

FLORIDA

TURF

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ASSOCIATION

DIGEST

VOL. 40 / NO. 1

Winter 2022

Olde is New Again

ALSO IN THIS ISSUE:

Creating Wildflower Habitats in Golf Course Out-Of-Play Areas
FTGA Turf Seminars Coming in March
FTGA Membership Drive Underway
68th Annual Conference Wrap-Up



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President's Message

By Lance Tibbetts, FTGA President

Welcome! I look forward to being your president this year.

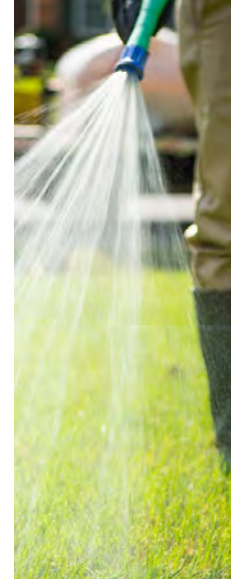
One of my first calls to action was to handle a curve ball thrown right off the bat, with Heather coming to me to express her desire to dial back her duties within the association. There are two ways to look at this change in the association—negatively or positively. Change is hard for a lot of us, and it may be a negative, knee-jerk reaction. What is wise is to take a step back, process what is being thrown your way, communicate and implement the plan. I choose to take this announcement in a positive manner as change is good and is needed in order to grow.

There were numerous discussions with the board of directors on what is best for the association. We all came to the unanimous vote to have Mac Carraway head the association as acting executive director. Mac has a plethora of industry knowledge and successfully spearheads the Environmental Research & Education Foundation. Heather has been with the association for 16 years, knows our members and wants to get back to focusing on the membership's needs.

The FTGA Board of Directors has started off with numerous ideas on how to improve the association, your association. However, we cannot improve the association without your input. The best way to find out what your wishes are as a member of the association is through surveys. Yes, I know what probably popped into your mind... "Take another survey? Will I be entered in a chance to win something and be added onto a spam email list, or what are you really going to do, or does my opinion really matter?"

Well, frankly YES, your opinion matters as this is your association. How can our board make your association better without your opinion? So, coming soon to your Inbox will be surveys. We promise to keep them short and sweet, and all we ask in return is for your candor and for you to complete it.

This year will be about refocusing the FTGA in a direction that matters most to the members to make this a successful association. I thank you for being a member of the association and look forward to your comments on the surveys. Together, we can take the FTGA to even greater heights. 🌱



2022 REGIONAL TURF SEMINARS

Education & CEUs



Turf Seminars have been scheduled in spring this year, beginning in March and running through May. Watch social media and the e-newsletters for details as they are released. Date and location information can be found below.

You will soon be able to register online at <https://www.ftga.org/page/TurfSeminars> as soon as details become available.

SEMINAR SCHEDULE

MARCH

Milton	March 22	Santa Rosa County Extension Office
Tallahassee	March 23	Northside Community Center

APRIL

Lake Worth	April 5	Polish American Club
Plantation	April 6	Jacaranda Country Club
Plant City	April 12	Hillsborough Community College Trinkle Center
New Port Richey	April 20	Pasco-Hernando State College **New Seminar**
Ft. Myers	April 26	Florida Southwestern College

MAY

St. Augustine	May 3	St. John's County Ag Center **New Seminar**
Orlando	May 11	Orange County Extension Office
Sarasota	May 12	Sarasota County Extension Office
Ocala	May 19	Marion County Extension Office
Port St. Lucie	May 24	Port St. Lucie Community Center
Cocoa	May 25	Brevard County Extension Office

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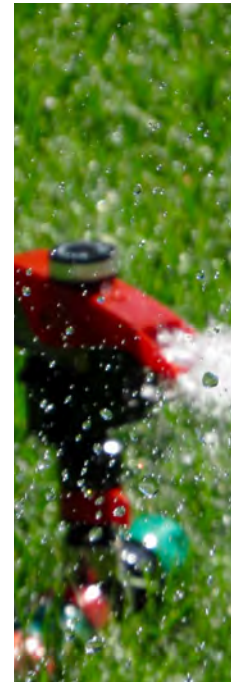
\$40 per person
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Cancellations made 10+ days prior to the event will be granted a refund less a 25% cancellation fee. Cancellations made less than 9 calendar days prior to the event will NOT be provided a refund; only employee substitutions will be granted. Refunds will NOT be granted for not attending.



(Continued from page 4)

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From the Acting Executive Director

By Mac Carraway, Acting Executive Director

First, a warm hello to all my fellow FTGA members and friends. If you don't know me, I am a long timer with the FTGA and am excited to be back in this transitional role with our wonderful association. Not that I ever got too far away! As a past president, I am privileged to have a strong and lasting connection to the FTGA and with past leaders, who clearly understand that a strong FTGA is good for Florida's turfgrass industry, and more importantly, for the association's membership.

Right off the bat, let me say that I have worked with Heather for many years and want to congratulate her on her time as the FTGA's executive director. She did a fantastic job, particularly given that she was tasked with the COVID pandemic and all that entailed for member-based associations like ours. It was brutal to say the least—and she kept smiling and grinding throughout it all. We are blessed to have had her in that role and that she remains with the FTGA as its association manager. I hope you will reach out to Heather with a word of appreciation for a job very well done!

What changes you will be seeing are more of me, in person and in print, as well as members of the board. All of us are very enthusiastic about this being a year to focus on membership, member benefits and education. Coming out of the worst of the pandemic, we are all adjusting to various degrees of new normal, and our turfgrass-related issues are evolving and need our attention now more than ever.

As you may know, I am also the executive director of the Environmental Research & Education Foundation Inc. (EREF). The foundation originated from within the FTGA and is now a separate entity. For well over ten years, EREF has been engaged in advocating for the green industry, most notably by opposing fertilizer ordinances that unfairly punish green industry professionals. EREF is blessed with the support of all the major statewide green industry trade associations and is an integral part of the FTGA's advocacy efforts on behalf of you, its members and friends.

The FTGA's ever-popular Turf Seminars are coming up with recurring and new locations to make them convenient and with great topics to make them relevant to your continuing education needs. Also, membership renewal is in full swing—keep them coming! If the last couple of years told us one thing, it was that our professional and personal relationships are what keep us connected and enable us to thrive, even in difficult circumstances. We definitely also discovered how much we missed in-person industry events and the amazing benefits they bring—both tangible and personal!

Over the next year, in addition to its traditional events and activities, the FTGA Board will be focused on updating its long-term strategies on how to serve you in an ever-evolving world. In the meantime, please share your enthusiasm for the FTGA with fellow professionals, actively promote new membership, and join us in our efforts to make this a special year for the FTGA! 🌱

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Olde is new again

Led by a former GCSAA president, venerable Olde Florida Golf Club undergoes the most extensive renovation in its 29-year history.

All photos courtesy of Darren J. Davis, CGCS

By now, there's a good chance Darren J. Davis, CGCS, has gone fishing. The Certified Golf Course Superintendent at Olde Florida Golf Club in Naples, Florida, has also perhaps walked on the beach. But for six months this year—from April through September—Davis basically lived at the club where he has tended turf for more than 29 years.

That's because Olde Florida underwent its most extensive renovation since it opened in 1993. And Davis, who knows the course's nuances like nobody else because of his history there, was the person in charge of the \$4.5 million renovation, which was done primarily to improve playability and aesthetics. Olde Florida reopened November 1, 2021.

"It was a long summer," Davis, a 32-year GCSAA member who served as president of the association in 2018, said in September as the renovation was winding down.

But while the summer was long and tiring for Davis, it was also gratifying.

"[The renovation] has absolutely rejuvenated me," he says.

INSIDE INFORMATION

Davis was hired as Olde Florida's construction superintendent in 1992 and was actively involved in the course's construction, grassing and grow-in. He is the only superintendent the club has ever had. "Managing it this long has given me a unique perspective on all of the course's subtle intricacies," Davis says.

The renovation's price tag, which also included updating the driving range, would've been higher if not for Davis' experience. He knew where he could save the club money.

Consider the bunker redo, which made up \$890,000 of the renovation's total price. The existing sand from the front nine bunkers—about 149,000 square feet at an average depth of

6 inches—was removed, stockpiled and kept clean. Most of it was later used on the fourth and eighth fairways as well as smaller areas on the sixth and seventh holes to modify the soil and improve drainage. Davis knew exactly what to do with it.

While Leibold Irrigation's construction division was selected as builder of the project, Davis oversaw all material purchases to avoid the normal markups that contractors charge for securing such materials.

"The club has confidence in me as a 29-year employee and a Certified Golf Course Superintendent and knew I was able and willing to track expenditures and be accountable for them," Davis says.

Regarding Leibold Irrigation, Davis says he selected the company because it fit his vision for the project. He calls Leibold a "boutique" firm because, he says, the company fully invests itself in its projects and doesn't spread itself too thin by taking on too many projects at once.

John Leibold, founder and president of the East Dubuque, Illinois-based outfit, says he was impressed with Davis' meticulous approach to the project. "The thing about Darren is that he plans as good as anyone. He does his homework ... and then some," Leibold says.

Another key confidante on the project was golf course architect Greg Muirhead, the senior vice president of Rees Jones Inc., the firm that designed Olde Florida. Muirhead was on the property with Davis when the course was built.

"We were both very young and probably thought we knew a lot more than we did back then," Muirhead says. "But Darren has always been extremely passionate about whatever it is he's involved in. That kind of passion is hard to find, but he has maintained it for almost 30 years at Olde Florida."



Fraise mowing of Olde Florida Golf Club's fairways helped prep them for regrassing during a recent renovation at the Naples, Florida, club, a project overseen by Darren Davis, CGCS (bottom), who has led maintenance efforts there since the club opened 29 years ago.



Above: An aerial view of Olde Florida after the first herbicide application on March 16. The course remained open for play until the second application.



Top: As part of the renovation, all of the sand was removed from the bunkers. The Better Billy Bunker method was utilized in the reconstruction and new bunker sand was added.

Bottom: Aside from the putting surfaces, every other surface at Olde Florida was regrassed during the renovation project. Approximately half of the 112 acres were sprigged, and the remaining 56 acres were sodded.

THINGS ARE ‘POPPING’

The renovation touched most areas of the course and included a regrassing. It did not include a greens renovation, however (more on that later).

While the bunker renovation took about 20% of the project’s total budget, Davis believes the club will get a solid return on its investment, especially since it’s the first time the bunkers have been renovated. Over the years, the bunkers had slowly lost some of their original shaping from normal wear and deterioration, especially in their fingers.

The bunkers were also originally built without liners. Today, bunker liners are a mainstay in the industry, and there are several bunker construction methods to choose from that weren’t available in 1992. After careful research, Davis chose Better Billy Bunker because he felt that company’s technique could combat South Florida’s sometimes-torrential rains and keep the bunkers from washing out, among other things.

“There have been many days in the summer when all of our 16 crew members would spend eight hours doing nothing but pumping water out of the bunkers and raking the sand,” Davis says, noting that

now the bunkers can withstand an inch of rain in an hour, and playability and aesthetics won’t be affected.

Tom Wildenhaus, Olde Florida’s director of golf, has been on the property for as long as Davis and says the bunkers have regained their contour and definition. “I remember what they looked like when the course opened — they just popped,” Wildenhaus says. “Now when I drive through the course, they’re popping again.”

The turf is also popping, thanks to being regrassed with TifTuf bermudagrass. The course’s tees, fairways, roughs and approaches, which were originally seeded with Tifway 419 bermudagrass, had been overrun with several other varieties, including common bermudagrass.

“We’ve known for the last 15 years that we had numerous varieties of bermudagrass that existed on the property,” Davis says. “We did a good job of managing them, though.”

But TifTuf is a cut above. While Davis is impressed with the number of new bermudagrass varieties that have been developed in the last 20 years by different universities, he recommended the club select TifTuf for several reasons, including



Top Left: Due to erosion that occurred since the course opening in 1993, the renovation included the reshaping of all lake banks to the initial 4:1 slope.

Top Center: Pike Creek Turf in Adel, Georgia, was contracted to provide the TifTuf sod and sprigs. The coordination of delivery and installation of the 56 acres of sod was a monumental task.

Top Right: The project included the replacement of all 1295 irrigation heads with the Toro Infinity model sprinkler. The irrigation aspect of the project accounted for almost 12% of the budget.

Bottom: Almost 20% of the budget for the renovation project at Olde Florida was dedicated to work on the club's bunkers.

its drought tolerance, upright growth habit and improved shade tolerance.

From a playability standpoint, Davis says TifTuf will win over Olde Florida's members. He explains that the hybrid, which features 27 chromosomes, grows upright with a fine leaf blade. "It almost looks like a cool-season grass, like ryegrass," adds Davis, who has trialed the variety on plots at Olde Florida for three years. "It also recovers better than other varieties."

Coincidentally, Wayne Hanna, Ph.D., the decorated turfgrass scientist at the University of Georgia, began development on TifTuf the same year that crews broke ground on the construction of Olde Florida. Davis consulted Hanna and other agronomists and university researchers about TifTuf, and they all endorsed it. Wildenhaus believes the club's members will embrace the variety.

"As this grass matures, I think the ball will really sit up nicely," he says. "The look of it is wonderful."

GROWING TURF TO ERADICATE IT

Before the TifTuf regrassing, Davis had to rid the course of all those bermudagrass varieties, and he knew he needed to kill about 99% of the previous varieties for the regrassing to be successful. It was a tall task, considering bermudagrass is difficult to kill, but he had several weapons at his disposal.

The eradication began in March when the club was still open for play and included three glyphosate applications about one month apart. Knowing that bermudagrass needs to be actively growing to be eradicated, Davis and his crew fertilized and irrigated it throughout the process. In essence, he needed to get the grass growing so it could be killed efficiently.

Davis also learned from research by turfgrass scientists Mike Richardson, Ph.D., from the University of Arkansas, and Jim Brosnan, Ph.D., from the University of Tennessee, that fraise mowing—a cultivation practice that physically removes large quantities of a turfgrass sward (thatch, organic matter, soil, etc.)—could enhance eradication of existing bermudagrass when combined with herbicide applications.

"Bermudagrass is so hard to kill because it has millions of growing points—above ground, below ground and at ground level," Richardson says. "The stolons, crowns and rhizomes can be 7 or 8 inches below the surface, and



Olde Florida's TifEagle greens were resurfaced 21 years ago and remain in excellent condition, so they were not included in the club's most-recent renovation. A regimen of cultural practices helps keep them in tip-top shape.

just getting enough herbicide down there to kill it is oftentimes a challenge. Our theory is to use fraise mowing to remove as many of the growing points as possible (before spraying herbicide). Then there are fewer stolons, crowns and rhizomes so the bermudagrass becomes easier to kill.”

Davis consulted Richardson several times about fraise mowing before implementing the practice about 10 days after the second glyphosate application. Davis and his crew fraise-mowed the centers of each hole, removing about 1.5 inches of material from about 50 of the course's 112 acres.

For Davis, there was no other way to approach the eradication, which took four months. “We would have wasted a lot of time and money if we didn't achieve a high level of eradication,” he says. (See the sidebar at the end of the article for more on eradication.)

CULTURE CLUB

Although it was the biggest renovation in the club's history, Olde Florida's greens weren't part of it. The USGA-style greens were resurfaced about 21 years ago with TifEagle bermudagrass and remain in excellent condition, Davis says, noting that a recent physical analysis of the greens mix, choker layer and gravel layer revealed

that a greens renovation wasn't necessary.

Davis says the saturated hydraulic conductivity could be improved, but it's not yet at a level that's detrimental to the turf. He maintains that consistent and aggressive cultural practices over the last 21 years—eration, vertical mowing, topdressing and appropriate fertilization—have enabled the greens to stay healthy. Davis says the course's greens are still 99.9% pure TifEagle.

Another reason the greens weren't renovated is that it would have added about \$1 million to the renovation's price tag. “It was money that didn't need to be spent,” Davis says. “Why spend \$1 million on something that didn't need to be done? I'm a superintendent who treats every dollar of the club's money as if it's my own money.”

The course's irrigation system didn't require a complete redesign—the original system was designed with excellent individual head-to-head coverage, Davis says—but those controlled heads were updated to catch up with current technology. Specifically, the “critical components” of the new heads can now be easily accessed for maintenance by simply removing three screws on the top of the head. “On the previous irrigation heads, this would have required us to dig

up the head,” Davis says.

The irrigation system's field satellites were also replaced. “The technology has come so far in the last 11 years that it warranted the replacement of the field satellites,” says Davis, who negotiated the sale of the old irrigation heads and satellites to a company in Arizona that buys used irrigation components for refurbishing and reselling.

Davis says there were “countless ancillary projects” that were also completed during the renovation. For instance, several trees were removed on the slope of the mounds to the left of the landing area on hole No. 1, and the area was reshaped to provide better playability on holes 1 and 10.

SHOW AND TELL

Another reason the project went smoothly—and it's a big one—is Davis' focus on maintaining clear lines of communication with Olde Florida members. He created a blog when the project began and posted to it regularly, complete with photos and explanations about certain procedures. Davis also offered members guided tours of the golf course during the renovation.

“Showing them what we were doing... you could see the excitement in their faces,” says Davis, who holds a bachelor's degree in communications from Florida Gulf Coast University in addition to his certificate in turf management from Penn State University.

Davis' communication skills are directly related to the passion he has for Olde Florida, which is still burning strong after 29 years.

“It would be easy for someone like Darren, who has been at the club for so long, to get complacent, but he's not like that at all,” Richardson says. “He's always looking at ways to improve on what's he doing.”

And Davis will continue that approach—even after the biggest renovation in Olde Florida's history. 🌱

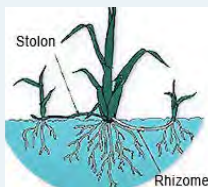
Lawrence Aylward is a freelance writer from Medina, Ohio.

Successful Bermudagrass Eradication

By **Darren J. Davis, CGCS, Olde Florida Golf Club**

One of the most crucial aspects of the 2021 renovation at Olde Florida was the eradication of the existing turfgrass. If a high level of bermudagrass eradication is not achieved, the results of the golf course renovation will be less than desirable.

Bermudagrass eradication is extremely challenging due, in part, to the plants' inherent deep rhizomes. A rhizome is a horizontal, underground stem, which puts out lateral shoots and roots at multiple intervals. Rhizomes can remain dormant for long periods of time and eventually allow bermudagrass to regenerate when growing conditions are favorable.



Extensive research has been performed on bermudagrass eradication. I have based the eradication program at Olde Florida on three peer-reviewed university studies, which are summarized below.

The first study was performed by Dr. B.J. Johnson, while at the University of Georgia. The results of Dr. Johnson's research were published in 1988. The data showed that three applications of glyphosate at 2 quarts per acre were needed to achieve acceptable control. His applications were made in May, June and August.

Dr. Johnson's research also demonstrated that three glyphosate applications, when combined, are still lower than the allowable yearly rate, were much more effective than a higher, single or split application.

The second definitive study was performed by Dr. John Boyd at the University of Arkansas in 1998 and 1999, and published in 2000.

Dr. Boyd's research confirmed Dr. Johnson's data from a decade earlier. The results again demonstrated that three applications of glyphosate at 2 quarts per acre, to actively growing, non-stressed bermudagrass over the entire summer were necessary to achieve 98% control. Dr. Boyd's study also confirmed that repeat, split applications were far superior to a single application of the herbicide at the maximum label rate. In fact, Dr. Boyd found that 5 months after a single application at the maximum label rate, the plot had zero percent control, as compared to 98% control on the three-application plot at the reduced rate of 2 quarts per acre.

Finally, in 2001 and 2002 at the University of Florida, West Florida Research Center, another study on bermudagrass eradication was conducted. The data from this research concluded that three applications of glyphosate tank mixed with an additional herbicide, Fusilade II, 4 weeks apart achieved 99% control 12 weeks after initial treatment. Dr. Bryan Unruh, Professor and Associate Center Director, University of Florida was one of the researchers in this study. I have consulted with Dr. Unruh on many aspects of the project at Olde Florida.

The timing between the herbicide applications is also a key component to the bermudagrass eradication process. Regrowth is essential, since spraying "brown," non-actively growing



Herbicide applications at Olde Florida Golf Club on March 16, 2021.
Photo credits: Darren J. Davis, CGCS.

bermudagrass with postemergence herbicides is of no value. An important component of encouraging bermudagrass regrowth is the maintenance of adequate moisture and nutrient levels in the soil. The Olde Florida agronomy team will be providing irrigation based on the plants' needs, as well as supplying a food source with light, frequent applications of soluble nitrogen throughout the entire eradication process.

The herbicide applications at Olde Florida were scheduled (weather permitting) for March 16, April 19 and May 21, 2021. Grassing the golf course did not begin until mid-June, which allowed for additional spot treatments (after the scheduled three complete applications) if they were deemed necessary.

Watch a short clip of herbicide application from a bird's-eye point of view on this short YouTube video: <https://bit.ly/33ELlOU>.



Darren J. Davis, CGCS, has been the golf course superintendent at Olde Florida Golf Club in Naples, Florida, since September 1992. Davis was the 82nd president of the Golf Course Superintendents Association of America (GCSAA) and currently serves as the GCSAA Centennial Committee chair. Davis is also a past president of the Florida Golf Course Superintendents Association, the Everglades Golf Course Superintendents Association and the Florida Turfgrass Association and serves as recurring guest editor of Florida Turf Digest.

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Creating Wildflower Habitats in Golf Course Out-Of-Play Areas

Photo credit: Dr. Adam Dale.

By Rebecca Nestle, Grace Cope, Nicole Benda, and Dr. Adam G. Dale, *University of Florida*.

Habitat loss from urbanization and agricultural intensification is reducing populations of pollinators, including native bees and monarch butterflies (*Danaus plexippus*), all over the world (Goulson et al. 2015). Recent evidence indicates that features of urban landscapes such as warmer temperatures and less viable habitat reduce the number and/or diversity of pollinators that live in these spaces (Biesmeijer et al. 2006; Kremen et al. 2007; Winfree et al. 2011; Blackmore et al. 2014; Hamblin et al. 2017). Similarly, monarch butterfly population declines have been estimated at over 80% since 2005 (Brower et al. 2018).

Due to their large footprint amidst urban areas, golf courses present an excellent opportunity to mitigate the negative effects of urbanization on pollinators. Golf courses are often islands of vegetation surrounded by roads and buildings, harboring wildlife, reducing temperatures, sequestering carbon and providing outdoor recreational space for urban residents (Lonsdorf et al. 2021). Despite public perception, research has shown that golf courses can support more species and a greater abundance of wildlife than their surrounding habitats or other urban green spaces (Colding and Folke 2009; Mata et al. 2017). However, this is dependent on the diversity, identity and acreage of plants on a given course.

Although golf courses provide multiple benefits, 40–70% of U.S. golf course acreage is not used for the game of golf yet is primarily composed of mowed and

maintained turfgrasses (Lyman et al. 2007). Moreover, the average Florida golf course is over 100 acres, 90% of which is irrigated (Hodges and Stevens 2010). With more golf courses than any state in the United States, Florida's golf industry is poised to be a national leader for environmental stewardship in the golf industry (Hodges and Stevens 2010; SRI 2015). Golf course superintendents are interested in reducing management inputs and providing more ecological value by repurposing out-of-play areas into more environmentally and economically functional spaces.

This article is intended to provide guidelines for Florida golf course superintendents to aid in their efforts to conserve important wildlife while reducing maintenance inputs and associated costs.

CONSERVATION HABITAT

Conservation habitat can take many forms, particularly in tropical or subtropical climates where plant and animal diversity is high. To function properly, wildlife conservation habitat must provide valuable resources in the form of food and/or refuge to attract and support a reproductive population. These requirements differ depending on the wildlife or ecological niche of interest and can be tailored to individual groups. For example, pollinating insects rely on flowering plants for pollen and nectar, which sustain pollinator nutrient requirements and reproduction, but these insects also require suitable nesting habitat, which comes in various forms. Some

insects, like monarch butterflies, require a specific host as a caterpillar but can use various hosts as an adult (see <https://edis.ifas.ufl.edu/in780>). Ground-dwelling beneficial insects or spiders often rely on dense, structurally complex vegetation instead of flowering plants. Therefore, when creating conservation spaces, it is important to evaluate their intended purpose and to design them accordingly.

PLANT SELECTION

An important aspect of creating wildflower habitats is selecting the appropriate wildflower species based on site conditions (e.g., sun exposure, soil moisture); geographic region (e.g., tropical, subtropical, temperate); and anticipated level of maintenance. Several drought-tolerant wildflower species will do poorly if over-irrigated, and many species will do poorly if fertilized. The performance of other species will vary greatly depending on the sunlight and soil moisture conditions. Therefore, careful consideration and selection of wildflower species is critical.

In addition to site conditions, wildflowers can also be selected based on the wildlife they support. For example, monarch butterfly caterpillars rely on milkweed species (*Asclepias* spp.) for larval development and reproduction. Other plants are known to attract specific predatory or parasitic insects. Non-native shrubby false buttonweed (*Spermacoce verticillata*), for instance, is highly attractive to the mole cricket parasitoid *Larra bicolor*, which

controls invasive mole crickets (Frank et al. 1995; Abraham et al. 2010; Portman et al. 2010). Similarly, partridge pea (*Chamaecrista fasciculata*), a common native wildflower, and white Pentas lanceolata, a common ornamental, are also highly attractive to *Larra bicolor* (Abraham et al. 2010; Portman et al. 2010).

Aesthetic quality is also a major aspect of golf course design and plant selection. Therefore, considering color, texture, seasonality and other components contributing to the aesthetic appeal of a habitat throughout the year is very important. Identifying and mixing wildflower species that flower at various times of the year will maximize the aesthetic quality and the environmental benefits, creating a landscape element that stays colorful and beautiful nearly year-round while providing constant floral resources and habitat for beneficial arthropods.

Table 1 provides an example of different wildflower mixtures that prolong the time of year during which at least one species is in bloom. For landscape design guidance, visit https://edis.ifas.ufl.edu/topic_landscape_design.

For additional guidance on wildflower species selection, visit:

- Common native wildflowers of north Florida (<https://edis.ifas.ufl.edu/ep061>).
- Performance and seasonality of several native wildflower species in north Florida (<https://edis.ifas.ufl.edu/ep341>).

			Season in Bloom			
Low Diversity Mix	Color	Annual/ Perennial	Spring	Summer	Fall	Winter
<i>Linaria canadensis</i>	Purple	Annual/Biennial				
<i>Coreopsis lanceolata</i>	Yellow	Perennial				
<i>Gaillardia pulchella</i>	Red	Perennial				
<i>Spermacoce verticillata</i>	White	Perennial				
<i>Liatris gracilis</i>	Purple	Perennial				
			Season in Bloom			
High Diversity Mix	Color	Annual/ Perennial	Spring	Summer	Fall	Winter
<i>Linaria canadensis</i>	Purple	Annual/Biennial				
<i>Coreopsis lanceolata</i>	Yellow	Perennial				
<i>Coreopsis basalis</i>	Yellow	Annual				
<i>Gaillardia pulchella</i>	Red	Perennial				
<i>Mondarda punctata</i>	Purple	Perennial				
<i>Conoclinium coelestinum</i>	Blue	Perennial				
<i>Spermacoce verticillata</i>	White	Perennial				
<i>Liatris gracilis</i>	Purple	Perennial				
<i>Solidago stricta</i>	Yellow	Perennial				

TABLE 1: Composition of two wildflower species mixtures evaluated by UF/IFAS for their performance and attractiveness to insect pollinators and predators.

SITE PREPARATION AND PLANTING

Among the most important steps for creating wildflower habitats is proper site selection, preparation and seed planting. Irrigation is important immediately after planting, and fertilization is not recommended. Wildflower species selection (see above) and ensuring the planting site matches the requirements (e.g., sunlight, soil moisture) of the wildflower species selected is critical to successful establishment.

Site preparation: Site preparation should typically occur between July and October. To control existing vegetation, make 2–3 applications of a nonselective herbicide (e.g., glyphosate). Make one application every two weeks. After plants have died, carefully remove plant residue from the soil surface to expose bare soil without disturbing the soil. It is important to minimize soil disturbance to reduce weed pressure during wildflower establishment. Dead plant material can be raked off. In cases with severe thatch or matted dead plant tissue, a sod cutter can be used to remove the top ~2 inches with limited soil disturbance. Bare soil is needed before seeding.

Wildflower seeding: Seeding should typically be done between September and January, depending on location within Florida. For specific timing recommendations, see <https://edis.ifas.ufl.edu/in1180>. Pure live seed (PLS) are the seeds of a plant species that will germinate from a seed package, accounting for the impurities and weed seed present in the package. Percent PLS can be calculated by multiplying the percent pure seed and germination rate, then multiplying by 100. Each of these values should be listed on the seed package label. Next, multiply the percent PLS by the seed package weight to determine the amount (lbs) of PLS in the package. Most seed packages provide the number of seeds per pound.

The target PLS density at planting should be 80–120 seeds per square foot, or 80,000–120,000 PLS per 1,000 ft.2 (~4 million PLS per acre). Seeds are sold by weight, so it is important to calculate the number of PLS per unit weight to achieve 80–120 PLS per square foot. Check the germination rate listed on the label of each species. Material with over 75% germination rate is suggested. It is also important to check for seed dormancy and seed treatments to reach a high germination rate. For example, most milkweed species seeds require a period of cold to break seed dormancy. Without breaking this dormancy, seeds will have a low germination rate. After selecting and preparing the seeds, they can be broadcast with a drop spreader, rotary spreader, hand-held rotary spreader or simply by hand. Go over the seeded plot lightly with a steel rake, light roller or harrow rake to ensure seed-to-soil contact after broadcasting the seed.

Plot irrigation: Irrigate 1/4 inch per day for 2–4 weeks after seeding, depending on weather conditions and precipitation.

Weed management: Weeds are typically the most challenging aspect of creating and maintaining wildflower habitats. It is important to accept that some weeds will always be present in the habitats. Healthy, vigorous wildflowers will outcompete, or resist being outcompeted, by most weeds. Manually pull weeds once every 2 weeks during the first 3 months of wildflower seed germination. Recently germinated weeds and wildflowers look similar, so be sure to only remove germinating weeds. (Creating a photo guide of the young wildflowers is helpful.) After wildflowers are approximately 1 foot tall, manually pull weeds once every 3 weeks. Weeding frequency can decrease as the plot ages.

End-of-year maintenance: For annuals that die back during the growing season, cut seed heads from the plant, leave them on the ground for germination and remove bulk dead plant material. During the weeks from mid-December to early February, manually remove remaining large plants killed by seasonal cold. You may also choose to boost variability by culling a portion of the more aggressive wildflower species to provide space for less aggressive species. Mow to ~6". Remove the bulk of debris using a rake or mowing bag. Mowing and raking allows plants to naturally re-seed the plot and opens up the canopy to promote airflow and facilitate seed germination for the following year.

- UF/IFAS guide to planting wildflower enhancements in Florida (<https://edis.ifas.ufl.edu/in1180>).



Figure 1. Before (top) (September 2016) and after (bottom) (May 2017) photos of a native wildflower mixture planted in an out-of-play area of bermudagrass alongside a golf course tee and fairway. Location: Mark Bostick Golf Course, Gainesville, Florida. Credit: Tyler Jones, UF/IFAS.

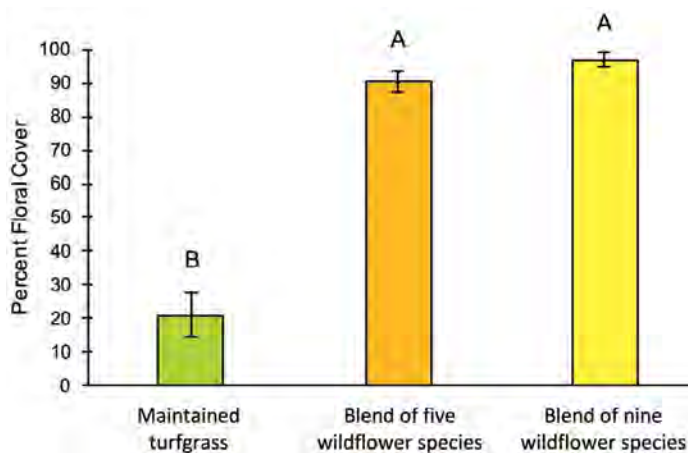


Figure 2. 5,000 ft.² wildflower plots created using the site preparation, wildflower planting, and seed mixture recommendations described above achieved over 90% plot coverage on average from March through October. Different letters above bars indicate statistical differences (P<0.05).

ESTIMATED COSTS OF WILDFLOWER HABITATS

Maintaining out-of-play areas on golf courses is time intensive and can require significant monetary inputs in the form of pesticides, fertilizers and mowing time to maintain aesthetic quality and minimize pests. A major benefit of converting these areas to flowering habitats is a reduction in irrigation, mowing, pesticide use and fertilization. Most

wildflower habitats do not require fertilization, are irrigated only during establishment or periods of prolonged drought, need be mowed only once per year and perform well with relatively few chemical inputs (usually just applications of small amounts of herbicide as needed to control aggressive weeds). However, wildflower habitats are not maintenance free and do require time and effort to create and maintain as attractive and beneficial spaces. To inform the costs associated with creating wildflower habitats as seen in Figure 1, a summary of estimated costs associated with wildflower habitat creation and maintenance was created (Table 2). This cost estimate is based on a 5,000 ft.² plot and represents the initial cost of site preparation and wildflower establishment. Costs in subsequent years should be less.

Weed management costs can vary depending on the site history. A site with a history of many annual weeds will have a seed bank that may sprout readily along with the wildflowers. Early removal of these weeds prevents them from blooming and adding to that seed bank. As the seed bank is depleted, weed control needs will decrease. Fortunately, many wildflower species are unaffected by grass-specific herbicides like fluazifop (trade name: Fusilade), and so this herbicide can be used to control many grasses emerging among the wildflowers. Check the product label, consult UF/IFAS resources or ask your local Extension agent or wildflower seed salesperson about fluazifop sensitivity of the wildflowers you select.

Task	Time Investment (assuming labor cost of \$10/hour)	Materials Cost	Total Monetary Cost
Plot preparation—removing turfgrass	2–3 applications taking 45 minutes = 135 min (2.25 hr)	Herbicide (3 applications) *fluazifop: \$3.66 **glyphosate: \$5	\$22.50 \$3.66 \$5.00
Plot preparation—removing dead plant material	60 minutes		\$60
Seed planting	1 application, taking 30–60 minutes	Wildflower seed mix (approximately \$200, depending on species selected)	\$10 labor + \$200 for wildflower seeds
Plot irrigation	Minimal	¼" per day for 21 days	Varies depending on source
Initial weed management	1–2 hours per 2 weeks for 6 weeks = 3–6 hours (Varies with seed bank/site history)	Standard gardening gear (e.g., gloves, trowel)	\$30–\$60
Maintenance weed management	1 hour every three weeks for 12–21 weeks = 4–7 hours	--	\$40–70
End-of-year maintenance	8 hours	High-cut mower needed, or manually cutting with scythe or machete	\$80
TOTAL INITIAL COST			\$445–\$505 per 5,000 ft²
*Fluazifop (Fusilade®) cost breakdown: \$79.00 for 32 fl. oz. = \$0.41/fl. oz., \$0.41 x 0.4–0.6 fl. oz. per 1,000 ft. ² x 5 = \$1.22 per 5,000 ft. ² x 3 applications = \$3.66 (using higher rate 0.6 fl. oz./1000 ft. ²)			
**Glyphosate (Roundup Pro®) cost breakdown: \$90.00 for 2.5 gal. (10 qt.). 0.8–1.6 qt. per acre. \$9.00/qt. x 1.6 qt./acre x 0.115 acre = \$1.66 x 3 applications = \$5.00 (using 1.6 qt./acre)			

TABLE 2: Cost estimates associated with creating wildflower habitats composed of the species mixtures described above. Costs are estimated per 5,000 ft.² of out-of-play area previously covered in turfgrass.

BENEFITS OF WILDFLOWER HABITATS Conserving Pollinators

Creating wildflower habitats boosts general pollinator abundance, and more diverse wildflower mixtures provide greater benefits for native bees (Figure 3a). UF/IFAS research found that, on average, native bees were over four times more abundant in wildflower plots composed of nine species compared to turfgrass areas and three times more abundant compared to a mix of five wildflower species (Figure 3b) (Dale et al. 2020). This illustrates that golf course out-of-play areas can play a valuable role in native bee conservation.

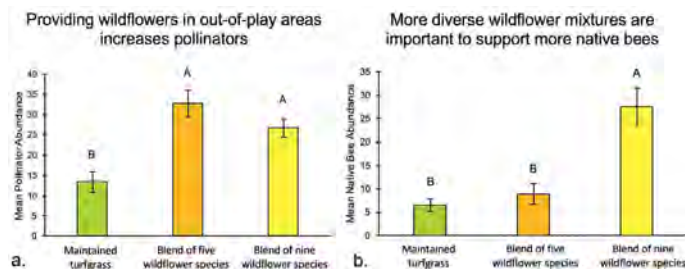


Figure 3. Average abundance of (a) general insect pollinators and (b) native bees visiting out-of-play turfgrass (control) and wildflower plots (low- and high-diversity mixes) May through September 2017.

Conserving Butterflies

In addition to native bees, butterfly conservation is increasingly important because populations are declining with habitat loss and global change (Pelton et al. 2019). Wildflower habitats can be highly attractive to adult butterflies through proper plant selection and habitat design. Butterfly larvae (caterpillars) require host plants as food to complete their lifecycle and need nectar resources as adults. Wildflower habitats can be manipulated to fit the needs of specific butterfly species and maximize butterfly use. For example, monarch butterflies prefer milkweed host plants that are tall and have large leaves (Baker and Potter 2018), and they lay more eggs on milkweed host plants in wildflower species mixtures than in single milkweed species monocultures (Nestle et al. 2020). In addition, milkweed in a wildflower mixture should be planted along the edges of habitats (Baker and Potter 2019) or in descending height with tallest plants facing north to assist monarchs with finding and laying eggs on host plants. Habitats can also be designed to conserve multiple butterfly species by incorporating more than one butterfly species host plant and selecting wildflower species (e.g., *Hibiscus coccineus*, *Helianthus angustifolius*, *Liatris spicata*) that are attractive to adult butterflies. In addition, many generalist butterflies may use wildflower species as both a nectar resource and a

host plant for offspring. Overall, it is recommended to include both host plants and nectar resources to increase butterfly abundance and richness in wildflower habitats.

Increasing Biological Control of Turfgrass Pests

Many insects attracted to wildflower habitats feed on pollen and nectar in addition to other insects. The invasive tawny and southern mole crickets are attacked by a parasitoid wasp, *Larra bicolor*, that feeds on nectar of the flowers *Spermacoce verticillata* and *Chamaecrista fasciculata*. This wasp can reduce mole cricket abundance in pastures up to 200 m. from the flowers (Portman et al. 2010). Incorporating these species into wildflower mixtures can promote the abundance of this wasp, which may reduce mole cricket abundance and damage in golf course turfgrass.

Similarly, many other predatory and parasitic insects become more abundant when provided with diverse wildflower mixtures (Figure 4a). This increase in predator and beneficial parasite abundance translates to up to 50% increased biological control of fall armyworm caterpillars in nearby fairways at least 60 feet away (Figure 4b). Just as mixtures of nine wildflower species got the best response from native bees when compared to turfgrasses or mixtures of five wildflower species, the nine-species wildflower mixtures also have the greatest benefit for flying predatory and parasitic insects (Dale et al. 2020).

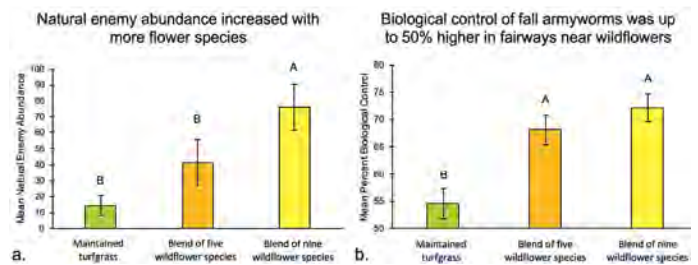


Figure 4. (a) Average abundance of parasitic and predatory insects collected in out-of-play turfgrass and wildflower plots from May through September. (b) Percentage of fall armyworms in golf course fairways adjacent to out-of-play turf and wildflower plots controlled by predatory insects.

In addition to flowering plants, nesting habitat is a critical resource for native bees and solitary wasps. A common and effective approach to providing nesting habitat is setting up bee “hotels or nesting boxes (Figure 5). These birdhouse-like structures contain hollow reeds and wooden blocks with holes for solitary bees and wasps to colonize and reproduce. On north central Florida golf courses, the most abundant insect to colonize solitary bee hotels was the red and black mason wasp (*Pachodynerus*

erynnis) (Figure 5), an important predator of caterpillars, including fall armyworm (*Spodoptera frugiperda*) and tropical sod webworm (*Herpetogramma phaeopteralis*) (Dale et al. 2020). This wasp captures caterpillars and stuffs them into nesting cavities where they are sealed in and fed upon by wasp larvae. For more information on this insect, see: http://entnemdept.ufl.edu/creatures/MISC/WASPS/Pachodynerus_erynnis.html.



Figure 5. (top) An example of a pollinator nesting box that will support native bees and predatory and parasitic wasps that attack golf course pests. (bottom) Red and black mason wasp (*Pachodynerus erynnis*) is a predatory wasp that specializes on caterpillars as prey. Credit: Jacquelyn Fitzgerald, NC State University (top); John Lampkin, bugguide.org (bottom).


Public Outreach and Engagement

Approximately 5 million people play over 60 million rounds of golf annually in Florida, while over 500 residential communities are centered around golf courses (Hodges and Stevens 2010; SRI 2015). Therefore, creating wildflower habitats in golf course out-of-play areas is an exceptional opportunity to engage with the public. One approach to this is creating signage adjacent to habitats, explaining what they are, why they are there and where people can learn more (Figure 6). This is a business, outreach and education opportunity, where superintendents can highlight the environmental stewardship they are participating in while also educating golfers, community members and youth about related scientific topics.

KEYS TO SUCCESS

- Select the proper site and wildflower species based on site characteristics (e.g., sun, soil, moisture).
- Plant wildflower seeds at the right time (mid-late fall).
- Ensure the correct seed density (80–120 PLS per ft.²) and seed-to-soil contact without disturbing the soil.

WILDLIFE & NATURAL RESOURCE CONSERVATION

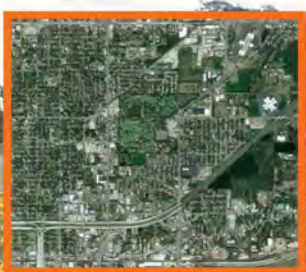






Green spaces provide valuable benefits to people and the environment in urban areas.

Converting areas of managed turfgrass to diverse flowering habitats supports more abundant and diverse wildlife and reduces pesticide and natural resource use.


University of Florida IFAS research shows that planting many different wildflower species attracts beneficial insects that help control pests in nearby managed turf areas.

Providing pollinator nesting habitat supports more beneficial insects that provide multiple benefits.

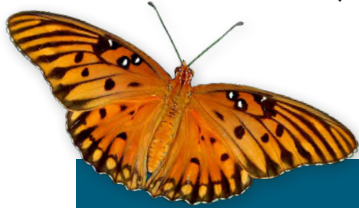
See any wildlife? If so, take a photo and share via social media with the hashtag, #UF Bugs



For more info, visit the UF/IFAS Urban Landscape Entomology Lab at dalelab.org

Figure 6. Template signage that can be placed next to golf course wildflower habitats to engage golfers and educate them about the environmental benefits associated with these spaces. Credit: Dr. Adam Dale and Susan Rodriguez, UF/IFAS Entomology & Nematology Department.

- Supplement rainfall as necessary during germination period to provide 1/4" water per day for 2–4 weeks.
- Weed manually every 2 weeks for first 2–3 months during germination period and occasionally thereafter.
- Allow seed to set, then remove dead plants and/or a portion of more aggressive wildflower species to provide space for less aggressive species (mid-December to early February). 🌱



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USEFUL AND RELATED RESOURCES

- **Video about the importance and effects of creating wildflower habitats on Florida golf courses:** (<https://www.youtube.com/watch?v=vHmGBHJcqaU>)
- **Best management practices for the enhancement of environmental quality on Florida golf courses:** (https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf)
- **Creating large-scale butterfly habitats** (<https://edis.ifas.ufl.edu/ep420>)
- **Wildflowers susceptible to deer damage in north Florida** (<https://edis.ifas.ufl.edu/uw360>)
- **Establishment of lanceleaf tickseed in roadside right of ways** (<https://edis.ifas.ufl.edu/ep367>)
- **Use of golf course ponds to support wetland birds** (<https://edis.ifas.ufl.edu/uw207>)
- **How to calculate pure live seed (PLS) rates** (https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/lapmctn9045.pdf)
- **GEO Foundation, Sustainable Golf Development Guidelines** (https://sustainable.golf/files/Sustainable_Golf_Development_Guidelines.pdf)
- **Audubon Cooperative Sanctuary Program** (<https://www.auduboninternational.org/acsp>)
- **Audubon International Monarchs in the Rough Program** (<https://monarchsinterough.org>)

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68th ANNUAL CONFERENCE WRAP-UP



Thank you to all who made the 68th Annual Conference an extraordinary event. For some, this was the first time in a long time to renew old acquaintances and friendships. A very special thank you to our valued sponsors, without whom we would not be able to present a conference of this caliber.

In addition to an outstanding educational program presented by University of Florida faculty, Extension agents and industry experts, there was plenty of fun to be had.

The networking activities kicked off with the annual golf tournament. Congratulations to the winners:

1ST PLACE GROSS	1ST PLACE NET	CTP
Jimmy Evans	Pat Irwin	Rodd Ronske
Gary Newcomb	Sean Shoffit	Jacqueline Horne
Larry Ziegler	Mike Williams	Calub Green
Bryce Koch	Joel Wotipka	Renze Berg



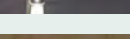
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Will Nugent honored with FTGA Wreath of Grass Award.



Scholarship Awards presented by Jason Frank. (L-R) Jason Frank, Jose Suazo Mejia, Idalia Sierra, Emma Alexjandra, Patrick McLoughlin.



Executive Committee (L-R): Eric A. Brown, Ph.D.; Cal Leggett; Jason Frank; Lance Tibbetts.



Board of Directors Front Row: Eric A. Brown, Ph.D.; Cal Leggett; Jason Frank; Lance Tibbetts. Middle Row: Andy Jorgensen, CGCS; Jason Horn; Dave Robinson; Mark Kann; Jimmy Evans. Back Row: Cordel Dietzig; Pat Marsh; Bill Cohn; Kevin Wasilewski; Bryce Gibson; Eric Dixon.



St. Augustinegrass Cultivar Workshop presented by Dr. Kevin Kenworthy and Jaime Buhlman.



Erin Wilder, Sod Solutions, presents golf course of the year award to Tim Cann, Harbour Ridget Yacht & Country Club.



Sports Turf Tour held at Orlando Soccer Stadium.

Back in the swing of things with FTGA's Annual Golf Tournament



Join or Renew Online

Save time by joining or renewing online. Go to www.ftga.org and select Membership from the top menu. Then select the appropriate membership. If you have any trouble with the online forms, send an email to: heather@ftga.org.



FTGA Brings Unprecedented Value to Members

Florida Turfgrass Association (FTGA) membership is based on a calendar year. To be included in the annual *FTGA Membership Directory & Industry Guide*, membership applications and renewals must be received by March 15, 2022.

FTGA relies on the revenues derived from membership to continue its work. As the umbrella organization that represents all aspects of the turfgrass industry in Florida, the FTGA advocates for the industry on important legislative and regulatory issues. It provides a voice for the industry to educate state and local leaders, consumers and the media about the turfgrass industry and the many benefits of turfgrass.

The association is dedicated to education, research and the promotion of environmentally responsible, professional and science-based management practices for turfgrass. FTGA benefits everyone involved in the turfgrass industry. In turn, the association asks for and appreciates the support from turfgrass industry professionals so we can continue important work on members' behalf. In this post-COVID environment, as we face new challenges, your support is needed more than ever.

Member Benefits

Last year brought an increase in education to members and industry professionals never before seen from the association. In fact, education went year-round for the first time. FTGA members receive member pricing on all FTGA programs (up to a 50 percent savings over non-members). This includes discounted rates on registration fees; sponsorships at FTGA's flagship; and a multi-day Annual Conference, which features education, industry updates, networking and continuing education unit (CEU) credits.

Members are entitled to discounted registration fees at local Turf Seminars, sponsored by the FTGA during the winter and spring. The Turf Seminar program is available at multiple sites around the state. The seminars include up-to-date research, education, new products, FDACS, Golf Course Superintendents Association of America Professional Development Initiative points, Certified Crop Adviser credits and a catered lunch.

FTGA members receive a free online and/or print subscription to the FTGA's magazine, *Florida Turf Digest*, featuring timely research updates, turf management articles, case studies and news of significance to the turfgrass industry. In addition, members receive the annually updated FTGA Membership Directory & Industry Guide, which provides the means to locate industry contacts.

The association also distributes periodic and timely e-newsletter industry alerts, which are delivered monthly as well as when breaking news warrants it. These

e-newsletters help recipients stay abreast of industry news, events, calls to action and critical dates. Our social media campaigns have also been increased as a means of keeping in touch with members and industry professionals.

Two Membership Types

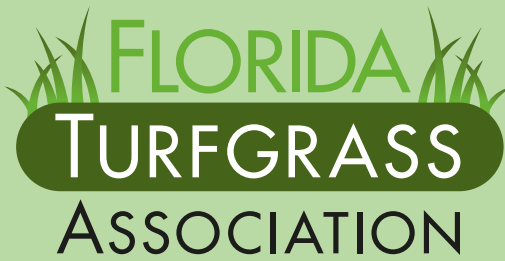
The FTGA offers two types of membership, each with different price points depending on your industry involvement.

Individual memberships belong to the individual, with member recognition and member pricing extended solely to the individual. Individuals can take advantage of FTGA membership benefits, including member pricing on all FTGA programs and events. The association has six different types of individual memberships: active members, technicians, academic and Extension, not-for-profit and municipal, students and retirees. Individual membership is available at \$225 for each active member. Other individual membership categories are lower priced. **Group memberships** provide both individual and organizational recognition at a reduced cost. These memberships belong to the organization (e.g., golf course, corporation, municipality, etc.) and allow all employees of the organization to receive member pricing on all FTGA programs (up to a 50 percent savings over non-members). Group memberships provide for recognition of the organization in addition to recognition for those employees that the organization chooses.

The FTGA has four different group membership plans, renewable each calendar year. They include:

- Not-For-Profit, Association & Municipal group memberships at \$200 per year, which provide recognition to the organization and two employees. Additional employees can be added for \$35 each.
- Basic group memberships at \$400 per year, which allow for the organization and two employees to be recognized as FTGA members. Additional employees can join at \$150 each (versus a \$225 active individual membership).
- Premium group memberships at \$825 per year, which allow for the organization and up to five employees to be recognized as FTGA members. Additional employees can become members at \$100 each.
- Premium-Plus group memberships at \$1,750 per year, which allow for the organization and up to 15 employees to be recognized as FTGA members. Additional employees can be members at \$75 each. Premium and Premium-Plus group members will receive special recognition in *Florida Turf Digest*.

Please support the association that supports you and the turfgrass industry and spread the word to colleagues you believe would benefit from membership. Thank you.



PO Box 14836 Bradenton FL, 34280 | Phone: (863) 688-9413 | www.ftga.org

INDIVIDUAL MEMBERSHIP APPLICATION

Application must be received by 3/15 to be included in the Membership Directory & Industry Guide

Business Contact Information

Full Name				Suffix	
Company Name					
Mailing Address					
City		State		Zip Code	
Phone	() -		Email		

Update Business Contact Information (if any information is incorrect above, please indicate below)

--	--	--	--	--	--

Membership Type (check one)

Industry Category (check one)

Active	\$225	Commercial Supplier	Property Mgmt
Technician	\$75	Consultant/Architects	School/Municipal
Academic & Extension	\$50	Golf Course Mgmt	Sod Production
Not-For-Profit, Association & Municipal	\$50	Landscape/Lawn care	Sports/Leisure
Retired	\$35	Nursery Grower	Student
Student	\$35	Pest Control	University/Extension

Check Additional Donations

<input type="checkbox"/> Florida Turfgrass Research Foundation for education and scholarships	\$50
<input type="checkbox"/> Florida Turfgrass Association	\$50

Payment Information (select one form of payment, check or credit card)

Application must be submitted with check or the check will be returned

FTGA Membership Dues	\$ _____
Additional Donation	_____
Total Amount Due	\$ _____

Check Information	Check Date _____	Check Amount _____	Check # _____
Credit Card Number	Exp. Date ____ / ____	Sec. Code _____	
Full Billing Address			

GROUP MEMBERSHIP APPLICATION

Application must be received by 3/15 to be included in the Membership Directory & Industry Guide

Primary Business Contact Information

Full Name					
Mailing Address					
City		State		Zip Code	
Phone	() -	Email			
Company					

Industry Category (check one)

<input type="checkbox"/> Commercial Supplier	<input type="checkbox"/> Consultant/Architects	<input type="checkbox"/> Golf Course Mgmt	<input type="checkbox"/> Landscape/Lawncare
<input type="checkbox"/> Nursery Grower	<input type="checkbox"/> Pest Control	<input type="checkbox"/> Property Mgmt	<input type="checkbox"/> School/Municipal
<input type="checkbox"/> Sod Production	<input type="checkbox"/> Sports/Leisure	<input type="checkbox"/> Student	<input type="checkbox"/> University/Extension

FTGA Group Membership Type (check one)

- Not-For-Profit, Association & Municipal \$200 Includes two employees; additional employees can be added for \$35 each
- Basic \$400 Includes two employees; additional employees can be added for \$150 each
- Premium \$825 Includes five employees; additional employees can be added at \$100 each
- Premium-Plus \$1,750 Includes up to 15 employees; additional employees can be added at \$75 each

Check Additional Donations

- Florida Turfgrass Research Foundation for education and scholarships \$50
- Florida Turfgrass Association \$50

Payment Information (select one form of payment, check or credit card) Application must be submitted with check or the check will be returned

FTGA Dues \$ _____ Total Additional Donation \$ _____
 Add Employees \$ _____
Total Amount Due \$ _____

Check Information Check Date _____ Check Amount _____ Check # _____

Credit Card Number Exp. Date _____ / _____ Sec. Code _____

Full Billing Address

Additional Members

Use additional sheet to list more member names and contact information

Name		Address	
Phone		Email	
Name		Address	
Phone		Email	
Name		Address	
Phone		Email	
Name		Address	
Phone		Email	
Name		Address	
Phone		Email	

MEMBER PROFILE:

Andrew
Jorgensen,
CGCS



On Top of the World golf course.

Andy Jorgensen, CGCS, is a past president of FTGA, a Wreath of Grass recipient and the current president for Florida GCSA. One might say, Andy is a “service to others” type of individual, and that’s the type of person who is naturally attracted the FTGA. Andy has served the green industry well during his tenure and has always gone above and beyond the call of the duty. In fact, he recently received the Golf Course Superintendents Association of America Environmental Stewardship Award.

Because his answers to our questions were perfectly on point, we present a very lightly edited Q&A format for this member profile.

Q. How did you come to the industry?

A. I grew up at a golf course outside of Atlanta. As members of the club, I spent my days playing golf and eventually working at this facility as a cart attendant and then on to the maintenance team. The Superintendent and owner of the club both encouraged me to pursue a career in this field. Upon graduation from high school, I attended Abraham Baldwin Agricultural College in Tifton, Georgia, where I received degrees in Golf Turf Management and Commercial Turf Management.



Andy Jorgensen at On Top of the World golf course.

It’s kind of funny that the general public thinks all we do is mow grass. All my friends and family think we play golf all day. The opposite is really true. Golf course superintendents need to be experts in many various fields. There really is a science behind this business.

Q. What does your job entail?

A. As director of golf maintenance operations, I oversee a great team of 50 individuals, maintaining 54 holes at our facility in Ocala. I also oversee a maintenance contract at our facility in Clearwater. Since we are a huge residential development, I also provide expertise to our landscape operations department as well as some oversight in areas where my knowledge is valued.

For instance, I am currently involved with building a new miniature golf course. These tasks are what

make this job fun and exciting and get me out of bed in the morning.

Q. What is most important and/or gratifying about your current job? How have you grown since you've been in the job? How has your job evolved, including with any technological advances?

A. As a growing development, my role has changed greatly after 16 years. My time continues to be split between day-to-day operations and long-term planning. I have a huge involvement when adjacent residential construction activities occur that have impacts to the golf course. Being involved in these non-golf activities has evolved my knowledge immensely. I remember many years ago having to manually turn on irrigation from a valve or quick coupler. Now we can do it from a smartphone anywhere in the world. Technology has made our jobs much easier in so many ways.

The most gratifying part of this job is growing my staff into talented and capable individuals in their own right. We have been fortunate that we have had many employees that start with us and move on to better jobs using the knowledge they gained here. Although we hate seeing employees leave, we take great pride in employee growth and seeing their continued successes.

Q. Do you have any work stories about turning lemons to lemonade? What were the lessons?

A. When I was first hired, we were in dire need of a new maintenance facility. As we set down the road to design and planning, the fallout from the 2008 building crisis hit, and we had to put the project on the back burner. For more than 10 years, we kept putting Band-aids on the existing shop, knowing one day we would have the opportunity to replace it. Fast forward to now and we just completed a massive, state-of-the-art facility that will serve us for the next several decades and something far better than what we originally imagined. This taught me to make do with what you have and be patient for the good things to come. Superintendents are great at adapting, and we did that for quite some time.

Q. What is the biggest challenge you see facing the industry, and how does your work contribute to the solution?

A. Probably the greatest challenge is finding capable employees who can do the job. We are often paying minimal wages but expecting first-class results.



Andy receiving the award from Mark F. Jordan, CGCS, GCSAA president while J. Rhett Evans, GCSAA CEO, looks on.

This is extremely true when it comes to assistant superintendents. Those of us who got into this field during the great golf course boom of the 1990s will soon be retiring, and there is no one filling our roles. Developing your team to be able to promote from within is crucial for long-term success of the organization. We are finally seeing wages increase to a level where they need to be to help recruit the younger generations into this field.

Q. How long have you been an FTGA member? Why did you join? Can you share anything interesting about your presidency or board membership? Why would you encourage others to get involved?

A. I have been an FTGA member for about 10 years. I had been invited to the FTGA Conference & Show and ran into Erin Wilder from Sod Solutions. She encouraged me to get involved with the association and really provided some great points that I was missing by not being a member. After joining, I was soon asked to serve on the board. Doing so has been really positive. Not only have I gained additional knowledge, but I have expanded my network of peers and developed some really good friendships from it. This industry is a great way to network and provides good camaraderie, even with your competition down the road. We are all open to sharing new ideas and information so that we all succeed as a whole, not just individually.

Q. Are you active in advocacy? If so, please share what you've experienced.

A. I have always felt advocacy was necessary for my



Brant Fletcher, golf course superintendent, On Top of the World Golf Club; Andy; Jeff Egolf, golf course superintendent, Candler Hills Golf Club.

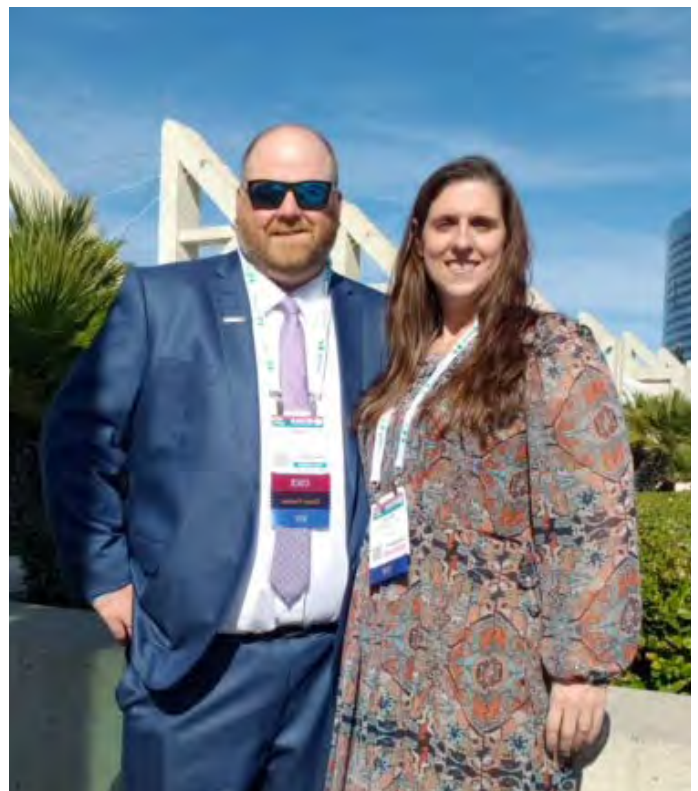
success. I have never been one to just sit back and expect others to do it for me. The old adage of “it’s not what you know, but who you know” could not be truer today. Forming relationships with policy makers has been very fulfilling and has made the conversations much easier when we are asking for something. It is very gratifying to be able to affect policy change that benefits all of us.

Q. Do you have any personal stories of interest or other interesting tidbits you would care to share?

A. I always get joked on about serving on so many association boards and how I have the time to perform all the required duties. The truth is each board is made up of a group of talented individuals who make the work easy. Without this help, each association would fail. I have been very lucky to have many influential individuals involved with these duties who have helped me grow personally and professionally.

Q. Do you have any advice for new members in the industry?

A. The greatest thing I learned at a young age entering this business is: Don’t think you know it all. Reach out to your peers, be involved in your association and take part in continuing education. Being active helps build your personal network and a group to call on when help is needed. The world is run by those who show up. 🌱



Andy and Tracy in San Diego in February for the GCSAA Conference & Show.

Marketplace

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

Editor's Note: Marketplace will return full of news next issue.

▶ FTGA NEWS

Save the Date for FTGA Turf Seminars

The annual Turf Seminars are coming to a location near you beginning in March. Please see page 5 for a list of dates and locations. Watch <https://www.ftga.org/page/TurfSeminars> for complete seminar and registration information. We will also keep you updated via e-newsletters and social media as details become available. Register early as some location offer limited seating.

Pricing Information

- FTGA Member \$40 per person
Groups of 10+ \$30 per person
- Non-Member \$75 per person



Meet Collier County Extension's New Agent

FTGA would like to extend its welcome to Dr. Hamutahl Cohen, who goes by Tali. She says, "I am stepping in for my predecessor, Dr. Doug Caldwell AKA Dougbug. I am looking forward to providing

support to the commercial horticultural community in Collier County! My background is in insect biology, conservation, and urban horticulture. Prior to this position, I worked for the University of Oregon where I studied bee declines. I am looking forward to meeting you!"

▶ UNIVERSITY OF FLORIDA NEWS

UF/IFAS Turf Science Program Reaches Milestone



The University Florida IFAS Turf Science Program is 100 years old. Per UF IFAS Solutions on Twitter, "Through UF's land-grant mission, IFAS touches the lives of more people around the state than any other part of UF." A very special thank-you to all the Extension agents who lend their expertise to the turfgrass industry throughout the year.

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▶ ALLIED ASSOCIATION NEWS & EVENTS

News from the GCSAA Conference and Trade Show Show

Thanks to Ralph Dain for a brief report from the recent GCSAA Conference and Trade Show in San Diego, California. Florida was well represented at the event, and many FTGA members made their way to it. The Florida reception at Tin Roof was well attended with nearly 200 participants. Many of the Florida attendees won awards:

- FTGA Past President Andy Jorgensen won the GCSAA Environmental Stewardship Award.
- Kevin Sunderman, CGCS, superintendent at Isla Del Sol Yacht & Country Club was elected Vice-President of the GCSAA Board for the upcoming year at this year's Annual Meeting.
- Florida was well represented at the GCSAA Golf Championships with Seth Strickland winning his

fifth National Title and repeating as last year's champion. Seth is the golf course superintendent at Miami Shores Country Club. Max Rudder, assistant superintendent at Venice Golf and Country Club placed third. The No. 1 team from Florida won the Chapter Team Competition Gross Division.

Turfgrass Producers of Florida

Growing Better 2022 will be held in Tampa, Florida, April 28–29.

For details and registration information, visit <https://floridaturf.com/events>.



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