



The Council Quarterly

Quarterly Newsletter of the Florida Urban Forestry Council

2017 Issue One

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.

HURRICANE TRIGGERS ACTIVATION OF FLORIDA'S FIRST URBAN FOREST STRIKE TEAM

Submitted by Lou Shepherd – Urban and Community Forestry Coordinator – Florida Forest Service

The storm formed on September 22, 2016, off the coast of Africa with a path impacting Haiti and the Bahamas. The Category 4 hurricane resulted in significant loss of life in Haiti. Next stop, Florida.

Hurricane Matthew paralleled the Florida coast causing widespread evacuations with over one million losing power during the storm. Overall, the hurricane caused damage estimates in excess of \$10 billion and was the costliest hurricane since Hurricane Sandy in 2012. On October 6, the Category 3 storm reached the peninsula. The following day it dropped to a Category 2 storm with sustained winds of 110 mph. The

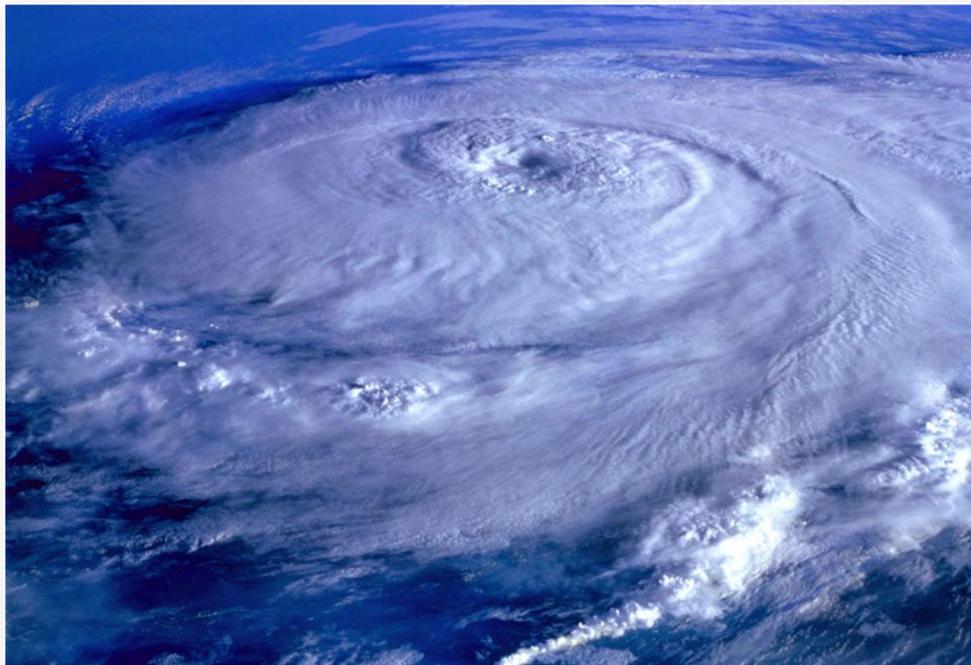
eye of the storm remained about 40 miles offshore as it passed Jacksonville. Matthew's path churned in the Atlantic staying far enough offshore to spare Florida a direct hit--yet, eight deaths were attributed to the storm. In all, On October 9, eight coastal counties received FEMA Disaster Declarations. Within three days of the Declaration, Florida Forest Service pre-mobilization efforts were underway.

Monday, October 17 was a bright sunny day in stark contrast to the apprehension I felt as I carried luggage, personal protection equipment, camera, and--as a precaution against debris and exposed nails--no less

than three cans of fix-a-flat for the car. It was just a little over a week since Hurricane Matthew swept up the east coastline and I was headed to the southern impact point of St. Lucie County for hazard investigation. Later investigations revealed that the lower three counties were not hit as hard as their northerly neighbors.

While implementing a mobile, multi-county, windshield survey, it was apparent that the scope of the disaster would require a coordinated effort and a working relationship between municipal, state, and federal agencies. During this time I contacted the U.S. Forest Service and Florida Department of Emergency Management. At my request, State Emergency Management officials distributed information from

continues on pg. 2



INSIDE:

Hurricane Triggers Activation of Florida's First Urban Forest Strike Team	1-4
President's Message.....	2
Vines, Villians & Vagabonds.....	6-7
Stump the Forester	9
Tree of the Quarter.....	10-11
Plan a Raid!	13
Tree Talk	14
Request for Articles (and Photos).....	15

PRESIDENT'S MESSAGE

continued from pg. 1



Hello FUFC members!

Urban forests play an important role and impact on the quality of urban life and urban ecosystems. Yet the urban forest faces many challenges, some in the form of vines, villains and vagabonds. Invasive trees and vines can kill and replace native trees, altering the ecosystem. Insects, diseases and storms can deliver severe damage to urban forests, causing loss of canopy coverage. Development is constantly

changing the urban landscape--to include the planting and removal of trees.

The biggest challenge facing the urban forest is proper urban forest management. Lack of funding, conflicting management approaches and insufficient information and knowledge often hinder effective management of urban forests. Along with these challenges, many communities do not have the resources to implement the most basic urban forestry management plan.

This year, the 2017 Urban Forest Institute, focusing on the topic of "Climbing to the Next Branch of a Managed Urban Forest," addressed ways to move forward with a plan to become a managing community. Topics on professional staff, tree ordinances, working with tree advocates, and implementing management plans were discussed. Additional information on becoming a managing community can be found on the Florida Urban Forestry Council's website, http://www.fufc.org/soap_resources.php.

By understanding threats to the urban forests, as well as the importance of an active urban forestry plan and program, management efforts can be directed to reduce the threats of vines, villains, and vagabonds within the urban forest. I hope you enjoy this issue of The Council Quarterly.

Yours Truly,

Linda Seufert

Linda Seufert

2017 FUFC President

Urban Forest Strike Teams to affected county level emergency management operations. Meanwhile, Florida Forest Service Cooperative Foresters made direct contact to municipalities situated in the heart of the disaster. Meetings were held with Cocoa Beach, Holly Hill, Palm Coast, St. Augustine, Jacksonville, and Volusia County government.

Within days the City of Jacksonville weighed the benefits of the Urban Forest Strike team against hiring a private contractor and a FEMA overseer. Jacksonville's city forester, Richard Leon, advocated using the Urban Forest Strike Team citing estimated contract costs could be upwards of \$200,000. After the initial storm response, it was time to initiate recovery efforts. By October 14, just one week after the storm, the value of the Urban Forest Strike Team became apparent to city officials. The City of Jacksonville asked the team to assess tree damage on public right-of-ways including public roadways, sidewalks and utility easements. Strike teams searched for storm damaged trees with broken limbs overhanging public right-of-ways and posing a hazard to the public. The team was dispatched on Sunday, October 23 and worked for two weeks in Jacksonville.

Hurricane Matthew represents the Florida Forest Service's first Urban Forest Strike Team (UFST) deployment. Urban Forest Strike Teams are specially trained, stand-alone resource using an Incident Command structure designed as a part of the national FEMA Disaster Recovery plan. The primary **RECOVERY** activities included individual tree assessments to support a community's application for FEMA public assistance (i.e., debris management) and

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).

hazard mitigation. The primary **OBJECTIVE** was to help communities retain as much viable, low-risk tree canopy as possible following a natural disaster.

Urban Forest Strike Teams assisted communities with the classification of damaged urban trees based on FEMA 325 guidelines for the purpose of public assistance reimbursements during the recovery phase of a federally-declared disaster. At the same time, they provided on-site, individual tree evaluations following the natural disaster. Risk assessments used the American National Standards Institute (ANSI 300 Part 9) Tree Risk Standard and the International Society of Arboriculture (ISA) Best Management Practices for tree risk assessment guidelines.

In Jacksonville, the Urban Forest Strike Team, being a stand-alone resource, proved invaluable. It decreased response time and positively impacted communities that faced challenges coping with response and recovery issues. Public safety, medical, public works, and electrical service responders had been continuously functioning on little rest.

The Florida Forest Service Urban Forest Strike Team was composed of four ISA



The first "Team of Task Specialists" included CFA Coordinator Steve Lloyd, Urban Forestry Programs Coordinator Lou Shepherd, Senior Forester Cathy Hardin, and Senior Forester Mark Torok. Stephen also served as Incident Commander and GIS Specialist.

certified arborists. All Urban Forest Strike Team participants received safety training and wore appropriate gear. Within two weeks of the disaster the Urban Forest Strike team was operational in Jacksonville. Shortly after the team's arrival Eric Kuehler, technology transfer specialist with the

U. S. Forest Service Urban Forestry South, arrived with GIS support equipment and a quick refresher on its use.

After meeting with Richard Leon, the city forester, and other city staff, the teams

continues on pg. 4

PRUNING SAW SANITATION

BLADEBATH™

HORTICULTURAL PRUNING SAW
DISINFECTING TUBE

www.bladebath.com

SPECIAL INTRODUCTORY OFFER

\$28.95 + s/h



SIMPLE • EFFECTIVE • EFFICIENT

FOR USE WITH MOST STRAIGHT-BLADE HAND-PRUNING SAWS
PATENT PENDING • SAW NOT INCLUDED

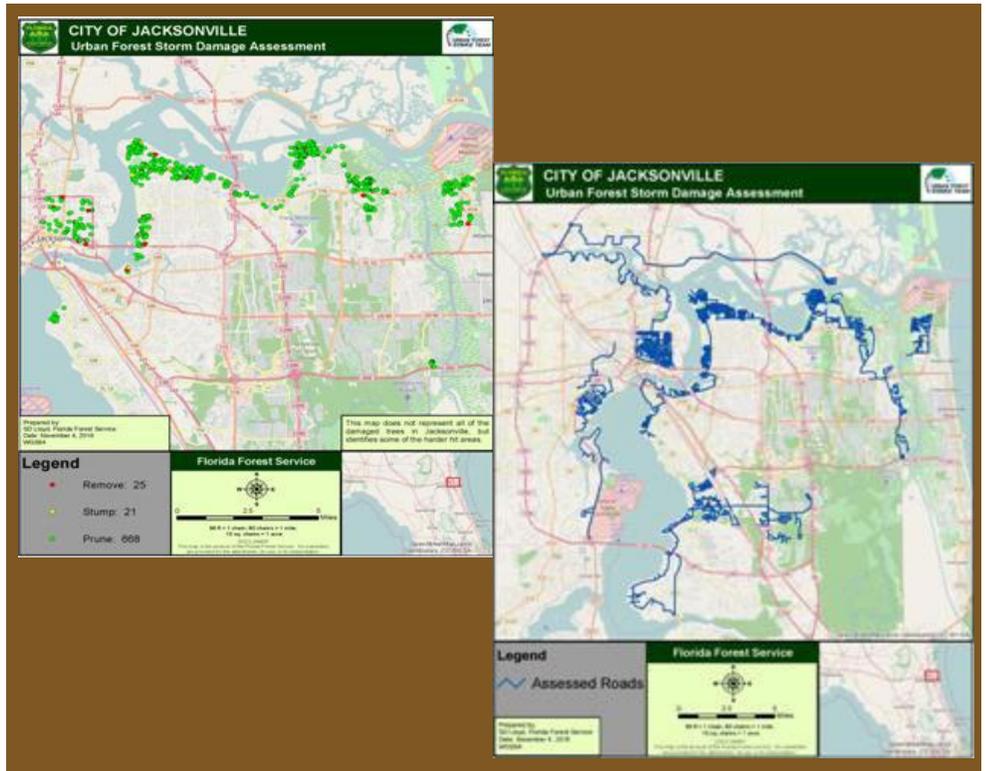
set up a command center. The scope of work was limited to street trees. Richard designated the Springfield community as a priority due to an upcoming architectural celebration and musical festival known as “Porch Fest.”

Springfield was established as a residential community in 1871 and is now registered as a National Historic District. The neighborhood contains some of the City’s best examples of 19th and early 20th century architecture. The district contains 119 city blocks in an area of approximately 500 acres where a mature laurel oak tree canopy would overhang festival goers.

Springfield neighborhood trees were observed for various defects. Strike teams were looking for storm damaged trees that had broken limbs overhanging public right-of-ways and posing a hazard to the public. Specifically, tree crowns for hanging or broken branches, leaning trees, trunk shear defects, and root plate uplift were noted. Individual trees with failures or hazards meeting FEMA requirements were identified and documented.



Team members interacted with concerned and curious homeowners while taking questions and explaining the team’s purpose and role. The team was able to quickly assess and make necessary recommendations to the tree crews responsible for the mitigation



of potential public safety risks prior to the event.

Upon concluding the team’s role within the historic neighborhood, the data, electronic shape files, hard copy maps, and numbered tree location points, were provided to Jacksonville’s arborists, GIS department and designated tree crews in order to effectively begin hazard mitigation.

Strike teams then turned their attention to hard hit areas, having very old canopies of hardwoods, near the St. Johns River and its tributaries. Some areas of concern included Fort Caroline, Arlington, Bay Meadows, Riverside, San Marco, Mandarin, and Trout River districts. The teams commenced initial impact and damage assessments through windshield surveys, plotting locations and damage to trees.

Two teams surveyed almost 800 miles of urban and suburban roadways during the impact assessment. The survey results showed predominantly light to medium impact in most neighborhoods. The Arlington and Fort Caroline districts, situated on the south bank of the St. Johns River, were areas fully exposed to the northerly gusts coming in over the salt marsh and flats. This

condition caused a higher concentration of wind damaged trees. Given time, personnel, and other resource considerations, the teams concentrated efforts to these locations. As with the Springfield neighborhood, strike teams assessed and recorded hazardous broken limbs, leaning trees and stumps in the public right-of-way. Once concluded, electronic and hardcopy reports of the findings were delivered to the city forester.

In summary, UFST assistance can be provided anywhere from two weeks to several months after a disaster. UFST deployments are flexible and based on community needs. In the course of two weeks,

over 700 hazards were identified. Most were laurel oaks with hazardous limbs (hangers) in the crown. The city had budgeted an estimated \$200,000 for contract work. The Florida Forest Service wishes to thank the U.S. Forest Service for grant funds specifically dedicated for

disaster deployments. As a result, the City of Jacksonville incurred no cost for UFST services. As word gets out, after the next disaster, the Florida Forest Service encourages more communities to benefit from, and call upon, Urban Forest Strike Teams.

“...UFST assistance can be provided anywhere from two weeks to several months after a disaster. UFST deployments are flexible and based on community needs.”

Wedgle® Direct-Inject™ TREE INJECTION SYSTEM

Our advanced technology for tree treatment allows you to

INCREASE THE NUMBER OF TREES YOU TREAT IN A DAY!

- ◆ No drilling damage
- ◆ No mixing at job sites
- ◆ No guarding or return trips
- ◆ No waiting for uptake
- ◆ Treats most trees in five minutes or less!
- ◆ Successful and most profitable add-on service



Made in
the USA

Multiple injection tips designed for all types of trees, conifers and palms



Insecticides • Fungicides • PGRs • Antibiotics • MicroNutrients

AVAILABLE AT:

WINFIELD™

855-880-0048

www.winfieldpro.com

ArborSystems™

Tree Injection Solutions
ArborSystems.com

VINES, VILLAINS, AND VAGABONDS

Submitted by Joe Anderson – JEA Utility Forester

Vines are perhaps the serpents of the plant Kingdom. They are sly and treacherous sprouts that crawl along the ground, searching for a mark to grab and engulf. They prey upon light and asphyxiate open space. They slither along, climbing the trunks and branches of stout trees, exploiting the strength of wood and stem. Vines will lie, cheat and steal their way through the landscape as they constrict around helpless, woody bystanders. They betray the laws of gravity in a mischievous climb upward. Some vines are more troublesome than others. Some vines are vipers that deliver a toxic poison--an oily, irritating resin (urushiol)--when disturbed or threatened.

Vines don't have the exclusive rights on the use of urushiol. The Florida Keys and parts of southern Florida are home to poisonwood (*Metopium toxiferum*) and manchineel (*Hippomane mancinella*) trees. Poisonwood weeps a black, toxic sap from its trunk as if saturated with the stuff. Urushiol oozes from the Manchineel tree in a milky sap. Both trees are extremely poisonous and



Manchineel (*Hippomane mancinella*)

significantly more potent than our three most common poisonous vines--poison ivy (*Toxicodendron radicans*), poison oak (*Toxicodendron pubescens*) and poison sumac (*Toxicodendron vernix*). These vines may be our most familiar villainous vines, but they are not the only creepy crawlers in Florida.

The sap of the Virginia Creeper (*Parthenocissus quinquefolia*) contains needle shaped crystals of calcium oxalate (raphides). Calcium oxalates are the most common component of kidney stones--never a good

thing. The purplish-black berries of the vine contain toxic amounts of oxalic acid and can be deadly if eaten. The showy leaves and flowers of trumpet creeper, trumpet vine or cow itch vine (*Campsis radicans*) can irritate the skin or cause an allergic reaction. Apart from their toxins, don't underestimate a vine's rampant, meddlesome growth if left unchecked.

Vines are wandering vagabonds traveling from place to place with no settled home. Vines may appear to be shiftless and lazy, but as plants go, they are very resourceful and tenacious in their search and seizures. In the urban setting, they will embrace and climb trees, fences and utility poles. To an electrical power line, a vine can be a live wire--a scam artist. The vascular system of trees, shrubs and vines can conduct electricity. A vine will twist around an energized line and provide a quick and easy path to ground, creating a short or fault in an electrical system. In order to enhance the reliability of electrical service, utilities establish routine trim cycles to combat the encroachment of vegetation. These cycles are often set for two to five year intervals and can accommodate for the growth habits of trees, but vines don't play by the rules of trees. The rapid growth of a vine can interrupt a trim cycle prematurely. Though trees will reclaim available space following a cycle trim, it will take time to build the twigs and branches to do so. In a race for space, a vine can energize growth to a warp speed and outpace other woody plants. Vines will seize the upper hand by hijacking the stems and branches built by neighboring plants. If conditions are right, a vine can reach the hazard zone of an electrical circuit in a single growing season.



Poisonwood (*Metopium toxiferum*)

Poison Ivy (*Toxicodendron radicans*)



Poison Oak (*Toxicodendron pubescens*)



Poison Sumac (*Toxicodendron vernix*)



Virginia Creeper
(*Parthenocissus quinquefolia*)



Trumpet Creeper, Trumpet Vine or
Cow Itch Vine (*Campsis radicans*)

If vines were scoundrels, they would only be small-time crooks compared to the impact and terror brought on by invasive blight, disease, and pests. These may be familiar, chilling stories, but they need to be told less we forget, or grow complacent toward, the menaces that threaten the sanctuary of our urban forests. Once upon a time, a chestnut blight, caused by a wind-borne fungus *Cyphonectra parasitica*, virtually stripped the American chestnut (*Castanea dentate*) from

our urban landscapes where it once reigned a king. The blight brought a cascading and devastating hardship to the environmental, social, and economic landscapes once framed by chestnut trees. By the mid 1900's, Dutch elm disease (DED), spread by elm bark beetles (Family: *Curculionidae*) infected with the sac fungi (*Ascomycete microfungi*), ravaged and laid to waste the American elm (*Ulmus americana*) in both North America and Europe. Outside the confines of its native East Asia habitat, the emerald ash borer (EAB) (*Agrilus planipennis*) has proven to be a highly invasive and destructive force to our native ash trees (*Fraxuys Sp.*). In Florida, redbay (*Persea borbonia*) and other laurel (*Lauraceae*) species have fallen victim to the deadly laurel wilt disease, caused by a *Raffeelea lauricola* fungus, following attacks of the ambrosia beetle (*Xyleborus glabratus*).

“If vines were scoundrels, they would only be small-time crooks compared to the impact and terror brought on by invasive blight, disease, and pests.”

These are just a handful of tales in the genre of arboricultural horror stories. Though the stories each have villains, vagabonds, and victims in their plot, there is always hope with emerging vanguards too. The heroes and heroines of the urban forestry story are the stewards of the urban landscapes – be it foresters, arborists, landscape architects, horticulturalists, tree-care specialists, gardeners, scientists, students, urban planners, civil engineers, public works officials, government agencies, code-enforcement officers, and tree advocacy groups, just to name a few. Nevertheless, as the plot thickens, the stewards can be heroes or they can be bums.

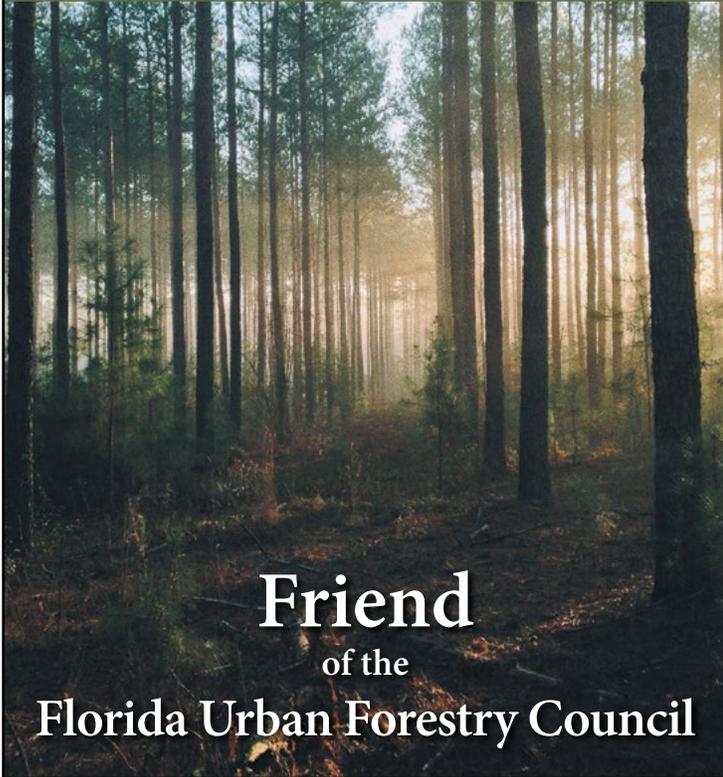
Magnificent as people are, man can have a vine-like, exploratory, and predatory drive to be more master than steward of the natural systems that endure our urban, suburban, and rural accommodations. We are bums if we, in the end, remain ignorant - holding contempt for coexisting forms of life.

We can no longer be preoccupied with self if we are to be the hero. We are not exempt from the laws of nature – be it gravity, thermodynamics, physics, or species interdependency. If we are not vigilant and prudent in our stewardship we may play the part of the villain and vagabond. We may become the vine that rapidly climbs to the top of a utility pole, snuffing out the very power that energizes a way of life. It will be “lights out!” We may fall victim to our own villainous habits and crimes.



Ambrosia Beetle
(*Xyleborus glabratus*)

John Fotlz
Sustaining Sponsor



Friend
of the
Florida Urban Forestry Council



Industry leading
equipment resources



Nationwide 24/7 crisis response

Unmatched safety record

Highest standards for crew professionalism



Contact your Nelson representative today to discuss your vegetation management needs:

Bob Turner Jr. at 1-856-694-4100



OUR TEAM

ERIN GIVENS, CA
(352)457-8356

JOHN HOLZAEFFEL, CA, ACF, CF
(352)238-0917

ERIC HOYER, CA, RCA, CF
(863)670-0734

CHARLIE MARCUS, CA
(850)570-5963

JAY VOGEL
(352)238-0458

LEGACY ARBORIST SERVICES

A DIVISION OF NRPS FOCUSED ON MANAGING THE URBAN FOREST

- | | |
|-----------------------------------|-------------------------------------|
| Tree Risk Assessments | Street / Park Tree Inventory |
| Tree Appraisals | Canopy Analysis |
| Pre-Development Tree Evaluations | Urban Forest Management Planning |
| Expert Witness Testimony | i-Tree Analysis |
| On-site Tree Preservation | Grant & Ordinance Preparation |
| Arborjet Tree Injections | Educational Workshops |
| Natural Areas Management Planning | Urban Forestry Outreach & Promotion |

CREATING A LEGACY, GROWING YOUR FUTURE SINCE 1974

www.NRPSforesters.com

Working in Harmony with Nature

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.



STUMP THE FORESTER

QUESTION: What in the world is it?

ANSWER: It may look like a soft, fluffy, touchable pussy cat, but looks can be deceiving. This creature is anything but friendly. Distance is your friend if you happen upon a puss caterpillar (*Megalopyge opercularis*). In the realm of venomous creatures this cat is a pillar of the community – an inch-long woolly mammoth. It is perhaps the most venomous caterpillar in the United States.

The larvae can grow to be an inch-long with luxuriant gray to golden brown hair. A bright orange streak along the ridge of its back often tapers off into a tail that trails the body.

Don't worry about fangs, or a stinger. Extremely toxic, quill-like spines are concealed under its furry overcoat (setae). Upon contact the quills stick to the skin and inject venom that causes immediate, progressive, and severe burning pain. Pain, welts, blisters, and rash can persist for hours. The venomous curse can radiate up a limb beyond the point of contact. A sting may also cause headache, fever, nausea, vomiting, abdominal pain, seizures, and muscle spasms.

When treating the sting(s) it will be necessary to remove the spines from the skin as soon as possible. Adhesive tape is great tool for this task. Baking soda, calamine lotion, or an oral antihistamine



may bring some relief. Medical treatment may be necessary.

The troublesome caterpillars are frequently found feeding on the leaves of oaks, elms, citrus, and sycamore. The puss caterpillar is not considered species specific in its feeding habits. It can be found feeding on the leaves of many different trees (polyphagous).

The puss caterpillar is the larvae of the southern flannel moth. The common name

“flannel moth” refers to the thick, furry coat. The southern flannel moth is found from New Jersey to Florida and west to Arkansas and Texas.

Other stinging caterpillars include the buck moth caterpillar (*Hemileuca maia*), hag caterpillar (*Phobetron pithecium*), lo moth caterpillar (*Automeris io*), saddleback caterpillar (*Acharia stimulea*) and the spiny oak-slug caterpillar (*Euclea delphinii*).

Answer provided by Joe Anderson, Utility Forester with JEA



If you would like to ‘stump the forester,’ see page 15 for information on submitting your question!

Tree of the Quarter

PAPER MULBERRY
(*Broussonetia papyrifera*)

The Paper Mulberry (*Broussonetia papyrifera*) is a species of flowering plant in the family Moraceae. It is native to Asia, where its range includes China, Japan, Korea, Indochina, Burma, and India. It is widely cultivated elsewhere and it grows as an introduced species in parts of Europe, the United States, and Africa. Other common names include **tapa cloth tree**.

This plant has been cultivated in Asia and some Pacific Islands for many centuries for food, fiber, and medicine. Paper mulberry played a significant role in the development of paper-making, and is one of the plants mentioned in the Chinese classic *Shih Ching* ('Book of Poetry'), which contains a collection of folk songs, odes and sacrificial psalms composed between 1,000 and 500 BC, and is said to have been edited by Confucius.

It was used to make washi in Japan by 600 AD. Washi, a Japanese handcrafted paper, is made with the inner bark, which is pounded and mixed with water to produce a paste, which is dried into sheets. In Korea, the paper made from the mulberry bush is called Hanji (한지).

In contrast, in the Pacific region textiles are made by beating together strips of inner bark. This tapa cloth is used for various items of clothing, such as sarongs, scarves and hats, as well as for making bags and other items such as bedding. Until relatively recently, tapa cloth was the main source of clothing worn on Pacific islands such as Fiji, Tonga and Tahiti. Tapa cloth is still worn on ceremonial occasions, during festivals and for traditional dances. The bark fibres (and indeed the roots) can also be made into rope and cord. The wood is light



and easily worked, and is used for making cups, bowls, and furniture.

Paper mulberry was introduced for use as a fast-growing shade tree. Found from Illinois to Massachusetts, south to Florida and west to Texas, paper mulberry invades open habitats such as forest and field edges. Internationally, it is identified as an invasive weed in over a dozen countries. It tolerates disturbance and air pollution, so it has been useful as a landscaping plant on roadsides. It is a pioneer species that easily fills forest clearings, and it has been considered for reforestation efforts. It grows well in many climate types.

The ability of the plant to readily colonize available habitat, particularly disturbed areas has helped it become an invasive species in some regions. It spreads rapidly when male and female individuals grow together and seeds are produced. Seed dispersal is accomplished by animals that eat the fruits. The plants can form wide, dense stands via their spreading root systems.

Look-alikes are exotic invasive white mulberry (*Morus alba*) and native trees including red mulberry (*Morus rubra*), American basswood (*Tilia americana*) and sassafras (*Sassafras albidum*), due to a shared leaf form. The red mulberry and sassafras are good planting alternatives to this invasive species.



Size and Form: This species is a deciduous shrub or tree with milky sap - usually growing 10 to 20 meters tall, but known to reach 45 feet.

Habitat: Full sun to partial shade, well-drained to occasionally wet soil, high drought tolerance, and moderate aerosol salt tolerance. It will grow on any well-drained soil, and performs best in a sheltered place in full sun.

Growth Rate: Fast growing shade tree

Leaves: The leaves are alternate, opposite, and whorled, often 3-15-lobed (the lobes sometimes deep), variable in shape, even on one individual. The blades may be lobed or un-lobed, but they usually have sharply toothed edges, lightly hairy, pale undersides, and a rough texture. The leaf base is heart-shaped to rounded.

Bark: The twigs of paper mulberry are hairy reddish brown and the bark is tan and smooth to moderately furrowed. The wood is soft and brittle.

Roots: The shallow root system makes it susceptible to blowing over during high winds.

Flower: The species is dioecious, with male and female flowers on separate plants. The separate male and female flowers appear

in the spring; male flower clusters are elongate, pendulous, 2½-3 in. long, and composed of many individual flowers; female flowers are globular and about 1 in. diameter;

Fruit and Seed: The female flowers mature into red, ball-shaped, aggregate fruits. The stone fruits are up to 1.2 inch in diameter. The Paper Mulberry fruits are edible, as are the young leaves, when steamed.

Environment: Once established it grows vigorously, displacing native plants through competition and shading. If left unmanaged, paper mulberry can dominate a site. Its shallow root system is susceptible to blowing over during high winds, posing a hazard to people and causing slope erosion and further degradation of an area.

Usage: Tapa cloth is a textile made from the inner bark in many Pacific Island nations. It was the main material for clothing in places such as Fiji, Tonga, Samoa and Tahiti until recent times, and it is still worn ceremonially. It is also used to make bags and bedding. The wood of the plant is useful for making furniture and utensils, and the roots can be used as rope. The fruits and cooked leaves are edible. The leaves also have properties to increase reduced blood cells.



The fruit, leaves, and bark have been used in systems of traditional medicine. For example, the bark and fruit of the species, known locally as jangli toot, are used as a laxative and antipyretic in rural Pakistan.

Little known facts

Specimens of paper mulberry wood, bark, paper, and cloth products (including fans, envelopes, a bowl, kite, parasol, coat, cloak, hat, dresses, and shoes) are held in Kew's Economic Botany Collection, where they are available to researchers, by appointment.

Items of particular importance are the paper products collected by Sir Harry Parkes in the 19th century and examples of tapa cloth from Polynesia (one of which was made by the wife of one of the mutineers of the HMS Bounty, the vessel captained by William Bligh in order to collect breadfruit plants, and take them to the Caribbean).



WANE 3000[®] TREE SYSTEM

...Since 1972

County Library Parking Lots
Fire House Parking Lots
City Side Walks
Major Florida Amusement Parks

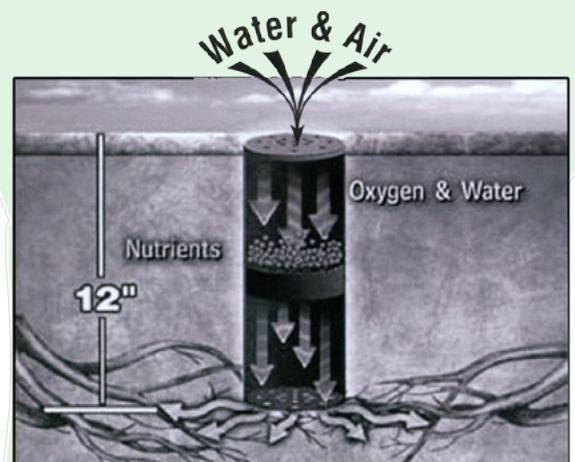
Emerson Hall University of Florida



**Over 100 Wane Units
support root growth
beneath this hard surface.**

- **Does This Product Suit Your Needs?**
- **Very Cost Effective**
- **Offering Time Proven Products for Trees in Hard Scapes.**

...See Our Website



www.wane3000.com

(813) 961-1060

info@wanetreesystems.com

PLAN A RAID!

Submitted by Jody Buyas, Keep Orlando Beautiful Coordinator

The hairiest. The ugliest. The smallest. The largest. These are some of the winning titles of an Air Potato raid.

I think we are all aware of the invasive Air Potato vine (*Dioscorea bulbifera*), which was first sent to Florida in 1905. It is native to Asia and Africa. Scientists and horticulturists warned about how quickly it would spread, but it was still promoted. Over time it has become a detrimental species in our local environment.

It grows, twists, and climbs easily, pushing its way into trees and shrubs, covering everything it grows on, starving the plants below of sunlight. It commonly reaches the tops of trees 60 feet tall. It wraps itself around utility poles, fences, and lines - grabbing onto any surface in order to spread. Few things will grow or survive where it occurs. Animals that depend on native plants can be easily displaced. So, it is extremely important for us to try and control this exotic plant species here in Florida. It affects plants, animals and us.

If the Air Potato vine is a problem in your park, neighborhood, or where you are managing land, or forests, a good old-fashioned weed pulling, or weed raid, may be the best solution. Many organizations like Keep Orlando Beautiful and Green Up Orlando assist local governments and land managers by calling on volunteers to help get rid of the intrusive vine. It is an ongoing battle and costs the State millions of dollars a year to treat.

Removing the actual potato is the best way to prevent the vines from growing and returning. Volunteers of all ages will actually enjoy this important task, if you make it fun with an Air Potato raid.

Girl Scouts, Boy Scouts, middle school, high school, college students, local corporations and many other groups are always looking for volunteer opportunities. They usually find the Air Potato raid appealing and worthwhile. They love the fact that they can make such a huge impact in just a few hours.

If you're ready to plan a raid in your area, here are some simple steps to do:

- Find a safe, practical meeting location.
- Make sure the area you are looking to pull vines and collect potatoes is safe for all ages.
- Pick two hours on a Saturday morning (we have the most success with 9-11 am).
- Create a promotional flyer with all the details - location, time, and contact information.
- Include information about the vine and how important the day's activity will be.
- Promote the event as a contest (hairiest, smallest, ugliest, largest, most collected).
- Announce that community service hours can be earned.
- Provide water and light snacks.
- Invite local schools and organizations.
- Have buckets, bags, and gloves on hand for your volunteers.
- Have some fun team leaders and judges for the contest portion of the event.

To learn more about the benefits of, or how to organize an air potato raid, please contact jody.buyas@cityoforlando.net or 407.246.2752





Florida's trees have a voice, a voice that is revealed through the Speaker's Bureau of the Florida Urban Forestry Council (FUFC). Distinguished speakers have knowledge, expertise, and experience to share. Speakers may include tree care professionals, arborists, foresters, horticulturalists, landscape architects, parks and recreation managers, educators, tree advocates, and tree-minded enthusiasts. You can find speakers from municipalities, utilities, campuses, advocacy groups, community organizations, urban forestry related businesses, and others who understand the intrinsic value, and deep-seeded splendor trees bring to the sunshine state.

Notable speakers may be called upon to speak out at community events, organized meetings, agency or municipal workshops, educational programs, or other meetings where a voice for urban trees is relevant. The FUFC Speaker's Bureau continues to branch out, adding speakers, talent, topics, and experts to its rank and file. Are you ready to lead discussions and present information relating to trees and urban forest communities? Are you looking for a speaker?

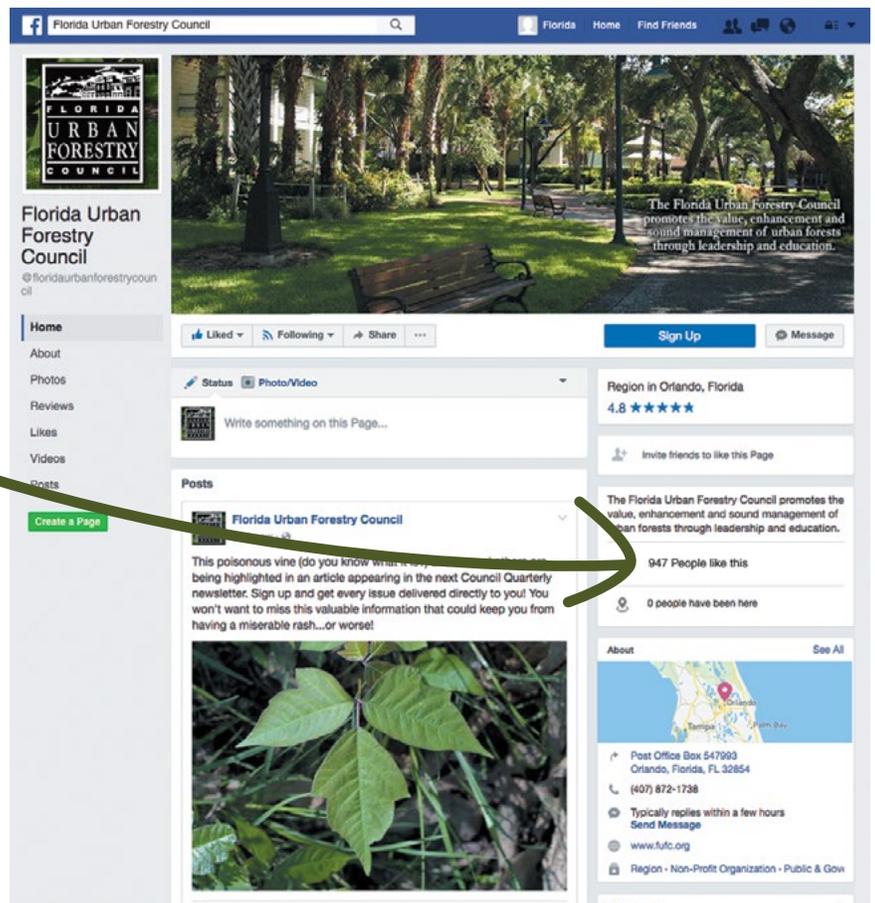
Do you want to learn more? Please visit, http://fufc.org/speakers_bureau.php

COUNCIL'S DISPLAY BOOTH

Whether it is an outdoor environmental event or conference trade show, The Florida Urban Forestry Council's display booth will help provide information about the Council and Urban Forestry educational resources for citizens and communities. To request the booth at your event email info@fufc.org.

Like Us!

How high can we go?



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 Joe Anderson, FUFCC newsletter editor, at andejs@jea.com.

Thanks for contributing!



PHOTOS TOO!

If you enjoy taking photos of trees & nature, the Florida Urban Forestry Council can use high resolution, quality images for newsletters, website use, social media and other projects. All images must be your original work, free to use and under NO copyright protection. When possible, photo credit will be noted. Send photos to media@fufc.org. Thank you for contributing!



MEMBERSHIP APPLICATION

(Dues are effective for the calendar year of January 1 - December 31)

Make check or money order payable to FUFCC 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. Membership 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: _____

Zip: _____

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



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

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

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.

2017 FUFUC EXECUTIVE COMMITTEE MEMBERS

OFFICERS:



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



John Harris
President Elect
 Appointed Position
 FNGLA
 Earth Advisors, Inc.



Joe Anderson
Vice President
 Elected Position
 Member-at-Large
 JEA



Leah Hoffman
Secretary
 Appointed Position
 Florida Recreation and
 Park Association
 Marion County



Justin Freedman
Immediate Past President
 Appointed Position
 Advisory Member
 E Sciences Inc.

COMMITTEE MEMBERS:

Kathy Beck, *Appointed Position*
 Advisory Member
 City of Tampa

Jody Buyas, *Elected Position*
 Member-at-Large
 Keep Orlando Beautiful

Jim Davis, *Appointed Position*
 Cooperative Extension Service
 Sumter County

Steve Edgar, *Appointed Position*
 Society of American Foresters
 Long Leaf Forest Service, Inc.

Mary Edwards, *Appointed Position*
 Advisory Member
 Rollins College

Erin Givens, *Appointed Position*
 Advisory Member
 Legacy Arborist Services

Elizabeth Harkey, *Elected Position*
 City Arborist
 City of Sanford

Julie Iooss, *Appointed Position*
 FL Chapter ISA
 Retired – City of Orlando

Ian Jurgensen, *Elected Position*
 Member-at-Large
 City of Orlando

Andrew Koeser, *Appointed Position*
 Advisory Member
 UF/Gulf Coast REC

Gayle Lafferty, *Advisory Position*
 Advisory Member
 City of Vero Beach

Mark Miller, *Appointed Position*
 Advisory Member
 City of Apopka

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

Anthony Santangelo, *Elected Position*
 Private Arborist
 Ocala Electric Utility

John Springer, *Elected Position*
 Tree Advocacy
 Enchanted Walkabouts

David Watford, *Elected Position*
 Utility Forester
 SECO Energy

Mark Williams, *Elected Position*
 Member-at-Large
 City of Fort Lauderdale

Lou Shepherd, *Liaison*
 Florida Forest Service

Vacancy - ASLA/FL Chapter

Vacancy - Florida League of Cities

Vacancy - Advisory Member

Sandy Temple
 FUFUC Executive Director