# How to Measure Playability for Safe Sports Fields

TURFGRASS ASSOCIATION

VOL. 43 / NO. 3

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Palm Beach GCSA Steve Wright

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**ERIC DIXON** FTGA President



# FTGA TRANSITIONS INTO SUMMER

s we transition from spring into the full heat of summer, Florida's ongoing drought has become a challenge for our industry. Across the state, turfgrass managers are facing dry, stressful conditions that test not just the grass, but the people managing it. These weather patterns remind us that perfection is a rarity in this line of work. Whether it's too little rain today or too much tomorrow, the conditions are constantly shifting. But that's where turf managers excel. Resilience is a necessity. We've learned to adapt, to act decisively and to solve problems. A drought may complicate our daily work, but it also highlights the strength of our community and the practical knowledge we've built over time. If we waited for the "perfect" forecast or ideal growing conditions, we'd never move forward. Our success doesn't come from waiting; it comes from adjusting, innovating and pushing ahead, even when the circumstances aren't on our side.

One of the greatest benefits of FTGA membership is access to statewide education. Our Regional Turf Seminars, held each winter and spring in February and March, are a cornerstone of that effort, covering pest and disease management, weed control, BMPs, regulatory updates and pesticide usage. These seminars are a great opportunity to build community and share ideas. Several seminars broke attendance records this year, a clear sign of their value to our members. Thank you to all the presenters, attendees and sponsors who helped make the 2025 Regional Turf Seminars a success.

Building on that momentum, we're excited to offer a "Summer Session" Turf Seminar on July 29 at the UF Fort Lauderdale Research and Education Center. The event will feature a three-hour session in English, followed by a threehour session in Spanish, expanding access to even more turf professionals across the state.

In a strong demonstration of our commitment to advocacy, FTGA leadership including myself, Vice President Mark Kann, Immediate Past President Pat Marsh and Board Member Allen Woerner recently joined the Florida Pest Management Association (FPMA) for their Legislative Days event in Tallahassee. This collaborative effort offered a valuable opportunity to engage directly with key decision-makers and ensure the turfgrass industry's priorities are heard. During our visit, we had the privilege of meeting with Florida Commissioner of Agriculture Wilton Simpson, Senate President Ben Albritton and several other legislators. These conversations were critical in discussing the importance of science-based policy, sustainable land management, and continued support for Florida's green industries. We are especially grateful to Dave Shepp of The Southern Group for his work in coordinating these meetings. His guidance and support were instrumental in helping us communicate our message effectively and build strong relationships within the legislature.

Looking ahead, FTGA is excited to expand on two key initiatives that will further our mission and strengthen the future of our industry. First, we are ramping up our high school outreach efforts, aiming to introduce students to the many career opportunities available in turfgrass management. This is a key priority of our Leadership and Development Committee in the coming year. Second, we're especially excited about a new partnership with the University of Florida, which will bring the UF Field Day at the Citra Plant Science Research and Education Unit (PSREU) into the 2025 Annual Turfgrass Conference schedule. This collaboration will provide attendees with hands-on learning and access to cutting-edge research. Additionally, we're proud to partner with the Central Florida Sports Turf Managers Association on the Annual Conference to broaden our reach and provide even more value to our members.

Similar to growing turf, the FTGA is not waiting for the perfect conditions. We're working to improve the conditions we have today. By educating our members, we're enhancing their ability to adapt to current challenges. Our advocacy efforts will help create better conditions for the future. Through high school outreach, we're planting the seeds for the next generation of industry professionals. And by collaborating with allied associations on a conference, we're ensuring lasting value for the future of the Florida turfgrass industry.

Eric Dixon, GCS Class A President, Florida Turfgrass Association



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# HOW TO MEASURE PLAYABILITY FOR SAFE SPORTS FIELDS

### By John Mascaro, President, Turf-Tec International

Ensuring the safety and playability of sports fields is crucial for player performance and injury prevention. For sports field safety and playability, three points of data are needed. This article will explore the methodologies and standards for evaluating natural grass and synthetic turf surfaces, emphasizing the importance of consistency across playing fields.

To measure an exact position on Earth, three points of reference are needed. Before GPS, navigators used the positions of stars, the sun, and the moon to determine their position on the earth's surface. This was done using instruments like sextants.



Today, GPS relies on a process called trilateration. Trilateration uses signals from at least three satellites to determine a receiver's position. Each satellite provides a sphere of possible locations where the receiver could be located. The intersection of these three spheres pinpoints the exact location on the earth's surface.

### NATURAL GRASS SURFACES

Three points of reference are also needed to determine playability for safe sports fields on natural grass surfaces, they include gMax, soil moisture and shear strength. Each of the three reference points is dependent on the others in order to evaluate the overall safety and playability of the playing surface. Without all three reference points, you are in fact "lost" as they interdepend upon each other. If a surface is too hard in gMax numbers, you can lower the gMax number by adding moisture. However, with added moisture, traction and shear strength are reduced. If the shear strength is too low, that number can be increased by drying out the surface, however you increase gMax. This is why, similar to GPS readings, each number is dependent on the others for your overall ability to assess playability and safety of the surface.

Photo credit: freepik.com

You can identify trends by comparing the same sports field playing surface test results over time. Readings from gMax, soil moisture and shear strength can be compared and analyzed. For example, if the gMax numbers vary, higher or lower, from one measurement point in time compared to another, the other two data point variables, soil moisture and shear strength, can be compared to determine what changed over time.

### gMax Testing on Natural **Grass Surfaces**

gMax is expressed in units of g (gravities), where 1 g is equivalent to the acceleration due to Earth's gravity, approximately 9.81 meters per second squared (m/s<sup>2</sup>). For example, a gMax of 10 g means the subject is experiencing forces 10 times greater than the force of gravity on Earth. Standing on Earth, you are at 1 gravity.

gMax testing measures the shockabsorbing properties of the playing surface. This is crucial because surfaces with poor shock absorption can increase the risk of concussions and other impactrelated injuries.

- Procedure: A 2.25 kg weighted device called a "Clegg Hammer" or "Clegg Impact Tester," is dropped onto the surface from a specific height. The peak deceleration (gMax value) is recorded upon impact.
- Standards: The NFL and ASTM have set maximum allowable gMax values. Typically, a gMax value on a Clegg above 100 is considered potentially dangerous.
- Impact: Lower gMax values indicate better shock absorption, which reduces the risk of injury to players.

### Soil Moisture Testing on Natural **Grass Surfaces**

Soil moisture testing measures the amount of water present in the soil, which affects the field's hardness and playability. Soil moisture can be categorized into several forms, including:

- Gravitational water is water that moves • through the soil due to gravity and can drain away quickly.
- Capillary water is water that is held in the soil • pores against the force of gravity and available for plant use. Hygroscopic water is water that is adsorbed onto the outside of soil particles and is not available for plant use.

Soil moisture is essential for turfgrass growth. It also influences soil temperature and microbial activity. Monitoring and managing soil moisture ensures optimal turfgrass growth and water use efficiency.





Shear Strength

Natural Grass

Shear strength testing

measures the traction

surface, which affects

how well players can

grip the ground with

their footwear. Using

equipped with a shear

a shear vane tester

vane foot, allows a

sports field manager

to measure the shear

strength of soil and

turf. It consists of a

set of vanes (blades)

attached to a handle,

which is inserted into

the turfgrass surface.

and stability of the field

Testing on

Surfaces

Clegg Impact Tester.

Soil moisture testing in sports field testing is a crucial aspect of field maintenance and management, ensuring optimal playing conditions and player safety. Proper moisture levels in the turf and underlying soil impact the field's firmness, traction and durability.

- **Procedure:** Various methods are • used to measure soil moisture, including direct methods such as time-domain reflectometry (TDR) using soil moisture sensors.
- Standards: Maintaining the right moisture level is crucial for player safety. Overly dry fields can become hard and increase the risk of impact injuries, while overly wet fields can become slippery and increase the risk of slips and falls.
- Impact: Optimal soil moisture ensures good turf health and durability. It affects the turf's ability to recover from wear and tear. Ensuring a consistent playing surface across different fields and stadiums is crucial for fair play. Soil moisture testing provides a tool to manage consistency.



When the rod is rotated, the vanes are rotated through the soil or turf, and the resistance encountered is displayed on a dial providing a measure of the sports surface shear strength. The shear vane foot helps determine the turf's resistance to shearing forces, which is crucial for evaluating the durability and stability of the turf surface. This is particularly important for sports fields and other areas where turf is subject to heavy use and wear.

Traction and Stability measure how well players can grip the surface with their footwear, which affects their ability to make quick movements without slipping or falling.

- **Procedure:** Devices like the Shear Strength Tester are used. These simulate the forces exerted by a player's foot on the surface.
- **Standards:** Optimal traction values are specified to ensure that the surface provides enough grip.
- **Impact:** Adequate traction prevents injuries from slips and falls, reducing the risk of non-contact injuries and improving overall player performance.

### SYNTHETIC TURF SURFACES

### gMax Testing on Synthetic Turf Surfaces

The three points of reference needed to determine playability for safe sports fields on synthetic turf surfaces are gMax, infill depth and shear strength. Each point of reference is also dependent on the other in order to evaluate the safety and playability of the playing surface.

Similar to natural grass, the gMax value measures the hardness of synthetic turf surfaces using the 2.25 kg Clegg Impact Tester.

- **Procedure:** The same procedure as with natural grass surfaces is followed, using the 2.25 kg Clegg Hammer to record gMax values.
- **Standards:** The NFL and ASTM have set maximum allowable gMax values. Typically, a gMax value on a Clegg above 100 g's is considered potentially dangerous. gMax values over 200 g's with an ASTM F355 tester of the Clegg Equivalent formula are also considered potentially dangerous.
- **Impact:** Lower gMax values on synthetic turf indicate better shock absorption and reduced injury risk.

### Infill Depth Testing on Synthetic Turf Surfaces Importance of Infill Depth

The depth of infill is critical in achieving these benefits. Too little infill can lead to a hard and unforgiving surface, increasing the risk of injuries. Conversely, too much infill can make the surface unstable and affect the playability of the field. In many instances, infill is displaced during play and then, without measuring, additional infill is added instead of redistributing the displaced materials, causing excessive build up. Maintaining an optimal infill depth is necessary to balance cushioning and stability.



Infill Depth Tester.

### **PROCEDURE:**

Infill depth testing involves measuring the depth of the infill material at various points across the turf. This process can be conducted using several methods:

- **Manual Probes:** A calibrated probe is inserted into the turf to measure the depth of the infill manually. This method provides spot-check data and is often used for quick assessments.
- **Digital Depth Gauges:** These devices offer more precise measurements and can record data for comprehensive analysis and GPS map the field surface for infill depth consistency and ease of redistribution of infill materials after play.
- **Prism Gauges:** These devices will give the pile height or amount of fiber that is above the infill depth.

### STANDARDS:

Measuring the infill depth and the amount of fiber above the infill, determines the ratio of infill to overall fiber length. Ideally, around 68–70% of pile height should be covered by infill. Individual manufacturers of your synthetic surface should be contacted for their recommendations.

Regular infill depth testing is vital for maintaining the quality and safety of synthetic turf fields. By routinely measuring and adjusting the infill, field managers can ensure:

- **Consistent Playing Surface:** Athletes experience a uniform surface, reducing the risk of injuries from trips and falls caused by uneven infill distribution.
- Enhanced Durability: Proper infill levels contribute to the longevity of the turf, preventing premature wear and tear.
- Safety Compliance: Many sports governing bodies have regulations regarding the maintenance of synthetic fields. Infill depth testing helps facilities comply with these standards.

Often, when measuring infill properly and determining the ratio of infill to fiber length, and GPS mapping the surface for infill amounts, it can be determined that redistribution of infill is needed to maintain consistency rather than application of additional infill. Often the infill is displaced by wear, weather events or improper grooming techniques or a combination of the three. Proper field grooming and redistributing high areas to low areas often result in a more consistent, safe and playable surface.

### Shear Strength Testing on Synthetic Turf Surfaces

Shear strength testing evaluates traction and stability on synthetic turf, similar to natural grass surfaces.

- **Procedure:** A specially designed synthetic turf foot and the Shear Strength Tester with a lower range 0–9 newton meter wrench are used for this assessment.
- **Standards:** No set shear strength values have been set by the governing organizations with this tool; however, surface

consistency can easily be evaluated to determine whether grooming, rolling or adding moisture will be needed.

• **Impact:** Adequate shear strength prevents slips and falls, reducing the risk of non-contact injuries and improving overall player performance and reducing the potential for injury risk.

### The Fourth Data Point for Synthetic Turf: Cleat Depth Testing

Cleat depth testing measures the interaction between a player's cleats and the synthetic turf infill surface, ensuring proper traction and stability. I am confident that this fourth data point will become an invaluable tool in testing protocols to determine sports field safety and playability. Consistent cleat depth over the entire playing surface will ensure a player has the same footing across the entire field of play.

- **Procedure:** The Mascaro Infill and Cleat Depth Tester measure the depth at which cleats penetrate the turf by dropping a known weight from a known height and measuring the depth in which specially designed cleats penetrate the surface.
- **Standards:** Optimal cleat depth values by the governing organizations for this tool have not been specified; however, surface consistency can be evaluated easily and quickly.
- **Impact:** Consistent cleat depth penetration enhances player stability and reduces the risk of injuries. Training facility surfaces can be compared to game fields to reveal differences in cleat depth penetration. These variations may ultimately improve player performance and safety, thus ensuring consistent cleat depth across the field's surface.



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Visit us online at www.EvergladesEquipmentGroup.com Achieving a consistent and safe playing surface across different fields and stadiums is crucial for player safety and fair play. While the specific measurement techniques and standards may vary between natural grass and synthetic turf, the goal remains the same: to provide a uniform, safe, and playable surface that minimizes injury risks and enhances player performance. By adhering to these testing methodologies and standards, sports field managers can ensure that their fields are safe and playable for all athletes.

### LITERATURE CITED:

NFL Club Game Operations Manual. https://operations.nfl.com.

"Standard Specification for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured in the Field. American Society for Testing and Material" - ASTM F1936-98: https://www.astm.org/f1936-98.html.

*"Standard Test Method for Impact Attenuation of Playing Surface Systems and Materials."* American Society for Testing and Material - ASTM 355 - https://www.astm.org/f0355-16e01.html.

"Standard Test Method for Measuring Impact-Attenuation Characteristics of Natural Playing Surface Systems Using a Lightweight Portable Apparatus." American Society for Testing and Material – ASTM F1702-96 - https://www.astm.org/f1702-10r18.html.

"Technology Integration in Turfgrass Management: The development of mandatory practices for the testing and maintenance of synthetic turf fields in the National Football League." International Turfgrass Society Research Journal. https://onlinelibrary.wiley.com/doi/full/10.1002/its2.94.

Deying Li, Minner, David D., Christians, Nick E. "Evaluation of Factors Contributing to Surface Stability of Sand-Based Turf." Agronomy Journal 101(5)– DOI:10.2134/agronj2009.0031.

Rogers, III, John N., Waddington, Donald V. "Effects of Management Practices on Impact Absorption and Shear Resistance in Natural Turf."

Martin, B.R. "Problems Associated with Testing the Impact Absorption Properties of Artificial Playing Surfaces. Natural and Artificial Playing Fields: Characteristics and Safety Features": ASTM STP 1073. In: R.C. Schmidt, E.F. Hoerner, E.M. Milner, and C.A. Morehouse, (eds), American Society for Testing and Materials, Philadelphia, 1990. pp. 77-84.

Popke, M. Shock Value. Athletic Business Magazine. September. 2002. pp. 54-66. Powell, J.W. and Schootman, M. 1993. "A multivariate risk analysis of natural grass and AstroTurf playing surfaces in the National Football League." Intl. Turfgrass Soc. Res. J. 7:201-221.

Powell, J. W. and Schootman, M. "A multivariate risk analysis of selected playing surfaces in the National Football League: 1980 to 1989." Am. J. Sports Med. 20: 1992. 686 - 694.

Valiant, G.A., "Traction Characteristics of Outsoles for Use on Artificial Playing Surfaces. Natural and Artificial Playing Fields: Characteristics and Safety Features." 1990.

ASTM STP 1073. In: R.C. Schmidt, E.F. Hoerner, E.M. Milner, and C.A. Morehouse, (eds), American Society for Testing and Materials, Philadelphia, pp. 61-68.



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John Mascaro is president of Turf-Tec International. Turf-Tec manufactures instruments that measure different conditions to promote turfgrass health, consistency in playing surfaces as well as player safety. John is a past president of the FTGA serving from 2015–2016 and is chairman of the Sports Field Management Association's Historical Preservation Committee. ™® Trademark of Corteva Agriscience and its affiliated companies. Crew<sup>®</sup> is not registered for sale, distribution or use in New York. Other state restrictions on the sale and use of Crew may apply. State restrictions on the sale and use of Dimension<sup>®</sup> apply. Consult the label before purchase or use for full details. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. Always read and follow label directions. @ 2024 Corteva. 2150 COR (05/24)



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# BNDANGBRED SPECIES ON YOUR LABEL

## Do You Know How to Comply, Part 1 - "Herbicide Strategy"

*Editor's Note:* The EPA is phasing in a host of new rules pertaining to herbicides. This is important information for those who apply herbicides or are responsible for overseeing their application, whether currently covered by these rules or not. It's best to look to the future and familiarize yourself with the changes, the language and the point system that qualifies you to apply these products. A BMP certification is the fast lane to acquiring the proper credentials. This article is written for all turfgrass-related sectors as well as all agriculture sectors because government rules and regulations tend to expand over time. We have put Tiny URLs in parentheses for the convenience of our print readers. Because space is limited, we have uploaded a *PDF file at https://rb.gy/jfht43 with large images.* 

By Dr. Brett Bultemeier, Director of the Pesticide Information Office and Extension Assistant Professor, University of Florida, Weed Science & Invasive Plants

any of you have probably heard rumblings about various strategies, Pesticide Use Limitations Areas (PULAs), endangered species and EPA. While it is true there have been a LOT of updates and many things swirling around, we have a much clearer picture of how all this will impact you. Certainly, there are changes to come in the future and none of us knows what the regulatory environment may be, BUT we can be ready for whatever may come.

The first step for all of this is the most important step related to using pesticides: Read and Follow the Label! You have heard it before "The Label is the Law," and that applies for all of this. There isn't some mysterious group out there; you don't have to do bizarre incantations. All of it will be found on the label. The label tells you what PPE to wear, how much product to use, and now, how to follow the Endangered Species Act. However, there are some differences in what you need to do beyond just "Read the Label."

The first major change you will see covers the herbicide strategy and focuses on drift and runoff mitigations. So far, we only have one example of what this might look like. In section 9 of the Liberty® Ultra label you will see the instructions for reducing drift and mandatory buffers (Figure 1).



#### 9.0 MANDATORY SPRAY DRIFT MANAGEMENT

9.1 MANDATORY SPRAY DRIFT MITIGATIONS

- 9.1.1 For Aerial and Ground Boom Applications:
  - . DO NOT apply when wind speeds exceed 15 miles per hour at the application site.
  - Select nozitie and pressure that deliver medium or coarser spray droplets as indicated in nozite man-ufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers
  - standards 572.1 and 641 (ASABE S572 and S641). During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
  - Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
     DO NOT apply during temperature inversions.
- 9.1.2 For Aerial Applications:
  - When applying to crops via aerial application equipment, the spray boom must be impunted on the
  - Went applying to clopts values all application sequences, the spray bottom must be included a aircraft to minimize drift caused by wing tip or rotor blade vertices.
     Wind speed and direction must be measured on location using a windsock, an anemometer systems to measure wind speed or velocity on an arcraft, or an arcraft smoke system.
  - When the wind speed is between 11 to 15 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor. diameter for helicopters.
  - Galmeier for neucopters.
     When the wind speed is between 11 to 15 miles per hour, applicators must use a minimum of 3/4 swath displacement upwind at the downwind edge of the field. Otherwise, applicators must use a minimum of 1/2 swath displacement upwind at the downwind edge of the field.

  - DO NOT release soray at a height greater than 10 ft above the crop canopy unless a greater applica-tion height is required for pilot safety.

#### 9.1.3 For Ground Boom Application:

- S For strout a boom Apprication: Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but DO NOT exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Wind speed and direction must be measured on location using a windlock or anemometer (including).
- systems to measure wind speed or velocity using application equipment).

#### 9.2 Mandatory Spray Drift Buffers

9.2.1 For aerial and ground applications, maintain a downwind buffer between the last spray row and the protection area as follo

| Application Method            | Droplet Size Distribution (DSD)  | Minimum Buffer Distance               |  |
|-------------------------------|--|---------------------------------------|--|
| Aerial                        | medium   | 50 ft                                 |  |
| Ground                        | medium to coarser  | 10.01                                 |  |
| ided that people are not pres | es with the following exceptions which can<br>ent within the application exclusion zone du<br>either directly or through drift (see 40 CFR | ring the application, and they will n |  |

Figure 1. Example of drift buffer language mandated by EPA Herbicide Strategy.

These instructions are very detailed and will take some reading to get through. Luckily, the EPA has released a helpful tool to assist you in the process. The spreadsheet (app) is available for download at https://www.epa.gov/system/files/documents/2025-04/ spray-drift-and-runoff-mitigation-calculatortools-v.2.0\_1.xlsm (https://tinyurl.com/a6m5fsb8). This app will help growers reduce the mandatory buffers, which in some cases can be rather large. For Liberty<sup>®</sup> Ultra the buffers are 50 feet and 10 feet for aerial versus ground application, but some proposed labels have gone upwards of 350 feet. So having an app to help you reduce that buffer will be important. As with all labels make sure to read through the entire label to make sure you understand your restrictions given your situation.

The second major change is a little more detailed and can be found in section 11 "Mandatory Runoff Mitigation" (Figure 2).

This section has clear DO NOT statements about applying when it is raining or if your soils are saturated or above field capacity. Directly below that paragraph is a big change; you are required to achieve 3 points to use this product. This is the first label to require you to get "points" before you can use a product. Furthermore, you must go to a website to figure out what counts for points. This is important because if a label references a website, that website now counts as part of the label. This means you must read the information on that website and follow all those rules. Websites are LABELs, and the label is the law. For now, this is the only example we have, but the proposed plan would mean products could have as few as 3 points required all the way up to 9 points. So, before you continue, let's see how we get those points.

These regulations are specifically in place for agriculture only—for now. So, as it stands, it is highly likely that most turf, golf course, and ornamental products will NOT have this language—for now. IF you are a sod producer, ornamental grower, or producing your own nursery on the golf course, it likely DOES apply. Given how much the regulatory environment has been changing, it is worth becoming familiar with this process so it doesn't surprise you, should it apply to turf in the future. Now back to the how of using this system.

Now for the good news: Achieving those points will be much easier than you think. Most of our Florida growers are going to have 3 points easily built into the way they perform their operations. Go to https://www.epa.gov/pesticides/mitigation-menu (https://tinyurl.com/4twprrkf). From there you can read about how to get points, what each of the terms



Figure 2. Runoff Mitigation language mandated by EPA herbicide strategy. Points can range from 3 to 9.

|   | Α  | B                  | C  |  |  |  |
|---|--|--------------------|--|--|--|--|
| 2   | General Field/Management Unit Information (Optional Information- Does not Impact Calculation)  |                    |  |  |  |  |
| I IN  | Name:  | Albert Gator       | CLEAR ALL USER INPUTS                                    |  |  |  |
| 1 0   | Date:  | 6/6/2025           | CLEAR ALL USER INPUTS                                    |  |  |  |
| F   | Field/Management Unit Identification:  | Lot 45 Sweet       | (  |  |  |  |
| 1   |  |                    | CREATE NEW WORKSHEET FOR<br>ANOTHER FIELD/MANGAMENT UNIT |  |  |  |
| 3<br>7  | Other Landscape Considerations   |                    |  |  |  |  |
|   | Category   | Select Value       | Number of points   |  |  |  |
| T M<br>ab<br>att<br>c<br>v<br>d<br>c<br>c<br>M<br>e<br>f<br>a<br>c<br>c<br>n<br>e<br>f<br>a<br>c<br>c<br>c<br>n<br>e<br>f<br>c<br>c<br>c<br>n<br>e<br>f<br>c<br>c<br>c<br>c<br>f<br>f<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c<br>c | Mitigation Relief II the Area at Least 1000 Feet Down-Gradient from the<br>treated Fam/Field Contains GNU Managed Areas.<br>Wanaged areas are defined as:<br>b. Agricultural fields, including untreated portions of the treated field,<br>b. Rodsb, paved or gravel surfaces, moved grassy areas adjucent to field, and<br>areas of bare ground from recent plowing or grading that are contiguous with<br>he treated area;<br>b. Buildings and their perimeters, allos, or other man-made structures with<br>wills and/or cord;<br>b. Areas maintained as a mitigation measure for runoff/arosion or spray drift<br>control, such as vegetative filter strips (VFS), field borders, hedgerows,<br>conservation Reserve Program lands (CRP), and other measures on RPA's<br>Mitigation Menu Website;<br>b. Managed wetare Program lands (CRP), and other measures on RPA's<br>Mitigation Menu Website;<br>b. Managed wetarion water resources that are not connected to<br>ndjacent water bodies, including on-farm irrigation canals and ditches, water<br>converyance, managed inrigation/runoff retention basins, and failwater<br>collection ponds. | yes                | No Additional Runoff/Erosion Mitigation Needer           |  |  |  |
| 1   | Systems that Capture Run   | notf and Discharge |  |  |  |  |
| 2 0   | Category   | Select Value       | Number of points   |  |  |  |
| 0   | systems that Capture Runoff and Discharge (water retention pond, sediment<br>control basin, irrigation tallwater return system, perimeter berm system<br>present at the time of application and throughout the cropping season),<br>ubustrace or tile drainage with a controlled outlet or without a controlled<br>Read Mar Runoff Field ID-1 +  | make selection     | ٥  |  |  |  |

Figure 3. Certain mitigations would exempt you from requiring points as listed on the label. Simply follow the remainder of the label and grow.

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| 1 2 3 4 5 6 7 8 9 0 11 2 3 4 5 6 7 8 9   | Category Systems that Capture Runoff and Discharge (water retention pond, sediment control bain, imgation tallwater reterm system, perimeter beim system (present at the time of application and throughout the cropping season), subsurface or tile drainage with a controlled outlet or without a controlled outlet) Pesticide Runoff V Select State Florida Conservation Program and Runoff/Erosin Category Mitgation Tracking Follow Recommendations from a Runoff/Erosin Specialist or Participate in a Qualifying Conservation Program Field Charact Category Field with Slope <3% (naturally low slope or flat fields; flat laser leveled fields) Predominantly Sandy Solls (fields with sand, Joany sand, or sandy loam soil whout a restructive layer that mapdeds the mough the soil = e.g., "hard pan"). This option can only be used if the product label does not prohibit application on sandy soils.  | Select Value<br>not applicable<br>unerability<br>Select County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Select Value<br>make selection<br>make selection<br>make selection<br>make selection | 0 Number of points  |
| 1 2 3 4 5 6 7 8 9 00 11 2 3 4 5 6 7 8 9 00   | Category Systems that Capture Runoff and Discharge (water retention pond, sediment control basin, imgation tailwater return system, perimeter beim system (present at the time of application and throughout the cropping season), usuburface or tile drainage with a controlled outlet or without a controlled outlet)  Pesticide Runoff M Select State  Conservation Program and Runoff/Erosio Category  Field Charact  Field Charact  Category  Field With Slope <1% (naturally low slope or flat fields; flat laser leveled fields)  Fredominantly Sandy Solls (fields with sand, loamy sand, or sandy loam soil without a restrictive layer that impedes the movement of water through the sol – e.g., "And pan"). This Splits, can only be used if the product label does not prohibit application on andy soils.  In Field Mitigation Category  Numerical Category  Field Mitigation  Numerical Single (no. till, perennial crop (e.g., orchards that are not tilled),  | Select Value<br>not applicable<br>unerability<br>Select County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Select Value<br>make selection<br>make selection<br>make selection                   | 0 Number of points  |
| 11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>11<br>12<br>23<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>11<br>12<br>23<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>11<br>12<br>23<br>14<br>15<br>16<br>16<br>17<br>17<br>18<br>19<br>19<br>10<br>11<br>11<br>12<br>11<br>11<br>11<br>12<br>11<br>11<br>11<br>11<br>11<br>11 | Category Systems that Capture Runoff and Discharge (water retention pond, sediment control bain, imgation tallwater reterm system, perimeter beim system (present at the time of application and throughout the cropping season), subsurface or tile drainage with a controlled outlet or without a controlled outlet) Pesticide Runoff V Select State Florida Conservation Program and Runoff/Erosin Category Mitgation Tracking Follow Recommendations from a Runoff/Erosin Specialist or Participate in a Qualifying Conservation Program Field Charact Category Field with Slope <3% (naturally low slope or flat fields; flat laser leveled fields) Predominantly Sandy Solls (fields with sand, Joany sand, or sandy loam soil whout a restructive layer that mapdeds the mough the soil = e.g., "hard pan"). This option can only be used if the product label does not prohibit application on sandy soils.  | Select Value<br>not applicable<br>unerability<br>Select County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Polk County<br>Select Value<br>make selection<br>make selection<br>make selection<br>make selection | 0 Number of points  |

**Figure 4.** Having a farm in Polk County would exempt you from any further mitigation. Simply read and follow the remainder of the label and grow.

| A   | B  | C                       |  |  |
|---|--|-------------------------|--|--|
| 1 Systems that Capture Run  |  |                         |  |  |
| 2 Category  | Select Value   | Number of points        |  |  |
| Systems that Capture Runoff and Dickarge (water retention pond, sediment<br>control basin, irrigation taliwater return system, perimeter berm system<br>(present at the time of application and throughout the corporate season),<br>subsurface or tile drainage with a controlled outlet or without a controlled<br>outlet). | not applicable   | O                       |  |  |
| 4   |  |                         |  |  |
| 5 Pesticide Runoff V  | ulnerability   |                         |  |  |
| 5 Select State  | Select County  | Number of points        |  |  |
| 7 Florida   | Escambia County  | Not Eligible for Credit |  |  |
| 8   |  |                         |  |  |
| 9 Conservation Program and Runoff/Erosic  | on Specialists/Mitig                                       | ation Tracking          |  |  |
| 0 Category  | Select Value   | Number of points        |  |  |
| 1 Mitigation Tracking   | yes  | 1                       |  |  |
| Follow Recommendations from a Runoff/Erosion Specialist or Participate in a<br>Qualifying Conservation Program<br>2   | Participating in a<br>qualified<br>conservation<br>program | 2                       |  |  |
| 3   |  |                         |  |  |
| 4 Field Characte  | Select Value   | Number of points        |  |  |
| 5 Category<br>Field with Slope <3% (naturally low slope or flat fields; flat laser leveled<br>6 fields)   | make selection   | Number of points        |  |  |
| Predominantly Sandy Soils (fields with sand, loamy sand, or sandy loam soil<br>without a restrictive layer that impedes the movement of water through the<br>soil - e.g., "hard pan"). This option can only be used if the product label does<br>not prohibit application on sandy soils.                                     | make selection   | o                       |  |  |
| 8   |  |                         |  |  |
| 9 In Field Mitigation   | In-Field Mitigation Measures                               |                         |  |  |
| 0 Category  | Select Value   | Number of points        |  |  |
| Conservation Tillage (no-till, perennial crop (e.g., orchards that are not tilled),<br>reduced tillage, strip tillage, ridge tillage, mulch tillage)  | make selection   | 0                       |  |  |

Figure 5. No relief points, but documenting mitigation and enrollment in BMP program gets you to 3 points.

means and have a better understanding of what the label (and this website, which now counts as label) are telling you to do. The best news of all is there is a spreadsheet that you can use to determine your points. You can then save or print that spreadsheet to prove you have complied. That spreadsheet can be found here: https://www.epa.gov/system/ files/documents/2025-04/spray-drift-and-runoffmitigation-calculator-tools-v.2.0\_1.xlsm (https://tinyurl.com/53vbj5tv).

Right up top, there are conditions that would make you exempt from doing any type of mitigations (Figure 3). Things such as your spray area exclusively surrounded by other agricultural fields or conservation reserve program lands, among other options, might exclude you. Again, refer back to the mitigation menu website to read more detailed definitions. If you are capturing runoff from your field, maybe with a berm or controlled tailwater systems, you might also be exempt or get multiple points right up front. If none of that works, go further down the list to find our points to get us to 3 for this product.

For example, if you are a sod producer in Polk County, Florida, you are given 3 points and nothing else is needed. You can now continue on to the label and use this product according to its label (Figure 4).

If you are in Escambia County, Florida, you will not receive any points, so you must start implementing mitigations. The easiest points to get here are tracking your mitigation. Keeping this spreadsheet and any records of any of the other steps you might take automatically gets you a point, so two left to go. Directly below you get points for either using a soil conservation specialist or being enrolled in a conservation program. This is where being enrolled in the Florida BMP program will get you 2 points. If you are keeping score, 1 + 2 = 3, you can go back to the label and use the product (Figure 5). Simply by doing the things many of you are doing, you would be in compliance. More information about the BMP program can be found here: https://www.fdacs.gov/Agriculture-Industry/Water/ Agricultural-Best-Management-Practices (https://tinyurl.com/mr3326f8).

If you are not BMP certified, you can still easily get to 3 points. Below that we have a statement that if our field is level with less than a 3% slope, we get 2 points. Florida is pretty flat, so many of our fields will fit this category. A flat field and keeping this spreadsheet is 2 +1 = 3; read the label and grow. Well, your field isn't flat, but is it sandy soil? That's 2 points, 2+1 = 3, read the label go farm (Figure 6).

### **RESOURCE LINKS:**

EPA Mitigation Menu: https://tinyurl.com/4twprrk

EPA Spray Drift and Runoff Mitigation Calculator: https://tinyurl.com/53vbj5tv)

FDACS Agricultural Best Management Practices: https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices (https://tinyurl.com/mr3326f8)

YouTube playlist of Dr. Bultemeier navigating the new label: https://tinyurl.com/4nn39k8u

|    | A  | В                  | C                       |
|----|--|--------------------|-------------------------|
| 1  | Systems that Capture Ru  | notf and Discharge |                         |
|    | Category   | Select Value       | Number of points        |
| 13 | Systems that Capture Rumoff and Discharge (water retention pond, sediment<br>control basin, irrigation taliwater return system, perimeter berm system<br>(present at the time of application and throughout the cropping season),<br>subsurface or tile drainage with a controlled outlet or without a controlled<br>subsurface or tile drainage with a controlled outlet or without a controlled<br>subsurface. | not applicable     | ٥                       |
| 4  |  |                    |                         |
| 15 | Pesticide Runoff V   |                    |                         |
| 16 | Select State   | Select County      | Number of points        |
| 17 | Florida  | Escambia County    | Not Eligible for Credit |
| 18 |  |                    |                         |
| 19 | Conservation Program and Runoff/Erosi  |                    |                         |
| 20 | Category   | Select Value       | Number of points        |
| 21 | Mitigation Tracking  | yes                | 1                       |
| 22 | Follow Recommendations from a Runoff/Erosion Specialist or Participate in a<br>Qualifying Conservation Program   | Not Applicable     | 0                       |
| 23 |  |                    |                         |
| 24 | Field Charact  |                    |                         |
| 25 | Category   | Select Value       | Number of points        |
| 26 | Field with Slope <3% (naturally low slope or flat fields; flat laser leveled<br>fields)  | yes                | 2                       |
| 27 | Predominantly Sandy Solis (fields with sand, loamy sand, or sandy loam soil<br>without a restrictive layer that impedes the movement of water through the<br>soil - e.g., "hard pan"). This option can only be used if the product label does<br>not prohibit application on sandy soils.  | yes                | 2                       |
| 28 |  |                    |                         |
| 29 | In-Field Mitigatio   | n Measures         |                         |
| 30 | Category   | Select Value       | Number of points        |
| 31 | Conservation Tillage (no-till, perennial crop (e.g., orchards that are not tilled),<br>reduced tillage, strip tillage, ridge tillage, mulch tillage)   | make selection     | 0                       |
| 32 | Reservoir Tillage (reservoir tillage, furrow diking, basin tillage)  | make selection     | 0                       |
|    | Contour Farming (contour farming, contour tillage, contour orchard and<br>Read Me Runoff Field ID-1 +  |                    | -                       |

Figure 6. The conditions on my farm can provide additional points.

|    | A  | В              | c                |
|----|--|----------------|------------------|
| 8  |  |                |                  |
| 19 | In-Field Mitigation  | Measures       |                  |
| 90 | Category   | Select Value   | Number of points |
| 31 | Conservation Tillage (no-till, perennial crop (e.g., orchards that are not tilled),<br>reduced tillage, strip tillage, ridge tillage, mulch tillage)   | Perennial Crop | - 3              |
|    | Reservoir Tillage (reservoir tillage, furrow diking, basin tillage)  | make selection | 0                |
| 33 | Contour Farming (contour farming, contour tillage, contour orchard and<br>perennial crops)   | make selection | 0                |
| 34 | Vegetative Strips – In-Field (inter-row vegetated strips, strip cropping or<br>intercropping, alley cropping, prairie strips, contour buffer strips, contour<br>strip cropping, vegetative barrier (occurring in a contoured field))   | make selection | ٥                |
| 35 | Terrace Farming (terrace farming, terracing, field terracing)  | make selection | .0               |
| 36 | Cover Crop or Continuous Ground Cover (cover crop, double cropping, relay<br>cropping)   | make selection | 0                |
| 27 | Infigation Water Management (use of soil moisture<br>sensors/evapotranspiration meters with center pivots & sprinklers; above<br>ground drip tape, drip emitters; micro-sprinklers; use of below tarp irrigation,<br>below ground drip tape; dry tarming, non-irrigated lands)           | make selection | ō                |
| 10 | Mulching with Natural and Artificial Materials (mulching with permeable<br>artificial materials (i.e., landscape fabrics, synthetic mulches), mulching with<br>natural materials)  | make selection | o                |
| 39 | Erosion Barriers (wattles, silt fences)  | make selection | 0                |
| 10 |  |                |                  |
| 11 | Field-adjacent Mitiga  | tion Measures  |                  |
| 12 | Category   | Select Value   | Number of points |
| 13 | Grassed Waterway   | make selection | 0                |
| 14 | Vegetative Filter Strips or Field Border adjacent to field   | make selection | 0                |
| 15 | Vegetated Ditch  | make selection | 0                |
| 46 | Riparlan Forest Buffer; Riparlan Herbaceous Cover  | make selection | 0                |
| 47 | Constructed and Natural Wetlands (constructed and natural wetlands,<br>wetland and riparian landscape/habitat improvement)   | make selection | 0                |
| 18 | Terrestrial Habitat Landscape Improvement (critical area planting, cross wind<br>trap strips, hedgerow planting, herbaceous wind barriers, windbreak-<br>shelterbelt establishment and renovation, tree shrub planting, forest stand<br>inprovement, upland wildlife habitat management) | make selection | 0                |

Figure 7. There are other practices that can add points. These are more of a change in farming and growing practices for some but might not be necessary.



If none of those work, there are changes such as reduced tillage, strip tillage, vegetative filter strips, constructed wetlands, many other active changes that will earn you points (Figure 7).

There is not any single way to get your points, you just have to get them, track them and demonstrate you followed these rules. For most of our Florida sod and nursery growers, simply farming in exactly they way you do will get you the points you need.

It is possible that the mandatory spray drift language might work its way into your labels; it is not likely that the runoff mitigation language will. Either way, knowing how it works will help prepare you should it make its way onto the label, OR it can help you make the argument it shouldn't because you are already doing much of this. In particular, the golf course industry has specific BMP certifications that likely address all the things in these plans. All that said, understanding how this all works helps prepare you should change occur, AND it helps you to be prepared for the label language in part two of this series that DOES impact your products as we are TODAY. Stay tuned for that article in the future.  $\checkmark$ 



Dr. Brett Bultemeier is a double Gator graduate, having received his M.S. and Ph.D. in Agronomy from UF. He is director of the Pesticide Information Office and Extension assistant professor, Weed Science & Invasive Plants, University of Florida and focuses on pesticide use and safety.



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This park, in the City of Lauderhill, sits on 12.6 acres and includes amenities such as a baseball field and benches, bleachers, a cricket field, fitness stations, a football field, a locker room, a netball court, a playground for kids ages 5-12, a soccer field, a walking/jogging paths and more. Photo credit: Brittany Mason, UF/IFAS Fort Lauderdale Research and Education Center.

# Are We Losing Our Wildlife to Benches and Ballparks?

### UF/IFAS RESEARCH SHOWS HOW SMART DESIGNS CAN AVOID IT

By Lourdes Mederos, UF/IFAS Fort Lauderdale Research and Education Center

cross the United States, more than 440 national parks and 7,400 urban parks offer a variety of recreational green spaces for people and pets.

Yet, the United States Forest Service warns that urbanization, including park development, is reducing natural habitats for plants and animals, infringing on wildlife survival.

How can urban parks continue to be vital havens for wildlife, even as they are designed to meet the growing needs of people? A first-of-its-kind study (https://tinyurl.com/4u8hyn57) by University of Florida scientists explores this critical balance and provides insights on ways to achieve harmony for smart urban park design.

Published in the *Journal of Urban Forestry and Urban Greening*, scientists at UF's Institute of Food and Agricultural Sciences (UF/ IFAS) studied the parks of one of the most populated counties in the Sunshine State—Broward—to answer that question.

Researchers analyzed over 600 urban green spaces throughout Broward County to explore how different physical attributes such as tree canopy, athletic facilities and playgrounds relate to human activity and biodiversity.

"We found that the size of the green space is a strong predictor of both human utility and biodiversity. Importantly, our findings highlight that green spaces need to be carefully designed to support biodiversity, but also a mix of green spaces with different goals is important," said Dr. Corey Callaghan, senior author of the study, and an assistant professor of global ecology at the UF/IFAS Fort Lauderdale Research and Education Center.

Urban green spaces are critical because they serve as assets within cities, supporting both ecological and social systems. These areas offer places for recreation, relaxation and connection to nature—benefits that are closely tied to mental and physical wellbeing, Dr. Callahan explained.

"Meanwhile, for biodiversity, green spaces provide essential habitats for birds, insects, mammals and plants, helping to sustain populations in otherwise fragmented urban landscapes," he said. "Ecologically, these spaces contribute to climate regulation by reducing the urban heat island effect, improving air and water quality, buffering against flooding and sequestering carbon."

These spaces also help to buffer the impacts of flooding and help sequester carbon. This dual role—supporting human well-being and ecological health—makes urban green spaces essential as cities grow.

One important takeaway from the study highlights how urban green spaces can be designed to serve different purposes, although these purposes can sometimes conflict with the needs of wildlife.

Features like sports fields and playgrounds are great for people but can reduce habitat quality for sensitive species, Dr. Callaghan explained.

"On the other hand, dense vegetation and limited lighting support biodiversity but may be underused by people. It's all about

### LANDSCAPE DESIGN | Are We Losing Our Wildlife to Benches and Ballparks?





This burrowing owl was photographed at Vista View Park. They can be found in various regions across the United States. They inhabit open prairie grasslands and can be found in many urban parks as well. Photo credit: Brittany Mason, UF/IFAS Fort Lauderdale Research and Education Center.



The Eastern cottontail rabbit is the most common type of rabbit you will find in Florida, and they live in various habitats across North America including Canada. They live in open areas feeding on wild vegetation and it is not uncommon to see them roaming around in your neighborhood parks. Photo credit: Brittany Mason, UF/ IFAS Fort Lauderdale Research and Education Center.

finding that middle ground," said Nataly Miguez, a lead author on the paper who conducted this research as an undergraduate student from the UF geography department.

Frequent mowing to maintain manicured lawns can harm native pollinators, and light installations for safety purposes can disrupt nocturnal species. Despite these trade-offs, there are ways to design green spaces that can benefit both people and wildlife. The researchers recommend incorporating native plant species, creating tree canopies and connecting separate green spaces to provide better habitats for wildlife, while also supporting human activities.

To further enhance the coexistence of human activities and wildlife in urban green spaces, leveraging modern technology and community involvement is essential.

One way to incorporate them is through data-driven insights, made possible by citizen science platforms like iNaturalist (www.inaturalist.org), which allow people to directly contribute to our understanding of biodiversity in urban spaces.

Citizen science platforms like iNaturalist played a pivotal role in gathering the vast amount of biodiversity data needed for this study. By providing members of the public with a way to contribute observations of plants and animals in urban parks, these platforms provide a unique and scalable tool to assess biodiversity across large areas.

Using this data, scientists and urban park planners can better align urban greenspace management with the needs of both human visitors and the wildlife that calls these spaces home, said Dr. Callaghan.

The study's findings show that thoughtful, data-informed park planning doesn't have to compromise biodiversity for recreationor vice versa. By identifying which park features support both

wildlife and human use, planners across the country can design urban greenspaces that are more resilient and ecologically functional. This research provides a model that can be applied far beyond South Florida, offering guidance for cities nationwide that are striving to protect nature while serving growing populations.

"As cities continue to expand, we need to ensure our greenspaces are working harder for both people and biodiversity," said Dr. Callaghan. "That means ongoing investment in research, monitoring and community science platforms like iNaturalist. The more we know, the better we can design spaces that are inclusive for both humans and biodiversity. Continued support is key to making that vision a reality."

### **ADDITIONAL RESOURCE:**

USDA Urban Wildlife Site - Information and tools to help with landscape design to support humans and wildlife. https://tinyurl.com/4d7srsw2



Lourdes Mederos is a public relations manager at UF/IFAS Communications. Her passion is to bring awareness of innovative work, research breakthroughs, and science-based solutions to all of Florida by sharing the work generated by dedicated UF/IFAS scientists, faculty, students and Extension agents in Florida's southeast region. Based out of UF/IFAS Fort Lauderdale Research and Education

Center, she serves five research facilities and 13 Extension and leads the efforts to make strides in the Spanish-speaking community so UF/IFAS can expand the reach of its research, programs, and services. You may reach Lourdes at rodriguezl@ufl.edu.

#### HOSTED BY: **Tuesday, July 29, 2025** FLORIDA **IFAS** Extension **UF/IFAS Ft. Lauderdale REC** UNIVERSITY of FLORIDA 3205 College Ave | Davie, FL 33314 Ft. Lauderdale Research & Education Center **REGISTRATION CLOSES FOR ATTENDEES, VENDORS & SPONSORS - Tuesday, July 22, 2025 AGENDA** ENGLISH SESSION **SPANISH SESSION** Check-In 8:00 a.m. - 8:15 a.m. 12:30 p.m. - 12:45 p.m. Welcome & Vendor Introduction 8:15 a.m. – 8:45 a.m. 12:45 p.m. – 1:00 p.m. **Disease Management / LVN Update** 9:00 a.m. - 10:00 a.m. 1:00 p.m. – 2:00 p.m. Weed Management 10:00 a.m. - 11:00 a.m. 2:00 p.m. - 3:00 p.m. New Grasses for South Florida 11:00 a.m. – Noon 3:00 p.m. - 4:00 p.m. 12:15 p.m. - 12:45 p.m. Lunch for English & Spanish Session **CONTACT INFORMATION** Name\_ Company Address City/State/ZIP Phone \_ Email **ATTENDEE REGISTRATION** ENGLISH PRICING SPANISH ATTENDEE (FIRST & LAST NAME) (per attendee) SESSION SESSION 1. In-Person Online In-Person Online FTGA Member: \$40 2. □ In-Person □ Online □ In-Person □ Online FTGA Member Group (10+): \$30 0

|   | 3.   |                                   | In-Person Online |                   | In-Person Online | Non-FTGA Member: | \$60    |  |
|---|--|-----------------------------------|------------------|-------------------|------------------|------------------|---------|--|
| 6 | 4.   |                                   |                  | son 🗌 Online      | In-Person Online |                  |         |  |
|   | 5.   |                                   |                  | son 🗌 Online      | In-Person Online | Grand Total: \$  |         |  |
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|   | Sponsorship:                                   | \$100                             |                  | FDACS             |                  |                  | 3 Total |  |
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| 0 | Representative #1 (included with registration) |                                   |                  | Lawn & Ornamental |                  |                  | 2       |  |
|   | Name:  |                                   |                  | Limited Co        | aintenance       | 2                |         |  |
|   | Representative Name #2:                        | (additional \$35)                 |                  | Limited Fe        | ertilizer        |                  | 2       |  |
|   | Name:  |                                   |                  | Limited La        |                  | 2                |         |  |
|   | Representative Name #3:                        | tative Name #3: (additional \$35) |                  | Ornament          | tal & Turf       |                  | 2       |  |
|   | Name:  |                                   |                  | GCSAA             |                  |                  | .30     |  |
| 1 | Grand Total: \$                                |                                   |                  | FNGLA             |                  |                  | 5       |  |
|   |  |                                   |                  |                   |                  |                  |         |  |

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|   | Martes, 29 de Julio de<br>UF/IFAS Ft. Lauderdale REC<br>3205 College Ave   Davie, FL 33314 | 2025                       | TU  | FLORIDA<br>IRFGRASS     | ANIZADO POR:<br>IFAS Extens<br>UNIVERSITY of FLORIDA<br>Verdale Research & Education |          |  |  |  |  |
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|   | AGENDA   |                            |   | N INGLES                | SESION EN ESPAÑOL  |          |  |  |  |  |
|   | Registración   | 8:00 a.m.                  |   |                         | 12:30 p.m. – 12:45 p.m.  |          |  |  |  |  |
|   | Bienvenida & Introducción de vendedores  | 8:15 a.m                   |   |                         | 12:45 p.m. – 1:00 p.m.   |          |  |  |  |  |
|   | Manejo de Enfermedades & Actualización sobre L   |                            |   |                         | 1:00 p.m. – 2:00 p.m.  |          |  |  |  |  |
| 5   | Manejo de Malezas  | 10:00 a.m.                 |   |                         | 2:00 p.m. – 3:00 p.m.  |          |  |  |  |  |
|   | Nuevos Céspedes para el Sur de Florida   | 11:00 a.m.                 | - N                                       |                         | 3:00 p.m. – 4:00 p.m.  |          |  |  |  |  |
| Í.  | Almuerzo para sesión de Inglés y Español 12:15 p.m. – 12:45 p.m.                           |                            |   |                         |  |          |  |  |  |  |
|   |  | INFORMACIÓN DE CONTACTO    |   |                         |  |          |  |  |  |  |
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|   | ASISTENTE (NOMBRE Y APELLIDO)  | INGLES                     |   | ESPAÑOL                 | (POR ASISTENTE)  |          |  |  |  |  |
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|   | 2.   | Presencial Er              | linea                                     | 🗌 Presencial 🔲 En linea | Miembro grupo FTGA (10   | +): \$30 |  |  |  |  |
|   | 3.   | Presencial Er              | linea                                     | Presencial En linea     | No Miembro FTGA:   | \$60     |  |  |  |  |
| 6   | 4.   | Presencial Er              | Presencial 🗌 En linea 🗌 Presencial 🗌 En l |                         |  |          |  |  |  |  |
|   | 5.   | Presencial Er              | linea                                     | Presencial En linea     | Total General: \$  |          |  |  |  |  |
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| 4   | Patrocinio: \$10   |                            |   | DACS                    |  | 3 Total  |  |  |  |  |
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|   | Representante #3: (adicional de \$3  | 5)                         |   |                         | ea   |          |  |  |  |  |
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# -25 YEARS OF INFLUENCE THE SOUTHERN GROUP

# **2025 POLITICAL UPDATE**

By Seth McKeel & David Shepp The Southern Group

reetings from The Southern Group. We hope that everyone with the Florida Turfgrass Association has had a great start to 2025.

This would typically be the post-session wrapup article to inform you of all the policies that the Florida Legislature agreed upon and passed, as well as how much funding the State of Florida is set to spend during the next fiscal year. However, as of this writing, the work of the Legislature is only half complete.

Despite controlling all of state government, with supermajorities in both the House and the Senate, Republican leaders have been at odds for the first half of 2025. These disagreements have led to the need for an extended session to complete the FY 25–26 Budget.

Governor DeSantis has repeatedly called for property tax cuts, including the possibility of complete elimination of local property taxes. However, House and Senate leaders have been reluctant to follow suit due to the timing of relief for consumers (referendum on the 2026 ballot) and the unknown impact on local government funding. House Speaker Danny Perez has created a Select Committee on Property Taxes that will meet this summer to review all impacts and potential options for consideration during the 2026 Session.

With property tax reform set aside for the time being, the leaders were unable to agree upon the type and scope of tax relief to include in their budget proposals. Speaker Perez has insisted upon a recurring sales tax cut from 6–5.25%, which results in \$5 billion in tax cuts. Senate President Ben Albritton has stated his concern that a recurring tax cut will lead to future deficits for the state and has instead called for non-recurring tax relief. The impasse on a starting point for negotiations led

to the extension of session beyond the May 2 end date. The extension only applies to the budget, the implementing bill and conforming bills associated with the budget. Florida's fiscal year ends June 30, so an agreement must be reached prior to then.

The 2025 legislative session began on Tuesday, March 4. The run-up to the 60-day session was far from normal, with multiple special sessions relating to immigration, a freak snowstorm in Florida's panhandle, and a rampant illness that knocked House and Senate bill drafting staff out for weeks at a time. The result was a bottleneck of more than 700 bills being filed at the last minute, eliminating the chance for bills to be heard in committee prior to the start of the session.

This year, the FTGA teamed up with the Florida Pest Management Association for our annual Day on the Hill in early April. Members of FTGA came to the Capitol to meet with Commissioner of Agriculture Wilton Simpson, Senate President Ben Albritton, and other Senators and Representatives to advocate on issues that impact the turfgrass industry. This year, those bills included:

**SB 700, Florida Farm Bill.** A comprehensive package for FDACS, the bill strengthens best management practices for agricultural producers and protects Florida's farmers from harassment and financial discrimination from lenders, among a host of other issues. SB 700 passed unanimously and was signed by Governor DeSantis on May 15.

HB 129, Products Liability Actions under Florida Pesticide Law. The bill prohibits lawsuits against pesticide applicators, dealers, distributors and manufacturers if a pesticide product is registered and approved by the EPA. HB 129 did not pass but will be brought back next year. **HB 683, Construction Regulations.** A broad construction bill that includes a provision allowing the installation of synthetic turf on residential properties up to one acre and prohibiting local governments from restricting their installation. The bill requires DEP to adopt standards for installation. HB 683 passed unanimously and is waiting to be sent to the governor.

While FTGA is, naturally, opposed to the introduction of synthetic turf in residential communities, we were able to speak with Senator Keith Truenow (who included the DEP oversight) and the House bill sponsor, Representative Griff Griffitts, to get a better understanding of his motivation for introducing the bill. His goal is not to have residents with 100% synthetic turf lawns, but rather to stop local governments from prohibiting residents from installing a synthetic putting green, or similar feature, on their property. DEP is charged with rulemaking authority for what the standards will look like. We can meet with DEP during that process to further define what is an appropriate use. In addition to discussing legislation, the FTGA delegation invited Commissioner Simpson and the legislators to the Florida Turfgrass Conference in Ocala in September. Our goal is to have legislators attend and become more familiar with the science and scope of work that FTGA puts into our natural turf and the environmental benefits of healthy turfgrass to the state as a whole.

While we continue to wait for a final resolution to the 2025 session, it is important to note that the 2026 session will begin in January. That means that committee meetings will start in early September. Advocacy efforts never end in this nearly year-round process. We strongly encourage FTGA members to invite their local legislators to tour your facilities in the brief time that they are in their district offices. The 2025 Conference will take place during the committee process, so legislators will be ready to start considering and introducing policy issues for the 2026 session.

Your team at The Southern Group appreciates the opportunity to serve as Florida Turfgrass Association's voice in Tallahassee. Please let us know if there is ever anything that we can do for you.



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# FTGA Engages Lawmakers During Florida Legislative Days

his past April, the Florida Turfgrass Association proudly participated in the Florida Pest Management Association's Legislative Days in Tallahassee, joining other allied green industry leaders to advocate on behalf of turfgrass professionals, researchers and businesses statewide. These Legislative Days provided a critical opportunity for FTGA to ensure the voice of our industry is heard in the development of policies that directly impact the interests of the Florida Turfgrass Industry along with Florida's environment, economy and communities.

FTGA representatives met with a number of key state legislators and regulators along with their staff to discuss crucial issues pertaining to the members and businesses of our association as well as others in the Florida turfgrass industry. There was considerable discussion regarding pending legislation affecting subjects from product liability, the Florida farm bill and construction regulations allowing the installation of synthetic turf on residential properties of less than one acre. Through these meetings, we were able to clearly express our position and remain committed to protecting our members' interests and elevating the value of turfgrass in Florida's future.

Representatives of the FTGA in attendance during legislative days included current board President Eric Dixon, Vice President Mark Kann, Past President Pat Marsh and Board Member Allen Woerner. Together we promoted and emphasized to our representatives that certified turfgrass professionals follow best management practices developed in coordination with the University of Florida's IFAS Extension, the Florida Department of Environmental Protection and the Florida Department of Agriculture and Consumer Services. We also took time to educate legislators on the environmental benefits of healthy turfgrass systems. These benefits are often overlooked but play a vital role in Florida's environmental resiliency. After all, natural turfgrass is one of nature's first water filters.

The FTGA is grateful for the productive dialogue with lawmakers and their willingness to listen to the concerns and insights of our industry. We look forward to ongoing collaboration with state officials, universities and partner organizations to promote sustainable practices and policies that support Florida's green spaces and the people who care for them. We would also like to thank the Florida Pest Management Association for letting us tag along during legislative days and also David Shepp with The Southern Group for organizing and planning a very eventful capital visit.  $\checkmark$ 

#### RESOURCE

#### Final Construction Bill: HB 683

https://www.flsenate.gov/Session/Bill/2025/683/BillText/er/PDF Search for "125.572 Regulation of synthetic turf" to find the appropriate section.



L-R: FTGA Board Member Allen Woerner, FTGA Vice President Mark Kann, FTGA President Eric Dixon and FTGA Past President Pat Marsh.



Representatives of the industry delegation on the Senate floor.



L–R: FTGA Past President Pat Marsh, FTGA Board Member Allen Woerner, Senator Keith Truenow, FTGA Vice President Mark Kann and FTGA President Eric Dixon.



Meeting with Commissioner Wilson Simpson.





The Florida delegation with Sen. Rick Scott.



Dave Robinson meeting with the Fish & Wildlife Service.

# National Day of Golf Annual Event in Washington, D.C.

Contributors to this article: Dave Robinson, CGCS; Bryce Gibson, CGCS; and Darren J. Davis, CGCS

very year, the American Golf Industry Coalition (AGIC), a group of the game's leading associations and industry partners, including GCSAA, hosts the annual National Golf Day (NGD) event in Washington, D.C. According to GCSAA, around 250 delegates from around the country attended. FTGA was once again well represented, and we thank them for their service to their association and the golf industry. All the contributors to this article were repeat attendees.

Industry leaders met with Members of Congress, the Executive Branch agencies to discuss golf's economic role in the United States.

### Golf's Huge Economic & Qualify of Life Impact

According to AGIC's latest Economic Impact Study:

- U.S. golf industry's total economic impact, including indirect and induced effects is \$226.5 billion.
- In 2024 the industry generated \$101.7 billion in direct economic activity and raised nearly \$5 billion for charitable causes. Golf supports approximately 2 million jobs in the United States, with a 57% increase in participation over the past decade.

### Day 1

The day started with a plenary session that included a keynote discussion with Jake Sherman, co-founder of Punchbowl News, and Jay Perron, a partner at Prism Group, a lobbying firm that represents AGIC and GCSAA on legislative issues.

A Capitol Hill reception with members of Congress was held that night where Sen. Thom Tillis (NC) and Rep. Jimmy Panetta (CA-19) informed the group about their involvement in golf and how and why they support positive legislation for the industry. They also heard from a variety of other speakers.

### Day 2: Meetings & Awards

The second day was full of meetings; each state's delegation met with their congressional members, agency heads and others. The Florida contingent split into five groups, based on their location, to meet with their House reps. The general theme of the discussions centered around golf's 15,000 diverse businesses, 2 million jobs, tax revenue creation and tourism value, which is especially important to Florida.

- Dave and Bryce were in the same group, which also included Ralph Dain, GCSAA; Jack Harrell III and Clay Bleazeale, Harrell's. Their group met with three congressional members, Rep. Cory Mills, Rep. Daniel Webster, Rep. Laurel Lee, as well as Sen. Ashley Moody. Other members of the Florida delegation met with their representatives. The entire Florida delegation came together to meet with Sen. Rick Scott and one of Sen. Ashley Moody's staffers.
- Specific topics covered in the meetings:
  - The Parity for Athletic Recreation Act (PARs Act), which would amend the Internal Revenue Code of 1986 to remove private or commercial golf courses and country clubs from the list of uses for which certain proceeds cannot be used.
  - The Personal Health Investment Today Act (PHIT Act).
  - The Farm Bill's turf research section.
  - Golf's overall economic impact in Florida.
- As a member of GCSAA's Government Affairs Committee, Dave also met with the Fish & Wildlife Service and the EPA.

That evening a reception was held to award Grassroots ambassadors from across the country with the Grassroots Leadership Award. Bryce and fellow Florida superintendent Clinton Turgeon, CGCS, both received the award. Congratulations to both on their jobs well done.

### Day 3: National Service Project

The National Service Project is an activity where golf course superintendents and other GCSAA members give back, something to which they are no stranger. This year, around 150 delegates participated in sprucing up Old Soldiers Golf Course, East Potomac Golf Links and part of the Armed Forces Retirement Home.

Dave and Ralph worked at the Old Soldier Golf Course, which is 100% maintained by volunteers. He top dressed the greens while others mowed, seeded greens and cleaned up landscape, among other tasks.

### In Conclusion

National Golf Day 2025 was a blend of community service, networking, legislative advocacy, personal stories of leadership and dedication to the golf industry, and awards to outstanding grassroots advocates for the golf industry. It was also marked by bipartisan efforts, highlighting golf's economic impact and importance. Just as important is the fact that this group, the face of golf course management, left Washington, D.C., a better place than when they arrived.  $\checkmark$ 



Florida delegation with Rep. Brian Mast.



This was my 11th trip to our nation's capital to attend the NGD event. It was, by far, the most productive trip as well as my favorite time! We had a highly engaged, diverse group of attendees from Florida who provided a wide range of perspectives to the elected officials and their staffs during our meetings. The warm welcome "golf" received, and the positive reaction to our message was refreshing. We have come a long way from the early NGD events! – Darren J. Davis, CGCS



Dave Robinson and Ralph Dain prepare for the National Service Project.



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# WORKING TOGETHER to ENGAGE STUDENTS

immy Evans and Keith Harrison hosted an event recently at the P.P.M. Sports Turf shop for the agriculture class at Jefferson County High School. They heard from many speakers about career opportunities in turf and received answers to their questions. Jimmy and Keith were joined by many friends and colleagues in the industry.

Erin Wilder shared some thoughts on the event: "Bringing up the next generation and teaching agriculture in the classroom is something I truly care about. It was wonderful to see these students have the chance to learn from some of the best local leaders in our industry, and I was so happy to be a part of it. I was honored to speak with the high school students from my hometown about the opportunities that have come my way in the turfgrass industry, even as a small-town girl. Thank you, Jimmy Evans, for your vision, your leadership and for including me on this journey."

Jimmy and Keith would like to thank the following people for participating in the shop event and sharing their knowledge with the students:

- Florida Gateway College—Maddison Morton, CTE coordinator for the agricultural/turf program at school
- Jefferson County High School—Stefanie Prevatt, agriculture teacher is working to incorporate turf studies in her classroom to help students see the post-graduation opportunities in turfgrass management.
- Killearn Club—Winston James
- Miller Tree Service—Clay Culpepper and Brian Wilson
- SiteOne Landscape Supply—Pat Marsh and Scott Tousignant

### "The earlier we can engage those who might be interested, the better."

- Sod Solutions—Erin Wilder
- Woerner Sod Farms—Allen Woerner

Jimmy would like to recognize the following companies for the generous donation of resources:

- SiteOne Landscape Supply donated a fertilizer spreader and backpack sprayer
- Sod Solutions is donating turfgrass varieties
- Woerner Sod Farms is donating turfgrass varieties

These resources will allow the students to install and maintain turf plots on their campus to enrich their study. It provides simulated, real-world experience working under supervision. If they can gain hands-on experience and early exposure to the work environment of turf management, it will enable them to more accurately evaluate if this is the career path they wish to pursue.

Jimmy says, "This is only the beginning. I am currently working on a much bigger project with Liberty County Schools, which has created a program at the schools for students to learn about athletic field and golf course turf management. I will have more information on this moving forward."

Jimmy also says that there is nothing stopping you from organizing similar events in your local communities. Look into participating in career days at local high schools and junior colleges as well as career fairs to include universities. The earlier we can engage those who might be interested, the better. The labor shortage is a challenge for all of us, and the good news is we can be a big part of the solution.





# MEMBER PROFILE: David Dore-Smith

o say that David Dore-Smith is an extremely well-rounded turf professional hardly does justice to his career. He has taken it upon himself to delve into every nook and cranny of the industry, obliterating comfort zone after comfort zone along the way. If you're interested in expanding your horizons, follow along with David's masterclass in his own words below to see how it's done and pick up some insider tactics to use as you traverse your own career path.

### **HERE'S DAVID**

I'm originally from Melbourne, Australia, and have always had a passion for landscaping, which stems from my grandparents on my mother's side of the family and both my parents. My grandfather was an avid gardener, was published in many magazines, and even hybridized plants, including an iris he named Nanette Elizabeth after my mother. As a teenager, I would perform landscaping work at friends' houses by cleaning up overgrowth, building new beds and creating reality out of a vision. I remember I used to mow the lawn for a friend for free, and they got paid for it—I loved it so much.

After graduating from high school, I attended a technical college for horticulture. Through this program, I started at a local golf course, maintaining their clubhouse grounds. After only one day, I was offered a full-time job as an apprentice on the golf maintenance crew.

After four years of working on the golf course, I was selected as an intern through Ohio State University, facilitated by Mike O'Keefe, to work at Fiddlesticks Golf and Country Club in Fort Myers, Florida. After one year, I transferred to Tiburon Golf Course in Naples, Florida, to start constructing the new Greg Norman-designed project. It was a fantastic experience.

In 2000, I was offered the superintendent position at Pelican Sound Golf and River Club in Estero, Florida. In 2003, I was offered the position of director of golf course and grounds at Copperleaf Golf Club, also in Estero. While at Copperleaf, I was also president of the Everglades Golf Course Superintendents Association, and later president of the Florida Golf Course Superintendents Association—both exceptionally rewarding positions. I was at Copperleaf for 21 years, with the last three years as their general manager. That was another wonderful experience as I helped oversee many projects, including a complete renovation of the golf course in 2015 with architect Kipp Schulties and a successful \$20 million renovation of their clubhouse and outdoor dining facility in 2024. I continue to maintain my Golf BMP certification, Restricted Use Pesticide license, Arborist certification and am a Florida Certified Horticulture Professional (FCHP). I work with the City of Bonita Springs on their Tree Advisory Board and participate in the Village of Estero Leadership program.

At the beginning of 2025, I was offered the position of vice president of operations for BLUE Landscape and Outdoor Solutions, a very successful, high-end residential landscape company in Naples, Florida. Although I was very proud of all I had accomplished at Copperleaf, being in the landscape business was always my passion. I was impressed by the incredible work that BLUE Landscape and Outdoor Solutions does, so I accepted the position.

My wife of 20 years, Christine, my two children, Brooke and Brady, and my parents have always encouraged me along this incredible journey.

As vice president of operations, I am involved in almost every aspect of the business. I work closely with the four partners: Tim Felts, John McFadden, Lawrence Perillo and Frank Kitchener. In November 2023, BLUE Landscape & Outdoor Solutions joined the Mariani Premier Group, a growing partnership of over 25 of the most prestigious landscape companies across the United States. Since joining the Mariani Premier Group, BLUE has enjoyed improved buying power, back-office support and employee benefits, ultimately improving the services offered to BLUE's clients.

My primary focus is to lead and enhance BLUE's operations



by reviewing efficiencies and driving extensive and sustainable growth. This includes organizational improvements, client and employee satisfaction, inventory management, manager training, communications, financial oversight, equipment management and safety.

BLUE Landscape and Outdoor Solutions has been an extremely successful company in the Naples area for over 13 years. The company has grown organically over that time with the foundation of providing high-quality work, customer satisfaction, communication and an excellent workplace for its employees.

It has also been exciting to see a number of impressive new technologies come into use, such as mapping clients' properties to ensure accurate applications of products, calculating efficient driver routes, drone technology and artificial intelligence to assist in many aspects of the business. At BLUE, we use the Aspire software program to calculate proposals, create work orders, develop schedules, maintain inventory and provide detailed analytics of our performance. The technology in use today is impressive, and I have embraced it. I am a big believer in communication. As much as we roll our eyes at having another meeting, it is the best way to share ideas, compliment team members, listen to challenges and ensure everything has been thought

This year, I have also overseen the revamping of our website www.bluelandscape.com, which now has updated information, easier navigation and improved images showcasing the outstanding work BLUE produces.

through logically.

Our region of Florida has experienced numerous storm events over the past few years. As much as it has been devastating for many people affected by the winds and storm surge, it has also showcased untapped talent in our communication, teamwork and provided more value to our clients and employees. During these times, you can provide another level of service, care and leadership that will resonate for many years.

### ADDRESSING INDUSTRY CHALLENGES

Identifying, recruiting and retaining employees are recurring themes in many industries, and the turf and landscape sector is not immune. BLUE has over 300 full-time employees, and I am incredibly proud of the long tenure that many of our team members have had with the company. This has been achieved by investing in the staff with continuing education, providing new technology, purchasing quality equipment and tools, and promoting from within, which helps create many career paths and opportunities for our employees within the company. It is a great work environment at BLUE.

All landscape and turf professionals must continue promoting this great profession to the younger generation and informing them of the many benefits of working in the green industry. We need to get in front of high school and college students and let them know there are great alternatives to being trapped in an office all day.

# PARTICIPATION IS VITAL TO THE INDUSTRY'S FUTURE

I have been an FTGA member for many years. Admittedly, there were some gaps along the way due to my workload; however, I have seen how much the FTGA has grown due to the leadership of Heather Russo and the past and current boards and presidents. Joining the FTGA has been highly beneficial for networking, reaching out to other industry professionals for advice, research, continuing education and government advocacy. I would encourage everyone to get involved in their professional organizations in some capacity. Perhaps being on the board and working your way to become president is not for everyone; however, there are various committees you can contribute to. Ultimately, we should all find ways to give back and improve this profession for future generations.



Advocacy has always been at the forefront of our profession. All too often, you read how the turf and landscape industry is to blame for various environmental issues. However, this is simply not the case. We are trained professionals who deeply understand and care for the environment. I was privileged to visit Tallahassee for "Florida Golf Day" and present our economic and environmental impact to prominent legislators. It has proven invaluable over the past five years, when our governor deemed our industry "essential" during the pandemic, ultimately allowing us to continue our vital work throughout the state. Several years ago, I was a director for the Environmental Research and Education Foundation (EREF). EREF works to protect Florida's environment and natural resources by funding environmental research and sharing sound scientific findings on the environmental and human-health benefits of properly maintained green spaces and urban landscapes. Being involved with such passionate leaders within our industry was incredibly rewarding.

### YOU CAN TAKE THE MAN OUT OF **AUSTRALIA, BUT...**

As I mentioned, I'm originally from Australia, having moved here 28 years ago with a backpack and a travel bag. I slept on a mattress on the floor of a house in Lehigh Acres for three months before moving into an apartment with an intern from England and one from Ireland. Having an Australian accent has certainly helped with networking opportunities. However, being asked to remove snakes from members' lanais simply because I am Australian and must be related to the Crocodile Hunter, Steve Irwin, is a stretch.

I am fortunate to have had some fantastic experiences and met some incredible people during my time in this industry. I have met people like Smokey Robinson, Greg Norman, President George H.W. Bush and Arnold Palmer. I have visited Augusta National, Bandon Dunes, several courses in Ireland and incredible courses here in Florida. I have also worked on the Senior Tour and the World Golf Championship. At BLUE, our client's properties, which we are honored to service, are breathtaking. It is a testament to BLUE's reputation that these discerning individuals trust us to maintain and enhance their properties.

Outside of work, I enjoy spending time with family and friends, staying active, golfing, hiking, boating and working around the house.

The landscape profession, and everything it encompasses from turf, plants and trees to irrigation, pest control, fertility, machinery, hardscape, human resources, travel, networking and simply being outdoors, is a wonderful profession to pursue. If some kid from Australia can come to this fantastic country, work hard, learn, network and provide value, there is no reason why anyone cannot be successful in this industry. If I can ever serve you, please do not hesitate to contact me directly at ddoresmith@experience-blue.net. ↓





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FEBRUARY 26 TALLAHASSEE Capital City Golf Club 1601 Golf Ter Dr, Tallahassee, FL 32301

### MARCH

MARCH 4 NEW PORT RICHEY Pasco-Hernando State College 10230 Ridge Rd, R-151 New Port Richey, FL 34654

MARCH 5 **PLANT CITY** Hillsborough Community College | Trinkle Center 1206 N Park Rd, Plant City, FL 33563

MARCH 10 LAKE WORTH Polish American Club 4725 Lake Worth Rd, Lake Worth, FL 33463

MARCH 11 PORT ST. LUCIE Port St. Lucie Community Center 2195 SE Airoso Blvd, Port St. Lucie, FL 34984

MARCH 12 FT. MYERS Florida Southwestern State College 8099 College Pkwy, Room U-102 Ft. Myers, FL 33919

MARCH 24 ORLANDO Orange County Extension Office 6021 S Conway Rd, Orlando, FL 32812

MARCH 25 **ST. AUGUSTINE** St. John County Ag Center 3125 Agricultural Center Dr St. Augustine, FL 32092

MARCH 26 OCALA Marion County Extension 2232 NE Jacksonville Rd, Ocala, FL 34470



# MARKETPLACE



UNSUNG HERO SPOTLIGHT

*Editor's Note:* This year, "Unsung Heroes" focuses on the outstanding group of graduate assistants working with University of Florida faculty in turfgrass-related fields. They work tirelessly with a passion for their field, and they are on a trajectory to be young leaders in the industry. You will also see their bylines in cover stories and other articles written with their professors.

### **Spotlight on DR. P. AGUSTIN BOERI**



Pablo Agustin Boeri, now Dr. P. Agustin Boeri, one of the outstanding FTRF scholarship recipients, is an Assistant Professor and Turfgrass Extension Specialist at Texas A&M AgriLife (https://tinyurl.com/47cjdzn6). His journey in the turfgrass industry began in Buenos Aires, Argentina, where he supported golf courses, sports fields and residential lawns with a wide range of turfgrass management challenges.

In 2017, Dr. Boeri began his M.S. program at the University of Florida under the mentorship of Dr. Bryan Unruh. His master's research focused on the evaluation of bahiagrass genotypes with improved turf traits, developed by Dr. Kevin Kenworthy. Following his M.S., Dr. Boeri remained at the University of Florida to pursue a Ph.D., continuing to support the state's turfgrass industry through both research and Extension efforts.

His doctoral research focused on evaluating mixed-species lawns designed to reduce water and fertilizer inputs while maintaining aesthetic appeal and functional performance comparable to traditional lawn grasses. His work spurred industry interest in alternative landscape systems, exemplified by his 2021 article in *PestPro Magazine* (http://tinyurl.com/yc26w2pf), which helped catalyze the formation of an Ornamental Peanut subgroup within the Perennial Peanut Producers Association, and led to several material transfer agreements between UF and Florida nurseries and sod producers. This work was recently published as a scientific article.

Throughout his graduate studies, Dr. Boeri actively contributed to organizations such as the Florida Turfgrass Association, the Florida Golf

Course Superintendents Association, and the Florida Nursery, Growers and Landscape Association (https://tinyurl.com/vebtj7na), earning recognition through scholarships and grants for his impactful work.

Dr. Kevin Kenworthy says, "Dr. Boeri was an outstanding graduate student and during his time at UF, working with



Dr. Boeri two years after teaching about turfgrass management at Texas A&M, Fort Worth, Texas (2024).

Dr. Unruh, he was a leader among our group of turfgrass related graduate students. His research bridged the gap between traditional turfgrass lawns and new approaches to lawns through his investigation of a mixed-species approach. Now as a colleague, Dr. Boeri is emerging as a national leader for turfgrass and landscape management in water-scarce environments coupled with large urban communities.

Ideas, People, Events, Products, Promotions, Sound Bytes, Etc.

"Dr. Boeri was a such a great student that Dr. Unruh gave him the reigns of his research program. I'm pretty sure Dr. Unruh cries big ol' crocodile tears each morning when he enters WFREC and realizes that Agustin is no longer there."

Dr. Bryan Unruh concurred, "Fact. The first two months after Dr. Boeri's departure were tough! I walked around like a lost pup. Now at Texas A&M, Dr. Boeri continues his mission to improve turfgrass systems by addressing long-standing challenges such as water scarcity and nutrient pollution, while also exploring emerging issues like soil health, pollinator support, and plant biodiversity. His work remains deeply informed by his experience and training in Florida, and he maintains strong ties to the state's turfgrass community.

"Dr. Unruh and Dr. Kenworthy have been outstanding mentors and friends—and continue to be," says Dr. Boeri. "They are not only exceptional professionals but also remarkable individuals. I'm genuinely excited to now work alongside them as a colleague and to collaborate on future multistate and national projects."

We are grateful for Dr. Boeri's continued support, and we look forward to his continued leadership in the turfgrass industry.



Turf Demo Cobalt, May 2024.



Dr. Boeri evaluating water infiltration on his Ph.D. project at the WFREC, Jay, Florida (2022).

### **FTGA NEWS**



### **FTGA Summer Events**

The FTGA is headed for a busy summer. The firstever Summer Turf Seminar, conducted in English and Spanish, will take place July 29 at the UF/IFAS Ft. Lauderdale REC. Read about it on pages 22-23.

Space is limited, so register as soon as possible. For information and registration, visit https://www.ftga.org/page/SummerSeminar.

Past President Pat Marsh says there will be an FTGA Community Project this summer. We will keep you apprised via our social media sites, newsletters and news blasts.

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Lee Howard

Jefferson Country Club

The Club at Boca Pointe

Seminole Legacy Golf Club

Florida State University

Michael Knewitz

Mizraim Mata

Matt Morelli

Trugreen

Blake Voth

Jason Worley

The Greenerv Inc.

### Membership Drive

### Welcome to the Newest FTGA Members:

Tim Davis Tim Davis

**Gabriella Ascione** Citv of Wildwood

**Brian Danielle** Greenwav Lawn & Pest Control Services, Inc.

Mark Doran Mark Doran

Brandon Gobel Oregon Tool

Chad Hanson MD Plant Health

Steven Hatton Calcium Silicate Corp. Inc.

Correction

In the Winter issue of *Florida Turf Digest*, print edition only, we need to make a correction. On page 27 of Susan Haddock's article, "Winter Maintenance for Warm-Season Turfgrass Sports Fields," the last sentence of the first paragraph under the heading "Fall Maintenance Activities" should read, "Pre-emergent applications should be made in October-November when average soil temperatures are 70°F." We apologize to Susan for this error.

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### UNIVERSITY OF FLORIDA UPDATE



### Dr. Bonnie Wells is ON THE MOVE

Congratulations to Dr. Bonnie Wells who is now the County Extension Director for Osceola County. If you are following her X feed at https://x.com/OsceolaPlantDr, you know she's still making the rounds, sharing her knowledge and interacting with people all over the state.

### South Florida Turfgrass Field Day & Expo Recap

### From Dr. Marco Schiavon

The 36th South Florida Turfgrass Field Day & Expo was hosted by the UF/IFAS Fort Lauderdale Research and Education Center on March 27th. The event, which was co-sponsored with the South Florida Golf Course Superintendents Association of America, included sessions and tours in English and Spanish. This year's field day offered a variety of targeted sessions for professionals across the turf industry.



**UF Faculty & Extension Highlights** 

Golf course superintendents and sports turf managers learned about best practices for turfgrass management, including the latest research on pest and disease control. Landscape professionals and lawn care operators benefited from sessions on sustainable landscaping and irrigation techniques as these sessions offered guidance on improving efficiency and environmental impact. Researchers and Extension specialists showcased new findings on turfgrass science, providing attendees with data-driven strategies for maintaining healthy, resilient landscapes and treatment options that are both economical and environmentally friendly.

Follow Dr. Schiavon on his X feed at https://x.com/FLRECturf.

### Pesticide Certification and Testing Move to FDACS

The Florida Department of Agriculture and Consumer Services (FDACS) will be taking over responsibilities from UF/IFAS for all in-person and remote testing effective October 1, 2025. They will be working with their selected contractor, Everblue. We want to share this information so you can prepare in advance for this change.

Please read and/or download the document from FDACS for more information at https://tinyurl.com/mrxwkfz8.

### **UF Faculty & Extension Highlights**

### From Dr. Pawel Petelewicz

Dr. Pawel Petelewicz seems to be everywhere at once. When he's not conducting field trials, teaching, presenting, writing copious amounts of research papers, he's mentoring his graduate student Mikerly Joseph and encouraging him to reach new heights. Follow his X feed at https://x.com/petelewicz.

Top right: Mikerly Joseph receives the 2025 Gerald O. Mott Award for Meritorious Graduate Students in Crop Science.

Right: Mikerly Joseph's presentation on the UF/IFAS Weed Science Lab at this at the Weed Science Society of America Conference.

### Spanish Version of Turfgrass Herbicides: Mode of Action and Resistance Management Now Available

### From Dr. Marco Schiavon

Dr. Marco Schiavon and graduate student M. Cecilia Sánchez-Quintanilla (advisor: Dr. Schiavon) have translated the English version by Drs. Pawel Petelewicz, J. Bryan Unruh and Ramon G. Leon into Spanish. You can view "Herbicidas para céspedes: modo de acción y manejo de Resistencia" and download the PDF at https://edis.ifas.ufl.edu/publication/AG485.



Congratulations to Dr. Schiavon on his 2024 Editor's Citation of Excellence!

Finally, FTGA extends a big thank-you to Dr. Schiavon for his help with the Summer Seminars. For more information, see pages 22-23.

## INDUSTRY NEWS

### Turf-Tech Announces New Tool: Hexagon Turf Plugger

Inspired by the need to replace divots on golf course tees, fairways and approaches, **Turf-Tec International** has developed the Turf-Tec 4 x 8-inch Hexagon Turf Plugger. This tool makes divot repair quick and easy by completely plugging the worst divots on your course. This innovative tool makes it easy to cleanly remove and replace the turf and soil. For larger areas of damage, the six-sided plugs can nest together for seamless turf repair. The hexagon shape



causes the plugs in the repaired area to interlock and remain in place with the honeycomb shaped pattern even on sloped areas.

For more information, visit https://tinyurl.com/ypwfjstf.

### TOOLS & TECH

Technology, when used properly can skyrocket your productivity and make your life easier. The tool below is full of information here to support turf management, and is free for the asking.

### GreenCast Syngenta Portal



**Syngenta** has announced the release of GreenCast Connect for golf and turf managers. The app enables turf professionals to grab real-time data and insight on the go, and it's available for Android and iOS devices. It is a three-tiered app, with a free, basic version as well as

advanced and pro subscription options.

To learn more about GreenCast Connect, visit: https://tinyurl.com/bbuy5c49. Download the Android app: https://tinyurl.com/y25cxy43. Download the iOS app: https://tinyurl.com/4bspkm6d.

As an aside, think about what excites high-school and college students? You might want to anticipate this question when talking with them or with potential entry-level employees and new hires. The question you may hear is, "Is there an app for that?" With an app, they will learn, they will do, and they will retain because gamification is the name of the game in today's world. By understanding the technologies that exist to assist turfgrass professionals, you can more easily speak the language of fresh out-of-school prospective employees, and this may be one more tool in our weapon against the employment challenge.

Florida Friendly Landscape<sup>™</sup> Professional Webinar Series



Each second Tuesday of the month, the UF/IFAS Florida-Friendly Landscape Program hosts a webinar series for landscaping professionals. Registration is required, but there is no fee to join the webinar. The rest of the schedule for this year is listed below.

- June 10: High Performance Landscapes and the Metrics and Standards that can be used to Create Sustainable Landscapes with Dr. Gail Hansen
- July 8: Microclimates: Mitigating the Heat in Florida's Cities with Dr. Yi Luo
- August 12: Wildflowers and Weeds: Exploring Nativeness with Marc Frank
- September 9: What's New in Tree Selection and Care with Dr. Andrew Koeser
- **October 14:** Public Perception of Sustainable Landscaping Practices with Dr. Jaiyang Li
- **November 4:** Creating Habitat Connectivity in the Urban Landscape with Isabella Guttuso Browne
- December 9: The UF Coleus Breeding Program with Dr. Dave Clarke

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