

Summer 2020
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Historic Tree Salvage at Walt Disney World

By D. Scott Shultz



Picture #1. Shows existing Oaks and Crape Myrtles. The district transplanted eleven of these trees around the new MK Toll Plaza interchange area. (See white letters 1-11)

Reedy Creek Improvement District (the district) operates and maintains the public roadways at Walt Disney World. The district will soon widen and reconfigure Floridian Way near the Magic Kingdom parking lot.

The construction process will demolish several trees along the edge of this roadway. Construction managers considered salvaging some of the Floridian Way trees. This would help beautify and screen other recently expanded roadways around Walt Disney World property.

Initial Planning Process

The initial planning process involved two parts. One, investigate possible transplanting sites, methods and routes. And two, evaluate the health and condition of the trees.

The district found good transplanting sites on Osceola Parkway at two of its new interchanges. And, they also identified sites at World Drive near the MK Toll Plaza area with its new interchange at Vista Way.

Historic Trees continued on page 4

A Message From the President



I saw a meme on Facebook recently showing Captain Kirk and Spock going through a time warp to the year 2020. Jumping excitedly through the warp, they shout “we’re time traveling to the year 2020”! Five minutes later they return, shouting “Nope. Nope. Nope. Bad idea”.

If our swashbuckling heroes from the Starship Enterprise had arrived in January 2020 they would have been impressed and stayed. But in March 2020 it is a different story.

The Florida Chapter began 2020 with a bang, hosting a January planning/fact-finding meeting to once again look into licensure for arborists in Florida. This meeting gave us direction, options and an appreciation for the challenge... a challenge we accepted. Your Trees Florida 2020 committee, hard at work since 2019, was finalizing an amazing and record setting event. Education, the life blood of this chapter, was well-organized for future class offerings - the best plans I have ever seen. In February the board, in a marathon session, advanced their plans for licensure, set up a task force to create scholarships for Certified Arborists and Certified Tree Workers, and realigned committees to form a Membership, Marketing, and Public Relations committee to bring our chapter into the future. March brought with it an amazing Florida Chapter Tree Climbing Championship. It was one of finest ever (if not the coldest): the trees were awesome, the events challenging and spirits were high. In hindsight, we now know that we were very lucky to get our TCC completed before Covid-19 precautions forced many chapters to cancel theirs.

Fast forward to May. Today our world is much different. Kirk and Spock took one look and jumped back through the time warp. They had the opportunity to leave 2020. We do not.

My hero, astronaut Neil Armstrong said, “I think we’re going to the moon because it’s in the nature of the human being to face challenges. It’s by the nature of his deep inner soul... we’re required to do these things just as salmon swim upstream”. As May and future months unfold, we shall face this challenge head on.

Norm Easey, our chapter CEO is doing an exceptional job

of updating all of us through the chapter website and Facebook with regular Covid-19 updates. The board is keeping its meeting schedule and in April conducted important chapter business via a Zoom conference call. Committee meetings are continuing via Zoom as well. Adjustments are being made in class and conference schedules based on updates from state and local governments (watch for all updates on our website). The certification process has restarted through the use of the Pearson Vue testing facilities.

Early on in this challenge many businesses were asked to close their doors for the well-being of everyone; tree work was considered essential so most of us have remained busy while many others have suffered. We must hold this responsibility up to the highest standards. We must follow guidelines and perform our duties with care and respect for all. This is the time to show our state and country how professional and capable we are.

Rob Calley

President, Florida Chapter ISA (2020)

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Historic Trees continued from page 1



Picture #2. These packages show transplant locations for the salvaged trees. Package #1 is the Osceola Parkway and World Drive interchange. Package #2 is the World Drive and Vista Way interchange at the Magic Kingdom Toll Plaza area. And, Package #3 is the Osceola Parkway and Victory Way interchange.

In addition, they decided to move the trees upright with some creative route planning. Transporting the trees upright results in less damage to the canopy and root system. And, they determined to root prune the trees and transport them in wood

boxes to further minimize transplant shock.



Picture #3. Root pruning in advance minimizes tree stress. Digging a double set of trenches around the tree makes it easier to remove the cut roots later on. Note guying cables and supplemental irrigation in picture.

During the second part of this proposal, the district asked me as Urban Forester for Disney’s Horticulture to evaluate the health and condition of the trees.

The trees all looked in good shape structurally and in good health. Although I did notice some of the trees had misshaped canopies from being planted close together. But, we had enough of an inventory to pick through to find the fullest trees.

Which Trees to Salvage?

The trees fall into three distinct groups. First is a row of widely spaced very large Live Oaks (*Quercus virginiana*) on flat ground between Floridian Way and the Magic Kingdom guest parking lot.

The second group includes a long staggered row of large Live Oaks planted on a berm that screened the old racetrack. The screening effort required tighter spacing as mentioned earlier. Some of the trees considered were on the slope of the berm.

Salvaging trees on a slope poses some challenges. The box is dug parallel to the slope and then braced on the trailer with the tree upright. Then, the box is planted at the same angle in the final location hole. With these trees the final planting is easier if relocated on a similar slope.



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Historic Trees continued on page 5

Historic Trees continued from page 4



Picture #4. One of the berm Live Oaks salvaged on a slope. The tree is transported and planted upright with the box still at this angle. The district identified corresponding slopes to plant many of these trees.

The third group comprises three large Crape Myrtles (*Lagerstroemia* species) planted at the toe of this berm.

The district selected twenty-two trees to be salvaged. The majority of this selection consisted of Live Oaks. Seven of these Live Oaks are very large and from the first grouping identified above. And, twelve of these Live Oaks were from the second grouping on the berm.

The selection included all three of the Crape Myrtles.

Here is some history about each of these tree groups. Early construction efforts planted the first group of trees at the opening of Walt Disney World (1971) or shortly thereafter.

These trees line the exit road from the Magic Kingdom parking lot onto Floridian Way. These trees existed prior to my starting with the company in the late 70's.

The racetrack opened in 1995. This led to the planting of the second group of trees on the berm. I remember the contractor installing small wooden retention walls on the upslope of each tree planting area. These retaining walls kept the soil from sloughing off and burying the tree root balls below.

In 1996 and 1997 I coordinated the salvage of hundreds of trees from the widening of Buena Vista Drive. During this project, I have vivid memories of relocating these three Crape Myrtles to the toe of this berm. I am

happy to have played a role in salvaging these Crape Myrtles twice!

Planting Locations, Transportation and Planting Techniques

The district determined the planting locations. They decided half of the trees would go to the MK Toll Plaza area (Less than one mile away) and the other half of the trees would go to Osceola Parkway (4-5 miles away).

They acknowledged that there were considerable obstacles in getting to the Osceola Parkway locations. The trees would travel down World Drive circumventing four main bridges.

For one of those bridges, Epcot Center Drive, the trees would travel around the interchange on the old haul road. Epcot construction crews build the dirt haul road in 1981 to get trees from the Walt Disney World Tree Farm to Epcot.

In order to get around the other three bridges - the trees

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Historic Trees continued from page 5

crossed medians, ramped over curbs, and drove the wrong way on exit ramps to maintain their upright positions.

Construction managers envisaged many challenges and details to successfully move these trees. First of all, the trees required nighttime transport to avoid peak driving loads.

The transport of the trees also required MOT's (Maintenance of Traffic), proper signage, alternate routes, and minimal stoppage of traffic. They also needed police assistance to help manage still busy roadways transporting cars, busses, delivery trucks, and other construction activity at night.

Smooth travel for the tree trailers necessitated leveling uneven surfaces by adding portable ramps, sand bags and temporary soil bridges to cross swales and medians. Transport crews needed to prune roadside trees and temporarily move small signs to allow for unimpeded transport.

Successful passage also required truck and trailer drivers to maneuver several hairpin turns and navigate on uneven terrain to tight planting sites.

In addition, construction personnel planned for the usage of different types of equipment. They utilized cranes and lowboy trailers for most of the tree moves.



Picture #5. Most of the trees needed cranes and lowboy trailers for loading and transporting.

The boxed trees required hydraulic jacks for raising them up and down. Larger trees needed "Smart" trailers. The "Smart" trailers are self-propelled and remote controlled.

These trailers drive under the raised boxes and then are able to level their loads automatically. Our largest tree, the sixty inch trunk diameter Live Oak, used two "Smart" trailers connected together in tandem.



Picture #6. Sixty inch trunk diameter Live Oak transported by two "Smart" trailers in tandem. This picture shows the trailers poised to drive the tree down the ramp into it's final planting location.

Transplanting trees requires proper planting techniques. Planting the trees high above grade insures better drainage when adding large amounts of water needed for establishment.

Also, planting the trees high is especially important in areas where existing soils are poorly drained.

Crews jetted (pressurized water delivered from a metal wand) the trees in several times and in different locations to eliminate air pockets in and around the tree root balls.

Personnel installed poly pipe water lines to trees with several emitters for irrigation. Valves connected to existing irrigation clocks automatically watered the trees.

Sizes and Timeline

The box sizes varied with the size of the trees. The diameter of the box averaged out to an 8:1 ratio (root ball diameter inches to trunk diameter inch).

The main exception to this ratio was the sixty inch trunk diameter Live Oak. The tree was simply too large and heavy to maintain this ratio. This tree was fitted with a 5:1 ratio box. The depth of all the boxes averaged 4-5 ft. deep.

Historic Trees continued on page 8



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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

Historic Trees continued from page 6

The trunk diameter of six of the seven large Live Oaks on flat ground averaged 30 inches. The exception was the sixty inch trunk diameter Live Oak. Unbelievably, this tree not only had a wider trunk but measured 45-50 ft. tall, 80-90 ft. wide and weighed 320,000 pounds!

The trunk diameter of the 12 berm Live Oaks averaged 22 inches. The three Crape Myrtles were multi-trunked and stood approximately 25-30 feet tall and wide.

Here is the overall timeline of the project. Tree selection was in the fall of 2018. Root pruning occurred in the Spring/Summer of 2019.

The installation of the tree box sides took place in the Summer/Fall of 2019. The addition of the bottom of the boxes occurred in the Winter of 2019.

Transplanting the trees came in the late Winter/Spring of 2020. Throughout this process the trees had supplemental irrigation and guying.

Contractors and Owners

The process required two tree contractors to do the work. Brightview, Inc. boxed all 22 of the trees because of their extensive prior experience in this technique.

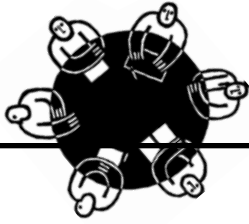
And, Brightview transplanted 11 trees at the MK Toll Plaza area and 4 trees at the Osceola Parkway/World Drive interchange. Cepra Landscape Construction planted the 7 trees at the Osceola Parkway/Victory Way interchange.

The district is the eventual owner of 15 of the trees. Walt Disney World will own and maintain 7 of the trees.

In conclusion, 21 trees transplanted successfully at the time of this writing. One tree is still in the box next to the area that is getting reworked on Osceola Parkway and World Drive. The planting date is still a few weeks away.

Monitoring the trees will continue until all trees are fully established.

The complexity and scope of this project was huge. We credit the success of this historic tree salvage to the collaboration and expertise of all involved! ❖



Florida Chapter Board Updates

BOARD SHORTS:

TREES FLORIDA 2020 RESCHEDULED



Due to the circumstances due to COVID-19, the Florida Chapter has rescheduled the annual Trees Florida Conference and Trade Show to SEPTEMBER 14-16, 2020 at the same great resort Sheraton Sand Key in Clearwater Beach.

We've worked hard to ask speakers and exhibitors to make this change with us, with great success, so we hope to see you all there!

Watch for conference registration to open in early July.

Room reservations at the Sheraton Sand Key Resort are already open! [Click here](#) to access the room reservation link; the new room rate expiration date is August 13, 2020, so don't delay. Be sure to chose your arrival and departure dates from the drop-down date boxes.

UNIVERSITY OF FLORIDA INTERVIEWING CANDIDATES FOR DR. GILMAN'S POSITION



The UF Department of Environmental Horticulture was granted special permission to continue recruiting the position left vacant by retiring Professor Dr. Ed Gilman. This permission is truly an honor given that UF

has paused positions since the start of the pandemic. The Department has also been very generous with the Florida Chapter ISA during this recruitment process providing regular updates. The Department has conducted this process three times since Dr. Gilman's retirement four years ago, and has made 2 offers to excellent candidates. We are hopeful that this latest round will lead to another excellent candidate and the third offer is the 'charm'. Interviews via Zoom were held the first week of May.

FLORIDA CHAPTER ISA GOES VIRTUAL



Rest assured; we are all still hard at work for our Florida membership. The board held its first ever Zoom Board meeting in April with great success. Various committees have problem-solved virtually too. CEO Norm Easey remains in close contact with ISA International on a regular basis so that we stay well-informed on news and any changes at headquarters.

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Clearwater Beach
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Long-Living Tropical Trees Play Outsized Role in Carbon Storage

By University of Texas – Austin, College of Natural Sciences

A group of trees that grow fast, live long lives and reproduce slowly account for the bulk of the biomass—and carbon storage—in some tropical rainforests, a team of scientists says in a paper published this week in the journal *Science*. The finding that these trees, called long-lived pioneers, play a much larger role in carbon storage than previously thought may have implications in efforts to preserve forests as a strategy to fight climate change.

“People have been arguing about whether these long-lived pioneers contribute much to carbon storage over the long term,” said Caroline Farrior, an assistant professor of integrative biology at The University of Texas at Austin and a primary investigator on the study. “We were surprised to find that they do.”



Giant long-lived pioneers (Cavanillesia platanifolia) store most of the biomass in this tropical forest, even though their seedlings rarely survive and make it to the canopy. Christian Ziegler

It is unclear the extent to which tropical rainforests can help soak up excess carbon dioxide in the atmosphere produced by burning fossil fuels. Nonetheless, the new study provides insights about the role of different species of trees in carbon storage.

Using more than 30 years’ worth of data collected from a tropical rainforest in Panama, the team has uncovered some key traits of trees that, when integrated into computer models related to climate change, will improve the models’ accuracy. With the team’s improved model, the scientists plan to begin answering questions about what drives forest composition over time and what factors affect carbon storage.

Most existing Earth system models used to forecast global climate decades from now, including those used by the Intergovernmental Panel on Climate Change, represent the trees

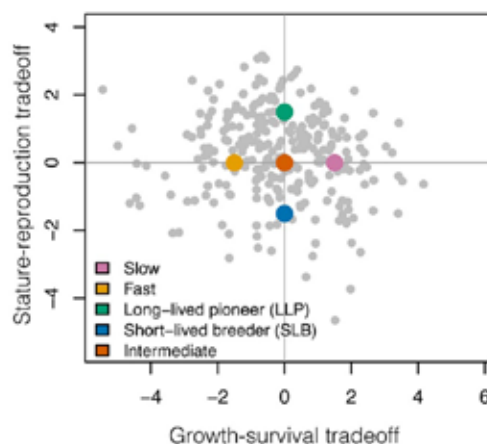
in a forest as all basically the same.

“This analysis shows that that is not good enough for tropical forests and provides a way forward,” Farrior said. “We show that the variation in tropical forest species’s growth, survival and reproduction is important for predicting forest carbon storage.”

The project was led by Nadja Rüger, research fellow at the German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig.

In addition to the finding about long-lived pioneers, the team found the composition of a tropical forest over time depends on how each tree species balances two different sets of trade-offs: growth versus survival (for example, one type of tree might grow fast but die young) and stature versus reproduction (another might grow tall but reproduce leisurely). Plotting every species as a point on a graph based on where they fall along these two different axes allowed the scientists to have a more sophisticated and accurate model than prior ones, which usually focused exclusively on the first of these two trade-offs or parametrized the groups by different means.

“To really appreciate that there is this second trade-off between stature and reproduction, and that it’s important in old-growth forests, is a big deal biologically,” Farrior said.



The composition of a tropical rainforest over time depends on how each tree species balances two different sets of trade-offs: growth versus survival (for example, one type of tree might grow fast but die young) and stature versus reproduction (another might grow tall but reproduce leisurely). The nearly 300 unique tree species that live on Barro Colorado Island in Panama (gray dots) can be represented in a computer model by just five functional groups (colored dots) and still produce accurate forecasts of tree composition and forest biomass over time..

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[Long-Living continued from page 10](#)

The team also discovered that the nearly 300 unique tree species that live on Barro Colorado Island, which sits in the middle of the Panama Canal, can be represented in their computer model by just five functional groups and still produce accurate forecasts of tree composition and forest biomass over time.

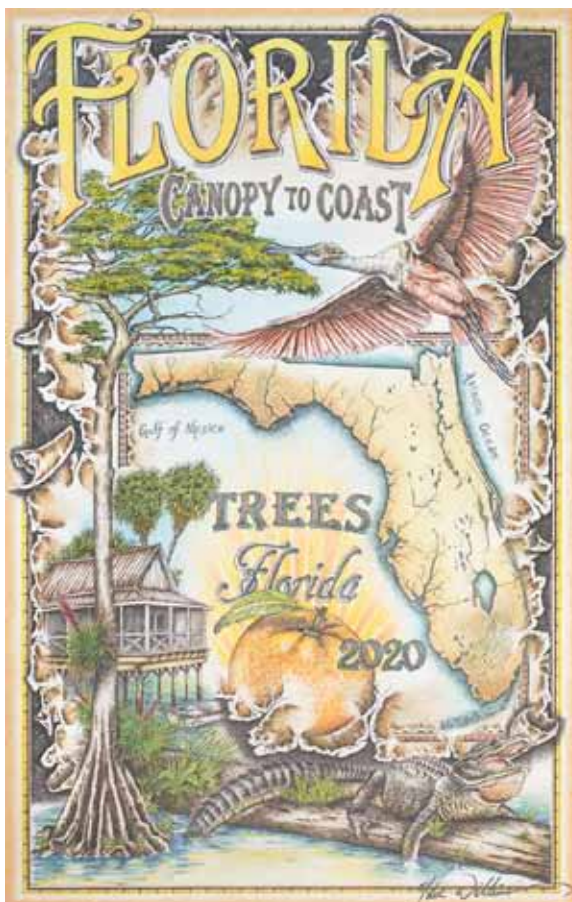
It's not possible to directly verify the forecasts of a forest model in future decades. So the researchers did the next best thing: They seeded their model with forest composition data collected at their site in Panama during the 1980s and then ran the model forward to show that it accurately represents the changes that occurred from then until now. This is called "hindcasting."

Next, they plan to explore how a warming world might benefit trees with certain traits over others, shifting forest composition and the potential of forests to store carbon.

"One of the biggest unknowns in climate forecasting is: What are trees going to do?" said Farrior. "We really need to get a handle on that if we're going to accurately predict how climate will change and manage forests. Right now, they're absorbing some of the excess carbon we're producing and delaying climate change, but will they keep doing it?"

The other coauthors on the paper are Richard Condit at the Field Museum of Natural History in Chicago and the Morton Arboretum; Daisy H. Dent at the Smithsonian Tropical Research Institute (STRI) in Panama and the University of Stirling in the U.K.; Saara J. DeWalt at Clemson University; Stephen P. Hubbell at STRI and the University of California, Los Angeles; Jeremy W. Lichstein at the University of Florida, Gainesville; Omar R. Lopez at STRI and Instituto de Investigaciones Científicas y Servicios de Alta Tecnología in Panama; and Christian Wirth at iDiv, University of Leipzig and Max Planck Institute for Biogeochemistry in Germany.

Funding was provided by the U.S. National Science Foundation, Deutsche Forschungsgemeinschaft and Secretaría Nacional de Ciencia, Tecnología e Innovación. ❖



Trees Florida 2020 CANOPY TO COAST

CONFERENCE HAS BEEN RESCHEDULED:

September 14-16, 2020

**Sheraton Sand Key Resort
Clearwater Beach, FL**

Hotel reservations open on May 1, 2020
Reservation link will be at www.treesflorida.com



Basic Soil Properties

Henry Mayer, UF/IFAS Miami-Dade Urban Commercial Horticulture Extension Agent

Do trees need dirt or soil? Soil is a very complex and dynamic natural body while dirt is what you have under your fingernails.

Soil is composed of mineral and organic solids, gases, liquids and living organisms, which can serve as a medium for plant growth. The basic components are minerals, organic matter, water, air, and living organisms. Depending on the percentage of these components, the physical, chemical and biological properties of the soils will vary.

1. Physical properties are measurable characteristics that define how the soil will react to physical forces. The properties depend on the following factors:

- Texture, is the proportion of different sizes of particles in a given soil sample. These particles are identified as clay, silt, sand and gravel.
- Structure, is the arrangement of soil particles and how they are bonded together.
- These properties will affect the soil compaction, water movement and nutrient holding capacity.

2. Chemical properties are also measurable characteristics of the soil in the solution. The soil chemistry will affect the:

- Cation exchange capacity (CEC), which is the sum of total exchangeable cations (positively charge ion like potassium, calcium, magnesium, iron) that a soil can adsorb.
- pH, a measure of the concentration of positive hydrogen in a soil solution. It is a measure of the acidity (low pH) or alkalinity (high pH) of the soil.
- Soil fertility in the form of macronutrients and micronutrients, which are the soil elements that the plant needs in order to survive. Plants need big quantities of macronutrients (%) and small amounts of micronutrients (ppm). Macronutrients are nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg) and sulfur (S) and micronutrients are boron (B), chlorine (Cl), cobalt (Co), copper (Cu), iron

(Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn). Plants get oxygen (O), hydrogen (H) and carbon (C) from the air and water.

These properties will affect the fertility of the soil.

3. Biological properties include a vast array and complex community of organisms that depend on each other as food sources. They include vertebrates, arthropods, mollusks, nematodes, protozoa, algae, fungi, actinomycetes and bacteria between others.

These properties will affect:

- Carbon cycle
- Nitrogen, phosphorus cycle
- Organic matter content

Next time you plant a tree, evaluate the soil and assess what you have. If you are lucky and find good soil, congratulations!

This is the best thing that can happen to you!

Reference:

- James Urban. Up by roots. Healthy soils and trees in the built environment. ISA, 2008.
- Nyle, C. Brady, Weil, R. The nature and properties of soils. 13 edition. 1996.

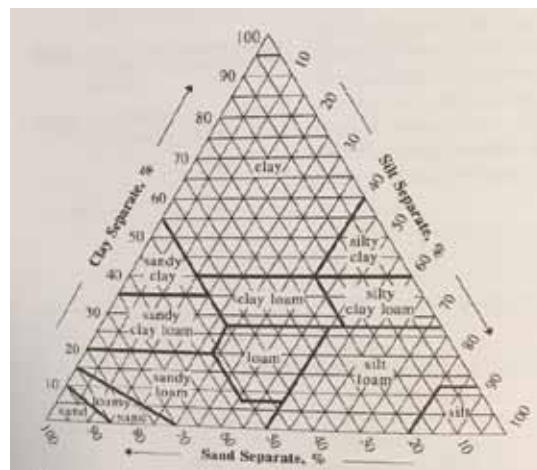


Fig. 1.-Soil texture classification triangle, courtesy of J. Urban, Up By Roots

[Basic Soil continued on page 14](#)

Propiedades Básicas del Suelo

Henry Mayer, UF/IFAS Miami Dade -Urban Commercial Horticulture Extension Agent

¿Que necesitan los árboles tierra o suelo? El suelo es un cuerpo natural muy complejo y dinámico, mientras que la tierra es lo que tienes debajo de las uñas.

El suelo está compuesto de minerales y compuestos orgánicos, gases, líquidos y organismos vivos, que pueden servir como medio para el crecimiento de las plantas. Los componentes básicos son minerales, materia orgánica, agua, aire y organismos vivos. Dependiendo del porcentaje de estos componentes, las propiedades físicas, químicas y biológicas de los suelos variarán.

1. Las propiedades físicas son características medibles que definen cómo reaccionará el suelo a las fuerzas físicas. Las propiedades dependen de los siguientes factores:

- Textura, es la proporción de diferentes tamaños de partículas en una muestra de suelo dada. Estas partículas se identifican como arcilla, limo, arena y grava.
- Estructura, es la disposición de las partículas del suelo y cómo se unen.
- Estas propiedades afectarán la compactación del suelo, el movimiento del agua y la capacidad de retención de nutrientes.

2. Las propiedades químicas también son características medibles en la solución del suelo. La propiedad química del suelo afectará a:

- Capacidad de intercambio de cationes (CEC), que es la suma de cationes intercambiables (iones con carga positiva como potasio, calcio, magnesio, hierro, etc.) que un suelo puede adsorber.
- pH, una medida de la concentración de hidrógeno positivo en una solución del suelo. Es una medida de la acidez (pH bajo) o alcalinidad (pH alto) del suelo.
- La fertilidad del suelo en forma de macronutrientes y micronutrientes, son los elementos del suelo que la planta necesita para sobrevivir. Las plantas necesitan grandes cantidades de macronutrientes (%) y pequeñas cantidades de micronutrientes (ppm). Los macronutrientes son nitrógeno (N), fósforo (P), potasio (K), calcio (Ca), mag-

nesio (Mg) y azufre (S) y los micronutrientes son boro (B), cloro (Cl), cobalto (Co), cobre (Cu), hierro (Fe), manganeso (Mn), molibdeno (Mo) y zinc (Zn). Las plantas obtienen oxígeno (O), hidrógeno (H) y carbono (C) del aire y el agua.

Estas propiedades afectarán la fertilidad del suelo.

3. Las propiedades biológicas incluyen una comunidad compleja y variedad de organismos que dependen unos de otros como fuentes de alimentos. Incluyen vertebrados, artrópodos, moluscos, nematodos, protozoos, algas, hongos, actinomicetos y bacterias entre otros.

Estas propiedades afectarán entre otras:

- Ciclo del carbono
- Ciclo del nitrógeno y fósforo
- Contenido de materia orgánica

La próxima vez que plantes un árbol, evalúa el suelo que tienes. Si tienes suerte y encuentras que es bueno, ¡FELICIDADES! ¡Esto es lo mejor que te puede pasar!

Referencias:

- James Urban. Up By Roots. Healthy soils and trees in the built environment. ISA, 2008.
- Nyle, C. Brady, Weil, R. The nature and properties of soils. 13 edition. 1996.

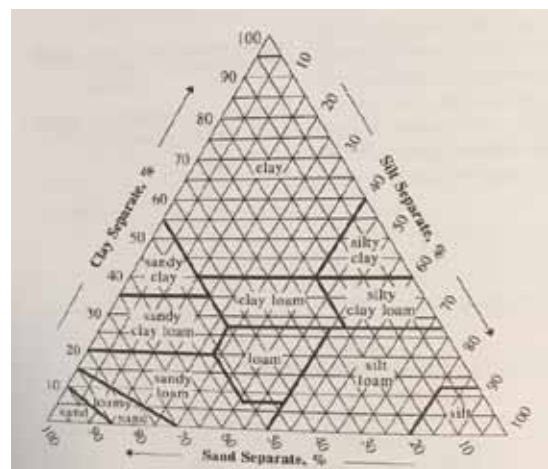


Fig. 1.-Triangulo de textura del suelo, cortesía ode J. Urban, Up By Roots

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Propiedades Básicas continued from page 13

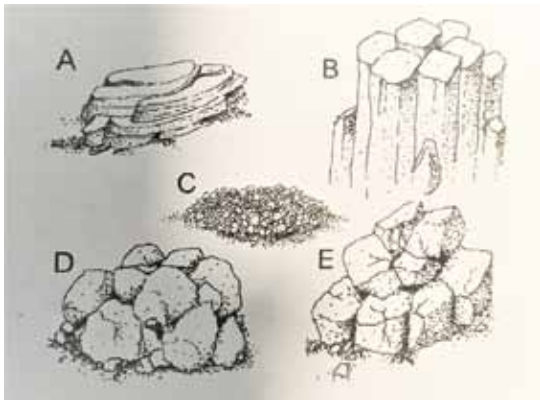


Fig. 2.-Soil structure types, A. platy, B. prismatic, C. Granular, D. Subangular, E. Angular, courtesy of J. Urban, Up By Roots

Fig. 2.-Tipos de estructura del suelo, A. planos, B. prismático, C. granular; D. subangular y E. angular Triángulo de textura del suelo, cortesía de J. Urban, Up By Roots

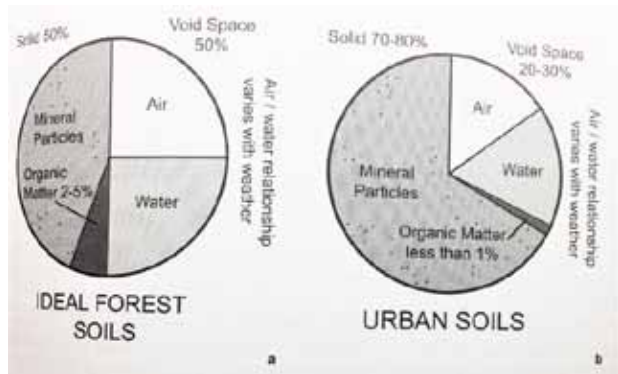


Fig. 3.-Relationship of minerals, air, water and organic matter in forest and urban soils, courtesy of J. Urban, Up By Roots

Fig. 3.-Relacion de minerales, aire, agua y material organica, en bosques y suelos urbano, cortesía de J. Urban, Up By Roots

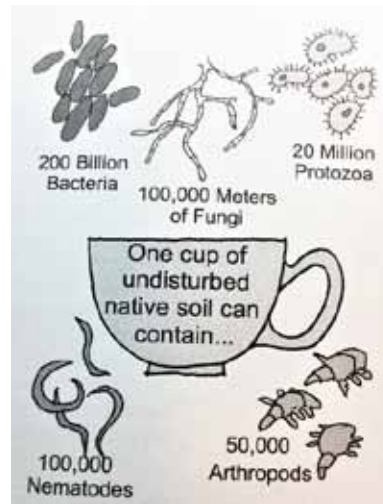


Fig. 4.- Healthy soil is full of living organisms, courtesy of J. Urban, Up By Roots

Fig. 4.-El suelo sano esta lleno de organismos vivos, cortesía de J. Urban, Up By Roots.

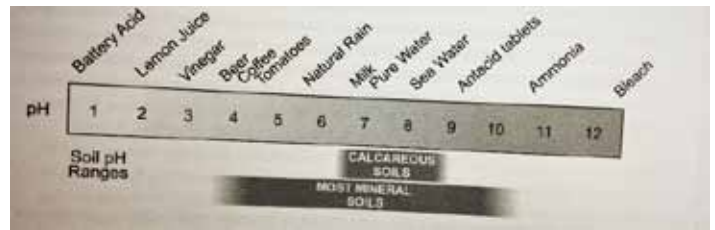


Fig. 5.-pH of various compounds, courtesy of J. Urban, Up By Roots

Fig. 5.- pH de varios compuestos, cortesía de J. Urban, Up By Roots.

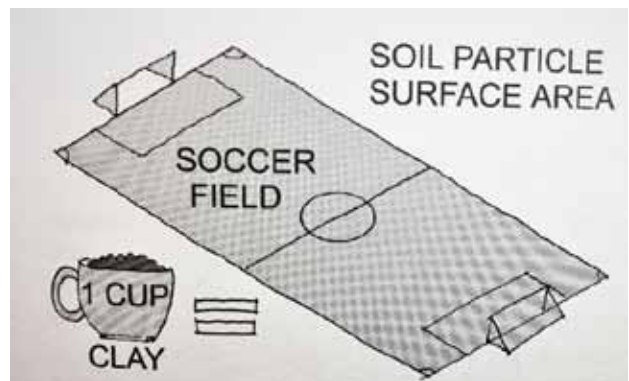


Fig. 6.- Surface area of one cup of clay is equal to the surface area of a soccer field, courtesy of J. Urban, Up By Roots.

Fig. 6.- El area de superficie de una taza de arcilla es igual al area de superficie de un campo de futbol, cortesía de J. Urban, Up By Roots.

News From International

2020 ISA Annual International Conference & Trade Show Update

After careful consideration and several weeks of discussions with officials at the Albuquerque Convention Center and the Albuquerque Convention and Visitors Bureau, **ISA is moving the 2020 ISA Annual International Conference and Trade Show to 15-17 December 2020.**

We are excited to connect as a community to wrap up an unprecedented year and look to where the profession is headed in 2021. ISA hopes that these new dates allow time for more of our members to be able to travel, our exhibitors to operate, and our community to recover.

We plan on providing more details in the coming weeks with information on registration, housing, and a new virtual conference experience for those who may not be able to join us in person in December.

ISA will continue to monitor the circumstances surrounding COVID-19, coordinating with local public health officials, and provide updates as necessary. We are committed to protecting the health and safety of our attendees, exhibitors, sponsors, and staff and hosting the most successful conference possible. Thank you for your understanding and your commitment to ISA.

[Your credential and COVID-19: important information:](#)

a. Renewals

- i. The Certified Arborist renewal date in June has been extended by an additional 120 days in order to provide additional time for earning CEUs for renewal.
- ii. If your TRAQ renewal/expiration date is within the next 6 months, you should receive communication directly from ISA International and your credential expiration date will be extended by an additional 6 months.

b. Exams

- i. Paper exams are not currently being scheduled. This process is under review and will follow directives made by state and local governments.
- ii. Computer based testing at many Pearson Vue Testing Centers are now open with specific requirements such as the use of face masks, six-foot distancing and meeting health requirements. Travel restrictions are based on your regional directives. Some testing loca-

tions will provide a temperature check upon arrival. [Click here for more details.](#)

You worked hard to earn your ISA credential — make sure you promote yourself with our Find an Arborist tool.

‘Opt in’ to be listed on the ‘Find an Arborist’ search tool by logging in to the ISA website and going to your profile. Then scroll down to “Communication Preferences” and check the box for “Listed in Find an Arborist.” Remember, as a credential holder you already have an account. If you are not able to log in you can reset your password or contact us at isa@isa-arbor.com for assistance.


Bookstore Additions

1. Study Guide goes digital

The digital version of the Certified Arborists’ Study Guide is now available at the ISA Store. This online resource maintains the popular look and feel of the current print version, including all of the illustrations, while also providing handy features including a searchable table of contents which takes you directly to the chapter of interest.

2. Glossary of Arboricultural Terms

Updated version is now available.



Florida Chapter ISA Awards Program

The Florida Chapter ISA Awards Program is all about spotlighting and honoring deserving arborist, industry professionals and educators.

The process is easy.

Just fill out the half-page form found on the [Florida Chapter website](#) and send it in.

Applications are due to the Chapter office by AUGUST 15th

2020 Florida Chapter TCC Results

This year's event was successfully held before we all socially distanced due to COVID-19. The full roster of 40 climbers converged on the grounds of Heritage Park in Kissimmee, FL on a windy and chilly weekend in March. As usual the climbers were enthusiastic and energized for a great competition. Not only that, but they showed great comradery toward fellow climbers, sharing tips, techniques and sometimes even gear with each other. Thanks to all participants, all the great volunteers, and especially to Adam Jackson, TCC Chair. We appreciate the exhibitors and sponsors that participated and supported our event.

MEN

Aerial Rescue:

- 1st Forrest McCullough
- 2nd Paul Lloyd Jones
- 3rd Jason Gerrish

Ascent Event:

- 1st Forrest McCullough
- 2nd Trevor Hill
- 3rd Paul Lloyd-Jones

Belayed Speed Climb:

- 1st Trevor Hill
- 2nd Paul Lloyd-Jones
- 3rd Taylor Passetti

Throwline

- 1st Paul Lloyd-Jones
- 2nd Rob Calley
- 3rd Edward Delehanty

Work Climb

- 1st Forrest McCullough
- 2nd Trevor Hill
- 3rd Jason Gerrish

MASTERS CHALLENGE

- 1st Forrest McCullough
- 2nd Jason Gerrish
- 3rd Colin Kelly
- 4th Trevor Hill
- 5th Tim Walters

WOMEN

Aerial Rescue:

- 1st Michaela Ramsey
- 2nd Danae Jackson
- 3rd Alison Summersill

Ascent Event:

- 1st Alicia Amundson
- 2nd Michaela Ramsey
- 3rd Alison Summersill

Belayed Speed Climb:

- 1st Alicia Amundson
- 2nd Michaela Ramsey
- 3rd Alison Summersill

Throwline:

- 1st Alicia Amundson
- 2nd Alison Summersill
- 3rd Danae Jackson

Work Climb:

- 1st Alicia Amundson
- 2nd Michaela Ramsey
- 3rd Alison Summersill

MASTERS CHALLENGE

- 1st Alicia Amundson
- 2nd Michaela Ramsey

Thank you to our exhibitors:

- A Budget Tree Service
- Advanced Tree Pros
- Florida Outdoor Equipment
- Bandit Industries
- Kid's Activity Center

And **thank you to our sponsors** who donated either monetary amounts or provided equipment, gear or prize items:

- A Budget Tree Service
- Advance Tree Pros
- Altec
- ArborWear
- Asplundh
- Davey Tree Experts
- Earth Advisors
- Florida Outdoor Equipment
- Husqvarna
- Monster Tree Service
- O'Neil's Tree Service
- Vermeer Southeast
- Yellowstone Tree Care

Our volunteers ARE THE BEST! Thanks to the many energetic and dedicated people who make this climbing event happen! People who help as judges, time keepers or scorers, people who prep the site, people who act as team leaders, people who give a hand at gear check, people who just offer to do what needs to be done at a moment's notice...

WE APPRECIATE YOUR HELP!



Trees might be 'aware' of their size

University of Helsinki: Elina Raukko

Birch trees adjust their stem thickness to support their weight.

Trees are known for their great, but not unlimited, trunk height and diameter. They have evolved to develop a heavy above-ground biomass, but this integral feature poses a challenge to the trunk's stability.

Despite its evident importance, the principle by which plant stems respond to their increasing weight remains unknown. To address this question, a theory of "vertical proprioception," a mechanism that balances the radial growth of the stem with the weight increase, has been developed.

To study the theory, researchers at the University of Helsinki, University of Cambridge and Natural Resources Institute Finland manipulated the aerial weight of downy birch (*Betula pubescens*).

The researchers observed that the tree was indeed able to adjust its stem radial growth in response to the added weight, and the strength of this response varied along the length of the stem. Furthermore, a degree of lateral stem movement was required for this response: static trees did not grow as thick as free-moving ones.

"Even though the idea of plants sensing their own weight and thickening their stem accordingly sounds intuitive, our study is the first one to address this question in trees," says Juan Alonso-Serra from the Faculty of Biological and Environmental Sciences, University of Helsinki.

One approach to understand how this weight-sensing

mechanism works is by comparing normal plants with plants lacking this ability. The researchers took advantage of a naturally occurring birch mutant named *elimäki*. This exceptional tree grows upright for three months, after which its stem suddenly bends at the very base, and the whole tree collapses.

The researchers showed that, unlike normal trees, *elimäki* trees fail to properly adjust their width to their increasing weight, which makes them less stable mechanically. The lack of a proper response in *elimäki* trees is linked to a single position (locus) in the birch genome, enabling the future identification of the mutated gene.

The use of mutant trees was a key part of the project. In most plant models, such as *Arabidopsis*, genetic studies are feasible because a new generation can be produced within months, whereas the same typically takes decades with trees.

However, birches are exceptional as they are the among the few tree species where flowering can be induced already at six months' age. This provides a unique opportunity to address basic and applied questions concerning the life and development of trees. ❖

FLORIDA CHAPTER SCHOLARSHIP

Students! Remember to submit your [scholarship application](#) to the Chapter office no later than June 15th for the 2020 Fall scholarship.

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Tree Response to Removal Pruning Cuts on Branches that Lack Collars

by Jake Miesbauer, Ph.D.

The science and practice of arboriculture has advanced dramatically over the past 30 to 40 years. One of the most significant developments has been the recommendation of making pruning cuts at the branch collar



Figure 1. Branch protection zone (V-shaped area of darker wood) that developed after a branch was removed from the tree. The tree creates this area to protect itself against decay causing organisms.

(i.e. the swelled area at the branch base, consisting of branch wood and trunk wood) as opposed to making flush cuts. Studies showed that when pruning cuts are made at the branch collar and only branch wood is removed, the tree develops a protection zone in the interior area of the trunk at the branch-trunk union (Figure 1). This protection zone walls off the area to slow the advance of decay organisms.

When flush cuts are made, some of the trunk wood around the branch is also removed, exposing the trunk tissue around the removed branch. This prevents the tree from forming an effective protection zone and allows the decay organisms to colonize the area more effectively and hastens the spread of decay. Wound closure also occurs more quickly when pruning cuts are made at the branch collar.

Unfortunately, many branches have no visible branch collar, which can lead to confusion for arborists as to where to properly make their pruning cut. And although there is much evidence to support the recommendation of cutting at the branch collar when one is present, there is very little research to guide recommendations for where to make the pruning cut when there is no visible branch collar. One suggestion has been to make the pruning cut perpendicular to the branch axis so as to minimize the size of the wound. The idea is that the tree will be able to seal the wound over more quickly, thereby depriving decay causing organisms the oxygen they need. However, cambial dieback on the lower side of the cut is sometimes observed after

the cut is made, thereby creating a larger area of dead tissue for the woundwood to close over. Another suggestion has been to make the pruning cut just beyond the branch bark ridge and at an angle closer to parallel with the trunk (but not cutting into trunk wood tissue). The initial wound size would be larger than if the cut was made perpendicular to the branch axis, but there might be less likelihood of cambial dieback on the bottom side of the cut (Dujesiefken and Stobbe 2002).

A better understanding of how trees respond to cut size and angle would go a long way in helping to guide recommendations to tree care professionals. To this end, we conducted an experiment measuring tree response to pruning cuts on branches that lacked collars. For this study we selected 'Highrise' live oak (*Quercus virginiana* 'Highrise') which is very good at compartmentalizing injuries, and 'Florida Flame' red maple (*Acer rubrum* 'Florida Flame'), which compartmentalizes injury moderately well. For Highrise live oak, branches had a diameter range of 3.0-12.4 cm (1.2-4.9 inches) and an aspect ratio (i.e. branch diameter to trunk diameter ratio) range of 0.21-0.95. For red maple, branches with a diameter range of 3.2-13.5 cm (1.3-5.3 inches) and an aspect ratio range 0.42-0.99 were selected.

Branches were pruned off the trees using one of two randomly assigned pruning cut treatments: 1) pruning cut originating beyond the branch bark ridge (BBR) and with an angle 45 degrees to the BBR (Figure 2, left), or 2) pruning cut angle that is perpendicular to the longitudinal axis of the branch, min-

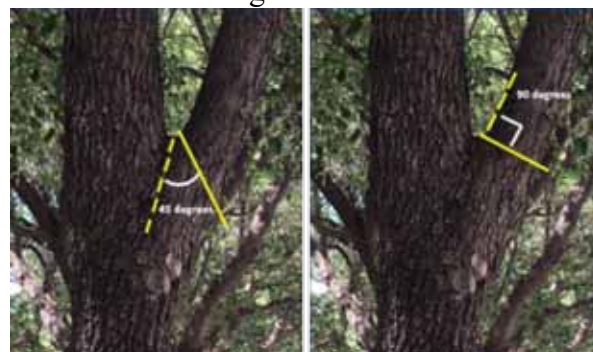


Figure 2. Pruning cuts were made either at a 45 degree angle from the branch bark ridge or perpendicular to the longitudinal axis of the branch.

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Tree Respong continued from page 19

imizing the cut surface area (Figure 2). After we made the pruning cuts we measured the cut surface area.

Three years after the pruning cuts were made we destructively harvested the trees and extracted the trunk sections that contained the pruning cuts. We measured the area of the remaining wound opening to calculate the percentage of wound closure, and then cut the trunk section lengthwise through the center of the connection between the trunk and branch to expose the trunk-branch union and the extent of discoloration from the pruning cut (Figure 3). To measure the extent of discoloration we took digital photos of each trunk section. We downloaded the photos and used ImageJ software to measure the depth and area of discoloration from each pruning cut.



Figure 3. Trunk sections were dissected along the midpoint of the trunk-branch union to measure the extent of discolored wood within the branch protection zone. Arrow shows the depth of discoloration. Area of discoloration was also measured.

Our preliminary results show that as aspect ratio along with cut size increased, percent of wound closure was less in red maple, and there

was a greater extent of discoloration within the branch protection zone (BPZ) in both species. For red maples, the increase in discoloration and decrease in wound closure percentage occurred to a greater extent when cuts were made perpendicular to the branch axis. Live oak showed no differences in any of the measured parameters based on cut angle. (Manuscript in preparation)

So what do these results tell us? It appears that even on species with different compartmentalization ability, the tree will be better able to defend against decay organisms if removal pruning cuts are small relative to the size of the trunk. For red maples, we can help to increase the amount of wound closure and slow the spread of discoloration by making removal cuts closer to 45 degrees from the branch bark ridge than perpendicular to the branch axis, especially on bigger branches with a larger aspect ratio.

Of course, these are only 2 species, and there is plenty of follow up research to be conducted on a multitude of species in different climates. But this research is an important step to providing data to help improve our industry best management practices. We would like to thank TREE Fund for their generous support of this project. The funding we received made a tremendous impact in being able to conduct this research.

Reference Dujesiefken, D. and H. Stobbe. 2002. The Hamburg Tree Pruning System – A framework for pruning individual trees. *Urban Forestry & Urban Greening* 1:75-82 ❖



ROLLIN' THE ROCKIES!
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 Sat., Aug. 29
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 Sun., Aug. 30 - Thurs., Sept. 3

Closing Breakfast and Bike Shipping
 Fri., Sept. 4

From Your TREE Fund Liaison Chair - Bill Armstrong

Webinars

TREE Fund's 1-hour webinars are free and offer 1.0 CEU credit for live broadcasts from the International Society of Arboriculture, the Society of American Foresters, the National Association of Landscape Professionals and sometimes the Landscape Architecture Continuing Education System. [Registration information](#) becomes available on our website approximately one month before webinar date.

- a. The Calm Before: Tree Adjustments to Wind & Ice Storm Loads
Tuesday, June 2, at 12 p.m. Central
Kim Coder, PhD, University of Georgia
- b. Fighting Microbes with Microbes to Protect Our Native Trees
Tuesday, June 16, at 1 p.m. Central
Rachael Antwis, PhD, University of Salford
- c. Enhancing Tree Health in Water Sensitive Urban Design: Role of Mycorrhizae
Tuesday, July 14 at 12 p.m. Central
Brandon Winfrey, PhD, Monash University
- d. Soil Assessment for Urban Trees: Part 2 Action Plans
September 29, 1 p.m. Central
Bryant C. Scharenbroch, PhD, University of Wisconsin – Stevens Point
- e. Measuring Multi-stemmed Trees
Tuesday, Oct. 13 at 12 p.m. Central
Yasha A. S. Magarik, Yale School of Forestry and Environmental Studies
Lara Roman, PhD, Research Ecologist, USDA Forest Service, Philadelphia Field Station, Northern Research Station

Register to ride or support a rider today!

Although we are months away from the 2020 Tour des Trees, we wish to address any concerns you may have about the health and safety of this event. Tour des Trees is scheduled for the end of August. We will continue to monitor local health orders and CDC guidelines with the health and safety of all TdT participants as our primary concern. At this time, we have faith in a healthy future and will not plan for any immediate changes to event plans and logistics.

The 2020 Tour des Trees will be held from August 29 to September 4, 2020 in beautiful Colorado with a target distance of ~300 miles over five full days of riding. ISA Rocky Mountain Chapter is collaborating with TREE Fund on the 28th annual staging of our most important community engagement event.

Registration for the 2020 Tour des Trees in Colorado is filling quickly. To maintain our road support safety standards and due to lodging limitations, we will close registration when we get to 85 full-time riders or 90 total riders, whichever comes first. [Complete details on Tour des Trees 2020 can be found here.](#) Registration closes on June 15. ❖

Consultant's Corner

by Joe Samnik, Expert Forensic Arborist



INSURANCE THINK TANKS AND MR. BIG: REDUCTION OF RISK

Somewhere on the penthouse floor of a gigantic insurance Think Tank sat Mr. Big. He had a grand idea. If the insurance risk of failing trees or tree parts could be eliminated, so would the wrongful death and personal injury cases his company and other insurance companies were paying out in claims. Trees falling onto homes and offices were in that mix as well. And don't forget the damages to automobiles, both moving and parked. There is, after all, no such thing as a perfectly safe tree, especially in our urban forests.

Out went the edict: "Dear Insured, remove all the branches over your roof or we won't insure you." Problem solved. A promotion for Mr. Big to whatever floor is above the penthouse floor.

In came the questions to me from the commercially insured and from cities that faced this new edict. What should we do? If we don't remove the overhanging limbs, we won't get insurance. Indeed, what to do.

Over the decades I have had the extreme pleasure and privilege of working for numerous insurance companies on \$20 million claims and more to less than \$1,000. In depositions and courts, I've also worked across from insurance companies in numerous cases. It has been quite an experience.

The one thing I've learned is that the reduction of risk or preferably the elimination of risk is the goal. A foregone conclusion certainly: Eliminate the risk and eliminate the loss.

Well, it seems that Mr. Big overlooked a few pesky items in his claim to fame among his collegiality. Small oversights to be sure ... like the American National Standards Institute ([ANSI A300](#)). Two of these 10 Standards are the Pruning Standards and Risk Assessment. And, of course, the Dixie Darling of all injury attorneys: due diligence as it relates to duty. Attorneys turn to the ANSI Standards to demonstrate duty and negligence in deposition and at trial.

In almost every situation, removing large branches in a willy-nilly manner causes greater danger to the insured risk and the insured target. There is a long list of negative consequences, including loss of counterweight balance, when some large limbs are removed on only one side of a tree. It seems that during their development, trees evolve by creating branches to better enable them to grow



big –big without fear of weight imbalances occurring and subsequent failures. Removing too much wood in the form of branches or limbs is detrimental to the health of the tree as well. It takes an experienced arborist to determine the ability of a tree to withstand negative outcomes of significant pruning as it relates to the tree species, age, environment, and other pertinent factors.

So, perhaps it's back to the drawing board for Mr. Big as it relates to his elimination of tree limbs as a Get Out of Jail card regarding risk. Options to total removal of limbs overhanging the risk may include a tree risk assessment conducted by a credentialed arborist

[Think Tank continued on 24](#)

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Think Tanks continued from page 22

trained to identify risk and mitigate or eliminate it. A written report of findings might then be submitted to the insurance company for their further consideration. The report would, at a minimum, provide an opportunity for science to become part of the decision-making process of risk management by the insurance provider.

Arboriculture can include a study of risk reduction based on research and science. And that study would lead a reasonable insurance policy to be issued based upon science and research regarding tree limb failures. The arborist’s opinion can then lead to terms and conditions of insuring the risk. Perhaps it is time to remove the entire tree. Perhaps remove just some of the limbs. Perhaps nothing should be removed.

There is no such thing as a safe tree. The consequences of failure must be weighed against other factors that provide benefits to us all. It is these consequences that Mr. Big must consider when issuing an insurance policy that carte blanche removes any limbs overhanging an insured risk. Otherwise, he may wish to discover just where the fire escape is located that will take him from the penthouse down to the ground floor where he just might be issued a Notice to Appear for his deposition.

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Qualified arborists in your area may be found on the International Society of Arboriculture ([ISA](http://isa-arbor.org)) or the American Society of Consulting Arborists ([ASCA](http://asca-arbor.org)) websites.❖

2020 ABORMASTER CLIMBING KIT PRIZE PACKAGE

ArborMaster and co-sponsors are proud to provide the Climbing Kit Prize Package for the Tree Climbing Champion (TCC).

This climbing kit is being offered to each chapter champion, both man and woman and is intended help equip the chapter representative(s) for the International Tree Climbing Championship (ITCC) Competition later during the year. Note: due to COVID-19 restrictions, the ITCC has been cancelled for summer 2020. Best wishes for the climbers at next year’s competition.



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- And provide public education programs about tree care and preservation.

The Tree Tag...Get it Today!



WEB: www.floridaisa.org P: 941-342-0153 E: jan@floridaisa.org

The Florida Chapter of the International Society of Arboriculture (ISA) is a non-profit organization committed to serving the needs of Florida's professional arborists and tree-care consumers.

Florida Chapter ISA - 2020 Education Schedule

*The schedule below is tentative and subject to changes.

[View Florida Chapter Seminars Online](#)

<u>Date</u>	<u>Seminar/Class</u>	<u>Location (s)</u>	<u>Open for Registration</u>
POSTPONED	2-Day Arboriculture Short Course	Tampa Area	
POSTPONED	TRAQ Renewal 1-day	Fort Lauderdale	
POSTPONED	TRAQ Full course: 3-days	Fort Lauderdale	
POSTPONED	Climber School	Fort Lauderdale	
September 14-16, 2020	Trees Florida 2020		

Welcome!

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the first quarter of 2020. If you see a name from your area of the state, look up their phone number online* and give them a call. Introduce yourself and find out what aspect of arboriculture the new member is involved in. Let's make the Florida Chapter friendlier. We're all working in different ways for the same goals. Get to know other Chapter members. You might make some helpful connections for the future.

Corey Alleyne, Bridgetown, Barbados
 Douglas Alvarez, Clearwater, FL
 Stefano Alvernia, Winter Garden, FL
 Andrew Balas , Saint Petersburg, FL
 Patrick Barron, Inverness, FL
 Brasington Beakley, Seminole, FL
 John Beane, Saint Cloud, FL
 Kyle Benham, Vero Beach, FL
 Bradford Booher, Green Cove Springs, FL
 Lester Brannan, Jacksonville, FL
 Keith Burke, Tampa, FL
 Katlin Burkhardt, Sorrento , FL
 Billy Calhoun, Sebring, FL
 Jacob Connolly, Stuart, FL
 Billy Cook, Valparaiso , FL
 Christine Crepsio Valentin, Tampa, FL
 JT Crouch, Fort Walton Beach, FL
 Matthew Dancho, Deerfield Beach, FL
 Trey Davidson, Tallahassee, FL
 Alayna Delgado, Tarpon Springs, FL
 Courtney Deviney, Gainesville, FL
 Mathew Dombrowski, Dunedin, FL
 Leonardo Erripa, Jupiter, FL
 Ivin Espana, Miami, FL
 Steven Eyster, Tampa, FL
 Christopher Forrest , Holly Hill, FL

William Fountain, Parrish, FL
 Joel Fuentes, West Palm Beach, FL
 Andrew Gatewood, Jensen Beach, FL
 Emilio Gomila, Tampa, FL
 Dennis Halenkamp, Pinellas Park, FL
 Steven Halenza , Long Key, FL
 Stephanie Hayek, N Ft Myers, FL
 Derrick Hedges, Rotonda West, FL
 Casey Hogan, Boca Raton, FL
 lacy Holtzworth, Gainesville, FL
 Michael Hough, Crawfordville, FL
 Vincent Ianuale, Boynton Beach, FL
 Daryl Johnson, Fort Lauderdale, FL
 Brent Kaplan, Tequesta, FL
 Christopher Kidd, Wimauma, FL
 David King, Inverness, FL
 Zachary Krause, North Port, FL
 John Lawrence, Lake Worth, FL
 Thomas Locke, Tallahassee , FL
 Michael Maciejewski, Hallandale, FL
 Ralph Marano, CORAL SPRINGS, FL
 Joshua Mcfadden, Orlando, FL
 Brandon McMullen, Jupiter, FL
 Drew Miller, Tallahassee, FL
 David Minkler, Pascagoula, MS
 Frank Montalvo, Miami, FL

Steven O'Donnell, Palm Bay, FL
 Salvatore Perrone, Coral Springs, FL
 Jason Ramirez, Tampa, FL
 Zachary Rash, Jacksonville, FL
 Grantly Ricketts, Kissimmee, FL
 Mike Robinson, Santa Rosa Beach, FL
 Jose Sagarrabay , Miami, FL
 Angel Segoviano Quirino, Ruskin, FL
 Kayla Selph, Apopka, FL
 Gavyn Simmons, Gulf breeze , FL
 Julee Sims, Saint Petersburg, FL
 Casey Stallcup, Saint Petersburg, FL
 Adam Starling, Tallahassee, FL
 Christopher Stratman, Hollywood, FL
 John Stuckey, Fort Myers, FL
 Bailey Sumner, Tallahassee, FL
 Taylor Sumner, Tallahassee, FL
 Michael Tercyak, Tallahassee, FL
 Adelle Tucker, Oldsmar, FL
 Robert Van Allen, Dade City, FL
 Selvin Velasquez, JUPITER, FL
 Alyssa Vinson, Bradenton, FL
 Zachary Washington, Jacksonville , FL
 Joshua Watts, Seffner, FL
 Lindsey Weber, Winter Haven, FL

**Go to <http://www.isa-arbor.com>, then go to "Members Only" and log in. Then go to ISA membership directory. If you do not know your log in for members only, contact ISA headquarters at (888) 472-8733. Once you log in, you can update your address, check your CEU's, edit or verify: Certified Arborist information and search the membership list.*

Letters to the Editor

We welcome your thoughts about Florida Arborist articles, about your Florida Chapter, or about tree issues in general.

Email your letters to:
jan@floridaisa.org

or mail to:
 Florida Chapter - ISA
 7853 S. Leewynn Court
 Sarasota, FL 34240

Please remember: Letters should be no longer than 300 words. We reserve the right to condense letters, or to edit as necessary.



An invitation to all members
 to attend a

Board of Directors Meeting!
 Call 941-342-0153
 for specific times and locations

Up-coming 2020 Board Meeting - Dates & Locations

June 14, 2020: TBD
 September 13, 2020: Clearwater
 November 13, 2020: Orlando

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

[Click here to view all scheduled exams](#); clicking on the “state” column will group all Florida exams together for easy searching. The ISA Certified Arborist exam at Pearson Testing Centers throughout Florida.

See the ISA International website www.isa-arbor.com for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 2057 Certified Arborists.

The Florida Chapter would like to congratulate the following 39 Florida or Florida Chapter individuals for earning their certifications during the 1st quarter of 2020 as Certified Arborist, and Utility Specialist:

Certified Arborist

Donald Benson, New Port Richey, FL
 Christopher Berman, Saint Petersburg, FL
 Jake Bolden, Fernandina Beach, FL
 Michael Bouwer, Bradenton, FL
 David Brayboy, Cocoa, FL
 Steven Brown, Fort Walton Beach, FL
 Kyle Brudzinski, Miami, FL
 Chung-san Cheung, Hong Kong, NA
 Craig Conatser, Cortez, FL
 Dustin Cook, Minneola, FL
 Darryl Cox, Plant City, FL
 Roy Croka, Winter Haven, FL
 Leonardo Erripa, Jupiter, FL
 Al Falewitch, Navarre, FL
 Mitch Feller, Largo, FL
 Daniel Gonzalez, Weston, FL
 Andrew Griner, Clermont, FL
 William Gurney, Wellington, FL
 Casey Hogan, Boca Raton, FL
 Michael Hough, Crawfordville, FL
 Daniel Hysmith, Jacksonville, FL
 Vincent Ianuale, Boynton Beach, FL
 Frank Jaques, Naples, FL
 Trevor Jessup, Sarasota, FL
 Brandon Justice, Oakland Park, FL
 Ryan Krammes, Gainesville, FL

Gregory Lahr, Orlando, FL
 Sean Lyons, Lakeland, FL
 Joseph MacKenzie, Newberry, FL
 William Mahan, Naples, FL
 Kirstie McCullough, Fort Lauderdale, FL
 Joshua Mcfadden, Orlando, FL
 Rory Mueller, Sebastian, FL
 Salvatore Perrone, Coral Springs, FL
 Casey Stallcup, Saint Petersburg, FL
 Rahim Vedaee, Dania Beach, FL
 Joseph Vibonese, North Venice, FL
 Todd Warren, Stuart, FL

Utility Specialist

Patrick James, Gainesville, FL



Are you thinking about becoming certified?

[Visit the International ISA website](#)

To access the certification application handbook with further information.

International Society of Arboriculture Florida Chapter

Our Mission: "To Promote and Improve the
Scientifically Based Practice of Professional Arboriculture"



Arborist Code of Ethics

Strive for continuous self-development by increasing their qualifications and technical proficiency by staying abreast of technological and scientific developments affecting the profession.

Not misuse or omit material facts in promoting technical information, products or services if the effect would be to mislead or misrepresent.

Hold paramount the safety and health of all people, and endeavor to protect property and the environment in the performances of professional responsibilities.

Accurately and fairly represent their capabilities, qualifications and experience and those of their employees and/or agents.

Subscribe to fair and honest business practices in dealing with clients, suppliers, employees and other professionals.

Support the improvement of professional services and products through encouraging research and development.

Observe the standards and promote adherence to the ethics embodied in this code.



Florida Arborist
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