SEEING THE BILLBOARD THROUGH THE TREES: A LOOK INTO FDOT’S VEGETATION MANAGEMENT PROGRAM FOR OUTDOOR ADVERTISING

Submitted by Michael McCoy, Director of Environmental Services - Metric Engineering

We have all seen them—billboard signs along Florida’s highways, telling us what restaurant, surf shop or local attraction we can find if we “exit now!” So how is it that the landscaping and natural vegetation so prevalent along our roadways stays clear of these signs? Does Florida Department of Transportation (FDOT) keep these areas clear? How are public interests for roadside vegetation met in these areas? The answers to all these questions and more are yours when you read on...

Even though they are constructed on private lands, all of the roadside billboards (that we either love or love to hate) along Florida’s state roadway system require a permit from the FDOT. These permits are not easy to obtain and require an extensive application and review process, but that is another story—our story about vegetation and billboards begins once that permit is obtained.

With an outdoor advertising permit in hand, a sign owner is entitled to a “view zone”—typically a 500 foot-long stretch of the roadway leading up to the sign. To fully understand the view zone, we need to utilize the skills we learned in high school geometry class (you see, it did come in handy). The view zone is drawn by making a triangle with one side being the 500 foot-long segment of the road starting from the sign and leading away (in the direction the sign is facing). Now, start at the roadside edge of the sign itself and connect it to the start of the 500 foot-roadway segment, this is the second side of the triangle. To make the final side, connect the far end of the 500 foot segment to the outside edge of the billboard. If you are drawing this out, some of you may note that the edge of the right of way cuts off the top of the triangle, actually creating a trapezoid. For those of you who notice this difference I will re-iterate that I said high-school geometry, so please stop showing off. Within this view zone, FDOT agrees to not install new landscaping that would block the view of the sign (after the outdoor advertising permit is issued).

Further, the owner of the permit can apply for an FDOT Vegetation Management permit, which provides the ability for the sign owner to trim or remove certain existing vegetation, as well as to control the growth of new vegetation, within the view zone. So how does FDOT decide what trimming and removal of vegetation is acceptable, and who is responsible to do it? I’m glad you asked. The requirements for vegetation management in view zones are provided both by Florida Statute (479.106) and by the Florida Administrative Code (14-10.057). In short, these regulations state that an applicant cannot remove FDOT-installed landscaping (unless the landscaping was installed after their permit was issued), but naturally growing vegetation can be removed or trimmed, provided that these activities do not affect trees that have special significance for ecological, historical, cultural, or aesthetic reasons.

To help ensure that these requirements are met, FDOT obtains input from their district Landscape Architects, as well as utilizing

continues on pg. 2
Along the Road...
Some of the most viewable examples of urban forestry exist alongside the roads, interstates and byways we travel every day throughout the state. Some of them are quite spectacular and well planned while others seem to appear awkward in their existence and are either struggling to exist or are in conflict with everything around them. Either way, it seems that the open roadways of Florida and many other states are now becoming the new artisitic canvases for roadside tree planting and there are mixed reviews concerning what should or shouldn’t be placed and where. While I can’t say that all of the roadway plantings are perfect in form and function, I’ll take them any day over a barren grass strip with opposing galvanized guardrails. Often where you are at in the state drives what you see. Traveling from our most southern parts, I enjoy seeing the local and exotic palms mixed in with some hardwoods and local understory. Even though most of the selections are non-native species, I grew up in South Florida and have always known them to be part of the landscape and their sight lets me know when I’m getting close to the old home again.

Moving up through I-75, the exits and widened medians are gaining stands of sabals and more native ground cover. Sometimes the seemingly excessive use of the State tree becomes a little redundant, but given the remote locations to some of these plantings it makes sense to utilize species that can thrive with little to no maintenance. Wetland patches are also common throughout the midsection of the state and offer refuge to visible wildlife that seems to ignore the constant drone of an endless passing of traffic.

Once you make it to Gainesville, the “Palm-fest” fades and succumbs to a plethora of assorted oaks and pines. The medians seem more expensive and stately due to the broadened openness of the surrounding countryside as the metro areas just touch the major interstates at assorted exits. If the season is right, some strategically placed dogwoods and redbuds will stand out amongst the greenery giving the roadside some diversity in color to which I would prefer more of as more of these plantings increase.

Fortunately the vacant roadways of the past are just that. Road beautification programs, whether state or metropolitan driven, enhance the places we visit and live in and are important not only to improve the aesthetics of our expansive roadway systems, but keep trees close to where we live and travel providing all the benefits trees bring to our everyday life.

The Florida Urban Forestry Council is becoming increasingly active in providing recommendations on the selection of the trees utilized for roadside plantings across the state. Your support as members and sponsors give us the ability to carry on with this task as well as many others in our mission to promote and educate the public on sound urban forestry practices.

Lastly, I would like to thank you the members and the entire Executive Committee body to allow me the honor to serve as the 2014 President. The experience was greatly enriching and I only hope that my service benefited the FUFC as much. Please continue with your generous support of this great organization as we continue to move forward and expand our organization in providing the needed resources to our community forests.

Ken Lacasse, Ken.lacasse@secoenergy.com
FUFC President
Bald Cypress (Taxodium distichum)

Bald Cypress is the largest and tallest tree in old swamp forests of the South. These beautiful trees are draped with ghostlike moss and alive with tree frogs. Although many conifers are evergreen, bald cypress trees are deciduous conifers that shed their needle-like leaves in the fall. In fact, they get the name “bald” cypress because they drop their leaves so early in the season. Their fall colors are tan, cinnamon, and fiery orange. Branches are often draped with clumps of Spanish moss.

Bald cypress trees growing in swamps have a peculiarity of growth called cypress knees. These are woody projections from the root system that project above the ground or water. Their function was once thought to be to provide oxygen to the roots, which grow in the low dissolved oxygen waters typical of a swamp, evidence for this is scant. Another more likely function is structural support and stabilization. Bald cypress trees growing on flood-prone sites tend to form buttressed bases, but trees grown on drier sites may lack this feature. Buttressed bases and a strong, intertwined root system allow them to resist very strong winds; even hurricanes rarely overturn them.

Geologists believe that cypress trees have been growing in the State for about 6,500 years. They can live for hundreds of years. Some old-growth trees in Florida are over 500 years old. The trees tend to grow in forested wetlands, along streams and rivers, in spring runs and ponds, and in places with still or slow-moving water. Cypress are the most flood-tolerant of all Florida’s trees, which is why they dominate swamps that have long flood periods. They are valued for the rot-resistant heartwood of mature trees, and so they have been widely used to make fence posts, doors, flooring, caskets, cabinetry, boats, etc. However, they are not harvested for timber as much because they are slow-growing and there aren’t as many of them left. Also, they usually grow in wetlands, which cause loggers much difficulty. Currently, cypress trees are harvested mainly for saw timber and landscape mulch.

Originally cypress mulch was produced using waste wood from sawmills. However, the increased demand for mulch has led to an increase in harvesting the smaller pond cypress, as well as other cypress previously thought too small for harvesting.

UF/IFAS Extension and the Florida Urban Forestry Council do not recommend purchasing cypress mulch for your landscape. Younger trees harvested for mulch do not have the natural pest resistance of old-growth wood, and cypress trees are needed in our swamps where they serve an important ecological function.

These trees have very important roles in the wild. Since they tend to grow along rivers and in wetlands, they are excellent at soaking up floodwaters and preventing erosion. They also trap pollutants and prevent them from spreading. Frogs, toads, and salamanders use bald cypress swamps as breeding grounds. Wood ducks nest in hollow trunks, catsfish spawn in the submerged hollow logs, and raccoons like bald eagles nest in the treetops.

Form:
Bald cypress is pyramidal shaped, a moderately fast grower, especially when given regular irrigation. It can reach heights of 60 to 80 feet, but has been known to reach 150 feet and six feet in diameter.

Leaves:
It’s unusual for a conifer to be deciduous, but this one is—it loses its leaves in winter—thus the name “bald.” A magnificent tree, with gorgeous fall color as the needles turn a coppery bronze tone before losing its leaves for the winter. The unique feathery foliage is composed of small individual leaves arranged alternately in tight, flat sprays along both sides of the branchlets.

Bark:
The bark is gray-brown to red-brown, shallowly vertically fissured, with a stringy texture.

Roots:
Cypress trees have the characteristic knobby “knees”—roots that protrude above the soil.

Flower, Fruit and Seed:
Bald Cypress is monocious. Conifers produce cones, but this tree’s cones are small and won’t create a litter problem. The cones contain seeds that are popular with squirrels and birds.

The conspicuous staminate catkins of the cypress are one of the first signs of life in the new year. The small, round pistillate flowers develop in round brown cones nearly the size of golf balls. Female conelots are found singly or in clusters of two or three. The globose cones turn from green to brownish purple as they mature from October to December.

Environment:
Cypress can maintain and improve water quality in the environment. The soil and plants in cypress swamps can remove both phosphorus and nitrogen from treated wastewater. While cypress can handle these nutrients and filter them, smaller organisms can still be impacted by wastewater in the environment.

Cypress ponds are depressions in the ground that can hold more water than just soil. Cypress ponds can absorb runoff from storms and slow or prevent flooding during storm events.

Wildlife:
Cypress swamps are home to many species, including rare and endangered animals. Large mammals take advantage of the plant density and hollow trees of the swamps. The cones contain seeds that are eaten by wild turkeys, squirrels, evening grosbeaks, and wood ducks; they are a minor part of the diet of other waterfowl and wading birds. Large, old Bald Cypress furnishes unique habitats for some wildlife. Bald eagles and ospreys nest in the tops. Yellow-throated warblers forage in the Spanish moss or resurrection fern often found on old trees.

Usage:
Bald cypress makes a fine specimen tree for very large landscapes. They are best suited to wet areas, lake margins, and the like, but as noted above, they will thrive in normal, even dry soils. The feathery pale green foliage is attractive in spring and summer, and again in fall when it turns reddish. A nice shade tree in summer, bald cypress lets the sun shine through in winter.

Bald cypress has been called the eternal wood because it is extremely resistant to decay. Vast swamps have been clear-cut of their cypress for construction of docks, bridges, boats, and buildings. Drainage and filling of southeastern cypress swamps and centuries of over harvest have severely reduced the number of these magnificent trees, especially old, large ones.

Champion Trees:
One of the oldest trees in the world, a Bald Cypress called The Senator, stood in a park in Longwood, Florida, until a few years ago when a vandal caused a fire that destroyed it. The Senator, at 118 feet tall with a circumference of 35 feet, was estimated to be 3,500 years old. Lady Liberty remains in Big Tree Park not far from the site of the Senator. She is 80 feet tall with a circumference of 32 feet, estimated to be 2,000 years old and is a Florida Challenger tree.

The new co-champion trees are in Hamilton County and stand more than 95 feet tall, measure 45 feet in circumference, and have a crown spread of 50 feet. It is estimated that the two Bald Cypress trees are hundreds of years old. The location of the trees near the Suwannee River and the Florida Trail will make a great spot for nature enthusiasts to visit.

Little Known Facts:
In 2012 Scuba divers discovered an underwater forest several miles off the coast of Mobile, AL below 60 feet of water. The forest contains trees that have been dated to approximately 52,000 years old. The forest contains trees so well-preserved that when they are cut, they still smell like fresh Cypress sap. The team, which has not yet published their results in a peer-reviewed journal, is currently applying for grants to explore the site more thoroughly. It is estimated that they have less than two years before wood-burrowing marine animals destroy the submerged forest.
QUESTION: I have a very large old live oak tree on my property. It is being decimated by a heavy infestation of Spanish moss and breaking whole branches. How do I get rid of this parasite and save my tree?

ANSWER: Spanish moss is common throughout Florida. It is not actually a moss but what is known as an epiphyte. Epiphytes do attach themselves to trees but do not harm them, unlike mistletoe, a true plant parasite. Epiphytes have the ability to obtain the minerals they need from dissolved water that flows across leaves and down branches. They flourish in areas with plenty of light and fairly high humidity. With increasing age, the naturally spreading nature of our open grown live oaks provide an ideal habitat by allowing greater amounts of sunlight to penetrate the interiors branches of the crown. So, with the increasing age of live oak we typically see a higher density of Spanish moss.

Because epiphytes prefer plenty of light, they thrive on weak trees that are already losing their leaves. The presence of Spanish moss on weak or dying trees does not necessarily mean they are the direct cause of the tree’s decline or loss of leaves. The true cause of your tree’s decline is likely due to soil compaction, root damage, altered drainage, or environmental problems that have compromised its health. Spanish moss may speed the decline of your weakened tree by shading lower leaves and intercepting light needed for photosynthesis that produces the sugars needed for tree health and growth.

Branches and limbs breaking and falling are commonly attributed to the weight of the moss. In fact, Spanish moss weighs very little and is almost never a factor in broken branches. Falling branches are likely the result of the tree’s declining health and vigor. The bottom line is that tree damage from Spanish moss is very uncommon and its removal can be expensive for large trees.

The best advice is generally to not attempt to remove these beneficial native Florida plants. If removal is needed consult with an International Society of Arboriculture - Certified Arborist for advice on physical removal and/or herbicide treatment.

Answer provided by Bob Northrop, Extension Forester / Urban and Community Forestry – University of Florida/IFAS Hillsborough County Extension

If you would like to ‘stump the forester,’ see page 13 for information on submitting your question!
On the western edge of Alachua County in North Central Florida, the City of Newberry sits in the middle of one of the most picturesque, historical and fastest growing areas in the state. Founded in the early 1800s, Newberry was officially put on the map when a post office was established in 1894, followed by incorporation in 1895. Before 1890, families had moved to the area and farmed in the region and also made a living from timbering. However, it was the discovery of phosphate in 1889 that brought the hidden Florida town to life as a booming mining town. The town was located along the route of the Savannah, Florida and Western Railway, that in 1893 was extended to the complex entrance. Newberry's phosphate mining operation was opened in 1894.

On the western edge of Alachua County in North Central Florida, the City of Newberry...
Submitted by Julie Jessee, Environmental Horticulture/Irrigation Program Manager – City of Orlando Parks Division

TRAIL OF TREES COMES TO FLORIDA SCHOOLS

The Florida Urban Forestry Council is honored to have sponsored Tim Womick and the Trail of Trees program throughout the state of Florida this past year. It is one of the most educating and entertaining programs involving trees and our children. Enjoyed throughout the country and in neighboring countries, Tim’s program reaches into the hearts and minds of the children leaving a lasting impression.

Trail of Trees is a very special part of a non-profit educational effort known as Tree Family that targets public lands like parks and schools with projects and programs that address a variety of issues to a diverse audience, with emphasis on the value of the ‘trees where you live.’ Their program can vary from engaging school children about ‘trees where you live...it is suggested that later they keep a journal focusing on a certain tree, or speak to others about what they think of trees, opening doors to understanding about our fragile environmental footing and the vital role trees play in sustaining that footing. The objective is to lead people toward a path to better themselves and their communities. Thanks to the support of people and agencies like Orlando Utilities Commission, City of Sanford, Urban Forestry Organization, Keep Orlando Beautiful, Cherry Lake Tree Farm, A Friend of the Florida Urban Forestry Council, and the Florida Forest Service, schools throughout Orlando, Vero Beach, Clermont, Mascotte, Miami, Homestead, and Hollywood were fortunate to be a part of the Trail of Trees program and our modern day Johnny Appleseed, Tim Womick. Over 4,600 students and teachers laughed and shouted through maracas shaking, scarf wearing and even a little juggling. Those lucky enough to work closely with Womick during his visit may have even received a tiny silver acorn or a packet of seeds to remind them that even the smallest object can grow into something large and magnificent.

The Florida Urban Forestry Council is proud to be a supporter of Tim Womick and the Trail of Trees program. Various groups in Florida have been involved with him for over 17 years and the Council hopes to continue our support of the program for many years. This takes volunteers and sponsorship in order for programs of this caliber to reach our youth. Next year we hope to be in the cities and towns from Orlando to Jacksonville. If you are interested in sponsoring this program or having it come to your area, please contact us.

Remember, Trees are the lungs of the Earth and get your Johnny Appleseed on! - Tim Womick
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**FDOT BOLD LANDSCAPE INITIATIVE PROJECT: DISTRICT 4 – Broward County / Intersection of I-95 and I-595**

Submitted by Elisabeth Hassett, RLA, District IV Landscape Architect - Florida Department of Transportation

In anticipation of the I-95 Express project soon to follow, two wet ponds were added to the landscape project eliminating possible damage to the landscape during the next project’s construction. The ponds create a welcomed water feature and further enhance the landscape’s tropical appeal.

The BOLD landscape project was completed on April 2, 2014 and the Contractor will be responsible for maintaining the project for three more years.

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**REQUEST FOR ARTICLES**

Please let us know what urban forestry projects you have going on in your neck of the woods. The Florida Urban Forestry Council would greatly appreciate the opportunity to share your information in our newsletter. These articles can include:

- New trends in the industry
- News about tree advocacy groups
- Volunteer projects
- City tree programs
- Letters to the Editor
- Questions for “Stump the Forester”

We look forward to hearing from you on this or any other interesting topic related to the urban forestry industry and profession. Please send any articles or ideas to Jerry Renick, FUFC newsletter editor, at jerry.renick@wantmangroup.com.

Thanks for contributing!
Trees add beauty and character to any community. As part of the "green infrastructure" trees provide environmental services such as fresh air, shade and wildlife habitat. Sumter Electric Cooperative is committed to bringing uninterrupted services to our members. Trees that grow too close to utility lines need to be trimmed to minimize the chance of an outage. Sometimes trees will need to be removed to reduce recurring right-of-way maintenance costs. Planning trees away from overhead and underground utilities will allow your new tree to achieve its fullest potential and offer you the greatest benefits.

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As part of the Florida Department of Transportation’s BOLD Landscape initiative, the Florida Turnpike Enterprise designed and installed the Okahumpka Gateway landscape project located at the northern most service plaza. This gateway project welcomes Turnpike patrons entering from I-75 and sets the tone for the entire Turnpike system. The Okahumpka project is a great example of the “thoughtful site specific design approach that will produce the highest visual impact and distinctive sense of place” that the BOLD program was developed to create.

All the existing trees at the Okahumpka site were retained, 30+ 20’-30’ pines and live oaks, and incorporated into the design. The preserving of the existing and upgrading to BOLD created a landscape that visually impacts the area but still integrates the planting with natural sites that are adjacent, a true planting partnership!

With over 60 existing pines and 10 oaks the project site also received:

- 19 Phoenix dactylifera ‘Medjool’ palms ranging in size 18’-24’ CT
- 165 45 gal. Lagerstroemia indica (Natchez & Tuscarora)
- 27 R&B 10’-12’ Ilex attenuate ‘Eagleston’ holly
- 69 5’-6’ Viburnum obovatum - Walter’s viburnum
- 20 45 gal. Ligustrum japonicum – Japanese privet
- 170 Sabal palmetto – Root regenerated Sabal palms

Okahumpka is just one example of the Turnpike’s contribution to the FDOT BOLD program that is creating landscapes that “instantly create a welcoming and enjoyable experience” for all the users of the State’s roadways and “the first and lasting impression of the state and individual communities” for all the visitors we host every year.
FUFC JOINS TREE/LANDSCAPE INDUSTRY TO ADVISE FDOT

Back in November of 2014 the Florida’s Nursery, Grower & Landscape Association (FNGLA) created a liaison committee of industry representatives to meet with and advise the Florida Department of Transportation (FDOT) on tree and landscape issues. The first meeting of the committee took place Tuesday, January 13, 2015 in Ocoee, Florida. FNGLA and their President Sandy Stein and Chief Executive Officer Ben Bolinsky head the committee. In the E-mail sent to the FUFC, Ben wrote “FNGLA purposely reached out to three groups inviting each to suggest a representative to serve on the committee to ensure such disciplines are reflected on this important FNGLA committee. We are pleased all three groups accepted the invitation. They are the Florida Association of Native Nurseries (FANN), Florida Chapter of American Society of Landscape Architects (FL-ASLA), and the Florida Urban Forestry Council (FUFC).

The committee’s agenda for the inaugural meeting covered general discussion on design, construction and maintenance of FDOT projects. Task teams were formed to work on issues in more detail and begin reporting out at the next meeting to be held sometime in April 2015. All parties agreed that the discussion that took place was positive and were excited about the work ahead. FUFC will continue to be involved with the committee to ensure an urban forest perspective is heard. FUFC encourages and supports the FDOT in the responsible use of trees along our State’s roadways. Trees planted by the FDOT are welcomed members to the State’s urban forest and we are glad to offer any assistance to ensure their long-term success.
2015 FUFC EXECUTIVE COMMITTEE MEMBERS

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