

13. Do what you say you will. Keep promises and follow through on commitments.
14. Get involved in your community: school systems, philanthropic organizations, Little League, homeowner's associations and public service venues such as serving on the parks and recreation commission.
15. Become involved with fundraising and other charitable causes.
16. Always answer criticism in a professional and courteous manner. Explain why there is a problem and what you plan to do about it. Never let it be assumed that you do not care. Take immediate action on complaints.
17. Use time management strategies. Decide exactly what is to be accomplished and why. Plan and organize. Set daily priorities within the list. Finish projects. Delegate work. Filter out unnecessary information.
18. Empower employees to make their own decisions.
19. Make a point of thanking employees and praising them when they do a good job.
20. Think big. Look for ideas that will excite people.

Editor: We never talk about professional development without talking about communication. If there is one thing I have found over the years it is that the most successful and secure superintendents are the ones who take the time to communicate with the people they work with and work for. The last article from my files is from a superintendent in Texas who

gives good advice on writing articles for his club's newsletter. Hopefully, this "how to" article will make that chore just a little easier from now on.

Member/Golfer Communication: Writing an Effective Newsletter

*By Jay Shine, GCS
Canyon Creek C.C.*

As department heads, many of us are often asked to write newsletters and articles for our golf facilities on a regular basis. Let me begin this article by stating that I am no literary genius, nor do I claim to be. I have however, developed a successful formula for writing my club newsletter articles that reduce the amount of time spent staring at the computer monitor with a blank look on my face. In the past, I have always dreaded the e-mail from my member-relations director, which requested my article in three days. My formula may or may not work for you, but hopefully, some of you can use it to streamline the process.

Obviously, the newsletter article is one of our most effective tools for communicating with the golfers at our facilities. I try to write an article that is informative, brief, humorous and non-technical, which I feel is essential to keep the attention of the reader and maximize the impact of the message. By combining all of these attributes, I feel that I can

produce an article that they will actually look forward to reading, while at the same time learning something every month.

My typical newsletter has four main components that allow me to get all of the information on one page or less. The first piece of the puzzle is the monthly preview, which I use to explain what effects the typical weather pattern for the month will have on the golf course. I stress the word "typical," because many of our articles are written one or two months in advance so they can be edited and printed on time. I certainly do not attempt to predict the weather, but I do try to tie in the expected weather conditions to the expected course condition. I also use this paragraph to explain any new techniques or procedures we may be using on the golf course. Also I will use this paragraph to communicate any department headlines or big events we may be preparing for.

The next part of the newsletter is the cultural practices summary. In this section, I preview the major cultural practices that will be completed on the golf course in that month. Typically, this includes aerification, overseeding, special chemical applications, fertilization schedules, or any other practice that informs them as to how hard we are working out on the golf course.

The third component is the "word of the month" feature. I am often surprised at how uninformed some golfers are about some of the terms we use on a daily basis. I introduce a word and then

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explain what it means and how it relates to what we do on the golf course. Some examples are: "transition," "Poa annua" (two-word bonus), "overseed," "verticut," "Primo" and the list goes on and on. Again, these words sound so simple to us, but I'm sure most have been asked what they mean or what they are. I feel that this part of the newsletter is very important, because it will bring the reader back each month, just so they can learn something new.

The final part of my typical newsletter is my "declaration of availability." I use this paragraph to emphasize that I am welcome to any feedback or suggestions from all golfers. Some might think this opens us up to an endless barrage of questions, suggestions, recommendations, etc, but I think most of us have actually received some good ideas from golfers at some point. Letting the golfers know that you appreciate their input can help you build some good relationships, while letting them know that you are trying to make their facility better with their help. In this section, I list my e-mail address and work phone number. I also encourage them to visit with me on the golf course or around the club.

This formula is my personal technique for preparing an article that is interesting, educational and easy to read. Many of the characteristics of my formula I have picked up along the way by reading many of your articles in your newsletters. My formula may not work for you, but it has made the process much simpler for me, while significantly improving my level of communication and helping me build better relationships

with my members.

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USGA Update

Success Is Not An Accident - Plan For It!

By Chris Hartwiger and Patrick O'Brien

Successful golf courses do not happen by accident. As USGA agronomists we visit more than 200 golf courses each year of all sizes, shapes, and budgets. The most successful clubs, regardless of budgets, all share one characteristic. These clubs have a clear vision of what they want to be and are characterized by excellent working relationships between club management, membership, and the golf course superintendent. To help realize their vision, these clubs develop long-range plans and maintenance objectives.

To maximize the return on the dollars spent on the golf course, we recommend that your course create a long-range plan and maintenance objectives for the golf course. The following steps are helpful in the development of maintenance objectives for the golf course:

1. Define expectations for the golf course - An open dialog among management, the board and the superintendent is needed to define expectations. Rank the major playing areas from the most important to the least important. Define the standards of condition for all these

areas. There will be differences of opinion, but compromises can be offered until all parties arrive at a consensus. The golf course is going to be managed in some fashion, so it is possible and beneficial to work through any conflicts.

2. Develop an agronomic program to meet these objectives - The superintendent and USGA Green Section are excellent sources of information.
3. Make sure funding and staff can meet these objectives - Reallocate resources from lower priority areas, change the budget or staff size, or reduce the level of expectations if the existing staff and budget cannot complete the agronomic program required to meet these objectives.
4. Implement the plan - Implementing the maintenance objectives and a long-range plan will benefit your course in several ways. First, the budget will be spent as efficiently as possible. Priorities will be well defined and inefficient use of resources will drop dramatically. Maintenance objectives will provide continuity over time and will be an excellent means to show the progress being made on the golf course.

The topic of maintenance objectives is discussed during many USGA Turf Advisory Visits. We have collected numerous examples of maintenance objectives and can provide your club with more specific direction. Contact your regional USGA Green Section office to schedule a visit for your club and our agronomists will be ready to discuss this important issue.

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Shade: Turfgrass Enemy No. 1

By Joel Jackson

Have you ever been kept in the dark about what's happening at work? Without all the facts you may find yourself heading in the wrong direction, duplicating effort, minimizing productivity, wasting time and money. That may be a big stretch for an analogy for what's happening to your turfgrass that is in heavy, persistent shade, but it's not too far off the mark.

The North American version of the game of golf, which originated on the mostly treeless, windswept, coastal areas of Scotland, has golf

courses snaking through hardwood wetlands and evergreen forests as well as open links lands. When golf gets woody, turfgrass gets in trouble. Shame on designers and/or owners who insist on tucking a green in a location so protected by trees that air circulation and sunlight are minimized. That green is doomed to a shaky existence and the members will not like the resulting thin, always-near-death putting surface.

To add insult to injury, sunny, open and airy golf courses are often planted with trees for screening purposes and for memorializing members who have passed away. The placement of these trees

is often done without due diligence for the growth habit of the tree and its potential future impact on the turfgrass... especially in critical areas like greens and tees which get lots of wear and tear from foot traffic and equipment.

Let me make it perfectly clear for those who have forgotten their 10th grade biology class: Green, growing plants (including turfgrass) need, require, must have sunlight. They live, grow and make their own food through the process of photosynthesis. A really big clue here is the prefix *photo*, meaning "light." The scientific definition of photosynthesis has to do with the production of chloro-



It is nearly noon and this patch of thin, ugly turf still in the shadow of a tree dramatically shows the effects of shade on the health and vitality of turfgrass maintained at putting-green heights. Photo by Joel Jackson.



The Tifway 419 bermudagrass on this tee at the Gainesville G&CC is in constant shade in the fall and winter. The turf can't bear up under the low light conditions and the wear from traffic. Photo by Joel Jackson.

phyll (that green color golfers really love). It goes on to say that chlorophyll is a result of the combination of nutrients, oxygen, and water *in the presence of sunlight*. Get it yet? No sunlight. No chlorophyll. No healthy turfgrass.

A superintendent can mow, feed, water, aerify, spray, spike, topdress, install fans and subsurface blowers, but without sufficient light, it is an exercise in futility. A golf course that has high expectations for its turf conditions must provide the will and the commitment to let the superintendent find a way to get sunlight to the turfgrass. Of course you could roll out a bank

of grow lights like Augusta National does, but some nearby residents might object to the glare at night. And then there's mole crickets, but that's another story.

If it's a case of trees (shade and roots) versus turfgrass, trees will win. There is really only one solution: *remove* the shade-making trees or *severely prune* the canopies and roots to allow adequate sunlight to get to the turfgrass. Tree roots also compete for water and nutrients when left to encroach into turf areas, making the grass plants weak and susceptible to drought, diseases and traffic damage. If a club member is reading this article and

doesn't believe me or his superintendent, then he should hire a company to come in and track the shade patterns on the course. If those chronically thin turf areas aren't defined by the shade lines, I'll buy you a beer. Bite the bullet and let the staff cut down or cut back some of the offending trees and watch the miracle of life take place.

I've heard the story over and over of how the turf recovered once the shade was removed, but getting past stubborn club members or local tree removal ordinances is often a long and protracted battle. So let's make a deal: if the superintendent, the USGA agronomist, and the private consultant tell you that persistent shade is keeping your turfgrass thin - but you won't accept their professional experience and knowledge - then please don't beat up on the superintendent and keep harping on the thin, ugly bare patches on the golf course. You have the solution in your hands and it is as simple as - let there be light!

Sunlight is the main ingredient, but you should also be aware that the shade keeps the turf moist longer and fosters a disease condition. That's why some courses install fans: to circulate air blocked by the trees and dry the surface.

And then there is the matter of the tree roots. I have been bashing trees (really only the ones next to key turf areas) but they too need air, light, water and nutrients just like any plant, so it's just a natural battle for survival of the fittest.

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Solutions to Shade Problems

If you are Augusta National, hosting the Masters tournament and earning millions in merchandise revenue and television fees, then maybe you can afford to set up and dismantle “grow lights” on your shady greens to provide the needed light for the turfgrass to survive in the perpetual shade of those towering Georgia pine tree. Chances are your club would not go to that expense, so what are your options?

Outside Contractors: Hire professional arborists on an annual basis to properly prune and thin tree canopies to let sunlight and air reach the putting surface. Greg Pheneger at the Johns Island Club says they have two crews that come in twice a year not only to trim the branches but also to prune the roots that grow back into the greens and fairways within six months of pruning. Pheneger also has to get a permit to remove trees when that is the only option, which requires a site visit by the local authority to get approval. Try removing 200. The officials finally realized that the residential rule on tree removal didn't really fit the needs of trying to grow a sports-playing surface. A home lawn is not a putting green.

In House: If you feel confident that your crew has the ability to take down a 60-foot pine or oak tree without it falling on the green or - heaven forbid! - a house along the course, then proceed. Some courses purchase bucket trucks and go through the course each year to prune not only for shade problems, but also to trim palm trees and other large canopied



On another shaded tee at the Gainesville G&CC, Superintendent Buddy Keene installed zoysiagrass and improved the appearance and durability of the playing area. Photo by Joel Jackson.

trees to reduce wind damage effect and debris. Using loader buckets and tall ladders are risky alternatives, and it takes a lot of study to determine which limbs to prune or trees to drop, since the sun moves north and south with the seasons.

You can spike, aerify, fertilize, top dress and fertilize and spray fungicides over and over on the thin turf to combat the damp low-light growing conditions. In the case of some tees and roughs, there is the option of using more shade-tolerant grass varieties like zoysiagrass. Buddy Keene has had some success with zoysia on one of his tees at the Gainesville Golf and Country Club that is in shade almost all day in the fall and winter. Before

installing one of the many zoysia varieties, it pays to try some test plots of the grass and see which variety handles your maintenance programs the best.

If the light intensity is marginal and a lot of tree removal is not necessarily called for or even possible (the trees may be on private property near the course), then the installation of fans may help improve conditions by speeding up the drying time of the dew or rainfall in the shady areas. Fans are a compromise and sometimes have to be mounted in fairly obvious areas in order to be effective. Some people are swearing by the underground air systems to blow or suck air through the root zone to keep the soil drier to prevent disease conditions.

Consultants: There are companies that will come and photograph shade patterns and then put them in a computer model to show you and the club members how the shade patterns change with the season and how thin-turf-area problems correlate directly with those shade patterns. Of course you could do the same thing with a digital camera, but sometimes clubs like to pay big money to consultants instead of listening to their superintendent who already knows shade patterns affect turf quality.

Golfers, take your pick: trees or turf. You can't have championship greens with good putting surfaces and thick fairways as long they languish in the shade. You can either play golf or go for a walk in the woods, or put up with thin, bumpy turf and quit complaining.

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Time Lapse Images Shed Light on Shade



8 a.m.



10 a.m.



Noon



2 p.m.



4 p.m.

by Mike Pilo

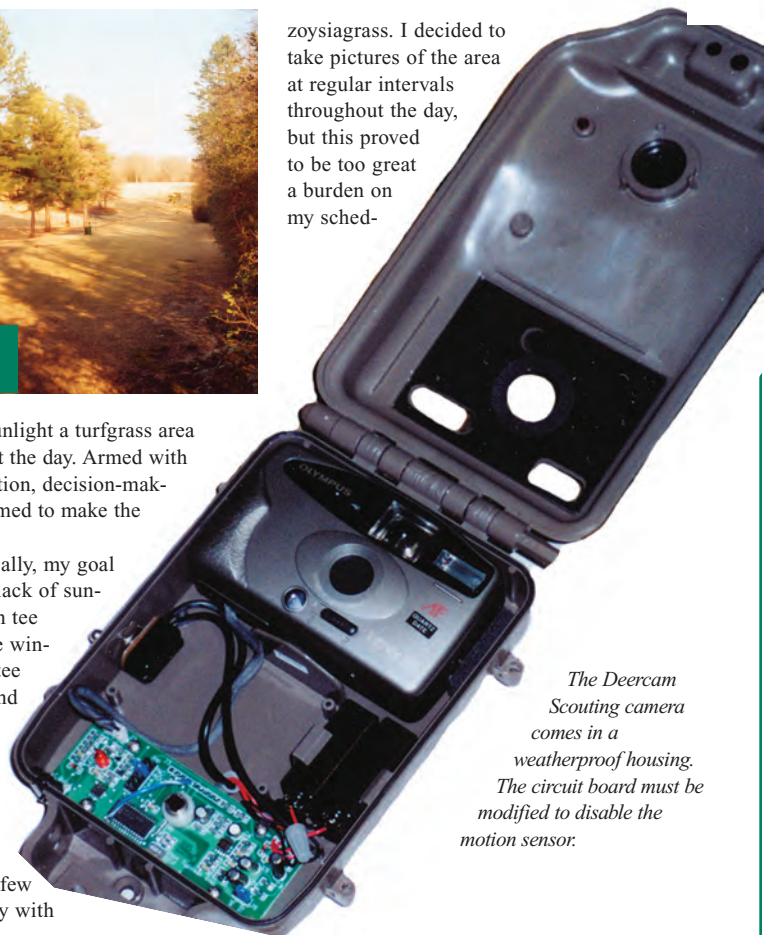
One of the great agronomic challenges in maintaining a golf course is growing high-quality turfgrass in excessively shaded areas. Charlotte Country Club is no stranger to this problem as we have many large trees throughout. The solution may seem simple: increase light penetration to the area by removing the trees. However, the extent to which an area is shaded is not always as obvious to some as it might be to the golf course superintendent, especially when a tree has special meaning for someone or it “adds character” to a hole.

Effectively communicating to club officials that a tree or trees need to be removed in order to consistently maintain healthy turfgrass is easier with clear visual evidence. Pictures have helped me to illustrate the quanti-

ty and quality of sunlight a turfgrass area receives throughout the day. Armed with this visual information, decision-makers are better informed to make the right choice.

Specifically, my goal was to convey the lack of sunlight on the seventh tee complex during the winter months. These tee boxes stayed wet and would often remain frozen for days. Consequently, they have been re-sodded several times over the last few years, most recently with

zoysiagrass. I decided to take pictures of the area at regular intervals throughout the day, but this proved to be too great a burden on my sched-



The Deercam Scouting camera comes in a weatherproof housing. The circuit board must be modified to disable the motion sensor.

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ule. So I looked for camera equipment that could take the pictures automatically.

Time-lapse photography equipment suited for the outdoors can be expensive. I eventually came across a camera that was well suited to the job and at \$260, was relatively inexpensive. It is called the Deercam Scouting Camera. This camera was designed with a different use in mind - to take pictures of wild game visiting a feeding station. A motion sensor detects the movement of the animal and triggers the camera to take a picture. A built-in time delay prevents the entire roll of film from being taken of the same animal in rapid succession. The time delay can be set to six different intervals from 15 seconds to one hour. It uses 35mm film, can be mounted in a tree and it is all contained in a weatherproof case. Everything you might want to know about this camera can be found on their website www.DeerCam.com.

The Deercam does not come ready to use for time-lapse photography right out of the box. The motion sensor must be bypassed with a small piece of wire; otherwise it will only take pictures when the motion sensor picks up movement. Fortunately, I was able to enlist Brad Peterson, manager of irrigation services at Smith Turf and Irrigation to figure out how to get this done.

To bypass the sensor, locate both the biggest chip on the circuit board - it will have 14 pins on both sides - and locate the row of 10 holes at the top of the circuit board. Very carefully solder a small wire on the second pin from the bottom left of the computer chip to the fifth hole from the left. This will undoubtedly void the warranty.

Now armed with a time-lapse camera, I photographed several areas with significant shade patterns. I included these pictures in a presentation to the Green and Grounds committee.

The result was better than had I expected.

It was obvious that the number seven tee complex was not getting enough sunlight. The committee agreed unanimously to take down the trees immediately.

I included other trees during that presentation as well. The pictures told such a complete story that further explanation was not always necessary for every site. At one point committee members blurted out "take it down" before I could say more than "this is the large hemlock next to the 14th green." In this situation, pictures have proven to be the best communication aid.

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USGA Update

What's Wrong With the Ultradwarfs?

By Patrick O'Brien and Chris Hartwiger

We are hearing this frequently from calls to the office, or by e-mail correspondence, or at TAS visits this summer, "Mr. USGA agronomist, what's wrong with the ultradwarfs? Unfortunately, this simple question may be misleading and imply that there is a turfgrass problem as the reason for the poor performance.

TifEagle is by far the ultradwarf grass questioned by most - and usually because it is by far the most widely planted ultradwarf. Mini-Verde and Champion are the two other popular ultradwarfs that are also used in the Southeast Region. From our observations, the problems seen and heard about are not ultradwarf issues but rather one or more factors at a particular course that cause poor turf performance and quality.

The ultradwarfs continue to be the choice for virtually all regrassing or reconstruction projects in the Southeast. Golfers want bermudagrass putting green surfaces that will not mutate, and will provide faster and smoother surfaces. These are the new standards promised by the ultradwarfs.

Below are some key points that we feel are essential to maintain healthy ultradwarf putting greens in the Southeast Region.

Address Existing Issues

Turfgrass variety is only one of the many factors that influence the performance of a putting green. While the ultradwarfs can be a major



Ultradwarf test plots at the IFAS Research Center in Ft. Lauderdale

improvement over Tifdwarf or Tifgreen, simply replacing the grass will not make other preexisting problems disappear. Unfortunately, some clubs have made the mistake of not taking the opportunity to resolve other issues such as poor construction, shade, surface drainage, etc.

To avoid this, ask yourself the question, "Why were my existing greens in poor condition before regrassing?" Address as many of these factors as possible prior to regrassing and your success rate will improve dramatically.

Thatch Control

Often we hear that managing the accumulation of organic matter in the top of the profile has been neglected for the first few seasons. Ultradwarfs produce 8 to 10 times the amount of thatch compared to the old industry standards.

Numerous secondary problems can result once organic matter weight exceeds 3% by weight in the upper rootzone, including disease problems, nutrient issues, and water-management concerns. Applying 4,000 to 5,000 pounds of sand annually per 1,000 square feet is the key to maintain a high sand matrix and not an organic matrix in this zone. Be sure to use ASTM test #1647 to determine organic matter percentage by weight in the zone of organic accumulation. Aeration and topdressing programs can be fine tuned with this information.

Disease Issues

Spring dead spot and bermudagrass decline issues are the diseases observed most often. Spring dead spot is fairly easily prevented with Eagle fungicide and Rubigan. Be sure to follow all label recommendations.

Bermudagrass decline usually occurs in the mid to late summer after some form of injury, such as mower scalping, has occurred and during extended periods of cloudy and rainy weather. This is a weak fungus and generally requires some other stress to allow it to weaken the plant. Raising mowing height in mid to late summer is the best approach to avoid problem, rather than expensive fungicide programs that seldom provide much benefit.

Lime

Liming is another practice that can elevate the soil pH in the upper rootzone and make conditions more favorable for many pathogens, including those involved with spring dead spot and bermudagrass decline. When superintendents apply lime, it tends to stay in the thatch and upper rootzone, and measurements of soil pH if taken from a deep plug may give a false sense of security. Testing the pH in the upper rootzone area will provide additional information and maybe even far different values.

Rootzone Construction

Sometimes we hear of grass failure and after checking the rootzone, observe the use of a 100% sand rootzone. Use of a straight sand rootzone is not recommended. Desiccation, winter injury, and low soil nutrients have been a problem in these types of root zones. In addition, rootzones

2004 Plants of the Year Part 2

In an on-going effort to promote the production, sale and use of superior Florida-grown plants, the Florida Nurserymen & Growers Association is pleased to announce the 2004 selections of the Florida Plants of the Year. This program was launched to promote under-utilized, but proven Florida plant material. These proven ornamentals are selected on an annual basis by a group of growers, horticulturists, retailers, landscape professionals and University of Florida faculty.

For a plant to be considered a Plant of the Year, set criteria must be met. Selected plants have good pest resistance, require reasonable care and are fairly easy to propagate and grow. The award-winning plants must also exhibit some superior quality, improved performance or unique characteristic that sets it apart from others in its class. Here are two 2004 selections for your consideration:

Common Name: Purple Trumpet Tree

Botanical Name: *Tabebuia impetiginosa* 'Ipa'

Hardiness: Zones 9b-11

Mature Height and Spread: 15'-25' Tall x 10'-15' wide

Classification: Flowering tree

Landscape Use: Small shade or specimen tree

Characteristics: A variable species in size and shape



Purple Trumpet Tree

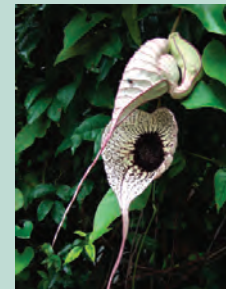
of flower giving masses of pink color in the spring. This flowering tree prefers to be dry in winter. Some features of this tree are a single trunk and palmately compound leaves.

Common Name: Pelican Flower

Botanical Name: *Aristolochia grandiflora*

Hardiness: Zones 8b-11

Mature Height and Spread: A climbing vine, 30' high, or as tall and wide as the support



Pelican Flower

Classification: Sub-tropical flowering vine, root hardy in zone 9

Landscape Use: Trellis, pergola, large structure, tree or fence.

Characteristics: A very strong grower with large fantastically-shaped flowers that have a unpleasant odor for part of their life. Heart shaped leaves and 10" heart shaped dark purple and white flowers are pollinated by flies. Foliage is a larval source for Gold Rim butterflies found throughout the state.