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SPOTLIGHT: BOB BITTNER RECEIVES PRESIDENT'S AWARD

Education and charity fundraisers marked the fall chapter activities, highlighted by the presentation of the FGCSA Presidents Award for Lifetime Service to Bob Bittner, CGCS, superintendent of the Club at Pelican Bay in Naples.

COVER STORY: 44 YEARS AND 3 SUPERINTENDENTS LATER

Overlooking Payne's Prairie, the Gainesville G&CC clubhouse is a portal for wildlife to meander into the woodsy southwest suburbs of this Florida college town. Located west of I-75 and just off Williston Rd, this certified Audubon Cooperative Sanctuary's wildlife inventory runs from A to Z.

HANDS ON: SHADE: TURFGRASS ENEMY NO. 1

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.

42 RESEARCH: LIGHT INTENSITY AND ULTRADWARFS

A UF study indicates that TifEagle and Champion bermudagrasses are capable of sustaining quality better than other dwarf bermudagrass cultivars when grown under reduced-light conditions but none of the tested grasses performed well under dense shade or long periods of shade.

48 STEWARDSHIP: ROSEMARY - ENDEMIC NATIVE

The discovery of an extraordinary population of Florida rosemary, an endemic, native plant, at Frenchman's Reserve led to a scientific study conservation and member-education programs that formed part of the course's application process to become a certified Audubon Cooperative Sanctuary.

54 AFTERWORDS THE ORIGIN OF GREEN

Mark Jarrell brings back some spectacular photographic evidence of a September trip to Ireland, where golf course maintenance is sensible, living is not cheap, drivers have to be the best in the world and the people are as friendly as their reputation.

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#### The Florida Green

#### **WINTER 2004**

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#### CALL FOR ARTICLES

**Hands on Topics:** Share your best practices and tips for these upcoming topics. Photographs or slides are encouraged. Digital images that are 5 inches wide at 300 dpi or greater accepted.

Spring 2004 - Trends in Rough Mowing and Maintenance

Summer 2004 - Aquatic Management: From Vegetation to Water Quality

Fall 2004 - Traffic Control Programs and Strategies

Please submit articles via email if possible. Attached articles should be saved in Microsoft Word or, if you use another word processor save it as a Text file before attaching or you may just copy and paste it into the email text box. Try to limit articles to 1500 words or less. The Florida Green pays \$100 per page and \$50 for 1-3 pictures.

 $\boldsymbol{\text{Digital photos}}$  must be a minimum of 5 inches wide at 300 dpi for publication-quality reproduction.

Do not write on the back of prints. Attach a Post-it note with ID information. All slides and photographs should include identification of persons in the picture and the name of the photographer.

Contact Joel D. Jackson, editor for more information. Mail: 6780 Tamarind Circle, Orlando, FL 32819. Phone or fax: 407-248-1971. E-mail: flgm@aol.com.

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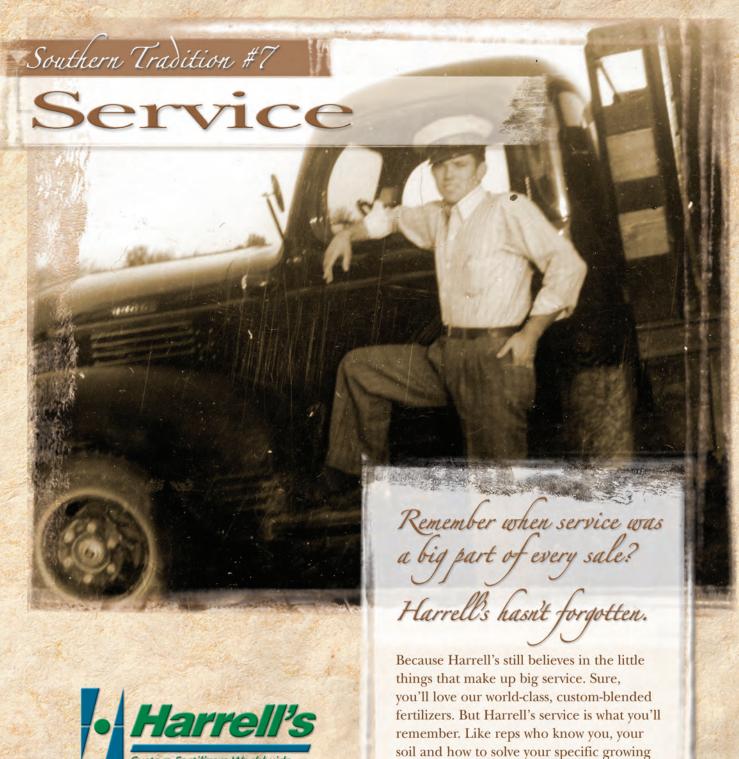
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By Greg Pheneger

Golf course superintendents from around the world will soon be descending upon San Diego in early February. In my previous classes, I sat next to superintendents from all over the globe and have learned to respect just how good I have it only traveling a few hours to get to the conference site. Sure, I'll whine about the flight to San Diego just like I will complain about the drive to Orlando next year.

#### Don't Take Education and Issues For Granted

The last time the show was in Orlando, I met a superintendent from Australia. He didn't complain once about his plane ride from half a world away; he just kept going on and on about the experience and enormous size and attendance of the show.

I go to the convention for the convention for the convention itself, not because it is held in a particular city. I can't tell you anything about the tourist sights of Atlanta after last year's visit. The hotel resembled any other hotel. The seminars and trade show, reconnecting old friends and meeting

new ones take up most of my day. The education is the reason to plan the trip, so don't let the venue detour your focus. I hope to see all of you in San Diego at the FGCSA Reception Feb. 12 in the Wyndham Hotel at Emerald Plaza.

PRESIDENT'S MESSAGE



Greg Pheneger

Locally, seven Florida Turfgrass Association Regional Turf Conferences are being held at various locations around the state. The topics will include herbicide updates, adjuvant and tank mixing, groundwater, and pesticides... and more. All of these are very important topics and the cost is minimal. With all the opportunities available around the state. make an attempt to attend one of the conferences, and if you can't make it, send

someone else who needs to be in the know.

I recently took the Core Turf and Ornamental exam and the instructor briefly discussed the new pesticide license

requirements coming up in 2005. (Yes, I did not have enough credits). Yes, I know that 2005 is still a year away; however, if your license requires renewing in January 2005, you must meet these new requirements. So, plan ahead and research the exact requirements at www.safepesticideuse.com and you will not have to spend all day taking the test. (By the way, I did pass the exam).

I have written about the arsenic issue in previous arti-

cles and the need to be prepared for inquiries from media representatives. Please stay on top of this issue to make certain that the golf industry does not get painted as the bad guy. Remember, we are using a legal chemical and we are applying the product in a legal manner at labeled rates.

The arsenic issue will be with us for awhile. I realize everyone has a very busy schedule this time of year and it is understandable to think that, if it has not affected you yet, it will never impact you. However, all of us are only a phone call away from your local media outlet. So be prepared and discuss the issues at your next board and chapter meetings. Don't assume that everyone already is aware of the issues and ramifications of arsenic. A close friend in the industry always reminds me what "assume" stands for.

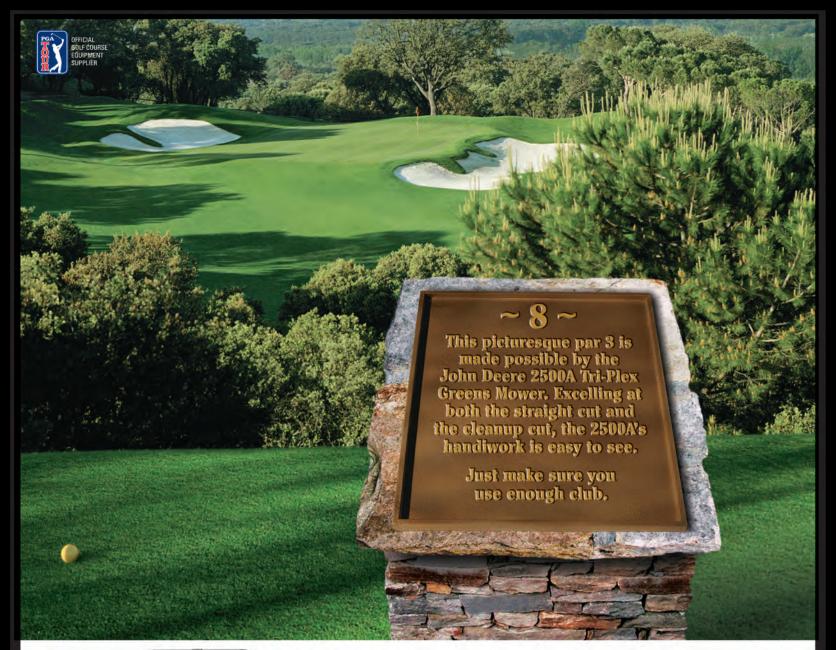
My sincere condolences to Terri Bundschu, whose husband Paul passed away recently. Paul owned Harvest Publishing, which has been the publisher of the Florida Turf Digest for many years. Paul not only was a contractor providing publishing services for the FTGA, but he volunteered his time and efforts to the turf industry. Another friend of our turfgrass industry has passed. Our thoughts and prayers go out to the Bundschu family.

I apologize for not having the opportunity as to visit many chapters around the state this year. Like most of you, I've

The arsenic issue will be with us for awhile. I realize everyone has a very busy schedule this time of year and it is understandable to think that, if it has not affected you yet, it will never impact you. However, all of us are only a phone call away from your local media outlet. So be prepared and discuss the issues at your next board and chapter meetings. Don't assume that everyone already is aware of the issues and ramifications of arsenic.

had a very busy schedule and also had back surgery recently, which has prevented me from traveling pre and post surgery. I have plans to visit as many of the chapters as possible during the first few months of the New Year to meet with as many of you as possible.

Take care and I hope all of you had a safe and wonderful holiday season.





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# Bob Bittner, CGCS - A Man of Many Talents

By Mark Black, CGCS

Some time ago I was asked to write a short bio for Robert R. (Bob) Bittner, superintendent at The Club Pelican Bay here in Naples and recent FGCSA President's Award winner for the Everglades Chapter. I was asked to do this since Bob and I both hit town about the same time way back around 1980. At the time we were both straight out of college, both assistants, both green and both in our first positions of supervisory responsibility. Bob worked for Roger Whitford at The Club Pelican Bay. I worked for Dan Hall at Imperial Golf Club. At the time, Roger and Dan were "seasoned" veterans in the turfgrass industry. As I write this, I realize Bob and I are now the "seasoned" veterans. Ouch! We are now referred to as "The Sod Fathers!" Ouch again!

Bob was born in Elvria, Ohio. He moved to Ft. Myers Beach in 1970 where he played football and finished up his last years of high school at Cypress Lakes. For those of you that don't know Bob, I can tell you he's a pretty big boy. If he weren't, we would still be stuck on that sand bar down in the 10,000 Islands. From high school, Bob went to McNeese State University in Lake Charles, La. where he received his bachelor of science degree in horticulture. While there, he met his future wife MaryJo Foreman. Following college Bob returned to Florida, married MaryJo and began his family of three children. They have two daughters Ashley 18, Lauren 17, and a son, Pierce, who is 10.

Bob began his professional career at The Club Pelican Bay in August of 1979. Pelican Bay was a new Westinghouse Communities development project in Naples. The Club was designed by Arthur Hills. There was no doubt Pelican Bay set a new standard of excellence for golf maintenance in this area. In 1985, Roger decided to move on, and Bob was appointed the golf course superintendent. In 1988, Bob was promoted to Westinghouse director of golf course operations for Southwest Florida. During this time he managed The Club while simultaneously growing in numerous courses throughout the area, including Pelican Nest Golf Club, Gateway Golf Club, Bay Colony and Pelican Marsh. While in this position,



Bob Bittner with his 2003 Presidents Award for Lifetime Service.

Bob relocated his office to Pelicans
Nest in Bonita Springs, where he stayed
and grew in 27 holes designed by Tom
Fazio. During this time he also designed
and oversaw the construction of numerous maintenance facilities, set up shop
and hired all required staff. To say he
was busy was an understatement.
Obviously, Bob has also been associated with two of the most famous golf
course architects of our time, numerous
high end golf courses and the demands
of producing quality golf conditions on
a regular basis.

In 1991, Pelican Bay was purchased by the members and Bob was asked to remain as the director of golf course operations. As we all know in this business, the period of transition from developer ownership to member ownership can, at best, be tricky and often dangerous for our occupation. That was almost 13 years ago and Bob is still there. Not only that, he is working with the same golf professional, John Carroll, who has been there from the beginning as well. I would have to say they have had as fine a superintendent/golf professional relationship as there is in the industry, which is very admirable.

Over the years, Bob has been involved professionally within his occupation. This includes being a GCSAA Member and certified golf course superintendent since 1992; a member of the Florida Golf Course Superintendents Association and the Everglades Chapter of the FGCSA as a board member (1986-87), secretary/treasurer (1987-88) and vice president (1988-89). He served on the FTGA Special Events Committee 1995-98 and 2002 to present. He is also

#### **Bob's Mentors**

**Richard Bittner**, my father, was very detail oriented and demanding person. He was a perfectionist.

**Robert Ternes, my grandfather** - A hard-working farmer who taught

me and my brother the meaning of a hard day's work.

Roger Whitford, CGCS - The man who taught me how to grow turf-grass and how to maintain an

upscale golf course.

Ross Obley - Former president of Westinghouse Communities Inc. He demanded The Club Pelican Bay be the best and gave us the support and resources to do the job.

Dr. Max Brown and Wayne
Wiemkin Both sport many

**Wiemkin** - Both spent many hours helping to determine The Club's soil and fertility requirements.

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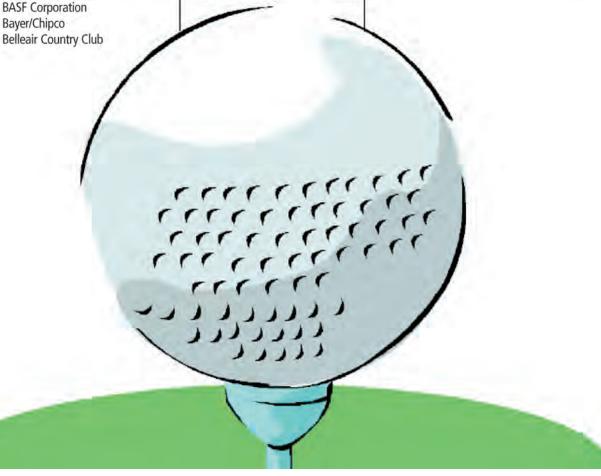
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#### Bob's Mentors, cont'd

Wayne Ragsdale - Wadsworth Golf Construction, taught me more about golf construction then I needed to know

#### Mark Black and Bob Shevlin -

fellow rookie assistant superintendents and later superintendents. We grew up together. (Thanks Bob!)

#### Accomplishments and Goals:

- Managing several golf courses simultaneously for Westinghouse Communities, Inc.
- Hosting PGA Tour golf events.
   Bob hosted three concurrent televised Senior PGA Etna
   Challenge Tournaments from 1988 to 1990.
- "My present goal is to keep a good job until I choose to retire."

#### Greatest Satisfactions in this Business

- Knowing we are providing a superbly maintained golf course each and every day.
- Those rare "special" days when the golf course is absolutely perfect.
- Seeing ex-employees who have become outstanding individuals in the turfgrass industry and still being friends with most of them.

#### Greatest Challenges

Working with such a diverse maintenance team and trying to get employees to take pride in their work. Trying to get golfers to understand how much influence the weather has on the ability to manage fine turfgrass.

#### Work Philosophy

Work hard and be efficient each day but, don't take work home with you.

involved with the Coastal Conservation Association - Naples Chapter board of directors 1996 to present, and he was named Outstanding Volunteer for 2001 and 2003. He is also a U.S. Coast Guard licensed boat captain.

Bob Bittner has a lot going on. He is busy in his occupation and his family responsibilities. On a personal note I will tell you Bob Bittner is many things. He is a professional and a credit to our occupation. He is honest and trustworthy. He is

#### Advice

Be patient: Try to learn from everyone you work with. Everyone has something positive about them.

#### Most Memorable Moments

- During the first year of the Aetna Challenge, Brian Henning of the Senior Tour asked me about employees in Naples. He knew Naples was high end but he asked, "How much do you pay your employees? Your cup cutter is wearing a Rolex watch, a Polo shirt and expensive boots." He did not know that fellow superintendents were helping out during the event.
- Many years ago I got a call one evening regarding an irrigation break on the course. It was dark and Roger and I went out to investigate. We found the leak and while I was closing the isolation valves I forgot one thing... to put the truck in park. Luckily the doors were left open and I was able to hop in before it got too far away.
- At Christmas each year Santa and his two elves (I'll give you one guess as to Santa is) visit the maintenance complex and pass out gifts and encourage a good time. It's a fun time for us all.

#### Hobbies and Interest:

Fishing boating, rod building, fly tying, cooking, golf, pro football and spending as much time in the keys as possible. (I will tell you that Bob has more fishing tackle than Bass Pro Shops!)

#### Community Involvement

Coaches Optimist Soccer Coastal Conservation, Naples Chapter

kindhearted and supportive. He is a knowledgeable golf course superintendent and respected as such. He is usually one of the first people I call on when I have a turf problem that has me stumped. He has never turned his back on me. I can count on him. I honestly don't know what better friend or support system I could have in this industry and I know I speak for many when I say this.

Congratulations Bob, you deserve to be recognized by your friends and peers with this award.

#### Fall Focus: Education, Charities

#### Calusa

Our November meeting was rained out, but we bounced back with our first annual Christmas Charity Tournament at the Kelly Greens G&CC Proceeds from the event went to the Lee County Abuse Counseling Center. We instituted a traveling trophy for the event and Cliff Anderson was the first winner.

We also got together in December for a Christmas Cruise on the Caloosahatchee River. The Heron's Glen team of Jerry Belyea, Charlie Betters and Brian Lee won our 2003 Superintendent-Professional-Supplier event at Heritage Palms G.C.

#### Central Florida

Congratulations to the



NBC's Scoring Line Producer Tammy Proctor poses with members of the Central Florida GCSA at the PGA Father/Son Challenge.

team of Joey Brownsberger, Chris Cartin, Jimmy Lawrence, Joe Ondo and Robert Parmar for winning the FGCSA Championship Team Trophy at Southern Dunes GC. The chapter hosted a GCSAA Regional Seminar on employee safety, the second regional we hosted this year.

Chapter members put on their long johns and jackets to help NBC Sports televise the PGA Father/Son Challenge by acting as TV spotters and scorers at the chilly but perfect Champions Gate resort. The chapter will be holding its annual FTGA Research Fundraiser at the Interlachen CC in January.

#### Everglades

Congratulations to Rudy Geiger, Hole-in-the Wall GC, for becoming a certified golf course superintendent. The chapter hosted a one-day GCSAA Seminar on water quality assessment and management facilitated by Dr. Ronnie Duncan and Mike Huck at the Naples Beach & Golf Club. Sixty attendees, superintendents and vendors, were present from throughout Central and South Florida. Education on water quality, water treatment options, cultural practices, and correctly reading water-sample information were presented. It was the first of many GCSAA seminars that the EGCSA hopes to hold in the Naples area.

We had great turnouts for



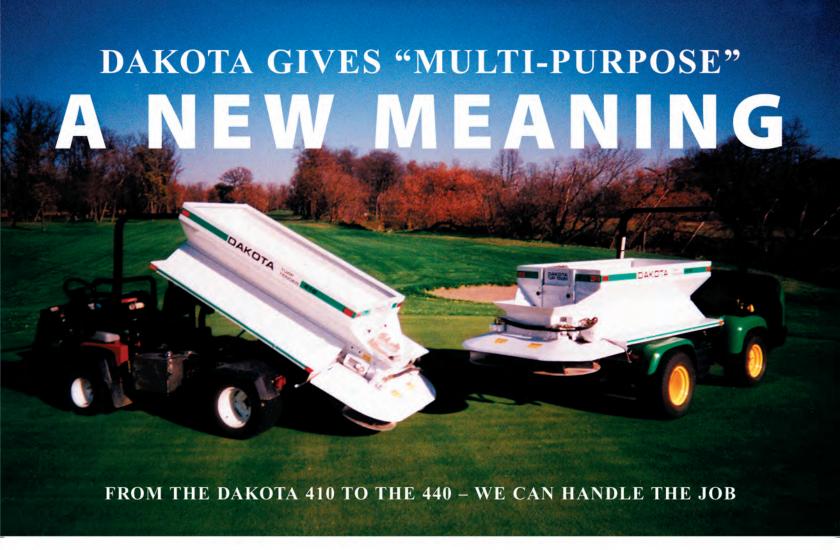
At the FGCSA Fall Board Meeting, the Everglades GCSA answered the call for turf research donations when Matt Taylor, left, presented a check for \$5,000 to FGCSA President Greg Pheneger

our Pro-Superintendent tournament (90) at Palmira GC in Naples, and our first-ever meeting at the Naples National Golf Club. The Children's Home Society will be the recipient of \$4,000 raised at our December golf outing at the LaPlaya GC. Odell Spainhour won the raffle grand prize of a classic 1969 Cadillac convertible. (See sidebar elsewhere in Spotlight)

#### North Florida

We had one of our best meetings ever this November with a presentation by Dr. Michael Healy and a panel discussion with Greg Tharp, Fred Klauk, Daron Murrell and Ron Hill entitled "Ultradwarfs vs. Tifdwarf: Has the jury reached a verdict?" The goal was to discuss common denominators and differences in managing both grass types. We will finish out the year with a December golf tournament at the San Jose CC and are looking forward to kicking off the New Year with an FTGA Regional Seminar in January for our chapter education session.

Paul Hamrick, a longtime member of the NFGCSA was honored for his military service during the



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Korean War on the recent 50th anniversary of the end of that conflict.

Our annual Christmas
Tournament took place at the San Jose
CC. This year the money raised was
donated to an educational trust fund
for the son of Scott Strickland, San
Jose's chemical technician who was
tragically killed in an auto accident.
This tournament will now be an annual fundraiser for a charity of choice by
the club that hosts the tournament.

#### Palm Beach

Steve Bernard won the individual title at the FGCSA Golf Championship and earned a berth on the Florida team competing in the GCSAA golf championship in San Diego next February. The USGA Green Section Regional Seminar at Palm Beach Gardens was a success with more than 150 in attendance. We had a great time watching the Miami Dolphins defeat the Washington Redskins on our 15th Annual Dolphins Game trip. Next we will be anticipating our Christmas golf outing at Jupiter Dunes to check out Travis Lincoln's new paspalum greens.

#### Ridge

The chapter put away the golf clubs for a couple of meetings, but the education was great as we toured the E.R. Jahna sand mine in November, and enjoyed a catered lunch from Sonny's Bar-B-Q. In December we toured the Harrell's Fertilizer plant in Lakeland and had dinner at the Red Barn, and we will have a Christmas Party at the Bartow Municipal G.C. In January, Jeff Brown will host the annual Member/Vendor golf outing at his Lake Region Yacht & Golf Club. The annual Ridge Invitational to be held on Monday, March 1, 2004 at the Grasslands C.C. will be renamed the Jack Harrell, Sr. Memorial Ridge Invitational.

#### Seven Rivers

Soil analysis, equipment leasing and Todd Lowe's USGA Florida Green Section update were the topics of our fall chapter meetings. We have donated funds to help sponsor two FTGA Regional Seminars in January, and our board is discussing several new research projects that we might help to fund using reserves in our Envirotron Research account. Planning has already begun on the 2004 Envirotron Classic to be held in

April at World Woods.

#### South Florida

The South Florida Chapter held its annual fundraiser for the Florida chapter of the Missing & Exploited Children's Foundation at the up to give a talk on Paspalum growin and management. In January, the chapter will celebrate its annual Vendor Appreciation Day with an equipment exposition, golf outing and barbeque. There will be no meeting in February either due to



Nancy McBride (center) holds a check for \$18,000 from the South Florida GCSA for the Florida Chapter of the National Foundation for Missing and Exploited Children.

Colony West CC. As emcee Bob Klitz, CGCS presented Nancy McBride, Director of the Florida Chapter, with a check for \$18,000 this year, he pledged the event has set a goal of \$20,000 next year for the 20th anniversary of the fundraiser. McBride thanked the audience for their donations over the years that are nearing the \$250,000 mark.

In January, the Crandon
Park GC will host the annual Bring
Your Pro Day meeting and golf outing.
There will be a panel discussion on prosuperintendent relations. Mark your calendars now - SFGCSA/IFAS Turf
Expo, March 18, 2004 at the Ft.
Lauderdale Research & Education
Center.

#### Suncoast

Chapter co-founder and long time chapter newsletter editor, Jim Svabek, was presented with the FGCSA President's Award for Lifetime service upon his recent retirement from the Bradenton CC. Retirement doesn't mean a rocking chair: Jim is now giving Bob Gwodz a hand over at Sara Bay. You can't just quit cold turkey when you've been doing this job as long as he has.

The chapter did not have a meeting in October due to the demands of overseeding, but in November, Dr. Lee Berndt of Edison Community College came many members attending the GCSAA Conference and Show in San Diego.

#### Treasure Coast

Congratulations to Bob Markut, PGA GC, on attaining his certified golf course superintendent classification. Our 2004 Blue Pearl tournament which supports environmental projects at schools and in the community raised \$20,000 this year. The event was highlighted by an appearance by Greg Norman who had some very nice things to say about the GCSAA and superintendents in general and the work that we do. We really appreciated him taking time out of his busy schedule to spend some time with us and for the use of the Medalist Club for our event.

Our board has approved a motion to make all superintendents responsible for maintaining a legal USGA handicap. We will have a sixmonth grace period and then all members will be required to show proof of a valid handicap to play with strokes in chapter events.

Our annual Christmas
Party and a joint meeting and golf
outing with the Palm Beach GCSA at
the Jupiter Island Club will wrap up
2003 for us.

#### West Coast

We had another successful Bud Quandt Tournament in October at



Florida Green Editor Joel Jackson presented Coastal Plains GCSA External Vice President Jeff Heggen with a framed copy of the cover of the Winter 2003 issue at the Fall Board Meeting in Orlando.

a new venue this year at Tampa Palms GC, raising about \$9,000 for turf research and scholarships. Some of the proceeds will also go to local charities.

Frank Hardy of Florida
Potting Soils presented a program at our
November meeting at Bloomingdale
GC on topdressing mixes and the
importance of particle size in maintaining good greens percolation. We will
hold our Vendor Appreciation Day and
Cook Out in December with an equipment demonstration at the University of
South Florida baseball fields.

#### Florida GCSA

Controversy over reports of total arsenic levels found in some water and soil samples on golf courses sparked four or five newspaper articles and one TV report in southeast and southwest Florida. The FGCSA has been working with state agencies and other stakeholders to scientifically identify the sources of the arsenic to determine if there are any links to normal, legal turf maintenance practices.

The FGCSA Executive
Council and Government Relations
Committee are working with our lobbyist Mike Goldie to set up meetings
with Florida legislators during committee work days in Tallahassee.
Topics to be discussed: water issues,
pesticide use and regulations, urban
green space, economic impact, and
research funding in the budget.

The FGCSA Reception at the GCSAA Conference and Show will be on Thursday, Feb. 12 at the Wyndham Hotel at Emerald Plaza. 12th Annual Lake City Community College Endowment Golf Tournament

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#### Raptor Bay GC Hosts LCCC Alumni Event

By moving the LCCC Endowment Tournament from January to November two years ago, the committee avoided the frost delays that plagued the event several years in a row. In fact it was a downright warm November day at the Raptor Bay Golf



Jay Smith and Mike "The Hammer" Hamilton won the Low Net division. Photo by Joel Jackson.

Course for this year's event. With host Superintendent Jason Brod and his staff grooming the golf course to perfection and General Manager Ed Weber taking care of the hospitality, it was a great day of golf and networking for everyone. Next year the event will move to Marco Island to showcase WCI's new Hammock Bay Golf & Country Club. In fact, WCI courses have played host to most of the tour-



Tom Caliguire and Jim Glase captured top Low Gross honors. Photo by Joel Jackson.

naments over the 12-year history of the fundraiser.

This event, originated by the LCCC Alumni Association is designed to provide supplemental funding for the Lake City Community College Golf Operations program to offset budget cuts made by the state. Thanks to the hard work of the volunteers, the generosity of the sponsors and participation of the players this tournament has donated more than \$110,000 including this year's event.

Even if your golf game lets you down on tournament day, the prize-packed raffle offers plenty of



Accommodations for the event were provided by Hyatt Regency Hotel seen here overlooking Raptor Bay's 6th hole. Photo by Joel Jackson.



The hard-working 2004 LCCC Committee: (from left) Ed Weber, Scott Hamm, Jason Brod, Roy Bates, Glen Zakany, John Peirsol, David Fry, John Johnson, Odell Spainhour, Jim Lones and Mike Smith. Photo by Joel Jackson.

incentive to show up and buy tickets. Highlighted by resort weekend stays at such places as The Broadmoor in Colorado, The Greenbrier in West Virginia and the Sheraton at Fisherman's Wharf in San Francisco there were numerous Florida resorts donating weekends from Amelia Island to Marco Island and points in between. The total raffle package was valued at more than \$16,000.

Raptor Bay's General Manager Ed Weber and Superintendent Jason Brod teamed up to provide superb hospitality and fantastic playing conditions to help make the tournament a smashing success.

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The Everglades GCSA got into the Christmas spirit early this year when they donated \$4,000 to the Children's Home Society at their annual chapter Christmas tournament. From left Mark Shoemake, assistant superintendent, LaPlaya Golf Club; Greg Maze, CGCS, Twin Eagles Golf & CC; Odell Spainhour; Energized Water Solutions, "Cadillac Winner;" Kyle D. Sweet, EGCSA president, The Sanctuary Golf Club; Roseann Albertario, Children's Home Society of Florida, executive director; Wayne Kappauf, CGCS, EGCSA golf committee chairman, Island CC; Brian Beckner, superintendent, LaPlaya Golf Club.

#### It Was a Good Friday

On Friday, Dec. 12, the Everglades Golf Course Superintendents Association hosted its third annual Members-Only Christmas Tournament and Gift Drive to benefit the Children's Home Society of Southwest Florida. Brian Beckner, golf course superintendent and his staff hosted the event at the newly completed LaPlaya Golf Club in Naples.

A full field of 124
golfers provided gift donations at the
registration table filling two SUVs
driven away by Children's Home
Society volunteers. The golfers also
participated in purchasing raffle tickets for a 1969 Cadillac Coupe de

Ville. Throughout November and

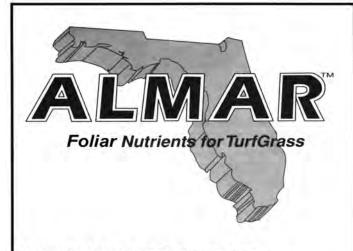
December a total of 800 Cadillac raffle tickets were sold raising \$4,000 in donation money; all proceeds going to benefit the Children's Home Society of Florida, Southwest Florida Division. Odell Spainhour of Energized Water Solutions was the lucky winner of the 1969 Cadillac.

Southwest Florida's local NBC affiliate, WBBH Channel 2, covered the event on the 6 p.m. news, highlighting the association's involvement with the Children's Home Society and showing off some golf play. The news was just in time to be seen by all golfing participants at dinner in the LaPlaya clubhouse.

With over \$4,000 in golfer awards and raffle prizes given out after golf, it was a great time for everyone. The event's great prizes were possible due to an outpouring of generous sponsorships form area sales associates.

To close the night, EGCSA presented a \$4,000 check to Roseann Albertario, executive director of the Children's Home Society of Florida.

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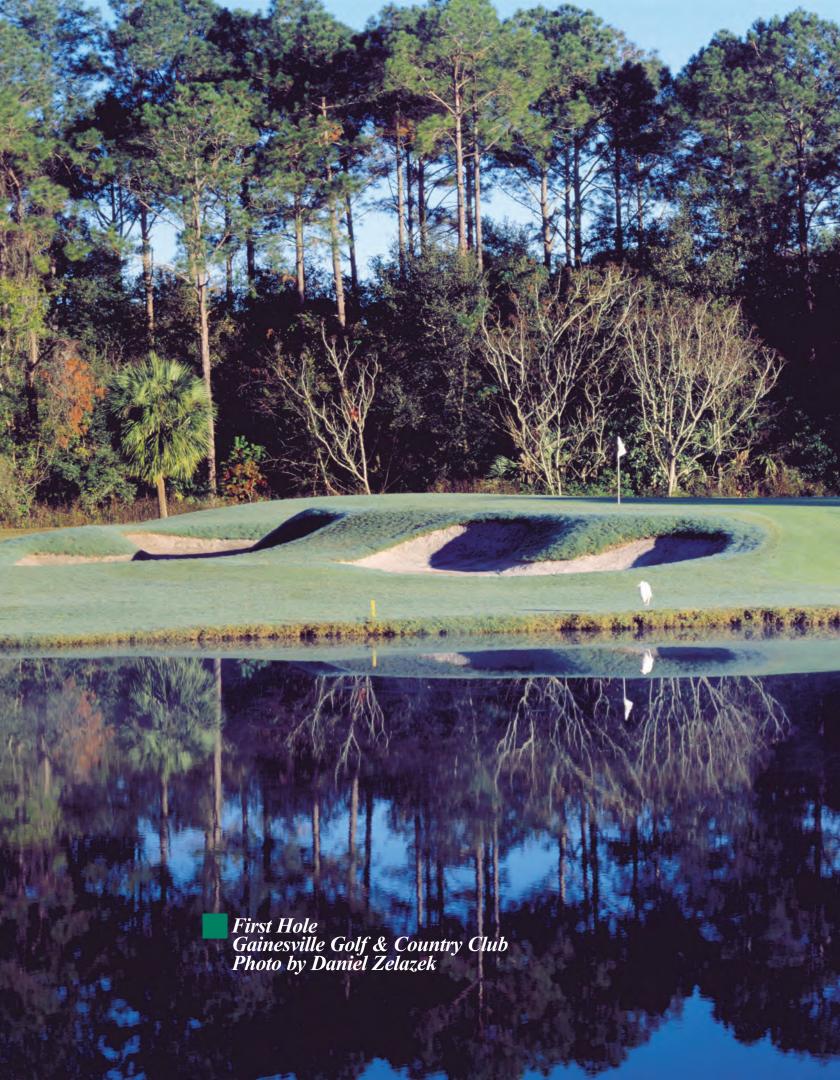
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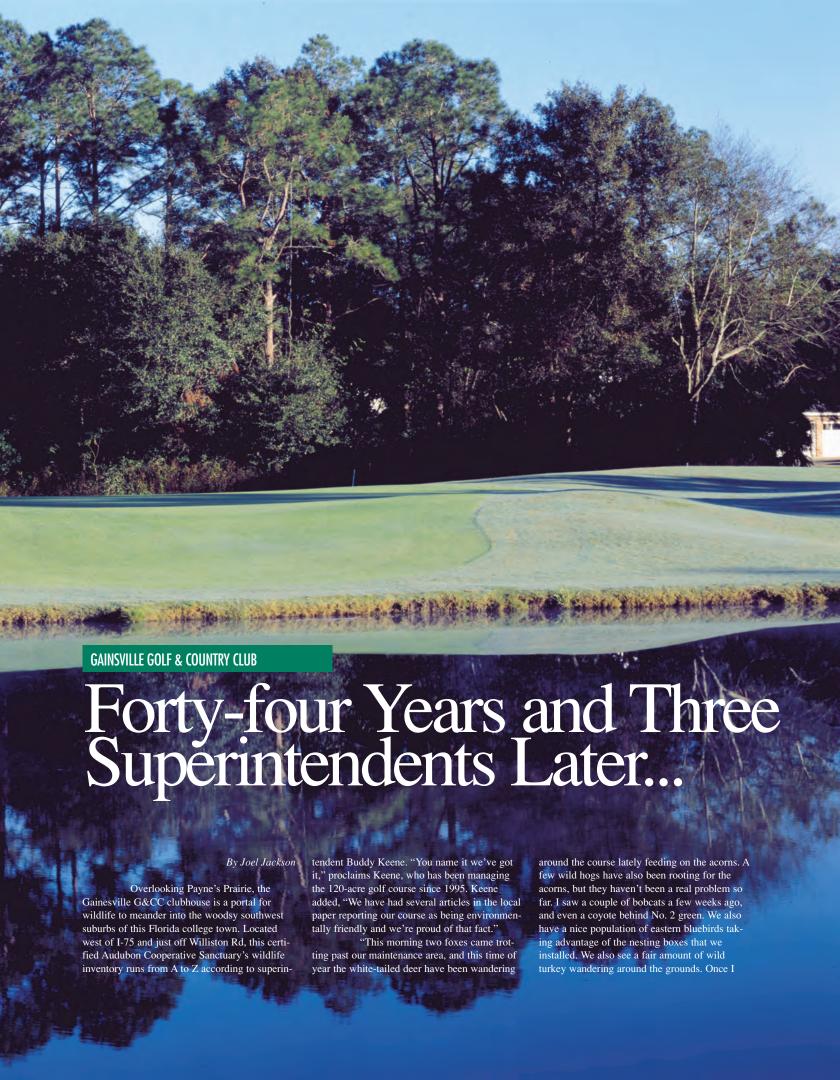
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Jensen Beach, Florida 772-692-1221 cell: 772-215-1819 picked up a baby alligator in one of our ponds and the momma gator wasn't too happy with me. I put junior down and made a strategic and hasty retreat. It was a little hairy there for a moment."

Keene, an avid outdoorsman, replaced the late, legendary Jeff Hayden in 1995 as only the third superintendent in the 44-year history of the course. Hayden took over for Charles Brasington, the original pro-superintendent in 1988, and groomed Keene as his replacement. Says Keene, "Jeff was an excellent mentor, a good friend, and almost like a big brother or father figure to me." The longevity of these superintendents has provided a stable yet progressive atmosphere at the club for getting things done and providing good playing conditions for the members over the years.

Recently, the club hosted three professional golf events, two of which were televised: the Nike Tour and subsequently the Buy.com Tour for developing PGA Tour players. Keene said, "I'd like to host another event like that. I love that kind of pressure to perform. I respond better to pressure. Tell me what you want and I can do it. I don't like it when I have to guess or wonder what you want."

The location of the Gainesville G&CC has its own built-in demands for growing high-quality turfgrass that meets the expectations of avid golfers. The mature trees in the

area cast long shadows and require Keene and company to find ways to manage the shade, a natural enemy to healthy turfgrass. The mostly clay-like soils drain slowly, and so an ongoing drainage program is in place to solve wet spots that crop up around the low-lying areas on the course. And the last major challenge is from isolated but vigorous populations of nematodes in the few sandy fairway areas and on the sand-based greens.

Because of the proximity of the Payne's Prairie Preserve, Keene takes a very proactive IPM approach on the course. Says Keene, "We have recorded lance nematode counts of over 1200 per cc of soil in some green samples, and so we have worked with the university nematologists over the years to finds ways to control them. I generally try to grow the turf out of the stress and have used Nemacur sparingly only when they don't respond to extra fertility and watering. We have used some of the NeoTec product on the greens and have noticed some better transitions in the spring on otherwise weak greens."

In his overall pest-management program, Keene treats all curative applications of chemicals with a spot-treatment approach. The only large-scale applications are with Barricade and Ronstar pre-emergent herbicides applied in the fall and spring to prevent ryegrass or crabgrass and goosegrass germination, thus reducing



A flawless putting green; the perfect place to practice. Photo by Daniel Zelazek.

the total amount of herbicides needing to be applied to the course.

But pest problems take a back seat to dealing with shade issues. People revere trees, those majestic wind-whispering giants that dwarf our homes and sometimes our golf courses. In the right locations, trees can accent and define a hole and create a myriad decisions in strategically playing a hole. But, should the designer tuck a green into a shady glen or a short-sighted green committee plant trees which seem innocent until they grow and spread, the golf turf and playing conditions will eventually suffer.

It is a simple rule of nature - turfgrass

The mature trees in the area cast long shadows and require Keene and company to find ways to manage the shade, a natural enemy to healthy turfgrass. The mostly clay-like soils drain slowly, and so an ongoing drainage program is in place to solve wet spots that crop up around the low-lying areas on the course. And the last major challenge is from isolated but vigorous populations of nematodes in the few sandy fairway areas and on the sand-based greens.

needs and thrives on sunlight. It does not do well in shade and when you mow it down to 1/8-inch putting-green height, it is sheer folly to expect anything except thin turf, algae and bare ground.

Superintendents and agronomists have been trying to educate golfers about this undeniable fact, but the love of trees is difficult to overcome.

It is belatedly satisfying to finally hear golfers admit that turf managers were right after all when a tree is either removed or aggressively pruned to allow sunlight to reach the turf and the grass rebounds and fills in the bare spots and becomes a playable putting surface once again. Such is the ongoing discussion at many golf courses around the country and superintendents like Keene patiently seek the understanding of the golfers as they deal with shaded turf areas.

Two of Keene's toughest challenges are a couple of tees that get very little sunlight during certain times of the year. Keene said, "We have sodded one of the tees with zoysiagrass, which tolerates shade better than bermudagrass, and it has done better. It still gets a little thin, but it is easier to bring back. The biggest problem is that the bermudagrass can't compete with the overseeded ryegrass and we end up with big bare areas in the spring during transition. We will likely plant zoysia on the other tee as well and see how it does."

On the couple of greens impacted by shade, Keene has been able to either prune or remove the trees causing the most shade problems, but it is an ongoing issue as the limbs grow back and fill in or other trees grow taller and spread.

The Gainesville G&CC turfgrass palette is an interesting mix of old and new. Most of the fairways are mainly Ormond bermuda-



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Early morning shadows across the 10th green. Photo by Daniel Zelazek.

grass, one of the oldest varieties used on golf courses. There are a couple of Tifway 419 and Greg Norman GN1 fairways as well. The greens are 11-year old Tifdwarf with some of the typical off-type patches in them.

The course installed a TifEagle putting green and chipping green three years ago to evaluate the ultradwarf variety for possible future established a workable routine that keeps the use. Keene says that the differences in manage-

ment practices between Tifdwarf and TifEagle makes for extra work in having different mowing and verticutting heights and schedules. Clubs really need to do their homework on these new varieties. There were a lot of problems cropping up on ultradwarfs during this rainy summer.

On holes 1-18 however, Keene has greens in great shape. Keene says, "We aerify three times a year in March, June and August and in the summer growing season we verticut three or four times, and during spring transition we verticut lightly on a weekly basis until the bermudagrass fills in. We topdress every couple of weeks during the summer, which allows us to keep the speeds faster without having to mow too low. We must be doing something right as our most recent soil tests came back showing a percolation rate

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#### **Fun Facts**

Here are some things you may not know about our cover story superintendent

- 1. Car: Dodge Ram 4x4 off road. "Can't dodge
- The last good movie I saw: "Unforgiven"
- 3. I stay home to watch: The Weather Channel,
- Fox News, and The O'Reilly Factor
- 4. The book I've been reading: The Art of War
- Favorite meal: Steak and lobster
- Favorite performers: Toby Keith, Hank Williams, Jr., and George Wallace, the comedian
- 7. Prized possessions: My dog "Bear" and my dad's military gun collection
- 8. **Personal Heroes**: My dad, John Wayne for what his movie characters stood for, and Charles Bronson
- 9. Nobody knows that I: Work out three times a week with former Gator star center Zac Zedalis.
- 10. I'm better than anyone else when it comes to: Seeing through the B.S.
- 11. If I could do it over: I would have played college football
- 12. I'd give anything to meet: John Wayne, Clint Eastwood, George Bush, Toby Keith and Hank Williams, Jr.
- 13. My Fantasy is: To race trucks across the desert
- 14. The one thing I can't stand: Incompetent indi-
- 15. If I could change one thing about myself: I would be more patient
- 16. My most irrational act: Can't think of any. I like to think things out before acting
- 17. My most humbling experience: Playing golf
- 18. The words that best describe me: Stubborn, honest, loyal, dedicated, relentless, caring, fun-



Buddy says, "Don't worry, boss. The greens aren't brown; that's just the new seed on the ground."



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Practice made easy. A shag bag for collecting balls hangs from a hook on the edge of the practice green. Photo by Joel Jackson.

of 23.6 inches per hour. Tees and fairways are aerified in the spring and late fall and we verticut the fairways once a year."

To communicate the maintenance schedule and progress of projects and course conditions, Keene writes several articles in the club's monthly newsletter. One article is usually just the timing and dates of major maintenance activities and what to expect condition-wise so there are no surprises. The other article is on the what, why and how things are done on the course.

Keene also posts key information on bulletin boards in the clubhouse in case people miss the information in the newsletter. Not content with only the written word, Keene makes it a point to visit the clubhouse during lunchtime to be around and be available for questions. He also makes sure he is seen on the course and visits with the regular golfers.

Keene says, "I try to give the members information in advance and let them know directly what's going on. It has helped to dispel rumors and questions and keep them informed about the progress on the golf course. I think every superintendent should at least write a regular report or article and if there are no newsletters then at least make regular postings on a bulletin board at the clubhouse. The main thing is to stay in contact with your members."

One of the key tools on a modern golf course is the irrigation system and Keene has two things going for him. One is James Wiley, a 40-year veteran and irrigation technician. Keene says, "James has seen it all and can do it all. We take very good care of our irrigation system."

And second is a radio-controlled irrigation system that was installed in 1998. Keene continued, "We edge all the heads once a month





If members don't pick up a scorecard at the pro shop, they can get one at the mail box on the first tee. Photo by Joel Jackson.



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22 THE FLORIDA GREEN

#### Charles "Buddy" Keene

Originally from: Clermont

Family: Single

Education: Manatee Community College (business and real estate courses); 1995 Lake City Community College - AS degree in golf course operations

**Employment history:** 1984-88 all crew positions River Wilderness GC; 1988-93 Manatee County Parks and Recreation Dept on municipal courses and athletic fields; 1993 to present Gainesville



G&CC as crew member, assistant superintendent and superintendent since 1995.

Professional affiliations and awards: FTGA 1995 to present - board member and Event Committee chairman, Membership Committee co-chair; FGCSA since 1995, current board member and Education chairman; GCSAA since 1995, currently working on certified superintendent status.

How did you get into the business: Took a job at the River Wilderness Club out of high school.

Mentors: Mike Miles and Tim Cann hired me at River Wilderness and taught me a lot. Gary McDougall with Manatee County encouraged me to go to Lake City and get my degree. Without his advice and encouragement I wouldn't be here today. Last but not least, Jeff Hayden. He did so much for

**Goals**: My immediate goal is to complete my CGCS certification. I'd also like to learn how to pilot a helicopter.

Philosophy of work/Advice: Always be honest with people that way you won't have to worry about what you told someone. Give people your best and more than they expect. Don't take your work home with you. Learn to relax and let it go. You can't please

everyone. Be yourself. Give back to your profession. Join and participate. Support research. Do something. Memorable moments: I sent a new employee out to mow the clean-up ring on the greens. I showed him how to operate the mower and told him to mow greens 1-18. I set him up with a vehicle, trailer and extra gas and sent him to No. 1. I stopped by a few minutes later and he was doing a fine job. Three hours later he showed up at the shop really sweating and looking for more gas. His trailer was piled high with clippings. I said, "Boy you sure cut a lot of grass, and you're looking for more gas? Aren't you done?" He said, no, he was only on No. 8 and there were more than 18 greens. I began to get worried then, and we went out to see what he was mowing. Not only had he done the clean-up ring, he was also mowing all the tees. It looked pretty bad for two weeks, but I had to laugh. It was my fault for not making sure he really knew what to do, and I learned a valuable lesson about assuming things.

Hobbies/Interests: Wide variety of things I like to do: Hiking, camping, hunting, fishing, scuba diving and spear fishing, travel, and oh yeah, some golf. I am a member of Ducks Unlimited, which is a conservation organization.

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#### **Gainesville Golf & Country Club**

**Location:** Gainesville **Ownership:** Members **Playing policy:** Private

The Numbers: 18 holes. 6,938 yards. Par 72.

Course Rating 73.5/Slope 135.

Designed by: George Cobb. Opened in 1963.

Management: Club President John Galm; Club
Manager Dana Saad; Green Chairman Dale Smith;
Golf Course Superintendent Charles "Buddy"
Keene

Major renovations: All greens and some tees redesigned by McCumber Golf in 1992. New Hunter irrigation system in 1998. Ongoing projects: Drainage, drainage, drainage. Future projects: New maintenance facility hopefully.

Total acreage under maintenance: 120 Greens: TifDwarf. Avg. Size: 6,222 sq.ft. Total: 3 acres. HOC: .150" - .185" depending on season and weather. Overseeding: Poa trivialis @ 9-12 lbs/1,000 sq. ft. Green speed goals: 9-9.5. TifEagle putting and chipping greens for evaluation.

Tees: Ormond/Tifway 419 Bermudagrass - 2.5

acres. HOC: .500". Overseeding: 3-way Ryegrass blend @ 400 lbs/Acre.

**Fairways:** Ormond/419 Tifway/GN-1 Bermudagrass - 32 acres. HOC: .500". Overseeding 3-way Ryegrass blend @ 400 lbs/Acre.

**Roughs:** Ormond Bermudagrass - 90 acres. HOC: 1.25" - 1.50". Overseeded only when hosting Nike and Buy.com tour events.

**Bunkers**: 60, 1.21 acres. Sand type: Standard 37M. Machine raked 2x week with Toro Sand Pro. Hand raked as needed rest of the time.

Native areas: 70 acres of native forest and wetlands bordering golf course. Clubhouse overlooks Payne's Prairie Reserve. Five crushed coquina shell waste areas (.25 acres) in dense shade areas under trees. Waterways/Lakes: Five lakes, 3.22 acres. Aquatic weeds spot treated as needed by outside contractor. Irrigation: VFD pump station. Source: 3 deep wells permitted by St. Johns River Water Management District. Hunter Legacy radio controlled/computerized control system. 675 Hunter heads-85'-95' spacing. Fertigation system. Watering restrictions: No

watering between 10 a.m. and 4 p.m. Variances allowed per EPA/Product label directions.

**Total staff including superintendent:** 14 full time and 2 part-time. 600 hours per week. 50 hours overtime. Sometimes it's not enough. Project work done in the winter when the grass growth slows down a little.

Leadership: First Assistant Superintendent Lloyd Brown; Second Assistant Adam Strosser; Equipment Technician T. J. Poore; Irrigation Technician James Wiley - 40 year veteran; Administrative Assistant Diane Delzell. Equipment operators Ralph Durant and Willie Cobb - 30-year veterans.

Communications: Monthly club newsletter article - original articles as well as sharing from USGA Green Section and trade magazines. Monthly green committee and staff meetings. Interact daily with members in grill room and on the course.

**Environment**: Fully certified Audubon Cooperative Sanctuary. Wildlife inventory ranges from armadillos to waterfowl. You name it. We have it.



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Walking golfers can repair their divots on the course by picking up a handy clip-on sand bottle at the 1st and 10th tees. Photo by Joel Jackson.

and every Monday we check the operation of the heads and zones. We can't do them all in one day, but every Monday we are working our way through the course to make sure everything is operating properly."

The day that I rode the course for this story interview, the winter overseeding had just been put down within the past 48 hours. Keene said, "We only seed tees, greens and fairways. We did overseed the roughs three times when we hosted the pro tournaments. We don't bury the seed under a lot of sand. Our verticutting program going into the fall keeps the turf canopy open for good seed-to-soil contact and we do topdress a week before we seed."

Other than the golden brown color on the greens from the seed, the course was neat and clean in appearance, a testament to the hard work, organization and dedication of the crew. Two other crew members had 30 years with the club and several others were going on ten years.

The staff is made up of 14 fulltime and two part-time people including the superintendent. One half the crew works three hours overtime on Saturdays and Sundays. Keene's office assistant, Diane Delzell, works from 6 a.m. until noon and he says she has been a god-send in helping with phone calls and paperwork. He wished every superintend could have someone like her to ease the administrative load. The other part-timer does edging, trimming and mowing work on the course and gets about 25 hours a week. Keene says sometimes there's just so much to do and not enough people to cover all the bases.

The Gainesville G&CC's stable work environment over the history of the club has allowed superintendents to operate at a good comfort level that has allowed them in return to provide the club members with excellent playing conditions. After 44 years of success, what's next?

Keene says, "The club has talked

Most of the fairways are mainly Ormond bermudagrass, one of the oldest varieties used on golf courses. There are a couple of Tifway 419 and Greg Norman GN1 fairways as well. The greens are 11-year old Tifdwarf with some of the typical off-type patches in them.



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Plenty of sunshine and plenty of bunkers at the 11th and 15th double green complex. Photo by Daniel Zelazek.

about a possible upgrade of our maintenance facility. That would be good investment when you consider all the changes in environmental and OSHA regulations that have come along since 1960. As our equipment gets more sophisticated and expensive, our need to store it and service it properly also increases."

Keene and his staff challenge themselves each year to improve some aspect of the golf course. It keeps them sharp and prevents falling into a boring routine. Says Keene, "The golf course may look the same to the casual observer, but it is a living, growing thing that changes all the time. Sometimes it's just normal growth and maturity, and other times it is a reaction from weather stresses placed on the turf by Mother Nature. Our job is to diagnose the situation and react to the conditions."

Sometimes clubs don't fully realize the importance and benefit of having a long tenured

superintendent who has learned the in and outs of a piece of property. It takes time to learn all its wet and dry spots and how the turf responds to local weather trends and how to predict and how to modify practices to keep the turf as playable as possible under the situation. Superintendents like Keene and others truly appreciate clubs that learn to trust and respect their knowledge and abilities to manage the golf course, the most important asset of a club.

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A good healthy stand of Poa trivialis takes root on the 2nd green. Photo by Daniel Zelazek.

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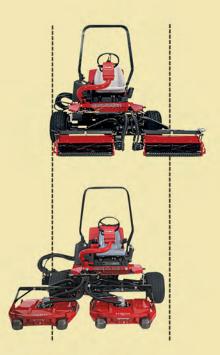
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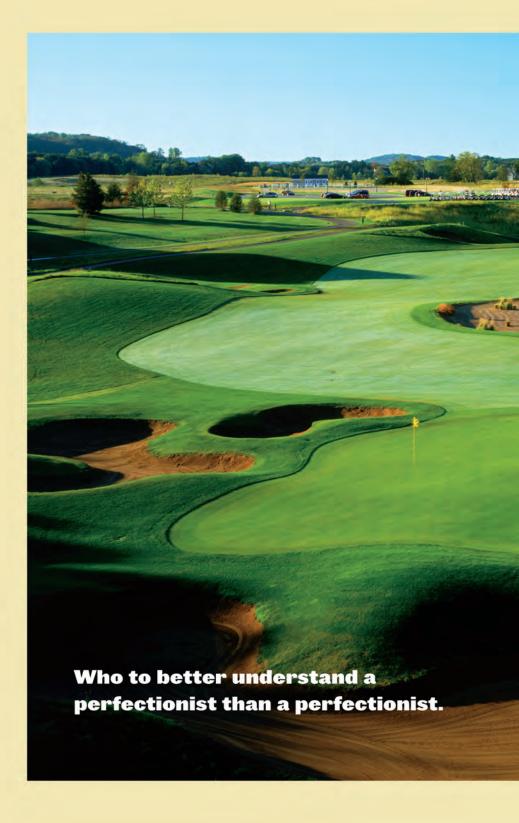
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# In 2004 I Resolve... To Become A Better Golf Course Superintendent

Edited by Joel Jackson, CGCS

As I read the various trade publications and chapter newsletters over the years, I clip and save articles that I think are worth sharing. Since this is the time of year we make New Year's resolutions to get organized and overcome or resistance to changing ourselves and our operations for the better, I pulled out several articles that I thought might be helpful. The following is a collection of articles designed to help you make improvements in your personal growth and development as a golf course superintendent and provide some helpful hints in self promotion and communications.

#### Things That Affect an Image

From "Enhancing Your Value as a Professional Golf Course Superintendent," presented by GCSAA

Personal appearance: Are your clothes clean, neat, and well fitting? Are they appropriate for the occasion? Are your shoes shined, is your hair neatly trimmed? Are your mustache and beard clean and neat? Is your personal vehicle clean and well maintained? And is your home and lawn well manicured?

**Staff appearance:** Is your staff well organized? Does your staff know its role? Are staff work areas clean, neat and well organized? Is your staff well informed of the staff organization? Does your staff wear a uniform or appropriate clothing that distinguishes it from other employees of your club? And is your staff well informed of the role of public relations?

Work appearance: Is your maintenance facility neat, well organized, well maintained and generally clean? Is your office clean, neat and well maintained? Is the staff bulletin board well organized and up-to-date? Are emergency evacuation plans conspicuously posted? Are neat, well-maintained and appropriate signs displayed? Are work vehicles clean and well maintained? Are organization charts posted? And are grounds, flowers and shrubs adjacent to your facility well cared for?

Other areas in which a golf course superintendent's image can be affected and improved include:

- Attitude
- Job performance or results
- Communications: expressing oneself orally and in writing

- Job knowledge: overall knowledge of the profession
- · Good record keeping
- · Speaking ability
- · Presentation of reports
- · Well organized and well written plans
- · Confidence in abilities
- · Promptness and timeliness
- Cooperativeness
- Friendliness
- Flexibility
- · Willingness
- · Decisiveness
- Efficiency
- Use of good judgment and common sense
- · A sense of humor
- · Showing respect and appreciation of others
- Supportive of other club officials and employees
- Understanding
- · Ability to handle unexpected situations
- · Accessibility to golfers and various other publics
- · Participation in civic and community activities
- Participation in local golf course superintendent associations activities
- · Participation in GCSAA activities
- · Relationships with local media
- Working relationships with staff and others at club
- Education (Continuing education)
- · Certification (Class A PDI)
- · The condition and beauty of your golf course

In order for the golf course superintendent and golf course superintendent profession to continue to improve its image as "professional," attention to these actions and behaviors will be required from each and every one. Strive to be the best that you can be in all aspects of the golf course superintendent profession.

Reprinted with permission from Georgia GCSA's "Through the Green."

Editor: That list of image factors might be daunting on the first look, but like any undertaking, if you break it down into smaller chunks it's easier to undertake and accomplish. This next article provides some step-by-step actions you can take to change old behaviors. Superintendents are always hard working, but often weak in the area of self-promotion, but in today's world you'd better be tooting your horn in a positive and proactive way to insure your success.

#### The Power of Self Promotion: From the CGCS Owner's Manual Published by the GCSAA

You know that keeping your job is up to you. You dress appropriately. You speak clearly and are easily understood. You've been published. You continue to learn.

So what else can you do?

Set up and execute a plan to gain greater awareness of you as a person and the job you do.

Here are strategies that successful people in businesses across the world have used to promote themselves. They can work for you, too!

#### 20 Strategies to Success

- Take responsibility for your own mistakes and for those of your subordinates. Blaming others, however justifiable, makes you look smallminded and weak. Earn a reputation as a "fixer" of errors, someone who can snap back from setbacks and learn from mistakes.
- Acquire skills beyond those needed for your own job so that you help colleagues solve their problems. Offer to cooperate on projects, but do it without seeming pushy or threatening. Once you are seen as a team player and not a threat, you'll get new opportunities to shine.
- Set goals for yourself in public. Intelligent risktaking is an integral part of savvy career man agement. You will be noticed if you fail, but you will be noticed even more if you succeed.
- Don't shy away from your critics. Look for ways to get your message across.
- Associate yourself with those of status, those who are credible opinion leaders.
- If you feel you lack personal charisma, imitate someone who has it.
- Get along with others. Be a team player, whether you are in a leadership or team-member role.
- Control your reactions. The champions in business are able to shrug off distressing situations and regroup emotionally - that is one important reason why they are successful.
- 9. Be honest. Build an ethical business reputation. Exhibit good values.
- 10. Make others look good at every opportunity.
- 11. Roll up your sleeves. Never be afraid to do what it takes to get the job done.
- Set and maintain high expectations for all who work with you. Encourage others to do their best.

THE FLORIDA GREEN

- 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.
- 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



explain what it means and how it relates to what we do ships with my members. 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 sugus up to and 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

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 relation-

Reprinted with permission from the North Texas News

### Success Is Not An Accident - Plan For It!

By Chris Hartwiger and Patrick O'Brien

Successful golf courses do not happen by gestions from all golfers. Some might think this opens 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 cre-This formula is my personal technique for ate 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.

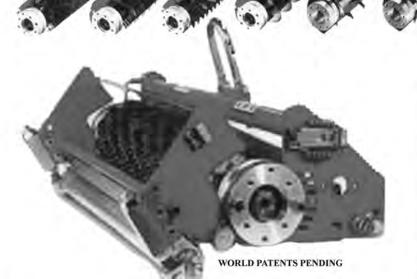
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-- Walter Owsiany, CGCS The Vineyards of Naples Naples, Florida

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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 woodsy, 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.

3.4 The florida green



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 sportsplaying 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 on 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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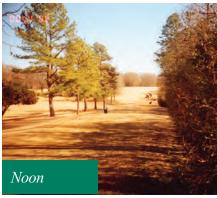
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## Time Lapse Images Shed Light on Shade







zoysiagrass. I decided to take pictures of the area at regular intervals throughout the day,



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.

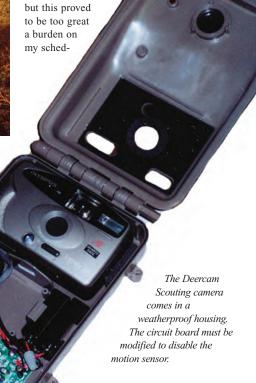
Effectively communicating to club officials that a tree or trees need to be removed in order to consistently maintain healthy turfgrass is easier with clear visual evidence. Pictures have helped me to illustrate the quanti-



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 resodded several times over the last few years, most recently with



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#### HANDS ON

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 Undate** 

## 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 Floridagrown 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 underutilized, 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 sin-

gle trunk and palmately compound leaves.

Common Name: Pelican Flower Botanical Name: Aristolochia grandiflora

Hardiness: Zones 8b-11

Mature Height and Spread: A climbing vine,



Pelican Flower

30' high, or as tall and wide as the support

Classification: Subtropical flowering vine, root hardy in zone 9

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

fence. **Characteristics:** A very strong grower with large fantasical-

ly-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. with high clay soils and poor surface drainage can cause problems, such as decline due to standing water. All of these problems can be avoided with better construction and renovation building techniques.

#### Water Quality

Do not neglect water quality. If turfgrass performance is marginal with an older bermudagrass variety, do not expect anything better with the ultradwarfs. Take the time to address water quality.

#### Overseeding

Like it or not, overseeding competes with and shades a bermudagrass surface. If overseeding is a must, consider using a lighter rate or join the growing number of courses that paint instead of overseed. Also, there are numerous products that can assist early removal of overseeding. Keep in mind that overseeding does contribute to organic matter levels in the upper portion of the rootzone. Extra aeration and topdressing are required.

#### Take Home Message

Ultradwarfs have the potential to provide the highest quality putting surfaces possible at sites where bermudagrass is the preferred turf species. Hopefully, this article has given the reader some ideas about maintaining the new ultradwarfs. More importantly, we hope the reader will study up on

these new varieties and seek as much information as possible before problems arise.

#### Is Your Turf-Care Facility The Site of an Accident Waiting to Happen?

By Jim Baird

These were the words of the prosecutor in a recent court case in Australia that convicted the Warringah Golf Club and their former superintendent of criminal negligence. A pesticide used on the golf course was discharged from a spray tank onto an uncontained concrete wash pad that drained into a nearby creek. Contamination of the waterway resulted in the deaths of an estimated 10,000 fish and numerous waterfowl.

Could this happen on your golf course? Do you have a dilapidated turf-care facility and pesticide storage and containment areas that do not conform to environmental regulations? According to the legal brief in the these aforementioned case: "The evidence shows that a draft environmental policy and a master plan for the golf course were essentially not acted upon.

Furthermore, the President has given evidence that the board had in recent years focused on other matters in the belief that they had no responsibility in respect of environmental matters

and that it was entitled to delegate such responsibilities to management employees."

So ultimately who was responsible? The Club was ordered to pay approximately \$600,000 in fines, court fees, and costs of cleanup as well as installation of proper pesticide storage and handling facilities. The superintendent was sentenced to community service, had to pay substantial legal fees, and lost his job

If your facility needs improvement, now is the time to take the necessary measures to protect our environment and the game of golf. Consult your state or local environmental regulatory agencies for information on standards and specifications regarding the safe storage and handling of chemicals on the golf course.

This regional update and others written by the Green Section staff may be found on the USGA Web site at: www.usga.org/green.

Editor's Note: With recent studies showing high levels of arsenic (regardless of the source) in golfcourse soil and groundwater samples, regulators are taking harder looks at golf course operations and record-keeping. Expect more in-depth inspections in the future. Mix/load areas, pesticide storage facilities and wash-down pads are areas that need to be brought up to modern standards of containment and safety. Is your maintenance area an "accident waiting to happen?"

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## Florida Rosemary -An Endemic Native

By Elizabeth Gilmour

This is an environmental case study submitted as one of the requirements for becoming certified in the Audubon Cooperative Sanctuary Program.

Project description: Give an overview of the project. Why did you choose it? What were conditions like before and after implementing the project?

Unlike most case studies submitted to the Audubon Cooperative Sanctuary Program, this project was significantly based on research, observation, and conservation. The property at Frenchman's Reserve is graced by well over 50 acres of native Florida pine flatwoods, including sand pine scrub and oak-saw palmetto scrub. Intermixed among this treasured ecosystem is an endemic native plant, *Ceratiola ericoides*, also known as Florida rosemary,

wild rosemary, and/or sandhill rosemary. The purpose of this project was to educate ourselves, our members, and our residents about this curious plant and to discover the existence of an extraordinary population here at Frenchman's Reserve. Being an endemic plant, we thought it appropriate to learn as much as possible about Florida rosemary in order to maintain its natural population while allowing golfers to enjoy their game.

Before realizing that we had a treasure trove of Florida rosemary in our upland preserve between Holes 1 and 9, golfers were allowed to retrieve their balls without limitation and spray technicians applied herbicides to anything that looked out of the ordinary. The former and the latter had the same result: Florida rosemary seedlings were growing by the inch and dying by the golfer's foot or by RoundUp toxicity.

Frenchman's Reserve no longer allows

golfers to enter upland preserve areas along Holes 1 and 9. Additionally the Frenchman's Reserve staff now has been trained to recognize Florida rosemary seedlings and thereby adheres to the "NO SPRAY ZONE" requirements. Rosemary is coming back in full force and seedlings are breaking ground everywhere.

Mature Florida rosemary shrubs had been showing signs of decline. They simply did not look as vivacious as they once had. After much research, it was determined that several irrigation heads must be removed or adjusted in order to ensure the survival of mature groupings. Elimination of overhead irrigation is of utmost importance to the continued existence of Florida rosemary.

Success! Since the project's inception, Florida rosemary is growing like wildfire. Seedlings are no longer being stepped on or sprayed. Likewise, older clumps of the evergreen appear much healthier



Mature stand of Florida Rosemary in the upland preserve area between the first and ninth holes. Photo by Elizabeth Gilmour.

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A young Florida or "sandhill" Rosemary plant. Photo by Elizabeth Gilmour.

since most of the overhead irrigation has been eliminated.

#### Goals: Please list your goals for the project:

- Educate staff, members, and residents about Florida rosemary, i.e. where it can be found, what it looks like, how it grows, etc.
- Enable the survival of Florida rosemary seedlings through proper training, identification, education, and conservation.
- Ensure the survival of mature groupings of Florida rosemary by reducing and/or eliminating overhead irrigation.

Implementation and Maintenance: What specific steps did you take to implement it? What kind of ongoing maintenance will it require? Please give sufficient detail so that someone interested in duplicating this project could do so.

The first step in implementing this project was simple - identifying the problem.

After proper identification, research was our main goal. Through observation it was apparent that there were certain areas where Florida rosemary seedlings were being hardest hit. This end result had two root causes. The first was that golfers did not know about Florida rosemary. On top of this, golfers were not being properly informed that retrieving golf balls in preserve areas was not permitted. Thus, proper signage was installed along hole No. 1 and hole No. 9 clearly stating, "Environmentally Sensitive Area - Entering This Area Is Prohibited." In addition, we requested that the golf pro shop staff orally reinforce this rule with all golfers and members.

Secondly, it was observed that while

spraying for weeds along preserve perimeters and landscaped beds along the golf course, spray technicians were dousing Florida rosemary seedlings with herbicide. The herbicidal injury was evident. Proper training, education, and identification solved this problem immediately. Frenchman's Reserve spray technicians no longer apply herbicides near any preserve areas

The golf course maintenance staff then noticed something else that proved to be worrisome. Several mature Florida rosemary groupings that once thrived along the outside perimeter of the preserve were showing noticeable signs of decline. Through our research we determined that the cause was too much irrigation. Florida rosemary typically grows in well-drained, dry, sandy soils. It simply cannot grow in wet areas. We then looked at the design and layout of our irrigation system. After eliminating several heads and limiting the rotation of several others, the plants that had been in decline appear to be recovering nicely.

The only on-going maintenance that will be required is follow-up. We need to continue talking with our members and their guests in order to let them know about rules, signage, and upland preserve areas. We must ensure that our signage is legible, functional, and placed in appropriate, visible areas. We must also perform periodic irrigation maintenance checks to verify that no overhead irrigation is entering the preserve.

Results: Describe the results you achieved. What were the environmental benefits? Please be as specific as possible about any tangible results, e.g., number of acres naturalized, new species observed, increase in habitat acreage, number of birds fledged

from nest boxes, number of gallons of water saved, acres taken out of intensive management, increase or decrease in man-hours needed to maintain, increase or decrease in equipment wear and tear.

As previously mentioned our results have been most successful. According to our head golf professional, Craig Voudren, members and their guests frequent the Audubon information table located in the golf pro shop where educational material on Florida rosemary is located. In part due to these educational materials and in part due to the signage placed along preserve areas, we are seeing much less foot traffic in these sensitive areas. Additionally, all herbicidal spraying has ceased. Ultimately our current population of young rosemary is well into the thousands. We are certainly proud of this conservation effort.

We have been able to salvage our mature groupings of Florida rosemary by eliminating or reducing overhead irrigation (and conserving water). Approximately a dozen groups had been showing signs of decline, i.e. leaf drop, little new growth, low seed production, etc. Now, three months after the project's inception, the Florida rosemary bushes appear remarkably healthier. These particular specimens are no longer showing signs of leaf drop, their overall color appears healthier, and they are growing much better

Golfer/Employee response: How did golfers respond to the project? How did you communicate about your actions?

Most of Frenchman's Reserve members and golfers responded positively to the changes along holes No. 1 and No. 9. Some are concerned about losing their balls and not being able to retrieve them, but generally they understand the rule is in place for the better good of the environment. Since the Florida rosemary educational materials have been placed in a conspicuous area in the golf pro shop, many members have expressed an interest in better understanding Florida's unique ecosystems and the native plants within them. We plan on providing more educational materials in the future.

Our employees have responded just as well, if not better. Proper training and education only improve employee morale. Our employees now have a better understanding of the environment and how precious and fragile the Florida ecosystem really is.

Perspective and Recommendations: What, if anything, would you do differently if you were to do the project again? What would you recommend to others implementing this project?

The only thing we would have done differently would have been to implement this project sooner. Since the golf course is relatively new and young, we firmly believe that we nipped this problem in the bud. Keen observation was the key to saving our population of Florida rosemary.

Economic Costs and Benefits:

Cost to implement this project: \$1,678.15 Anticipated or actual financial savings: \$3,830.00

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#### Closer Mowing Heights

After three-times-per-week mowings at 1/4", research conducted in Tifton GA shows that TifSport can tolerate closer mowing heights than Tifway and Midiron. Sod density was excellent.

#### Upright Leaf Blade Orientation

TifSport's leaf blade orientation and stiffness is being touted by many golf course superintendents. They feel Tifsport gives a better ball lie in cut fairways and roughs.

#### Impressive Leaf

TifSport has a similar leaf texture to Tifway, and a finer leaf texture than most other grasses used on fairways and tees. This also helps promote good footing on athletic fields.

#### Superior Turf Density

TifSport has a greater density than Tifway-about a 1-point difference on a 10-point scale. And it's about 3 points better than common bermudagrass.

#### Good Lateral Growth

TifSport is more aggressive than genetically pure Tifway, especially during the cool weather months. This may account for TifSport's rapid grow-in and repair time.

#### Superior Sod Strength

TifSport has superior sod strength. This translates into improved playing conditions and resistance to divot injury in football, golf and baseball.

#### Excellent Traffic Tolerance

TifSport's density, sod strength and good lateral growth rate give it a high ranking for traffic tolerance. Athletic field managers and golf course superintendents are reporting outstanding re-growth from normal wear and tear.

#### Dark Green Color

TifSport has a dark emerald green color versus the somewhat lighter green of Tifway and Quickstand.

#### **Drought Tough**

TifSport developer Wayne Hanna has data from a 2-year study showing that TifSport has good drought tolerance. It not only stays green longer but it also recovers faster.

#### **Cold Tolerant**

TifSport has expanded the northern limits for warm season bermudagrasses, and has remained very consistent over multiple winters in Oklahoma.

#### Varietal Purity

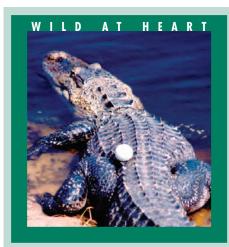
In many cases common bermuda is being sold as Tifway 419, but Tifsport's on-going purity is carefully controlled by a rigorous set of rules and guidelines.

#### Vigorous Root System

This inside view of a typical TifSport plug shows TifSport's impressive root system, stolons and rhizomes.

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## Alligators - The Ultimate Lizards

By Craig Weyandt

Alligator is derived from the Spanish word "el lagarto," which means, "the lizard." The Florida alligator's primary habitat is freshwater swamps and marshes, but can also be found in rivers, lakes and smaller bodies of water. They can tolerate a reasonable degree of salinity for short periods of time, being occasionally found in brackish water around mangrove swamps, although they lack the buccal saltsecreting glands present in crocodiles. Little alligators eat small invertebrates such as insects, small fish and frogs. As they grow larger, their dietary range increases to include larger prey, which consist of fish, turtles, small mammals, birds and reptiles including small alligators. When left alone, alligators will stay away from humans and pose little threat. If humans feed alligators, this will encourage the alligators to approach humans aggressively expecting food, which in turn can be extremely dangerous.

#### So please do not feed the alligators!

After all, for the last 65 million years alligators have done a pretty good job of feeding themselves. Also, alligators do not feed during the cooler months. Studies have shown that alligators generally begin to lose their appetite below 27C (80F), and stop feeding altogether below 23C (73F). They can easily last the winter on their energy reserves.

#### Cool facts:

- · Alligators are really lizards
- Alligators now occupy almost every body of water in Florida
- The sex of an alligator is determined in the egg by the temperature of the nest
- · Alligators hibernate during the winter months
- Alligators have between 74 and 80 teeth

#### Stewardship Notes

#### Goal for 2004: Bring Every Course Into the Fold

By Shelly Foy

My New Year resolutions have not changed much over the past few years. I would like to spend more time with my children, start exercising regularly, be a better listener, etc. I do feel like I am making some progress each year, but always could do more.

I'm running out of time to spend



more time with my children because Hunter and Elizabeth are both seniors in high school and hopefully will be off to college in 2004. Of course, since Thomas is five, we still have many years of T-ball, soccer and school plays. John and I have already determined that there will never be a day when we

are alone because once Thomas is ready to go off to college we will more than likely be grandparents.

My 2004 goals for the ACSP are to reach out to each and every golf course in Florida that is not a member of the program and encourage them to join. The FGCSA and the USGA are working together to promote Audubon International's 50 in 5 Initiative, which is to have 50% of golf courses enrolled in the program in five years. Florida is leading this push and we can't afford to slack off now. We are planning a series of ACSP Workshops in Florida in 2004 and we encourage every golf course to make plans to attend one close by.

While you are in San Diego, don't forget to take advantage of the many education-

We are planning a series of ACSP Workshops in Florida in 2004 and we encourage every golf course to make plans to attend one close by.

al opportunities with the ACSP. Audubon International staff will be available at Booth S7609, directly across from the USGA. A special session titled, "The Business Value of Environmental Stewardship: An Environmental MBA for Superintendents," will be presented from 5-6 p.m. on Wednesday, Feb. 11. Audubon staff also will be teaching two seminars, "Wildlife Management and Habitat Conservation" Tuesday, Feb. 10, all day, and

"Integrated Environmental Management" all day Wednesday Feb. 11.

The winter season is a very good time to work on your Education and Outreach for ACSP certification. Over the years we have listed many ideas in the *Florida Green*, and I would encourage you to look through some past issues if you are searching for ways to promote environmental education.

We are always looking for tips and ideas to help you. Here's another very successful one: Craig Weyandt, golf course superintendent the Moorings Club in Vero Beach, has a regular column in the club newsletter that he calls "Wild at Heart." Craig always includes pictures, and he has had members tell him that since he has started writing "Wild at Heart," his article is the first thing they look for in the newsletter. They are so interesting; we will reprint them from time to time for possible use at your club.

I encourage you to make membership in the ACSP one of your New Year resolutions. All the best for a happy and prosperous 2004!

#### **ACSP Year in Review**

#### Florida Courses Joining in 2003

Abacoa GC

Banyan GC Boca Greens CC

Card Sound GC

Crown Colony G&CC

Fiddlesticks CC

Forest CC

Ft. Lauderdale CC

Ft. Walton Beach GC

Gator Creek GC

Glades CC

Gleneagles CC

Grey Oaks CC

Kelly Plantation GC

LPGA International GC

Longboat Key Club - Harbourside Longboat Key Club - Islandside

Maple Leaf G&CC

Misty Creek CC

Outdoor Resort GC

Palencia GC

Red Stick GC

Riomar CC

Ritz Carlton GC, Grande Lakes Ritz Carlton Golf Club & Spa, Jupiter

Seminole GC

Shadow Wood Preserve

Six Lakes CC

Sugar Mill CC

ugai Willi C

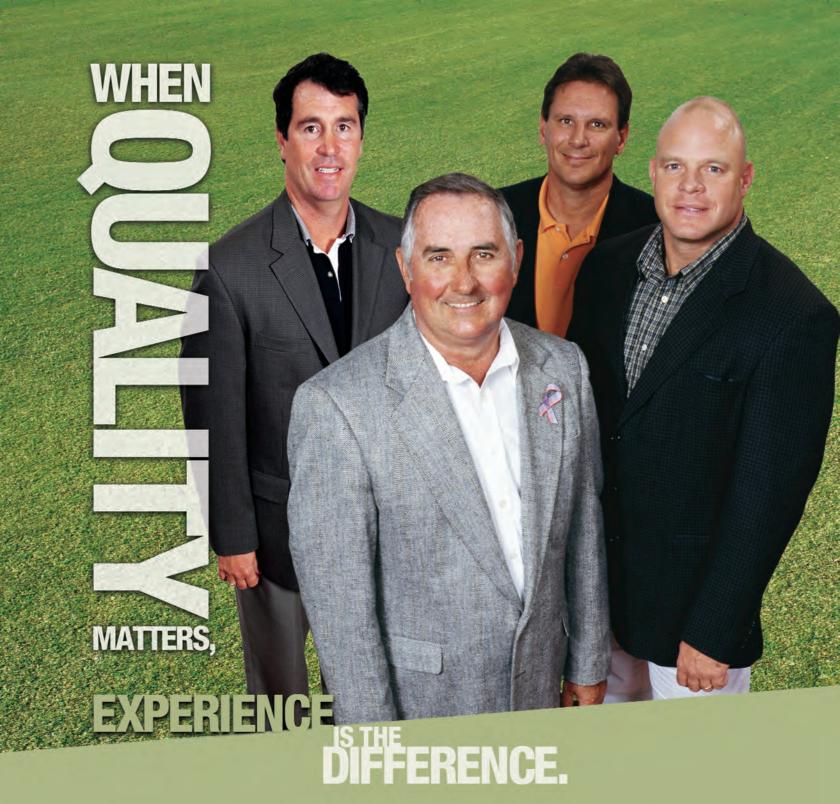
Vasari CC

#### WCI Renaissance GC ACSP Certified in 2003

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Pelican Sound GC

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## Light Intensity and Duration Influence Growth of Ultradwarf Bermudagrasses

Life in the shade may be less stressful for some ultradwarf bermudagrasses than for others.

By Grady L. Miller and Jeffry T. Edenfield

Golf course superintendents are often faced with major challenges caused by tree shade on turfgrass, particularly on putting greens. An increase in available sunlight or an increase in leaf area enables the turfgrass to increase carbohydrate synthesis and storage processes critical for withstanding the many stresses inherent to putting green turf.

Therefore, to relieve shade stress, superintendents usually raise mowing heights, or thin or remove trees. However, these remedies are often met with resistance by those who wish to maintain the natural setting, increase speed and maximize playability on the greens .

#### Ultradwarf bermudagrasses

Responding to demand over the past decade for increased speed on putting greens , researchers have developed ultradwarf bermudagrasses, a new generation of bermudagrass cultivars that show improved tolerance of lower mowing heights. The term ultradwarf derives from the morphological characteristics of these cultivars: shortened internodes, reduced leaf size (compared to ear-

lier "dwarf" grasses such as Tifdwarf) and more prostrate leaf habit. Champion, FloraDwarf, TifEagle and Reesegrass are the new hybrid bermudagrasses [Cynodon dactylon (L.) Pers. 'C. trans vaalensis Burtt-Davy] that we chose for testing.

Champion is a dwarf hybrid bermudagrass selected by Morris Brown in Texas in 1987 from a Tifdwarf hybrid bermudagrass golf green planted in the late 1960s. Coastal Turf Inc. of Bay City, Tex. subsequently developed this selection and conducted independent research. In 1995, the Florida Agricultural Experiment Station released FloraDwarf. Thought to be a mutant of Tifgreen, FloraDwarf was discovered on a practice green on the island of Kauai, Hawaii, by turfgrass researcher A.E. Dudeck, Ph.D., in the summer of 1988. TifEagle was cooperatively released by the USDA ARS and the University of Georgia Coastal Plain Experiment Station in August, 1997. It was developed as an induced mutant by cobalt radiation from Tifway II bermudagrass. Reesegrass is a hybrid that was discovered serendipitously on a golf green in New Orleans. This ecotype is the newest member of the ultradwarf family and has shown great potential in early research conducted in Alabama and Florida.

#### Objectives

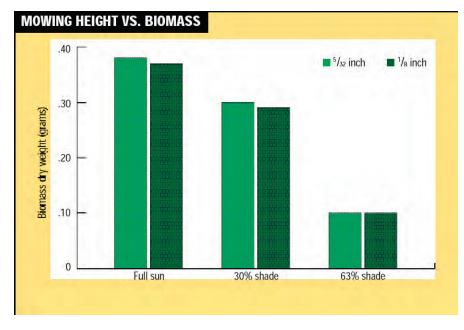
This study addresses the dilemma golf course superintendents have when managing putting

greens subjected to light stress from excessive tree shade. We evaluated physiological and growth responses of the ultradwarf bermudagrass cultivars to various levels of shade. Knowing the light requirements of these cultivars will allow superintendents to make better decisions about which cultivar to use in potentially shaded conditions. We also evaluated the potential advantages of slight increases in mowing height. It was hypothesized that a slight increase in mowing height would result in an exponential increase in carbohydrate synthesis, potentially facilitating a more stress-resistant turf.

#### Materials and methods

Studies were conducted during 2000 to evaluate physiological and growth parameters of five dwarf-type bermudagrass cultivars, maintained under three-shade regimes and two mowing heights. The cultivars evaluated were Tifdwarf, Champion, FloraDwarf, TifEagle and Reesegrass. The turf was grown in containers using a mixture of 85 percent sand and 15 percent organic-matter rootzone in an effort to comply with USGA putting green recommendations. At least 3/10 inch irrigation was applied daily to maintain proper plant turgor for high-quality turf. Nitrogen fertility was applied once a week at 1/4-pound nitrogen per 1,000 square feet per week for the duration of the study. The three light regimes were full sun, 63 percent shade and 30 percent shade. Covered structures of black polypropylene cloth were used to produce shade. The small containers were used to facilitate the number and diversity of treatments and allow whole-plant photosynthesis measurements. In the second treatment, the grasses were clipped six times a week at 1/8- or 5/32-inch with the clippings removed.

We collected data for photosynthetic rates, biomass, visual ratings of percent cover, and determinations of chlorophyll a and b. All measurements were taken three, six, nine and 12 weeks after initiation of the experiment, except chlorophyll determinations, which were taken at 12 weeks after initiation. Photosynthetic measurements were taken at irradiances of 0, 210, 1,540 and 1,950 µmols per square meter per second. From these measurements, we determined additional photosynthestic measurements: dark respiration, net photosynthesis and light compensation points. In dark respiration, the plant is using energy. Net photosynthesis is the balance of what is lost (dark respiration) plus the energy that is being produced. The light compensation point is the least amount of light needed for the plant to sustain life.



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#### Results

#### Light intensity

Biomass measurements were taken after three days of growth. After collection, clippings were oven-dried to determine dry weights.

Chlorophyll a and b analysis was also completed. Previous research had suggested that plants with higher ratios of chlorophyll b:a have greater light-harvesting efficiencies and, therefore, better shade tolerance. Visual ratings evaluated percent turf cover. All dependent variables were statistically analyzed.

As demonstrated by values of net photosynthesis, biomass accumulation, percent turf cover and total chlorophyll, TifEagle and Champion were superior to the other cultivars tested. For example, averages of net photosynthesis in full sun for TifEagle and Champion were 8 percent greater than for FloraDwarf, 15 percent greater than for Tifdwarf and 87 percent greater than for Reesegrass. In 30 percent shade, averages of net photosynthesis for TifEagle and Champion were 11 percent greater than for Tifdwarf and 120 percent greater than for Reesegrass. These results indicate that TifEagle and Champion were more efficient at using available sunlight, even at reduced light intensity.

Averages of biomass accumulation of turf grown in full sun for TifEagle and Champion were 27 percent greater than Tifdwarf, 44 percent greater than FloraDwarf and 18 percent greater than Reesegrass. In 30 percent shade, biomass averages

for TifEagle and Champion were 63 percent greater than those for Tifdwarf, but were similar to those for FloraDwarf and Reesegrass. For percent turf cover at 63 percent shade, averages for TifEagle and Champion were 28 percent greater than Tifdwarf and 94 percent greater than Reesegrass. These grasses used their enhanced photosynthetic capacity to produce more biomass than the other cultivars. In each shade treatment, TifEagle and Champion also had the highest levels of total chlorophyll, which would increase their capacity to absorb light.

#### **Increased mowing height**

Another objective for this study was to determine whether increased mowing height resulted in increased growth. The data suggest few advantages. For example, results for biomass accumulation were similar for the two mowing heights, even though the greatest differences would be expected for that parameter. In addition, few differences were determined in values for percent of turf cover.

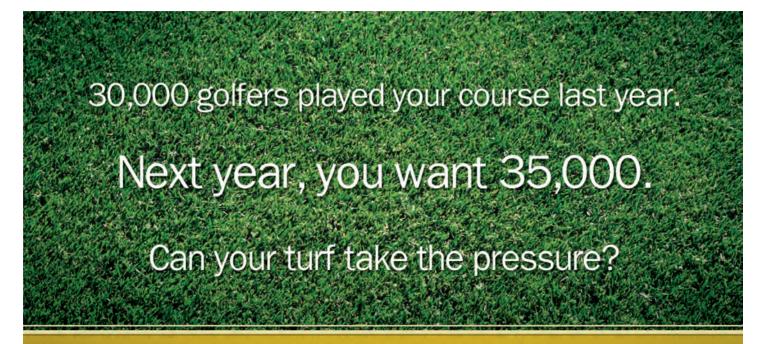
Increasing mowing height in the 30-percent-shade treatment did result in a significant increase in percent of turf cover for all the cultivars tested. Increased mowing height was most advantageous in the full-sun and 30-percent-shade treatments as demonstrated by net photosynthetic rates. Increasing mowing heights by 0.04 inch increased net photosynthetic rates by 13 percent for the full-sun treatment and 10 percent for the 30-percent-shade treatment. Although some figures are statisti-

cally insignificant, the margin of benefit to the golfcourse putting green may be much greater than indicated. The added value may be the ability to thin and/or remove fewer trees, which are important to the aesthetics of the course, while maintaining turf vigor.

The results suggest that TifEagle and Champion displayed physiological and growth characteristics more tolerant of shaded environments and that Reesegrass was least tolerant of shaded environments. In all cases, even slight increases in mowing height somewhat improved turfgrass performance.

#### Light intensity and duration in FloraDwarf and Tifdwarf

A second series of evaluations used growth chambers to evaluate FloraDwarf and Tifdwarf under varying light intensity and duration. Because of space constraints, only two cultivars could be used for these evaluations. Light treatments incorporated six light regimes, and each photoperiod was based on 12-hour days and 12-hour nights. The maximum available light was 1,540  $\mu$ mols per square meter per second, denoted as full sun FS). Shade was either 570 µmols per square meter per second, denoted as 63 percent shade, or 1,078 µmols per square meter per second, denoted as 30 percent shade. Light treatments were (1) 12 hours full sun + 0 hours 63 percent shade; (2) 8 hours full sun + 4 hours 63 percent shade; (3) 6 hours full sun +6hours 63 percent shade; (4) 4 hours full sun + 8





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#### Acknowledgments

This research was supported by a grant from the Florida Turfgrass Association and Florida GCSA, Seven Rivers Chapter.

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hours 63 percent shade; 5) 0 hours full sun + 12 hours 30 percent shade; and (6) 0 hours full sun + 12 hours 63 percent shade.

Responses of the two cultivars were not significantly different, supporting earlier data obtained from the glasshouse studies. However, as limited as the evidence is, some results suggest FloraDwarf did respond to shaded conditions better than Tifdwarf. Results suggest that FloraDwarf has a greater ability to assimilate carbon reserves at lower levels of light, indicating greater shade tolerance. A year of weekly observations of a tree-shaded FloraDwarf green at the University of Florida Golf Course in Gainesville also indicated that FloraDwarf could endure 25 weeks at partial shade without a loss in quality. The data suggest that a combination of light intensity and duration affected overall turf quality.

#### Conclusions

Golf course superintendents are often faced with major challenges caused by tree shade on turfgrasses, particularly on putting greens. These studies looked at the effects of light and shade on turf health. Results indicate that TifEagle and Champion bermudagrasses are capable of sustaining quality better than other dwarf bermudagrass cultivars when grown under reduced-light conditions. FloraDwarf also responded slightly better to shaded conditions than Tifdwarf. None of the tested grasses performed well under dense shade or long periods of shade.

shaded for other portions of the day. However, in some situations, a grassed area may be shaded for most or all of the day, making it difficult for the grass to obtain either adequate intensity or duration of light for growth. Under shaded conditions, grasses will have elongated leaf blades and stems as they attempt to obtain sunlight by outgrowing their neighbors.

This tissue elongation depletes carbohydrates, causes shoot tissue to be weakened, and reduces the overall health and vigor of the turfgrass plant. Turf groundcover is also reduced and the bare ground resulting from this is conducive to weed growth. It is not advisable to grow turfgrass under conditions of heavy shade. Other groundcover sources or mulch should be used on these sites. For areas receiving moderate amounts of shade, however, there are certain species and cultivars that are able to maintain suitable growth. There are also specific management practices that will encourage better turfgrass health under shaded conditions.

#### Species Suitable for Use in Shade

Some species are particularly well-suited for use in shaded areas. Within these species, certain cultivars sometimes maintain considerable advantages when grown in a shaded environment. Included in these species:

St. Augustinegrass: This species is among the best overall for growth in shade, although it will also perform well in full sunlight. St. Augustinegrass cultivars that exhibit best shade tolerance include cultivars Seville and Delmar. Floratam, Floratine, and Floralawn exhibit moderate shade tolerance.

**Zoysiagrass:** This is another good choice for shaded areas. Like St. Augustinegrass, it will also do well in full sunlight. Generally, any cultivar of zoysiagrass will perform well in shade.

**Bahiagrass** is not recommended for use in shaded conditions, but **centipedegrass** will tolerate moderate shade.

**Seashore paspalum** and **bermudagrass** do not do well in shaded conditions.

#### Management Practices for Growing Turfgrass in the Shade

Because the turfgrass is already suffering from effects of a stress (lack of sufficient light), it is important to follow specific management practices for turf growth in the shade. Included in these practices are the following:

## Some Species Tolerate Shade With Proper Management

By L.E. Trenholm

Turfgrass requires a minimum amount of light for growth. Both intensity (brightness) and duration of light are important factors affecting turfgrass growth. In many landscape settings, grass will receive a minimum amount of light during enough of the day for adequate growth, even if the area is

1. Increase the mowing height for grasses growing in the shade. For instance, if you normally cut St. Augustinegrass at a 3-inch height, increase the cutting height to 4 inches. The increased mowing height allows for more leaf area, thus intercepting as much available light as possible. In addition, leaf blades will be longer and narrower in the shade, and a lower cutting

height will cause an excessive reduction in leaf length, which is not good for the grass. Higher mowing heights will also promote deeper rooting, which is one of the key mechanisms of stress tolerance for turfgrasses.

2. Reduce fertilizer applications to turf growing in shade. The grass grows more slowly in a shaded environment, which reduces fertility needs. Too much nitrogen fertilizer depletes carbohydrates and produces a weaker turf system. If you normally apply 4 pounds of nitrogen per 1000 square feet yearly, apply 2.5 to 3 pounds to turf growing in the shade. Limit any single fertility application to no more than 1/2 pound of nitrogen per 1000 square feet at any one time.

3. Irrigation. Water usage is reduced under shaded conditions, so irrigate only on an "as-needed" basis. This would be when the leaves begin to roll up lengthwise, take on a blue-gray color, or when impressions from foot or vehicular traffic remain on the grass. If the irrigation system covers an area that is partially shaded and partially in sun, consider removing the sprinkler heads from the shaded areas and irrigating by hand instead.

4. Avoid effects of traffic. The grass will be more easily injured by traffic if growing in shade and may not be able to recover adequately. Also, if trees cause shade, traffic may damage tree roots, resulting in decline or death of the tree. 5. Monitor for weed pressure. Weeds are able to outcompete turf in certain situations, and will seek out those opportunities. In a shaded environment, lateral turfgrass growth and groundcover may be sparse, leaving bare ground suitable for certain weeds. Treatment with a pre- or postemergence herbicide may be necessary. Use caution, however, when applying any chemical treatment to a shaded lawn, as there is a greater chance of phytotoxicity when a grass is under stress. Additionally, many herbicides are potentially damaging to landscape trees and shrubs. 6. Monitor for disease pressure. In many shaded environments, there will be less air movement and more humidity, which may increase the possibility of disease. Again, use caution if applying pesticides to a turf that is already under environmental stress.

#### Watch for Competition from Trees

Grasses growing under trees are subjected to further stresses in addition to reduced light. These include competition with tree roots for soil space, water, oxygen, and nutrients. Tree roots may extend far from the canopy line, so these competitive effects may occur at some distance from the tree.

#### Consider Alternatives to Grass

Attempting to grow grass in shaded environments may be time-consuming, frustrating, costly, and damaging to the environment. In areas that receive shade all day or for much of the day, an alternative ground cover or mulch may be the best choice. Consult your County Extension office for information on alternative groundcovers for shaded environments.



















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5 1 WINTER 2004

#### **2003 Photo Contest Results**

#### This is part two of presenting the four category winners of the 2003 photo contest.



First Place - "North Course Putting Green with Annuals" by Trevor Brinkmeyer, Shadow Wood CC, Naples



Second Place - "View to #10 Tee" by Tom Biggy, Bent Tree CC, Sarasota

#### Category 2 -Formal Landscape.

2004 Photo Contest Categories

Category 1 - Wildlife on the course: includes any critter on the course that walks flies, swims, slithers or crawls.

Category 2 - Formal Landscaping: includes annuals and ornamental shrubs and trees planted in formal beds on the course or club entrance.

Category 3 - Native Areas: includes beds of native plants including trees, shrubs and grasses used in naturalized areas to reduce turf inputs and aquatic vegetation plantings used to create habitat and protect water quality.

Category 4 - Scenic Hole: includes any view of a golf hole (panoramic or close up) that demonstrates the scenic beauty of a golf course.

#### Easy Rules

1. Media: Color prints, slides or digital files. Prefer prints. Only one entry per category. Digital images: Digital image entries must be taken at a resolution setting of 300 dpi or higher and saved as highest-quality jpeg or tif format images. Images taken, saved and sent at lower resolutions will not qualify for the contest. If you're not sure, send a print instead.

- 2. Photo must be taken on an FGCSA member's course by an FGCSA member or a member of his staff.
- 3. Attach a label on the back of the print or slide which identifies the category, course and photographer.

#### DO NOT WRITE DIRECTLY ON THE BACK OF THE PRINT.

Each print shall be attached to an 8.5" x 11" sheet of paper using a loop of masking tape on the back of the print. Slides should be in plastic sleeves for easy access for viewing. Digital images must be accompanied by the same information in an email or document on a

- 4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the mounted print.
- 5. Judging will be done by a panel of FGCSA members not participating in the contest.
- 6. Mail entries in a bend-proof package marked "PHOTOS DO NOT BEND" to Joel Jackson, 6780 Tamarind Circle, Orlando, 32819. Entries postmarked after August 1, 2003 automatically will be entered in the 2004 Photo Contest.

The green-and-white Boeing 717 dropped down from our cruising altitude as we descended

our visit to Alan Weitzel's family our homestead in western New York d State. Alan is the director of Dade

County's golf course maintenance operations.

Susi and I were met at the airport by Alan Weitzel's mother Josephine and close family friend Larry Matzlin. After collecting golf bags and luggage, we began our 20-

mile journey to the southwest for the town of Caladonia. What we had seen from the air was even more beautiful on the ground. Gentle rolling hills, two-lane country roads, farms and trees about 30 percent into their color change of yellow, brown and red.

As we approached the Weitzel home adjacent to the

#### **AS IT LIES**



Jim Walker

Country Club, there was the third hole, the second green and then the clubhouse. The building is every bit of 150 feet long.

The main

dining room

Caladonia

was upstairs in the old dairy barn and the first floor houses another dining area, locker rooms and pro shop. A two-story addition to the original building includes a new men's locker room, conference room, offices upstairs and downstairs, and a 60-cart storage area. There is also an open-air bar and grill downstairs about 75 feet from the ninth green.

Upon our arrival at the club, we were met by Alan's father Bob, who was busy paying off the lucky winners of a two-day Calcutta tournament that had concluded on Sunday. Bob was in a very good mood because it seems he had a piece of the third- and fourth-place

#### Heaven on Earth

toward the Rochester, N.Y. airport. Rolling green hills and beautiful farmland filled the landscape as far as the eye could see. This aerial precursor of bucolic beauty could not fully reveal what lay ahead for us in

52

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By Mark Jarrell.

In September, I was the happy and fortunate recipient of an invitation from Joe Conoly of Bayer Environmental Science to join about 50 Bayer clients and employees on a golfing tour of southwestern Ireland. I had heard glowing descriptions of how beautiful the country and how great the golf courses are from many friends who have traveled there, and I found them all to be true. I'd like to play travel writer once again and share photos and impressions of the Emerald Isle on my first trip across the big pond.

As luck would have it, a rotator cuff injury kept me from play-

#### MARK MY WORDS



ing golf, and as an indifferent golfer, I anticipated little disappointment in not being able actually to tee it up. One look at Old Head Golf Links, the first of our stops, and I was

chomping at the bit to be able to chase the white ball in such unique and incredibly beautiful surroundings.

The week-long tour was set up to play golf five days in a row, and I was able to walk and photograph all but one of the golf courses before or after sightseeing excursions to local points of interest. All but one -Killarney Golf Club - were true links golf courses, one just as beautiful as the other, with a look and feel that cannot be duplicated here in the states as some have tried. The maintenance standards, while a bit more relaxed in some areas than we're used to in the better clubs of the U.S., were excellent and, in my opinion, make more sense than the immaculate and costly grooming of every blade of grass that seems to be the holy grail in our country. It was an incredible trip, and I'll be forever grateful for Bayer's generosity and gracious hospitality.

Ireland is as green and beautiful as all the coffee table books and travel brochures portray. Traveling in September, so I was told, can be chancy with the weather, but we had perfect weather except for two cool and drizzling days in mid-week. It seemed there were as many cattle as there were sheep, and the countryside sparkled with emerald green fields broken up into small patches by hedges or stone walls, but rarely with fences. We spent two nights each in three of the largest cities - Cork,



Killarney, and Limerick - but they still had a quaint, small town feel.

While I could probably go on for many pages, for the sake of brevity, I'll finish with a short list of impressions:

Ireland is not cheap! My perception, or misperception, before going there, was that Ireland was a quaint, rural country with good bargains and low prices. Not so! Checking out real estate prices while walking various towns left the impression that a modest three-bedroom house cost between 350,000 and 450,000 Euros (add about 15% to come up with the dollar conversion). A pint of beer or ale cost more than \$4 in most of the pubs we visited. Discussions with our tour bus drivers gave the impression that Ireland had experienced a real economic boom about 10 years ago after joining the European Union and most Irish were improving their standard of

Irish drivers must be the best in the world, especially bus drivers! The typical Irish road is about as wide as a lane-and-a-half in the states, so you can imagine how many times we passed cars (or other buses or tractors!) with no more than a couple of inches to spare between vehicles and a roc wall. The newer freeways - mostly built with EU funds in the past decade or so - are as wide as U.S.

The Irish people are as friendly and accommodating as their reputation, but, curiously, I did make the observation that most didn't make eye contact and greet you when passing in the street. As a student of history and from chats with our tour drivers, I have a theory! I think maybe the Irish were treated so poorly for so long by the English that it is possibly ingrained survival behavior, but after introductions, their congenial nature knows no bounds. My apologies if my halfbaked theory offends anyone of Irish heritage, but I also have Irish roots (Jarrell is believed to be derived from Fitzgerald, a family which was once considered the unofficial rulers of Ireland).

Hurling, the national sport of Ireland, looks fascinating, so much so that I'm surprised it hasn't gained a foothold in this country with its high percentage if Irish descendants. It looks to be a fast-paced combination of rugby, lacrosse, and soccer, but I didn't see enough of it to figure out the rules. Our trip coincided with the "Super Bowl" of hurling, and as a si dent of the American Civil W the flag was used, but the Cork "Rebels" are called that because the city was the center of a 19th century Irish independence movement.



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teams. So not only had he overseen another successful event, which he has been doing since 1963, but a share of the winnings had found its way into his pocket.

Here's the deal: Bob and Jo Weitzel own the Caladonia Country Club lock, stock and barrel. It is a 6,500-yard layout built around and over Mallochs Hill which is the highest point in Livingston County. Not many holes go straight up or down the 140-acre hill, but those that do feature 100foot elevation changes. The course has bluegrass/fescue fairways and bentgrass greens that roll 10 on the stimpmeter. Par is 72 and every hole has trees on both sides of the fairway.

The scorecard lists Alan's brother Scott as the director of golf, Bob King, PGA Pro and Ernie Baker, superintendent. Sadly what the scorecard doesn't report is the architect. That would be none

other than Bob (Money Ball) Weitzel. Having purchased the farm in 1959, it took Bob five years to open the first nine holes. The second nine opened in 1968. Bob was not only the architect, but also the contractor and superintendent. It was a family business from the beginning, with Bob and Jo doing everything and the five Weitzel children pitching in from the time they were old enough to pick up a

The club hosted the 1995 State Senior Ladies Championship and annually hosts the Bob Weitzel Two-Man Scratch Best Ball and the Caladonia Charity Classic which has the highest purse for golf pros in western New York. \$30,000 will be paid in the 2003 event.

Every hole on the course is a treat to see and play. There is not one hole that is not a "keeper." The greens are undulating for the most part and slope from

back to front for drainage purposes. When I asked Bob how he routed the course, he said he got advice from his brothers, Johnny and Jay, both of whom were golf professionals and George Meyers, a local pro, who told him to work "with the hill" and keep the straight up or down holes to a minimum. I also asked him how he came up with the greens complexes, and did he have a surveyor assist him? "No," he said, "I just eyeballed them."

What great eyeballs. Standout holes for me are the par-4 7th, 9th and 17th holes and the par-5 18th. All of these holes go up and down the hill and have the most dramatic elevation changes. I guess I like the holes that are so different from our Florida flatlands. The backdrop for the 18th green is the two-story Weitzel home complete with a white, 4-rail fence.

Caledonia is a farming

community of about 4,000 people located 30 minutes from Rochester and an hour from Buffalo. It has one grocery store, one drug store and no traffic lights. It has several topnotch restaurants and friendly people who move at an easy pace. It also has a solitary man on a tractor mowing roughs in the dusky light of the setting sun. Bob is mowing his own course. The course he built and nurtured for the past 40 years.

Bob loves his wife, his children and golf.

In the last four decades, he and Jo, sons Scott and Toby (the food and beverage manager) have created paradise. It's a true heaven on earth. With hard work, dreams and dedication, fairy tales do come true, especially in Caladonia.

Already having been invited back again next year must mean we, unlike fish, did not begin to smell after a few days. Susi and I can't wait.

My personal experience

I think after public speaking and writing articles, the thing superintendents dread the most is answering surveys. It doesn't matter whether it's about budgets and benefits, pesticide use, education topics for meetings or what

ting out fires that we have forgotten how to employ fire prevention on a larger scale. Fire prevention depends on education and learning good techniques and those in turn depend on good data about the fire potential in your area of expertise.

> Data for regulasurveys on the of concern.

tors to make informed decisions on pesticide risk assessment can come from topics or products

S. Environmental Protection Agency is responsible by law for reassessing all the chemicals we use on our golf courses. If these assessments of risk and benefit are done using outdated or overly conservative computer models and assumptions (as unfortunately they are) then the fate of some of the most broad-spectrum and economical products is determined by the application of faulty data. How is EPA to know any better?

Recently Dean Graves at the Chevy Chase CC in Washington, DC held a Regulator Day at his course and gave about 70 EPA regulators a tour and discussion of golf-course maintenance practices. When a particular product was being discussed, it turned out that EPA, based on a computer

model, was figuring twice the number of applications on twice the number of acres that Graves was applying in real life. EPA admitted their models and assumptions were off base but, without data, they didn't have any way of changing or correcting the model. That's why we need to have some data-gathering surveys on pesticide use, and you'd better be willing to chime in or learn to do without some of your key products.

We need to fill the data gaps at EPA by conducting surveys that report our chemical use by product, amount, frequency and treatment area. Sounds like a lot of surveys doesn't it? I can see you screwing up your face right now.

But come on.

You probably know, off the top of your head, how many pounds, gallons, quarts, pints and ounces you apply to your greens, tees and fairways per acre. I know you know how many acres of each you have to maintain, and you also know about how many times a year you apply certain products.

Putting all the information down on paper will go a long way to helping local, state and federal environmental protection agencies do two things. First it will put our actual use of products into a ball park they can envision, and, second, it will help to defuse the ranting and raving from environmental activists about all the

tons of stuff we use.

in the past has been that I have gotten minimal feedback on products like Dursban, Nemacur and MSMA when I sent out simple surveys to characterize use amounts and treated acreage. I don't mind telling you it is discouraging when we try to make our case and defend a product and you won't take the time to total up your application amounts and acreage. I get very frustrated when products are cancelled because of political expediency or by risk assumptions based on faulty data. But in the absence of good, verifiable, current information, I don't blame EPA entirely for the results. We the end users have a bigger stake in the fate of the products we use than anyone else. The manufacturer will naturally come down on the economic side of the product. The regulators will use the most conservative, worst-case scenarios if they don't have better data. Where are they going to get that data? They should get it from you so the data will be correct and meaningful. The GCSAA Environmental Institute for Golf will be making an effort to fill those data gaps at EPA in the days ahead. When that survey comes in the mail or by e-mail, either fill it out or forfeit your right to complain about losing another efficient and effective product that helps you do your job.



things

would you

like your

chapter to

Surveys

require

some soul

do for you?

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searching that many turfgrass Joel Jackson, CGCS managers just don't want to contemplate.

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