FLORIDA TURF DIGEST

FLORIDA TURFGRASS ASSOCIATION

March/April 2018
VOL. 35 / NO. 2

Soil Testing AND Interpretation FOR FLORIDA TURFGRASSES

ALSO IN THIS ISSUE:

- Lake County, Florida, Fertilizer Ordinance Vote Recap
- Interlachen Golf Tournament Renamed to Honor Stuart Leventhal, CGCS

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Official Journal of the Florida Turfgrass Research Foundation Inc.

FLORIDA TURF DIGEST

Florida Turfgrass Association

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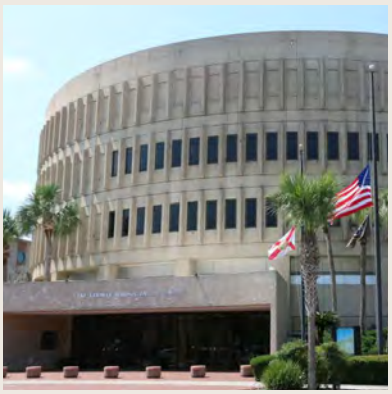

DEPARTMENTS

Cover photo and photo on page 8: Olde Florida Golf Course, courtesy of Darren J. Davis, CGCS,

Florida Turfgrass Association
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Florida Turf Digest is the official publication of the Florida Turfgrass Research Foundation Inc.
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PUBLISHED BY
Florida Turfgrass Research Foundation Inc.

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President's Message

By **Andrew J. Jorgensen**, *FTGA President*

Industry Update

Mac Carraway, Executive Director of the Environmental Research and Education Foundation, recently shared a video that praised a residential yard for achieving *Florida Water Star* certification through the ample use of gravel with minimal plant material and zero turfgrass installed. This lunar landscape is not only unattractive; the lack of turfgrass and plant material reduces all the benefits a well-thought out and beautiful landscape would provide. It also creates zero on-going business that our professional members rely on to support jobs, families and the local economy. However, this type of landscape, if you want to call it that, will become the future of Florida if the industry just sits back and lets someone else dictate what policy is put in place.

Fortunately, the industry will not go quietly into the night. The FTGA is active in promoting the benefits of a healthy landscape that include turfgrass and plant material that provide good aesthetics and reduced leaching and capture atmospheric pollutants and runoff that otherwise would end up in our water bodies. We provide education on proper fertilization, pest control, and most importantly, the proper use of irrigation through correct design and component selection. We have actively participated in meetings advocating such, and we have invested in research documenting water reduction and reduced nutrient leaching in Florida turfgrass. We all know a healthy landscape is not only good for the environment but also good for business.

Our friends over at the Florida Nursery Growers and Landscape Association have provided an important action plan from their recently formed Landscape Irrigation Committee in preparing for Florida's future. It highlights the need for additional strengthening of Florida's irrigation standards, the increase of irrigation training for employers and extension agents and a social media campaign aimed at consumers on ways to save water in their landscapes. All very important points that benefit the entire industry, turfgrass included.

On another front, the Florida Golf Course Superintendent Association recently met with several water management district officials to discuss a proposal to change the methodology of conservation during water shortage orders for golf courses. This proposal included the conservation methods that golf course superintendents currently employ on a daily basis and provided ideas on how to better conserve water during a drought period. All water district officials in attendance provided positive comments and agreed to review the proposed changes at their next board meetings.

The industry has made great strides in protecting the livelihood of all our members—regardless of association membership. This continued advocacy on an allied front will maintain turfgrass as an important component of Florida's landscape. We look forward to being able to communicate on your behalf to preserve Florida's turfgrass future.

Glyphosate Victory – In case you didn't see it, the Environmental Protection Agency reported in December that glyphosate is **not** likely to be carcinogenic to humans, contradicting a previous report issued in 2015 by the World Health Organization deeming it so. The agency went on to say they found "no other meaningful risks to human health" when the product is used in accordance to the label. This latest assessment is a major victory for the entire industry, which relies on this non-selective herbicide for use in landscapes around the country. More importantly, it provides additional ammo when battling proposed ordinances, similar to what we have already experienced with the City of Miami Beach.

There is never a moments' rest for the Florida Turfgrass Association or its members. The association must remain on guard against the public and private entities that would take our jobs and livelihood. Your membership helps to provide the resources to continue vital advocacy work in this area. During our annual membership drive, I would like to challenge each of you to introduce a new member to the FTGA. Together, we can ensure that our industry continues to flourish regardless of the forces and conditions that work against us.

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From the Executive Director

By **Heather Russo**, *Executive Director*

Value on Investment

Every company looks at Return on Investment (ROI) and how it affects its bottom line. But Value on Investment (VOI) is just as important and often overlooked.

The Florida Turfgrass Association is a member-centric association that continually adapts to the needs of its membership. Each year, we host dozens of educational events as well as the annual Conference & Show, our flagship event. We attempt to grow our roster and improve our events and VOI for members year over year, much the way companies attempt to improve their bottom lines and ROI year over year.

The internet has been a disruptive force that has changed our lives greatly—from the way we purchase groceries, watch television and movies, receive education, bank and much more. The smartphone addiction is real; you cannot go anywhere without checking your voicemails, emails and what is trending on social media. All the while, our heads are buried, and we have lost the personal connection with others.

These days, you can receive continuing education from almost anywhere. The internet can provide instantaneous answers, deep research and even free postgraduate level classes through Massive Open Online Courses known as MOOCs. It's wonderful that we have all these different avenues to help us stay abreast in our rapidly changing world, but what about the VOI of personal connection?

Everyone is limited on time and operating on tight deadlines. Taking a class online presents an ideal solution, since you don't have to leave the home or office to get an education. However, by attending classes in person, you get to learn from and talk with experts—in person. Instead of relying on Google, Alexis or Siri, you get to learn firsthand how other people are conducting business, what products they prefer, and what does and does not work for them. You get to learn about their successes and failures and discuss ways you can incorporate their knowledge into your own situation. That's just one of benefits of FTGA membership.

MEMBERSHIP IN FTGA

Membership applications and renewals must be received by March 15 for inclusion in this years' *Membership Directory and Industry Guide.* You can register and renew online at www.ftga.org. Click Membership on the top menu and follow the online instructions.

We provide members of the association with the following benefits:

- **INFORMATION** – provide eight issues of our official magazine, the *Florida Turf Digest,* including the annual *Membership Directory and Industry Guide* and conference program as well as newsletters and social media accounts.
- **IMPACT** – create benefits for our members.
- **INFLUENCE** – monitor city ordinances and participate in advocacy on behalf of our members.
- **INTERACTION & INSTRUCTION** – provide educational seminars and annual Conference & Show, which include access to CEU sessions.

Just as important as the events listed above, active participation in the FTGA allows members to build a strong network of industry colleagues and friends. The **66th Annual Conference & Show** in September is a premier event to connect you with others in the industry, to see colleagues, network and learn from university faculty and turfgrass experts—to make connections that add to the VOI of FTGA membership. Make it a point this year to get out of the office, unplug from your devices and make one-on-one connections.

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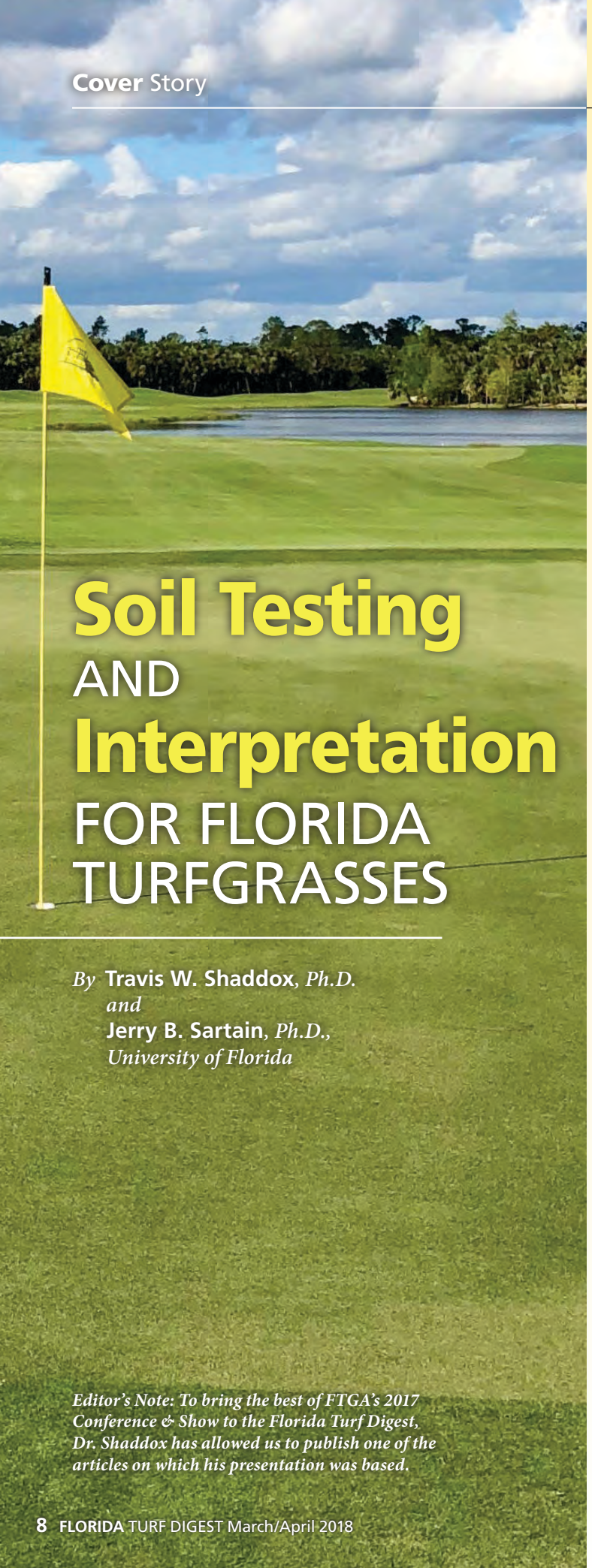

Soil Testing AND Interpretation FOR FLORIDA TURFGRASSES

By **Travis W. Shaddox**, *Ph.D.*
and
Jerry B. Sartain, *Ph.D.*,
University of Florida

Editor's Note: To bring the best of FTGA's 2017 Conference & Show to the Florida Turf Digest, Dr. Shaddox has allowed us to publish one of the articles on which his presentation was based.

Most people agree that healthy, well-maintained turfgrass is a thing of beauty. However, many of these same people think beautiful turfgrass requires a lot of trouble, hard work, and possible expertise that they do not possess. This is not necessarily true, but a few basic facts concerning the nutritional requirements of turfgrasses and the properties of fertilizer and liming materials are essential for growing healthy turfgrass. Under normal conditions, water, light and temperature have greater influences on turfgrass growth and quality than nearly any other variable. However, when water, light and temperature are at optimal levels and the turfgrass remains unacceptable, nutrient deficiencies may be the cause. Therefore, it is essential to understand how soil testing may be used to more efficiently manage nutrient applications.

Soil Analysis and Interpretation

Soil testing involves sample collection, analysis, interpretation and recommendations. Sample collection is the first step of soil analysis. The soil test and the resulting recommendations represent the soil nutrient status only as well as the sample does. Therefore, it is imperative that the soil sample be taken and handled properly. Soil samples should be taken from the soil depth in which the turfgrass roots exist, which is normally the top 4 inches of the soil. The soil samples can be taken using a traditional soil probe, a garden spade or shovel. Ten to 15 samples should be randomly taken from the area of concern. Do not mix soil from healthy turf areas with soil from unhealthy turf areas because this will reduce the ability to diagnose the problem. The 10–15 samples should be mixed and a one-pint portion placed in a soil sample bag and shipped to any soil testing laboratory. Soil sample bags can be acquired from the UF/IFAS extension soil testing laboratory (ESTL) at soilslab.ifas.ufl.edu. The UF/IFAS ESTL also performs soil testing for a fee.

The second step in soil analysis is extraction. The purpose of the extractant is to determine the quantity of an element that would be representative of what will be available for plant uptake during that growing season. Following extraction, the extracting solution is introduced into an instrument that detects the element concentrations.

The third step of soil testing is data interpretation. The nutrient concentrations are interpreted by comparing the nutrient concentration to known nutrient response curves for the given soil and the turfgrass of interest. Unfortunately for Florida turfgrasses, nutrient response

calibration curves do not exist for phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), sulfur (S), and all micronutrients. Until calibration curves are determined, the use of soil testing to manage the application of nutrients to turfgrasses (other than for pH or salinity) is questionable (Kreuser, 2015). However, critical soil test values have been determined for P and Mg and are 10 and 20 ppm, respectively (Liu et al. 2008; Sartain 1993). Critical soil test values only provide a single value above which no response would be expected, but do not provide any response probability when soil test results are below the critical value.

The final step is to provide a recommendation based upon the interpretation. As previously mentioned, because calibration curves for each Florida turfgrass and each soil type do not exist, the use of soil testing to manage nutrients applied to Florida turfgrasses are of little value. However, the critical soil test values for P and Mg can be used to recommend that no P or Mg be applied when soil test values exceed 10 and 20 ppm, respectively.

Soil Acidity

If soil testing has limited value for managing turfgrass nutrient applications, why should you test the soil? Simply, because pH and salinity are of great value and are evidence-based components of most soil tests. Soil reaction, or pH, is important because it influences several soil factors that affect plant growth. Soil bacteria that transform and release N from organic matter function best in the pH range of 5.5 to 7.0; certain fertilizer materials also supply nutrients more efficiently in this range.

Plant nutrients, particularly P, K, Ca, Mg, boron, copper, iron, manganese and zinc, are generally more available to plants in the pH range of 5.5 to 6.5 (McBride 1994). These plant nutrients are more available to plants at pH values below 5.0 than in soils with pH between 5.0 and 7.5. In certain soils, when the soil pH drops below 5.0, aluminum may become toxic to plant growth.

Turfgrasses differ in their adaptability to soil acidity. For example, centipedegrass and bahiagrass grow better in an acid environment (pH 5.0 to 6.0) than St. Augustinegrass or zoysiagrass, which grow best in near neutral or alkaline soils (pH 6.5 to 7.5) (Figure 1).

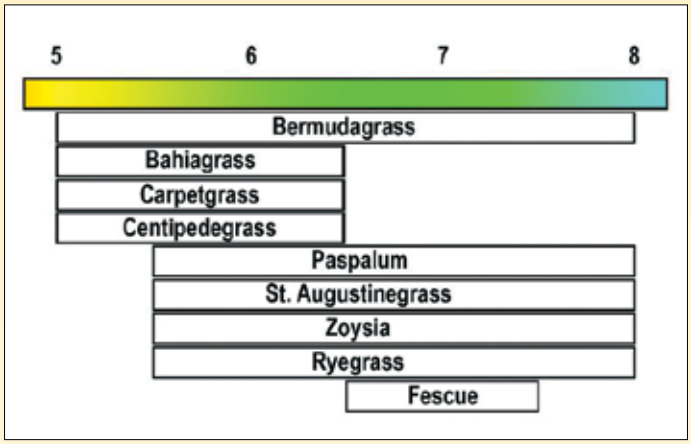

Figure 1. Soil pH ranges for Florida turfgrasses.

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Adjusting the Soil Reaction (pH)

Normally, liming materials are used to increase soil pH and supply the essential nutrients Ca and Mg. The two most commonly available liming materials are calcic and dolomitic limes (Table 1). Generally, about six months' reaction time is required for calcic and dolomitic lime to have their maximum effect on soil acidity. If more immediate results are desired, hydrated lime can be used; however, hydrated lime is not recommended for use by the non-professional because this material can severely damage the turfgrass if improperly used. Lime recommendations are typically made on a calcic limestone basis. If another liming material is used, adjust the application rate according to the calcium carbonate equivalents (Table 1).

Soil lime requirement cannot be determined by soil pH alone. Liming recommendations are based on the Adam–Evans lime requirement test, which is included in routine soil analysis, and is reported if the soil pH is 6.0 or less. The quantity of lime recommended is based on the type of turfgrass being grown, the target pH desired, and is highly dependent upon soil type. The greater the amount of organic matter or clay content of the soil and the lower the pH, the more lime is required to increase the soil pH to a desired level.

Soil Alkalinity

If a soil is too alkaline (has a pH greater than 7.5), it must be determined whether the excess alkalinity is due to an inherent soil characteristic or previous excessive application of liming materials. Soils having a pH greater than 8.3 are not alkaline due to the presence of calcium carbonate materials because calcium carbonate has an equilibrium pH of 8.3 in water. Thus, excessively high soil pH is most likely due to the presence of elevated levels of sodium (Na). It is difficult and uneconomical to change the pH of naturally occurring alkaline soils, such as those found in coastal areas or fill soil containing marl, shell or limestone. On the other hand, if a high pH is due to applied lime or other alkaline additives, then acid-forming materials such as sulfur and ammonium sulfate (Table 2) can effectively reduce soil pH when applied at the proper rate and frequency.

Granular, super-fine dust, or wettable sulfur can be used to decrease soil pH. Granular sulfur is preferred on turfgrass production systems due to the ease of application (with cyclone fertilizer spreaders) and the reduced possibility of foliar burn from the granules. Thoroughly water-in sulfur after application, taking care to wash off all above ground turf parts. It takes approximately 1/3 the amount of sulfur to decrease the soil pH 1 unit as it does calcic lime to increase the soil pH 1 unit. Do not apply more than 10 pounds of sulfur per 1,000 square feet per application. Additional applications of sulfur should not be made more often than once every 30 days. Depending on the quantity of excess lime in the soil, several applications of sulfur may be necessary to decrease the soil pH to the desired level.

However, as stated above, if the soil is inherently high in pH due to the natural presence of lime in the soil, pH cannot be reduced over a long period of time and will gradually rebound. If the soil has a naturally high calcium carbonate content, it would be more practical and much easier to change to a type of turfgrass that will tolerate high soil

pH and not attempt to reduce the soil pH using a sulfur-containing material. Sulfur oxidizes in the soil and reacts with water to form a strong acid (sulfuric acid) that can severely damage plant roots, so it must be used cautiously.

Soil Salinity

At high enough levels, soil salts deplete the turfgrass's moisture and can result in stressed and unacceptable turfgrass. Salts are introduced to turfgrass soils via many channels, including but not limited to irrigation water, effluent water, ocean spray, saltwater intrusion and fertilizer (Carrow et al. 1999). Soils may require remediation if the soil salt level exceeds the tolerance of the turfgrass being grown (Table 3).

The most effective method of reducing soil salts is to rely upon natural rainfall and/or low-saline irrigation. If clean water is not available, irrigate deeply with existing water to leach the salts remaining in the rootzone from prior irrigation cycles. Wetting agents may aid with moisture distribution but may also reduce infiltration rates (Chang et al. 2013). Despite claims, gypsum ($CaSO_4$) will not remove salts and does little to increase percolation in Florida's sandy soils. Gypsum is a salt and, therefore, the application of gypsum increases salinity. However, gypsum can remediate Na-related issues such as poor percolation resulting from deflocculated soils. Florida's soils are predominantly sands, which have a very poor capacity to retain Na and, therefore, Na-related soil problems are rare. However, gypsum has the additional benefit of reducing bicarbonates and carbonates (Figure 2), which can be toxic to many turfgrasses (Carrow et al., 2001).

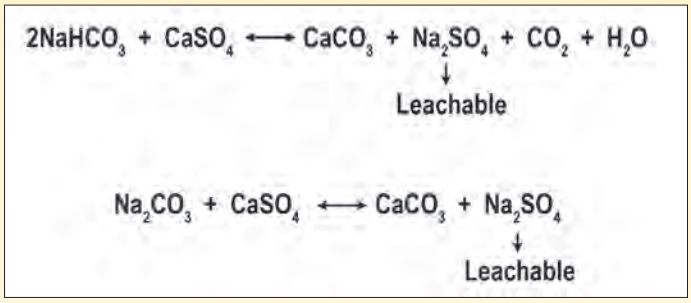

Figure 2. Bicarbonate ($2NaHCO_3$) and carbonate (Na_2HCO_3) reductions following gypsum ($CaSO_4$) application.

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In locations where Na and/or bicarbonates are continually added to the turf/soil system, remediation may require regular gypsum applications over several years, in some cases. On established turf, gypsum application rates range from 200–500 lbs. per acre. If your normal fertilizer contains filler, your fertilizer distributor should be able to replace the filler with gypsum. In this manner, gypsum applications would then be a regular part of your nutrient applications with very little appreciable increase in cost. This method may be less expensive than sole gypsum applications, but it will require more time to achieve the same remediation effect.

Summary

Soils should be regularly tested for pH and salinity levels. In many cases, turfgrass issues can be resolved by adjusting the pH into the range of 5.0–6.5. Salinity levels should be compared to the tolerance level of the turfgrass being grown. If diagnosed as an issue, bicarbonates and carbonates can be reduced by applying gypsum. Turfgrass response to P and Mg fertilizers is unlikely when Mehlich III soil test values exceed 10 and 20 ppm, respectively.

References

Carrow, R.N. and R.R. Duncan. 1998. *Salt-affected turfgrass sites: assessment and management.* Chelsea, Mich: Ann Arbor Press.

Carrow, R.N., R.R. Duncan, and M. Huck. 1999. "Treating the cause, not the symptoms: Irrigation water treatment for better infiltration". *USGA Green Section Record.* 37: 11–15.

Carrow, R.N., D.V. Waddington, and P.E. Rieke. 2001. *Turfgrass soil fertility and chemical problems: assessment and management.* Chelsea, Mich: Ann Arbor Press.

Chang, Z.H., Z.F. Jia, J.F. Liu, and D.Y. Li. 2013. "Influence of gypsum and wetting agent on sand-based putting greens irrigated with recycled wastewater". *Agron. J.* 105: 1676–1682. doi:10.2134/agronj2013.0060.

Kreuser, W.C. 2015. "Simplifying soil test interpretations for turf professionals". G2265: www.nebraskaturfgrass.com/turfiNfo/simplifying_soil_test.pdf (accessed February 5, 2018).

Liu, M., J.B. Sartain, L.E. Trenholm, and G.L. Miller. 2008. "Phosphorus requirements of St. Augustinegrass grown in sandy soils". *Crop Sci.* 48: 1178-1186. doi:10.2135/cropsci2007.09.0506.

McBride, M.B. 1994. *Environmental chemistry of soils.* New York: Oxford University Press.

Sartain, J.B. 1993. "Interrelationships among turfgrasses, clipping recycling, thatch, and applied calcium, magnesium, and potassium". *Agron. J.* 85: 40–43.

See Tables on next page

Table 1. Chemical composition and calcium carbonate equivalents of liming materials.

Materials	Chemical Composition	CCE*
Burned Lime	CaO	56
Hydrated Lime	$Ca(OH)_2$	74
Dolomitic Limestone	$CaCO_3$ $MgCO_3$	92
Calcic Limestone	$CaCO_3$	100
*The number of pounds of each material required to neutralize the same quantity of acidity as that neutralized by pure calcium carbonate or calcic lime.		

Table 2. Acidifying materials equivalent to 1 lb. of sulfur.

Materials	Chemical Composition	CCE*
Aluminum sulfate	$Al_2(SO_4)_3 \cdot 18H_2O$	56
Ammonium sulfate	$(NH_4)_2SO_4$	74
Ferrous sulfate	$FeSO_4 \cdot 7H_2O$	92
Lime sulfur solution	$CaS_5 + CaSO_4 \cdot 5H_2O$	100
Sulfur	S	
Sulfuric acid	H_2SO_4	

Table 3. Salinity tolerance of warm season turfgrass species*.

Threshold ECe**			50% Growth Reduction ECe			
Common Name	**Scientific Name**	**General Salinity Tolerance*** **	**Average**	**Range**	**Average**	**Range**
---------- dS m-1 ----------						
Bermudagrass, common	*Cynodon dactylon*	MT	4.3	0-12	21	12-32
Bermudagrass, hybrids	*Cynodon*spp.	MT	3.7	0-10	22	11-33
Blue grama	*Bouteloua gracilis*	MT	5.2	2-10	-	-
Buffalograss	*Buchloe dactyloides*	MT	5.3	0-10	13	13
Carpetgrass	*Axonopus* spp.	VS	1.5	0-1	-	-
Centipedegrass	*Eremochloa ophiuroides*	VS	1.5	0-3	8	8-9
Kikuyu	*Pennisetum clandestinum*	T	8.0	6-10	-	-
Saltgrass	*Distichlis stricta*	T	8.0	6-10	-	-
St. Augustinegrass	*Stenotaphrum secundatum*	T	6.5-18	0-18	29	22-44
Zoysiagrass	*Zoysia* spp.	MS	2.4	0-11	16	4-40
* Carrow and Duncan (1998)						
** ECe = electrical conductivity of the saturated-soil extract						
*** MS = mildly sensitive, MT = mildly tolerant, T = tolerant, VS = very sensitive,						

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FTGA Members in the SPOTLIGHT

Andy Jorgensen (R) presents a plaque to **Stuart Leventhal, CGCS**, commemorating the tournament's name change to the Stuart Leventhal, CGCS, Turfgrass Research Golf Tournament in honor of his outstanding work over the years.

For the past 30 years, Wreath of Grass recipient Stuart Leventhal, CGCS, has made the kinds of waves that ensure the Florida Turfgrass Association can help fund important green-industry research. In honor of his contribution, the annual golf tournament held in cooperation with Interlachen Country Club and the Central Florida Golf Course Superintendents Association has been renamed the Stuart Leventhal, CGCS, Turfgrass Research Golf Tournament.

Each year, Stuart coordinates the tournament to benefit the Florida Turf Research Foundation. The 30th annual tournament, held January 8, 2018, raised $5,000 for a total of around $115,000 over the past 30 years.

(left to right) **Jennifer Bryan**, Florida Golf Course Superintendents Executive Director; **Bryce Gibson**, Interlachen Country Club; **Stuart Leventhal, CGCS**, Interlachen Country Club; **Bob Yount**, FTGA Wreath of Grass recipient; **Andy Jorgenson, CGCS**, On Top of the World Communities and FTGA president; **Joshua Kelley**, Hawks Landing Golf Club and CFGCSA President; and **Heather Russo**, FTGA Executive Director.

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TPF Annual Meeting & Field Day
May 3 – 4
www.floridaturf.com

FTGA's 66th Annual Conference & Show
World Golf Village,
St. Augustine
September 17 – 19

FLORIDA TURFGRASS ASSOCIATION

WELCOME NEW MEMBERS!

We extend a hearty welcome to our new members, and we look forward to seeing you at one the FTGA events. In the meantime, we hope you enjoy the *Florida Turf Digest* and other member benefits.

Anthony Baur
St. John's Golf Club

Stewart Clarke
Big Earth Landscape Supply

Tony Disano
Lake Jovita Golf & Country Club

Christopher Falck
Marion County BOCC

Mike Feliciano
Bee Green Lawn Care

Francis Lapina
Blackwater Air Imagery

WILDLIFE FEATURE PHOTO

Look closely to spot an Eastern Screech Owl in a common "grey morph" stage. The mass to the right of the owl is a knot in the tree, but the markings are so similar that it is easy to mistake it for a second owl.

This "needle in a haystack" was spotted by Cole McNally, 1st assistant superintendent in an oak tree on the south course at John's Island Club, where Gregory A. Pheneger is director of golf course maintenance.

Photo courtesy of Brian Beckner, former FTGA member and Native Bird Boxes owner. His bird boxes populate many golf courses and natural habitats throughout Florida. Learn more about Brian at www.bit.ly/2sizgCd, visit his Facebook page at www.facebook.com/NativeBirdBoxes or email him at Brian@NativeBirdBoxes.com.

If you would like to submit a wildlife photograph for this feature, please email a high-resolution image in .jpg format as an attachment to FTGA Media Operations Manager Emily Cox at emily@ftga.org. We are specifically interested in highlighting wildlife in turfgrass habitats.

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LAKE COUNTY
FLORIDA

Fertilizer Ordinance Vote Recap

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By **Mac Carraway,**
Executive Director, The Environmental Research & Education Foundation (EREF)

> *Certain activist organizations, witnessed by us, openly and publicly state that their goal is "to make trouble and scare people."*

It makes sense that if we write about our good news, we should write about our bad news. And make no mistake about it, Lake County's passing the so-called strong fertilizer blackout ordinance (no nitrogen June–September and without professional or BMP-trained homeowner exemptions) is a loss. Before getting into our take on why it is a loss, we'll raise a quick question—why didn't we include phosphorus in our opening line since it is also banned in Lake County's summer blackout? The answer is that there is very limited, if any, phosphorus used by professionals or in many of the new consumer bagged materials. In the context of residential plant nutrition, phosphorus is a boogey man used as a tactic by blackout enablers to justify these punitive and discriminatory ordinances. Unfortunately, that is lost on most elected officials, which is not a criticism of them, but of the activists who exploit this issue to scare up a favorable vote.

An activist reading this might say something such as, "Well that's just industry sour grapes." Maybe a little. But it is more so an interesting matter of record: Certain activist organizations, witnessed by us, openly and publicly state that their goal is "to make trouble and scare people." Is that what local government policymaking has devolved into (say, versus a systematic discussion of relevant evidence)? Yes. Yes, it is. It is the activist calculus to scare local elected officials and residents into thinking there can't possibly be any reasonable or environmentally friendly position on nutrient management other than theirs.

To illustrate this, we would encourage you to watch the video-taped debate on the ordinance at ***https://youtu.be/fGpHA2uddT4.*** Here is what you are going to see: Green industry advocates making articulate, measured, evidence-based arguments in favor of rejecting the four-month blackouts, and/or exempting licensed lawn care professionals and BMP-trained homeowners from them—arguments for treating those who are trained and educated differently than those who are carelessly doing the damage. Period. As to the blackout supporters, you will certainly hear heartfelt testimony in support of the ordinance as written and passed. All of us respect that, even though we know they are long on emotion and short on facts. Beyond that, however, there are the sadly predictable attacks on green industry speakers as out-of-town shills protecting their profits, who don't really care what happens to the water and natural systems in Lake County, and on and on.

Those attacks are simply the most blatant kind of hypocrisy imaginable. We would ask you to watch either the Lake County or the also-recent Orange County videos of their ordinance debates. In both cases, the activist-speaker roll call included numerous citizens and, more importantly, paid activist representatives from outside of the respective county. It's fine with us for those folks to testify, but you might think that calling us shills for doing the same thing really doesn't pass the smell test. More disturbing is the oft-repeated slander that green industry speakers are only motivated by money. Anyone paying any attention at all knows that these folks use their websites and media reach to raise and print money to promote their progressive, anti-science agendas, and it is naïve to think otherwise.

Once again though, we get it. It's fine to have a representative speak on your behalf. Most people from both sides are typically hard at work during public hearings. Each is fortunate

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> *... name calling is the last resort of those who have NO EVIDENCE to support their position.*

to have committed advocates to speak for them. In our case, ALL the green industry advocates who spoke in Lake County were representing individuals or companies who call Lake County their home. Not sure how that translates into being a shill. The answer is, of course, that it doesn't, and any intellectually honest observer knows what is going on. It is name calling, pure and simple. And ultimately name calling is the last resort of those who have NO EVIDENCE to support their position.

Now, as to why the Lake County result is a loss, albeit on a skinny 3–2 vote that flipped in the last moments of the debate. It's not because of the final vote, although we certainly wish it would have gone the other way. No. It is a loss for two more important reasons: (1) Because evidence, science and fairness were trumped by fear mongering, emotionalism and mythologized conventional wisdoms; and (2) because the outcome was allowed to be influenced by self-righteous and inflammatory rhetoric aimed at profiling and marginalizing the hard-working, water-loving, highly trained green industry professionals who live in, work in and love Lake County and its waterways just as much as anyone else.

In conclusion, we can proudly say that the green industry has consistently refrained from the mannerless tactics used by many of the activists and will continue to do so. Going forward, however, we are not going to be quite so nice about having this double standard imposed on us. Count on EREF calling it out.

> *...evidence, science and fairness were trumped by fear mongering, emotionalism and mythologized conventional wisdoms;*

In the end, the evidence clearly tells us that the vote was symbolic because the blackouts don't do anything to change water quality—they never have, and they never will. **Soil and water science aren't influenced by what the vote is.** But if, as we stated at the public hearing, the ordinance masquerades as education, and a few of those who are ignorant about how to care for their landscapes learn something, some good was done—but done only by unnecessarily sacrificing the licensed professionals and BMP-trained homeowners who don't need to be told to do the right thing. That's what they do all the time.

Mac Carraway is the Contracted EREF Executive Director

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