleston & Nellie R. Stevens holly; Allee, Bosque & Winged Elm; crape myrtle, slash pine, bald cypress, sweetgum
14. Nature Coast Tree Corp. - Bell, 386-935-9349
live oak, ligustrum, holly, Highrise & Cathedral live oak, Alta & DD Blanchard magnolia
15. Skinner Nurseries - Bunnell, 800-741-2020
live oak, ligustrum, holly, crape myrtle
16. SMR Farms - Bradenton, 941-708-3322
large specimen live oak
17. Southern Pride Tree Farm - Bell, 386-935-3636
live oak, ligustrum, holly
18. Stewart's Tree Service - Brooksville, 352-796-3426
Cathedral, Highrise & seedling live oak; Bracken, Claudia Wannamaker & DD Blanchard Magnolia; laurel oak, eagleston holly, ligustrum
19. The Magnolia Company - Barberville, 800-880-4662
DD Blanchard and Little Gem magnolia
20. Turner Tree & Landscape - Bradenton, 941-721-3597
live oak #1 and naturals
21. Walsh Brokerage - Parrish, 863-326-5639
palm spp., live oak, laurel oak, sycamore, pine spp. large specimen material in holly, magnolia

Associate Members

- Braun Horticulture**
- Caretree Systems**
- Cherokee Manufacturing**
- General Cordage**
- Graco Fertilizer Company**
- Grass Roots Nurseries**
- Seaworld**
- Jack Siebenthaler**
- Sunrise Landscape**
- Treemart**

RPG TIMESline

September 28-30th, 2006 - Florida Nursery and Allied Trades Show (FNATS), Orlando, FL
For more information visit www.fngla.org or call 800.375.3642

October 6-10th, 2006 - ASLA Annual Meeting & EXPO, Minneapolis, MN
For more information contact ASLA at www.asla.org

October 8-11th, 2006 - IPPS Southern Region Annual Meeting, Charlotte, NC
For more information visit www.ipps.org/SouthernNA

November 30 - December 1st, 2006 - Sixth Annual Great Southern Tree Conference, Gainesville, FL
For more information visit www.fngla.org or call 800.375.3642

February 2-3rd, 2007 - Gulf States Horticultural EXPO, Mobile, AL
For more information visit www.gshe.org or call 334.502.0047

February 23-24th, 2007 - Tampa Spring EXPO, Tampa, FL
For more information visit www.tbwg.org or call 813.655.1914

May 10th, 2007 - 10th Annual RPG Field Day, Brooksville, FL
For more information contact RPG at www.rootsplusgrowers.org or call 352.528.3880

June 9-12th, 2007 - Trees Florida Conference and Trade Show, Tarpon Springs, FL
For more information visit www.treesflorida.com

July 2007 - Florida Chapter ASLA Annual Meeting
For more information contact FC/ASLA at www.flasla.org

RPG Information

If you would like more information about the Roots Plus Field-Growers Association of Florida please complete the following and return it to:

Roots Plus Growers
17350 SE 65th Street
Morriston, FL 32668

Please add me to your mailing list

Please send me the following:

Information on RPG Membership Tree Planting Cue Cards _____ (quantity)

Other _____ Tree Grading Cue Cards _____ (quantity)

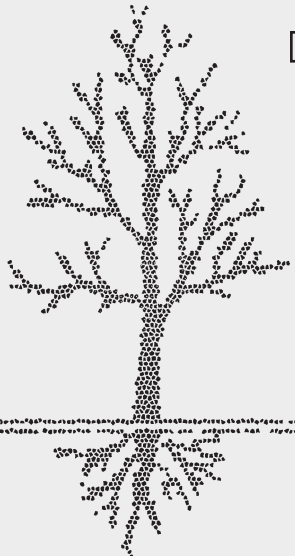
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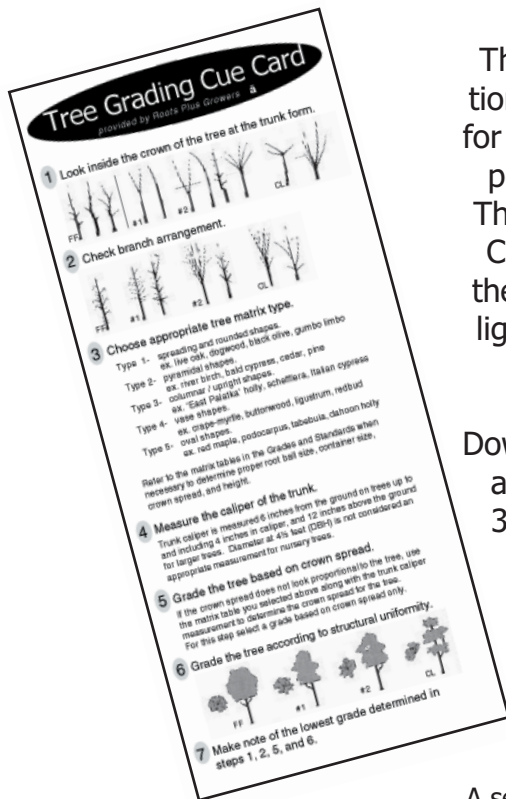
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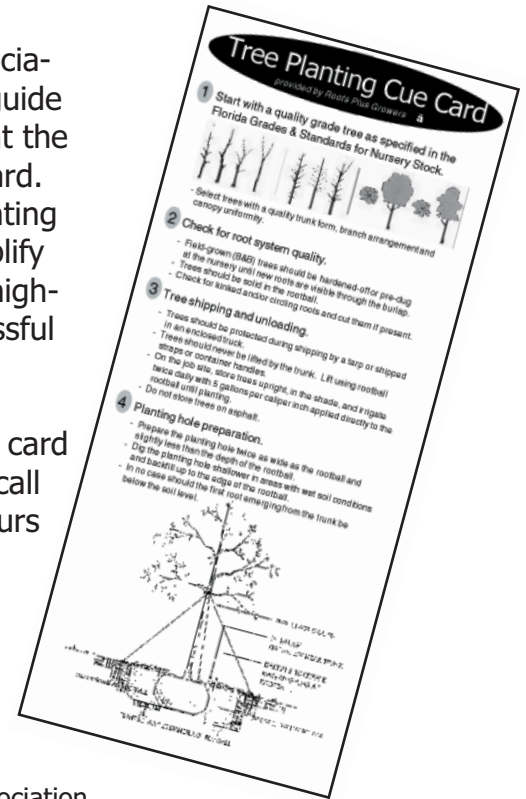
Phone _____ Fax _____





The Roots Plus Growers Association has developed a pocket guide for tree planting to supplement the popular Tree Grading Cue Card. This 3x7" laminated Tree Planting Cue Card is intended to simplify the tree planting process by highlighting eight steps for successful transplanting.

Download a copy of each cue card at rootsplusgrowers.org, or call 352-528-3880 to request yours today!



A service of Roots Plus Growers Association



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Morriston, FL 32668