

Council



Quarterly Newsletter of the Florida Urban Forestry Council

The Council Quarterly newsletter is published quarterly by the Florida Urban Forestry Council and is intended as an educational benefit to our members. Information may be reprinted if credit is given to the author(s) and this newsletter. All pictures, articles, advertisements, and other data are in no way to be construed as an endorsement of the author, products, services, or techniques. Likewise, the statements and opinions expressed herein are those of the individual authors and do not represent the view of the Florida Urban Forestry Council or its Executive Committee. This newsletter is made possible by the generous support of the Florida Department of Agriculture and Consumer Services, Florida Forest Service, Adam H. Putnam Commissioner.

URBAN FORESTS — WHY WE CARE

Reprinted from American Forests / www.americanforests.org/urbanforests/whywecare

Urban forests help purify the air we breathe.

Urban trees in the lower U.S. have been found to remove nearly 800,000 tons of air pollution from the atmosphere every year.[1] In the modern day of bustling factories and countless cars on the road, this service of air purification has become more necessary than ever. As mentioned in a U.S. Forest Service report, "Urban forests freshen the air we breathe by releasing oxygen as a byproduct of photosynthesis. Net annual oxygen production differs depending on tree species, size, health, and location. A healthy tree, for example, a 32-foot-tall ash, produces about 260 pounds of net oxygen annually. A typical person consumes 386 pounds of oxygen per year.

Therefore, two medium-sized, healthy trees can supply the oxygen required for a single person over the course of a year. In colder climates, oxygen release will be less than in areas with longer growing seasons."[2]

Urban forests help manage a city's water.

A single front-yard tree can intercept 760 gallons of rainwater in its crown, reducing runoff and flooding on your property.[3] Because a city has so many impermeable surfaces, rainwater often builds up rather than being absorbed into the ground. This means that even a small rainstorm can cause flooding, as most of the water overflows into the stormwater system rather than into the ground. As the rainwater flows over the

pavement, it becomes contaminated with pollutants and may eventually end up in our urban streams and waterways — and even our faucets.

Urban forests help a city's water in several ways:

- They intercept rainfall, allowing the water to be absorbed into the tree, roots and soil. This often results in cities not having to build as many artificial stormwater controls, saving the city and its citizens money.
- They purify the water on its way into the ground by removing the pollutants collected.
- The water retained by the urban forest also helps to sustain the growth of the urban trees, parks and vegetation.

These services, provided naturally instead of artificially, can save a city billions of dollars each year.

Urban forests help reduce energy demand.

When planted in the right place, urban forests provide shade to homes, businesses,

continues on pg. 3



INSIDE:
Urban Forests - Why We Care1 & 3
President's Message2
The Value of the Urban Forest4
Tree and Human Health May Be Linked7
Managing Community Spotlight - Jacksonville8
State of Urban Forestry in Florida11
Tree City USA Update12
Florida's Urban Forestry Grants Program13
Tree of the Quater14
2012 Friends of Our Urban Forest Awards Winners16, 17 & 19

PRESIDENT'S MESSAGE



What a great year the Florida Urban Forestry Council has planned for 2013. I am so honored to be your President and look forward to committing my time and efforts this year to this great organization. I have spent the last five years as an Executive Committee member learning just what the Council provides. Through active participation, our Executive Committee and members fulfill our mission statement of promoting sound urban forestry policies and practices through educating communities throughout the state.

This has not been a typical year. In January, a trip to Tallahassee was planned for Council representatives to meet with Florida Forest Service Director Jim Karels. Charlie Marcus, FFS Urban Forestry Coordinator and liaison to the FUFC, along with Julie Iooss (Education Chairperson), Ken Lacasse (President Elect) and I, as President of FUFC, met with Director Karels to discuss just what the Florida Urban Forestry Council does throughout the state to promote our mission. We presented him with an informational packet showcasing the programs and materials that we distribute through seminars and at our display booth such as the Right Tree, Right Place posters, PowerPoint presentations,

newsletters, membership applications, and sponsorship information. We stated that we are striving each year for sustainability and that we are making great improvement even in a down economy. Director Karels stressed that our outreach to Congress and other State officials would be an excellent avenue to take. By keeping the Federal government abreast of our annual activities and programs, it could help future funding. It was a well-received and positive connection.

Our 2nd Annual Urban Forestry Institute was held on March 14-15 at the University of South Florida Patel College of Global Sustainability. This was an awesome two-day program on urban forest management, planning, appraisal, and vegetative management. We are also planning on offering four i-Tree workshops in various locations throughout the state later this year. Results of our recent membership survey are being

compiled and we will share the results and feedback from the survey later this year. We thank all of our membership for their participation in responding to the survey. A drawing was held for members completing the survey for a complimentary registration to the UFI and "congratulations" go to Emilly Foster--the lucky winner.

Lastly, I would like to give praise to our membership, sponsors and Executive Committee. Thanks for all of your support and hard work. I look forward to working with each and every one of you to make 2013 a tremendous year for the Florida Urban Forestry Council!

Sincerely,

Elizabeth I Jarkey FUFC President



NEWSLETTER ADVERTISING ANNUAL RATES:

Business-card size advertisement \$75

Quarter page advertisement \$115

Half-page advertisement \$225

Full page advertisement \$450

To place an advertisement in *The Council Quarterly*, please contact Sandy Temple, FUFC Executive Director (407-872-1738).



roads, and parking lots. Just three large trees around your home--two on the west side and one on the east--can provide enough shade to reduce your air-conditioning costs by 30 percent in the summer. And, when placed properly to reduce wind exposure, they can reduce heating bills in the winter by two to eight percent.[4]

Urban forests help improve the urban experience for its residents.

The strategic planting of urban trees reduce the noise of the city considerably. Tall, dense trees with soft ground surfaces can reduce noise by 50 percent or more.[5] And, it has been shown that urban trees help provide an overall feeling of community well-being. For example, a stronger sense of community and empowerment to improve neighborhood conditions in inner cities has been attributed to involvement in urban forestry efforts.[6]

For more information on the social benefits of urban forests, check out the resources at the College of the Environment, University of Washington, on Human Dimensions of Urban Forestry and Urban Greening (http://www.naturewithin.info/index.html).

These are only a few of the many benefits that urban forests can provide if kept healthy and if they are cared for properly. They also provide bird and wildlife habitat and recreational opportunities, improve soil quality and reduce erosion, add to your home's property value and more.

Urban forests can help mitigate climate change. Urban Forests can help to mitigate climate change two ways: through direct carbon

uptake and sequestration and by reducing the amount of carbon and other greenhouse gases emitted. Shrubs and trees store carbon in woody tissue, leaves and roots for years — even decades to centuries — taking carbon dioxide out of our atmosphere, reducing the greenhouse gas effect and slowing the rate of climate change. In fact, urban trees in the lower 48 U.S. states store 770 million tons of carbon, valued at \$14.3 billion.[7]

Trees in urban areas, through shade in the summer and as windbreaks in winter, help limit the need for cooling and heating and reduce the amount of greenhouse gases emitted by power plants, commercial and residential buildings. According to the U.S. Forest Service, "reduced emissions from trees can be substantial, especially in regions with large numbers of air conditioned buildings, long cooling seasons and where coal is the primary fuel for electric power generation." For more information, check out this article on "Urban Tree Planting and Greenhouse Gas Reductions" (http:// www.fufc.org/downloads/urban tree planting and greenhouse gas reductions.pdf).

Urban forests can help communities adapt to climate change.

Urban trees can be strategically placed to better prepare communities for the impacts of climate change. For example, specific species of trees in urban areas can be planted to provide shade, thereby reducing the Urban Heat Island Effect and creating more comfortable outdoor space in hot summers. Urban trees can be placed to create soil stability in areas that are prone to erosion from severe weather events and

placed to provide protection from strong winds. For more information, check out the document called "Urban forests: A Climate Adaptation Guide" (http://www.retooling.ca/Library/docs/Urban Forests Guide.pdf) and this paper called "Climate Change Mitigation and Adaptation in Urban Forests: A Framework for Sustainable Urban Forest Management" (http://www.cfc2010.org/papers/session7/Ordonez-s7.pdf).

References

[1] Nowak, D.J.; Crane, D.E.; and Stevens, J.C. Air Pollution Removal by Urban Trees and Shrubs in the United States. Urban Forestry and Urban Greening. 2006, 4, 115-123.
[2] U.S. Department of Agriculture. U.S. Forest Service. Pacific Southwest Research Station.

Service. Pacific Southwest Research Station. Northeast Community Tree Guide: Benefits, Costs and Strategic Planting. (accessed Oct. 15, 2012).

[3] U.S. Department of Agriculture. U.S. Forest Service. Pacific Southwest Research Station. Center for Urban Forest Research. Urban Forest Research March 2001. (accessed Oct. 15, 2012). [4] Simpson, J.R. and McPherson, E.G. Potential of Tree Shade for Reducing Residential Energy Use in California. Journal of Arboriculture. 1996, 22(1), 10-18.

[5] Cook, D.I. In Proceedings: National Urban Forest Conference, Trees, Solid Barriers and Combinations: Alternatives for Noise Control, Syracuse, New York, 1978; Hopkins, G. Ed.; SUNY College of Environmental Science and Forestry.

[6] Kuo, F. The Role of Arboriculture in a Healthy Social Ecology. Journal of Arboriculture. 2003, 29(3), 148-155.

[7] Nowak, D.J. and Crane, D.E. Carbon Storage and Sequestration by Urban Trees in the USA. Environmental Pollution. 2002, 116, 381-389.



THE VALUE OF THE URBAN FOREST

Rob Northrop, Extension Forester - University of Florida IFAS - Hillsborough Extension

"...workers without the

nature view reported 23%

more illness in the prior

six months. Desk workers

with the nature view

indicated higher levels of

job satisfaction, were less

frustrated, more patient,

As managers and stewards of the state's urban forests we have a responsibility to not only provide technical assistance in the conservation and restoration of the urban forest, but to better represent and promote its values. During the past decade we have made significant progress in using a variety of models to document the role that our urban forests play in providing clean air and water, reducing stormwater flows, reducing energy demand, and sequestering and storing green house gases. However, there is a growing body of research that suggests that we are missing an equally important value of the urban forest, the intangible social services (Vejre et al. 2010).

There is a deep and abiding connection

between people and plants that can be traced back to the earliest periods of human existence. Today's sprawling metropolitan areas can leave its residents detached from this critical connection with nature leading to feelings of stress and alienation so pervasive in our contemporary urban society.

For instance, work and study often require long periods of directed attention that lead to fatigue. Such fatigue can result in feelings of anxiety, irritability and an inability to concentrate. Researchers Rachel and Stephen Kaplan have conducted research on the restorative properties of encounters with nature in urban areas and found that such interaction counteracts these symptoms of fatigue. These same researchers conducted a survey of office workers with and without tion by playing In light of these numerous to survey of encounters with numerous to survey of encounters with and without tion by playing In light of these numerous to survey of encounters with numerous to survey of encounters with and without evidence of hu

a view of a natural setting from their office window to determine rates of illness and worker satisfaction. Those workers without the nature view reported 23% more illness in the prior six months. Desk workers with the nature view indicated higher levels of job satisfaction, were less frustrated, more patient, and felt more enthusiastic (Kaplan 1989).

The physical environment has a well-documented impact on human aggression. Crowding, noise and high temperatures all contribute to levels of violent behavior. Some researchers believe that these environmental conditions lead to inattentive, irritable and impulsive behaviors that are all associated with violence. Contact with

nature has been demonstrated to reduce the level of these behaviors and the incidence of aggression and violence in cities (Kuo and Sullivan, 2001).

These same researchers found that green settings relieve the symptoms of Attention Deficit Hyperactivity Disorder in children. Children were shown to more successfully refresh their ability to pay atten-

tion by playing outdoors in green spaces.

In light of these studies, and others far too numerous to summarize here, the USDA Forest Service - Urban and Community Forestry Program in partnership with the University of Washington have developed a web site, **Green Cities: Good Health**, which provides an overview of the scientific evidence of human health and well-being benefits provided by urban forestry and urban greening. The web site provides access to the nearly 40 years of research documenting how the experience of nature is profoundly important to human functioning, health and well-being.

While civic leaders may intuitively accept that urban nature is important for public health, this web site presents supporting scientific evidence, confirming intuitions and expanding our knowledge. This sciencebased evidence can have a significant impact on public policy decisions regarding urban forestry, just as the science-based evidence that urban forests play a direct role in urban air and water management has had over the past decade. Given the consistent expansion of metropolitan areas in our state, every bit of nearby nature has the potential to benefit hundreds to thousands of people daily. When we speak of 'green infrastructure' and its backbone--the urban forest--we should no longer be limiting our conversation to the bio-physical values, but also to the social and physiological benefits that they provide to the vast majority of people living in our nation today.

References:

- Green Cities: Good Health http://depts.washington.edu/hhwb/
- Kuo, F.E., and W.C. Sullivan. 2001. Aggression and Violence in the Inner City: Effects of Environment Via Mental Fatigue. Environment and Behavior 33(4):543-571.
- Verje, H., F.S. Jensen, and B.J. Thorsen. 2010.
 Demonstrating the importance of intangible ecosystem services from peri-urban land-scapes. Ecological Complexity 7(3):338-348.









Right Tree, Right Place Posters Order Today!

- Tree Selection Tips
- How to Plant Trees
- Area Guidelines
- What to Avoid
- Watering Guidelines
- Pruning Tips
- Charts & Illustrations
- Convenient Size Poster
- Informative for Everyone



CENTRAL • NORTH • SOUTH FLORIDA REGIONS

1 to 25 @ \$7.00 each 26 to 100 @ \$4.50 each 101 to 1,000 @ \$3.50 each 1,001 to 2,500 @ \$2.75 each

Order online, download an order form and fax or mail your order in, or call to place your order:

FLORIDA URBAN FORESTRY COUNCIL Post Office Box 547993, Orlando, FL 32854-7993 Phone: 407-872-1738

FAX: 407-872-6868 www.fufc.org



Quality, Variety & Service since 1984

2" to 12" caliper specimens with over 30 varieties for our Southeastern landscapes

Customer Service is our specialty, we provide quotes, pictures and deliveries on your schedule

Visit us at www.marshalltrees.com



Call for current availability

800.786.1422



PRUNING SAW SANITATION



TREE AND HUMAN HEALTH MAY BE LINKED

Geoffrey Donovan, USDA Forest Service - Pacific Northwest Research Station, Portland, OR: January 16, 2013

Evidence is increasing from multiple scientific fields that exposure to the natural environment can improve human health. In a new study by the U.S. Forest Service, the presence of trees was associated with human health.

For Geoffrey Donovan, a research forester at the Forest Service's Pacific Northwest Research Station, and his colleagues, the loss of 100 million trees in the eastern and midwestern United States was an unprecedented opportunity to study the impact of a major change in the natural environment on human health.

In an analysis of 18 years of data from 1,296 counties in 15 states, researchers found that Americans living in areas infested by the emerald ash borer, a beetle that kills ash trees, suffered from an additional 15,000 deaths from cardiovascular disease and 6,000 more deaths from lower respiratory disease when compared to uninfected areas. When emerald ash borer comes into a community, city streets lined with ash trees become treeless.

The researchers analyzed demographic, human mortality, and forest health data at the county level between 1990 and 2007. The data came from counties in states with at least one confirmed case of the emerald ash borer in 2010. The findings—which



A tree-lined street in Toledo, Ohio in 2006, before emerald ash borer infestation. Credit: Dan Herms, Ohio State University

hold true after accounting for the influence of demographic differences, like income, race and education—are published in the current issue of the American Journal of Preventive Medicine.

"There's a natural tendency to see our findings and conclude that, surely, the higher mortality rates are because of some confounding variable, like income or education, and not the loss of trees," said

Donovan. "But we saw the same pattern repeated over and over in counties with very different demographic makeups."

Although the study shows the association between loss of trees and human mortality from cardiovascular and lower respiratory disease, it did not prove a causal link. The reason for the association is yet to be determined.

The emerald ash borer was first discovered

near Detroit, Michigan, in 2002. The borer attacks all 22 species of North American ash and kills virtually all of the trees it infests.

The study was conducted in collaboration with David Butry, with the National Institute of Standards and Technology; Yvonne Michael, with Drexel University; and Jeffrey Prestemon, Andrew Liebhold. Demetrios Gatziolis, and Megan Mao, with the Forest Service's Southern, Northern, and Pacific Northwest Research Stations. (Contact: Geoffrey Donovan, (503) 808-2043, gdonovan@ fs.fed.us)



Three years later, in 2009, after the invasive insect spread to the neighborhood. Credit: Dan Herms, Ohio State University

MANAGING COMMUNITY SPOTLIGHT — JACKSONVILLE

Charlie Marcus, Urban Forestry Coordinator - Florida Forest Service



The City of Jacksonville, which encompasses most of Duval County in Northeast Florida, contains the largest land area of any city in the United States, approximately 760 square miles. The city population of over 800,000 exceeds any other city in Florida. As Jacksonville's population has significantly increased in recent years, so has the need to actively manage the city's tree canopy. In response, a network of government, non-profit, citizen, and private entity partnerships has evolved which serves as an excellent example of what we refer to as a "managing" urban forestry community. A managing community is defined as a local urban forestry program having professional STAFF, an enforced tree ORDINANCE, active citizen ADVOCACY, and an urban forestry PLAN (or **SOAP** for short).

Staff consists of Don Robertson, the City arborist, Larry Figart, the forester with the Cooperative Extension Service, and Mike Robinson, the utility forester for the Jacksonville Electric Authority (JEA), as well as a number of professionals who work with them. Each one has decades of experience, education, and professional training, and all are recognized statewide as leaders in urban forestry. Each entity has a defined role, but those roles often overlap and opportunities for collaboration abound. Any of them could be involved at a given time in activities such as tree planting or

maintenance, public or professional education and helping either individual residents or larger groups with tree issues.

Jacksonville's tree Ordinance has been in existence since the early 1980s, and has been revised a few times since then to enhance its effectiveness. The ordinance is enforced by the City's Planning and Development Department. Goals include the protection of trees during development, perpetuation of indigenous forested plant communities, use of native tree species and right tree, right place principles during planting site selection, and water conservation where irrigation is necessary. If tree removals are deemed necessary after reviewing all possible alternatives, the ordinance specifies mitigation measures such as replanting standards, contributing to a city tree planting fund or planting trees offsite on public property.

Greenscape of Jacksonville represents the **Advocacy** component of Jacksonville's urban forestry program. They are the oldest and one of the largest tree advocacy groups in Florida, having first sunk their roots in 1975. Since then, they can take credit for planting over 300,000 trees within the city limits, in both underserved and well-travelled parts of the city. Over the years, the organization has reached out to neighborhood residents, private companies and governmental agencies with many exciting

and innovative projects. By working with the City of Jacksonville in an advisory capacity to establish the City's Landscape Ordinance, serving on the Mayor's Environmental Advisory Committee, JEA's Tree Coalition, and the Keep Jacksonville Beautiful Commission, Greenscape continues to further the awareness of the importance of the tree canopy to the health and economic well-being of the community. The organization has received numerous awards on local, state and national levels. They work closely with city and county urban forestry staff, and they use creative means such as the "Root Ball" and Flowering Tree Sale to maintain their financial self-sufficiency. Kudos to Anna Dooley and all her collaborators!

In order to develop a Plan, tree data collection and assessment are an essential first step. Jacksonville worked with the American Forests organization to conduct an Urban Ecosystem Analysis in 2005. The analysis used infrared images to track areas where the City had lost the greatest amount of tree canopy during the past decade and then calculated the value of the ecosystem services that were lost as a result. These included stormwater retention, air pollution absorption and energy conservation--all provided by the trees. Since then, the City has employed vendors to conduct additional ecosystem service analyses in various neighborhoods using the i-Tree suite of software. This has involved collecting data on the ground from sample plots or street segments and using the software to calculate these parameters. City forestry staff and Greenscape members have compiled summaries of this information and carry copies with them to give to private citizens and City officials at opportune times, so that they can spread the word about the true value of Jacksonville's trees. They also conduct tree inventories in various neighborhoods to assess needs for maintenance or replanting and prioritize follow-up management activities.

The components of Jacksonville's urban forestry program provide examples from which other cities can borrow ideas. Smaller cities could implement some of the same activities on a reduced scale and achieve positive results. Future issues of this newsletter will highlight examples of how some smaller cities have done this.





Sumter Electric Cooperative has always placed a high priority on the environment by working to stay in harmony with nature. Evidence of SECO's environmental stewardship is displayed through the following programs.

Sumter Electric Cooperative:

- was named a *Tree Line USA* utility for the fourth consecutive year by The National Arbor Day Foundation. Employee arboriculture training, public education, and maintaining abundant, healthy trees in SECO's service area are common practices.
- installs osprey nesting dishes atop of the utility pole cross arms as needed for these magnificent birds.
- places squirrel guards atop the transformers to protect a variety of animals from danger, particularly squirrels.
- offers net metering to members interested in renewable generation such as photovoltaic systems.
- recycles retired power equipment, scrap steel, aluminum, copper, porcelain, fluorescent lights, ink printer and copier cartridges, plus much more.
- researches and writes Nature's Reflections, a special column in the members' newsletter developed to educate the community on the flora and fauna of Florida with eco-friendly topics like xeriscaping and conservation.



RPG Trees Are Superior Performers In Your Landscapes

- Hardening-off Trees
- Improving Quality
- **Research & Education**

Now More Than Ever... Look for the RPG Tag for Quality!

2012 Grower Members

The Arbor Group Orlando/407-235-8492

Nature Coast Tree Corp Bell/386-935-9349

BE-MAC Farms Odessa/813-920-2247

SMR Farms Bradenton/941-708-3322

Fish Branch Tree Farm Snapper Creek Nursery Zolfo Springs/863-735-2242 Ft Pierce/772-216-9993

Huntsman Tree Supplier Spectrum Tree Farms Brooksville/352-754-5295

Live Oak/800-753-1379

Marshall Tree Farm Morriston/800-786-1422

Stewart's Tree Service Brooksville/352-796-3426

Supporting Members

John Deere Landscapes / 941-737-2305

Associate Members

Cherokee Manufacturing Graco Fertilizer Company Grass Roots Nurseries

Griffin Trees, Inc Jack Siebenthaler Treemart

RPG Growers are committed to enhancing the image and quality of field-grown trees through the hardening-off process. Research continues to show that hardened-off field-grown trees are more wind resistant, use water more efficiently at planting, establish faster after planting, and when planted with container trees in a situation of limited water or irrigation will have dramatically higher survival rates.

To Subscribe to the RPG Times Newsletter or to request copies of the Tree Grading, Planting or Pruning Cue Cards contact an RPG member or visit www.rootsplusgrowers.org Now offering:

Trunk Injection Products for

Spiraling Whitefly Control

Lowest Cost Trunk Injectable Imidacloprid Highest Active Ingredient (10%) Lowest Cost Equipment

> Easy Quick Effective

-Approximately one minute application time in palms.

-Starts killing Whitefly in less than 24 hours.

-Simple, proven and low cost application equipment.

-Completely closed system-never touch the insecticide.

-Doesn't kill beneficial insects, only kills insects feeding on the tree.

Texas Phoenix Palm Decline and Lethal Yellowing Control Products Available Too



(561) 655-6940 palmtreesaver.com store.palmtreesaver.com info@palmtreesaver.com

Distributors for:



STATE OF URBAN FORESTRY IN FLORIDA

Charlie Marcus, Urban Forestry Coordinator - Florida Forest Service

What is the state of urban forestry in Florida? That's what scientists from the US Forest Service tried to ascertain in a nationwide study conducted in 2009. They were mandated to do so in 2000, when the federal Resources Planning Act (RPA) was expanded to include an assessment of urban forests. This report allowed them to evaluate certain parameters and measure changes in those parameters over approximately a decade.

Since field measurements would have been time and cost-prohibitive, they collected data from interpretation of aerial images. Although not as precise as field measurements, the resulting data provides useful information that urban forest managers can use to prioritize their management activities and justify requests for resources to implement them. The report provides a statewide overview of conditions, as well as supplementary tables with information for individual cities and counties.

Developed areas in Florida, which include the entire spectrum from downtowns to suburbs, comprise over 16% of the state's

total land area. Acreage in developed areas in Florida increased by almost 30% during the 1990s, as the total population increased by 23%. These figures reinforce the need for strong urban forestry programs in local communities since developed areas represent a significant portion of the state and approximately 75% of the state's population lives in developed areas.

Tree canopy cover is a good measure of the vitality of a community's urban forest. The report lists the average tree canopy cover in Florida's developed areas at just under 27%. Several years ago, American Forests set the figure of 40% average canopy cover as a reasonable goal for communities to try and achieve. Many have listed this goal in their urban forestry management plans. The supplementary tables provide estimates of tree canopy cover for each Florida community. Urban foresters can refine these estimates in a number of ways. They can

use a simple dot grid overlaying an aerial photograph; they can use either i-Tree Vue or i-Tree Canopy software; or, they can contract with a vendor who specializes in remote sensing to do a more precise spatial data analysis for their community. The more you invest, the more accurate and useful the information will be.

The main impediment to increasing canopy cover would be the presence of impervious surfaces, which include paved areas, sidewalks, and buildings. Impervious surfaces reduce the amount of land available for tree planting, and more importantly reduce the amount of rooting space for larger tree species. When urban forest managers work with developers and city planners before they finalize road or development plans, they can reduce the amount of impervious surface created and optimize the amount of greenspace and plantable area for trees, as well as minimize the loss of existing tree canopy. The report estimates that impervious surfaces cover almost 17% of Florida's developed areas.

Of course, that leaves 83% of the land in these communities available for trees.

"These figures reinforce

the need for strong

urban forestry programs

in local communities

since developed areas

represent a significant

portion of the state and

approximately 75% of the

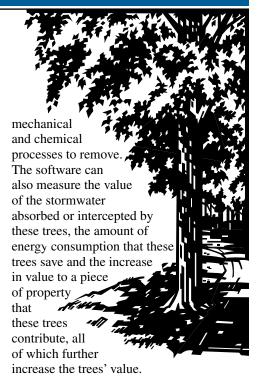
state's population lives in

developed areas."

Statewide, less than one third of this unpaved land currently contains tree cover. So, that means opportunities for tree planting abound in most developed areas, even if you subtract the acreage in ball fields, gardens and other maintained open space. Limited budgets for new trees, limited resources to maintain existing trees, and limited knowledge of the potential

benefits of trees or how to manage them are the major impediments to planting more trees.

Knowledge of the ecosystem services that trees provide, however, can serve as a powerful motivator for local governments to invest more in their tree canopies. For example, the report estimates that developed areas in Florida contain approximately 292 million trees. An analysis conducted using the i-Tree software suite shows that these trees remove an estimated 66,000 metric tons of air pollution, which would require an investment of \$540 million in



The accompanying charts provide information about counties and individual communities. Readers can look up their own places of residence and compare the previously described parameters to those of other Florida communities. The authors also developed a rating scale for community tree canopies based on their population densities, current tree canopy percentages and potential to increase those canopies. This scale has an inherent bias toward smaller towns located in less populated parts of the state with low development pressures. Gainesville, however, did receive an excellent rating on this scale. Jacksonville (which encompasses all of Duval County), North Miami, Oldsmar, Oviedo, Tallahassee, and Winter Springs all received a very good rating. Daytona Beach, Deland, Leesburg, Maitland, Ocala, Ormond Beach, Palm Coast, Panama City, Temple Terrace, Titusville, and Winter Park all received a good rating. Although the formula does have an inherent bias against larger cities, those listed above should take pride in what they have achieved.

This information was derived from Urban and Community Forests of the Southern Atlantic Region, or General Technical Report NRS-50. The authors are David Nowak and Eric Greenfield. Copies of the publication and accompanying CD can be ordered online by visiting http://www.nrs.fs.fed.us/pubs/9918.

TREE CITY USA UPDATE

Charlie Marcus, Urban Forestry Coordinator - Florida Forest Service

Welcome to Florida's new Tree City USA communities for 2012:

- Apalachicola, Franklin County
- Bartow, Polk County
- Crystal River, Citrus County
- Gateway Community Development District, Lee County
- LaBelle, Hendry County
- Virginia Gardens, Miami-Dade County

These additions allow Florida to maintain its #5 Tree City USA state ranking nationally, with over 160 cities now certified. The on-line application procedure that the Arbor Day Foundation initiated in 2010 continues to improve the application and approval process for everyone concerned. This year, over half the applicants used the on-line portal. Admittedly, the system still has a few glitches, but it has proven to be more convenient than submitting paper applications for most users.

Jacksonville remains as the largest Tree City USA in Florida, with a population of close to one million residents. The City of Pomona Park in Putnam County, with a population of less than one thousand residents, remains as the smallest. Orlando was one of the 12 cities certified in 1976, the inaugural year of the program.

A total of 13 other Florida cities have now been certified for at least 30 years. This year, Gainesville, Port Orange, and St. Augustine have reached their 30th year in the program, joining Boca Raton, Clearwater, Cooper City, Fort Lauderdale, Hollywood, Orange Park, Plantation, Tampa, Vero Beach, and Winter Park.

TREE CITY USA.

The Florida Forest Service administers the Tree City USA program in Florida. Information about the program is available on the Arbor Day Foundation website, www.arborday.org, as well as the Florida Forest Service website, www.floridaforestservice.com. City and county governments, as well as federal military bases, are eligible for certification. To qualify, they must have a designated tree board, advocacy group, or department in charge of tree management. They must also have an enforced tree ordinance, work plan with an annual budget of at least \$2.00 per capita, and an annual Arbor Day celebration.

The Tree City USA
Growth Award celebrates
those communities with
tree programs that go
above and beyond the call
of duty. To qualify, a community needs to expend
at least as much funding
on their tree program as
they did the previous year.
They must also initiate

either new tree management activities or broaden the scope of their current activities over those of the past year. In 2012, a total of 25 Florida communities received Growth Awards. Any city that receives the Growth Award for at least 10 years is recognized as a *Sterling Tree City USA*. Florida currently has 18 cities who have achieved this honor.

The Tree Campus USA program, sponsored by Toyota Motors through the Arbor Day Foundation, recognizes colleges (any post-secondary academic institutions) who maintain an active tree management program on their campus with adequate funding, dedicated staff and resources, and volunteer participation in tree activities from students, staff, and faculty.

Florida institutions currently certified by the **Tree Campus USA** program include:

- College of Central Florida, Ocala
- Florida Atlantic University, Jupiter
- Florida Gulf Coast University, Fort Myers
- Florida International University, Miami
- Stetson University, Deland
- University of Central Florida, Orlando
- University of South Florida, Tampa
- Valencia College, Orlando

The Florida Urban Forestry Council is actively promoting Tree Campus USA and is currently working with a number of campuses who are now close to achieving certification. These include the University of Florida in Gainesville, where the Arbor Day Foundation held a special tree planting ceremony with Alpha Kappa Alpha sorority in March. Additional participating campuses are always welcomed.

Electric utility companies and cooperatives who use good tree care practices and do public tree outreach in their communities are eligible for certification under the

"Any city that receives

the Growth Award for

at least 10 years is

recognized as a Sterling

Tree City USA. Florida

currently has 18 cities

who have achieved this

honor."

Tree Line USA program. Certification requirements include adhering to established standards for tree pruning and tunneling, using integrated vegetation management principles when maintaining transmission line rights-of-way, providing worker training and adequate safety for line

clearing crews, promoting tree planting for energy conservation, and participating in the urban forestry programs of their local communities.

Florida companies and cooperatives that are currently certified as Tree Line USA include:

- Florida Power and Light
- Florida Keys Electric Cooperative
- Gainesville Regional Utilities
- Jacksonville Electric Authority
- Ocala Utility Services
- Orlando Utilities Commission
- Progress Energy
- Sumter Electric Cooperative
- Tampa Electric

If your city, county, college, company, or cooperative would like to participate in any of these Arbor Day Foundation programs, or if you would like more information about them, please contact Urban Forestry Coordinator Charlie Marcus at 850/921-0300, or charles.marcus@freshfromflorida.com.

FLORIDA'S URBAN FORESTRY GRANTS PROGRAM

Charlie Marcus, Urban Forestry Coordinator - Florida Forest Service

Each year, the Florida Forest Service provides matching grants to eligible entities throughout the state to provide them with the resources they need to either initiate or improve their local urban forestry management programs. These eligible entities include local governments (city and county), non-profit groups, and educational institutions.

Eligible activities for funding include the following:

- Hiring temporary staffing
- Purchasing urban forestry equipment
- Conducting urban forest inventories
- Preparing urban forestry master plans
- Developing various educational projects

In addition, a small amount of funding is available for demonstration tree planting and pruning projects. First priority for these funds goes to either smaller rural communities or underserved neighborhoods in larger cities.

Each recipient for demonstration or educational projects may receive as much as \$10,000 in matching funds. The other practices may receive as much as \$20,000. Applicants can provide match for their grant requests through either direct cash expenditures, in-kind salary and benefits contributed to the program, equipment use expense, donated materials, or volunteer labor time.

Available funds are allocated so that each of three geographical regions in the state receives an equal share. One third of the funds go to the counties in southeast Florida; one third go to the counties on the Southwest coast up through Tampa and Orlando; and the remaining third go to the North and West Florida counties. Some shifting in the boundaries between these three regions

occurred as the result of the 2010 census. Within each region, applications are scored and ranked based on factors such as need, previous funds received, benefit to the community, and technical correctness.

In 2012, a total of 28 applications with a total value of approximately \$260,000 were approved for funding. Recipients have until January 31, 2014, to complete these projects. The application period for the 2013 grants concluded on March 22. We anticipate that we will allocate a similar amount of funding for these grants as we did in 2012.

Additional information about these grants is available on the Florida Forest Service website, www.floridaforestservice.com or by contacting your local FFS County Forester.



The Of The EAGLESTON HOLLY llex x attenuata

EAGLESTON

The Eagleston Holly is a hybrid of Dahoon holly and American holly. This beautiful evergreen holly typically has a dense canopy and produces bright red berries in the fall and winter. It is often grown as a large shrub or a small tree. It has denser, darker green foliage than the East Palatka Holly and has a smooth, light, and slightly modeled gray trunk. The Eagleston Holly is also less susceptible to many of the diseases commonly associated with hollies.

Ilex x attenuata 'Eagleston'

Leaves:

Medium green leaves with multiple spines. Evergreen

Flowers and Fruit:

Small white blooms in the spring and summer that produces clusters of bright red berries in fall and winter.

Bark:

The Eagleston's bark is smooth light to medium grey and modeled.

Roots:

Eagleston hollies have numerous small, fibrous roots.



Form:

Eagleston holly has a slow to medium growth rate and reaches a height of 18 – 20' and a spread of 6 - 8' with a pyramidal growth habit.

Other Attributes:

Wild birds love the numerous bright red berries that are produced in the winter.





Creating a Legacy, Growing Your Future Since 1974

Natural Resource Planning Services has assisted clients with urban forest management since 1974.

To better serve our clientele we have established a division entirely focused on arboricultural and urban forestry services.

Contact us today!

Erin Givens

(352) 457-6356 Certified Arborist FL-6122A

John Holzaepfel (352) 238-0917

Certified Arborist FL-1147A
Certified Forester CF-630

Eric Hoyer

(863) 670-0734

Certified Arborist SO-0103A Certified Forester CF-1207 Registered Consulting Arborist RCA-482

Mindy Moss

(352) 457-1878 Certified Arborist FL-5874A

P.O. Box 564 San Antonio, FL 33576 Office: (352) 588-2580

Fax: (352) 588-2206

LEGACY Arborist Services

- ♦ Environmental Benefits Analysis
- Urban Tree Inventory
- ♦ Urban Forest Management Plans
- ◆ Pre-Development Inventory
- On-site Tree Preservation
- ♦ Hazard Tree Assessment
- ◆ Tree Appraisals
- ♦ Expert Witness Testimony



A Division of Natural Resource Planning Services, Inc.

2012 FRIENDS OF OUR URBAN FOREST AWARDS WINNERS

MICHAEL DePAPPA OUTSTANDING PROFESSIONAL



Inder Michael DePappa's leadership, the City of Largo has seen the urban forest grow in both forest size and the professionalism of care it receives. As well, both the variety and the quality of trees planted in projects and along streets in Largo have improved under his direction. Michael has been a very large part in the planting of 10,000 trees within the City of Largo over the last eight years. Through his dedication to urban forestry and the environment, he has improved the quality of life for residents in Largo.

Michael's interest in trees and the environment runs deep. He has a keen interest in photographing nature and especially trees. Many of his photographs can be found on the City of Largo's web site. The City's urban forestry web site is another place Michael has improved the urban forest in Largo. Visitors to the web site will find abundant information on Largo's urban forest, its benefits, and trees in general. The many links provide information on the City's awards and tree programs. Michael's own late brother owned a tree company for several years as well. Michael's interest in forestry shows in the "family tree."

KEEP MANATEE BEAUTIFUL - OUTSTANDING TREE ADVOCACY GROUP

eep Manatee Beautiful, Inc. is located in Manatee County on Florida's southwest coast that has an estimated population of 365,000. There is strong community interest for enhancement and protection of the existing tree canopy by establishing innovative tree preservation mechanisms that utilize incentives and site design principles, understanding those trees that make the natural character of Manatee County and establishing a countywide awareness program. Redevelopment activity and increasing pressure from developers are causing destruction of significant tree species.

Keep Manatee Beautiful's directors and technical advisors represent a range of professionals such as certified arborists, biologists, foresters, landscape architects, landscapers, realtors, utility providers, corporate businesses, media, chamber of commerce, public schools, youth organizations, and state and local governments. Five of the seven local governments are members of Keep Manatee Beautiful's Board of Directors or Technical Advisory Committee.

Keep Manatee Beautiful inspires a sense of community involvement by bringing together volunteers, businesses and local governments to make Manatee County a cleaner, more beautiful community with 7,268 volunteers involved in litter cleanups, outdoor beautification projects and environmental enhancement activities. The group works together to implement urban forestry programs and celebrate Arbor Days.

WINDERMERE TREE BOARD AND TREE CLIMBING CONCEPTS TRAINING TEAM, INC. OUTSTANDING PUBLIC EDUCATIONAL PROGRAM



indermere Tree Board and Tree Climbing Concepts Training Team,
Inc. (TCCTT) have a unique partnership in public tree education programs, tree arboriculture and tree planting projects. For eight years, the Windermere Treebute Arbor Day Festival has supported the Town of Windermere's urban forestry program with 200+ trees for planting by Windermere Tree Board volunteers and residents.

Windermere Tree Board and TCCTT arborists supply public education utilizing the "Ask the Arborist" booth where residents can get advice from ISA Certified Arborists

regarding the "right tree for the right place" in their yards. For children's tree education, Smokey Bear from the Florida Forest Service is present with forestry books and information. A tree safety training seminar for arborists, first responders and fire department personnel is facilitated by the Windermere Tree Board who partners with TCCTT arborists and North American Training Solutions to teach tree safety.

The Town of Windermere is a town committed to the preservation of the urban forest and is celebrating its 20th year as a Tree City USA.

CITY OF SUNRISE OUTSTANDING URBAN FORESTRY PROGRAM – LARGE COMMUNITY



he City of Sunrise, founded in 1961, has been a Tree City USA for 24 years. Sunrise has grown into a diverse City with a population nearing 85,000 residents. Nestled alongside the Everglades, the City of Sunrise maintains a commitment to preserving its natural environment through an established and growing urban forest.

Utilizing tree replacement initiatives such as the Landscape Recovery Program and the New Home Buyers Program, Sunrise offers financial assistance to businesses and residents to reverse urban forest losses. In addition, the City is able to offer tree give-aways to residents four times per year, which increases the residential tree contribution to the urban forest. In partnership with the Green Industry, Sunrise provides programs and resources that promote public education to residents and industry professionals at the city, county and state level.

Sunrise has developed over five miles of urban linear parks within existing right-of-ways that would have otherwise been left undeveloped and underutilized. As part of the development of two new parks, the City has preserved in place over 650 specimen trees, created new wetlands and enhanced existing wetlands. Future plans include a green bike path connecting City parks and facilities and surrounding cities.

Through its commitment to the Urban Forest and eco-friendly programs, the City of Sunrise continues to flourish as a vibrant city while preserving its unique natural surroundings.

TRANSPLANTING A 36" LIVE OAK AT THE UNIVERSITY OF TAMPA OUTSTANDING PROJECT



his large oak conflicted with the site of a sports field. Feasibility studies by a Consulting Arborist--who would ensure the best techniques were implemented and liaise with regulatory authorities--confirmed the viability of relocating the tree. South Coast Growers of Lake Worth was awarded the moving contract.

The project commenced in January, 2012 with preparation of the tree including hand excavation three-feet deep of a 24-foot root ball, initial root pruning, fertilization, drenching with mycorrhizae and bio-stimulants, and installation of microirrigation. These preparation procedures

resulted in clearly visible improvements in the condition of the tree.

In May 2012, the 269,000-pound tree was raised on a platform to hydraulically self-driven dollies. The tree was moved over a distance of about 400 feet to a prepared receiving pit where it was rotated 180 degrees for the best fit and lowered into place. Backfill and irrigation were installed and the tree is on an ongoing monitoring program.

The prognosis is good that the tree will survive and thrive, providing a legacy of shade and aesthetic beauty on the University of Tampa's campus for years to come.

CITY OF WILTON MANORS OUTSTANDING URBAN FORESTRY PROGRAM — SMALL COMMUNITY

n 2008, the Broward County Department of Environmental Protection informed the City of Wilton Manors of available funds that were paid to the County for mitigation of tree removal and relocation of trees within the City by residents. The City of Wilton Manors organized a committee to come up with a plan of how the money would be spent, and thus began the Wilton Manors Tree Trust Fund.

A board of elected officials, City staff, residents, and landscape professional were

organized and developed an action plan. The plan included several phases of planting trees in City parks, along swales throughout the City and other City-owned property. The overall goal was to increase the tree canopy and beautify the City.

The City of Wilton Manors also participates in the Greater Fort Lauderdale Flyway Cities Coalition and trees are important in this project's success for migratory birds.

Help Trees in Hardscapes.

Use the WANE Tree System.

The W.A.N.E. (Water Air Nutrition Exchange) 3000 Tree Unit is a tree feeder and irrigator that supplies water, air and nutrition for trees surrounded by pavement.

These units have been used throughout the United States since 1972 in city sidewalks, roadways, parking lots, theme parks and private home sites.

View our complete brochure at wane3000.com



Eliminate sidewalk grates - use a 6" W.A.N.E. unit utilizing the soil beneath the paving and lessening the trip hazard.



- Installs in any paved medium
- Send essential nutrients to the tree's root system
- Supplies water and air necessary for healthy tree growth
- Attractive and safe (Visitors with high heels, wheel chairs, canes, etc. will not have a problem trying to maneuver around uneven surfaces.)
- Available in different colors

TREE FEEDER SYSTEM

wane3000.com

12312 Sunriver Lane • Dade City, FL 33524 • 813-961-1060



The Wilton Manors Tree Trust Fund supports the mission, goals and objectives outlined by the Coalition by providing adequate tree canopy and restoring their native natural habitats.

Wilton Manors also understands the environmental importance, beautification of the City, and overall benefit of having more trees in their community.

JULIE IOOSS LIFETIME ACHIEVEMENT AWARD

Julie Iooss has spent many years of her professional career promoting quality trees. She is dedicated to learning and educating others about urban forestry. Julie's name is equivalent with quality in the tree care industry. She has always been passionate about tree quality and a huge proponent of the "Right Tree, Right Place" program.

Julie has had many outstanding accomplishments over the years in her career. She has 30 years of technical landscape knowledge. As the Horticultural

Manager for the City of Orlando Parks Division, Julie oversees the state-regulated pesticide applications, the City Nursery operation, landscape maintenance crews, tree planting coordination, and the entire irrigation department.

Even though Julie is not the City's urban forester, her passion for trees is well-evidenced in her annual commitment to ensure the City of Orlando continues to receive the Tree City USA and Tree City Growth awards. Julie cares about trees wholeheartedly everywhere and her support of educating about trees is tireless.

MEMBERSHIP APPLICATION

(Dues are effective for the calendar year of January 1 - December 31) Make check or money order payable to FUFC and mail to: Post Office Box 547993, Orlando, FL 32854-7993 Categories (please check one): ☐ Professional @ \$25.00 (Professional membership is open to anyone who is actively working in the profession of Urban Forestry or any related profession.) ☐ Tree Advocate @ \$20.00 (Tree Advocate membership is granted to those volunteers who are members of a tree board, beautification committee or other *Urban Forestry volunteer group.)* ☐ Supporting @ \$200.00 (Supporting membership is granted to those individuals, groups or other entities expressing a desire for a strong supportive role in the Council. Membership will be granted for up to five individuals of an organization or business.) ☐ Government/Non-Profit Agency @ \$100.00 (Government/Non-Profit Agency membership is granted to those individuals, groups or other entities actively working in the profession of Urban Forestry or any related profession. Member*ship will be granted for up to five individuals within the agency.)* **☐** Student @ \$10.00 (Student membership is granted to anyone who is actively enrolled as a full-time student and who is considering pursuing a career in Urban Forestry.) Name: Title: Firm: Address: City: State: Telephone: (FAX: (E-mail: Amount Enclosed: ______ Date: ____/___ Would you be interested in further information regarding serving on a Council subcommittee? Yes No Area of interest:



FLORIDA URBAN FORESTRY COUNCIL Post Office Box 547993 Orlando, FL 32854-7993

NON-PROFIT ORG. U.S. POSTAGE - **Paid** -Permit #2717 Orlando, Florida

For more information or change of address, please contact the FUFC:

Phone: (407) 872-1738 Fax: (407) 872-6868 E-Mail: <u>info@fufc.org</u> Website: <u>www.fufc.org</u>

CHANGE SERVICE REQUESTED

Address Update:

- ☐ Please change my address as noted on the right.
- ☐ I receive duplicates. Please delete my name at right.
- ☐ Please remove my name from your mailing list.

2013 FUFC EXECUTIVE COMMITTEE MEMBERS

OFFICERS:



Elizabeth Harkey President Appointed Position Advisory Member City of Sanford



Ken Lacasse President Elect Elected Position Utility Forester SECO Energy



Wayne Zimmerman Vice President Elected Position Member-at-Large Orlando Utilities Commission



Scott Souder Treasurer Appointed Position Advisory Member Jacksonville Electric Authority



Linda Seufert Secretary Appointed Position Advisory Member City of St. Petersburg



Mary Lou Hildreth Immediate Past President Advisory Member City of Keystone Heights

COMMITTEE MEMBERS:

Kathy Beck, *Elected Position* Member-at-Large City of Tampa

David Crawley, Appointed Position ASLA / FL Chapter URS Corporation

Gene Dempsey, *Elected Position*Private Arborist
City of Fort Lauderdale

John Foltz, *Appointed Position* Advisory Member University of Florida (Retired)

Justin Freedman, *Elected Position* Member-at-Large Metric Engineering, Inc.

Jennifer Gihring, Appointed Position Advisory Member SJRWMD

Erin Givens, *Appointed Position*Society of American Foresters
Natural Resource Planning Services, Inc.

Eric Hatcher, Appointed Position FNGLA

Cherry Lake Tree Farm

Sam Henderson, Appointed Position Florida League of Cities City of Gulfport

Leah Hoffman, Appointed Position Florida Recreation and Park Association Marion County **Julie Iooss,** Appointed Position Advisory Member City of Orlando

Gayle Lafferty, Elected Position Member-at-Large City of Vero Beach

Larry Leggett, Appointed Position FL Chapter ISA City of Lakeland

Michael Mittiga, *Elected Position* Private Arborist The Davey Tree Expert Company

Guy Murtonen, *Appointed Position* Florida Department of Transportation Florida's Turnpike Enterprise

Rob Northrop, *Appointed Position* Cooperative Extension Service Hillsborough County Extension

Jerry Renick, Elected Position Member-at-Large Land Design South

John Springer, Elected Position Tree Advocacy Enchanted Walkabouts

Stephanie Wolfe, Appointed Position Advisory Member City of Winter Springs

Charlie Marcus
Florida Forest Service Liaison

Sandy Temple FUFC Executive Director