FALL 2015

ON THE TURF™

THE OFFICIAL PUBLICATION OF THE FLORIDA CHAPTERS OF THE STMA

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ON THE TURF™

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PRESIDENT'S MESSAGE
CFSTMA

Hello Turfers,

I hope everyone's summer is going well and that some of you are taking a much deserved break! Our turf should also enjoy a break and recoup from this past season.

I would like to share with you some information from STMA National that I think is very good. Every now and then we need to be reminded of learning tools to keep us ahead of the game.

5 Tips to Promote Your Value

Implement these five tips and increase respect and recognition for your expertise:

1. Remember that sports is a service business with customers, clients, fans, vendors, staff, etc. View the field management operation not just as the agronomic arm, but as a service center. This means treating every request as an opportunity to serve your customers.

2. Manage Up. Use the same 'service business' mentality with your employer by 'managing up'. This means you anticipate his/her needs and get the work done before it gets requested. This keeps your employer from having to manage you.

3. Ask different questions when assessing an issue. For example, What do I expect not to find? What might I be explaining away a little too quickly? Consider multiple perspectives to arrive at innovative solutions. You'll be sought after for your decision making abilities and included in important discussions.

4. Manners matter! Use 'please' and 'thank you', hold doors for people, and do not wear a ball cap inside. This also includes being well-groomed and dressed appropriately for every situation.

5. Stay current. Add to your knowledge base by taking continuing education in agronomics and in personal development areas, especially in written and oral communication. The STMA annual conference has excellent technical and professional development sessions, so start making plans now to attend the meeting in January in San Diego. Be knowledgeable about current events so you can have intelligent conversations.

After reading these, I hope that you understand why I chose these comments to be the highlight of my president's message.

I would like to expand this list by one more line item that I personally feel is just as important: "Don't be afraid to admit that you have made a mistake

and always look at a mistake as a learning lesson".

No matter how experienced we are or how well we know our tasks, we all have made a mistake or two. If someone tells you that they have never made a mistake, run from that person. They just haven't been caught yet.

As your chapter President, I not only have to walk the walk, but also talk the talk. Therefore, I owe an apology to Robert Sample who was highlighted in the Spring 2015 issue as our professional member. Robert's last name was spelled incorrectly even though I had read the article several times. So Robert, I am sorry I didn't catch that one.

Here is someone else that I need to apologize to as well. Does anyone know who this gentleman is?

He is Opie Cheek, the field supervisor for the Clearwater Threshers (Phillies). We had a very nice article on professional Baseball Field Maintenance and highlighted Opie, but we forgot to include his photo.

On a final note, this is my first foray into magazine publishing. I am fortunate to have a great team working with me on this project. From time to time, mistakes will be made, but as our process goes forward, we will learn from these mistakes and continue to put forth the best publication that we can.

So let me go ahead and apologize now for any future mistakes we may make. Please don't take it personally, we are learning as we go.

Well, that's enough for now,

▶Dale Croft
CFSTMA President

CHAPTER NEWS

On June 25, CFSTMA held a program at the Stetson University Softball Facility in Deland. We enjoyed a great day at a wonderful facility. There were plenty of networking opportunities, CEU programs and a fantastic sponsored lunch!

If you missed it, we hope to see ya at the next upcoming program. We also had another great event hosted by Stetson University Softball. What a fantastic facility offering the girls a collegiate softball program and an occasionally, a friendly local utility game.

Dr. Travis Shaddox gave a great presentation on Iron. Dr. Shaddox's research supporting less granular usage and encouraging more liquid forms was very informative.

We had 25 individuals attending and almost all are supporting members. We even obtained new members and our new total is 86. We are only 14 shy of our 2015 goal. Great job team! We still have plenty of time to reach our goal, so please join! Members who attended also were able to receive the NEW, really cool CFSTMA pin.

There was awesome networking going on while we toured the complex. So much of the CFSTMA is getting together with your peers and bouncing off ideas, concerns and the general way we run our

operations while learning from each other.

We would like to thank all of those who helped put on this great program together. Stetson University, Frank Griffin, Head Coach and JJ, Assistant Coach and their crew. Dr. Shaddox from UF for his presentation. A big shout out to our lunch sponsor Ewing Irrigation, hosted by Kevin Scott and Jerod Jesso. Another thank you needs to go to David Nowakowski with Harrells for helping put this entire program together and obtaining the CEU's.

See You Soon,

▶Mark Miller
Secretary, CFSTMA

SPORTS TURF MANAGEMENT

As a Parks and Recreation Professional

▶By Joe Gasparini
Program Manager
Orange County Parks & Recreation

As any Parks and Recreational professional can tell you, we are faced with a variety of demands on our time, energy and resources in attempting to provide the highest quality recreational facilities and programs for the public we serve. Providing safe, aesthetically pleasing sports fields is one of those areas. How do we manage the high use demand and at the same time minimize expensive, time consuming field renovations?

First, begin with a plan. That plan must reflect an integrated approach to managing your athletic turf. It should include effective mowing practices, an enhanced water management program, an efficient fertilization/herbicide application schedule, and a targeted insect control program incorporated with sound cultural practices.

Mowing may be one of the most underappreciated practices of turf maintenance, but is one of the most beneficial when preformed properly. With the right tools, at the proper mowing heights and correct frequency, turf maintenance challenges can be minimized.

Bermuda 419 grasses are one of the most commonly used turf types for athletic fields. It is primarily found in the warm humid zone of the Southeastern United States that includes Florida. Bermuda 419's ability to withstand high traffic (to a point) and its regenerative abilities, makes it ideal for heavy foot traffic. To maintain Bermuda 419, reel mowers are the preferred tool over rotary mowing. Mowing should be performed two to three times per week at 45° angles from previous mows. The goal is to remove no more than 1/3 of the grass blade at each mowing to maintain the turf at ¾ to one inch in height. It's also beneficial to leave the clippings on the turf's surface, as long as it's not windrowed or clumped. If this occurs, more than 1/3 of the turf blade is probably being removed. You may find that this is unavoidable from time to time due to inclement weather or for some other unforeseen circumstance such as equipment breakdown. So, when this does occur, double cut and screen drag

to spread the clippings. This will allow sunlight to reach the grass and prevent yellowing of the turf. If you are contract mowing, you may want to add this requirement in the language of the contract.

With water management, be it irrigation or Mother Nature, your goal is to maintain 1 inch of water moisture below the root system, while not allowing surface runoff.

Bermuda grass usually requires a weekly application of 1 ¼ inches of water. When irrigating, time the zones to achieve the desired goal outlined here. Avoid light infrequent watering. Consistent moisture promotes healthy turf, which more easily withstands high use demands and requires less chemical usage. Don't be afraid to turn your systems off during rainy periods. But, remember to turn it back on prior to seeing turf stress!

Effective fertilization and herbicide application, as well as targeted insect control, can be achieved by dedicating qualified staff that are knowledgeable in the specifics of pest control and chemical application. A qualified turf manager will identify the needs of the turf by taking soil tests to determine the types and quantity of fertilizer needed. They will also work with their local agricultural extension agent to help identify troublesome pest problem areas. A knowledgeable, experienced turf manager will pay dividends in your agency by minimizing costs to maintain healthy turf allowing for increased safe use of your athletic fields.

Cultural practices for Bermuda turf, such as slicing, aerating and topdressing, are another component of the integrated management plan. These practices in conjunction with the fertilizer, herbicide and pest control programs round out your turf management plan.

Slicing promotes lateral growth of the turf, aerating encourages water and air exchange at the roots, topdressing enhances soil structure, levels the playing surface and helps to protect the turf crowns from foot traffic.

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Slicing and aerating should be conducted during the growing season, spring through fall. Slicing can be performed more often than aerating, as it doesn't delay use of your fields. Slicing can be done weekly, where aerating is a monthly activity, being it's a more aggressive cultural practice. There are soil cores that require time to dry and spreading out over the turf. If time is an issue, consider slicing and aerating your high traffic areas, such as goal mouths, benches, home plate, and coaches' areas to minimize soil compaction promoting root growth and reestablishment of turf.

Even after incorporating the integrated management practices mentioned here, you may still require sod replacement. But, you will notice a considerable reduction in the sod needed from previous replacements. Implementing the practices mentioned here will minimize sod replacement and save money and considerable effort in maintaining safe aesthetically pleasing athletic fields.

Lastly and most importantly; we, as the Parks and Recreational professional, must communicate and establish good working relationships with league organizers, who are our vested partners, to jointly provide their players and coaches quality safe playing athletic fields. Maintaining continuous open lines of communication will go a long way, especially, deciding "playability", due to inclement weather conditions, or when requesting practices be moved to different areas on the field to minimize ware.

Just as important, if not more, you can establish trust with your partner users, so that they know and are confident that when the fields are taken out of play "for maintenance" that the fields will be in an improved playing condition when reopened. This will demonstrate your professionalism and commitment to providing the best possible playing fields for your partners and the general public you serve.

Aside from getting a college degree in sports turf management, one of the best ways to become more knowledgeable in the sports turf industry is to be involved in the green industry. You can achieve this through your local agricultural extension agency and/or joining your local turf managers association, such as the North, Central or Southern Florida Sports Turf Managers Association. By networking with like-minded career individuals and attending education sessions offered in your local area, you can improve your turf maintenance program. So, if you have not already joined consider joining today. ●

● For more educational opportunities or to join the Florida Sports Turf Managers Association please visit our web site at: www.CFSTMA.org.

SAFE SPORTS FIELDS ARE BUILT THROUGH UNDERSTANDING IRRIGATION'S Best Practices

▶By Lynda Wightman, Industry Relations Manager, Hunter Industries

A safe, pristine sports field can only be developed by implementing an irrigation system that consists of high quality components that are designed with sports fields in mind. In order to determine the right irrigation products for a particular field, the Turf Manager has to focus on a few key points including player safety, aesthetics, and cost.

Finding the right combination of components can only be accomplished by thoroughly understanding efficient irrigation practices. One of the most important factors the Manager must consider is how the field is used and how often. The Manager must also need to have a firm grasp on basic irrigation hydraulics, plant/soil/water relationships, and irrigation terminology. Not only does the Manager need to be personally educated, they need to keep their entire staff educated as well. The basic steps that need to be considered for either a new or renovated field are the same for any field across the country, and are imperative to field success.

Design

The design of an irrigation system is the "roadmap" for the contractor who is installing the system. There are professional irrigation designers who specialize in this process and understand the hydraulics required for an efficient system. It is generally best to contract one of these seasoned professionals, especially for a new build. They can identify many of the technical specifics involved with planning such as the point of connection, water supply, elevation changes, available water pressure, and so on. These items must be reviewed

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before a design can take place. The project also needs to meet local codes for backflow devices, meters, and electrical configurations. Most importantly, a professional designer can match the right irrigation and maintenance equipment needed for a specific site.

Automatic Valves

The "heart" of an irrigation system consists of the electric or battery operated valves, which can be arranged into various configurations depending on water pressure and zone sizes. Valve size is important, especially for larger zones of sprinklers. Generally 1.5" or 2" valves are used. The valve needs to have slow closure to ensure no "water hammering" takes place. Pressure regulation devices are often installed on the valve to optimize the sprinkler's dynamic, working pressure. Captive parts are imperative when someone might need to work on the valve after installation. Quick coupler valves offer easy access to pressurized water in isolated areas. The more quick couplers that are included in the design, the better. They are usually installed on the mainline, which makes it easy to hit hot spots quickly and effectively.

Automatic Controller

The irrigation controller is the "brain" of the system, as its scheduled run times are what activate and deactivate field watering. Versatile scheduling capabilities within the controller allow the manager to implement a customized set of run-times that provide the ideal amount of water to each zone of the system. To ensure irrigation doesn't occur in conjunction with natural precipitation, most professional-grade controllers are equipped with rain sensors that temporarily cancel irrigation. There are also "solar sensors" that track daily weather patterns and automatically adjust runtimes to the optimal irrigation level. These sensors not only save the health of the field, they save water and money as well. Flow sensors are another add-on device designed to save water and protect landscape health. In the event of a pipe or component breakage, a flow sensor will not allow the zone to receive irrigation. With many system designs, more than one zone will often need to operate at the same time, so it is important to select a controller that features multiple programs and runtimes.

Rotors

There are a few key features that should be considered when selecting the rotors that will be irrigating the field. The rotors must

have a small exposed diameter on top and an attached rubber cover to ensure player safety. A strong spring within

the sprinkler will provide positive retraction and ensure that sprinkler caps do not stick up above the grade level of the field. Manufacturers spend a tremendous amount of time creating nozzles that provide an even distribution of water over the turf area. Without these features and specialized nozzles in the rotors, brown "doughnuts" can occur, which looks bad and can become a player safety issue. An increasingly large number of Managers are also responsible for synthetic turf surfaces these days, which need irrigation for cleaning and cooling. There are new rotors on the market that can provide the radius and flow required to do these jobs. Care needs to be taken in the initial design to ensure there is enough water and pressure available.

Efficient Installation

After the design has been created and the products have been selected, the Field Manager needs to do his or her homework to find a professional contractor. When searching for a contractor, be sure to ask for references, referrals, and their certifications.

When it comes to installation, it is of the utmost importance to ensure that the installers closely follow the installation specifications provided by the manufacturers.

Additionally, sprinklers should not be buried too low, operating pressure should not be too high, and the valve box should be filled with gravel and wired with the correct waterproof wire connectors. Make sure to have the contractor provide an "as built" design (how it was actually installed/ built), and put a copy of this in the controller cabinet for maintenance of the system. This can come in tremendously handy, as site observations are cheap insurance policies during the installation process.

Efficient Maintenance/ Management

After the design and installation has taken place, the final step to an efficient, safe playing field is in the hands of the Manager. This person needs to understand what

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the products do and how to troubleshoot all of them, if required. Also, understanding the specific site is very valuable when it comes to the water supply, quality and available pressure. Many Turf Managers have taken classes on plant/soil/water relationships, and this knowledge is imperative when it comes to scheduling the amount of water the turfgrass needs and how quickly it might infiltrate through the different soil types. Education is probably the most important issue when it comes to maintenance and management. Basic irrigation classes on hydraulics, precipitation rates, distribution uniformity, and electricity are just a few topics that are offered by various associations both nationally and locally.

Basic irrigation classes on hydraulics, precipitation rates, distribution uniformity, and electricity are just a few topics that are offered by various associations both nationally and locally.

It's imperative that all sports field managers become members of STMA, Sports Turf Managers Association and then complete their certification. By becoming a CSFM (Certified Sports Field Manager), they add a professional endorsement to their resume and location of employment.

There are many knowledgeable people in the irrigation industry that can assist with the education and consulting of an irrigation system.

The following links offer different educational opportunities and networking for someone who might not be aware of basic irrigation needs:

- ***www.stma.org (STMA)***
- ***http://wwwdpla.water.ca.gov/urban/conservation/landscape/wucols/index.html (WUCOLS)***
- ***www.irrigation.org (Irrigation Association)***
- ***http://www.atinet.org/cati/cit/ (Center for Irrigation Technology, Fresno)***
- ***http://www.asic.org (American Society of Irrigation Consultants)***
- ***http://www.landcarenetwork.org/ (PLANET – Professional Landcare Network)*** ●

Soil Sampling

▶By Dr. Phil Busey, Agronomist
Phil Busey Agronomy Consulting

Sports Turf Managers need to manage and understand soil quality as the basis for manageable, playable turfgrass fields. Soil quality, lately called "soil health," includes available nutritional content, pH, organic matter content, microbial activity, soil structure, and particle size distribution.

Different Types of Soil Analysis

Some soil qualities can be assessed through regular monitoring, that is, sampling and shipment for analysis by a qualified laboratory. Other soil qualities cannot readily be determined by soil analysis. For example, available nitrogen is not readily determined by soil testing because nitrogen is in a very dynamic relationship with organic matter and is controlled by soil microbes, temperature, and moisture. Soil micronutrient analysis may not be meaningful, because it does not adequately measure availability, so tissue analysis may be required for iron and manganese. Also, for crops and nutrients for which there is no science-based interpretation available, soil testing may be meaningless. Fortunately, for many nutrients that may be insufficient in turfgrass, such as potassium, magnesium, phosphorus, and calcium, regular soil testing is informative and there is a degree of consensus on what the right values should be.

Before collecting a soil sample of a sports turf area you must decide

what kind of analyses are required, and what chemical extractant is appropriate for your soil samples. The minimum sample volume varies from 1 tablespoon to 1 gallon or more, depending on the analysis and extraction used.

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In addition to the extraction and analysis of soil chemical nutrients, which I discuss below, saturated paste extraction is helpful and can be used to measure soil salinity and boron. In addition, complete physical analysis is used to assess

particle size distribution, saturated hydraulic conductivity, and distribution of pore space. These are important in new field construction, renovation, and selection of topdressing mixtures.

A qualified independent soil testing laboratory will give you the choice of a nutrient chemical extraction method, such as Mehlich III, Olsen (for phosphorus in high pH sol), Ammonium Acetate (for cations or positively charged ions in high soil pH), and other extraction methods. The chemical extraction method is intended to approximate the availability of nutrients to the turfgrass plant. Using the wrong extractant (depending on soil pH) may result in the partial dissolving of rock particles and result in spurious high values, or may fail to adequately measure the nutrient availability to the turfgrass plant, and result in spurious low values. You might be inclined to apply too little or too much fertilizer, if the wrong extractant is used.

Highly managed turf areas should be sampled and analyzed at least once per year.

By doing regular soil sampling and analysis, the sports turf manager can diligently develop a baseline for future fertilization and future problem solving. If there are future turfgrass problems, soil nutrition might be interpreted as being a contributor to the problem or eliminated as a contributor to the problem. The price of regular soil sampling and analysis is small

compared with the cost of remedial treatments that might be needlessly applied.

Irrigation water sampling and analysis is also helpful in conjunction with soil testing. I have seen situations where there was enough nitrate applied through reuse irrigation water that the nitrogen fertilization budget could be substantially reduced. In situations where salinity might be a problem, irrigation water analysis should be done alongside soil sampling.

Where and How to Sample

A soil sample is obtained within the turfgrass rootzone that, depending on the grass, is the upper 4 to 6 inches depth of soil. A good sample of an area, for example, a soccer field, should involve many (20 or more) subsamples from a grid pattern or a random pattern of different places throughout the field, mixed together as a composite. If there is soil heterogeneity, e.g., sandy areas and mucky areas, separate samples should be obtained from different parts of the field. For soils that are layered, it may be informative to divide the samples by depth and submit for separate analysis a shallow sample and a deep sample (see photo).

The Mascaro Profile Sampler used to see root distribution and soil layering. This football field soil has a whitish calcium marl layer between about 1.5 and 2.5 inches depth which restricts drainage.

A good soil sampler is a tubular stainless steel probe with a horizontal bar or foot step to assist in pushing the probe into the soil (see photo). A good sample container is a 1-pint paper bag. Prior to shipment, soil samples should be properly labeled and promptly dried with a fan on exposed pans at ambient air temperature—no artificial heating. It is a good idea to sieve and remove gravel, particles larger than 2 mm in diameter, because these will not be a part of the nutrient analysis. The better quality of sample preparation will result in faster laboratory turnaround and more uniform results. Typically a sample that is shipped through USPS is received by the laboratory within 3 days, processed within 1-2 days, and results are emailed to a client within 6 days after initial shipment.

A 36-inch tubular stainless steel soil sampler with step and paper bagged soil samples from a multipurpose municipal sports turf field.

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The Soil Testing Laboratory

There are many independent laboratories including universities that provide an analysis of common nutrient elements. To achieve the most accurate and repeatable measurements, choose a laboratory that is certified, that reports the method of nutrient extraction (which chemical extractant is used), that includes fairly complete analysis of different nutrients, and that reports in real numbers such as ppm, parts per million.

Laboratory results in pounds per acre may be hard to interpret because it is not clear if these values are based on an assumed agricultural "plow-layer" depth, e.g., 6 inches, or the depth that was actually sampled. Reports in ppm are easier to interpret because they can be applied to different situations. In some cases, soil samples analyzed through fertilizer dealers are not as complete and informative as those through regular testing laboratories. In some cases, these analyses report numbers in no defined unit of measurement, so that even though there is a recommendation that you need to fertilize with so much of this and that, there is no way to verify the interpretation. Common sense says that an analysis of your soil quality should be done by someone other than the company trying to sell you the fertilizer. ●

CENTRAL FLORIDA
SportsTurf
MANAGERS ASSOCIATION
Experts on the Field, Partners in the Game.

Quarterly Chapter Meeting, CEU and Tour

September 22, 2015

10:00am - 1:00pm

Educational CEU Program: Label and FDACS Updates
Paul Mitola, FDACS Field Training Coordinator

Cost: Chapter Members - Free
Non-Members - $25
Refreshments and luncheon included

RSVP: By September 15th
Send payment to:
Rob Julian
3302 West Martin Luther King Blvd.
Tampa, FL 33607
rjulian@buccaneers.nfl.com
Register at www.cfstma.org/about-us/chapter-meetings

Location: Bright House Field
601 Old Coachman Rd.
Clearwater, FL 33765

Save money and become a member...application found on page 28

Professional

MEMBER SPOTLIGHT

Clay Paulk

I am currently a Senior Parks Specialist with Orange County Parks and Recreation.
I began my professional carrier with Orange County on the tree crew in 1995. After three years, I began working as the quality control liaison for the County's landscape vendor. This included general grounds, sports fields and interior landscapes. During this time, I became licensed to maintain areas that were not under contract. I had the opportunity to gain considerable experience with the irrigation repair team working on sports fields. I worked as a Site Supervisor at Cypress Grove, then George Bailey. After 5 years as a site supervisor at these parks, I had the opportunity start up an in-house athletic turf maintenance program from scratch. We started with one truck, a 200 gallon Toro spray rig, a cub cadet spreader sprayer, 30 hors power Challenger tractor and a trailer. We initiated the County's first sports turf maintenance crew of two. We are now responsible for maintaining 20 turf sites of 56 athletic fields for approximately 100 acres of Bermuda turf that included 15 acres of St. Augustine Grass.

During my free time, I enjoy the outdoors, especially kayaking and fishing. ●

Commercial

MEMBER SPOTLIGHT

Erin Wilder

I am from a seven-generation farming family from North Florida, where I spend most of my summers and weekends roaming the cattle pastures, playing in cotton-bins and riding tractors. I was active in 4-H, where I focused on citizenship and leadership programs. My desire for a career in agriculture began while I was the public relations representative for the Florida Watermelon Association during college. After graduating from Florida State University, I returned to my family business and began my turf career as Sales Representative and later the Sod Production Manager.

Currently, I am the Director of marketing and Industry Relations for Sod Solutions, Inc. - a turfgrass research, development and marketing company with over 250 licensed producers worldwide. I speak to organizations and associations providing educational seminars. In addition, I work directly with turf professionals to educate others on the benefits and proper maintenance of turfgrass. I have been blessed to travel the world visiting sod farms, golf courses, university and research facilities, and various natural and synthetic sports venues.

My passion for the industry seems to get me involved in many organizations. I am the Immediate Past President of the Florida Turfgrass Association and serve on the Turfgrass Producers International Membership Working Group. Previously I was on the board for Turf Producers of Florida, Tallahassee Builders Association, and an alternate for the Florida Home Builders Association. I have also served on the FDACS License & Bond Committee and the Florida Sod Best Management Practices Steering Committee. I am a Class VII graduate of the Wedgworth Leadership Institute for Agriculture and Natural Resources.

In my spare time, I enjoy spending time with family and friends, traveling, studying health and fitness, fishing, hunting and cheering on the Noles. My husband, Bedford, and I live in Tallahassee, Florida. ●

To submit profiles, please send them to ontheturf@crgnet.net. Maximum word count is 300.

DIAGNOSING TURFGRASS DISEASE

▶By Phillip Harmon, Ph.D.
Dept. of Plant Pathology, University of Florida

For many of us (paraphrasing Whitman), turf is the flag of our disposition, out of hopeful green stuff woven. So what happens when the hopeful green stuff starts to thin, turn brown, die? Turf managers know how quickly that can sour a disposition, particularly when it's not known why or what can be done about it. Diagnosing a turf problem needs to be done quickly, with certainty, and the diagnosis should inform the overall management of the grass to minimize the damage and hasten the recovery. Some of the most frustrating problems to diagnose are turfgrass diseases, because of the difficulty telling them apart and the seemingly unpredictable nature of when and how severely they occur. Though sometimes difficult, diagnosing turfgrass disease is really important because of the wide range of inputs turf managers have available to deal with them. In addition to dozens of fungicide products to choose from, intricacies of fertility, irrigation, mowing, cultivation, and every other management input may also impact how disease ultimately affects turf quality.

The Rapid Turfgrass Diagnostic Service was established at the University of Florida in Gainesville, in 2006 with key input and support from the Florida Turfgrass Association (FTGA) and the Florida Golf Course Superintendents Association (FGCSA). I worked closely with some key turf professionals in these organizations to try to understand why the diagnostic services offered prior were not

meeting the industry's needs. I had help from two other turfgrass pathologists and the then director of the Plant Disease Clinic (all whom have since moved on from UF) putting together protocols and methods for the new service. We received two years of support from the industry to implement the service with the idea that we would charge more and make it self-sufficient within the UF Clinic. Our goal was to receive the high end turf samples from Florida that were largely being sent outside the state for diagnostic services. With a lot of help and support, we built something that turfgrass managers from Florida, and many other states, value and use. Sample numbers by year are given in Fig.1. By 2008 we were receiving samples from our turf managers and from other southern states (7 in 2008), and last year we processed samples from 18 states including Florida. We recently received the USDA APHIS permitting to receive samples from outside the country and are processing a limited number of samples from Asia and Australia on a trial basis at the moment.

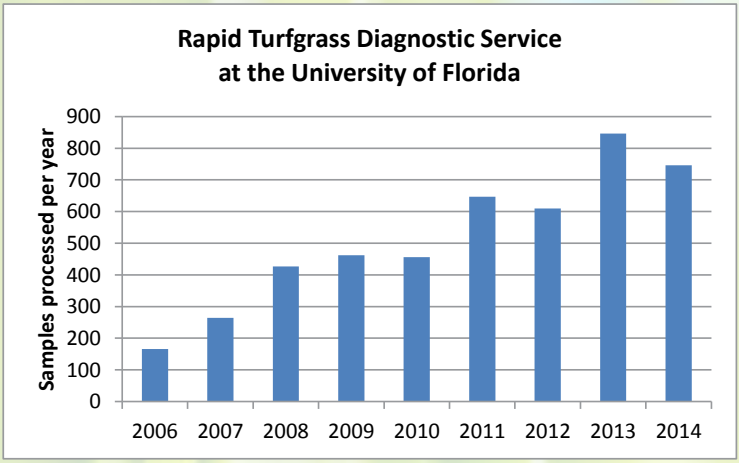

Fig. 1

We're continuing to try to come up with ways to better serve turf managers in Florida. Future plans include offering the RTDS as a subscription-based service for turf managers that will allow easier, once a year billing and budgeting to include samples as needed and optional site visits for when something really needs special attention (not currently offered as part of the service). Logistical details are being worked through, and input from industry is always welcomed. The service has always relied on a student diagnostician with a real interest in turfgrass. Several students have been trained and generally have been successful finding "real jobs" after graduation. I've been fortunate to have had some great help. Looking forward, we are reaching sample numbers that have required us to hire undergraduate

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students to work with the graduate students and myself. We are probably at a point (~900 samples/year) where the workload is as much as the current structure can handle. We are trying to determine if we can generate enough support ($) to hire a full-time rapid turf diagnostician at some point.

My research program has benefited tremendously from the RTDS. It's a great way for me to keep my finger on the pulse of turfgrass pathology in the state. I see trends in the samples that we are getting, and can target my research from product evaluation trials to student projects to address the important issues. One example was the recent widespread reports of difficult-to-control bipolaris leaf spot on bermudagrass. Turf managers reported failures in fungicide efficacy from products that they had expected to work. Through some directed research, we found that there is some level of fungicide resistance in populations of the leaf spot pathogen in Florida, but in other cases product selection and timing may have been to blame for lack of efficacy. This data is still being prepared for publication, but the results have already been incorporated into our management suggestions that accompany leaf spot diagnoses.

We also have key clients that send us the unusual stuff. When these folks send a sample, we know to take a close look for something special. Long term clients get really good at picking up on disease symptoms earlier in the process, when management is much more efficient. We actually put ourselves out of business somewhat in this way. The number of "easy" samples has been reduced drastically as users get familiar with the common issues. One of those unusual samples that led to research projects included aggressive mosaic and dieback in St. Augustinegrass caused by Sugarcane Mosaic Virus (SCMV, Fig.2). Multiple samples came in within weeks of each other from a former Doctor of Plant Medicine student, an agrichemical company technical services rep, and an owner of a pest control business with many years of experience managing St. Augustinegrass lawns in Florida. They all knew something different was going on that was not responding to fungicide applications or horticultural inputs. Through research, we found the damage was due to an unusually aggressive

Fig. 2. Mosaic caused by Sugarcane Mosaic Virus in St Augustinegrass

strain of the SCMV that we hadn't seen before. We are still investigating why this disease has surfaced, and what management recommendations can be made to prevent spread where it has killed lawns. The diagnosis has saved many unnecessary fungicide applications, since they would have been wasted on a viral disease.

▶ *For additional information*

Visit http://turf.ufl.edu

If you're curious about how this whole Rapid Turfgrass Diagnostic Service works, or if it is something that could potentially benefit you, I would encourage you to visit the webpage http://turf.ufl.edu and read up on more details. We strive to give you a preliminary diagnosis of your turf disease within 24 to 48 hours from receipt of your sample. When we find disease, we include disease management recommendations based on my research with your diagnoses. From that webpage above, you can also access our Facebook feed of "Disease Happenings" in Florida Turf. I try to post pictures, sample trends and answers to questions that I'm getting in hopes that the information may help other turf managers head problems off before they get too bad.

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TIPS!

Some of the best tips I can give for getting the most out of sending your sample are:

1. **Take a good representative sample with generous amounts of tissue. A couple cup cutters from the edge of the diseased area are best. Include 1/3 healthy, 2/3 sick, not much dead turf or soil.**
2. **Package the samples carefully. Wrapping plugs in aluminum foil to keep soil off the turf works really well, newspaper also works pretty good. Use a sealed plastic bag only when sending express courier. Do not add any water.**
3. **Send express courier. FedEx, UPS, DHL are preferred. USPS takes one additional day after it arrives on campus, so avoid if possible. Dropping off the sample is another great option if you're close. We can sometimes bring you back and look at it with you in the lab right away if you're interested.**
4. **Fill out the form with as much info as possible. The more info, pics, and observations you can give us, the better your result will be. Don't be afraid to give a call or email to check on the status or give us some additional info.**

I'm really thankful to the turf industry in Florida for all the support of this program over the years, and I hope to continue to serve the industry for many more to come. I welcome feedback on the service and hope that you will contact us if we can help with your turf disease problem. ●

On the Turf Tips from STMA

Here are a few tips from STMA on the care of your warm season turf (Bermudagrass). Please keep in mind that they are just tips and you will need to develop a plan that works in your climate.

September - November

MOWING

Timing for maintenance practices is dependent on weather and location. The cooler areas may need to end or perform certain maintenance practices earlier in the season versus warmer climates, which can continue maintenance practices later into the year.

Recommended mowing heights for Bermudagrass is 1"-2".

Bermuda also goes dormant during low temperatures and as winter approaches, mowing height should be raised if the field is not being overseeded. Do not exceed a 2 inch cutting height. Remember the 1/3rd rule, never remove 1/3rd of the leaf blade at any one mowing.

IRRIGATION

Recommended amounts per week (minus any rainfall) 1"-1.5" per week.

Water should be applied on an as needed basis. The proper amount of water applied at any one time is dependent on the water holding capacity of the soil, grass species, soil texture, climatic condition (rainfall, humidity, temperature, and wind movement), exposure, intensity of use, drainage and amount of moisture present when irrigation is started. Most turgrasses require between 1"-1.5" of water per week during their active growing period to remain healthy and resilient.

Always water at the first signs of wilt.

FERTILIZER

Recommended amount of nutrients per month

- **September** - 0.5 - 1 lb. N/1000 sqft.
- **October** - May also be the last month that premergeent can be used if you are planning to overseed in November. Read the label of the product to be used for residual factor.
- **November** - Apply a product high in potassium.

(continued on pg. 26)

Soil and Tissue testing should be conducted on a routine basis. However, their real value is realized if conducted simultaneously with a soil test since only the soil report can provide clues as to why a nutrient deficiency or toxicity is occurring.

Make sure to check with your local and state agencies for any restrictions on applying nutrients.

CULTIVATION

Recommended time for soil cultivation keep in mind that as bermudagrass growth slows with decreased temperatures vertical mowing, dethatching, aerating in the fall should be avoided unless they are being overseeded. Doing so can cause injury to bermudagrass that will not allow plants to successfully recover before winter.

DISEASES

Recommended diseases to be on the look out for Brown patch, Dollar spot, Fairy ring.

Diseases occur when three factors are present and meet the correct conditions, A susceptible host, A virulent pathogen, and a Suitable environment.

INSECTS

Protect seedlings from Fall armyworm damage.

WEEDS

Recommended time to apply herbicides in all Turfgrass:

- **September** - Postemergent control for winter annual and perennial broadleaf weeds.
    - Preemergent control should only be done if you are not overseeding.
- **October** - Postemergent control for winter annual and perennial broadleaf weeds.
    - Preemergent control should only be done if you are not applying overseed.
- **November** - Postemergent control for winter annual and perennial broadleaf weeds.
    - Preemergent control should only be done if you are not applying overseeding. ●

Florida Turfgrass Association Annual Conference

In September the Florida Turfgrass Association Annual Conference and Show will take place in **Orlando, September 14-16**. The first day will be a Sports Turf and Landscape Tour, including Universal Studio's tour of unique uses of fine turfgrass at Phase 2 of Harry Potter and Islands of Adventure. The second day there will be an Athletic Field Management session with Auburn University's Dr. Beth Guertal talking about foliar fertilization. University of Florida's Dr. Jason Cruse will speak about his latest research on athletic field management. Dr. Travis Shaddox will talk about how bermudagrass responds to iron. Clemson University's Dr. Bert McCarty will present information on Poa control. Throughout the conference, there will be presentations on bermudagrass, time to explore the trade show and many social opportunities to connect with fellow turfers, such as the famous Corn Boil.
To register online, go to www.ftga.org. ●

The Landscape Show - September 24-26, 2015

Orange County Convention Center

Join over 6,500 attendees, and attend the Southeast's premier landscape and horticulture conference and trade event. The Landscape Show features over 200,000 square feet of trees, shrubs, equipment and more from nearly 450 exhibiting companies in 800+ booth spaces!

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- Dozens of Educational Programs
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The Landscape Show is recognized as one of the premier nursery and landscape trade shows in the country. Known in the 1950's as the FNGA Trade Meet, The Landscape Show has a long history of bringing thousands of members of the nursery industry together. ●

Florida Statewide Chapters
SportsTurf
MANAGERS ASSOCIATION

Florida STMA Chapter Application Form

Name: _____ Title: _____

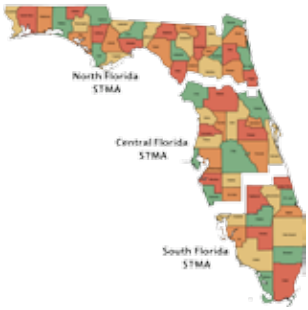
Employer: _____ _____Contact Phone: _____

Address: _____ City: _____

Zip: _____ Email : _____

If vendor, type of business: _____

Florida's STMA Chapters welcomes new members. We are a very inclusive organization and have a membership category for anyone interested in learning more about sports field management.



____ **$50 Sports Turf Manager** - If you are primarily responsible for managing or maintaining a sports field(s). This position is an eligible voting member and hold elective office.

____ **$35 Sports Turf Manager Associate** - If you are primarily responsible for managing or maintaining a sports field(s) and your organization already has a Florida STMA chapter member employed. The Associate(s) has the same benefits and privileges as the Sport Turf Manager. Dues are lower because of multiple members (groundskeepers, turf specialists, grounds maintenance, etc.).

____ **$50 Academic** - If you are in teaching, extension or research. This position is an eligible voting member in the Chapter and hold elective office.

____ **$75 Commercial** - If you work for a company engaged in a commercial enterprise providing services and/or products to the sports turf profession (consultants, architects, designers, contractors, management companies, distributors and manufacturers, etc.). This position is an eligible voting member and can hold elective office available to the commercial category.

____ **$50 Commercial Associate** - If you are the 2nd person (or more) from a commercial company. All Commercial Associates **must** first have a Florida STMA Chapter commercial member at their company before the lower dues category can be selected. This is a non-voting member and not eligible to hold office.

____ **$35 Affiliate** - If you are indirectly or on a part-time basis involved in the maintenance/management of sports field(s) (coaches, athletic directors, volunteers, or full-time students). This is a non-voting member and not eligible to hold office.

After being accepted for membership, members of any Florida Chapter have the same member benefits and privileges in all chapters except the right to vote and hold office.Voting rights and right to hold office are restricted to a member's home chapter, defined as the chapter to which member's dues are paid. Members may only claim Home Chapter membership in a single chapter.

☐ North Florida

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Tallahassee, FL 32303

☐ Central Florida

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