



# The Florida Green

Fall 2003



**Number 5**  
**Johns Island Club West**  
**Vero Beach**  
**Photo by Daniel Zelazek**



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## SPOTLIGHT: JOE PANTELEO RECEIVES PRESIDENT'S AWARD

When it comes to growing grass and getting a course ready for the big game, Joe Pantaleo, like Larry Bird, wants the ball. And like the Celtic great, it's nothing but net as the buzzer sounds. He received the Presidents Award for Lifetime Service

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## COVER STORY: THREE COURSES AND TWO ENVIRONMENTS

The Johns Island Club isn't on Johns Island at all. It is located in the middle of Orchid Island halfway between Sebastian Inlet on the north and Ft. Pierce Inlet to the south. Two of its courses are on the island and a third - added later - is on the mainland.

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## HANDS ON: WHOSE JOB IS IT, ANYWAY?

According to a recent National Golf Foundation survey on the attitudes and expectations of avid golfers, among the top complaints about course conditioning was the existence of unrepaired ball marks and divots and the condition of teeing areas.

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## INDUSTRY NEWS: TOO MUCH RAIN

Frequent and at times heavy rains have occurred throughout the state. Many areas are 10-12 inches ahead of normal year-to-date rainfall, a situation quite favorable for the proliferation of weeds, and also complicating post-emergent herbicide treatments.

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## STEWARDSHIP: ACSP & BMP GO HAND IN HAND

Sanctuary Golf Course chose to build a contained chemical mix/load area due to the liability of the potential hazard as well as the desire to comply with the necessary requirements of the Audubon Cooperative Sanctuary Program for Golf Courses.

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## RESEARCH REPORTS: BIOHERBICIDE FOR TURFGRASS

A multiple-pathogen bioherbicide system has shown potential to manage signalgrass in turf and sod in Florida.

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## AFTERWORDS SECRETS REVEALED

Just so the Ridge Chapter won't feel picked on, Joel Jackson reveals some secrets held by the other 11 GCSAA chapters in Florida while Jim Walker discusses his favorite architects who have worked in the state and Bruce Williams, CGCS, MG shares sage advice he has received over the years.

*About the use of trade names: The use of trade names in this magazine is solely for the purpose of providing specific information and does not imply endorsement of the products named nor discrimination against similar unnamed products. It is the responsibility of the user to determine that product use is consistent with the directions on the label.*

# The Florida Green

FALL 2003

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**EDITORIAL:** All inquiries should be directed to the editor, Joel Jackson, CGCS. Unsolicited manuscripts and photographs cannot be returned.

## 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.

Winter 2003 - Tree and Shade Management

Spring 2004 - Trends in Rough Mowing and Maintenance

Summer 2004 - Aquatic Management: From Vegetation to Water Quality

**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.

**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.

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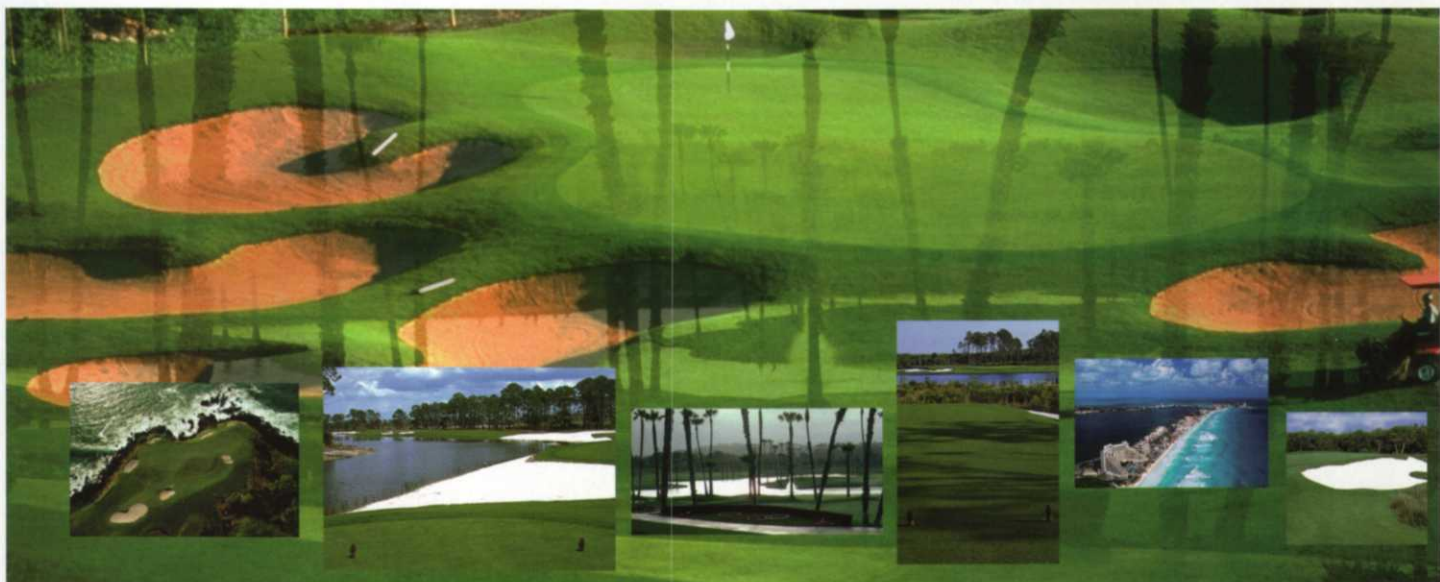
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Sealsle 1, a new salt-tolerant (halophytic), drought-resistant, warm-season turfgrass, is now available as "certified" sod or sprigs. After seven years of extensive research at the University of Georgia's Griffin Experiment Station, combined with careful evaluation of 35 small-plot golf course locations, Sealsle 1 was released in 1999 by plant geneticist Dr. R.R. Duncan. Unlike Adalayd, Futurf and other earlier medium and coarse-bladed paspalum cultivars, Sealsle 1 is similar in texture and wear tolerance to the hybrid bermudas. And Sealsle 1 has a number of other advantages, especially under difficult environmental scenarios. First and foremost, it can handle multiple stresses: prolonged drought, high salt levels, low light intensity, waterlogging and extremely high or low soil pH levels. Secondly, Sealsle 1 can tolerate most types of alternate water sources, including wastewater, effluent, gray water and brackish water. It also requires less irrigating, less fertilizer and only minimal pesticide applications when compared to other warm-season cultivars. As water quality and water conservation become even more critical in the days ahead, Sealsle 1 may be the best choice for fairways, tees, roughs and transition areas. Sealsle 1 not only thrives in difficult environments, it also gets very high marks for turf quality, cold-hardiness, turf density and turf strength, disease and pest resistance, and rapid recovery from normal wear and injury. On top of that, Sealsle 1 has the most attractive, rich dark green color of any of the warm season grasses. See for yourself. Schedule a trip to see Sealsle 1 at one of these quality-conscious producers licensed to grow and sell certified Sealsle 1 seashore paspalum.

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It is with great pride that I assume the duties of president of the Florida Golf Course Superintendent Association. The executive committee; board of directors and FGCSA staff all look forward to working with you over the next year. Committee chairmen have been selected for the new year. Thank you to all of the board members who have accepted their respective positions.

The Awards Committee once again will be chaired by Clayton Estes. The Awards Committee develops, defines and upholds

the standards by which the various awards of the FGCSA are determined. The committee has been asked to modify and streamline the selection process of all award candidates to ensure that all worthy candidates are considered equally. The manner in which the Distinguished Service Award is distributed will be examined to make sure that

we do the best job of honoring the recipient. The DSA is our most treasured award and we want to make certain that we give the honoree proper attention.

Mike McCulloch will chair the Bylaws Committee. Members of this Committee are charged with ensuring that the business practices of the FGCSA follow the Bylaws of the GCSAA. All proposed bylaws must be submitted to the Executive Board 90 days prior to the next meeting and then to membership 30 days before the meeting.

The Education Chairman is Buddy Keene. This Committee is responsible for all educational programs. The initiative of the Education Committee is to ensure that educational offerings are spread throughout the calendar year. This will increase attendance at all education sites and increase revenues for all chapters. There is a calendar of events on our Web site ([www.floridagcsa.com](http://www.floridagcsa.com)). If you are planning an educational seminar please contact Buddy, so he can review the events around the state to avoid any conflicts or

duplications.

Craig Weyandt is wearing at least three hats for us this year. In addition to his secretary/treasurer duties, he will become the finance chairman and still retain his Research Committee duties at this time. The Research Committee is charged with coordinating all research activities in Florida with the FTGA, GCSAA, USGA and other allied associations. The finance chairman typically is also the secretary/treasurer and is charged with watching our backs and to ascertain avenues for our financial stability. This year the Committee will also be reviewing the feasibility of changing our investment portfolio. At the present time, our money is earning less than 1% in CDs and money market funds. We will be looking into increasing our returns, while still remaining fiscally responsible in our investing.

Chris Ansley from the West Coast Chapter will be the FTGA Liaison. The FTGA liaison's job is to monitor all FTGA meetings through attendance or by the minutes provided by the FTGA. The FTGA is our closest ally in the state and we all hold the FTGA in the highest regard. Chris will be our voice and ears with the FTGA.

Our Fund-Raising Committee chairmanship will be handled by Jeff Brown. Jeff and his committee will work to develop and implement programs that will successfully raise money for use by the FGCSA. Their initiative for this year is to implement a system to solicit and raise donations from the local chapters. The FGCSA fund-raising activities have been non-existent in the past. Funds are required to offset recent additional financial obligations that the state board has undertaken as part of the state budget, which includes full responsibility for our Tallahassee lobbyist's expenses, certain cam-

paign donations and media/public relations expenditures.

Dale Kuehner will again be our GCSAA liaison and voting delegate. His duties include attending the annual chapter delegates meeting and casting your votes at the GCSAA Annual Meeting in February. Dale has done a tremendous job of researching the candidates and issues in the past and we can look forward to more of the same.

Once again, Joe Ondo has agreed to chair the Golf Committee. Joe keeps track of all of the winners of the Poa, Crowfoot, and FGCSA Championship and the competitors with the lowest average and whips them into shape for the FGCSA Team at the GCSAA Championship.

Ralph Dain is the chair of the Government Relations Committee. Members of this committee must work very closely with

***One researcher was computing the amount of arsenic that golf courses apply each year. She took the average acreage per course and assumed that we spray every square foot of turf. We are aware that we do not spray every foot; however, others are not. We must do a better job of getting the facts out.***

the director of communications in order to monitor government and similar agencies as their policies affect the FGCSA. The Government Relations Committee has also been charged with increasing FGCSA-member-courses' participation in the Audubon Cooperative Sanctuary Program. Florida has more golf courses than any other state and the program received the most publicity from Tim Hiers and his involvement early on in the cooperative effort to promote golf's environmental awareness. Our state goals are to attain 50 percent participation in five years as established by Audubon International.

The Membership Committee is being chaired by Matt Taylor. Matt's committee responsibility is to promote the benefits of FGCSA membership and in-turn will increase membership in the local chapters. This year the Membership Committee will be investigating the status of membership for assistant superintendents. The committee will investigate the value and costs of an assistant being a member, and methods on how to attract more assistant members.

Joe Pantaleo will chair the Publications Committee and his job is to ensure the quality of each and every one of our publications. This committee works very closely with Joel Jackson, Marie Roberts and Mike Perham to publish the best and most informative publication in the nation.

Steve Bernard will be in charge of the Standard Operating Procedure Committee. The purpose of this committee is to maintain continuity from administration to administration so that important procedures are not overlooked. This year the Committee will add the annual five-year financial projection into the SOP.

I recently attended the Pesticide Review Committee meeting in West Palm Beach with our Government Relations Committee chairman, Ralph Dain. The meeting opened up my eyes even more widely than before concerning the necessity of passing along the correct information to the researchers. One researcher was computing the amount of arsenic that golf courses apply each year. She took the average acreage per course and assumed that we spray every square foot of turf. *We are aware that we do not spray every foot; however, others are not. We must do a better job of getting the facts out.*

Please contact me with any comments or suggestions that you might have with regard to communicating the correct practices of golf course superintendents.

## Going Around the Horn...



Greg A. Pheneger  
President

### PRESIDENT'S MESSAGE

*Southern Tradition #11*

# Teamwork



*Bobby Jones and teammates*

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was a given?*

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Joe Pantaleo, 2003 President's Award for Lifetime Service

Joe Pantaleo

## From Cheese Head to Big Cheese

By Jim Walker

It is an honor and privilege to write the Presidents Award story about my longtime friend, Joe Pantaleo.

The thing I have always admired and respected about Joe the most is his ability to walk the talk, not just talk the talk. Next to golf, Joe loves basketball. He is like Larry Bird, the "Hick from French Lick" who played more than a few seasons with the Boston Celtics. When asked about the pressure of a big game, Bird said, "If it were the seventh game of the NBA Championships and there were two seconds left and his team were trailing by one point, I WANT THE BALL!"

When it comes to growing grass and getting a course ready for the big game, Joe, like Larry Bird, wants the ball. And like the Celtic great, it's nothing but net as

the buzzer sounds.

Joe got Key Biscayne ready for the Senior PGA Tour and Eagle Trace ready for the PGA Tour for three years. After stints at Ft. Lauderdale C.C. and Delaire C.C., Joe now applies his skills and superior work ethic to the Indian Creek C.C., and like the title of an old Van Morrison song says, it has been a perfect fit. Since 1996, this magnificent golf course has had as good a superintendent as there is in the business.

Joe is a cheese head. Born in Beloit, Wisconsin, he attended the University of Wisconsin and somehow became a Chicago Bears fan. After earning his B.S. degree in the snow and cold, he got smart and earned his M.S. degree at Biscayne College in sunny south Florida. They're freezing up in Eau Claire, stuck in their cars and Joe's lying here 'neath the sun and stars. Once you get sand in your shoes, you can check out anytime you

want, but you can never leave.

Good for south Florida that Joe never left. A member of the South Florida chapter since 1981 and the FTGA and GCSAA since 1985, Joe has touched many lives in the turf management community, as well as those outside our profession.

Joe is that strange breed of cat who lives, breathes, eats, sleeps and plays golf. And play golf he does. He has won the Poa Annuu Classic, the FGCSA Championship and earlier this year he won the most coveted title in our profession: the GCSAA National Championship. He did this at Harbour Town Golf Links, which hosts the MCI Heritage Classic each year the week after the Masters. Joe outplayed, out-gutted, and out-smarted the best superintendent golfers in the country on a day when the wind was blowing 30 knots and the air temperature was in the low 40s.

Joe has three children; Amy 18, Michael 16 and Meagan 15. By golly, Joe, you're getting old and grey. He lives with his wife Lila (Fred) in a beautiful home on the golf course property.

I want to remind all who have read this that the Presidents Award for Lifetime Service is not just another guy getting a plaque and his name in a magazine. Qualifications for this award include having a minimum of 20 years of service in the turfgrass industry. Joe joins the company of men like Paul Turcotte, Tom Mascaro, Joe Konwinski, Dick Blake, Steve Kuhn, Alan Weitzel, Kevin Downing, Tim Hiers and Dan Jones just to name a few. That is pretty lofty company and only 52 of the thousands of superintendents in our state have received this award.

Joe is currently the secretary/treasurer of the FGCSA and, until taking that office, he served as the external vice president for the South Florida GCSA. He was president of the SFGCSA in 1989-90. He is now in the pipeline to become the FGCSA president in two years.

Congratulations "Smokin' Joe," lifetime golfer, lifetime superintendent and most of all lifetime friend. Not just with me, but many others too numerous to mention. And this closing thought:

As you wander through this life, my friend

Whatever be your goal  
Keep your eye on the  
doughnut

And not upon the hole

## Chapter Round Up Checks From Fundraisers Keep Rolling In

Calusa

Greg Kriesch takes over as Calusa Chapter president and will also host our 4th Annual Superintendent-



Clayton Estes, CGCS, right, presents FGCSA President David Court, CGCS with a \$5,000 check from the Annual NFGCSA Turf Research Fund Raiser hosted by Glenn Klauk at the Pablo Creek G.C. Photo by Joel Jackson

Pro-Supplier tournament at the Heritage Palms G.C. Oct. 16. This event is our major fundraiser and provides a day of networking and fellowship as the three-man teams compete in a scramble format. Last year's event



During the 2003 IFAS Field Days, the University of Florida and Mrs. Sandy Hayden unveiled and dedicated a permanent sign that recognizes the work and support of Jeff Hayden and the Seven Rivers GCSA for the Environ Research Lab.

raised \$2,500 for turf research.

Central Florida

Crowfoot Open winner Robert Parmar, Lake Orlando G.C. continued his winning ways as he also



PALM BEACH CHAPTER

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July 25, 2003

Pay To The Order of **Florida GCSA Research Fund \$29,000**  
**Twenty Nine Thousand And 00/100 Dollars**

For: Ft. Lauderdale green

**South Florida GCSA**

FGCSA Secretary/Treasurer Joe Pantaleo, right, presents President David Court, CGCS with a check for \$29,000 raised at the 2003 South Florida GCSA/IFAS Turf Expo. The funds support the FGCSA Turf Research Green and projects at the Ft. Lauderdale Research Station. Photo by Joel Jackson.

captured the 2003 CFGCSA Championship held at Hal Richburg's Victoria Hills G.C. Jimmy Lawrence, Southridge G.C.

took low net honors. Our next event will be The Memorial hosted by Brett Harris at the Lake Nona Club. This event honors and remembers



External Vice President Chris Ansley, right, from the West Coast GCSA presents a \$3,000 turf research donation resulting from the proceeds of the annual Bud Quandt tournament. Photo by Joel Jackson.

our fallen comrades and raises scholarship funds for aspiring turf students.

As the fall swing of the PGA Tour comes back to Florida, we would like to recognize Disney's director of golf maintenance, Gary Myers, CGCS and Magnolia and Palm head superintendent, Pat Hennessey, as they host the 2003

Funai-Disney Classic. Pat is a 26-year veteran of Disney's golf operations. On October 27th we will be hosting a one-day GCSAA Regional Seminar on Employee Safety.

Dr. Joe Chamberlain, with the Valent Corp., will discuss post-emergent herbicide programs in established ryegrass and bentgrass at our October chapter meeting.

**Everglades**

At our annual meeting hosted by Matt Fancher at Tiburon, Kyle Sweet was elected president of the EGCSA. In other business at the annual meeting we voted to donate again \$5,000 each to the FGCSA, FTGA and GCSAA turf research programs.

We also awarded two \$500 scholarships to Lake City Community College students Steven Rauh and David McDonough. Rauh is a first-year Lake City Community student from Cape Coral and has worked at South Seas resort on Captiva for the past several years. McDonough, from Naples, is a third-year student with work experience in Naples as well as OJT experience



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*FGCSA Directors 2003-04. Front row from left, Ralph Dain, Treasure Coast; Michael McCulloch, Suncoast; Chris Ansley, West Coast; and Steve Bernard, Palm Beach. Back row from left, Ken Shakeshaft, Calusa; Buddy Keene, Seven Rivers; Jeff Brown, Ridge; Chris Cartin, Central Florida and Clayton Estes, CGCS, North Florida. Not pictured, Jeff Heggen, Coastal Plains; Matt Taylor, Everglades and Jim Goins, CGCS, South Florida. Photo by Joel Jackson.*

maintaining cool-season grasses in New Jersey.

Host superintendent Pete Metcalf had Wyndemere Golf Club, Naples in superb condition for the August Golf and Lunch meeting for the EGCSA. With a rainy morning start, then clearing, the day proved to be great for golf and fellowship. The afternoon meeting highlight was the donation of \$1000 to the family of

Rodney Jones. Jones, of Reliable Divers, recently passed away and will be missed by many of Southwest Florida superintendents for whom he provided his services. All prize money won for the day was donated by each golfer to Rodney's family.

In the government-relations arena we are working with the Conservancy of SW Florida to help write a survey on chemical use on

golf courses that will be distributed to local courses. We will be hosting a one-day GCSAA Regional Seminar on Water Quality at the Naples Beach Club on Sept. 23.

Fundraising idea: As chapters seek new ways to raise funds, the EGCSA created a voluntary contribution program and raised more than \$2,250 this year that helps our chapter to support GCSAA,

FGCSA, FTGA. This can work for you and your association.

#### North Florida

Our 2003 Turf Research Fundraiser hosted by Glenn Klauk at the Pablo Creek Club netted a \$5,000 donation which Clayton Estes presented to the FGCSA at the summer board meeting in Orlando. Clayton was roasted and toasted by Tom Cowan and Nick Clark as he was presented his FGCSA Presidents Award for Lifetime Service at our August meeting at Selva Marina G.C. Our educational speaker for the meeting was John Foy, director of the USGA Green Section. Thanks to Jerry Stevicks and his staff for hosting a great meeting.

#### Palm Beach

This September will mark our first Assistants Only meeting for the chapter. We need to find constructive ways to mentor the superintendents of the future and recognize them for the invaluable service they render as our righthand men and women.

Dr. Lawrence Datnoff was

## 2004 Florida Turfgrass Association Winter Turf Conferences

- January 13th Mid-Florida Turf Conference - Orlando
- January 15th Tampa Bay Turf Conference - Tampa
- January 20th Southeast Turf Conference - Lake Worth
- January 21st Dade/Broward Turf Conference - Miami
- January 22nd Southwest Turf Conference - Ft. Myers
- January 29th North Florida Turf Conference - Jacksonville
- February 3rd Gulf Coast Turf Conference - Milton

Topics will include - Herbicide label updates; adjuvants and tank mixing; groundwater and pesticide issues; pesticide safety, and much more!

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For more information, please call Conference Coordinator, Julie at 800-882-6721.



Newly elected FGCSA Officers, from left, Secretary/Treasurer Craig Weyandt, Vice President Joe Pantaleo, President Greg Pheneger, and Past President David Court, CGCS. Photo by Joel Jackson.

our educational speaker at our July meeting with a presentation on "Silicon For Managing Diseases In Bermudagrass." It was great to see such a good turnout by our members (40) for the August joint chapter meeting with the South Florida GCSA. Too bad we didn't bring home the trophy.

**Ridge**

Ever since the Green Side Up column on the Ridge Rules of Golf in the last issue, we are keeping a low profile.

**Seven Rivers**

This past July at the IFAS Field Day, we were honored to attend a dedication of a permanent sign at the Environtron Research Laboratory recognizing the fundraising efforts and support of Jeff Hayden and the Seven Rivers GCSA.

**South Florida**

Congratulations to our South Florida team for defending our possession of the Jimmy Blackledge Trophy with an 11-9 win over the Palm Beach Chapter at Grande Oaks

CC. Andy Lemmel had the course in great shape for the event. Low Gross went to John Swaner (72) followed by Seth Strickland and Jim Torba with 73s. Jim Goins, CGCS, who has volunteered to serve once again as our external vice president on the FGCSA board of directors took low net honors with a 63. Our speaker for this annual get together was Dr. Ronnie Duncan of the University of Georgia. His topic was "Renovation Issues With Paspalum, Grow-In Challenges and Greens Management."

**Suncoast**

Get-well wishes to Tom Hilferty at Tatum Ridge Golf Links who underwent an emergency quadruple bypass Aug. 8. According to reports, he is doing fine. Tom is a past president of the Suncoast chapter. Thanks to the participation by George Cook, Chip Powell, Tom Carlson, Troy Smith and others, the Sarasota County staffers are getting factual and real-world information to help guide the drafting of Golf Course Design and Performance Standards. The original document has been modified several times, thanks in large part to the information provided by these gentlemen. The hearing Sept. 10 yielded some positive results. The commissioners plan to vote on the ordinance Oct. 22.

Event news: Our Pro-Super tournament will be held Sept. 23 at Mission Valley CC in Nokomis. Host superintendent is William Tyde. There is going to be a golf tournament held Sept. 27 at Bird Bay Golf Club in Venice. This is for the Make A Wish Foundation. It will be a 10:00 a.m. shotgun start using Oldsmobile Scramble Format. Cost is \$50 per person with all proceeds going to the foundation.

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### Treasure Coast

Roy MacDonald, Hobe Sound G.C. is our new chapter president. He didn't waste much time asserting his leadership as he not only took the gavel, but also low gross honors at the August meeting at the North Palm Beach G.C. Our next big event is the 10th Annual Blue Pearl Golf Tournament celebrating a decade of benefiting our local schools and helping them make a commitment to environmental awareness.

With the coming of PDI, we found a great online resource at GCSAA that helps managing your education and service-point requirements and your professional development. It's called GCSAA Member Central. Check it out at [www.gcsaa.org/mc/index.asp](http://www.gcsaa.org/mc/index.asp).

Mike Vanatta's presentation on "Trenched Horizontal Well Technology" at our July meeting was an interesting insight into an alternative water resource we might need to consider in the future. Mike is now with Environmental Turf.

### West Coast

Congratulations to Louis



*Golf Agronomic Supply and Handling made its annual \$3,000 donation to Past President David Court, CGCS, for the FGCSA Research Fund at the 2003 Crowfoot Open Golf Tournament. Representing GASH were, from left, Chris Leahy, Dale Mitchell, Richard Colyer and John Swaner. Photo by Joel Jackson.*

DeVos of The Tides C.C., our new chapter president. We are looking forward to our annual Bud Quandt Benefit Tournament Oct. 6. This year the Tampa Palms G.C. will be hosting the event. Last year's event at the Pasadena Y.&C.C. netted a \$3,000 donation to the FGCSA Research

Fund, which was presented by Chris Ansley at the FGCSA Annual Meeting in Orlando.  
**Florida GCSA**

Board Meeting highlights: Turf Memorial presentation by Kirk Sowers and Cary Lewis. FTGA president and vice president, Bobby Ellis

and Jan Beljan discussed the upcoming FTGA Conference and Show and Research projects and the reorganization of the FTGA office. Mike Goldie's Legislative Report included some legislation that had been proposed concerning rate structures for reclaimed water, but it was poorly



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Geoff Coggan, CGCS, MG, left, presents immediate Past President David Court, CGCS with his gavel and framed cover photo in recognition for his service as president. Photo by Joel Jackson.

written and ill conceived and died in committee.

Adoption of the new FGCSA operating budget for 2003-04: A total of \$40,000 in turf research donations was received during the summer board meeting.

The FGCSA Officers for

2003-04 are President Greg Pheneger, Johns Island Club; Vice President Joe Pantaleo, Indian Creek Club; Secretary/Treasurer Craig Weyandt, The Moorings Club. New directors coming on board are Steve Bernard, Adios GC, Palm Beach; Chris Cartin, Deltona Hills

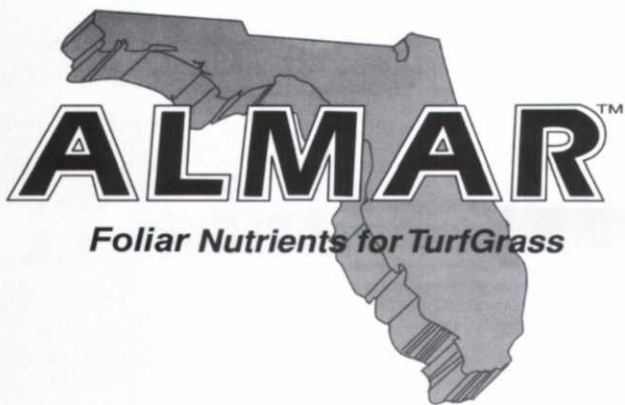


Director of Communications Joel Jackson, left, presents Geoff Coggan, CGCS, MG a bound copy of the 2002-03 issues of the Florida Green containing Coggan's president's message columns. Photo by Joel Jackson.

GC, Central Florida; Jim Goins, CGCS, Hollybrook GC, South Florida; Jeff Heggen, Hilaman Park GC, Coastal Plains; Ken Shakeshaft, Six Lakes GC, Calusa; Matt Taylor, Royal Poinciana, Everglades.

Continuing Directors are

Chris Ansley, Heritage Isles GC, West Coast; Jeff Brown, Lake Region, Ridge; Ralph Dain, Sailfish Point, Treasure Coast; Clayton Estes, San Jose CC, North Florida; Buddy Keene, Gainesville G&CC, Seven Rivers; Mike McCulloch, Jacaranda West, Suncoast.



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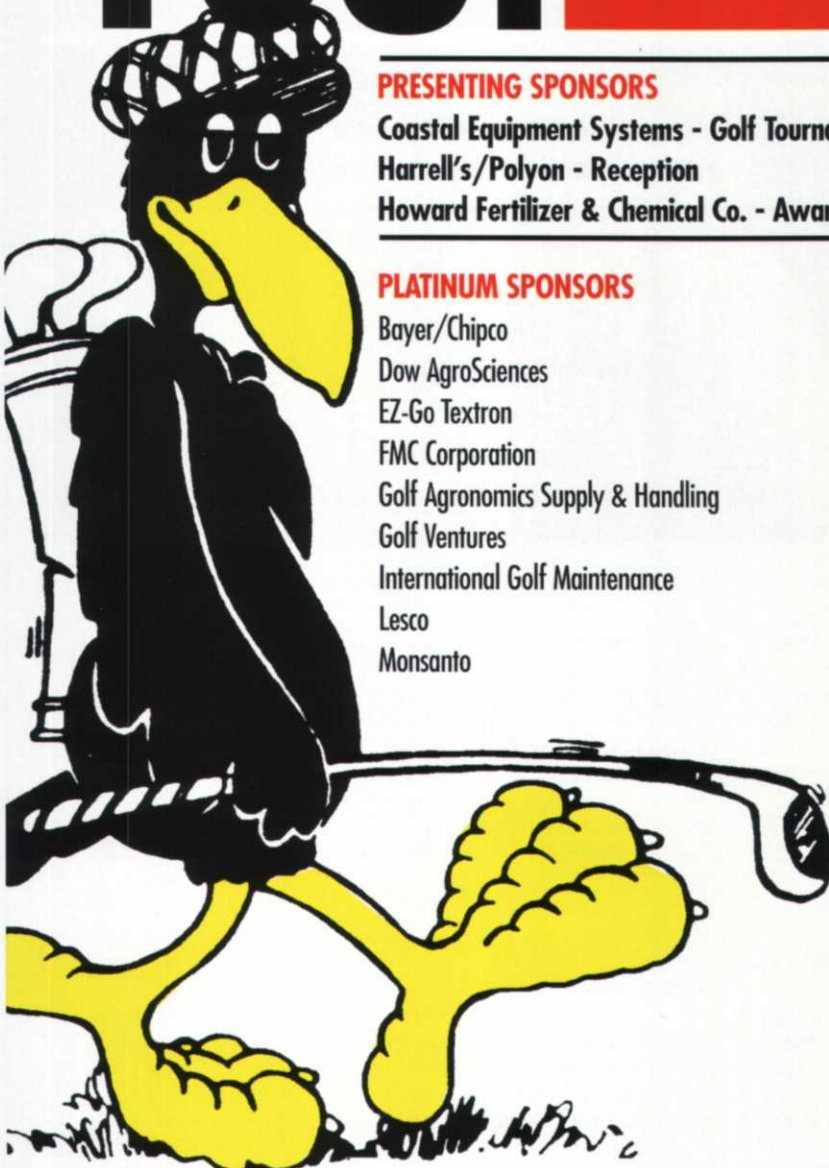
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From Mimeograph to Computer, the Florida Green Has Served Florida's Superintendents For

# 30 Years!

This issue marks the 30th anniversary of the Florida Green by way of the first superintendent's magazine, *The South Florida Green*. That first issue was published by the South Florida GCSA in October 1973 and was only 8 pages long. Seven years later as the Florida Golf Course Superintendents statewide association took shape, the South Florida Chapter graciously agreed to let its magazine become the *Florida Green* and the official voice of the association. The introductory editorial in 1973 by Tom Mascaro talked about the vision and value of the magazine to the association and the industry. His words ring as true today as they did three decades ago:

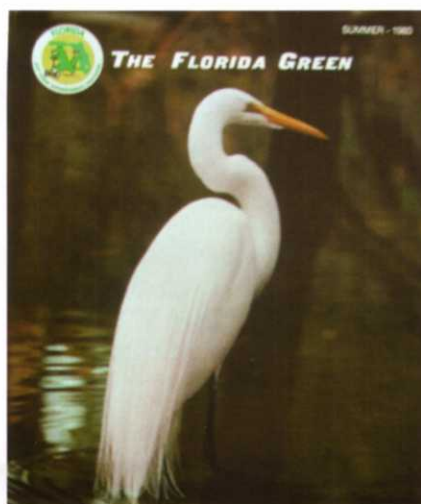
It is indeed an honor to be invited to write an introductory article

who have more than a passing interest in what's going on at their clubs. "South Florida Green" will most certainly afford them an insight into the "behind the scenes" activities.

This publication can become a vital link between the University of Florida Turfgrass Research Staff and the South Florida Golf Course Superintendents. Space in "South Florida Green" is being provided so that Turfgrass Research information can be reported as projects progress. All golfers in South Florida will ultimately benefit from this coordination of vital information. It becomes apparent, therefore, that "South Florida Green" can serve many people as a means of improving communications between those



1973



1980



1983

for the South Florida Superintendent's Association new publication "South Florida Green."

A newsletter such as this will perform an invaluable service, not only for Association members, but to many others as well. It is obvious that this publication will be an excellent vehicle to keep all of the members informed on the latest techniques in Turfgrass culture and management. In addition to the very real benefits to the membership, it will also be of immeasurable value to the many suppliers of equipment, chemicals, seed, fertilizer, etc. "South Florida Greens" is a means of presenting their products to the membership.

This publication can do much to improve communications between the Golf Course Superintendent, the Golf Professional, and the Manager, since these three positions represent the administrative body of most clubs.

For members of the Greens Committees and their Chairmen, "South Florida Green" will give them an insight and most certainly a better understanding of the many ramifications and problems of the care, maintenance, and management of their golf course and grounds.

I would even venture to say that there are many serious golfers

people interested in improving the game of golf.

To top it off, this publication, as it grows and matures, will undoubtedly be referred to time and time again. "South Florida Green" can become part of everyone's library. In addition, the exchange of this publication with other Association newsletters will give it national, and indeed international, stature.

I am proud to be counted among everyone who wishes "South Florida Green" success. It gives one a nice feeling to be associated with those who devote their lives to the betterment of the royal and ancient game."

Tom Mascaro

## Florida Green Trivia

### Staff Notables

Editors: Mike Barger, 1973-76; Dan Jones (Editor/Publisher 1976-1990); Tim Hiers, Editor 1984-85; Joel Jackson (Editor/Assistant Editor, 1990-present); Tom Benefield, Editor 1992-94. Associate Editor David Bailey, 1980-83. Advertising Manager Marie Roberts, 1990 - present. Business Managers: Paul Crawford (1995-99); Mike Perham (1999-present).

Photographers: Harry McCartha (1977-81); Daniel Zelazek, 1983-present). Regular Reporters/Columnists: Mike Bailey long time Palm Beach Reporter. Mark Jarrell and his Mark My Words column. Darren Davis for his Super Tips, and our newest regular Jim Walker, our own Andy Rooney.

**Size**

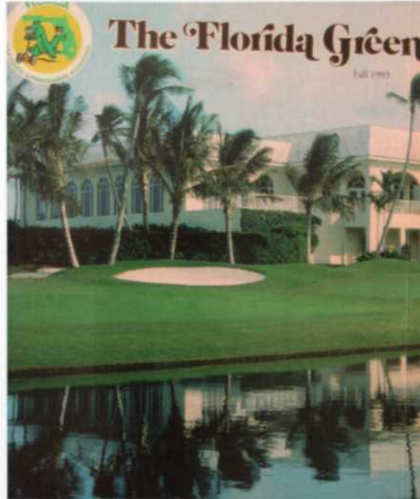
Smallest 8 pages. Largest 112 pages, Summer 1997. Average sizes - lots of 64-, 72-, 80- and 96-page publications. It all depends on the advertising. Ad to editorial ratio goal is 50%.

**Awards**

The Florida Green had an unprecedented run of 11 Best Overall Awards in its category in the annual GCSAA Publications Contest until the competition finally caught up three years ago. But we don't do this for awards, we do it to promote and educate people about the profession and industry. In that regard you are the final judge.

**Production**

Dan and Irene Jones used to cut and paste articles into layout design in their living room and take to the printer to be photographed, color-separated plates made, and then printed. Joel Jackson used to type articles on his Commodore 64 computer and fax articles and mail prints and slides to Larry Kieffer at Janlark Communications, which took over production responsibilities from Dan and Irene in 1989. Janlark did additional editing and the layout and then faxed the rough drafts back for proofreading. The printer was still doing color separations and making plates.



1993

Today Jackson, Janlark and Rinaldi Printing Co. of Tampa are 100 percent digital. Daniel Zelazek's large-format images are scanned on a very high tech machine to produce those fabulous cover shots. Jackson scans prints into digital images or takes digital photos. Janlark manages five publications and has graphic designers help to lay out the magazine after the editing process. Paul Wright of Brandon has been the art director assigned to the Florida Green for the past two years. Articles and photos are now transferred by e-mail attachment or by FTP transfer to a Web site.

The process of getting a proof from Rinaldi to Marie and Joel to Janlark, which returns corrections to Rinaldi, once took a minimum of four days, usually five and often six. Now it can be done in less than an hour. A digital proof hard copy is prepared and is routed to Marie and Joel for final approval and returned to Janlark to make any final corrections. Corrections in the old days meant making four new negatives for each page and then burning a new plate. Now a corrected page is submitted to the digital file on the computer.

**Distribution**

Two copies are sent to each golf course in Florida with a known address. One addressed to the clubhouse and one to golf course maintenance. We want every course operator and superintendent to be aware of the issues and developments affecting the Florida golf industry. Additionally, one is sent to each FGCSA member at his Member Directory address. Copies also go to the golf media, golf course architects and builders, turf schools, other superintendent associations and prominent turf researchers and other golf notables around the country.

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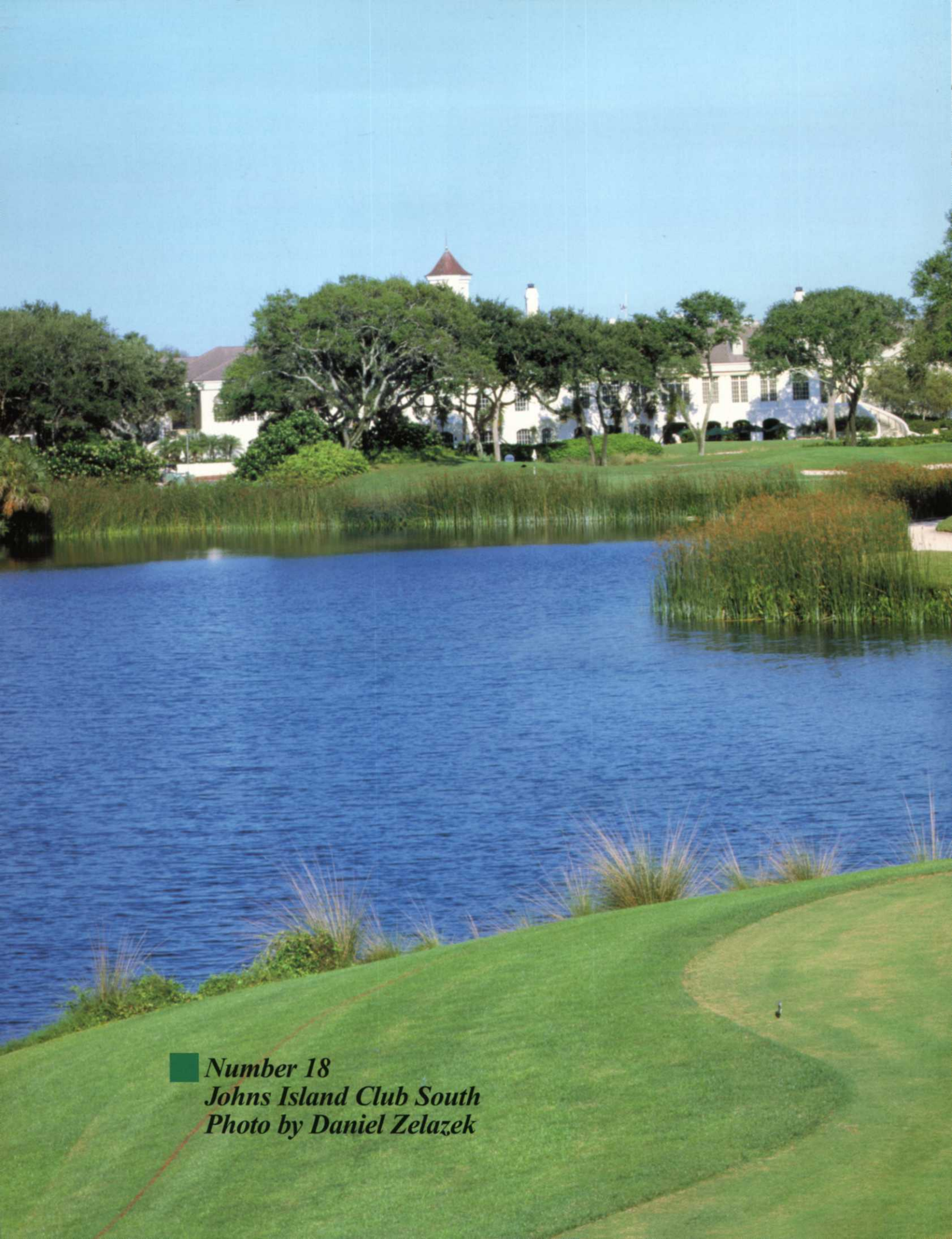
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**Number 18**  
*Johns Island Club South*  
*Photo by Daniel Zelazek*



JOHNS ISLAND CLUB

# Three Courses and Two Different Environments

*By Joel Jackson*

The Johns Island Club isn't on Johns Island at all. It is located in the middle of Orchid Island halfway between Sebastian Inlet on the north and Ft. Pierce Inlet to the south. Orchid Island is one of several barrier islands situated along the Atlantic coast of Florida. Johns Island is a smaller island in the Indian River Lagoon just west of this private community. Vero Beach is the nearest major city.

The 36-hole club opened the South Course in 1969 and followed soon after with the North Course in 1971. These courses were designed

by Pete Dye with the collaboration of Jack Nicklaus. It was one of the Golden Bear's first forays into course design. The property was originally a live-oak-hammock riverine habitat along the Indian River and west of Highway A1A and the beach dunes. The indigenous oak trees have played a major role in the growth, development and management of the property.

Twenty years later as the residential community built out and club membership grew, a third course was built on the mainland. The West Course, designed by Tom Fazio in 1988, sprang up amid the sand pine, palmetto and scrub oak lands west of U.S. Highway 1 near Wabasso. Although the

property is 150 acres, only 80 acres hold maintained turf, the rest is native vegetation with special attention given to preserving scrub jay habitat.

Leading the golf and grounds department at Johns Island is ten-year veteran, Golf Course Manager Greg Pheneger. Pheneger just assumed the presidency of the Florida Golf Course Superintendents Association in July. A graduate of Ohio State University's turf program, he spent his first ten years in the business at the PGA National Golf Club in Palm Beach Gardens rising to director of golf course maintenance before coming to Johns Island in 1993.

Pheneger says his experience at PGA



*Number 10 West. The rolling terrain and entirely different native plant palette of scrub oaks, pines and palmettos on the West Course offer members a completely different look from the more residential oceanside courses. Photo by Daniel Zelazek.*



*Number 6 South. Many holes on the North and South courses are surrounded and framed by native oak trees. Shade management is a top priority. Photo by Daniel Zelazek.*

National preparing for the 1983 Ryder Cup, eight PGA of America Championships, and the PGA Tour Championship in 1987 were great training for man-

aging multiple courses to the high standards expected at Johns Island.

But seniority has its privileges, so we

begin our tour of the Johns Island Club courses with the eldest of the three courses, the South Course, and superintendent Chuck Calhoun who has been here from day one more than 26 years ago. Says Calhoun, "I've been here when this place was just dirt, and I've been part of six or seven renovations since then; the most recent being the complete rebuild in 2000 and the change from Tifdwarf to TifEagle on the greens."

I asked Calhoun, who has worked on all three of the Johns Island courses, why so many renovations? He relied, "Primarily for playability, drainage and shade. The water table was only 18 inches below the surface originally, but we still drained pretty well. As the homesites were developed, the runoff from the streets and lots drained onto the golf course.

"Tim Hiers was here at that time and we installed 35 wet wells or sumps around the golf course. Each one had an electric pump and moved the water to our lakes. I thought it was pretty innovative at the time. But the system didn't have enough capacity to be effective after really big storms and the continued development, so some of the early renovations were done to raise the fairways and improve the drainage system."

Later enhancements tied both courses to a drainage network of lakes and subsurface drains to what Calhoun calls the Hurricane Lake which has a pump with a 23,000 gpm capacity to move water.

That brings us to playability and shade issues. The playability of any golf course is, of

course, a function of the design. On a barrier island, space is at a premium, so routing a course through all the existing oak trees was no easy task for Dye back in 1969. But trees continue to grow and 15 to 20 years later, shot angles were gone and encroaching tree roots and canopies were wreaking havoc on the turfgrass especially on closely mowed greens.

Phenegar says, "Vero Beach has a very strict tree ordinance that governs the cutting down and trimming of all trees and especially those of specimen characteristics. Once our shade and playability problems got so severe that we couldn't maintain a healthy playing surface, we petitioned to have 200 trees removed during a renovation to relocate some greens into sunnier locations and alter routings to open up the playing of the holes. Some of these were only three feet off the collar of a green, and we were root pruning the trees every six months to no avail.

"Naturally, there was some initial concern over the removal request, but once the person in charge of administering the tree policy for the city came out and rode the courses and saw what we were trying to accomplish, there was no problem. They understood that their policy was based on a residential model and they could appreciate the agronomic differences and needs to maintain a viable golf course."

"We still have certain holes where shade continues to challenge our ability to grow turf, so it is an ongoing process. We hired Arbor Com to come in and study a couple of our worst holes and by plotting the shade patterns throughout the year, they found another 30 trees that needed to come down to give us a fighting chance to grow good turf on the greens. We aren't on some crusade to just cut down trees. We approach shade management in several alternative ways."

"We have two arborist crews that work year-round to thin out the canopies to get as much sunlight through as possible while keeping the trees healthy. We have installed a fan on No. 6 green to help dry it out and prevent disease and will likely add another and look at doing the same on other shady greens. In out-of-play areas where dense shade prevents the establishment and maintenance of healthy turf, we are planting shade-tolerant ferns and other native plants that can succeed in lower-light environments."

While shade is the number one agronomic challenge on the South Course, Tim Nolan, another 26-year veteran of Johns Island, is busy growing-in his new TifEagle greens on the North Course. Nolan cites shade and its impact on overseeding transition in the spring as his most pressing challenges to growing turf.

Like his counterpart Calhoun, he aerifies his course three or four times per year and maintains a regular verticutting program on the greens. With the installation of more native plant beds in the shady and non-play areas, comes more hand labor to grub out the never-ending oak seedlings that pop up and keep intrusive weeds at bay.

Nolan lists hawks, rabbits, bobcats, parrots and otters among the wildlife inventory on the North Course which is addition to the red cockaded



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## Johns Island Club



### North & South Courses on Orchid Island

**Location:** Vero Beach

**Ownership:** Member owned

**Playing policy:** Private

**Number of holes:** 36. South Course - 6,592 yards, Par 71, Course Rating 71.9/Slope 136. North Course - 6,941 yards, Par 71, Course Rating 73.8/Slope 136.

**Designed by:** Both courses originally designed by Peter Dye with the collaboration of Jack Nicklaus. South Course opened in 1969 and the North Course in 1971. Design renovation in 1998-99 on the North Course and in 2000 on the South Course by Craig Shriner. Construction by Barbaron, Inc.

**Management:** President Brian R. Kroh; Club President Peter P. Graham; Green Chairman Heather Colhoun; Head Golf Professional David Marad. Golf Course Manager Gregory A. Pheneger.

**Major renovations/Ongoing projects:** 1998-2002 renovation of North Course tees, fairways, roughs and irrigation system; 2003 greens rebuilt and planted to TifEagle. South Course - Complete rebuild of course and regrassing of greens to TifEagle in 2000.

Total acreage under maintenance both courses: 190 acres (South 105 acres, North 80 acres)

**Greens:** TifEagle. Avg. Size 5,500 - 5,800 sq.ft. Total 4.6 acres. HOC = South: .09-.105; North: .110 depending on season and weather. No overseeding. Green speed goals: 10-11.

**Tees:** Tifway 419 Bermudagrass, Combined 6 acres.

**HOC:** .425 South, .400-.500 North. Overseeding: Ryegrass @ 20 lbs/1,000 sq. ft.

**Fairways:** Tifway 419 Bermudagrass, Combined 56 acres (Roughs 110 acres). HOC: Fairways South .600, North .475-.500. Overseeding - Ryegrass: Fairways -

South @ 350 lbs/A. North @ 375 lbs/A. Roughs-Both @ 250 lbs/A.

**Native areas:** South 32 acres of deciduous oak hammock. North 7 acres planted in native grasses, ground cover, shrubs and flowers.

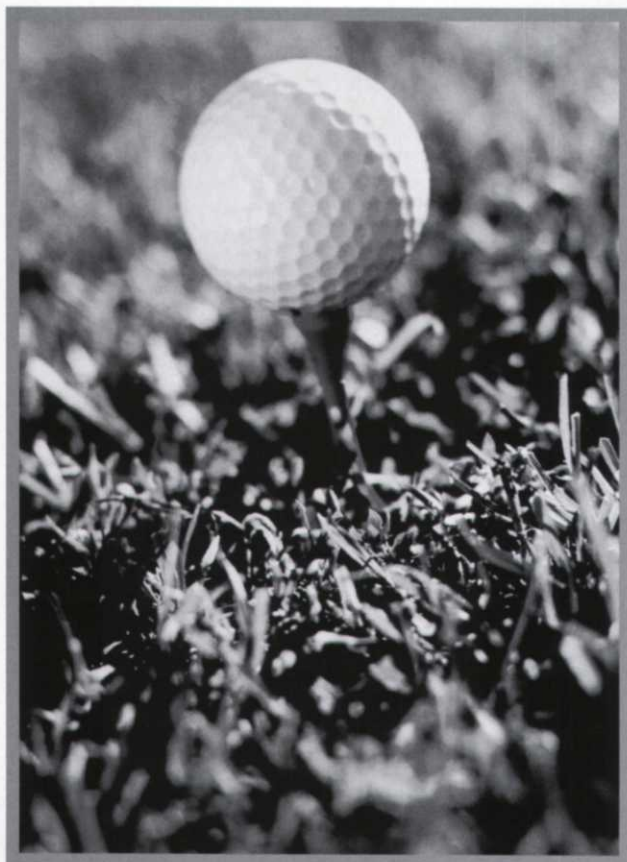
**Waterways/Lakes:** South 9 lakes (7 acres fresh water, 35 acres brackish). North 5 lakes. Contracted aquatic maintenance.

**Irrigation:** Flowtronex VFD 2400 gpm pump station. Source: Deep well on mainland and stormwater retention. Rain Bird Cirrus control system. Rain Bird heads triangular spacing. Fertigation system. Currently no watering restrictions in the South Florida WMD.

**Total staff including superintendent:** South 18 and North 20 full time. 40 hours per week. 6 hours overtime.

**Leadership:** Administrative Assistant Barbara Tierney. Head Mechanic Gary Petzold; South Course - Chuck Calhoun, Superintendent; David Harrer, Assistant; Ted Cushman, Chemical Technician and Mike Roske, Irrigation Technician. North Course - Tim Nolan, Superintendent; David Beachem, Chemical Technician and Tony Jarrell, Irrigation Technician.

**Communications:** Entire crew meeting every Monday and weekly management staff meetings every Friday. Monthly safety meetings.



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## Johns Island Club

**Johns Island Club - West Course on the mainland**

**Location:** Wabasso

**Ownership:** Member owned.

**Playing policy:** Private

**Designed by:** Tom Fazio. Construction by Central Florida Turf

**Management:** President Brian R. Kroh; Club President Peter P. Graham; Green Chairman Heather Colhoun; Head Golf Professional David Marad. Golf Course Manager Gregory A. Pheneger.

**Major renovations/Ongoing projects:** Greens reconstructed in 1999 and converted to TifEagle. Irrigation system replaced and upgraded from Rain Bird Maxi to Cirrus. Heads were converted from hydraulic to electric.

**Total acreage under maintenance:** 80 acres of turf, 70 acres of native area.

**Greens:** TifEagle Avg. Size 5,000 sq.ft. Total 2.5 acres. HOC .085" - .110" depending on weather conditions. No overseeding. Green speed goals: 10 for daily play, 11 for special events.

**Tees:** Tifway 419 and Zoysia, 2.5 acres. HOC .275" - .400". Par 3 tees are overseeded with ryegrass @ 500 lbs/A.

**Fairways:** Tifway 419, 34 acres. HOC .375" - .550". No overseeding.

**Roughs:** Tifway 419, 40 acres. HOC: 1.0" - 1.75".



No overseeding

**Bunkers:** 60 native sand. Maintained with 2 John Deere and 1 Smithco rakes. Hand rake small bunkers.

**Native areas:** 70 acres. Sand pine, palmetto and scrub oak habitat.

**Waterways/Lakes:** 4 lakes total 9 acres. Maintenance by outside contractor 2X per month.

**Irrigation:** Flowtronex VFD pump station. Source: Deep well. Rain Bird Cirrus control system. Rain Bird 700 series heads on 70 ft. triangular spacing. 3 fertigation tanks with 2 pumps. Currently no watering restrictions in the South Florida WMD. Water

management/conservation: Greens are watered once per week automatically and supplemented by hand watering.

**Total staff including superintendent:** 26 full time. 40 hours per week. 6 hours overtime.

**Leadership:** Superintendent John Curran; Assistant Superintendent Lucas Harvey; Second Assistant Barry Balavender; Head mechanic Anthony Seals; Assistant Mechanic Rusty Meyer; Chemical Technicians Tom Caldwell and David Ramsey; Irrigation Technician Jose DeLapaz.

**Communications:** Weekly crew and club staff meetings.

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*Number 18 West. The 150-acre West Course has 80 acres of turf and 70 acres of native areas. Managing proper nutrition and moisture levels in the sandy soil and keeping invasive plants out of the native areas are the biggest challenges. Photo by Daniel Zelazek.*

## Greg Pheneger, Golf Course Manager



**Originally from:** Granville, Ohio

**Family:** Wife Gail; Sons Alec (11) and James (8)

**Education:** AAS Ohio State University

**Employment history:** 1980-1993 PGA National Golf Club as assistant superintendent, Champions Course 1981-86; superintendent 1986; director of GC maintenance 1988-93. 1993-present, Johns Island Club

**Professional affiliations and awards:** Member GCSAA, FGCSA (current president), FTGA, Treasure Coast GCSA - all offices and chapter delegate 2001, 1999 and 1998

**How did you get into the business:** My father is a retired club professional and I became involved in the golf course industry at an early age.

**Mentors:** My parents - Their love and devotion to family life has been a steady influence on my life. Paul Lombard - My football coach who taught me

that I could be a leader. Luke Majorki (PGA National) - He had a very strong work ethic, but family came first.

**Accomplishments:** Being involved in the preparations for major golf championships - 1983 Ryder Cup; 1985-93 PGA Seniors Championships and 1987 PGA Championship.

**Philosophy of work/Advice:** We are in a service industry and our job is to serve our customers. Our customers may be multimillionaires or someone like me. No matter who it is, their opinion counts and should never be ignored.

**Memorable moments:** This may sound corny, but it was definitely the birth of my two sons. I do not cry often, and probably never did before their births. However, I cried tears of joy on these two occasions  
**Hobbies/Interests:** Golf and snow skiing. I coach soccer for the local youth league.



Number 16 North. This challenging par 3 is enough to test the mettle of even the most accomplished player. Photo by Daniel Zelazek.

woodpeckers, ducks, wading birds and occasional bald eagle seen by Calhoun on the South Course.

Speaking of wildlife takes us to the West Course on the mainland, and a different habitat but one having some of the same critters like bobcats, rabbits, hawks and otters. In addition, Superintendent John Curran, a Penn State graduate and six-year veteran of Johns Island lists endangered or threatened species like scrub jays and gopher tortoises along with armadillos, alligators, owls, ospreys and raccoons making homes or foraging on the course.

The West Course doesn't have the drainage and shade challenges presented by the courses on the island. But sandy, well-drained soils have their demands as well, Curran explained.

"We have to manage our nutrient and moisture levels very closely. Because the soil profile drains so well, we only fertilize as needed, keeping the turf healthy but not lush. We basically spoon-feed the turf the nutrients it needs, putting out only small amounts at a time to prevent leaching. We maintain adequate moisture levels by infrequent deep watering and supplementing by hand watering when and where needed."

The sandier soil provides a good habitat for the pesky mole cricket, one of Florida turf's major nemesis, at least until Chipco Choice came along. Curran says, "We apply Chipco Choice to the fairways approximately every three years. The roughs are spot-treated with baits and Orthene. In general we only treat insect infestations if they exceed a tolerable threshold level. Our goal is to minimize pesticide application. All of our weed-control

programs are done by handgun spot spraying."

Reducing pesticide use is also one of the goals of the Audubon Cooperative Sanctuary Program and all three of the Johns Island courses are nearing completion of achieving certified status in the program. Since nearly half of the acreage of the West Course property is native vegetation, a very intensive program is in place to maintain the natural look by constantly keeping after the invasive plant species that try to take over.

Besides the challenge of managing the unique and sometimes demanding habitat, Curran and his staff had the honor of hosting a U.S. Open Qualifier in 2002. This brings us back the honcho of this operation, Greg Pheneger, who earned his spurs preparing for special events.

Pheneger, a dedicated family man, who admittedly wept tears of joy at the birth of his two sons, cites his parents' constant family devotion and the family-first, but strong work ethic of mentor Luke Majorcki as major influences in his life and career. He says his football coach Paul Lombard taught him that he could be a leader, and Greg has shown every indication of that trait as he brings new ideas and challenges to the Florida GCSA.

"We are in a service industry and our job is to serve our customers. They may be business owners, professionals, multimillionaires or someone like you or me. No matter who it is, their opinion counts and should never be ignored."

If you read Pheneger's "President's Message" in the front of this issue, you will see that he is not ignoring anyone and he's trying to include everyone.

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Number 12 North. Architect Craig Shriener renovated the original 1971 Pete Dye design to relocate features to enhance playability as the trees and course matured and changed shot angles. Photo by Daniel Zelazek

## Fun Facts



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

1. Car: Volvo S80
2. The last good movie I saw: Not "G" Rated would be "The Sixth Sense"
3. I stay home to watch: 24 Hours
4. The book I've been reading: Harry Potter & The Order of Phoenix
5. Favorite meal: Alaskan King Crab, baked Potato, corn on the cob; & a cold Becks Light!
6. Favorite performers: Robin Williams and Eric Clapton
7. Prized possessions: Grady White Boat and Golf Ball Collection
8. Personal Heroes: My father
9. Nobody knows that I: Like the Road Runner (but

- really pull for the Coyote)
10. I'm better than anyone else when it comes to: Working through concerns
11. If I could do it over: I would learn to play the piano
12. I'd give anything to meet: Abraham Lincoln
13. My fantasy is: To win the lottery and travel the world
14. The one thing I can't stand: Very pushy people
15. If I could change one thing about myself: I wish I were a better writer, especially now that I am going to have to write more articles
16. My most irrational act: Jumping off of a cliff into a quarry lake.
17. The words that best describe me: Trustworthy; committed; responsible (I would make a good pet dog)

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Number 18 South from behind the green. The lakes on the North and South course aren't just for aesthetics and challenging golf shots. They play a key role in stormwater management. Photo by Daniel Zelazek.

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# Johns Island Tour

*Photos by Joel Jackson.*



*An oscillating fan was installed on No. 6 South to combat shade induced dampness on the green.*



*Are rotary mowers becoming a trend in turf management?*



*Converting thin turf areas to fern beds in shady areas just makes environmental sense.*



*Johns Island Club Golf and Grounds Management Team. From left, front row: Barbara Tierney, administrative assistant; Chuck Calhoun, South superintendent; Gary Sampsen, North assistant superintendent; Barry Balavender, West second assistant superintendent and David Foster, landscape director. Back Row: John Curran, West superintendent; David Harrer, South assistant superintendent; Lukas Harvey, West assistant superintendent and Tim Nolan, North superintendent.*

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According to the etiquette section in the USGA Rules of Golf, players are responsible for repairing any damage they make to the green. Photo by Joel Jackson

By Joel Jackson

According to a recent National Golf Foundation survey on the attitudes and expectations of avid golfers, a couple of the top-20 bothersome complaints about course conditioning was the existence of unrepaired ball marks and divots and the condition of teeing areas, which I took to mean more divots and less turf. These complaints had somewhat of a rankling effect on this old retired superintendent, given that ball-mark and divot repairs are the responsibility of the golfers themselves and not the superintendent and his staff. If you don't believe me, look in the USGA's "The Rules of Golf for 2002-2003," Section 1, page 2, Etiquette, the sub-section titled, Care of the Course.

In addition to talking about carefully filling up and smoothing over all holes and footprints made in a bunker, and not damaging greens with flagsticks, shoes, golf bags and putters and following local golf cart traffic regulations and not taking divots during practices swings the section says and I quote,

A player should ensure that any divot hole made by him and any damage to the putting green made by a ball is carefully repaired. On completion of the hole by all players in the group, damage to the putting green caused by golf shoe spikes should be repaired.

The USGA just made one small error. They should have put that section somewhere on page 13 or beyond and attached some stroke penalties to the flagrant violations of these "rules" of etiquette. Maybe people playing golf

would have paid more attention to fixing up these blemishes if they had to add a stroke to their score for each ball mark or divot that went unrepaired. Since the courtesy and etiquette guidelines don't fall under the penal sections, people blow them off and then have the gall to complain about them, and the buck gets passed on to golf course maintenance to spend labor dollars to clean up after the players.

We can discuss the history, traditions, and state of the game and golfer etiquette till the cows or the night water-man comes home, or we can visit with five FGCSA members who talk about how they deal with ball marks and divots at their golf courses, remembering that the buck always eventually stops with maintenance.

### Grasslands C.C. Education is Job One



"We provide a ball repair tool and an information card to our golfing guests." - Roy Wilshire, CGCS.

When it comes to ball marks, our number-one focus is always on education. We take extra care to share with outside groups that have specials events at the Grasslands C.C. about

the importance of properly repairing ball marks on the greens. We provide a ball-repair tool and an information card to our golfing guests. For our members, we put reminders in our newsletters whenever the problem seems to getting out of hand. We don't have a formal maintenance routine for ball-mark repairs, since we rely on our members to police themselves.

As far as divots go, I'm pretty proud of how well versed the members are at leaving a level, filled divot and not a pile of sand. We have buckets of green dyed sand on our carts and for our small group of walkers we have small lightweight containers that fit on their pull carts. Overall they do a pretty good job of keeping up the divots and they understand the importance to the appearance and enjoyment of the round for everyone.

### Royal Poinciana Club Greens Mowers Do Double Duty



"We just schedule the manpower to get it done." - Matt Taylor, GCS

In our operating plan, ball-mark repairs are a staff responsibility first thing in the morning. Using the ball-mark-repair tool by Standard, our greens

## Ball Marks - The Magnitude of the Problem

*Editors Note: The following is an article and photo from "Black Diamond Happenings," the club newsletter from the Black Diamond Ranch in Lecanto. Superintendent John Cunningham was frankly amazed by the sheer number of ball marks. It took four or five workers several trips to the range to get enough golf balls to place on the visible ball marks in various stages of recovery or disrepair.*



*No. 4 Green Quarry Course at Black Diamond Ranch. Each golf ball represents one ball mark. There were approximately 1,200 identifiable marks on this green on Jan. 7. We continually try to fix and sand ball marks during our morning tasks. Topdressing will also help fill some of those blemishes. If you are already fixing ball marks, please make sure your playing partners are also.*

### "From The Green..."

What actually happens when a ball mark is not properly repaired?

1. Soil is exposed, so the area immediately surrounding the ball dries up faster than it would if the ball marks were repaired and thus a blemish is left on the green.
2. There is also a change that the raised turf caused by the ball will dry quickly and may die out.
3. The open soil invites weed invasion, such as crabgrass or Poa annua.
4. The unrepaired ball mark will leave a "bumpy" spot in the green. When a ball mark is neglected by a golfer it then is scalped the next morning by a mower which remains for many days.

From an agronomic viewpoint, a ball mark bruises the grass plant and severely damages

the growing point of the plant. Turf recovery must then take place from the perimeter of the damaged area, which will take a considerable amount of time.

The correct way to repair a ball mark is to stretch the turf back over the bruised area from the edges. After the mark has been repaired "pat" the area down with your putter. What takes 15 seconds to fix, could take 30 days to heal if not fixed properly.

Proper etiquette demands that each golfer repair his/her own ball marks before walking off the green. The damage caused by unrepaired ball marks is no small matter. Ball marks must be repaired almost immediately in order for them to heal properly.

See you on the course,

*John P. Cunningham, GCS*

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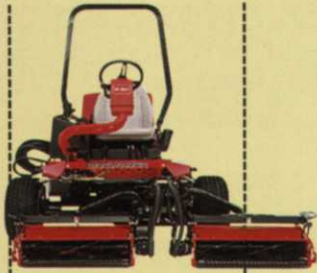
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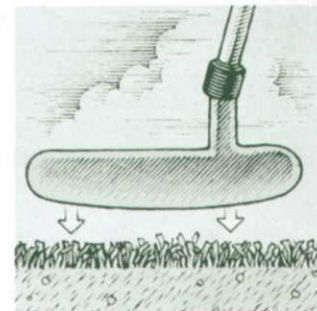
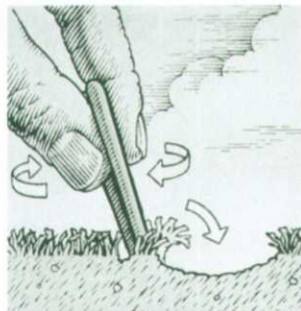
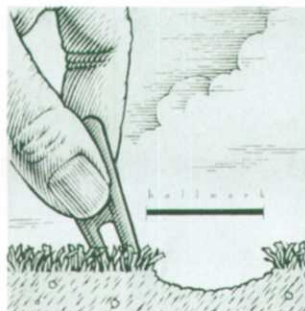
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## The Proper Way to Repair a Ball Mark



- 1** Use a prolonged ball mark repair tool (preferably), knife, key or tee.
- 2** Insert at the edges of the mark—not the middle of the depression.
- 3** Bring the edges together with a gentle twisting motion, but don't lift the center. Try not to tear the grass.
- 4** Smooth the surface with a club or foot. You're done when it's a surface that you would putt over.



Source: Golf Course Superintendents Association of America

This high-resolution ball-mark-repair guide can be downloaded from the GCSAA Web site.

mowers walk the greens, repairing ball marks before they mow the greens. We do promote golfer etiquette in the club newsletter, and post notices and put announcements on carts and some golfers do a great job of following through, but others don't. Instead of standing around complaining about ball marks, we just schedule the manpower to get it done. Most members may not be aware that we take the extra time to do this, but we think it's important to make sure the greens are ready to go first thing.

Our course set-up man takes care of filling divots on the course as he moves the tee blocks to the new positions for the day. We have sand buckets available on the Par 3 tees so the golfers can help fill divots on the tee tops. The set-up man also checks and repairs divots on short par-4 holes and the third shot areas on par 5s where short irons are frequently used. These chronic spots can have some unfilled divots, especially when we have lots of play during the season. We double-check par-3 tees on Friday to clean them up as much as possible for the weekend.

We have sand buckets on all the golf carts and sand bottles that fit in special brackets that fit on pull carts for our fairly large number of walking golfers.

### WCI Communities' Venetian Golf & River Club

#### Ball Marks Aren't a Problem



*"With no heavy organic layer, the greens aren't marking up." - Mike Miles, GCS*

Actually we don't have any real bad ball marks on our new greens. The only thing I can think of is the straight sand construction with only porous

ceramic amendments and no organics. We don't have a soft organic layer to gash like I've seen on former courses. I know there are tradeoffs using straight sand profiles, but with 40 inches of rain this summer, it hasn't been a bad thing.

As far as divots go, we use green sand. We don't put out sand buckets on the par-3 tees. With five sets of tees on every hole, it doesn't make too much sense. The golf carts have sand buckets for golfers to use on fairway divots, and I have to say that they get the majority of them. The rangers also help with divots, which is a big help too. We backfill and topdress tee divots on non-mow days and do the practice tee every other day.

### Waterlefe G.C.

#### No Room on the Practice Tee

*"I wish golfers wouldn't use the sod cutter method." - David Williamson, GCS*

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We don't have a formal program to deal with ball marks, and quite frankly, in the seven months I've been here, we haven't had a real ball-mark problem in that area. I have seen clubs that have lower numbers of rounds than we do and have more ball marks than we do. I don't know why the difference: age, thatch, construction, golfer awareness? If it does become an issue, the greens mowers would be assigned to repair any ball marks before mowing the greens in the morning.

My chief concern is the divots on the practice tee. Every superintendent will tell you that the practice tee is never big enough to manage the damage from the use and abuse the turf takes. I wish golfers wouldn't use the sod cutter approach to taking divots. They end up leaving a great big hole that can only be repaired by laying in pieces of sod. If they would leave more turf strips between divots, the grass could regenerate and cover faster.

Out on the golf course we have pretty good participation by our members in repairing their fairway divots. We provide a green sand divot mix in the buckets on the golf carts. A couple of areas on short holes take a beating sometimes and we have to react to those areas when the golfers haven't stayed on top of their etiquette. We have a tee and a green set-up person, which has been very effective in providing those extra pair of hands in the morning to get tee div-

ots filled before play hits the course. We don't have sand buckets on the tees. We fill tee divots seven days a week.

## Champions Gate G.C.

There's a universal responsibility for all golfers



*"I often see a major difference in etiquette between daily-fee golfers and club members." - Bobby Ellis, GCS*

As a rule our maintenance staff does not repair ball marks. Player assistants from golf operations like rangers and marshals are encouraged to repair ball marks as they ride the course and they all carry repair tools with them. My stance has always been - there are golf courtesy standards out there and they're pretty straightforward and simple: repair your ball mark, fill your divot and rake out your footprints. That's the universal responsibility for all golfers.

I often see a major difference in etiquette between daily-fee golfers and club members. I think club members will tend to fix their

ball marks more often and remind others to do so as well. Daily-fee players run hot and cold some do and many don't. Whenever we have a high-profile tournament like a mini-tour event or qualifier, those guys clean up those greens and keep that way during the event. I guess that's the caliber of golfer and respect for the playing conditions.

Our guests at Champions Gate are given an introductory spiel that includes a ball-mark repair tool and a card with instructions on how to do it properly. The GCSAA has a pretty good one that I have used before. But you have to be careful with information overload. With scorecards, pin sheets, promotions and menus, before you know it you have more litter on the golf course than useful tools.

We do have a very aggressive routine for maintenance to address divots, especially on our practice tees and the Leadbetter tees at the Golf Academy. We blow or sweep up the divots every day on the practice tees, and we are very strict and disciplined on how and where we move the tee blocks to get good wear rotation on the tees. That schedule is even more critical in winter with heavier play. We topdress the divot strip by hand and smooth out with levelers. Then we fertilize that strip only to help promote recovery. We topdress our par-3 tees on the course every Wednesday. Since we are also on a very aggressive Primo management plan, we mow our tees

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on Mondays and Thursdays on one course and Tuesdays and Fridays on the other, which makes Wednesdays our project day.

We use the green sand, but I have tried other mixes including a charcoal sand mix, but the Pro Shop likes the green color for aesthetics. If you are using green dyed sand, my advice is to use it up fast or keep it dry. The rain and sun will make the dye fade.

## San Jose C.C.

### Peer Pressure Works on Divots



"We run an article and diagram on ball mark repairs in the club newsletter every year." - Clayton Estes, CGCS

At San Jose the greens mowers are responsible for making sure any unrepaired ball marks are fixed before mowing the greens. They

use either the Standard Golf ball-mark-repair punch tool or the small divot tool that golfers use. We encourage players to follow standard golf courtesy by running a ball mark repair article complete with the GCSAA diagram for the proper way to fix ball marks each year during peak playing season. If the situation gets out of hand we run reminders as needed.

As far as divot repairs go, the staff takes care of the divots on tees and the golfers are responsible for their divots in the fairways. We have a big push by members to police themselves and there's often tremendous peer pressure for everyone to fill their divots. We make an exception during cart-path-only situations, and then we will check and fill fairway divots as needed. Our morning set-up man fills the divots on the tees, including the practice tee, every morning. We have a noise ordinance in effect and so he works by headlight on the range tee moving the hitting stations and filling in the divots before venturing out on to the rest of the course.

***We have a big push by members to police themselves and there's often tremendous peer pressure for everyone to fill their divots. We make an exception during cart-path-only situations, and then we will check and fill fairway divots as needed.***

We supply buckets and bottles of sand on the golf carts and in the winter we have a sand refill station out near the 5th and 15th tees. In the summer it is used as a water cooler refill station. We use our regular white-sand greens topdressing as our divot mix.



Tools for repairing ballmarks are simple, free for the asking at most courses, and ubiquitous.



Green sand is one of the most popular mediums for filling divots on the course. Photo by Joel Jackson.



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## Super Tips



*American flag should always be to viewer's left when placed with other flags. The flags of other nations should be the same size and be placed in alphabetical order at the same height as the American flag. Shown at Olde Florida Club are the American flag and the flags of Honduras and Mexico. Photo by Darren Davis.*

At the risk of sounding melodramatic, September 11, 2001 was truly a day that changed my life.

Being from a generation that was not directly impacted by a national tragedy such as a World War or Vietnam, I am ashamed to admit that

my sense of national pride and knowledge of national history was probably less than it should have been. However, this definitely changed for me shortly after the September 11th catastrophe in New York.

Through my travels I often visit my peers' golf course operations facilities. On many of these tours I have witnessed the display of the Stars and Stripes, often accompanied by additional flags from Mexico, Guatemala, Haiti, or other countries represented by the workforce at that particular golf course. I admit I never gave much thought to the manner in which the flags were displayed... that is until I decided to fly the Stars and Stripes at my facility. It was then that I decided to learn the basics of "flag etiquette," and I must admit some surprised me. Below are some of the facts that I learned.

1. The fundamental rule of flag etiquette is: treat *all* flags with respect and common sense.
2. The Stars and Stripes takes precedence over all other flags when flown within the United States. It should not be flown lower than another flag nor should it be smaller than another flag flown with it.
3. Other flags may, however, be flown at the same height and in the same size. Other national flags should *not* be smaller or flown lower than the Stars and Stripes when displayed together. If it is not possible to display two or more national flags at the same

height, it is not proper to display them together at all. 4. The point of honor is on the extreme LEFT from the standpoint of the observer (the flag's right). The order from left to right of flags flown together is: the Stars and Stripes, other national flags, in alphabetical order, state flags, county and city flags, organizational flags, personal flag.

5. If one flag is at half-staff in mourning, other flags flown with it should be flown at half-staff. When flying a flag at half-staff, first raise the flags to their peak, and then lower them to half-staff. The Stars and Stripes is *raised first and lowered last*.

6. A salute (hand over heart for those not in uniforms) should be rendered when the flag is raised or lowered.

7. It is proper to fly the Stars and Stripes at night but only if it is in a spotlight.

8. No flag should be flown during weather which might damage it.

9. When a flag is no longer of dignified appearance and cannot be repaired, it should be destroyed in a dignified way (burned or sealed in a bag or box before being sent out for trash collection).

10. It is not illegal or improper to fly any flag (state, ethnic group, organization, etc.) alone but it is always preferable to display the Stars and Stripes at the same time.

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USGA UPDATE

# The Rain Continues

## Fall Cultivation Practices Critical

By John Foy

On Aug. 14, a tropical depression moved across Florida and dumped another 1-3 inches of rain on a good portion of the state. After reaching the Gulf of Mexico this depression gained strength and became the fifth tropical storm of the season. We are approaching the peak of the Atlantic hurricane season, and while no major storms have threatened, frequent and at times heavy rains have occurred throughout the

eration rotation should be performed on greens, tees, and through the fairway and primary rough areas so that adequate time is available for a full recovery. While active bermudagrass growth is occurring, recovery from aggressive cultural management practices can be slow because of the additional environmental stresses that prevail. It is suggested that coring



times no larger than 0.5 inch be used on greens. The importance of these late-summer and fall practices cannot be over emphasized for preparing for and surviving the winter play season. This is true regardless of whether winter overseeding is conducted.

*Editor's Note: Tropical Storm Henri inundated the southwest Florida coast with nearly 7 inches of rain in some areas in early September.*

ronments and have been increasing in numbers on golf courses throughout Florida. Frequent rainfall makes it difficult for herbicides to be applied as they often require a rain-free period of several hours following treatment. Herbicide application following heavy rainfall also is difficult due to tire rutting caused by chemical sprayers. With all of these factors, forecasting the weather and scheduling herbicide treatments becomes difficult.

Routine rainfall brings with it extended cloudy weather and the need to increase mowing heights on putting surfaces. Bermudagrass requires at least eight hours of sunlight each day and closely mowed surfaces such as putting greens are especially stressed due to less leaf area (chlorophyll) to intercept the sunlight. Increasing mowing height improves photosynthesis. Studies at the University of Florida have shown that increasing mowing height by only 1/32-inch increased photosynthesis by 17 percent on bermudagrass putting greens. This may slightly decrease putting speeds, but other cultural practices like double cutting and rolling can be implemented to



Summer rains have closed courses, delayed projects and grow-ins, and hampered normal maintenance routines and preparations for fall overseeding. Photo by Joel Jackson.

state. Many areas are 10-12 inches ahead of normal year-to-date rainfall.

As Todd Lowe notes in his regional update below, the rains have been quite favorable for the proliferation of weeds, and also have complicated post-emergent herbicide treatments. The frequent cloud cover and resulting reduced sunlight is impacting bermudagrass growth. After just a few days of no sun, bermudagrass begins to take on a chlorotic appearance and density declines. With a decline in density, algae invasion can quickly follow. I have not yet visited any courses that are having major problems nor have I received any "S-O-S" calls. However, it is summer, and providing peak winter-season conditioning during this time is not a realistic expectation. The late summer and early fall is often a difficult period for Florida golf courses because of the adverse weather during the hurricane season.

Along with just trying to survive and complete renovation projects, it is time again to begin preparing for the winter. After Labor Day, a final core

## Weeds Abound During Wet Summers Months

By Todd Lowe

Much of Florida has been experiencing periods of scattered, and at times heavy, rainfall since early June. This annual cycle brings with it challenges in maintaining quality turf, and among the most prevalent is the increase in weeds. The warm, humid Florida climate supports the growth of a variety of plants, and it is no wonder that Florida golf course superintendents spend nearly three times as much on herbicides as do superintendents elsewhere in the United States. According to a survey of Florida golf course superintendents, weeds are the second most-reported management problem after insects.

An increase in weeds has been observed on many recent visits, and routine rainfall has been a major contributing factor. Sedges thrive in moist envi-

improve playability. Remember, a long-term benefit of raising mowing heights at this time outweighs the short-term inconvenience and it will not be long before the weather will allow more aggressive practices.

Keeping up with bermudagrass growth on



fairways is difficult during periods of extended rainfall. Falling behind on daily mowing leads to increased clippings (baling hay once mowing resumes) and increased scalping of the turf. A common tool that many golf courses incorporate is the application of plant growth regulators (PGRs) to decrease vertical growth and clipping yield.

In addition to decreasing clipping yield, PGRs improve turfgrass quality by increasing shoot density.

## Benham's Beat

# Can You Spare Five Bucks for the Future of Golf?

By Don Benham

Many golf superintendents have either read or heard about the proposed \$5-a-member grassroots



Don Benham

program for turfgrass research in Florida. The basic idea is to get club members involved by donating \$5 a member once a year. The money is to be used for basic research on products or problems in Florida.

The media repeatedly reports "Golf" as being a huge user of our limited water resources.

Golf is also often accused of polluting drinking water wells within our state. As environmental groups were making accusations without any scientific basis, the university was forced to provide sound research to disprove these accusations.

Counties and cities began passing their own legislation to "protect" their citizens from problems supposedly brought on by golf courses. Politicians began to speak out against this threat to their community. SWFWMD and other water authorities imposed rules on water use even though the golf courses had usage permits. They were told what day and time of day they could water. Finally, after two years of working with the SWFWMD and with research provided by the University of Florida, the water management district will allow golf superintendents to water when they need to if they stay within their permitted amounts.

Golf course ponds have proved to be a great benefit to water birds according to a study recently completed by IFAS. Joel Jackson and I were in a meeting a couple of years ago hosted by the Florida Department of Health, which was widely covered by the media. An outspoken environmental activist referred to golf course ponds as toxic holding ponds. How we

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would have liked to have had the results of this study in our hands at that meeting.

There are more requests for funding of research in Florida now than ever before. Each year the FTGA turns down many projects because we don't have the money. The USGA and the GCSAA have helped with many projects in Florida but their funding also has to be spread across the whole United States. Dr. Terri Nell and I have presented the \$5-a-member donation plan at many meetings with very limited success. We had a meeting together yesterday to evaluate our success and failures. Dr. Nell stated that we had never had anyone tell us that they didn't like the program. We have had several general managers and management companies tell us they would just like to send in a check from the club instead of billing the membership. We certainly would welcome their support in this manner.

This year we have received endorsement and permission to use the logo of the FGCSA, the Florida chapter of the Club Managers Association of America and the USGA in our fund-raising campaign. IFAS researchers Drs. Laurie Trenholm, Philip Busey, John Cisar, Lawrence Datnoff, and Robin Giblin-Davis have all written letters of need in support of this program. The club manager's association board of directors has agreed to request donations from their members when dues are billed.

The FTGA has donated \$2 million for research in the last 20 years. You as golf course superintendents could really help the program by talking to your club managers and green committees about sup-

porting this funding program and assuring them that this research money returns far more to the members than the meager \$5 donation. If only half of the private clubs participated, we could achieve in two years what it has taken the FTGA two decades to accomplish. Don't you think \$5 is a worthwhile investment in the future of golf?

GCSAA News

## Committee Structure Changes

To Increase Involvement,  
Elevate Strategic Focus

Increasing opportunities for meaningful member participation and raising discussions to a more strategic level are key goals in a phased transformation of the association's committee structure.

The transformation will start in 2004 with the creation of two new "umbrella" committees, which will be composed of members and others with relevant expertise and will be chaired by board members.

As needed throughout the year, the committees will convene task groups consisting of two or three members of the umbrella committee (one serving as chairman) plus additional members and other experts in the specific area. Task group assignments may involve commitments as brief as one or two conference calls, or as extensive as multiple in-person meetings over two or three years, which will provide more flexible opportuni-

ties for volunteer service. Once its assignment is complete, the task group will dissolve.

"We think it is critical to have a wide range of perspectives in the room when we are developing strategies," said President Jon D. Maddem, CGCS. "Our aim is to bring members with experience and expertise together with experts in relevant disciplines and our professional staff. This new structure will allow us to take a higher-level, integrated approach overall, with great flexibility in targeting specific issues as they arise.

"We are using a phased approach to implement the system so that we can apply what we learn during 2004 as we implement additional changes."

For 2004, the umbrella committees will be formulated as follows:

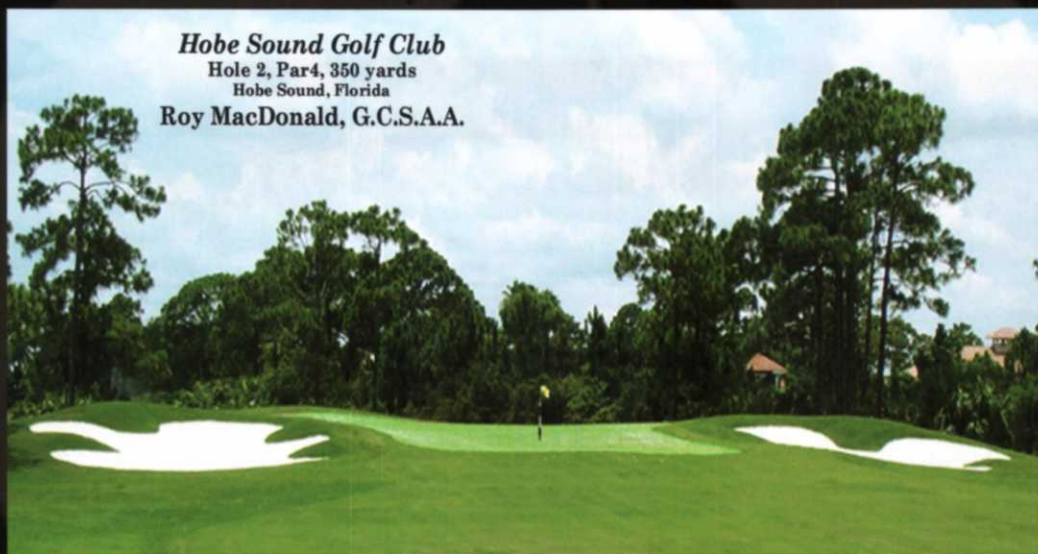
- The environmental programs committee and its related task groups will replace and expand upon the current environmental stewardship, government relations and research committees and begin work on the priorities identified during the July 2003 Environmental Institute for Golf strategic planning meeting.
- The strategic communications committee and its related task groups will replace and expand upon the current member communications and Web strategy committees.

As a result of this more flexible form of involvement, it is expected that the environmental programs and strategic communications committees, and their related task groups, will involve at least as many members as the current five and more over time. Other

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than the Institute focus group, which will complete its service in January 2004, all other currently active committees and resource groups will continue in their current form for 2004.

The next phase of implementation, anticipated in 2005, would reconfigure most of the other existing committees into two additional umbrella committees in the areas of professional development and member/chapter services, along with numerous related task groups in each area. The nominating, election and standards/bylaws committees would continue as stand-alone committees, in accordance with the bylaws.

Maddem provided participants in the September Chapter Delegates Meeting with a preview of the changes to the committee structure.

"Serving on a committee or task group is the chance to help mold GCSAA's strategies and policies," Maddem said. "It also is a fulfilling way to share your experience and expertise while you build leadership skills that you can use at work and in other organizations."

Members interested in serving on a GCSAA committee or task group must complete the online volunteer form by Dec. 1. Members who serve on GCSAA committees or task groups are eligible to receive service points for their participation.

#### Outcomes of The Environmental Institute for Golf Strategic Planning Session

In keeping with the spirit of the above-mentioned pooling of resources and integrating overlap-

ping areas of interest, 58 golf industry leaders and GCSAA staff met at headquarters in Lawrence, KS on July 29-31 to discuss how the newly named Environmental Institute for Golf, could build on the basics provided by the former GCSAA Foundation. Attending on behalf of the FGCSA were David Fry, Tim Hiers and Joel Jackson.

This gathering of stakeholders from a variety of disciplines is in keeping with the new format indicated above for committees and resource groups. The inter-relationships of various areas of interest will be combined to maximize results and avoid duplication of effort.

The meeting was facilitated by Jeffrey Cufaude of Idea Architects, Inc. After the ground rules were discussed the group was asked to leap forward in time to 2008 and develop a shared vision of what the Institute might accomplish. Remembering these are intended to be far-reaching goals, here is how the Institute might be viewed.

It is 2008 and the Institute

- Conducts an organized, collaborative effort to lead golf's environmental stewardship activities.
- Focuses on delivering programs and services that are targeted at maximizing the environmental sustainability of the game and golf courses.
- Operates as "the" organization that funds sound science and documentation on environmental issues that can be used in a practical manner by all stakeholders resulting in changes in behavior.
- Provides education in the formats appropriate to

the various audiences (superintendents, owners, builders, architects, developers, golf professionals, club managers, policy makers, regulators, environmentalists and golfers).

- Serves as the clearinghouse of information in the environmental and golf arenas.
- Generates positive PR and public awareness based upon the results of the environmental work of the golf industry.
- Operates with sufficient funding to conduct meaningful information collection, research, education and outreach programs.

This is a very simple list and does not do justice to the discussions both in small working groups and general sessions where detailed questions and ideas of how to accomplish those goals were brain stormed, argued, defended and debated for two and a half days. Steve Mona, the CEO of GCSAA, thanked one and all for their open and candid comments. He congratulated the group on the successful sharing of ideas and addressing tough issues. Mona reiterated The Institute will operate under three principles:

- Collaboration
- Accountability
- Responsibility

Jeffrey Cufaude closed the session with this quote from philosopher Huston Smith:

*"Infinite gratitude toward all things past.  
Infinite service toward all things present.  
Infinite responsibility to all things future."*

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Owners' Outlook

Supers as General Managers Make Perfect Sense

By Bill Stine

While talking to a group of course owners at an industry meeting, the subject of property managers - or the lack thereof - came up. It is true that there is a shortage of qualified course managers out there. This led to a search of possible training grounds and where to look for qualified managers. There are college programs with internships. There's growing them through the ranks and or training done by the larger golf corporations. The conversation eventually led to the superintendent.

As a board member of the National Golf Course Owners Association, I am proud to say that several members of our board are course owners who started in the business as a superintendent. And why not? It makes perfect sense. Superintendents have their own business units to run.

Their area of management in the course operation is a complete business within a business. Their employee pool includes various departments such as mechanics, spray techs, irrigation techs, assistant

supers and laborers. This department comes complete with all the human resource responsibilities, such as the proper hiring and firing process, employee motivation and retention, workman's comp rules, etc.

Their fiscal responsibilities run the gamut of line items, as they do with any business. They must



Bill Stine

be concerned about payroll cost, cost of products and equipment, the effects of weather on their products, environmental and other government agencies, producing and monitoring budgets and just about everything else other businesses have to deal with.

Let's not forget capital expenditures.

When does repairing a piece of equipment begin costing more than buying a new piece? Will the increased productivity of a new piece of equipment outweigh the expense?

I for one believe superintendents have income within their P&Ls. As any owner will tell you, if the super is saving money in his operation that is incremental income that helps the bottom line. Any superintendent worth his salt is concerned about getting

as many players as possible off the first tee and trying his hardest to keep the course open during inclement weather.

Public relations is another area in which supers often must get involved. Dealing with greens committees, golfers questioning why the cut is the way it is, the local paper wanting to know if he is harming the environment, or writing an article for the club's newsletter. Let's not forget that real pain in the rear they have to deal with is the owner.

Being a manager is not for everyone. In many cases, the super is paid more than the GM. Many supers are not comfortable dealing with customers all day every day and prefer working more with their hands. It seems most are happier being the super as opposed to being the general manager. However, if they have the desire and entrepreneurial spirit, the maintenance department can be a great training ground for becoming a general manager... or even an owner.

*Editor's Note: Bill Stine is a director of the National Golf Course Owners Association and of the Florida Chapter of the NCGOA. This is the first article in a recurring series we will call "Owners' Outlook." In return I am writing a column for their bimonthly newsletter on superintendent and maintenance issues.*

2004 Plants of the Year Part 1

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

For a plant to be considered a Plant of the Year, set criteria must be met. Selected plants have good pest resistance, require reasonable care and be 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: 'Hurricane Louise' Coleus

**BOTANICAL NAME:** *Solenostemon scutellarioides* 'Hurricane Louise'  
**HARDINESS:** Zones 9b-11 (an annual outside this area)  
**MATURE HEIGHT AND SPREAD:** 5' x 5'; more commonly 3' x 3'  
**CLASSIFICATION:** Annual  
**LANDSCAPE USE:** Warm season, full sun, color (from last to first frost), mixed containers, potted plant, bedding plant  
**CHARACTERISTICS:** Upright growth habit, somewhat mounding, good strong branching habit, late season (minimal) flowering. Foliage color is white pink and bright green with frilled leaf edges. Heat and sun tolerant.



Hurricane Louise Coleus. Photo: Dr. Rick Schoellhorn, U.F.

Common Name: Lion's Ear

**BOTANICAL NAME:** *Leonotis leonurus*  
**HARDINESS:** Zones 8-11  
**MATURE HEIGHT AND SPREAD:** 2-1/2 - 7' Tall x 3-5' Wide  
**CLASSIFICATION:** Flowering perennial or shrub  
**LANDSCAPE USE:** Mixed border, specimen/accnt, cuttable flowers, container, foundation, massing  
**CHARACTERISTICS:** A strong-growing perennial that may last for years and become woody. Their bright orange flowers are butterfly attractants and may be cut and used in fresh or dried arrangements. Upright square stems with aromatic foliage display fuzzy orange flower-balls stacked one just above the other on a central stalk.



Lion's Ear. Photo: Leu Gardens, Orlando

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## An ACSP Environmental Case Study

# Contained Chemical Mix/Load Facility Installation

*I have been urging superintendents to enroll in the ACSP program as part of the Audubon International's 50-in-5 campaign to get 50 percent of the Florida golf courses in the program within the next five years. I also know that there are still a lot of skeptics out there just waiting for someone else to take the plunge first. One of the things you are required to do for ACSP certification is an Environmental Case Study on a subject that falls within the standard management practices of the ACSP, which are listed in the certification handbook. We are going to be submitting ACSP case studies done on Florida golf courses in the Florida Green as hands-on examples what some of your peers are doing to get their courses certified.*

*Our first case study in this series of "how-to" articles is from Kyle Sweet, golf course superintendent at the Sanctuary Golf Club on Sanibel Island. Kyle's case study is on the contained chemical mix/load facility recently installed on the golf course. According to Joellen Zeh, staff ecologist with AI, "This is a good example of a course that was already 'doing it all' because of the strict scrutiny that the development was given due to its location within a wildlife refuge, and yet, the Sanctuary's awareness and best management practices were strengthened even more due to their involvement in the ACSP."*

Shelly Foy

By Kyle D. Sweet

The Sanctuary Golf Club did not have a contained chemical mix/load area. The original installed area was a 4-inch concrete pad poured level adjacent to the chemical storage building. This pad had no containment and had been used for mixing/loading for several years.

If a spill were to occur, there was great potential for the material to enter either of two nearby storm drains located in the maintenance facility's asphalt-paved areas. If a spill reached these storm drains, the contaminants could ultimately reach a nearby water body, which serves the 12th hole.

I proposed a project to eliminate this potential hazard. The contained chemical mix/load area project was chosen due to the liability of the potential hazard as well as the desire to comply with the necessary requirements of the Audubon Cooperative Sanctuary Program for Golf Courses.

The entire process began with gathering information on a portable containment skid and taking our proposal to a local structural engineering firm to put our ideas to work. The permitting process and engineering drawings took approximately two months to get completed so we could begin construction of the site.

The current mix/load site was the best location to build the new containment area. Demolition of the existing 4-inch-thick concrete slab was necessary, since the new slab needed to be 6

inches thick to be approved due to construction techniques. Once all of the old concrete was removed, proper reinforcing mesh was installed and the 6-inch slab was poured.

A concrete-block half wall was then constructed along two sides of the slab to protect the area from vehicle traffic as well as foot traffic that travels in and out of the facility area. The new slab was adjacent to the chemical storage building so, in order to cover it properly, an extension of the roof was necessary. The new roof to cover the mix/load area was actually fastened to the existing tie beam of the chemical building and became a large overhang for the area.

While the roofing and lighting were being installed to the new roof, we also had all electrical outlets, breaker boxes and light switches removed from the interior of the chemical storage building. Vapor-proof lighting was installed, which replaced previous insufficient lighting. All new construction of chemical storage buildings are permitted only in this way so I was glad to get us into compliance in this aspect also. In order to support the new overhanging roof, three large support posts needed to be installed along the outer edge of the slab inside of the half-wall. These support posts were buckled to the wall and fastened to the slab.

When the construction of the area was completed we sealed the slab with an impervious sealer and installed protection posts at the corners of the half wall. The posts are 6-inch PVC set and filled with concrete to prevent damage to the wall from vehicles.

This containment bay was built to accommodate a chemical mix/load skid that is constructed of aluminum and stainless steel by ESD Waste 2 Water manufacturing. This skid was placed on the new slab under roofing and had many advantages over other systems I have seen.

## Advantages

1. This mix/load skid is portable and could be moved and used throughout the property if needed.
2. The mix/load area could be used for something else in the future if needed. It is accessible with our large loader under roof and could serve as dry storage area.
3. All piping and working parts are visible and able to be worked on by our staff. There is no underground electrical or underground rinsate piping.
4. The system is very easy to empty and clean of rinsate material. Many staff members have been successfully trained in using the rinsate for small sprayer applications throughout the property. Now that the area is completed and working, it has served us very well. It has proven to provide us with a water savings in our use of our small handheld and electrical 15 gallon sprayers by using the rinsate water instead of additional potable water. Most of the small sprayer use is for non-selective spraying with Round-Up herbicide. It has been very easy and dependable for our IPM manager to work with and has removed the worry of a spill from chemical mixing entering into any of our surrounding storm drains or waterways.



Demolition of the old slab outside the chemical room. Note containment around the fertigation tanks to the right.



Portable 400-gallon-capacity containment skid with portable sump pump located on sealed concrete floor in protected mix-load area. Photo by Kyle Sweet.

#### Goals

The goals for this project:

1. Prevent the possibility of pesticides from entering maintenance facility storm-drainage basins and surrounding water bodies from a spill while mixing and loading chemicals.
2. Keep the project as cost efficient as possible.
3. Install a system that is easy to maintain for our IPM manager and that will last for many years without costly maintenance.

4. Have the ability to re-use the chemical rinsate water to carry out non-selective herbicide spraying on the golf course rather than using costly city water supplies.

#### Implementation And Maintenance

In order to implement this project several steps had to be taken:

1. Proper permitting through the City of Sanibel Planning and Building departments.

2. Engineering drawings done to illustrate our ideas so the project could be bid on and permits could be acquired.
3. Measuring of the area to make sure that the additional construction of a covered area would not interfere with the necessary delivery and maintenance traffic that must travel throughout our facility each day.
4. Keeping the area as close as possible to the chemical storage building. Since there was a pre-existing slab (without containment) adjacent to the building this was not a difficult decision.
5. Separating the area from normal facility operations. This was done with the use of a concrete half-wall. Once the area was constructed we instructed our maintenance staff to treat this area the same as the chemical storage area. No access into the area unless instructed to do so.
6. The size of the rinsate storage had to be large enough to facilitate our largest sprayer. Our largest volume sprayer is 300 gallons and the drive-on skid will hold 400 gallons of liquid when empty.
7. The pumping system to extract the rinsate needs to be maintained. A filtering system was installed and has to be monitored to filter out unwanted grass and soil that might enter the holding area of the skid. This filter will catch the solid material before entering the pump, which will help the performance and life of the pump.
8. Sealing the new 6-inch slab was done to pre-

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vent any material entering the concrete flooring that surrounds the drive-on skid system.

**Results**

The environmental and employee safety level has been substantially increased because if any mixing/loading spills occur, they will be contained in the sump area of the newly installed mix/load skid.

**Golfer/Employee Response**

The project was originally proposed to the Greens and Grounds Committee of The Sanctuary Golf Club in coordination with the Audubon program as well as the Best Management Practices for Golf Courses published for the state of Florida. We had to have capital money approved to complete the project and stressed the importance of this project to everyone involved in the budget process.

As the project progressed I publicized our progress and was able to meet with members at the site and show them what was being done. Once completed, I toured the committee through the operation of the area and they were very impressed with the project. I also walked through the area with the assistant fire chief of Sanibel during their inspection of the building add-on. They also were impressed with the operation and the fact that we were being proactive to prevent accidents.

**Perspectives and Recommendations**

My first recommendation is to have staff that can handle a spill if one occurs. For the past three years our department has trained five individuals to act as a Spill Response Team. Our IPM manager, Fred Fulford, is a trained OSHA Level V Incident Commander, while four other staff members are trained to assist him in the event of a spill. All personal protective equipment is on hand to handle a spill. We can react immediately to an incident within the full scope of the law pertaining to Hazardous Spill Cleanup. I feel this is very important as the amount of time a spill is uncontained can increase the risk of harm to the environment. Also, the services of outside contractors are at a premium cost. Our club can be assured that the problem will be handled as safely and cost effi-

ciently as possible.

With our existing facility size restrictions and chemical storage building location, I feel we did the best we could to improve our situation. I would not do anything differently. I would certainly recommend that golf courses of all types consider this type of mix/load area containment system. The flexibility and simplicity of the system will be a winner for anyone involved in chemical mix/load containment.

**Costs and Benefits**

How much did it cost to implement this project?  
\$ 21,050

What are your anticipated or actual financial savings?  
Immeasurable.

Information

Yes, I am willing to take calls regarding this project.

Yes, photos are included with this Case Study.

**Stewardship Notes**

# Another Outreach And Education Idea

*By Shelly Foy*



We have all heard the expression, "practice what you preach." You practice environmental stewardship on your golf course, but does that extend to your family and your own home? Where better to start employing good sound environmental practices than in your own backyard?

AI's

Treasuring Home program offers a guide to environmental stewardship

for homeowners. "Valuing and caring for the natural resources and unique landscapes in places we call home is critical to creating a healthier and more sustainable environment for the future," says Jean Mackay, Audubon International's director of educational services.

It occurred to me that golf course superintendents can use the Treasuring Home program and accompanying guide as another Outreach and Education program for their Audubon Cooperative Sanctuary Program. This is an excellent tool for introducing your golfers/members to AI and getting them interested in supporting the same type of projects on the golf course.

The booklet, Treasuring Home, which is available to all donors to Audubon's Earth Fund, not only is filled with great indoor and outdoor environmental projects you can do at your home, but also includes a pledge to fill out and return which allows homeowners to make a commitment to good environmental stewardship. You can obtain a copy of the guide, or purchase multiple copies by contacting AI at 518-767-9051, or e-mail [jmacky@audubonintl.org](mailto:jmacky@audubonintl.org). You can also view the Treasuring Home guide and take the pledge online at [www.audubonintl.org/homepledge](http://www.audubonintl.org/homepledge).

Below is a list of some of the projects you can learn more about in the Treasuring Home booklet.

**Outdoor Projects:**

- Landscape primarily with native plants
- Incorporate food and shelter for wildlife and protect natural habitats
- Maintain water for wildlife
- Become more familiar with local natural areas, plants and wildlife
- Add a variety of trees, shrubs and herbaceous plants
- Use water wisely to maximize efficiency and minimize waste
- Protect water quality
- Maintain healthy soils for a healthy lawn
- Mow the lawn at the proper height and with sharp blades
- Reduce or eliminate the use of harmful chemicals

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**Indoors:**

- Get all family members into the habit of daily conservation
- Save water by shutting it off during teeth brushing and shaving; take shorter showers and run appliances on full loads
- Make inexpensive upgrades such as installing low-flow aerators
- Replace older, large-tank toilets with low-flush models
- Conduct a home energy audit
- Switch to compact florescent light bulbs
- Improve insulation and purchase energy-efficient appliances
- Reduce waste
- Choose reusable products
- Recycle paper, glass, plastic and metal

**Beyond Your Backyard:**

- Pass along the Treasuring Home guidebook to family and friends
- Encourage others to participate in environmental stewardship at home
- Work with a local homeowner or neighborhood association to implement neighborhood environmental stewardship projects
- Purchase locally grown and produced products and recycled goods
- Offer to help a local school get involved in environmental education and stewardship
- Get involved in organizing community-wide environmental improvement projects
- Support the protection of local natural areas
- Participate in local planning efforts in support of local conservation and environmentally sensitive growth
- Participate in AI's Sustainable Communities Program

## Justifying a Full-time Environmental Technician

By Katie Benway

If you have ever considered becoming involved with Audubon International's Audubon Cooperative Sanctuary Program for Golf Courses, one of your first dilemmas may be to justify the manhours needed to implement the program. Many golf course managers feel that the ACSP program is not only valuable for internal and external public relations but also a way to learn and execute responsible management practices that do in fact help the environment.

In a recent NGF survey 93 percent of the avid golfers surveyed responded that they believed in the need to protect the environment and 85 percent of them responded that they thought golf courses are friendlier to the environment than they were 10 years ago. The ACSP certification program is an inexpensive and relatively simple and easy way for golf courses to demonstrate and document that they are environmentally responsible and are interested in doing the right thing.

## ACSP Update

### New ACSP Members since April 2003

Ft. Walton Beach GC, Ft. Walton Beach  
 Grey Oaks CC, Naples  
 Red Stick GC, Vero Beach  
 Ritz-Carlton Grande Lakes GC, Orlando  
 Seminole GC, Tallahassee  
 Sugar Mill CC, New Smyrna Beach  
 Vasari CC, Bonita Springs  
**Fully Certified since April 2003**  
 Long Marsh GC, Englewood  
 Pelican Sound GC, Estero  
 Sanctuary GC, Sanibel Island

For most superintendents the idea of completing the paperwork, research, and fieldwork required for the Sanctuary Site certification is more than they themselves have time for. Furthermore, they may not be willing to pull their assistants off their normal routine in order to devote time to this project. Therefore, one solution is to hire or appoint someone and create a new position to fulfill this requirement. While each course will have a different situation, at the Interlachen C.C. in Winter Park, where I worked, they have made the position a permanent part-time staff position, or it can be handled as an internship. I was an environmental science major at the University of Central Florida and worked part-time at the golf course.

Other courses have found individuals on the crew who have a sincere interest in doing environmentally related work in more detail. At some clubs, club members or members of the Resource Committee that must be formed have taken on the responsibility for conducting most of the projects thereby minimizing the labor hours needed from the maintenance staff. The possibilities are endless.

If you do decide to create a new position on the staff, the job description is that of an environmental technician/administrative assistant. Because this position is unique, it is important to mention the fact that the position can be designed to incorporate the added responsibilities of administrative assistant for the golf course maintenance department.

The ACSP certification itself has a great deal of research and paper and computer work involved. At the same time, the individual would be able to perform additional tasks within the office. The advantage to the superintendent is that this person is performing dual roles and is therefore more easily justifiable. However, in some cases this may require the position to be maintained at a full-time status. A full-time employee would also be able to attain the certified sanctuary status more quickly and plan more extensive projects.

The following is a list of the responsibilities for the environmental technician that I performed while at the Interlachen C.C. Tasks and responsibilities include:

- Care and maintenance of all gardens related to certification (i.e. butterfly and wildflower gardens)
- Research of plants to be used in specific garden types

- Make recommendation and prepare purchase orders for approval of plants for gardens
- Place and fill birdfeeders every 2 days
- Purchase birdseed
- Purchase and place nest boxes
- Conduct research for any project. (Example: Installing nest boxes - determine which boxes to build or purchase and where they should be placed for maximum effectiveness.)
- Monitor and document wildlife populations and species on the golf course property
- Monitor nest box activity
- Coordinate and/or host bird counts during migration or breeding season, including local birdwatching and Audubon clubs
- Transport any injured or orphaned wildlife to rehabilitation center
- Write "wildlife of the month" informative articles for the club newsletter.
- Assist in writing of course maintenance section of monthly newsletter
- Purchase and maintain library and/or bulletin board of environmental education materials where members can see them
- Complete all paperwork required for certification levels and update paperwork every two years to maintain certification status
- Complete all backup documentation required for certification (mapping, photos, water tests, records of soil tests, etc)
- Re-vegetate shorelines with native aquatic plants
- Re-vegetate and supervise maintenance of naturalized areas with native trees and plants with value to wildlife research for plants needed and native to area/benefits to wildlife
- Select and purchase those aquatic and native plants
- Educate co-workers with posters and bulletin boards explaining the program and identifying native plants and animals
- Answer all questions from both co-workers and members concerning any element of the program or wildlife related information
- Research any issue that is unfamiliar or requires specific information, such as location of local eagle nests, endangered or threatened species

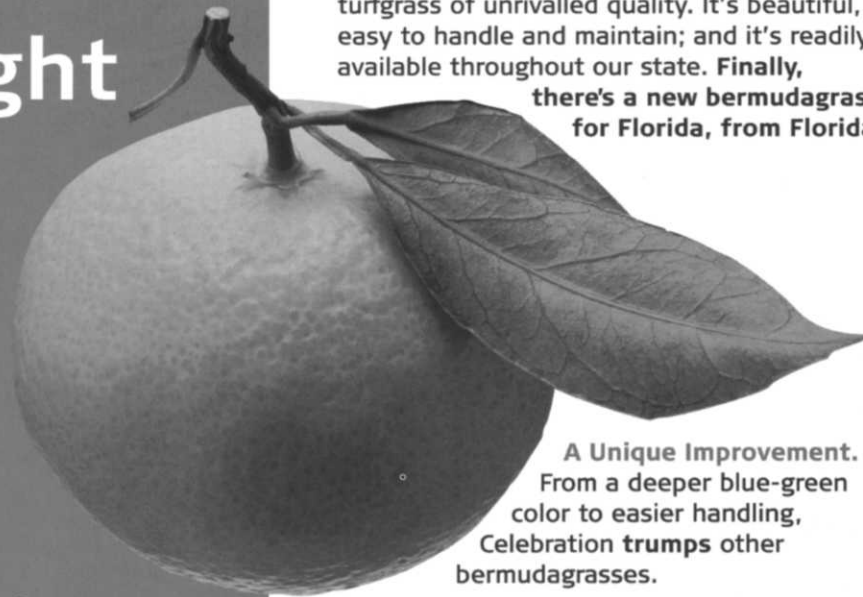
Additional duties outside sanctuary site program:

- Act as assistant to superintendent and assistant superintendent by making pickup and delivery of small tools, chemicals, and equipment
- Enter all purchases and purchase orders
- Keep record of expenditures and costs of products
- File all records
- Assist in correspondence for meetings, conferences, purchases and large-scale projects
- Answer incoming phone calls and take messages
- Distribute job applications
- Type out weekend schedule and office/break room clean-up duties
- Perform additional miscellaneous duties such as painting the office, making travel arrangements, etc.
- Make local parts runs as needed

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By S. Chandramohan, Carol Stiles and  
R. Charudattan

Many grasses, because of their beneficial uses as forage, landscape, or groundcover plants, have been spread around the world for economic development and use. However, during the past century several grasses have turned out to be quite invasive and weedy, for example, tropical signalgrass (*Urochloa subquadriflora*).

Tropical signalgrass has been identified as one of the most troublesome weeds in sod farms, golf courses and lawns in Florida (Busey, 2001). In the

tions for postemergence control of tropical signalgrass (Busey, 2001). Two applications of MSMA at 1.5 Kg a.i./ha at 13- to 14-day intervals have been found to reduce tropical signalgrass canopy to less than 10 percent, compared with up to 100 percent in untreated plots.

Tank mixing with Sencor does not enhance signalgrass control. Teuton et al. (2002) have identified a few preemergent herbicides including some that control tropical signalgrass when applied early postemergent. Although MSMA is effective in bermudagrass, there are no postemergent herbicide treatments available for St. Augustinegrass, because

(Mersie and Singh, 1989). Refinements can be in the form of improved application efficiency of chemical herbicides, use of adjuvants to enhance efficacy, and selective spraying of only weed-infested areas in a crop.

Nonchemical weed control methods, such as biological control (bioherbicides), if they can be deployed in an integrated approach, can help enhance the effectiveness and sustainability of weed-management practices.

#### Bioherbicide Strategy.

The bioherbicide strategy, a form of biological control, consists of using certain highly virulent native pathogens of weeds that are mass-produced, formulated, and applied like a pesticide to obtain rapid development of disease and a high level of weed kill. Typically, these pathogens are registered as bioherbicides by the EPA and are used in accordance with their labels. They are applied when environmental conditions and weed-growth stages are conducive for disease development.

The use of host-specific plant pathogens as bioherbicides could be a practical weed management method for signalgrass control. Bioherbicides can be used as a supplement to conventional herbicides or as a component of integrated control. Bioherbicides can be highly effective in terms of efficacy, environmental benefit, and economics (Charudattan, 2001). Currently, six bioherbicides are registered in Canada, Japan, South Africa, and the United States (Charudattan, 2001). Among these is a bacterial bioherbicide, Camperico, registered in Japan for the control of annual bluegrass (*Poa annua*) in turf.

An example of a registered bioherbicide in the United States is DeVine<sup>®</sup>, the first bioherbicide registered by the EPA. It is used for the control of milkweed vine, *Morrenia odorata*, a major weed in Florida citrus groves. DeVine consists of a pathotype of the fungus *Phytophthora palmivora*, which is capable of killing both seedlings and fully grown vines. On the basis of extensive host range and efficacy studies, this pathogen was found to be a safe biocontrol agent for use in citrus. Abbott Laboratories, Chicago, registered the bioherbicide in 1980 and it is now produced and sold by Encore Technologies, Minnetonka, Minn., on an as-needed basis.

#### Multiple-Pathogen Bioherbicide System for Broad-Spectrum Weed Control

Among the major challenges facing bioherbicide technology is economics. Since bioherbicide pathogens developed as bioherbicides are highly host specific, a bioherbicide typically can control only one out of many weeds affecting the crop. This limits the commercial potential of the bioherbicide and consequently there is little economic incentive to develop and register bioherbicides.

Inadequate or incomplete level of weed control is another problem.

However, these problems may be overcome by using mixtures of pathogens that are effective against several weeds. All susceptible weeds can be controlled simultaneously without loss of efficacy and host-specificity of the pathogens. Chandramohan and Charudattan (2001) have shown that several weedy grasses, including those that affect agricultural crops

### A Multiple-Pathogen Bioherbicide System With Potential To Manage Signalgrass In Turf And Sod In Florida

# BIOHERBICIDE



**Figure 1.** A germinating spore of *Exserohilum rostratum*, one of three fungi used in a bioherbicide mixture tested on tropical signalgrass.

**Figure 2.** Tropical signalgrass uninoculated (left) and inoculated with a mixture of three fungal pathogens. In greenhouse tests, up to 90 percent of the shoots were blighted on inoculated plants.

northern part of the state, tropical signalgrass is sensitive to frost, but in southern Florida it continues to spread vegetatively in successive years.

Tropical signalgrass is particularly troublesome in sod farms. It is difficult to control because of its tolerance to several chemical herbicides or its ability to outgrow control measures. It is essentially resistant to atrazine and asulox, two commonly used turf herbicides. The lack of selectivity of many chemical herbicides precludes their use to control tropical signalgrass in bermudagrass and St. Augustinegrass sod farms (Busey, 2001).

#### Chemical Control of Signalgrass in Florida Turf.

Currently, MSMA, Illoxan (diclofop-methyl), Drive 75DF (quinclorac), and Sencor (metribuzin) are being evaluated in various combina-

the herbicides are either ineffective against the tropical signalgrass or cause damage to the St. Augustinegrass (Brecke, pers. comm.)

#### Need for An Alternative Technology for Control of Tropical Signalgrass.

Sod growers, golf course managers, and lawn care managers in Florida depend on chemical herbicides because of their effectiveness and ease of use. Concerns about groundwater contamination by agricultural chemicals and build up of resistance to chemical herbicides in use necessitate environmentally-safe, alternative technology to complement existing weed management options.

Conventional weed management strategies, relying largely on chemical herbicides, are in need of refinements to make them more sustainable



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as well as natural areas, could be controlled by using a mixture of three fungal pathogens applied with suitable adjuvants.

The use of a mixture of pathogens is advantageous in that if one of the pathogens in the mixture fails the others may compensate. Also, using a pathogen mixture may reduce the chances of development of resistance in weeds that is possible if a single pathogen is used repeatedly. In addition, it may be possible to take advantage of possible synergistic interactions among pathogens in the mixture, which will enhance the efficacy of the bioherbicide mixture. The level of weed control can be further improved with repeated applications.

### Discovery and Development of a Bioherbicide System for Control of Several Grasses.

In 1994, we isolated three fungal plant pathogens, *Drechslera gigantea*, *Exserohilum longirostratum*, and *Exserohilum rostratum* (Figure 1), which were isolated from naturally infected large crabgrass (*Digitaria sanguinalis*), crowfootgrass (*Dactyloctenium aegyptium*), and johnsongrass (*Sorghum halepense*), respectively (Chandramohan, 1999; Chandramohan, and Charudattan, 2001).

These fungi occur in several Florida counties and are therefore indigenous to this state. These fungi were tested for pathogenicity to various grasses and determined to cause severe disease on many weedy grasses. Some grasses were killed, while some were moderately susceptible, and others immune.

The range of grasses that were infected and killed was also determined in greenhouse trials. Thirty-six economically important crop plants were tested to ascertain the potential risks to nontarget plants; however, none of these plants was harmed by the pathogens, whether they were used individually or in a mixture.

The crop plants tested were bean, beet, blackeye cowpea, broccoli, brussels sprouts, cabbage, cantaloupe, carrot, cauliflower, cilantro, collards, corn, cucumber, eggplant, endive, green pepper, head lettuce, Indian mustard, oat, okra, onion, parsley, pea, peanut, radish, romaine lettuce, rye, sorghum, spinach, squash, sweet corn, tomato, turnip, watermelon, wheat, and zucchini. Also, the pathogens did not damage orange and grapefruit, crops in which the bioherbicides are intended to be used.

The pathogens were then field-tested at two locations in Florida - Lake Alfred and Ft. Pierce. (Chandramohan, et al., 2002).

At Lake Alfred, it was possible to control four-week-old plants of large crabgrass (*Digitaria sanguinalis*), crowfootgrass (*Dactyloctenium aegyptium*), johnsongrass (*Sorghum halepense*), guineagrass (*Panicum maximum*), southern sandbur (*Cenchrus echinatus*), Texas panicum (*Panicum texanum*), and yellow foxtail (*Setaria glauca*), which were transplanted randomly into replicated field plots.

The grass seedlings were sprayed with spore suspensions of each pathogen alone or a mixture of the three pathogens in equal proportion of their spores. The fungi were applied as foliar sprays at the rate of 500,000 spores per ml in one of three carriers: water, 0.5 percent aqueous Metamucil<sup>®</sup>, or an emulsion (Sunspray<sup>®</sup> 6E 80 ml, paraffin oil 20 ml, and spores in water 100 ml). Appropriate controls were

included, and the fungi were applied two or three times at two-week intervals.

The emulsion-based inoculum preparation of each pathogen as well as the pathogen mixture yielded the best level of weed control (nearly 100 percent) of all the grasses tested, and the control lasted for more than 12 weeks.

At Fort Pierce, the pathogens were tested on a natural population of guineagrass. The emulsion-based inoculum of individual pathogens as well as the mixture of three pathogens gave nearly 100 percent control, and the control lasted for a period of 10 weeks.

We have also field-tested the bioherbicide system to manage guineagrass in Florida sugarcane in two field trials. The pathogen mixture caused a high level of disease on guineagrass and an 82-99 percent reduction in panicle numbers per square meter. Currently, the pathogen mixture is being tested to control torpedograss (*Panicum repens*), an invasive weed species threatening native plants in Lake Okeechobee.

### Bioherbicide Control of Signalgrass in Florida

A mixture of the above-mentioned fungal pathogens applied twice to tropical signalgrass in greenhouse tests blighted up to 90 percent of the shoots (Figure 2) (Chandramohan, et al., 2002a, b). In a separate study, these pathogens were tested in a greenhouse for nontarget effects on various species of cultivated turfgrasses.

However, the cultivated grasses tested under the same experimental conditions as for tropical signalgrass were immune or resistant to each of the pathogens as well as the pathogen mixture. Bermudagrass (*Cynodon dactylon*) (cvs. FloraTex, Floradwarf, Tifway, and Sahara) sustained some injury from the pathogen/emulsion mixture, but recovered.

Bahiagrass (*Paspalum notatum*) (cv. Pensacola), creeping bentgrass (*Agrostis stolonifera*) (cvs. Crenshaw, Pencross), centipedegrass (*Eremochloa ophiuroides*), and seashore paspalum (*Paspalum vaginatum*) (cv. Sea Isle 1) were immune. St. Augustinegrass (*Stenotaphrum secundatum*) (cvs. Floratam, 1996-7, Palmetto, Seville, and TXF) and zoysiagrass (*Zoysia japonica*) (cv. Empire) were resistant.

The susceptible weedy grasses included in this study (large crabgrass, guineagrass, tropical signalgrass) continued to remain diseased, while the cultivated grasses continued to grow and remain healthy if they were immune. If resistant, they recovered from the initial hypersensitive response and remained healthy. These results indicate that the pathogen mixture could be further developed as a biocontrol for tropical signalgrass in turf and sod in Florida.

In the case of cultivated grasses that are immune or resistant, for example St. Augustinegrass sod or lawn, the pathogens could be used as an over-the-top application. In bermudagrass, spot treatments of the tropical signalgrass with the bioherbicide mixture may be necessary because of the potential for slight injury from the pathogens in the emulsion mixture. From our earlier field tests, we have observed that the pathogens are confined to the treated area (Chandramohan et al., 2002).

### Novelty and Future Potential

In summary, we have developed a practi-

cal biocontrol system with potential to manage several grasses including tropical signalgrass, a problematic weed in Florida turf and sod. This multiple-pathogen approach offers the possibility to custom-blend various pathogens to suit particular groups of weeds. This is a novel approach to weed control, and the University of Florida has been issued a U.S. patent (U.S. Patent No. 6,265,347. Issued, July 27, 2001. Chandramohan, S., and Charudattan, R. "Enhanced Bioherbicide Control of Weeds using Multiple Pathogens"). We are exploring the possibility of commercial development of this bioherbicide system.

### Acknowledgment

This research was made possible by research grants from the Florida Citrus Production Research Advisory Council, Sugarcane Growers Cooperative of Florida, Florida Department of Environmental Protection to Drs. R. Charudattan, S. Chandramohan, and Florida Sod Growers Cooperative to Drs. Carol M. Stiles and R. Charudattan, and support from University of Florida, IFAS. The funding support from the Florida Sod Growers Cooperative through the Florida Turfgrass Research Foundation was part of an initial grant to UF/IFAS researchers to investigate tropical signalgrass management in Florida turfgrasses.

For information about the authors, see page 32.

## References

- Busey, P. 2001. Tropical signalgrass. <http://floridaturf.com/signalgrass/>.
- Chandramohan, S. 1999. Multiple Pathogen Strategy for Bioherbicide Control of Several Weeds. Ph.D. dissertation, University of Florida, Gainesville. 191 p.
- Chandramohan, S., and Charudattan, R. 2001. Control of seven grasses with a mixture of three fungal pathogens with restricted ranges. *Biol. Control* (22): 246-255.
- Chandramohan, S., Charudattan, R., Sonoda, R.M., and Singh, M. 2002. Field evaluation of a fungal pathogen mixture for the control of seven weedy grasses. *Weed Sci.* 50:204-213.
- Chandramohan, S., Charudattan, R., and Stiles, C. 2002a. Evaluation of non-target effects of grass bioherbicides on cultivated and weedy grasses. Annual research report for Florida Sod Growers Cooperative.
- Chandramohan, S., Charudattan, R., and Stiles, C. 2002b. Bioherbicide efficacy of the grass pathogen mixture on tropical signal grass. Annual research report for Florida Sod Growers Co-operative.
- Charudattan, R. 2001. Biological control of weeds by means of plant pathogens: Significance for integrated weed management in modern agro-ecology. *BioControl* 46: 229-260.
- Mersie, W., and Singh, M. 1989. Benefits and problems of chemical weed control in citrus. *Rev. Weed Sci.* 4:59-70.
- Teuton, T., Brecke, B., and Unruh, J.B. 2002. Tropical Signalgrass Management in St. Augustinegrass Sod: Biology and Control. Annual research report for Florida Sod Growers Co-operative.

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As It Lies

## Design And Build

By Jim Walker

Now that we are a few years into the Twenty-first century, it seems the only person not connected with golf-course design is



Jim Walker

Footjoy's "Sign Boy." Don't get me wrong, there are some players who design very good courses: Nicklaus, Palmer, Player, and Weiskopf to

name a few. However, when the USGA and PGA go looking for courses to host their championships, the old masters of design seem to be very prevalent.

Ever wonder why certain courses seem to be better than others and why you remember great holes on those courses and that you never seem to tire of playing them? If you checked, do not be surprised to see names like C.B. Macdonald, Seth Raynor, A. W. Tillinghast, Donald Ross, William S. Flynn, Alister Mackenzie, Robert Trent Jones, Dick Wilson, or Pete Dye as the architect of record. Playing on a course designed by these men and others like them is heaven on earth.

We all know golf began in Scotland on a course called St. Andrews around 1415 or so. What most don't know is that until 1848, when the first recognized designer - Allan Robertson - created the double greens and the "road hole," did the golf course become basically what it is today. Robertson is also credited with designing Carnoustie. Others of the early designers include Willie and Jamie Dunn, the Park brothers and of course "Old Tom Morris." Morris, who was an apprentice of Robertson, is responsible for Muirfield, Prestwick and redesigns of Carnoustie and St. Andrews. Old Tom's name will be popping up several more times in this article.

Willie Park, Jr. was the first to move dirt around to create hazards. His works include Sunningdale in England and

Olympia Fields in Chicago.

H.S. Colt was the first to build courses inland. This construction required the removal of trees and underbrush. He built nearly 100 courses in England between 1910 and 1940 and worked with Alister Mackenzie. He also worked with Donald Ross in the United States.

Ross is recognized as the father of modern architecture. He studied with Old Tom Morris before coming to America in 1899. Between 1912 until 1948, he built more than 450 courses in 29 states and six foreign countries. His great works include Oak Hill, Pinehurst, Seminole, Broadmoor, Oakland Hills, Scioto, and Aronimink. Between 1919 and 1926, six of the eight U.S. Opens were played on his courses.

A. W. Tillinghast was an American who spent time in Scotland discussing design with - you guessed it - Old Tom. His designs include Balustrol, the Black, Blue and Red Courses at Bethpage, and Winged Foot. A millionaire who went broke during the Depression, he left the business and wasn't rediscovered until 1974 when someone noticed the USGA had selected four of his courses to host championships that year.

William S. Flynn began his career in 1909 assisting Hugh Wilson to complete Merion. He went on to design or redesign some of the greatest courses in the country. Flynn, a hard-drinking Irishman, joined Howard Toomey to create Boca Raton Hotel, Indian Creek, Cherry Hills, Philadelphia C.C. and a complete redesign of Shinnecock Hills. He experimented with many different types of turfgrass, taught at Penn State, and did turfgrass research.

We have to throw George Crump in here despite the fact that he designed only one course. If you're going to build just one course, then Pine Valley will do nicely, thank you. Crump died after 14 holes had been completed on what is considered the best course in the world. The final four holes were completed by Hugh Wilson, C. H. Alison and H. S. Colt.

Alister MacKenzie designed more than 100 courses in the U.S. and eight foreign countries. Between 1911 and 1934 he designed and built Cypress Point, Augusta National, and worked with Bobby Jones, H.S. Colt, C.H. Alison and

Perry Maxwell.

The last of the old-school designers is Tom Bendelow with more than 400 courses in 30 different states and five Canadian Provinces. There are two gems in Florida: Dubsdread and Palma Ceia as well as three courses at Medinah. More importantly, he brought quality golf to many small towns and cities in the U.S.

Robert Trent Jones is without a doubt the granddaddy of them all. His career spanned from 1930 until 1991. In that time he built more than 450 courses in 42 states and 23 foreign countries. He also redesigned countless other courses which had been selected to host major championships. A Cornell graduate, his best courses include The Dunes, Old Watson, Shady Oaks, Bellerive, Dorado Beach, and Cotton Bay Club.

Louis S. (Dick) Wilson began his career in 1925 assisting William S. Flynn redesign Merion. He also assisted Flynn with the redesign of Shinnecock Hills. Wilson continued with Flynn when he came to Florida to supervise construction of Indian Creek on Miami Beach. During that time, he became friends with Mr. and Mrs. Paul Dye and their son Pete.

Enough said?

Wilson masterpieces include Moon Valley, La Costa, Bay Hill (original design), Doral Blue Course, Cog Hill, Desoto Lakes, NCR of Dayton, Pinetree, and Meadow Brook. He also spawned the careers of Joe Lee, Robert Von Hagge, and Bob Simmons.

Last but certainly not least is the only architect whose courses can be burned down because of his extensive use of wooden planks and railroad ties. Greatly influenced by Scottish design, Pete Dye has produced a multitude of great courses including Teeth of the Dog, The Golf Club, Harbour Town, TPC at Sawgrass, PGA West, Kiawah Island, Kingsmill, Crooked Stick, Mission Hills and Amelia Island.

Of course there are many other wonderful courses in this world, designed by creative architects. This is just a short list of the first two generations of designers and who influenced whom in the past 150 years. Most of the men mentioned built courses in Florida. You should seek out these wonderful courses and play them.



## LETTERS TO THE EDITOR

## Symbolic Flag Pole Topper



Joel,

I am sending you a photo of an osprey perched on our flag pole at Black Diamond Ranch taken the week that Jack Harrell, Sr. passed away. I flew the flag at half staff that week in memory of Mr. Harrell. The osprey landed on the pole as I was driving by, and I just happened to have my camera. I have to tell you, I had goose bumps as I was taking the picture. It was very symbolic to me. I don't think this would necessarily be appropriate for the Florida Green photo contest, but I thought you might appreciate the photo. I have shared copies with the Harrell family.

John Cunningham, GCS  
Black Diamond Ranch

Thanks indeed for sharing the story and photo with all of us who knew Mr. Harrell. I'd like to think he is still keeping an eye on us along with all our other friends who have bid us farewell this past year.

By Joel Jackson, CGCS

## 2003 PHOTO CONTEST RESULTS



**Best Overall Category 1 - Wildlife.** "Otter Rocks" by Walt Owsiany, CGCS, Vineyards C.C., Naples



**First Place - "Barred Owl"** by Tom Biggy, Bent Tree C.C., Sarasota



**Second Place - "Eastern Screech Owl"** by John Cunningham, Black Diamond Ranch, Lecanto

***This is Part One of presenting the four category winners of the 2003 photo contest. In this issue the owls have it. Maybe it was Harry Potter's sorcery at work, but for overall honors Walt Owsiany is "otterly" pleased.***

### 2003 Photo Contest Rules

**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. Color prints or slides. Prefer prints. Only one entry per category.

Digital images: We can try digital image entries, but they must be taken at a resolution setting of 300 dpi or higher and saved as jpeg fine 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. Photo must be taken 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 CD.
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, 2004 will be automatically entered in the 2005 Photo Contest.

***There were six entries in the Wildlife Category this year and it was a tough decision to come up with the finalists. I'd like to commend the photographers for the quality of the images this year. Look for the runners up to appear with Honorable Mention recognition in the Stewardship section in upcoming issues to highlight wildlife on our Florida golf courses.***



# Great Advice That I've Received

By Bruce Williams

Over the years, I have been fortunate to be around a group of people who shared many things with me. Their advice has been very valuable as I continue to learn and grow professionally. I thought I might share some of that advice with my peers in



this article.

- The harder I work the luckier I get. Nobody attains success by mere luck alone.
- Hard work alone does not ensure success. You need to toot your own horn and develop your own PR program.

- When it comes to ethics it is really pretty simple. If you take anything that you do or say and could write it on a 3"x 5" card...then tape that card to your forehead for all to see... then it is probably an ethical action or comment.
- The person who thinks he knows it all has a lot to learn. I have always admired the superintendent who attends seminars until retirement. Jim Neal, CGCS attained certification just a year before he retired. Hats off to those who have a lifelong commitment to learning.
- Some would say, "It is not what you know but who you know." I would agree that networking is often overlooked. Let's go a few steps further and think about the idea that it is not only who you know but who *they* know as well.
- The sharpest people I have met have shown me that it is not so important what you know as what you are going to know. Sometimes we need to just shut up and listen, because nobody ever learned anything by talking.
- Find a mentor to help you along your career path. It may be somebody you work for or a peer whom you

respect in the industry. Re-pay the favor by mentoring the next generation of golf course superintendents. Their questions will help you stay young and alert.

- When the golf professional, superintendent and manager have different agendas, nobody wins.
  - The customer or member is not always right but they are the customers. Never lose sight of who pays the bills.
  - Get involved. The best learning exercises, of my adult life, were those gained while serving on committees and boards. Leadership lessons learned have helped at the golf course, as a parent and as a citizen of the community.
  - Dress for success. While it may be an upfront cost, dress like the successful people you aspire to be like. If you want to be thought of and paid like a key member of the staff then look the part.
  - Never miss a chance to speak with your golfers. Be prepared and develop a comfort level for addressing golf groups, green committees, board meetings, etc. Learn to speak the game. Even bogie golfers, like me, can enjoy the game and speak intelligently about it. Position yourself as an insider when it comes to discussions about golf.
  - Don't be a policeman. Show me a superintendent who spends his time worrying about where the carts are being driven and I will show you someone who needs to learn which battles to fight. The golfer that you lock horns with today may be the one who approves your budget (or disapproves your budget) in the years ahead.
  - Love your work. I wouldn't do this job if I didn't love it. The fact that I am compensated well is only icing on the cake. If I won the lotto I would still go to work tomorrow.
  - Don't paint yourself into a corner. Develop external interests that might even provide you an alternate career path in the future. It is a shame to see people unhappily working somewhere because they have to work there to survive. Prepare yourself for those years after age 50. You would be amazed at how many proficiencies you have that could be the beginning of new career paths.
  - Treat people as you would like to be treated yourself. Enough said!
- I have been fortunate to work for people like Bob Williams, Bruce Sering, Frank Dobie and Hubby Habjan. I have been fortunate

to learn from instructors like Joe Vargas, Paul Rieke and Ken Payne. Fellows like this have given me the direction, motivation and inspiration to excel. I will always be thankful for their advice that I have shared with you.

## Obituaries

### T.E. Ed Freeman, UF/IFAS Pathologist, Dies at Age 73

Dr. T. E. Freeman, plant pathologist and turfgrass specialist died on Tuesday, September 16, 2003 in Gainesville, Florida at the age of 73. During his tenure at the University of Florida's Institute of Food and Agricultural Sciences, Ed Freeman specialized in turfgrass diseases and their control, publishing extensively on the subject. He chaired the multi-departmental UF/IFAS Turfgrass Working Group for several years. His other area of research involved the biological control of water weeds with plant pathogens.

Dr. Freeman was a positive influence on the lives of his students. In noting those influences, former graduate students Drs. Michael Olexa, director of the Agricultural Law Center UF/IFAS and Ray Martin, chair of the Plant Pathology Department at Purdue University stated that he allowed them the freedom to explore many avenues of research which helped nurture the creative spirit of good scientists and educators. Both agreed that one of the most important lessons they learned from their mentor was that you're never too old to learn. He always expected his students to do more and learn more than he did. Ed Freeman was never ashamed to admit that he didn't know something and was eager to learn about a new technique or result. Both have applied his philosophy of learning to their own students and career development. To these former students, he was a quiet man, a great man, and a good friend and mentor.

Dr. Freeman is survived by his wife of 50 years, Imogene Freeman; son Thomas Freeman; daughter Roxane McGinniss; brother, Barry Freeman; grandchildren, Whitney and Mason McGinniss. Following the memorial service, those attending were provided with turfgrass for planting in Dr.

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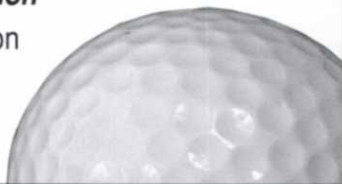
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Freeman's name. Memorial contributions may be made to University City Kiwanis Foundation, c/o Chris Dodd, 635 NE 1st Street, Gainesville, FL 32601.

## Paul Bundschu, Turfgrass Publisher, Dies at Age 62

Paul Bundschu, president of Harvest Publishing Co., died at his Winter Haven home Oct. 13 following a brief illness. He was 62.

Harvest Publishing Co. publishes the *Florida Turf Digest* and *North Carolina Turfgrass*. The firm is a strategic affiliate of Janlark Communications, which manages the *Florida Green*.

Harvest Publishing has assisted the Florida Turfgrass Association with planning and pro-

ducing the last three annual conference and shows and other special projects.

Mr. Bundschu had been a group publisher of agricultural magazines for Harcourt Brace Javonovich in the Midwest and Florida before founding Harvest Publishing Co. in 1993. He was a graduate of Cornell University with a bachelor of agriculture science degree.

Paul Bundschu was preceded in death by his daughter, Susan Horn. He is survived by his wife, Terri; sons Paul Bundschu Jr. (Joy), TJ Brablec (Candace) both of Winter Haven, and Steven Horn of Michigan; daughters Christy Davies (Robert) and Betsy Serviss, both of Buhl, Ida.; and six grandchildren.

In lieu of flowers, the family has requested donations to the Turfgrass Green Industry Memorial, 3008 E. Robinson St., Orlando, FL 32803.

art of growing turf on top of limestone, they may add legitimacy to the name. They hope growth continues because they are dependent on effluent irrigation. No new toilets, no irrigation water. This is also the only place where golf maintenance budgets have Dun and Bradstreet ratings.

**North Florida** - A chapter with a real identity crisis; it was founded as the Georgia-Florida Turfgrass Association in 1961. When Jacksonville built more golf courses than Jeckyll Island, it became the Florida-Georgia GCSA. When Florida began to whip Georgia regularly in the annual Gator-Bulldog Tailgate Party, it became the North Florida GCSA, since the Georgia members refused to attend any more meetings on Florida soil. Go Crocodiles. Rumor: Ron Hill has been president of all three of the organizations.

**Palm Beach** - The county government has been in touch with the leaders of this chapter since 2000 after noting that the PBGCSA was able to hold annual elections and elect a new slate of officers without any recounts in its long history. In researching the success story of the chapter they did find one conspicuous by-law (Section II, sub paragraph 3 - There shall be no members with the name Chad). They also noted that the vote count was done by a show of hands. The chapter wisely did not specify which hand should be raised, thus keeping the process as simple and easy to execute as possible. The Palm Beach County elections supervisor, a female 18-handicapper, is reportedly demanding that the number of left-hand and right-hand votes be tallied. Look out 2004.

**Ridge** - Able to build on the mistakes of the older chapters, this chapter is the most honestly named chapter of the Dirty Dozen. The sandy ridge running up and down U.S. 27 is home to most of its courses. Their subsequent shortcomings were well documented in the last issue.

**Seven Rivers** - While this chapter grabs headlines every year by hosting the most successful turf research fundraiser in the state, investigators have found they are masters of deception of almost Enron proportions. Advertised as the chapter with seven major rivers flowing through their region, evidence has surfaced indicating there are really eight rivers in the area and the chapter has knowingly lied to protect their favorite fishing holes along the Crysalacoochie River. Don't bother looking it up on the map. In fact, next time you unfold your

road map, check out the name of the publisher, Bozelander, Inc. These guys have been logging record bass in the headwaters and trophy reds, snook and trout where it empties out in the Gulf of Mexico.

**South Florida** - This is the granddaddy of all chapters. Born in 1939, they spawned the *South Florida Green* magazine, which became the *Florida Green* when the state association was formed in 1980. I have nothing negative to report about the South Florida GCSA. They made me an offer I couldn't refuse.

**Suncoast** - Since all of Florida is a "Coast" this name doesn't help identify where the chapter is located at all. However, a few buddies of Hernando DeSoto (Hugh Bebout, Royce Stewart and Jim Svabek) looking for the fountain of youth did find a place they called Manasota, which is an old Spanish word meaning, "You're away," which referred to how far they were from home. Since the Indians didn't have a reciprocal arrangement with the Madrid County Club, these three adventurers built their own golf courses in Florida. The well-preserved remains of these pioneers are often on display at monthly chapter meetings.

**Treasure Coast** - Contrary to the belief of many, this chapter was not founded by Mel Fisher, famed treasure hunter. Many thought that since a few WWII relics and equipment used to practice for the Normandy invasion became exposed on the beaches, the area was named the Treasure Coast. Typical of superintendents not trying anything new unless someone else has done it first, they took the name that was already in use since there were no negative reactions. Only later did they find out that the Treasure name came from shipwrecked Spanish galleons, and now everybody thinks golf is only for the wealthy, and it's all the Treasure Coast Chapter's fault.

**West Coast** - Oddly enough for the second-oldest chapter in the state (1949), there are only two or three golf courses close to the beaches and none actually on the coast. Actually most of the courses are in the metropolitan areas surrounding Tampa and St. Petersburg. Did you ever wonder why there are so many old folks in St. Pete? Think about it: St. Peter at the golden gate. Next stop paradise. Then the yuppies bring in the Devil Rays. Talk about the conflict between good and evil. That conflict sometimes spills over into the golf world. I'll let you debate whether we are good or evil.

## The Rest of the Story

In the last issue the soft underbelly of the Ridge Chapter (Alan Puckett) was laid bare in a scathing expose of the infamous Ridge Rules of Golf. Just in case the other eleven chapters were feeling left out, the Florida Green received an unsolicited report in a plain brown wrapper containing formerly unknown secrets and some historical facts about the

chapters. On our 30th anniversary and in alphabetical order: **Calusa** - Still just a toddler in terms of age, the Calusa chapter had to make a name change already for their premier event, the

### GREEN SIDE UP



Joel Jackson, CGCS

Superintendent-Pro-Supplier Golf Tournament. Originally billed as the Supt-Pro-Liers, the vendors revolted claiming the "-Liers" part could be

construed as "Liars" and so the title was expanded to spread the guilt around evenly.

**Central Florida** - Amazing as it seems, Central Florida's claim to be Central has never gone unchallenged. Any person with a high-school course in geography can draw a north-south line and an east-west line and find out that Lake Wales is the geographic center of the peninsula. Even that is a cop-out since you have to throw out the Keys, which is the separate Conch Republic and the Panhandle part of the state, which in reality is the southern coastline of Alabama and Georgia. Sorry, Pensacola. A voluntary name change to the Metro-Orlando-East Central-Space Coast Chapter would be warmly received I'm sure. Members of the Central Florida chapter have to file travel vouchers and make overnight accommodations when attending monthly meetings.

**Everglades** - Another misnomer, this chapter is not located in the Everglades. If it were, the headquarters would be in Chokoloskee, which is where you can find most of the superintendents fishing on weekends. However if expansion continues eastward and they continue to master the

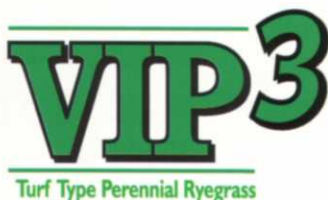
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Compare test results of proven overseeding grasses and you'll notice similarities. V.I.P. 3 Turf Type Perennial Blend is a combination of quality and performance...and at an amazingly affordable price. Contains #1 ranked varieties. Available in specific overseeding formulations. Varieties chosen for outstanding ease of transitioning, and genetic dark green color. Contains endophytes.



PIZZAZZ promises to set the standard for the next decade. Its dark green color and dense turf make it an attractive choice for parks, home lawns and golf courses. Clonal selections contained high levels of endophytes, and this synthetic variety is lower growing than many older varieties.



Paragon is in a class all of its own. In fact, we are so certain that you will want Paragon in your turf program because of its superior turf qualities, we have taken measures to ensure that once you see Paragon for yourselves that you will be able to readily get seed for this coming fall season. It's that good. Better color, finer texture, improved disease resistance. Paragon - the professionals choice.



Private and university trials have shown Cypress to be a premier overseeding grass. Cypress Poa trivialis establishes fast and can be cut close immediately, even after overseeding. As your Bermudagrass goes dormant, Cypress will provide the finest dark green putting surface with no interruption in play. Cypress is tolerant to shade and damp soils. This unique prostrate growing variety thrives in cool weather and will survive cold weather that will damage Turf Type Ryegrasses. But most important, Cypress will maintain its dark green color all winter long. As the weather turns hot in the spring, Cypress will die out naturally as your Bermudagrass begins to grow. Cypress will not choke out your Bermudagrass in the spring as some heat tolerant Perennial Ryegrasses do.



TMI has spent years developing StarDust to be more disease resistant and is one of the darkest commercial Poa trivs for better color matches with some of today's darkest green ryegrasses. University overseeding trials in Florida and Arizona have shown StarDust is setting the next standard that other Poa trivs can only hope to achieve!



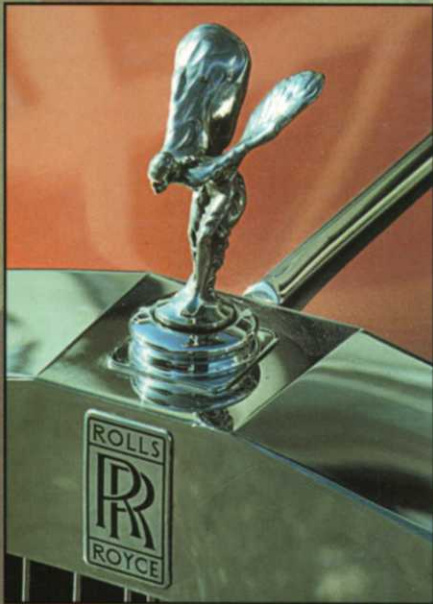
Created to meet the specific needs for seeding athletic fields, lawns, and golf courses. Establishes quickly and performs well under moderate to low fertility. Barracuda will grow under a greater variety of conditions than other grass seed, even on soils very poor in lime. Barracuda is a perennial grass with a creeping habit of growth, darker green than common redtop. Drought tolerant, dense turf with excellent mowing qualities.

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