

The Florida Green

Winter 2008



Number 9
Seminole Golf Club
Tallahassee
Photo by Daniel Zelazek



President Matt Taylor
 Royal Poinciana GC
 PO Box 7039
 Naples, FL 34101
 239-261-4987

VicePresident Shane Bass, CGCS
 St. James Bay GC
 201 Crooked River Rd.
 Carabelle, FL 32346
 850-528-3839

Secretary/Treasurer Bill Kistler
 Tampa Palms G&CC
 5811 Tampa Palms Blvd.,
 Tampa, FL 33647
 813-972-3375

Past President Craig Weyandt
 The Moorings Club
 100 Harbour Drive
 Vero Beach, FL 32963
 772-231-4996

DIRECTORS

CALUSA	Nancy Miller Maple Leaf G&CC 941-255-3677
CENTRAL FLORIDA	Gary Myers, CGCS Walt Disney World 407-824-3030
COASTAL PLAINS	Shane Bass St. James Bay GC 850-528-3839
EVERGLADES	Wayne Kappauf, CGCS The Island CC 239-642-5558
NORTH FLORIDA	Rip Phillips Windsor Parke GC 904-241-2837
PALM BEACH	Kevin Downing, CGCS 561-427-4501
RIDGE	Tom Barnett Bartow GC 863-258-1047
SEVEN RIVERS	Mark Kann UF Plant Science REC 352-843-3540
SOUTH FLORIDA	Kelly Cragin Granada GC 305-460-5334
SUN COAST	Bob Wagner Coral Creek Club 941-697-3208
TREASURE COAST	John Curran Johns Island Club 772-231-1700
WEST COAST	Bill Kistler Tampa Palms G&CC 813-972-3375

STAFF

EXECUTIVE DIRECTOR Joel Jackson
 6780 Tamarind Circle
 Orlando, FL 32819
 407-248-1971 voice/fax
 FLGrn@aol.com

ASSOCIATION MANAGER Jennifer Innes
 1296 NE Oceanview Circle
 Jensen Beach, FL 34957
 772-334-7515; 800-732-6053 (FL)
 fgcsa@comcast.net



12

SPOTLIGHT: THREE-PEAT FOR SFGCSA GOLF TEAM

The team of Jason Bagwell, Kelly Cragin, Bob Harper, Howard Hulesbosch and Seth Strickland carried the South Florida GCSA banner to its third consecutive FGCSA Championship at Southern Dunes GC, Haines City.

14

COVER STORY: SEMINOLE GOLF CLUB

Seminole Golf Club on the Florida State University campus in Tallahassee and the Don Middleton Golf Complex, which is home to the school's premiere Professional Golf Management program, is a state-of-the-art learning laboratory for future golf professionals.

32

HANDS ON: DISEASE ON THE RISE?

Based on some of the comments from superintendents and university turf pathologists, disease incidents appear to be on the rise on our turfgrasses just as we are making gains in cold tolerance, lower nitrogen requirements and better drought tolerance.

36

INDUSTRY NEWS: TURF EQUIPMENT MANAGEMENT

The Turf Equipment Management program at Lake City Community College will admit its 35th class next fall. Students can go one year for an applied technology diploma in turf equipment technology or stay for a second year and receive an associate in science degree in turf equipment management.

54

RESEARCH: GOLF COURSE ENVIRONMENTAL PROFILE

The GCSAA Environmental Institute for Golf has released the first of four focused surveys addressing components and practices used on golf courses. It covers overall land-use characteristics and environmental stewardship.

DEPARTMENTS

President's Message	2	USGA Update.....	38
Chapter Roundup	4	Stewardship.....	46
Course Facts	18	Research Reports.....	54
Superintendent Facts	20	Photo to the Editor	58
Fun Facts	26	Letter to the Editor.....	58
Super Tip	34	As I See it	58
Plants of the Year.....	40	Green Side Up	60

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

WINTER 2008

Published four times a year:
On the 25th of January, April, July and October

EDITOR **Joel Jackson, CGCS**
6780 Tamarind Circle
Orlando, FL 32819
407-248-1971 voice/fax
FLGrn@aol.com

PUBLICATIONS CHAIR **Shane Bass**
St. James Bay GC
201 Crooked River Rd.
Carabelle, FL 32346
(850) 528-3839

EDITOR EMERITUS **Dan Jones, CGCS**
Oviedo

COPYRIGHT NOTICE: Copyright 2008, Florida Golf Course Superintendents Association. All rights reserved. May not be reproduced in whole or in part without written permission of the FGCSA. **EXCEPTION:** Official publications of all golf course superintendent associations affiliated with the Golf Course Superintendents Association of America are welcome to use any material contained herein provided they give credit and copyright notice.

SUBSCRIPTIONS: \$20 for four issues. Contact the FGCSA office.

ADVERTISING: For rates and information, contact the FGCSA office at 800-732-6053

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.

Spring 2008 - Irrigation Management and Water Conservation

Summer 2008 - Ultradwarf and Seashore Paspalum Greens

Fall 2008 - Improving communication

Winter 2009 - Technician and Staff Training

Please submit articles via e-mail 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 e-mail 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.

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

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

ADVERTISER INDEX

Aerification Plus.....	22	Phoenix Environmental Services.....	27
Agrotain International.....	48	Pike Creek Turf Farms.....	9
Almar Turf Supply.....	9	Planet Air.....	11
Amerigrow Golf.....	44	Ragan Technical.....	16
Bayer Environmental Science.....	13	Regal Chemical Co.....	21
Beeman's Nursery.....	35	Rymatt Golf.....	39
Brandt Consolidated.....	52	ShowTurf of South Florida.....	Back Cover
Classic Greens.....	40	SMR Farms.....	40
Coastal Equipment Systems, Inc.....	45	South Florida GCSA.....	5
Coastal Plains GCSA.....	29	South Florida Grassing.....	24
Country Club Services.....	6	Spread-Rite.....	16
Disbrow Enterprises.....	1	Syngenta.....	3
Emerald Tree.....	57	Tampa Bay Turf.....	43
Florida Turf Support.....	25	TifEagle Growers Association.....	53
FMC Corporation.....	17	TifSport Growers Association.....	41
Golf Agronomics Supply.....	59	Tifton Physical Lab.....	12
Golf Ventures.....	55	TMI Turf Merchants....	Inside Back Cover
Green-Way.....	27	Tom Burrows Turfgrass Services.....	44
Kilpatrick Turf.....	55	Toro Distributors of Florida.....	30
Kubota Tractor Corp.....	23	UAP.....	47
Laserturf Leveling.....	51	Upstart Products.....	16
Liquid Ag Systems.....	19	West Coast GCSA.....	7
Newlife Turf.....	49		

CONTRIBUTORS TO THIS ISSUE

Davis. Darren Davis is director of golf operations, Olde Florida GC; 941-353-4441; fax 941-353-5947; darrenjuddavis@aol.com

Fenton. Dave Fenton is superintendent, Quail Creek CC; 239-597-1719; dfenton@quailcreekcc.com

Foy. Shelly Foy is ACSP coordinator, Florida Region, USGA Green Section; 561-546-2620; fax 561-546-4653; sfoy@usga.org

Hubbard. Joe Hubbard, CGCS is Superintendent, Broken Sound Club; 561-997-7793

Jackson. Joel Jackson, CGCS is director of communications, Florida Golf Course Superintendents Association; 407-248-1971; fax 407-248-1971; flgrn@aol.com

Kann. Mark Kann is coordinator of research programs, UF/IFAS Plant Science Center; 352-283-3540; fax 352-591-1578; mkann@ufl.edu

Kruchkowski. Michele Kruchkowski is publicist, Mastro Communications; 732-469-5700; mkruchkowski@mastrocomm.com

Lowe. Todd Lowe is agronomist, Florida Region, USGA Green Section; 941-828-2625; fax 941-828-2629; tlowe@usga.org

Masaik. Steve Masaik is senior designer, Fazio Golf;

Nelson. Matt Nelson is agronomist, USGA Green Section 5, Northwest Region;

Ondo. Joe Ondo, CGCS is superintendent, Winter Pines GC; 407-657-7565; fax 407-671-3420

Pepperman. Ward Pepperman is superintendent, Southern Dunes Golf Club; 863-421-4653; fax 863-422-8423; ward@southerndunes.com

Piersol. John Piersol is director, Golf, Landscape, Forestry programs, Lake City Community College; 386-754-4225.; fax 386-754-4582; piersolj@lakecitycc.edu

Schiavello. Stefanie Schiavello is publicist, Mastro Communications; 732-469-5700; stefanie@mastrocomm.com

Taylor. Matt Taylor is superintendent, Royal Poinciana Golf Club; 239-261-4987; mattt@rpgolfclub2.com

Uriarte. Ricardo Uriarte is assistant superintendent, The Old Collier GC; 239-593-8522; fax 239-593-8524; ruriarte@theoldcolliergc.com

Walker. Jim Walker is superintendent, Briar Bay Golf Course; 305-235-6667; fax 305-971-8828; sujim@adelphia.net

Wallace. Bobby Wallace is superintendent, Grand Harbour Club; 772-778-0330; fax 772-388-5750; bwallace@grandharbour.com

Welder. Scott Welder is superintendent, Walt Disney World Lake Buena Vista Club; 407-827-4220; fax 407-827-4808; scott.welder@disney.com

Wood. Heather Wood is Web editor, Golf Industry Magazine; ; hwood@gie.net

It's not just
about speed
...it's about
the roll
of the
ball.



Officially Licensed
Product of the
PGA TOUR®

Better Roll ... Better Golf.

The flagship RS48-11 Roll 'n' Spike Golf Greens Roller by Tru-Turf is the culmination of 60 years of design and development in the art of turf rolling. Our triple offset smoothing configuration allows this engineered product to smooth the turf by skillful design, not by weight.

The RS48-11 is designed to roll your greens in any direction without line creasing. With a rolling swath of 1200mm (48"), a split smoothing head, finger-light steering, and the patented triple offset smoothing rollers, it produces the quality of surface finish desired, without compacting the green.



DISBROW
discover the difference.



- Roll only or Roll 'n' Spike
- Split Dual contour-hugging Smoothing Head
- Low center of gravity
- Dual Drive Chain
- Powder Coated
- Light Weight
- Built-in Trailer



For more information or a free demonstration of any of our equipment contact us at: 1.877.561.2845 / www.disbrowent.com

Well, it should be official by now that most of the state is tightening water restrictions as golf season begins. Collier and Lee counties have likely gone to Phase III, reducing water use by 45 percent by the time this goes to press. Residential landscapes may now be watered only one day per week. Other areas of the state are certainly not far behind. All facilities that have restricted consumptive-use water permits will be facing difficult times.

Less Water, More Golfers

There is an old saying that “What does not kill you will make you stronger.” I believe this to be true. I also believe that much good can come from this drought in the long run, maybe because I know it will not last forever. We need to think seriously about how we can document and demonstrate ongoing water conservation and not just when it is a drought-response cutback.

One good thing that can come from this is that we all become better educators and communicators. We must improve the education of our staffs, teaching what we all know but might not have had to use for years: how to manage our turfgrass with less water than normal, the proper use of wetting agents and which varieties tend to hold more water.

We must also communicate more effectively with everyone involved at the club about what is actually involved with water restrictions. We must use every angle to continue to remind our members what we/they are faced with. We must communicate with the golf professionals, general managers, and assistant managers, use the club’s newsletter, club e-mail... anything that will get the word out, just in case someone has missed those brown fairways and roughs.

This situation is unlike others such as an outbreak of disease or other issue that might have been prevented. This is out of our hands, and hopefully presenting the facts over and over will show members and others that the water restrictions are a short-term event and not an excuse for conditions.

We must openly and honestly communicate what type of restrictions we are facing. Does your facility have effluent water that is or is not restricted? Are you solely reliant on surface water from your lakes or wells? We must help each other by being good stewards of our profession. Many in our area have only one source of irrigation water, that being surface water. Those clubs are going to be hit the hardest

in the beginning.

We all have been there – standing in the pro shop or out on the course and a member approaches and says, “Have you seen XYZ club? They are really in bad condition.” Here is the critical point. How do you answer? Hopefully you know enough about the club they are discussing and you can respond in a positive, truthful and supportive manner.

First we should ask if the facility is really in bad condition as the member says, or is it just dry grass? You know the XYZ club relies only on restricted surface or lake water. Since their normal supply has been reduced by 45 percent for the same period last year, which is why they are brown now.

God forbid, but water restrictions may be here to stay, given Florida’s growth and development demands. Maybe the time is now to begin planning for the future. Now may be the time to consider installing a new irrigation system or upgrading your existing system. Utilizing decreased spacing on irrigation head placement might be one option. Installing ET-based weather stations, or just installing newer technology sprinkler heads might help improve efficiency to stretch our water supplies.

Maybe it is time to look at reducing the amount of irrigated acres. This can be done in many ways but maybe the simplest is spraying out the turf, removing the irrigation and installing native plant material in out-of-play areas. They do not have to be large areas; many small areas that are truly out of play will add up quickly. Other ideas might be to install crushed shell or other ground covers that do not require irrigation. Either way, the projects can easily be sold on the number of gallons of irrigation that can be saved each year, not to mention the reduced man-hours and fertilizer and chemical costs to maintain these areas.

Beginning in December, the South Florida Water Management District began a series of stakeholder meetings to discuss long-term solutions to water issues. Joel Jackson, CGCS, our executive director, has been attending these meetings on our behalf. In the upcoming months you will begin to see what comes from these meetings which will certainly help to shape the near future for water use in this region.

Hopefully by being positive and proactive in dealing with the water restrictions, we will survive yet another season. If all of this fails, I remember the words of J. Mark Black, CGCS: “Matt, grass putts the best right before it dies.”

So we have that going for us. ■



*Matt Taylor, CGCS
President*



Syngenta never stops working to keep your course green.

Sure, we have an unmatched portfolio of products. From Subdue MAXX®, the industry leader against Pythium, to Barricade®, the longest-lasting pre-emergent against crabgrass. But we're never content. Keeping turf healthy means constantly refining our formulations. And developing new ones, to ensure we always have the best products. Making sure you have the tools you need, that's what we do.

**Contact Matthew Brecht, Ph.D., 1-407-488-8343 for East Florida, and
Kevin Wasilewski, 1-863-644-1467 for West Florida
to learn more about Syngenta.**



www.syngentaprofessionalproducts.com

Important: Always read and follow label instructions before buying or using these products. ©2004 Syngenta. Syngenta Professional Products, Greensboro, NC 27419. Banner MAXX®, Barricade®, Daconil®, Heritage®, Medallion®, Monument™, Primo MAXX®, Subdue MAXX®, and the Syngenta logo are trademarks of a Syngenta Group Company.

Donations Abound – Charities and Causes Benefit

CALUSA: Glenn McCandless hosted our Annual Christmas Charity Tournament at his Kelly Greens G&CC in December. All proceeds this year will go to the Hope Hospice.

CENTRAL FLORIDA: Jim Kernohan once again hosted the joint CFGCSA/CFTESTA meeting and golf outing in December at the MetroWest GC. In January, Stuart Leventhal and the Interlachen CC will host our annual FTGA Research Tournament. Thanks to Gary Myers, CGCS and Dale Stump for stepping up and running for president and vice president of the chapter for 2007-08. Brett Harris will continue to serve as the secretary/treasurer.

COASTAL PLAINS: Congratulations to Doug Abbuhl and the Seminole Golf Club for being the cover story for this Winter Issue of the Florida Green. FGCSA Executive Director Joel Jackson made a presentation on the various issues facing our industry at

our November meeting at the St. James Bay Golf Club.

EVERGLADES: We recently met with 100 club members and general managers to discuss the water restriction issue and the impact on area golf courses. So far we haven't made much progress with the SFWMD but we will keep trying. On a happier note, Mark Black and the Quail West G&CC hosted our annual Christmas tournament. All toys collected at the event were given to the Children's Home Society. Beginning in 2008 our monthly newsletter will go 100 percent electronic. No more hard copies of newsletters or announcements.

We were pleased to be able to make another Platinum Tee Club donation of \$5,000 to the GCSAA this year thanks to the support of all our chapter members.

NORTH FLORIDA: Congratulations to our golf team of Mike Shields, Matt Seibel, Bob Coffey and Ken Arsenault for



West Coast GCSA co-founder and legend Bud Quandt greeted all the players in his namesake tournament at Tampa Palms and helped each team's putt on the par-3, 17th hole. Photo by Christi Haley.

winning Team Low Net at the FGCSA Championship in Haines City and coming in fourth overall in the Gross Division. Also Mike Shields came in second overall in the Individual Division. Kudos also go out to Clayton Estes for his article on renovation that was published in GCM magazine. A tip of the hat also to Alan Davalt for a job well done at Selva Marina until new superintendent Chris Durkee arrived. Welcome Chris.

PALM BEACH: Golf at the joint meeting with the Treasure Coast GCSA at the Jupiter Island Club was rained out and host Rob

Kloska said a make up day would be scheduled so we could hold our annual Golf Grudge Match. Not rained out were the presentations by Steve Pearson, Joel Jackson, John Foy and staff members from SFWMD.

Our November meeting was at Iron Horse CC, hosted Bill Jeffrey CGCS. The education was an open panel discussion on ultra dwarfs. The panel was made up of Frank McKee of Parkland GC, David Tandy of Delray Dunes GC, Steve Pearson CGCS of The Falls CC, Richard Green of The Fountains CC, Dr. John Cisar of the UF Ft. Lauderdale and John Foy of



The Ridge GCSA presented Alan Puckett a Lifetime Service Award during the October meeting in Haines City in October. From left, Bob Solms, president; Puckett; Scott Scamerhorn, secretary/treasurer; Tom Barnett, external VP and Jim Rowland, vice president. Photo by Joel Jackson



Thanks for your helping hand

generosity and the loyal support from our sponsors.

The South Florida GCSA was able to donate \$23,000 to the Florida Branch of the National Center for Missing & Exploited Children at our 23rd Annual Benefit for Children



PLEASE SUPPORT OUR 2007 TOURNAMENT SPONSORS

DIAMOND SPONSORS

Aeration Technologies, Inc.
Bayer
Hector / Toro Company
Sysco
The Print Solution

GOLDEN EAGLES

Aeration Technologies, Inc.
Area Paving
Atlantic Fertilizer
Custom Spreading
Disbrow Enterprises
Fertigation Specialists
Florida Turf Support

Golf Agronomics
Supply & Handling
Golf Ventures
Greenzkeeper
Harrell's Fertilizer
Hector Turf
Lake Masters
Kilpatrick Company
Lesco / Deere
Patten Turf
Pro Source One
Show Turf
Soil Tech Distributors
Spreadrite
Smithco

Syngenta
UAP Products

EAGLE SPONSORS

Club Car, Inc.
Dow Agrosciences
DuCor International
Florida Coast Equipment
Florida Superior Sand
Greenway
Howard Fertilizer
Precision Small Engines
Rayside Trailers
Sullivan Electric

BIRDIE SPONSORS

A&L Labs
Adios Country Club
Amerigrow Golf
Aqua Aid
Bert Newcombe
Tree Service
Biscayne Electric Motor
Card Sound Golf Club
Cart Paths, Inc.
Continental Landscaping
Country Club Services
Detailed Sports Turf
Deering Bay Yacht & C.C.
DuPont
Florida Landscape Design

Googe Transport
Gulfstream Turf
Hamilton Grading
Hendrix & Dail
Highland Golf
Jeffrey Allen
Nature Safe
One-Two-Three
Pine Tree Golf Club
Pike Creek Turf
Precision Labs
Profile Products
Stan Norton Golf
Turfgrass Services
Upstart Products
Wyld West Annuals

Special thanks to Dale Kuehner, CGCS, the Colony West C. C. and all of the volunteers who gave their day to help us with this worthy cause.



Golf Course Renovation & Construction

- **EXCAVATION AND GRADING**
- **DRAINAGE**
- **GREENS CONSTRUCTION**
- **LASER GRADING**
- **BUNKER CONSTRUCTION**
- **ATHLETIC FIELD CONSTRUCTION**
- **GRASSING SERVICES**
- **EQUESTRIAN CENTERS**

William H. Wright, CGCS
PRESIDENT

Robert Farina
VICE-PRESIDENT

749 NE 70th Street • Boca Raton, FL 33487

(561) 272-4929

Fax (561) 272-4930

countryclubsvcs@aol.com

SPOTLIGHT



WCGCSA President Bill Kistler, left, presented Richard Hagan with a plaque commemorating his 2007 Bud Quandt Scholarship presented at the Bud Quandt Tournament at Tampa Palms in October 2007. Photo by Chrisi Haley.

the USGA.

In December we held a golf outing only at Park Ridge GC; host was Larry Balko CGCS. Our Christmas party cruise will be on the Palm Beach Princess. The chapter is picking up the tab. All donations collected on the cruise will go to Toys for Tots. Jan. 9 chapter meeting at CC of Boca Raton; host will be Randy Bushway

RIDGE: We presented Alan Puckett with our Lifetime Service Award at the October meeting. At that meeting we also made a donation to the Boys and Girls Clubs of Polk County.

Harrell's Fertilizer once again hosted our December meeting at their plant. In true Ridge legend the "infamous" Ridge Christmas party was once again held at the Bartow Municipal GC, thanks to hosts Tom Barnett and Mark Hopkins.

SEVEN RIVERS:

In November we held our annual fishing tournament out of Crystal River. We almost had a full boat this year. I just wish the fishing were a little better. Apparently, they caught a bunch of fish the day before we went. Congratulations to Wilson Randolph and Chuck Fernandez, who took first and second place, respectively. Everyone had a good time and I'm sure no one left hunger or thirsty. Thanks to all who attended.

We held our December meeting at Juliette Falls in Dunellon. Steve Keller is the superintendent of the course, which just recently opened. Besides playing a new course, we are participating in Toys For Tots this year. People bringing toys were given a \$5 price break on the registration.



Thank You!

We would also like to thank all who participated and volunteered to make this year's event a success!

A special THANK YOU
to **Tom's Sod Service** for the delicious barbeque!

Signature Sponsor **WESCO TURF**
INC.

THANK YOU TO ALL OF OUR GENEROUS SPONSORS:

- Aerifine, Inc. • Barnett Management**
- Citrus Seven Pump Station Services**
- Coastal Equipment**
- Du Cor International Corporation**
- Golf Agronomics • Golf Ventures**
- Harrell's, Inc. • Lesco/John Deere Landscapes**
- Pro-Plus, Inc. • Tampa Bay Turf Management**
- Fairway Golf Carts • Florida Irrigation
- Howard Fertilizer • Hendrix & Dail, Inc.
- Parkway Research, *A division of Brandt Consolidated*
- Pepin Distributors





At the Bud Quandt Tournament in Tampa, Bill Kistler, president of the Florida West Coast GCSA presents FGCSA Executive Director Joel Jackson with two checks, one for \$1,000 for the FGCSA Research Account and one for \$100 for the new Ag/Turf Awareness Campaign. Photo by Christi Haley.

We will not be having a regular January meeting due to the FTGA Turf Seminar in Ocala Jan 22 and the GCSAA Conference and Trade Show in Orlando at the end of the month. Hopefully, everyone takes advantage of these events being close by.

Mark Kann, President

SOUTH FLORIDA: The highlight of our fall calendar is always when Dale Kuehner, CGCS hosts the Missing & Exploited Childrens Tournament in October at the Colony West CC. This year we were very proud to deliver a check for \$23,000 to the organization. We have delivered around \$250,000 to this worthy cause over the 20-plus-year lifetime of this event.

Dr. Bert McCarty of Clemson University was the speaker at our November meeting at the Miami Beach CC hosted by Ricky Reeves. Dr. McCarty's topic was on new herbicides coming

out (also a little on old herbicides-MSMA) and side discussions on water problems in South Carolina and Georgia, gene stacking in turfgrass. We plan to send 2007 off in style with our annual Christmas party Dec. 8 at the Signature Grand in Ft. Lauderdale. The band Powerhouse will be back by popular demand.

SUNCOAST: Our annual Christmas Tournament was hosted by Tom Robertson at his Bird Bay G.C. on Dec. 20. Toys for Tots will be the charity for this year's event. Players donated toys as they signed in. In January we kick off the new year with our traditional Vendor Appreciation Meeting at the Bradenton CC hosted by Renze Berg. The golf outing will be the first qualifier in our annual Chapter Golf Championship series.

TREASURE COAST: Lucky for the Palm Beach Boys that the golf was rained

out at our annual joint meeting at the Jupiter Island Club. We were ready for them. Stay tuned for results from the re-match. Bobby Wallace's Grand Harbor Club is featured in the article by Shelly Foy in this issue's Stewardship section. Congratulations to Bobby and his members for supporting environmental stewardship in a very proactive way. We will not have a monthly meeting in January since many of us will be attending the GCSAA Green Industry Show in Orlando.

WEST COAST: This year we presented our Bud Quandt Scholarship to Richard Hagan at the October event. Joel Jackson, executive director gave a presentation on current golf industry issues. We also presented Joel with checks for the FGCSA Research Account and the PR Campaign for Ag/Turf

Awareness. In November, Kevin Sunderman hosted the meeting at the Isla del Sol GC. Tim Hiers, CGCS spoke about paspalum versus bermuda turfgrass. TPC Tampa Bay was the site for our annual Vendor Appreciation Day in December. Thanks to Jason Kubel for hosting this event.

FGCSA: Veteran staffer Marie Roberts along with rookie Association Manager Jennifer Innes co-piloted the Fall FGCSA Board Meeting in Orlando. Ever since then Jennifer has been taking on more and more of Marie's duties as they work through the transition period. Marie's official retirement date has been set as Jan. 31 at the FGCSA Reception in Orlando.

Executive Director Joel Jackson has been asked to serve on the South Florida Water Management District's Water Conservation Summit



Darden Nicks, treasurer of the Palm Beach GCSA presented Joel Jackson with a \$100 check at the joint Palm Beach/Treasure Coast meeting at the Jupiter Island Club. The funds are to support the Ag/Turf Awareness Campaign. Photo by Steve Pearson.



The Ridge GCSA joined the bandwagon by donating to the Ag Institute of Florida's Ag/Turf Awareness Campaign. Board member Alan Puckett presented a \$100 check to Joel Jackson at the October 2007 Ridge Meeting at Southern Dunes. Photo by Ward Pepperman.

panel. There will be a series of meetings from December 2007 to March 2008 for the panel to come up long range comprehensive and sustainable water conservation guidelines to present to the SFWMD Board of Governors in April.

Many thanks to all of our local FGCSA chapters that made additional donations to the Ag Institute of

Florida's Ag/Turf Awareness Campaign. This initiative will provide industry with positive messages to deliver to the public, politicians and media on the positive economic and environmental contributions of Florida's Ag and green industries. The original \$500 donation by the FGCSA was increased to about \$1,500, thanks to local chapter support.



Craig Weyandt, immediate past president of the FGCSA, left, received a "Thank You" plaque from Treasurer Bill Kistler at the Fall Board Meeting in Orlando for serving an extra term as president in 2007. Photo by Joel Jackson.

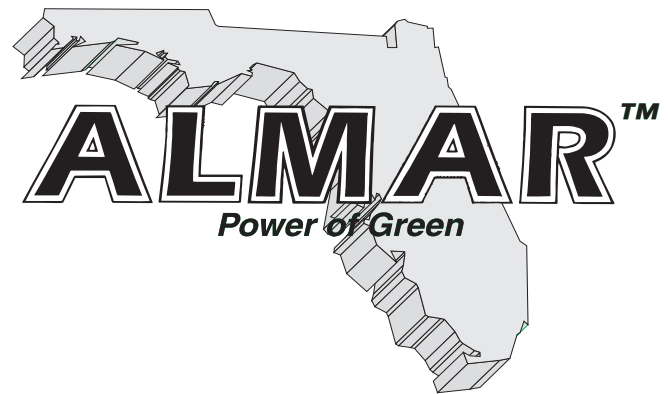
**Producers & Installers of
Fumigated Georgia Certified
Quality Turfgrasses
for Golf Courses and Athletic Fields**



- Tifway •Tifdwarf •TifSport •TifEagle
- Meyer Zoysia •Centipede Sod/Seed
- SeaDwarf •Sealsle I •Sealsle 2000
- Sealsle Supreme

Pike Creek Turf, Inc.
427 Pike Creek Turf Circle, Adel, GA 31620
1-800-232-7453

www.pikecreekturf.com



GREEN CaLITE™

BEAUTI-GREEN™

GREEN MAGIC™

GREEN'S BROTHER™

(800) 340-3888

AlmarTurf.com

FGCSA STAFF CHANGES

Hello from Your New Association Manager

This is my first official writing assignment for the FGCSA and I wanted to tell you a little about myself. I was born in Fall River, Mass. and moved to Jupiter when I was nine, and consider this the town where I “grew up.”

In 1994, I graduated from Florida State University with a B.S. in psychology and a minor in communications and moved to Atlanta immediately thereafter. I married in 1996, to Robert, remaining in Atlanta until 2000 when we began inching our way back to South Florida with a three-year stop in Jacksonville and now, happily, to Jensen Beach.

I am the proud parent of a son, Stewart (10), and daughter, Clare (3). When I am not spending time with



Jennifer Innes is the new association manager for the FGCSA. Photo by Elizabeth Skiles.

my busy family, which also includes our 11-month-

old boxer, Jigsaw, I love to run, play tennis, read, listen

to music and putter with projects around the house.

Prior to accepting employment as the association manager for the FGCSA, I was employed as a program coordinator for the YMCA in Atlanta and an executive coordinator for Lanier Worldwide, also in Atlanta.

I took a brief break from the workforce to focus on my family, but stayed actively involved on various school boards and volunteering in the community.

I am very excited to be a part of the FGCSA. This position holds many opportunities, and I am looking forward to learning more about your industry and using my knowledge and expertise to benefit the members of your association.

Jennifer Innes

The Old Dog is Up to New Tricks

I am proud and honored to be named the executive director of the Florida Golf Course Superintendents Association. I will still be responsible for the primary external communications of the association as I was as your director of communications since January 1998, and editor of our publications since 1990.

The working relationships I have established over the past 10 years with allied associations like the GCSAA, FTGA, Florida Fertilizer and Agrichemical Association, Florida Ag Council, Ag Institute of Florida, Pesticide Review Council, FLDEP, FLDOACS, UF/IFAS, Turf and Ornamental Communicators Association and the International Network of Golf will continue as we address issues facing our profession

and the golf industry.

I will continue to spread the word about our issues and golf maintenance in general to the golfing public via regular articles in publications like Florida Golf Central Magazine and Golf Is Our Game.

But I will also direct my energies inward to help the FGCSA recruit and retain members and develop programs and services that will benefit all members and especially address career needs and volunteerism not only among superintendents but also assistants and turf students who are the future life blood of our organization.

I approach these changes with mixed emotions as my long time partner in crime, Marie Roberts, hangs up her FGCSA hat. She made me swear I wouldn't retire before she did, and I am happy to comply and continue

to help the association for years to come.

The good news is she will still be working for the South Florida and Palm Beach chapters,

so we will be able to tap into her experience as we move forward. In fact one of my goals is to establish at least an annual meeting of the local chapter administrative staff members so we can be a resource for each other as we serve your needs and make things run smoother for everyone.

I wish you all a very prosperous New Year.



*Joel Jackson
FGCSA executive director*



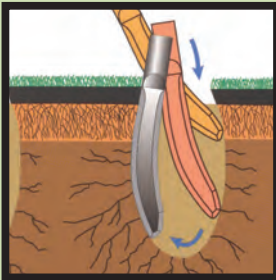
John Riley, GCS

Stonegate Golf Club at Solivita,
Poinciana, FL

Other Florida
golf courses using
PlanetAir®.

Black Diamond Ranch
Boca Grove Plantation
Boca West Golf Club
Colonial Country Club
Country Club of Florida
Gray Oaks Country Club
Golf Club of South Hampton
Grand Haven Golf Club
Sarasota National
Southern Hills Plantation
Sugar Leaf Mountain

Hawk's Landing Golf Club
IMG Golf & Country Club
Isleworth Country Club
Jupiter Hills Golf Course
Lake Nona Golf & Country Club
Legacy Club at Alaqua Lakes
Longboat Key Club
Martin Downs Country Club
Redstick Golf Club
Stonegate Golf Club at Solivita
The Club at Pennbrooke Fairways
Victoria Hills Golf Club



*Our shatter knife technology creates
new root growth with each use.*

Greens Aeration | Fairway Aeration

Purchase • 100% Lease Purchase • Contract Aeration Available



PlanetAir Aerator

1065 24th Ave. SW
PO Box 625

Owatonna, MN 55060
Toll Free: 1.877.800.8845
Email: dave@planetair.biz
Mobile: 507.363.1397

www.planetair.biz

PlanetAir® is a registered trademark of PlanetAir Turf Products, LLC.

Call **1-877-800-8845** now for a FREE demonstration on your course.

South Florida Sweeps FGCSA Championships Yet Again

The team of Jason Bagwell, Kelly Cragin, Bob Harper, Howard Hulesbosch and Seth Strickland must be getting tired of lugging the Chapter Team Trophy back and forth from Miami. They probably have a long-term contract with a trophy company to engrave the winners' plaques. They don't have to change much on the die, just the last digit of the year, since the team from South Florida has run the table since 2005, most recently Oct. 6 at Southern Dunes in Haines City.

They are sporting enough to at least rotate the Individual Championship among the members. This year Bob Harper and Seth Strickland stepped aside to let Howard Hulesbosch put the golden cup on his mantel for a year.

A new bit of FGCSA trivia emerged at this year's event since the FGCSA Golf Committee changed the qualifications to play on the state's No. 1 team in the annual GCSAA Golf Championship. This year the winner of the individual division at the 2007 FTGA Conference Golf Tournament will replace the former "Low



These guys are good. Front row from left. Seth Strickland, Jason Bagwell and Howard Hulesbosch (Individual Winner also). Back row: Bob Harper and Kelly Cragin. Photo by Joel Jackson.

Average" qualifier as the fourth spot on the team. The trivia nugget is that Seth Strickland has now won all four of the qualifying titles: The Poa Annuia Classic, the Crowfoot Championship, the FGCSA Golf Tournament and the FTGA Golf Tournament. What do we call that? The FGCSA Qualifier Slam?

While Strickland holds the modern career Qualifier Slam title, I'm not sure that there might not be a former title holder, since the FTGA Championship was one of the original qualifiers back in the day before a long run of scramble-only tournaments. If any of our "older" golf greats (*I'm not mentioning*

any names!) have won all four titles in their careers, give me a call and we'll set the record straight.

Thanks to host superintendent Ward Pepperman and his crew for preparing the course to be a great test of golf and to Golf Professional Kevin Woodard and his staff for running another great event from start to scoring. With sixth-ranked USF and FSU games on TV, superintendent golfers were pleasantly entertained while the scores were being tabulated.

- Joe Ondo

Seth Strickland has now won all four of the qualifying titles: The Poa Annuia Classic, the Crowfoot Championship, the FGCSA Golf Tournament and the FTGA Golf Tournament.

Tifton Physical Soil Testing Laboratory, Inc.

Accredited by the American Association for Laboratory Accreditation (A2LA)

Specializing in:

- Testing All Materials for USGA Golf Green Construction.
- Developing Putting Green Rootzone Mixtures that meet USGA Specifications.
- Recommending Topdressing and Bunker (Trap) Sands that meet USGA Specifications.
- Developing Sportsturf Rootzone Mixes with Optimum Physical Properties for Athletic Fields.

1412 Murray Avenue
Tifton, Georgia 31794



www.tiftonsollab.com

T. Powell Gaines
(229) 382-7292



Solutions that fit any grub problem.



When it comes to grubs and the serious problems they can dish out, Bayer has the solution—products that will prevent or control every no-good grub you may come across, quickly and effectively. Therefore, keeping your course beautiful and green and your reputation golden. And all our products are **Backed by Bayer** and all the support and science that come with it. For more information ask your Bayer Field Representative or visit us at BackedByBayer.com.

MERIT[®]

allectus[®]

Dylox[®]



BACKED
by **BAYER**[™]



Number 5
Par 4 , 353 yards
Seminole G.C.
Photo by Daniel Zelazek



SEMINOLE GOLF CLUB

Rebuild It and They Will Come

By Joel Jackson, CGCS Retired

Well, they didn't really have to rebuild the Seminole Golf Club to attract a lot of customers. The course averages between 60,000 to 70,000 rounds per year, but the renovation did receive rave reviews in the local

paper and the local golfers seem to be quite pleased with the changes.

There is no question that the resulting Don Veller Seminole Golf Club on the Florida State University campus in Tallahassee and the Don Middleton Golf Complex, which is home to the school's

premiere Professional Golf Management program, is a state-of-the-art learning laboratory for future golf professionals.

The new two-story brick building with two wings houses offices, classrooms, clubhouse, pro shop and the new Renegade Grill. The facility would be a standout



There isn't much water on the course, but an acre's worth challenges approach shots to the 416 yard, 14th hole. Photo by Daniel Zelazek.

at any golf course in the state, and the new golf car fleet even comes equipped with GPS units. There is a separate teaching/practice building with roll-up doors and the latest swing analysis equipment so FSU golf team members and golf program students can practice and learn during inclement weather.

The old practice range has been retrofitted and re-contoured to provide

all sorts of playing conditions and shot-making situations with the addition of greenside bunkers, severe slopes and chipping areas for practice and proficiency in playing and teaching the game.

The course itself underwent some major renovations to the greens and tee complexes four years ago, when architect Bob Walker provided more

challenging contouring to the enlarged greens much to the delight of the golfing public of Tallahassee. The putting surfaces were converted from Tifgreen 328 to TifEagle ultradwarf making it possible to skip overseeding and maintain speedy greens year round. Only the routing of one hole, the 14th, was measurably altered by creating a dogleg around a new one-acre pond to

SPREADRITE, INC.

CUSTOM SPREADING

FERTILIZER • DOLOMITE • GYPSUM
ARAGONITE • HYCAL LIME

FAIRWAY TOP DRESSING

LAMAR SAPP

ART SAPP

6001 S.W. 19th STREET
PLANTATION, FL 33317

MOBILE:

772-201-4000 (ID 158-81-10962)
954-444-0820

Upstart Products, Inc.

Quality Products for Aquatics & Turf

Precision Zone Surfactants

Cascade Liquid & Granular

SYNC Fungicide Activator

Liquid & Bulk Fertilizers

Almar Foliar Nutrients

Chemicals

BioPro • ADVAN • Howards

1-800-203-5629

**TORO T.Map
and
RAIN BIRD MAP
EXPERTS**

- Map Creation and Maintenance
- Aerial & GPS Data Integration
- Programming & Training Professionals

www.ragantechnical.com
dave@ragantechnical.com

RTS 561.776.9713

Ragan Technical Solutions, Inc.



Hit crabgrass where it counts.

Score extra points when you use new Echelon™ herbicide to control crabgrass on your course. Echelon will knock out preemergent crabgrass as well as postemergent crabgrass – up to four leaf. It is the only dual-action herbicide in the game that not only controls crabgrass, but also controls tough sedges and other stubborn weeds like goosegrass in the same preemergent shot. That's a win for your budget, and for your time.

Score more information about Echelon at www.fmcprosolutions.com. Or contact your local FMC sales representative or your local authorized FMC Sales Agent.

Echelon. Expect More.

Always read and follow label directions. FMC and Echelon are trademarks of FMC Corporation.
©2008 FMC Corporation. All rights reserved. FSP-069602 01/08NK

FMC

FMC Professional Solutions

1-800-321-1FMC • fmcprosolutions.com


Echelon™
HERBICIDE

COURSE FACTS



Seminole Golf Club

Location: Tallahassee

Ownership: Florida State University. Open to the public.

Number of Holes: 18; 7,147 yds; Par 73; Slope/Rating: 131/74.3

Designed by: Bill Amick. Opened: 1962. Redesign by Bob Walker in 2004. Work done by Quality Grassing & Services

Management Team: Tim Melloh, PGA Professional, club manager; John Forbes, PGA Professional, head golf professional; Doug Abbuhl, Class A GCSAA Member, golf course superintendent; Russ O'Quinn, Class C GCSAA Member, assistant superintendent.

FSU Golf Alumni: Hubert Green, Jane Geddes, Paul Azinger, Colleen Walker, Kenny Knox, Jeff Sluman, Lisa Walters and Nolan Henke.

Major renovations or ongoing projects: In 2007 added a new 21,000 square foot chipping green. We are growing in new 10-acre practice facility to be used by the FSU golf team and students in the PGM program. In 2003, rebuilt greens changing turf to TifEagle, added double row irrigation system and added 11,000 linear feet of cart path. Project architect Bob Walker.

Total acreage under maintenance: 120

Greens: TifEagle; avg size: 10,000-12,000 sq.ft. total 5 acres; HOC .125 winter, .140 summer; green speeds: 9-10; no overseeding.

Tees, Fairways and Roughs: Tifway 419; tees 4.5 acres, HOC .375, overseeding this year with intermediate ryegrass, previously used 3-way perennial ryegrass;

fairways 40 acres, HOC .375, overseeded with intermediate rye; roughs 20 acres, HOC 1.25; deep roughs bahiagrass, 40 acres; HOC 3 in. to 12 ft.

Bunkers: 39, white sand over lined bunkers with drains, hand- and machine-raked with Toro Sand Pro.

Natural areas: 5 acres on 14th hole. Many beds with crape myrtles and pinestraw mulch.

Waterways: 3 ponds with aeration fountains, total area 2 acres.

Irrigation: 3 wells; two 100-hp VFD pumps and one 7.5-hp submersible pump to maintain line pressure; 792 heads at 75-foot spacing; Rain Bird Cirrus System; fertigation: two 1,000-gallon tanks.

Water Management and Conservation Practices:

Northwest WMD. 500,000 gpd, 30,000,000 gpm.

Restrictions – cut back range, roughs, fairways, tees, slopes and then putting greens during shortages.

Staff: 30 including superintendent (16 full time and 14 part time – mostly FSU students).

Key staff specialists: Assistant Superintendent Russell O'Quinn; Pest Control Technician Tony Norton; Project Supervisor Ron Kammel; Horticulturist Ray Johnson; Senior Operators Jilian Bradley and Pemon Hamm. We had an OJT turf student from Abraham Baldwin Agricultural College in Tifton, Ga. this summer. We would like to have more turf students in the future.

I would like to pay tribute to our longtime Irrigation Technician Sip Collins. Sip passed away this past summer after 45 years at the course.

the left side of the green's approach.

The addition of multiple tee boxes kept the rolling course playable for all handicap levels. The course is just under 7,000 yards from the back tees, but the hilly terrain and five par-five holes means giving the future pros and top amateurs plenty of opportunity to let out the shaft.

In obviously striving to produce the best Professional Golf Management program and facilities I only hope the improvements don't stop at the top of the hill overlooking the rest of the golf course. Tucked away at the bottom of the hill is the 45-year old golf maintenance facility. It sorely needs upgrading to have a complete state-of-the-art operation from top to bottom for the whole property.

Future golf professionals should also be given tours of a model facility that serves as the center for golf course maintenance and environmental

stewardship - two keywords at the heart of issues facing every golf course in the state.

Without ample covered equipment-storage space or paved parking and service areas in maintenance compounds, the wear and tear on equipment from dirt and dust is accelerated which affects the life and performance of the turf grooming equipment. Investing in infrastructure like covered pump stations, etc isn't eye candy but it does pay such dividends as holding down maintenance and repair costs and keeps the irrigation system online during turf-stressing drought conditions.

Two investments that have paid off are a Sand Silo for storing topdressing material and two stand-alone self-contained storage buildings, one for fuel and oil and the other for pest control products. The Sand Silo keeps the sand dry, easy to apply and easy to brush in to minimize disruption to the

greens surfaces.

Every golf club benefits from friendly, up-front customer service, a functional clubhouse, a well-stocked pro shop and restaurant, but maybe even more so from well-conditioned turfgrass areas, and a functional, well-designed maintenance facility with new turf equipment on a capital replacement program to help deliver those desirable playing conditions.

It is a cooperative blend of all of these factors that make a golf club truly effective and successful. Abbuhi's name and the GCSAA logo are listed on the club's scorecard as part of the management team with PGA professionals Tim Melloh, the GM and director of golf and John Forbes, head golf professional. That's a good token of recognition of the importance that golf course maintenance plays in the success of a golf facility. I wish all golf clubs would do that simple gesture and then back it up with a sound maintenance

Keep Your Course in Optimum Playing Condition with:



Quality Foliar Nutrients



28% Acidic Nitrogen



Water Treatment Amendment

Try K-Cal-Mag 7-0-7-4Ca-1Mg alone or with organics for unmatched quick stress recovery!

Liquid Ag has the equipment, service and expertise to keep your professional sports turf looking its best all year round!



Call today and ask about our innovative calcium products and wetting agents for salt flushing of greens, tees and fairways designed to meet your needs!

Liquid Ag Systems

Corporate office:

800 Trafalgar Court, Suite 320

Maitland, Florida 32751

407-682-6100  407-682-6693

Toll Free: 800-775-5593



A split rail fence and pine straw area borders the cart path down the left side of the 168-yard, 8th hole. Photo by Daniel Zelazek.

budget and facilities.

Because the Seminole GC is such a popular public golf course (60,000-70,000 rounds per year) — thanks in part to its excellent condition, affordable rates and discounted greens fees to university faculty and students — the course almost never closes.

Abbuhl and his staff are required to do the cultural practices in a three-hour “tee time gap” on Tuesdays from 10 a.m. to 1 p.m. He understands the pressure for the course to be accessible and earning revenue, but there is often a flaw in the gap plan. He said, “If we get a slow foursome going off at 10 o’clock and the 1 p.m. group is a fast foursome or worse a twosome, our ‘gap’ shrinks rapidly, going from three hours to 30 minutes on some of our maintenance days.”

I have covered a lot of golf courses doing these cover stories, and I have to confess I can’t recall a golf course

SUPERINTENDENT FACTS

Doug Abbuhl: Class A Golf Course Superintendent

Born: Willamsfield, Ohio near Pymatuning Lake

Family: Two sons: Austin is 21 and enlisted in the U. S. Army. Noah is 11 and goes to Cobb Middle School

Education: Ohio University (2 years), Kent State University (2 years), University of Guelph, Ontario Turfgrass Program.

Employment: 1992-present, superintendent Seminole Golf Club; 1988-92 assistant superintendent Golden Eagle CC; 1986-1988 foreman/spray tech at Golden Eagle CC.

Professional Affiliations: Member of the USGA, FGCSA and GCSAA. Served on Coastal Plains GCSA board of directors as external vice president and now a past president of the chapter.

How did you get into the business? I was raised on a dairy farm in Ohio. I learned the value of hard work

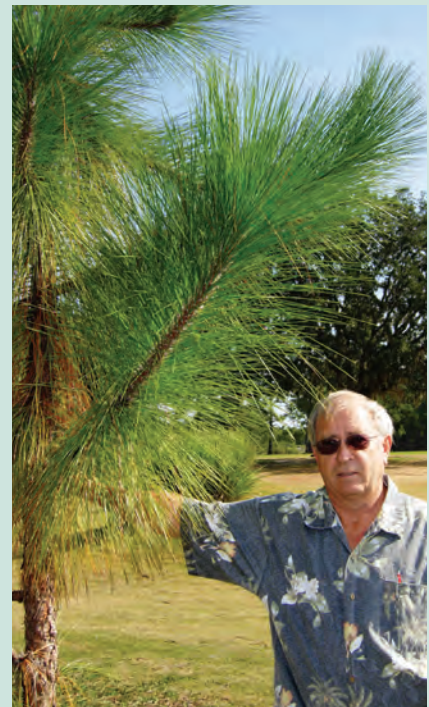
from my parents and I loved being outdoors. Now Master Greenkeeper and consultant Terry Buchen, CGCS was my first superintendent. From him along with my next two bosses Dave Gardner and Jeff Veitmeier I learned different and important life and work lessons about the business.

Goals: I want to take our course to the “next level.” Not just a pretty course but a course where golfers of all skill levels will enjoy playing.


Work philosophy and advice: I never ask someone to do something I wouldn’t or haven’t done on the course myself. I try to tell people that it takes a very high level of commitment to do this job and don’t get into it unless you are willing to put in the time. But, it may be possible to put in too much time. My divorce may have been the result of spending too much time at work and not enough time with my family.

Memorable moments: Viewing wildlife on the golf course.

Hobbies: Swimming and snorkeling.



Superintendent Doug Abbuhl plants longleaf pines instead of slash pines on the course to restore the true native plant palette. Photo by Joel Jackson.



3,746 fungi versus you.

Poor fungi. There is safety in numbers. Especially when you're counting on the number of fungicide options you have with Regal Chemical. More options means more opportunity to custom tailor your defense against fungi with a fungicide program that works for you on every level. The targeted applications, modes of



delivery, cost per acre. Contact action or systemic or both at the same time. Regal has the fungicides to fit your every requirement. Add them all up – then go do a number on that fungi. For more information on a fungi program designed just for you, call us

at 1-800-621-5208. Or, visit our website at www.regalchem.com.

CHLOROSTAR®

ConSyst®

fenox™ ME

resyst®

savvi®

SYSXSTAR®

SysTec®



The course plays down hill, 529 yards to hole No. 1, shown here with passing storm clouds looming nearby. Photo by Daniel Zelazek.

literally not closing some holes sometime to get necessary maintenance done. It is yet another example of an adaptable maintenance department doing whatever it takes to get the job done and provide acceptable playing conditions.

Downtime and weather became an issue with this year's overseeding program. Abbuhl said, "We had to overseed around play, but the weather was either too windy or rainy to do the proper job, so we had to keep postponing our dates. On the back end, we had the Bowden Golf Classic coming up so we had to get the seed down so it would have time to pop and get established so the course would look

good for the event.

"Finally, we got a clear day and we hopped to it. With four guys on rotary spreaders, two on tractors with Lely spreaders and five carts and a truck and trailer we worked from 10 a.m. until 6 p.m. and put down 11.5 tons of seed around tees, greens slopes and fairways. The real challenges after overseeding is trying to keep the golfers from driving wherever as the new seedlings emerge. We put out 'No carts' signs in critical areas, but they often aren't very effective in curtailing wandering golfers."

Also escaping the golfers' awareness is the fact that Abbuhl is trying a new seed blend this year to improve turf conditions during spring transition.

"Typically, the newer ryegrasses seem to be more heat tolerant which might be good for some folks," he said, "but when the overseeding hangs on into late May and early June, we often end up with thin spots in the fairways and slopes when the winter grass checks out in a heat wave.

"This year I am trying Transus 2200 from Pickway Seed. It is an intermediate rye. It has a darker green color and is very cold tolerant which can be a good thing in Tallahassee. The 'intermediate' means it is not as heat tolerant so hopefully, we can groom it out more easily in the spring. I say hopefully, because we are experimenting with it for the first time."

Right now Abbuhl is working under the added pressure of not having an equipment manager on staff and recruiting a new one hasn't been easy. "Our long term benefits are great," he said, "but our starting salary ranges aren't very competitive with the better clubs in the area, so finding a savvy, experienced turf technician willing to set up in an outdated shop built in the 1960s is tough. We get some outside help with reel grinding on the mowers, but routine preventive maintenance can get behind."

Abbuhl has the patience of Job. He knows things must get better. "When I came here 16 years ago, I had to rebuild the Cla-valves and pressure control valves just to get decent coverage from the irrigation system. We had patches of green down the fairways because the heads wouldn't overlap. Once I turned

AERIFICATION ⁺ **PLUS, INC.**
TURFGRASS AERIFICATION AND ROOT ZONE MANAGEMENT

**ALL SEASON HELP — SMOOTH—POWERSM DEEP SPIKE
(FOR GREENS AND TRAFFIC AREAS)**

SOIL RELIEVER[®] SALES

(800) 340-3888

AerificationPlus.com

on a green and stood in the middle and never got wet. With increased pressure and better coverage came the leaks in the old pipes and fittings. It would take four or five employees to operate and maintain the system, but we got decent coverage. When IGM came in to manage the course, we got a new Rain Bird® double row system installed. When new VFD pumps were installed on two wells over 1,500 feet apart, I could see there would be a problem because the wells couldn't communicate with each other. When one would ramp up the other would shut down. Finally we got them talking to each other so they work in harmony."

Working in harmony with Abbuhl is Assistant Superintendent Russell O'Quinn who has been at Seminole for seven years. He helps shoulder the administrative load with Abbuhl to keep the department running smoothly. O'Quinn is originally from Louisiana, but grew up in Graceville, just across the state line from Dothan, Ala. He attended FSU, studying accounting and economics but ended up graduating from Florida A&M along with classmate Andy Maguire who is the superintendent at the Marsh Creek GC in St. Augustine. O'Quinn got a job at Capital City C.C. in Tallahassee in 1990 and worked his way up from crewmember to assistant in 1998. He moved over to the Seminole G.C. in 2000.

For all the pressures, Abbuhl does appreciate the profession, especially the opportunity to work outdoors. "I was raised on a dairy farm in Ohio. I learned what hard work was from my parents and I enjoyed being outside with nature. Isn't it ironic that part of this property was once a dairy farm? This profession allows me so see nature coming alive every morning out on the golf course. Not many jobs give you the opportunity to work in such a beautiful setting.

"With all the redesign and improvement projects the past several years I have missed one of my favorite jobs on the course – walk-mowing greens. It is good exercise and a time



Fairway to green and in-between.



Grand L40 Series

Take charge of your course with the Grand L40. This versatile compact tractor features a smooth-shifting HST Plus hydrostatic transmission, Hydro Dual Speed (H-DS), Load Sensing System and turf tire package – perfect for course maintenance and management. Available in eight models ranging from 34 to 59 HP.

ZD300 Series

The ZD300 is the zero-turn mower that performs like a tournament pro. With a fuel-efficient Kubota diesel engine, high-capacity HST transmission, hands-free hydraulic lift and a PRO Commercial mower deck, even the toughest turf jobs seem as easy as a one-foot putt. Available in 21, 26 or 31 HP models.

SEE ONE OF THESE AUTHORIZED
KUBOTA DEALERS FOR A
PRODUCT DEMONSTRATION

DAVIE
Growers Equipment Co.
2695 Davie Rd.
(954) 916-1020
sales@growersequipment.com

HASTINGS
Tractor Depot, LLC
8515 SR 207 N.
(904) 692-3673

KISSIMMEE
Five Star Tractor & Equipment
1750 E. Irlo Bronson Hwy.
(407) 847-8895

OCALA
Bobcat Kubota of Ocala
5211 W. Silver Springs Blvd.
(352) 368-2400

PANAMA CITY
Sowell Tractor Co., Inc.
2841 Hwy. 77 N.
(850) 763-5441
www.sowelltractor.com

Kubota
EVERYTHING YOU VALUE

Kubota Tractor Corporation Markets a Full Line
of Tractors and Construction Equipment
Through a Nationwide Network
of Over 1,000 Authorized Dealers.

©Kubota Tractor Corporation, 2008





Storm clouds linger over the 17th green, a 199-yard, par-3 hole. Photo by Daniel Zelazek.

when I can clear my mind of daily clutter and think about planning.”

Abbuhl keeps improving the 120-acre environment he manages beyond the playing conditions of the greens and fairways. His stewardship includes the stands of native pine trees and live oaks. He has an arborist annually survey the trees on the course to evaluate which ones might be diseased need to come down for safety reasons. When he plants pine trees in the roughs, he plants longleaf pines which are native to the area.

He also planted a number of Leyland cypress trees which are fast-growing, bushy evergreen to provide visual and safety screening between greens and adjacent tees. The addition of beds and specimen plantings of low maintenance native flowering grasses have provided additional color accents to the course that has open parkland feel. Abbuhl says there are roughly five acres of native areas on the course. I saw a couple of

South Florida Grassing, Inc

Over 40 Years in the Grassing Industry

TifEagle

SeaIsle¹
Certified Seashore Paspalum

Supreme

Sod, Sprigs and Rolls available

- Our grass is grown in Hobe Sound on gassed, sand-based soil
- Installation, Hydro-mulching, grassing and mulching also available

Tifway 419

TifSport

**Registered
Tifdwarf**



Certified Producer

Southern Seed
Certification Association

(772) 546-4191

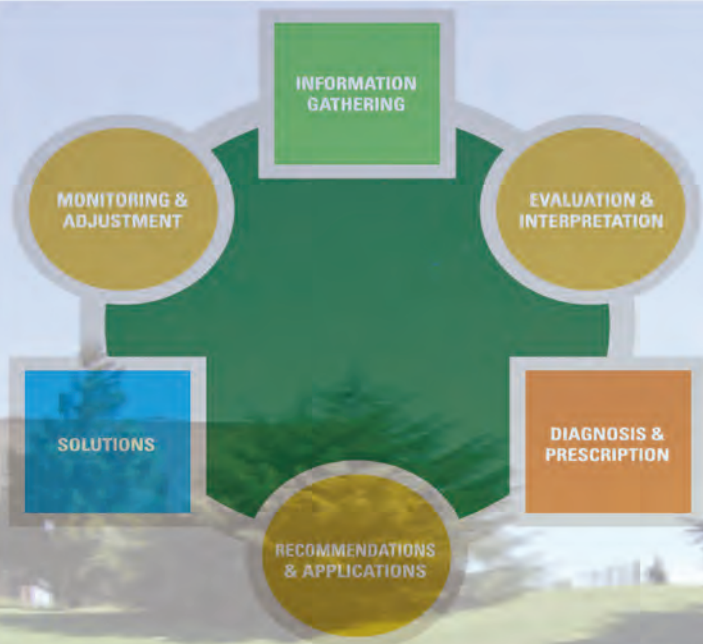
Fax (772) 546-3482

800-483-4279

FLORIDA TURF

SUPPORT

PRESCRIPTION WITHOUT DIAGNOSIS
IS MALPRACTICE



North

Jeff Pilcher 352-258-3314

Roger Myers 406-229-0321

Central

Clark Webb 407-702-8636

Amanda Dion 813-300-4072

Dave Itzkowitz 727-244-8586

Southeast

David Price 561-379-8403

Bo Healey 786-299-3305

Jaime Benito 786-299-0474

Durand Locke 561-324-3989

Tom Tremblay 727-480-3215

Southwest

Bill Myers 727-403-2488

Mike Hamilton 239-707-9974

Brian Clair 239-273-2770

Luis Lauretti 813-434-7074

Florida Turf Support

13929 Lynmar Blvd.

Tampa, FL 33626

813-925-0294 (Office)

www.floridaturfsupport.com



Contact your Florida Turf Support representative for information on Non-Chemical Water Conditioning by New Waves Water Technology, Inc.

these dense cover areas on the 14th hole.

You may have heard of people who are called “horse whisperers.” These folks seem to be able to connect with horses in a positive calming way. I can’t explain it beyond that. After my trip to Seminole, I’m dubbing Abbuhl the “hawk whistler.” He did a darn good imitation of a Red-tailed hawk as he tried to whistle one up for a photo during our course ride-through. I commented that I found hawks to be a very skittish. Abbuhl said, “We have a very large red-tailed population on the course and I can easily get within 15-20 feet of them as we whistle back and forth to each other.”

Abbuhl said that a young black bear had been reported on the course early that morning, but he never saw him. The wildlife sightings on this urban golf course include eastern bluebirds, crows, ibis and spoonbills, pileated and

red headed woodpeckers and all of the common songbird species. In the four-legged critter category there are fox, squirrels and rabbits an occasional white-tailed deer and if you can believe it, an alligator in the pond on No. 14. I would think that would be against school policy.

These natural wonders are a real plus to the setting, but as noted earlier good turf maintenance is at the heart of any successful golf course. Abbuhl has learned a few new tools along the way to help his program at Seminole. He said, “Because of the heavy play demand and our older equipment, mowing and clippings cleanup can be a challenge.”

“The past two or three years we have been on a Primo program, and it has been a lifesaver, reducing clippings and allowing us to reduce mowing frequency. We spray fairways, collars and cutouts around greens with Primo at 16 oz/A. Greens are sprayed weekly

in summer with Primo at 2-3 ounces per acre. With reduced clippings we can clean up quicker with the fairway blower and I have to say I think the blowing program has helped to keep our fairways more weed free by perhaps blowing weed seeds into the roughs where the taller grass might shade out the weed seedlings.”

Abbuhl uses Round-up® as a growth regulator in the 40 acres of bahiagrass predominant in the deep roughs. He said, “When the grass is actively growing in the warmer months we apply an initial application of 6 oz per acre, then five to six weeks later we follow up with 4 oz per acre and then, in another five to six weeks, we apply 2 oz per acre. This usually holds down the seed head and leaf growth until the cooler months when the growth naturally slows down on its own.”

His basic cultural programs include aerifying greens five times per year;

FUN FACTS

The Cool Abbuhl

Vehicle: 2001 Dodge Dakota

Last good movie I saw: Hero?

I stay home to watch: The History Channel or PBS Specials

The book I’ve been reading: The Five People You Meet in Heaven

Favorite meal: Sushi, fish

Favorite performers: The Who and Andy Pratt

Prized possessions: My two sons, Noah and Austin

Personal Heroes: My oldest son Austin in the Army.

The one thing I can’t stand: Mediocre employees who just barely get by

Nobody knows that I: Play video golf games late at night

I’m better than anyone when it comes to: Doubles in ping-pong

I’d give anything to meet: Arnold Palmer

If I could do it over: I wouldn’t change a thing

My fantasy is: Living in a cabin in the mountains with Rhonda

If I could change one thing about myself: I’d lose weight

My most irrational act: Taking the key out of a golfer’s cart after he drove up onto a green.

Most humbling experience: Looking into the eyes of my newborn sons



Obviously from the numerous golf cart tracks in the new tender ryegrass seedlings, someone didn’t get the message. Overseeding establishment takes cooperation from everybody. Photo by Joel Jackson.

Words that best describe me: Extrovert (on the inside) and introvert (on the outside)

My best fish story: When my assistant Russell and I won first place in the FTGA Fishing Tournament this year.

My most amazing/lucky/important golf shot: Still waiting for that one


My dream foursome would be: Arnold Palmer, Jack Nicklaus, Lee Trevino and Old Tom Morris.

pulling cores three times with 5/8-inch tines during growing season and using solid tines two times and a Hydroject during the cooler season; and verticutting two directions and topdressing with Red Bay sand every other week during growing season. The sand is stored in a sand silo.

Integrated Pest Management is accomplished by using Chipco Choice® for mole crickets although this year he sprayed Alectus® at 9 quarts per acre for crickets and grubs. He uses Talstar® to control worm outbreaks, especially when growing in new turf like our chipping green and practice facility this past season. On the new practice facilities he has had to control smutgrass and bahiagrass, which he does with applications of Princep® and Blade® applications.

High traffic volume and wear is a primary site challenge, but he says the soil profile, a sandy-clay mix called Orange Marlburg can dry out quickly in drought conditions but handles wet weather pretty well, allowing them to open up sooner than most other courses after a rainy spell. A good aeration program is important to keep the soil opened up for good percolation.

Every golf course has two stories to tell. One story is centered on playing the game of golf and the other is about managing the turf conditions that provide those all-important playing conditions. In the best of all worlds they both have interesting characters and story lines and most of all – happy endings.



Phoenix
ENVIRONMENTAL CARE

**Pegasus™, Vital®, Kestrel®,
T-Bird™, Firebird®, Lucid™,
Avatar™, Knighthawk™,
Current™, & Symmetry™**

**Contact: Craig Smith at 516-301-8326
or visit www.phoenixenvcare.com**

Pegasus, Knighthawk, Current and Symmetry are trademarks of Phoenix Environmental Care LLC. Vital is a registered trademark of Luxemourg-Pamol, Inc. Lucid is a trademark of Rotam USA. Firebird and Kestrel are registered trademarks of Phoenix Environmental Care LLC. Firebird GC is a Restricted Use Pesticide. Always read and follow label directions.

Dry Fertilizer
Bulk Liquid Fertilizer

Office: 954-741-4041
Fax: 954-741-4082



GREEN-WAY

Quality Turf Products
We Specialize in Keeping you GREEN

MANGA PLEX PLUS • ULTRA - GREEN • BIO-PLEX

10008 N.W. 53rd Street • Sunrise, Florida 33351



This view from the back tee shows the new two-story classroom and clubhouse buildings. The small brick building to the left is used for teaching and analyzing golf swings. Photo by Joel Jackson



Superintendent Doug Abbuhl stands next to the new self-contained chemical storage building by the old maintenance building. Photo by Joel Jackson



The new sand silo, above, holds dry topdressing stands beside a traditional open sand storage bin. Photo by Joel Jackson

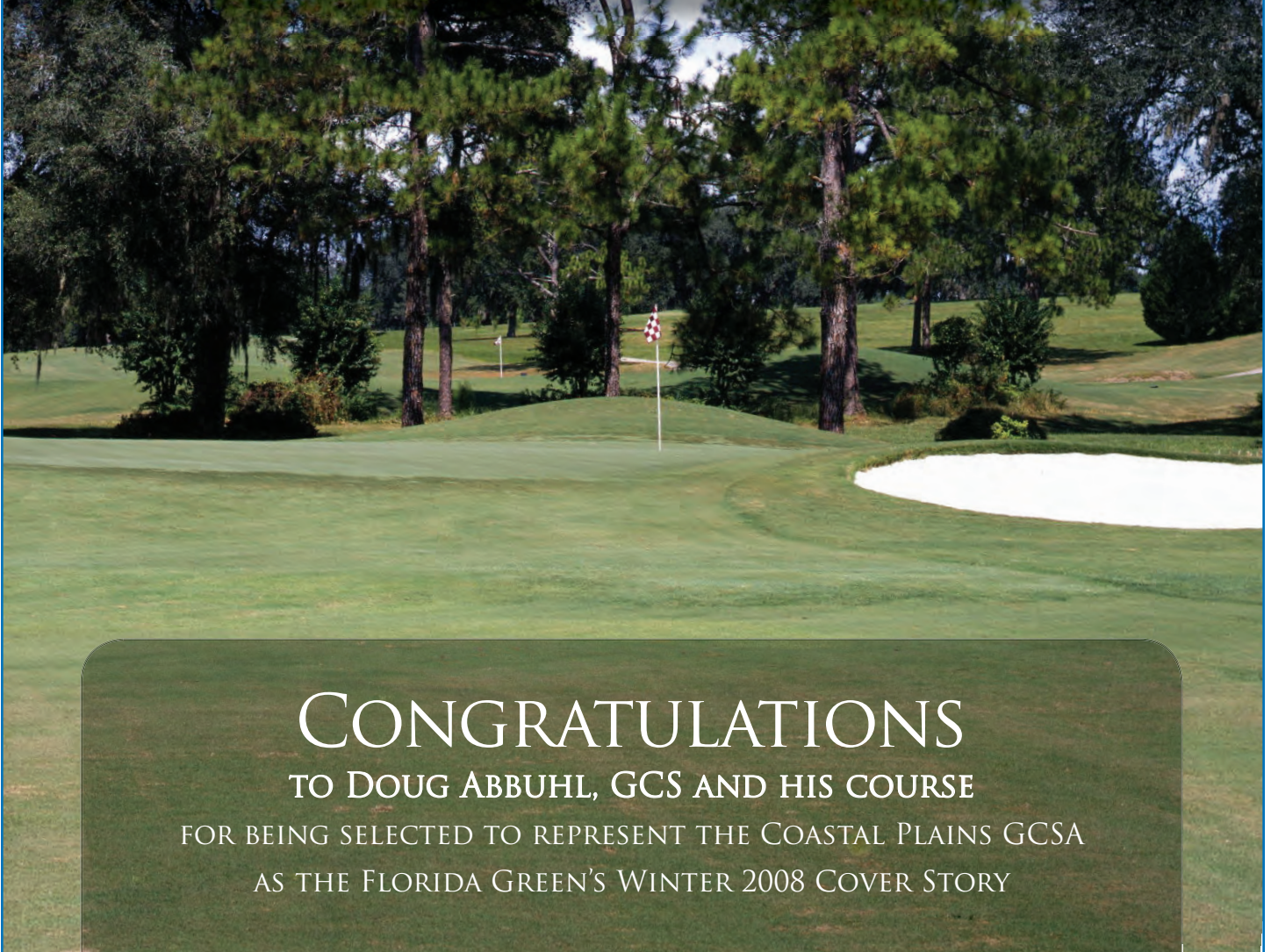


The new 10-acre practice facility with its greens, bunkers and swales will require more equipment and labor than the old 5-gang, pull-behind mower. Photo by Joel Jackson



Wooded upland and native grasses on the 14th hole provide excellent wildlife habitat. Photo by Joel Jackson

FROM THE PEOPLE AND COMPANIES
WHO SUPPLY AND SERVICE THE SEMINOLE GOLF CLUB:



CONGRATULATIONS
TO DOUG ABBUHL, GCS AND HIS COURSE
FOR BEING SELECTED TO REPRESENT THE COASTAL PLAINS GCSA
AS THE FLORIDA GREEN'S WINTER 2008 COVER STORY

HELPING WITH THE SUCCESS OF THE SEMINOLE G.C.

BRUCE ALLISON • Pike Creek Turf Farms • Adel, GA • (904) 923-3291

CLIFF ANDERSON • DuCor International • (352) 398-7137

BRENNAN GOLF SALE • Tom Brennan (904) 704-3377 • John Davidson (904) 514-6725

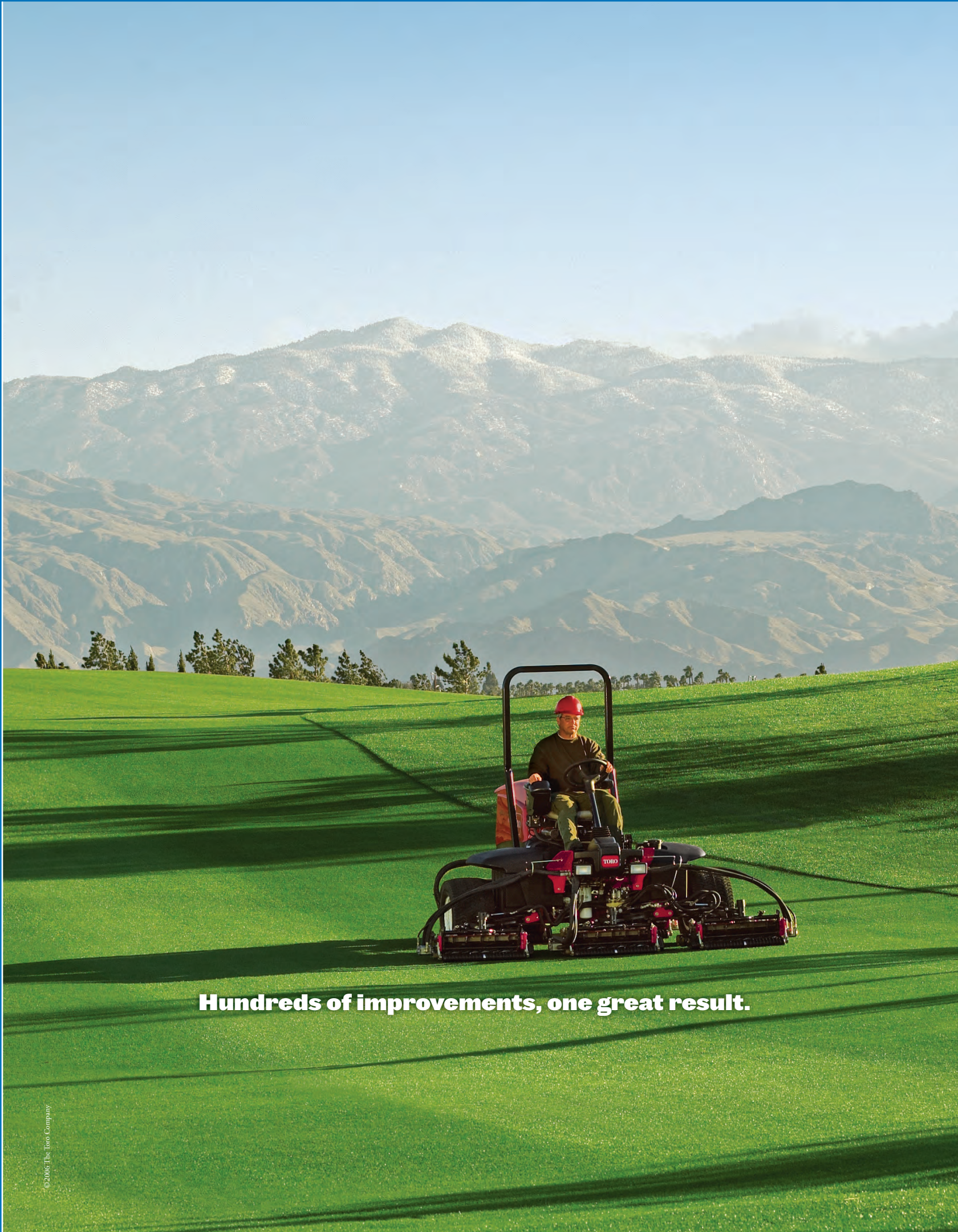
ALAN HOLLEN • Ewing Irrigation • Turf Products Division • (850) 566-6240

BEN KNOWLTON • Red Bay Sand & Eagle One Golf Products • (850) 974-8873

DOUG MERKEL • Wesco Turf Supply • (904) 759-3347

ROGER MYERS • Florida Turf Support • (229) 406-0321

BILL PLANTE • Harrell's, Inc. • 904-237-1671



Hundreds of improvements, one great result.



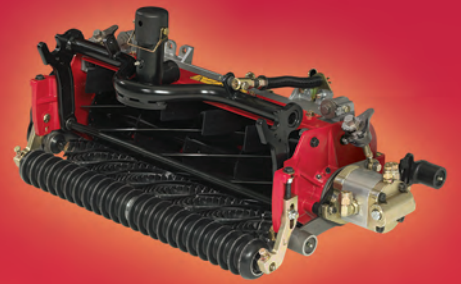
Hector Turf
Deerfield Beach, FL
954-429-3200



Wesco Turf, Inc.
Sarasota, FL
941-377-6777



Wesco Turf Supply, Inc.
Lake Mary, FL
407-333-3600



Exceptional quality of cut and after cut appearance is the result of the new Reelmaster® 5010 series fairway mowers from Toro®. It's all thanks to a completely new design that's focused on performance, operator comfort, and serviceability. The innovative new DPA cutting units offer simple adjustment along with major advances in reel and bedknife edge retention. The detailed improvements will keep you out of the shop and on the fairway producing the results you've come to expect. After all, beauty lies in the details. To find out more, call (800) 803-8676, or visit toro.com/fairways.

TORO Count on it.

Taking Stock on Florida Disease Problems

Compiled By Joel Jackson

Based on some of the comments from superintendents and university turf pathologists, disease incidents appear to be on the rise on our turf-grasses just as we are making gains in cold tolerance, lower nitrogen requirements and better drought tolerance. (See the "Top 10 Diseases" article in the Fall 2007 *Florida Green*.) So we asked Florida superintendents to address some turf disease management questions:

- Because of more intense management, are we stressing turf into disease syndromes that were not problems in the past?

- How has your fungicide program changed in the past few years? Describe products used, rates, timing and frequency and preventive and curative approaches.

- Fairy ring management. When is it occurring? Where is it occurring? How are you treating it?

- Have you used and are you aware of the UF/IFAS Rapid Diagnostic Service?

WALT DISNEY WORLD

I think we are stressing turf and making it more disease prone. At times the cut is lowered just because a competitive course is maintaining a lower height. Often raising HOC is frowned upon even though it is the best solution to overcoming stressed conditions. We don't do any planned preventive fungicide applications. If disease conditions are present then we do make an application. Normally, the disease conditions result from turf stress or foul weather conditions with high humidity.

When algae outbreaks occur, usually during wet periods with lack of sunlight, we use Daconil-Zn® at 5 quarts per acre.

Our overall fungicide program has remained about the same over the past few years and we have seen more pythium activity. Those greens maintained with a higher cut did better than those stressed with a lower cut.



Fairy Ring disease outbreaks are common on putting surfaces. Photo by Joel Jackson.

FAIRY RING

Had a lot of activity for the last two years on TifDwarf greens (four of the 20 at LBV). It was very obvious May through October until we seeded. It seemed to show the worst after a rain when the green was starting to dry enough to run the irrigation back in the auto phase.

The four greens that were a problem received almost daily irrigation (5-10 minutes) while the remaining greens received no water for a couple of more days after the rain.

ProStar® in a drench solution was the only cure we found. Our treatments were done using ProStar 1 lb. / 150 gal. water with 1 qt. Lesco Wet® and using the entire 150 gallons on a green.

We tried watering before, spraying, then watering again but got better results with the drench. The drench method was very slow, but did work. Also utilized a drench with Lesco Wet tabs about every two weeks

LBV greens were replaced this summer with TifEagle and no fairy ring has appeared as of yet. We did remove 4 inches of mix and replaced with new greens mix (This did completely remove the organic layer that was at 3-1/2 – 4 in. depth)

Haven't used the Rapid Diagnostic Service as of yet. I was aware of the service.

Scott Welder, GCS
Lake Buena Vista Club

SOUTHWEST FLORIDA

I don't think we are more stressed because of more intense management – I think some of the more intense management is actually better for the grass. Granted the lower heights of cut are a stress factor but the increased fertilization, fertigation, topdressing, grooming and verticutting is actually providing a healthier environment for growing.

My fungicide program has not changed much over the past couple of years – I try to rotate systemic and contact every two to three weeks – if anything, I have been able to stretch the windows out due to the drier weather we have experienced.

Last year brought us a couple of periods of intense disease pressure that were totally weather related and Dec. 19 was a big one. We had leafspot in areas in the roughs (cut at 1-1/2 inches, no stress there) and as a result I used more contact fungicide than normal and had more frequent intervals on the applications.

When I first got to Quail Creek we had fairy ring on two greens. A sound agronomic program eliminated the rings after the first aeration and we have not seen any since. I have seen it once or twice on a couple of tees but a Prostar application cleared it right up.

Regarding the Diagnostic Service, I haven't sent in a sample yet. I haven't

seen the need to do that a whole bunch so far. Most of the disease issues down here in Naples seem to be *helminthosporium*, or *bipolaris cynodon* I think they call it now, and I don't need a lab to spot that.

*David Fenton, GCS
Quail Creek C.C.*

I don't believe we are over-stressing our turf. However, I have had more disease incidents on the paspalum than I had on bermudagrass. We are mowing at lower height, but the patch diseases are in the rough as much as in the shorter-mowed turf.

Our disease management programs have changed. We are spraying a preventive on the greens on a monthly basis. We typically spray a group-11 type fungicide. If we have a problem on the fairways, I have curatively sprayed all fairways with a Mancozeb type fungicide. Proper irrigation management is the absolute key to disease management in the fall and winter.

Fortunately we have had very little fairy ring, thank God.

I am aware of the Rapid Diagnostic Service. We do have a microscope and so far I have been able to identify most of our problems.

*Scott Hamm, CGCS
The Colony Golf & Bay Club*

We could be stressing the turf, but we try to limit the stress only to certain special occasions such as tournaments. At the same time we are fertilizing them with more Mn, Ca, K and Fe..

Our program has not changed a lot through the years. We use Chlorothalonil, Thiophanate methyl, Iprodione, Heritage, Disarm and Insignia. We mostly are curative, except in the summer month we do so some preventive. Rates are usually in the high end of the spectrum, we try not to spray very often so we go for the 14- to 21-day interval. You could say we spray once a month.

We do not have much of a fairy ring problem. We did have it quite severe in the greens in the summer of 2005 and 2006, it probably was due to the regrassing of the greens in the

summer of 2004. In the greens we used aeration and fungicides – Prostar and Heritage. We have a few areas in the golf course like fairway and rough, we mainly aerate and add a wetting agent.

Yes, we are aware of the Diagnostic Service and we use them.

Some of the things we do to manage disease occurrence: we maintain a healthy plant by a strong fertilization program. We have reduced nitrogen application and added more potash, calcium and minors. We hydroject often, we also keep a close eye in the irrigation so we do not over water.

*Ricardo Uriarte
Assistant Superintendent
Old Collier Golf Club*

CENTRAL FLORIDA

Here at the UF Plant Science Research and Education Unit, we have a unique setting for disease to occur. With more than 10 different species and 30 different cultivars, we cover the field in possibilities. With the variety of turf, we also have a variety of pathogens hanging around. One species may be more tolerant to one disease, but may also possess a pathogen that will create disease in another turf species.

Then there are always a few fungicide trials ongoing throughout the year. Some of these projects let disease occur naturally, but others are inoculated directly. We take preventive measures to decrease the spread of disease, but often we come up on the short end. In addition to fungicide experiments, we also have other trials that stress the turf and create more disease-favorable conditions.

Over the last year or so, we tried to reduce our mowing times and reduce the hours on our equipment. One shortcut we took, which proved to a mistake, was to blow off the mower reels rather than wash them. Blowing them off took less time and there were more sites in which this could be done. However, we learned that simply blowing off the clippings would not sanitize our mowers nor prevent the spread of disease.

Dealing with bermudagrass for

most of my career, I was not exposed to the wide spectrum of diseases on other turf species, except for St. Augustinegrass. I mostly dealt with dollar spot, fairy ring, Pythium, among a few others. Over the last year or so, I have seen those plus quite a few more. We have incurred Fusarium, Bipolaris, Curvularia, Rhizoctonia in almost every fashion, and the latest new kid on the block, Bostulum, which exhibits dollarspot-like symptoms. The bad news is that there has been very little shown to treat this one.

There is one big positive dealing with this situation. It helps to have a highly qualified plant pathologist working close by. Dr. Phil Harmon visits the plots on a weekly basis, either taking ratings of his projects or applying treatments to them. He has seen a lot more than I have around the state, so I usually point out some questionable areas and get his diagnosis. I have stumped him a few times, but after looking at samples, he lets me know what I am dealing with rather quickly.

Even with following Best Management Practices to the best of my ability, it is becoming increasingly necessary to establish a preventive fungicide program. Being on a tight budget, we have tried a curative approach and seen it fail. We actually spend less money on a preventive program over a curative program due to smaller application rates. We still keep an eye on environmental conditions and avoid unnecessary treatments when we can. There are simply too many factors that encourage disease for us to battle on the curative program.

*Mark Kann
Coordinator of Research Programs
UF Plant Science Center, Citra*

Fairy Ring is our biggest disease problem. It is usually an issue in the spring, but we are seeing some in the fall as you will notice on a few greens during the FGCSA Golf Championship. A drench with a wetting agent like Cascade® and applications of Pro Star® seem always to take care of it.

*Ward Pepperman, GCS
Southern Dunes Golf Club*

SUPER TIP

Every Drop Counts

By Darren J. Davis

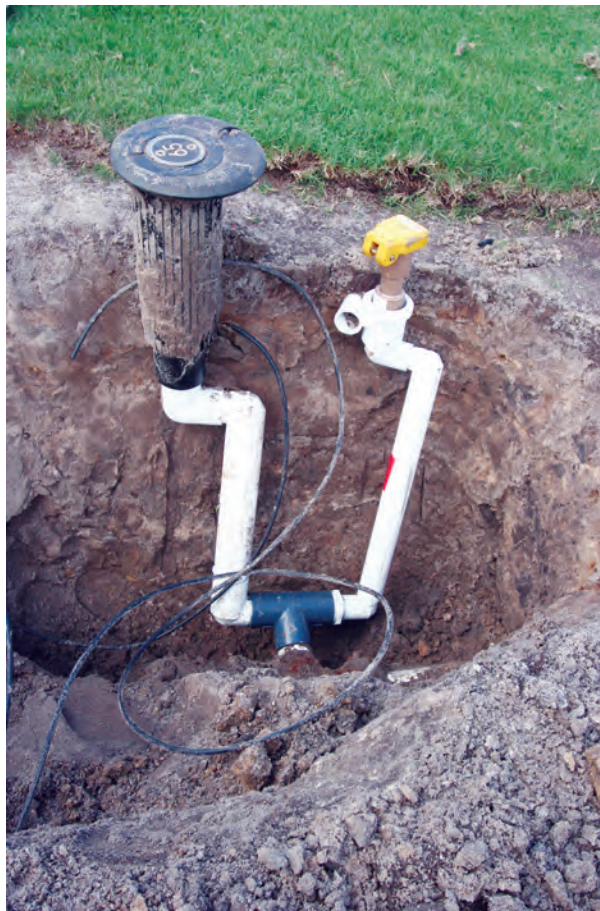
Conservation is not a new concept for golf course superintendents; however, with current water restrictions affecting a vast majority of Florida golf courses the phrase, “every drop counts” has definitely taken on added meaning. The Super Tip offered below details a project that was undertaken at Olde Florida Golf Club during the summer of 2007 in anticipation of additional restrictions being placed on irrigation water use.

When installed in 1992, the computerized irrigation system at Olde Florida was fairly “state of the art”. However, even with the significantly modern technology available at that time, it was decided to install 100 quick-coupling valves to provide supplemental irrigation water on tees and greens. During the dry winter golfing season, these quick-coupling valves enable us to maintain a more consistent playing surface than if overhead irrigation was solely utilized. An additional important benefit of the quick coupling valves is a significant reduction in water usage.

Through the years we have expanded our hand-watering practices to include areas in the fairways and rough. However, with a hydraulically-controlled, dual-head fairway-and-rough irrigation system, the process of tapping into irrigation heads with hoses is very time consuming. Additional quick coupling valves were in order and John Leibold, president of Leibold Irrigation provided me with a technique which we utilized to install an additional 100 quick coupling valves to the fairways and rough. While the total quantity we decided to install may

seem daunting to some, the process described below can be employed to quickly and inexpensively add quick coupling valves in quantities as little as one at a time.

For ease of installation, the additional quick couplers were all installed at existing irrigation heads. After the turf surrounding the



Adding strategically located quick couplers offers efficient hand watering option to drought prone turf areas. Photo by Darren Davis.

irrigation head was stripped and the soil removed the following steps were undertaken:

The top of the existing swing joint was unscrewed from the lower ninety degree fitting.

The lower ninety degree fitting was then unscrewed from the 1-inch male-

by-male nipple that attached the swing joint to the service tee.

Note: To avoid potential problems the male-by-male nipple originally screwed into the service tee remained untouched throughout the process.

With the existing swing joint removed (with the exception of the male-by-male fitting), a 1-in. Lasco

315-psi-rated, acme-thread double swing tee was installed on the 1-in. fitting extruding from the service tee.

The lower 90-degree fitting from the original swing joint was then installed on one side of the new Lasco fitting.

A (new) male, acme-by-acme nipple was then screwed into the lower 90-degree fitting.

The top of the original swing joint was then screwed onto this new nipple.

With the original swing joint and irrigation head reattached, the next step was to install a new quick coupler swing joint on the opposite side of the Double Swing Tee. The first step in the quick coupler swing-joint installation was to remove the lower male acme-by-acme nipple from the new swing joint and install it into the available side of the double swing tee.

Next the lower 90-degree fitting from the quick coupler swing joint was removed from the swing joint and screwed onto the nipple that was just installed on the swing tee.

Finally, the new quick coupler swing joint was screwed onto the installed 90-degree fitting.

Note: all fittings were screwed snug and then backed off one turn.

After all connections had been made the swing joints were correctly positioned, the soil and sod was replaced.



Native and Ornamental Grasses and Aquatic Plants

- * Wide Variety Of Native Species
- * Patented Floating Island Ecosystems
- * Free Deilvery



3637 State Road 44
New Smyrna Beach, FL 32168
Ph (386) 428-8889
Fax (386) 428-8879
www.beemansnursery.com



A Brief History of the Turf Equipment Program at Lake City Community College

By John R. Piersol

The Associate in Science degree Golf Course Operations and Landscape Technology programs started on the campus of Lake City Community College in 1967. By the early 1970s, there was concern among leaders in the golf industry about the increasing sophistication of golf course equipment and the lack of specifically trained golf course mechanics.

Dr. Gene Nutter, the first director of the Golf Course Operations and Landscape Technology programs, worked with industry to establish an Industry Advisory Committee for what was then called Golf Course Mechanics Technology. The first curriculum was developed with direct input from industry.

Dr. Nutter's description of the program to the curriculum committee on the LCCC campus accompanies this story.

This background information from Dr. Nutter written in 1973 is very interesting as the need for trained equipment managers has increased tremendously, but the supply, even after about 35 years has not increased. Also, interesting are the 1973 statistics, and equipment costs, and salaries.

The Golf Course Mechanics Technology program started in fall 1973. Steve Bolton, a local small-engine shop owner, was the first instructor. In 1975, a retired Navy chief petty officer, Ed Combest, joined the faculty as the instructor, and the program began to make a major move toward shop management and preventive maintenance which Ed had learned well from his Navy career in aviation and ground support equipment mechanics. Ed was also a master at training young people, another skill he developed in the Navy as an instructor and leader.

From 1975 until 1988, the program

was in an old wood-framed building on campus. It was not much to look at, but Ed had it as neat, clean, and organized as one could get the small space.

There clearly was a need for a larger, more modern facility. With industry and legislative help, state money was budgeted for the first facility in the state developed specifically for golf course mechanics and — most believed — the nation. The program moved into the new 15,000 square foot building in 1988.

In the mid- to late 1970s, the one-year program in golf course mechanics became a mandatory part of the Golf Course Operations program making in a three-year curriculum. This increased the total number of students in golf course mechanics to 35-40, requiring more sections of classes and more instructors. The faculty team increased to three full-time instructors: Combest, Jim Lones, and BJ Cannon, all retired military.

The golf industry has always been heavily involved in the program going back to 1973 with the advisory committee, and Combest immediately solicited its support in 1975. It was important for the students to see and work on specific golf turf equipment. Ed worked with the distributors and manufactures to expand the equipment loan program so that students could be introduced to more equipment from the major manufacturers. The equipment loans have continued so that today the program receives annual loans of turf equipment, grinders, lifts, and more valued at easily \$300,000.

Going back to the late 1970s and 1980s, there was a push to recruit more golf course mechanics. The student numbers in the program were good because all golf students had to take the mechanics module, but the program was only graduating five to ten technicians. Interestingly, this problem still exists today, even though numerous recruiting efforts have been tried over the past 25-



John Piersol, director of the Golf/Landscape/Forestry programs at Lake City Community College.

plus years.

Today the mechanics program is called Turf Equipment Management. The students can go one year and get an Applied Technology Diploma in Turf Equipment Technology and go to work or go to school for a second year of general education and business courses and receive an Associate in Science degree in Turf Equipment Management. Most students do the one-year program and go to work, and some work towards the AS degree while they are working.

Recruiting students for turf equipment is still a major problem even though the job market is excellent. It is common for LCCC to receive 40 to 50 job offers for five to ten students. Lack of career awareness is the problem.

There is a need for golf course superintendents to get involved in local high schools and bring principals, counselors, teachers, and students to a modern, organized golf course maintenance facility loaded with over a million dollars worth of equipment. This would be a tremendous community service, and it would introduce students to a career in turf equipment about which they know nothing. We hope that organizations like the International Golf Course Equipment Managers Association, working in conjunction with local, state, and national superintendents' associations, will develop career awareness programs for high school students. Introducing young people to this career is critical to the future of the golf industry.

Need for Golf Course Mechanics Technology Program Identified in 1971, Met in 1973

(Original Program Announcement of 1973)

Golf Course Mechanics Technology is a new one-year credit-hour program to be offered in Golf and Landscape Operations Department, scheduled to begin fall 1973. It will be a unique program in the turf industry in the United States.

The need for this specialized program has been projected by the State Department of Education Advisory Committee for the Turf Industry since 1971 in their State Manpower Profile Study. They suggest it be located at this college because of the logical tie-in with the existing program in Golf Course Operations, now a proven program known nationally.

Based on the above endorsement, the recommendations of an Advisory Committee for Golf Course Mechanics and further personal contacts with the golf course industry in Florida, the Southeast and the nation, need for this specialized curriculum more that justifies its earliest possible commencement.

OBJECTIVE OF NEW PROGRAM

The objective of this program is to train golf course mechanics whose duties combine mechanics technology, shop management and in some cases supervisory responsibilities. In the golf course table of organization the mechanic is directly responsible to the golf course superintendent (who is trained in our Golf Course Operations program).

PROGRAM JUSTIFICATION

In Florida alone it has been estimated by leaders in the golf course equipment industry that sales and service of golf course equipment exceed \$10 million annually. This is increasing rapidly with the expanding number of golf courses (increased from 125 in 1953 to over 500 in 1973).

As the volume of golf course equipment increases, so does its complexity and sophistication. Not only does the volume of equipment sales increase due to the expanding number of golf courses, but also due to the increasing expenditure per course. The high costs and shortage of labor has forced increased mechanization and today the equipment inventory on a modern 18-hole golf course facility may vary between \$75,000 and \$100,000. Many of the golf courses in Florida and the Southeast are multi-course complexes in which the value of the equipment would be much higher.

In order to maintain this increasing volume and complexity of equipment requires a mechanically oriented specialist who is familiar with golf course

operations and the specialized type of equipment used thereon. Thus, he must be trained differently from the typical automotive mechanic. To my knowledge there is no such training program anywhere in the United States. Therefore, in exploratory discussions, both the golf course superintendents and the equipment industry (manufacturers, distributors, and service specialists) have enthusiastically encouraged the development of this new program in Golf Course Mechanics Technology as an adjunct to our school of Golf Course Operations.

In addition to golf courses, graduates of the proposed curriculum will be in demand by the commercial elements of the industry (dealer and distributor sales and service) and will be better trained than any other available manpower for other facilities in the environmental industry who use much of the same types of equipment including landscape construction and maintenance firms, parks, sod farms, etc.

A further need for this training program is increased by the impact of OSHA (the Federal Occupation Safety and Health Act) regulations which are demanding modernization of all shop facilities in the golf course and landscape industries. In many cases this calls for a better trained mechanic than currently employed and currently available.

It is estimated by industry leaders that once the program is established, the market for this highly specialized technician will easily absorb 25-30 graduates per year. They further estimate that starting and benefit salary ranges for successful graduates will be between \$7,500 and \$8,500 per year with an increased earnings potential of \$10,000 to \$12,000.

ADVISORY COMMITTEE

Anticipating the development of this new program, an industry task force was selected in 1972 by the State Advisory Committee to explore the job requirements for modern golf course mechanic and shop operations. From this a list of job skills was developed as the starting point for curriculum development. A preliminary curriculum was presented to the State Advisory Committee and after review was endorsed in principal with recommendations that the new program be developed through proper channels at Lake City Community College.

In March, President (Herbert) Phillips appointed an official Advisory Committee for the proposed program in Golf Course Mechanics Technology, comprised of the original task force plus additional leaders in the golf course equipment industry throughout the Southeast. The first meeting of this committee was held March 23, 1973.

USGA UPDATE FLORIDA REGION

Irrigation Restrictions Should Be Firm But Fair

By Todd Lowe

For the past month I have been contacted by a number of Southwest Florida superintendents anxious about irrigation water allotments for the upcoming winter season. I was not overly concerned at first since these golf courses were supposedly being restricted by only 30 percent of their normal allotment. Healthy bermudagrass can withstand such reductions and just turns off-color (brown) during drought stress.

However, closer evaluation of actual water allotments for the upcoming months revealed that irrigation restrictions are much more harsh.

The superintendent at a non-overseeded 27-hole facility (160 acres) I recently visited remarked that their monthly allotments for January,

February, and March will be 5.2 million gallons, 6.2 million gallons, and 13.4 million gallons, respectively. Average water use on this golf course during the past five years has been 15.1 million gallons in January, 16.6 million gallons in February, and 23.7 million gallons in March. This change equates to a reduction of more than 60 percent for these months! Harsh restrictions will not only cause brown playing conditions, but will significantly impact long-term golf course health, and, most likely, cause some turf loss during the annual dry season.

This is especially disappointing considering golf courses utilize only 2 percent of the water supply in Florida, while home lawns utilize up to 15 percent. It is frustrating when we drive through our neighborhoods and see lush green yards that are over-irrigated, while golf courses suffer.

Many Florida golf courses provide an added environmental benefit by utilizing treated wastewater for irrigation; but not all golf courses have access to treated or recycled water. As a result, golf courses with recycled water will receive more water during the upcoming months and will remain greener. Unfortunately, it is difficult to explain this fact when golfers begin to play other courses and start to compare playing conditions.

The problem with the Modified Blaney-Criddle water-reduction model currently used is that it uses an equation that is less regionally sensitive in regards to water requirements of bermudagrass on golf courses. This model tends to under-allocate water in the dry winter and spring and over-allocate water in the rainy season.

The water management districts have worked with golf courses in the past and I am hopeful that they will utilize updated prediction models developed by university professors to better predict actual water requirements. Otherwise, superintendents will have barely enough water to maintain putting greens, teeing grounds, and landing areas on fairways without supplemental rainfall.

In a regional update from April 2007 (www.usga.org/turf/regional_updates/regional_reports/florida/04-23-2007.html), John Foy mentioned several important cultural practices for dealing with drought conditions. These are excellent guidelines to implement at this time. If restrictions worsen, your course may need to plan for additional projects. Such projects will cause a major strain on capital improvement budgets, so stay tuned and we will keep you posted as we learn more about this important situation.

Editor's Note: For those who are interested, here is the full citation for the Modified Blaney-Criddle Method: **Blaney, H. F. and W. D. Criddle. 1950. Determining water requirements in irrigated areas from climatological data. U.S.D.A. Soil Conservation Service Tech. Pub. 96**



Golf course irrigation is professionally managed and only consumes around 3 percent of the fresh water used annually in Florida. Photo by Joel Jackson.

GCSAA's Environmental Study Goes to Phase Four

GCSAA has announced that beginning in January 2008 it will conduct a national survey of golf courses focusing on pesticide use.

The survey is part of a multi-year, first-of-its-kind project being undertaken by GCSAA that will evaluate the environmental performance of golf courses. To date, GCSAA member and non-member superintendents have participated in three phases of the survey focusing on the physical profile of a golf facility; water use and conservation; and nutrient (fertilizer) use. The last phase of the survey to be issued in 2009 will examine maintenance practices on golf courses. The entire data set will establish a baseline for comparison when the surveys are replicated in the future.

The pesticide survey will be

conducted through March 15. As in the past, those superintendents with an e-mail address registered with GCSAA will receive an invitation to participate online. The others will be contacted via regular mail with a hard-copy survey or instructions on how to complete it online. Input will be sought on product use and integrated plant management programs. Funding for the first four phases have come from The Environmental Institute for Golf, thanks in part to a grant from The Toro Foundation.

"We are appreciative of the participation we have received in the first three phases," GCSAA Director of Research Clark Throssell, Ph.D., said. "This survey will be slightly more entailed, so I encourage superintendents to organize their 2007 records before they begin the process. This is an extremely important project, one which will benefit GCSAA, its members and the game. I cannot stress

how important it is for superintendents to participate."

The online survey has been constructed in a manner so that members can complete it in stages rather than in one setting. Participants will need to remember a password they have created in order to return to the survey. GCSAA members completing the survey will receive .25 service points and all participants will be registered in drawings for various prizes. A VISA gift card of \$250 will be awarded to one individual in each of the seven agronomic regions. A grand prize of a flat panel, LCD, HD television will be awarded as well.

The Golf Course Environmental Profile project is designed to collect information that will allow superintendents and other facility personnel to become better managers, help them operate more efficiently and lead to GCSAA developing more valuable programs and services. Such



SANDSTOR™

- *Keeps Dried Sand Dry
- *No Waste or Contamination
- *Delivered Fully Assembled
- *2 Models - 30 or 50 Ton
- *Cage Section & TopRailOptional

Rymatt Golf, Naples, FL

(239) 513-9238

MERIDIAN
MANUFACTURING GROUP

2008 PLANTS OF THE YEAR

Aloysia virgata

Common Name: Almond Bush

Zones: North, Central & South



Mature Height and Spread: Generally 6 x 8-ft. mounding shrub

Classification: Small Tree or Large Shrub

Landscape Use: Specimen and butterfly attractor

Characteristics: This fragrant, vigorous, drought-tolerant, upright-growing tree/shrub form South America produces finger-like spiked clusters of small, white almond-scented flowers on slightly weeping branches. With an extended bloom period this shrub can be pruned up to form a tree. For a full plant with denser growth, prune between bloom cycles. In North Florida this plant may die down and quickly regrows as a tall shrub.

Propagation: By cuttings from stem or semi-hardwood

information will include details about playing surfaces, natural resources, environmental stewardship efforts and maintenance practices on the golf course. Results from each phase will first appear in a peer-reviewed scientific journal, then in *Golf Course Management*, the association's monthly publication, then will be widely distributed.

Two Florida Turf Students Get GCSAA Scholarships

The Golf Course Superintendents Association of America (GCSAA) has awarded scholarship money to 16 college students as part of the GCSAA Scholars Program administered by GCSAA's philanthropic organization, The Environmental Institute for Golf. Jonathan Chase Webb (University of Florida) and Nathaniel Watkin (Lake City Community College) each were awarded stipends ranging from \$1,250 to \$2,500.

CLASSIC GREENS, INC.



Over 20 years supplying and installing quality Bermudagrass. Our new farm, located in Chiefland, FL is producing quality:

Certified Tifdwarf
Certified Tifway (T-419)
Classic Dwarf
Floratex

Phil Horn, President
 11151 NW 70th Ave
 Chiefland, FL 32626
 (352) 258-2695
 philhorn@bellsouth.net

**Golf Course
 Athletic Field
 Renovations and
 Grassing**

SMR Farms
 Cattle • Turf • Trees • Landscape • Citrus
 Growing Strong For
 Over 75 Years
 Your Florida Producers and Installers of Certified and Fumigated Turfgrasses, featuring ...

CELEBRATION BERMUDAGRASS
SEA ISLE SUPREME P ASPALUM
SeaIsle Certified Seashore Paspalum
Tifway 419
 Sod • Sprigs • Rolls

Call for pricing and availability, or better yet, visit our Bradenton farms!

We also grow 26+ varieties of trees.

4715 Lorraine Road
 Bradenton, Florida 34211
 877-708-3322 Toll Free
 www.smr farms.com

FLORIDA TURFGRASS ASSOCIATION



TIFSPORT BERMUDAGRASS

IT'S IDEAL FOR FAIRWAYS, ROUGHS AND TEES

TifSport Bermudagrass has great color. It recovers very rapidly from heavy traffic, injury and droughts. It has a finer texture than Tifway 419 and most other bermudagrass varieties. It's extremely cold tolerant. And its upright leaf blade orientation and stiffness mean better ball lies in cut fairways and roughs. It also has a pleasing, uniform

appearance, even during dormancy. If you're looking for a quality, certified bermudagrass that's ideal for tees, fairways, roughs and surrounds, relax. You've found it. Wall-to-wall TifSport. Talk about a superintendent's dream. For more information and a list of licensed TifSport growers visit our website or call 706 542-5640.

TIFSPORT
www.tifSPORT.com

OPINION

Water Woes Building

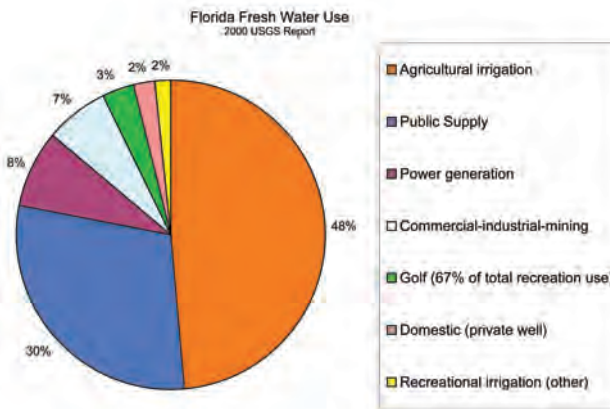
By Joel Jackson

Water restrictions are the hot topic throughout the state. In the South Florida Water Management District, the entire region was on Phase 2 - 30 percent since the spring.

As of Jan. 15, 2008, Consumptive Use Permit holders will go to Phase 3 - 45 percent restrictions because of the continuing drought conditions and the traditional winter dry season. Currently the district is conducting a five-meeting Water Conservation Summit to talk about future water resource management.

Meanwhile in parts of the Southwest Florida Water Management District, golf courses have been restricted to watering two days per week on fairways and roughs and three days per week on greens and tees, according to Bill Kistler and Tampa Palms G&CC. I thought we had gotten away

from the day-of-the-week method so professional turf managers could apply water when and where it was needed. Locking businesses like golf courses



2000 USGS Florida Water Use Report

Golf course irrigation has remained around 3 percent since the 2000 US Geological Survey report on consumption by six major consumer groups.

into some inflexible system may force some users to just crank up the run times and really not save any water. By instituting a common-sense percentage

reduction of overall usage, the superintendent can keep his turfgrass healthy and save measurable amounts of water.

Farther north, the word is that the Suwannee and Northwest districts don't even have a water shortage plan on the books and looking to Georgia and Alabama to see what they are doing. Even back during the 1988-2000 drought, I researched all the district web sites and true enough, they didn't have any restriction guidelines posted. I guess it haadn't been a problem until now.

Over in the St. Johns River Water Management District, they are discussing going to the one-day-per-week watering for home lawns as South Florida and Tampa Water Authority have done. I haven't seen specific hard numbers for golf courses. As of my last Web search, they call for golf courses

to stay within permits and use Best Management Practices.

I wouldn't be surprised if that changed sooner than later. The North

Florida Golf Industry Economic & Water Facts

FROM 2000 GOLF ECONOMIC IMPACT STUDY

Florida leads the nation in the number of golf courses. A recent economic study listed more than 1,300. The National Golf Foundation reports around 1,097 courses, but may not be counting some of the small 9-hole operations.

Total annual revenues: \$4.44 billion.

Annual expenses: \$3.7 billion.

Golf industry employment: 73,000 persons.

Book value of assets owned by golf courses: \$10.8 billion.

Charitable contributions: \$12 million in cash and \$25 million "in-kind" donations.

Rounds of golf in 2000: 58.6 million. 33 percent by out-of-state visitors.

Travel expenses in Florida by golf-playing visitors were estimated at \$22.9 billion, of which \$5.4 billion may be attributed directly to golf. These expenditures had an impact to the Florida economy of \$9.2 billion in personal and business net income (value added) and 226,000 jobs.

Area owned by golf courses : 205,000 acres, with 147,000

acres in maintained turf and 140,000 acres under irrigation. (Compare to 800,000 acres of citrus and 4-5 million acres of home lawns.)

Total county property taxes generated by golf courses, based on average county millage rates in 1999, and were estimated at \$214 million.

Water use: 49 percent of the surveyed courses in 2000 use reclaimed water for their irrigation source. 29 percent used surface water. Only 21 percent used deep-well sources from the aquifer. The use of reclaimed water for irrigation on golf courses provides an efficient way to re-use our water resources and dispose of treated water that is not immediately suitable for human use.

Compared to five years ago, water-use per acre decreased on 42 percent of the surveyed golf courses. 94 percent of the courses surveyed used automatic or computer controlled irrigation systems.

For more information see: University of Florida publication EIR 02-4 at <http://Economicimpact.ifas.ufl.edu>

Not All Calcium Products Are Created Equal



Mega Cal II is a 20% form of stabilized liquid manufactured from calcium carbonate that can be applied by spray rig or through irrigation water.



Campo Verde 9-0-0-12 Ca is a concentrated calcium complexed with an amino acid polymer for improved foliar uptake.



Cal-Pull is a polysaccharide chelated calcium that is highly effective in moving salt through the soil profile.

We Have A Calcium Product For All Your Needs

TAMPA BAY TURF

The Turf Specialist

7162 123rd Circle North ° Largo, FL 33773

(800) 229-1981

CALL YOUR TAMPA BAY TURF CONSULTANT ABOUT SOIL ANALYSIS AND PERSONAL OBSERVATION

Tom Phillips
(516) 719-6265
Southeast

Carl Bronson
(727) 638-5858
Northeast & Central

Buck Buckner
(239) 633-6398
Southwest

Keith Palmgren
(727) 487-3434
Northwest

Terry Brawley
(727) 638-3481
West

Florida, Central Florida, Seven Rivers and Treasure Coast chapters need to get involved with their district contacts to make sure no restrictions are imposed without real-world input about common-sense, progressive, percentage cutbacks for various shortage phases.

One thing for everyone to remember – and tell anyone who will listen – that statewide, the golf industry (that's right golf is a \$5-billion-a-year business) uses only about 3 percent of water consumed every day.

Drastic cutbacks to our industry's water use don't really conserve that much water, but can cripple local and statewide tax revenues. Remind them that we know we are highly visible, but we are also highly responsible water users, particularly compared to some others.

Recently I got this

note from Rich Marella who works for the U. S. Geological Survey and who has been collecting water-use data for Florida and issuing reports on Florida water use every five years. Here's what Marella had to say:

Joel, I posted the 2005 data on the USGS Web page (see new link below). For 2005 total water used for recreational irrigation was 330 million gallons per day. This is a decrease of 82 million gallons or 20 percent from 2000 value of 412 million gallons per day.

Of the 330 million gallons per day used in 2005, 68 percent (226 million gallons per day) was for golf course irrigation. The decline between 2000 and 2005 was primarily from weather conditions, as 2000 was very dry and

2005 received a more normal rainfall coupled with many new courses and several older courses using reclaimed wastewater as their water source (the 330 or the 412 do not include reclaimed wastewater used for golf course irrigation).

(Editor's Note: This is fair since reclaimed water is usually not subject to restrictions and certainly is not a public potable water source)

Overall, total freshwater use for 2005 was 6,841 million gallons per day, which golf course use was 3.3 percent in 2005, and golf course acreage was about the same in 2005 as it was in 2000. I will add the water management district tables for 2005 to the Web site sometime in December. I am still waiting on

some data from some sources to finish up my estimates. I hope this answers your question, please call if you have any other questions.

Here are the links Marella referred to. They don't have the whole state by water management District but they do contain county-by-county data on water use:

Florida USGS WEB Page: <http://fl.water.usgs.gov>
 Water-Use WEB Page: <http://fl.water.usgs.gov/infodata/wateruse.html>

AMERIGROW GOLF

DEAL DIRECT!
 We Manufacture, Deliver & Install

Palm Straw™
 Nativegroundcover™
 Landscaping Mulch & Rock
 Soils & Top Dressings
 Custom Products
 Horticultural & Hurricane Debris Hauling

10320 West Atlantic Avenue, Delray Beach • www.amerigrowgolf.com
1-800-860-8238

Blow-on Installation
 Punctual Deliveries
 Excellent Service
 Playable Materials



**For courses that roll,
meet the mower that rocks.**



The new 2653B Trim and Surrounds Mower from John Deere.

Meet the mower that is completely in tune with today's courses. The 2653B features a new traction system which enables it to climb and mow mounds like never before. Operators of any size will enjoy the increased legroom. And servicing the 2653B just became a lot easier thanks to more on-board diagnostics and parts commonality with other Deere machines.

Ask to see the machine that is sure to strike a chord with you and your crew. The new 2653B. Call your John Deere distributor for a demo today.



www.JohnDeere.com

COASTAL EQUIPMENT SYSTEMS
5287 NEW KINGS ROAD
JACKSONVILLE, FL 32209
Telephone: (904) 924-9624
Fax: (904) 861-0037

BGTC0330



Members and guests enjoy the annual golf course “Bird Walk” hosted by the Grand Harbor Audubon Society in the winter of 2006. Photo by Bobby Wallace.

Communication Can Be a Beautiful Thing

By Shelly Foy

I have been thinking a lot lately about the importance of being able to communicate effectively with others. It seems to be the crux of most problems in the world today and, quite honestly, very few of us do it well. Good communication is difficult at best, and yet it is so very important in everything we do. I encourage each of you to speak out more, write more, reach out more and force yourselves to become better communicators.

The reality is that you can’t just do your job solely on your golf course anymore. Your job has come to be about communicating effectively to those outside of your property about what you do on your golf course and why you do it.

GRAND HARBOR GOLF & BEACH CLUB, VERO BEACH

Talk about finding an effective way to communicate your message!

In my opinion, Bobby Wallace has hit the mother lode.

Wallace is the golf course superintendent at Grand Harbor Golf & Beach Club in Vero Beach. The property comprises 900 acres, with

140 acres of wetlands, 20 water bodies, 50 acres of surface water, 205 acres of turfgrass and a 45-hole golf course with 800 members. Wallace has been at the club for two and a half years. He came from Hilton Head Island, S.C., where he was the superintendent at Indigo Run Country Club for 18 years.

Grand Harbor was already a Certified Audubon Cooperative Sanctuary when Wallace joined the management team. Instead of being satisfied with its status, his love of nature and being outside compelled him to do more. Not too long after he came to Grand Harbor, Wallace had a conversation with a member who mentioned that she knew they were a Certified Audubon Sanctuary, but she felt like they could do so much more. Bobby agreed and they set up a meeting to discuss ideas.

Pretty soon, there were so many people showing up at meetings that they were running out of room. The next thing you know, the members at Grand Harbor had decided to form their own Audubon Society chapter, and the Grand Harbor Audubon Society was born. The group currently has 85 members and their goal – which

they believe will be reached soon – is 200 members.

On Nov. 20, they hosted their annual Audubon Open, and raised \$3,800, which they already are putting to use. Wallace and several members, with the help of the Pelican Island Audubon Society, are in the process of installing seven purple martin houses, two osprey platforms, four screech owl boxes, four wood duck boxes, and four boxes for woodpeckers.

One of the first projects they began was naturalizing an area around holes 6, 7, 9, 13 and 14 of the Harbor Course. They have stopped mowing and spraying out-of-play areas along this corridor (allowing Wallace to re-allocate those resources to other areas of the golf course), and members of their Audubon Society have convinced many of the adjoining homeowners to stop mowing and spraying their areas around this corridor as well.

When I visited Grand Harbor, it was 95 degrees at 3:30 p.m. and the area was teeming with dragonflies, butterflies and too many bird species to count. I can only imagine what this area will be like during the actual birding season.

Wallace and the members of the

Our Reservation Cards are Stacking Up! Are You Missing Out on **NEMACUR®** ?

Bayer Authorized Distributors will not be able to sell Nematicur after May 31, 2008.

**Contact Your Local UAP Representative or
CALL (888) 483-TURF (8873) and
Get Your Reservation Card Today!**



ALWAYS READ AND FOLLOW LABEL DIRECTIONS.
Copyright © 2007, by United Agri Products. All Rights Reserved.
Nematicur is a registered trademark of Bayer.

Nematicur is a Restricted Use Pesticide.

lpi 6371_12/07



Grand Harbor Audubon Committee: From left: Robert Wallace (director of golf), Virginia Tulluch and Jim Bercaw (in charge of lakes and buffer zones), Deb Fletcher (original organizer) and Neil Stalter (resident bird expert).

Grand Harbor Audubon Society continually seek new ideas for ways to enhance habitat on the golf courses. Several members made a point of traveling and playing golf on other Certified Audubon Sanctuaries across the country and brought back pictures and ideas of things they wanted to do at Grand Harbor.

Wallace has a shared goal with his membership of enhancing and protecting habitat on their 900 acres. They share e-mails and photos and spend time together making plans and discussing ideas. He is an active member of their Audubon Society, and I am quite sure he is getting more satisfaction from his job now than ever before. Two of his Green Committee members are also members of the Grand Harbor Audubon Society, and this helps garner support for projects on the golf courses. Wallace is quick to give most of the credit for their environmental efforts to his members,

It's Not Slow Release, It's Better



AGROTAIN
INTERNATIONAL, LLC

You want consistency when it comes to your nitrogen. With *StabilizedNitrogen™* Technology (SNT), more available nitrogen stays in the soil for results that last for weeks. Insist on SNT for:

- Better color & quality
- Increased nitrogen efficiency
- Extended nitrogen availability
- Environmentally sound
- Granular and soluble programs

UMAXX
STABILIZED NITROGEN FERTILIZER

UFLEXX
STABILIZED NITROGEN FERTILIZER

HYDREXX
PROFESSIONAL GOLF COURSE MAINTENANCE



Insist on it.

888-547-4140

www.stabilizednitrogen.com

StabilizedNitrogen is a trademark of AGROTAIN International, LLC.

and they have developed quite a kinship in Vero Beach.

During my visit we were stopped by a couple of his members who wanted to talk about the Egyptian Swans that are now living on the golf course, and where they were last seen. We toured the corridor area they are currently enhancing, and we talked about the plans they have for creating educational signs around several areas of the courses. He even shared his favorite spot along No. 14 on the River Course, which runs parallel to the Intracoastal Waterway. This is where he sometimes escapes to have a few minutes of quiet time to gather his thoughts before he heads off to a meeting.

We talked about the Bald Eagles that nested close by this past year and who raised a fledgling around hole No. 4 of the Harbor Course. Wallace recently told me that the eagles are already back this year. We talked about the manatees and the dolphins and even the bull sharks that have been seen around the property. We came around corners where rabbits were munching on grass and did not seem bothered by our presence. They have even installed an escape ramp for turtles to use when the water levels are too low in the effluent irrigation pond.

If you have ever spoken to Wallace you know immediately that he is a good communicator. You hear the tone in his voice, the excitement about programs, and the mention of all of the people helping him to spread his message. As I left Grand Harbor late that afternoon, I couldn't help but think, "How can I bottle some of this up and share it with the rest of the world?"

Wallace has used the Audubon Cooperative Sanctuary Program as an effective communication tool and it has worked beautifully for him and for the Grand Harbor membership. I encourage everyone who has not yet made the decision to enroll their golf course in this program to take the time to do so. You can enroll online at www.auduboninternational.org.



Simply Brilliant



Diamond Zoysia is a fine textured, vegetatively propagated, warm season variety with excellent tolerance to low light conditions, salty soils and high traffic. Diamond is best maintained at a very low mowing height and has outstanding recuperative abilities making it a logical choice for golf course tees, collars, as well as putting surfaces. Diamond has better fall color retention than most other zoysiagrass varieties and has an early spring green-up.



Shipyard Golf Club



Atlanta Athletic Club
Tees & Fairways

Features and Benefits



Diamond Green

Color ~ Brilliant Green

Texture ~ Very Fine

Performance: • Wear Tolerance ~ better than hybrid bermuda.

• Excellent shade tolerance (can maintain high quality in 60% shade)

• Tolerant of close mowing. • Excellent salt tolerance.

Climate ~ Thrives in warm to hot climates, USDA zones 7 to 11.

Maintenance ~ Moderate to High Mowing ~ 1/8" to 1/2"

- GREENS
 - SOD
 - SPRIGS
- Greens from sprigs in 70-90 days*

**BERMUDA - TIF EAGLE - TIF DWARF
ZOYSIA (CAVALIER - PALISADES)**

Diamond Zoysia is available in the southeast exclusively from:

2024 Willow Swamp Road
P.O. Box 212
Norway, SC 29113-0212
Phone 803.263.4231
Fax 803.263.4886
Email:
newlifeturf@sc.tds.net



**RHYNE'S
SELECT TURF**
306 4th Street
Benton, AL 36785
Phone 334.875.3288
Contact: John Mays
jmays@rhyneselectturf.com

www.newlifeturf.com

For Sports Fields, Golf Courses and Sophisticated Landscapes.

It's All About the Water

Less Irrigation is Better for Golf, the Turf, and the Environment

By Matt Nelson

Editors Note: As the various Florida Water Management Districts implement tighter water restrictions on golf courses and discuss future water conservation measures this article might just as well have been written today as it was four years ago. Clip and post in the clubhouse for your customers because we are now entering our traditional dry season and our courses likely won't be as green as usual.

As an agronomist in the golf industry, it often amazes me how obsessed American golfers are with the color green. Preparing good golf conditions sometimes seems secondary to prepping the course for a beauty pageant. Players commonly react with worry, disdain, and disapproval at the first signs of any off-color turf. Panic develops when the dreaded “brown spot” occurs. What gives within the ranks of our great game?

National drought surveys indicate that nearly half of the U.S. is currently experiencing drought, and water restrictions have been mandated at golf courses across the United States. The fairways may get a little firm and lose some color, but with traffic control and prudent cultural programs, much of the turf can survive without water for extended periods. Every lie might not be perfect, but isn't this part of what makes golf such a great game? When the course gets dry during the summer months, then use those conditions for more roll and to play different types



Panic often develops when the dreaded brown spot occurs. Photo courtesy of the USGA.

of golf shots. More bounce and roll presents risk and reward at some holes, different shots into greens throughout the year, and a greater premium on accuracy.

The golf industry has invested millions of dollars over the past two decades investigating the environmental impacts of golf course management. Our greatest challenge, however, will likely rest with irrigation. Water availability and quality will become the greatest issue facing golf courses throughout much of the country, if it isn't already.

Players may have no choice but to tolerate changing golf course conditions throughout the year, and they may even

learn to appreciate the many wonderful shades of brown.

But will it have to take water-use mandates to change current golfer attitudes? Sadly, this is probably true. In drought-stricken states this season, where both voluntary and mandatory water restrictions were in force, I observed golf shop staff manually turning on sprinkler heads after the maintenance department had left for the day, resort managers demanding that golf course superintendents increase the watering, and an adamant group of golfers complaining directly to the mayor about the lack of watering at their municipal golf course. The golf shop staff killed most of a green, play at

the resort was up even though several greens had been badly vandalized and closed, and late summer rains allowed the turf at the municipal course to resume normal growth and appearance.

Oh ye of little faith. The turf doesn't have to be green and soft to survive or provide a playable surface.

Those doing the most complaining typically are at golf courses with circa-1970 irrigation technology while expecting Y2K conditioning. Forget about it. The margin for error with respect to turfgrass water management has become increasingly thin with ever-faster greens and lower heights of cut. Drought conditions quickly highlight the deficiencies in the watering system, and simply cranking up the run times to make up for poor distribution uniformity invariably results in soft, muddy spots where embedded lies, mud on the ball, and no roll are the norm - all in the midst of a drought. This inefficient use of water results in a blatant waste of our most precious resource.

If course operators and players truly are concerned about uniformity and consistency on the golf course, then the irrigation system is the place to start. Modern irrigation control capability, components, and design have greatly improved the ability of golf course superintendents to accurately meet the variable turf water demands. Improved control and coverage also will result in significantly reduced water use over the year. Oh, can't afford to replace your 29-year-old irrigation system? Buck up and find a way to finance replacement of the golf course's most valuable infrastructure item or quit whining and hit the ball. Golf was invented prior to irrigation and has survived most of its life without it. Many would argue it was a better game without it, too.

The USGA is committed to funding research that investigates turfgrass breeding and selection, and management practices that enable reduced water use. We will continue to seek out every alternative to reduce water use and be better stewards, but it

will be much easier if golfers come to support this endeavor. So, this is a plea to the American golfer. Firm and dry conditions promote better and more exciting golf. Brown is beautiful, too!

Listen closely - it's all about the water.

Matt Nelson is an agronomist in the USGA Green Section 5 Northwest Region. Reprinted with permission from: USGA Green Section Record, January-February 2003 issue.

Turf Management in a Certified Audubon Cooperative Sanctuary

By Bobby Wallace

At the Grand Harbor golf courses, we approach pest management with the concept of protecting the environment while keeping a top-grade playing surface for our golfers. We do not treat with preventive applications, only curative. Our policy is to spot-treat affected areas rather than apply to large portions of the course. We use the lowest curative rate and the least problematic chemicals for any particular pest.

BUFFER ZONES FOR LAKE EDGES

We have a protective buffer zone around lake edges where no pesticide spraying or fertilizer application is permitted. Primo, a growth retardant with no water soluble properties, is used to help keep a 5 foot no-mow area that not only achieves a transition zone with a natural look to our lake edges, but helps to absorb any chemicals that might possibly leach towards the water. In addition, we are installing littoral-zone plantings that will filter contaminants, and add wildlife cover, feeding and nesting areas for water birds and small animals such as otters.

FERTILIZATION

Our fertilization program concentrates on slow-release fertilizers and foliar feeding to maximize

Tom Burrows, Consulting
Agronomist/Turfgrass Specialist
Independent Consulting using
"Brookside Laboratory"

Greens Reconstruction

- ◆ Soil Physical Analysis
- ◆ USGA Approved Testing
- ◆ Analytical Service
- ◆ Recommendations
- ◆ Specifications for Contractor Bidding

Soil Testing

- ◆ Greens, Tees, Fairways
- ◆ Analytical Report and Soil Fertility Recommendations

Water Testing

- ◆ Report & Recommendations

In the business 40 years

Jensen Beach, Florida
772-692-1221 cell: 772-215-1819

Laserturf.
Setting the Standard

Laser Controlled Leveling
and Topdressing For:

Golf Tees
Sports Fields
Tennis & Croquet
Courts

- Ron Butler
Central Florida
- Ken Schilling
Central Florida
- Tom Mackanos
Southeast Coast
- Joe Peters
Northern Florida

772-225-3771
10040 Oak Quarry Dr.
Orlando, FL 32832
email: laserturf1@aol.com

nutrient retention and drastically reduce the possibility of any leaching to any water source.

WATER-USE CONSERVATION

The Grand Harbor site was conceived with a large, scenic, interconnected storm-water lake system. This engineered retention services a high percentage of our irrigation water needs for both the golf courses and the residential areas of our development. We also receive re-use water from Indian River County which is the only supplemental water source besides the lake system for one 18-hole course. Overseeding has been reduced to “tees only” as winter ryegrass uses large amounts of water. We minimize our water use by monitoring soil moisture content and setting our irrigation program accordingly. There is also much hand watering of hot spots and use of wetting agents for mounds and other features which are historically troublesome.

Turf Management in a Certified Audubon Cooperative Sanctuary

Our pest-management goal is to protect the environment while keeping a top-grade playing surface. We do not treat with preventive applications, only curative. Our policy is to spot-treat affected areas rather than apply to large portions of the course. We use the lowest curative rate and the least problematic chemicals for any particular pest.

BUFFER ZONES FOR LAKE EDGES

We have a buffer zone around lake edges where no pesticide or fertilizer application is permitted. Primo, a growth retardant with no water-soluble properties, is used to help keep a 5-foot no-mow area that not only achieves a natural looking transition zone, but helps to absorb any chemicals that might possibly leach towards the water. In addition, we are installing littoral-zone plantings that will filter contaminants, and add wildlife cover, feeding and nesting areas for water birds and small animals such as otters.

FERTILIZATION

We concentrate on slow-release fertilizers and foliar feeding to maximize nutrient retention and drastically reduce the possibility of leaching to any water source. We also monitor the weather and postpone product spread any time there is a probability of rain. We comply with the “Best Practices” standards in all formulations and applications.

- Bobby Wallace



A New Face on the Names You Trust

Since 1953, Brandt has been the company the industry always trusted for quality, reliability and technology. Today, Brandt is a multifaceted forward thinking company with many segments that serve the “Green Industry”, and we’re excited to say now they’ll all be known as Brandt.

Brandt . . . Now more than ever!

- Manni-Plex® Foliar Chemistry
- Greens Fertilizers
- Sustainable Botanical Controls
- Colorants and Adjuvants



Brandt Consolidated, Inc.
 2935 South Koke Mill Road
 Springfield, Illinois 62711
www.brandtconsolidated.com
 800 300 6559

No-Till TifEagle is Landing



No-Till Renovation vs. Conventional Reconstruction

- No-till TifEagle can save you up to 75% of the cost of conventional greens reconstruction.
- Reduced down-time greatly reduces lost revenue. Six to eight weeks is normal turnaround.
- Site preparation can be done with your own crews and equipment to fit your own schedule.
- Original putting surface grades and contours can be maintained or slightly altered if desired.
- Healthy mature seedbed is retained and serves as base for new putting surface. •Speedy conversion from poor quality greens to TifEagle, the ultimate ultradwarf putting surface.

Are Your Greens Good No-Till Candidates?

- Not all older greens are good candidates. Serious disease, drainage and soil profile problems may require conventional reconstruction.
- Major re-shaping and architectural changes are not possible for most older putting surfaces.
- Free on-site inspection and a green-by-green analysis is yours for the asking.

Advantages of Certified TifEagle Bermudagrass

- Research shows that TifEagle has superior speed, consistency and overall playability.
- Compared to other ultradwarfs, TifEagle recovers more quickly from injury and is extremely drought tolerant and disease resistant.
- TifEagle has excellent color retention and a more robust recovery under cool conditions.
- TifEagle has smoother transitions during both fall overseeding and spring green-up.
- With frequent brushing, grooming and light top dressings, TifEagle requires less verticutting to control thatch buildup than other ultradwarfs.

Quality-Conscious TifEagle Grower-Installers

- TifEagle is grown, inspected and sold under a rigorous set of rules and guidelines designed to promote on-going purity and uniformity.
- A select group of top-quality TifEagle growers have been specially certified to handle all no-till TifEagle inspections, sales and installations.



For more information visit our website or contact
Dr. Mike Garland at 706 542-5640

www.tifeagle.com

GCSAA Releases Results of First Golf Course Environmental Profile

Editor's Note: People and the press often make and repeat claims about how golf courses affect the environment, but previously a centralized and coordinated, easily accessible database has been lacking. There certainly have been peer-reviewed scientific research studies over the years that independently have shown that properly managed turfgrass is not a threat to the environment. This effort by the GCSAA's Environmental Institute for Golf is to capture the overall impact and practices of the entire industry.

This is the first of four focused surveys addressing components and practices used on golf courses. It covers overall land-use characteristics and environmental stewardship to lay the groundwork for more specific surveys to follow on water, fertilizer and pesticide use.

The water and fertilizer surveys have been completed and are being tallied now for release later this year. The final survey of this first round of baseline data-gathering, pesticide use will be rolled out this month. There will be follow-up surveys at periodic intervals to measure how well golf courses are doing in making environmental improvements.

Here are the summary conclusions excerpted from the first survey on land use and environmental stewardship. It is very revealing and positive, but also sets the stage for more involvement and improvement:

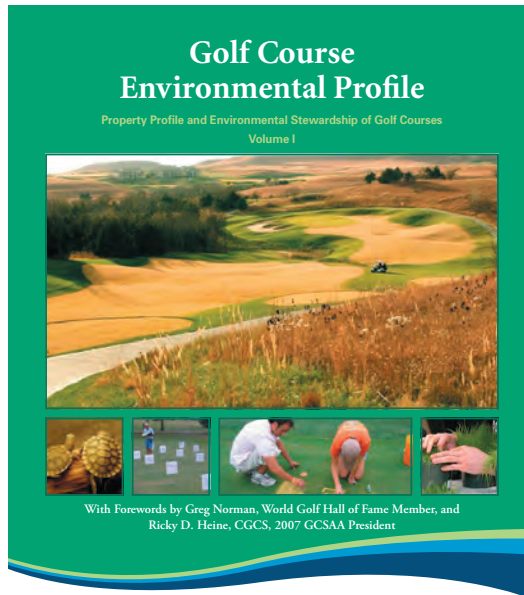
MAINTAINED TURFGRASS

- Contrary to popular belief, the entire golf course is not composed of high-maintenance turfgrass.
- The total acreage of an average 18-hole golf course is 150 acres. Of that total, 100 acres are maintained turfgrass. Fifty-eight acres, the rough and driving range, are not highly maintained areas.

- On most golf courses, the highly maintained turfgrass is dedicated to the three acres of greens and three acres of tees.
- Additionally, some golf courses have highly maintained turfgrass on the fairways, which comprise 30 acres of an average 18-hole golf course.

TURFGRASS SPECIES

- The grass species grown on each



The Environmental Institute for Golf is the philanthropic organization of the Golf Course Superintendents Association of America.

The first of four focused surveys addressing components and practices used on golf courses. Two more surveys are scheduled to be released this month

component of a golf course varies depending on the agronomic region of the country, supporting the principle of growing the best adapted turfgrass species for the particular geographic location.

- Cool-season grasses are grown on 66 percent of all maintained turfgrass acreage.
- Kentucky bluegrass is the most widely grown cool-season grass, found on 23 percent of all maintained

turfgrass acres.

- Warm-season grasses, mainly bermudagrass, are grown on 34 percent of all maintained turfgrass acreage.

NON-TURFGRASS ACREAGE

- The non-turfgrass landscape on golf courses is substantial and can make an important contribution to green space and wildlife habitats for local communities.
- Non-turfgrass landscape of an average 18-hole golf course is 50 acres, including 35 acres of elements such as forests, wetlands, ponds, streams or other specialized habitats.

• Facilities have the opportunity and the responsibility to maintain these areas in a sustainable manner to further enhance the environmental qualities of a golf facility.

ENVIRONMENTAL IMPROVEMENTS

- On average, over the last 10 years, an 18-hole golf course has made five environmental improvements.
- Approximately 29 percent of 18-hole golf courses are involved in a formal, voluntary environmental stewardship program.
- Facilities involved in formal, voluntary environmental programs have made an average of seven improvements to enhance the golf-course environment in that 10-year period.
- The data suggest that such programs are having a positive impact on the golf course environment.

This report provides a review of land use on golf courses. The results of this initial survey establish a baseline that can be compared to data from future surveys to identify change over time and highlight golf course land use to guide golf industry agronomic and environmental initiatives.

A copy of the complete first report on the GCSAA's Environmental Golf Course Environmental Profile can be found at: <http://www.eifg.org/programs/GCRPfullreport.pdf>

The Critics Have Spoken.

These are actual superintendent quotes from early demos of Jacobsen's new **ECLIPSE™ 122 F** walking greens mower.

"I like the command center and onboard computer. The clip rate is superior."

– Current Toro/John Deere Customer

"This unit is superior to other units we've demoed. I like the on-demand reel speed, floating cutting unit. **SOLD!**"

– Current John Deere Customer

"I like the option of gas or battery. The unit has a more flexible head and more clips per cut than our current walking greens mower. I will probably buy this mower."

– Current Toro Customer

"I like the adjustable reel speed. I plan on buying this mower."

– Current Toro/John Deere Customer

"Much better than our current walking greens mower. I like the simplicity of the reel and traction drives."

– Current John Deere Customer

"Excellent quality-of-cut."

– Current Toro Customer

"I like the floating cutting unit and that the electric reels can run at 2,220 RPM. I plan on buying this mower."

– Jacobsen Customer



JACOBSEN®
ECLIPSE™ 122 F
FLOATING HEAD WALKING
GREENS MOWER

COMING TO A DEALER NEAR YOU OCTOBER 2007!

Golf Ventures

5101 Gateway Blvd., Suite 18
Lakeland, FL 33811
800-330-8874

www.golfventuresonline.com

KILPATRICK

Turf & Commercial Equipment

7770 High Ridge Road
Boynton Beach, FL 33426
800-782-7399

1620 Trade Center Way
Naples, FL 34109
800-782-7399

www.Kilpatrickco.com

4545 Atwater Ct.
Buford, GA, 30518
866-302-3435

2510 Midpark Road
Montgomery, AL 36109
866-302-3435

JACOBSEN®

A Textron Company

When Performance Matters.™

Lead Not Follow

By Heather Wood

While many golf course operators show concern about environmental issues, they could be doing more to show they're positive contributors. This was the message of members of the golf and resort industry team of the law firm Foley & Lardner LLP, which hosted a Webcast about environmental concerns in the golf industry recently.

While a large percentage of golf course superintendents are concerned about environmental issues that affect golf courses, few are active in the regulation process, they say.

In a recent Foley & Larnder study, 66 percent of superintendents who participated said they currently aren't implementing water-reduction programs, yet the issue of water resources ranked as the top issue facing golf courses today, followed closely by pesticide regulation.

Seventy percent of respondents were "concerned" or "very concerned" about the impact of increased pesticide regulation.

At the same time, only 10 percent of respondents considered themselves "actively involved" in regulatory issues affecting the industry. That number should be easy to increase, says Thomas Maurer, a partner.

"Thinking about environmental issues and trying to deal with them in a proactive way is a win-win situation," he says. "Not only

does it approve appearance and the golf experience, but you minimize environmental impacts, save money and it's to the workers' advantage. Hit low-hanging issues without waiting for the government to get involved."

Maurer and his colleagues detailed steps golf course operators can take on their own courses to record conditions and make improvements where necessary, making it more difficult for regulators to find fault with the industry.

BEST MANAGEMENT PRACTICES

Florida took a proactive step with environmental issues this past January. The state's Department of Environmental Protection published Best Management Practices for quality on Florida golf courses. Most of the practices can be used anywhere in the country, Maurer says. Best Management Practices should be created before the course is built, if possible.

"Monitoring the conditions of the course before you start is great," Maurer says. "You can see how it's doing before the course is built versus after."

The plan covers elements including drainage, play area design and naturalizing nonplay areas, wildlife management, water quality and maintenance facilities.

Other BMPs Maurer outlined include:

- Nutrition and fertilization: Make sure the turf-grasses have the essential

nutrients and analyze the fertilizer types used;

- Cultural practices: Monitor mowing and blend it with the right amount of aerification and other cultivation practices;

- Lake and aquatic plant management: Weigh the benefits of lakes (water hazards, aesthetics, irrigation, storm water treatment) with the negatives (sedimentation, nuisance vegetation, littoral zones)

- Pest management: Practice integrated pest management, keep up with the latest regulations, keep records of applications, handle and store pesticides properly; and

- Maintenance operations: Make a plan and monitor fueling, equipment washing and waste handling.

ENVIRONMENTAL DUE DILIGENCE

Completing an environmental assessment might be required, especially for courses that are up for sale, Maurer says. The process is based on the regulations that came from the Environmental Protection Agency's Standards and Practices for All Appropriate Inquiries, now known as All Appropriate Inquiry.

The Phase I Environmental Site Assessment is focused on potential contamination issues involved with pesticides or maintenance procedures. A new buyer would be responsible for cleaning up any problems if they ever come to light,

Maurer says. If it is determined that there potentially are contamination issues, the next step – Phase II – is to test the soil to determine if there really is a problem.

Also, document the course's water source and make sure the course has a permit to use it.

Another factor to consider is the buildings on site. If they're older, conduct tests to find out they contain asbestos or lead-based paint, Maurer says.

WATER USE

A golf course superintendent who leaves a job at a course in the Eastern United States to take a job at a course in a Western state will have to learn a new set of water usage rules. There are two different doctrines regarding water use, says Matt Riopelle, who was a summer associate. The Western states follow "prior appropriation" guidelines. A core component is the "beneficial use" rule.

"California says the use of potable water on a golf course is not beneficial if another source is available," Riopelle says.

The right to a water source is simply stated as "first in time, first in right," which means first come, first served. The story is different in the Eastern states, where water isn't as scarce. Riparian rights mean that land ownership results in rights to the water. The riparian right is regulated by requiring a reasonable use of water on the property.

An increasing number of courses are using reclaimed or recycled water in the East and the West, and that number will only grow as water becomes scarcer and more courses are being required by law to switch from potable water sources, says senior counsel Wayne Rosenbaum. California law requires that golf courses use recycled water if it's available.

Unlike potable water, most contracts for recycled water require a facility to take a given amount of water per day or month.

"In planning a golf course, you will need to talk to a water purveyor in terms of the quality of the water provided to decide on utilization and irrigation

timing," Rosenbaum says.

Superintendents will have to think about whether people will come in contact with the water to determine the quality needed, Rosenbaum says. They also should think about how turfgrass management techniques might have to change when the course transitions to recycled water. More frequent water and soil testing will need to be conducted.

Also, the irrigation system likely will need be retrofitted and more pumping systems might be needed. The system should be checked for clogged sprinkler heads, which is more likely to occur with reclaimed water.

To ensure water isn't leeching into the ground-

water supply, monitor the groundwater before and after incorporating recycled water.

FIFRA

Reviewing the components of the Federal Insecticide, Fungicide and Rodenticide Act can protect the course against penalties, which can include having pesticides confiscated, says associate Julie Solmer, who addressed issues related to pesticide management and residual pesticide contamination.

Check for state or local laws. Some states might have their own use rules in addition to FIFRA, Solmer says. In Florida, there's a state law governing irrigation systems that are used to

apply pesticides.

Minimum-risk pesticides, including castor oil, citronella, garlic, linseed oil and white pepper, are exempt.

The pesticide must be used in a manner consistent with the label.

Pesticides can only be applied by or under direct supervision of a certified applicator.

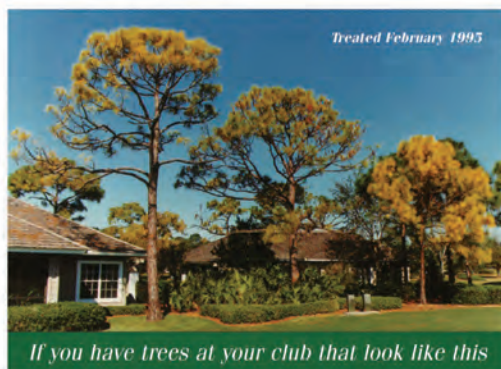
Commercial applicators shown to be in "knowing" violation of the law could face penalties of \$25,000 for each offense or one year in prison. Both the violator and the employer can be held criminally liable, Solmer says.

This article was reprinted with permission from Golf Course Industry Magazine.

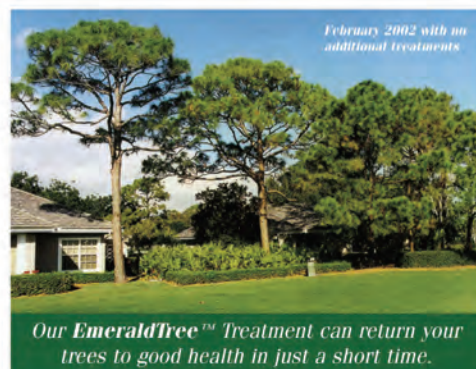
EmeraldTree™



ARBORJET



If you have trees at your club that look like this



Our EmeraldTree™ Treatment can return your trees to good health in just a short time.

We can do the same thing for your trees – GUARANTEED!

Do you have sick yellow trees? Do you have some "Key" trees you're worried about? Don't cut down another tree needlessly – Save those trees – Treat them with EmeraldTree. Over 95% of our treated trees regain color and vigor and we guarantee the treatment to last a minimum of **THREE YEARS!!** We now offer the Arborjet insecticidal system to protect your trees from Bark beetles. Call Neal Howell @ 251-402-9848, Robert Howell @ 561-523-1295 or call toll free @ 877-779-TREE (8733). Visit our web site @ WWW.Emeraldtree-inc.com.

PHOTO TO THE EDITOR



**Timing
is
Everything**

This photo shows exactly why they call the osprey a "fish hawk." Submitted by Joe Hubbard.

LETTER TO THE EDITOR

Proud of Friends' Professionalism

Joel,

Just wanted to drop you line after spending the last 18 months in and out of the Dominican Republic, and I had an opportunity to read the The Florida Green and see you are still at it.

What I like about the magazine is that there are many friends mentioned and that they are all doing great stuff for the business and the fact that your magazine recognizes their feats.

As you know I once was in the profession and have worked with the likes of Phinny, Matt Taylor, Bob Wagner, Jimbo Rawlings, Glen Klauk and countless others.

I just wanted to say how proud I am of the golf industry professionals that take our work to a higher level and constantly work

at making the golf course a better place for the environment and better conditions for all.

Stefan L. Masiak
SENIOR DESIGNER
FAZIO GOLF

Steve,

The rewarding part of my job is getting feedback from readers like yourself and from telling the stories of the people you mentioned and those countless others over the years. It was fun and educational working with you on the Disney Osprey Ridge project – omigosh – 16 years ago. They say time flies when you're having fun, maybe that's why it's whizzing by.

Keep in touch and please share those positive environmental contributions of some of your new projects so we can all continue to learn how to do it better.

Joel

**You, Me
and
Planet
Earth**



**AS I SEE IT
By JIM WALKER**

Save the whales, save the snails, save the trees, save the bees. In the 150 years since the Industrial Revolution, man has managed to all but destroy the environment in which he lives.

Never in the history of

our profession has there been more pressure to be prudent with our pesticide and fertilizer applications and Best Management Practices are the standard operating procedures.

Now, this is a very good thing, and don't get the wrong idea about where I go from here.

But, sadly, I think it is too little too late. Let's also remember that what golf puts on the ground is just 1 percent of the problem and homeowners, industry, farmers and Mother Nature herself are dumping the other 99 percent.

Industrial pollution and vehicle emissions have created holes in the ozone layer at the North and South Poles of our planet, and the ice packs are melting at an alarming rate.

Governments across the world are meeting, eating, and retreating to solve the problem.

We are telling South American countries to stop cutting down their forests, despite the fact we cut all of ours down 50 years ago. I'm on board, you shove off.

Oil is nearly \$100 a barrel and the USA and all the other major players in the world can't get enough, and can't burn it up fast enough in our vehicles, factories, and electric generating plants.

I say we are starting to see the beginning of the end. It may take a few hundred years, but the end of civilization as we know it is at hand.

Only the pompous, arrogance of man can come up with the mantra that we are now going to save the world. Well, I've got a

hot news flash for you. The planet isn't going anywhere; we are.

The human species is nothing more than a dead-end biological mutation destined for extinction by its own hand. It will be the first time in the history of our planet that the species at the top of the food chain did itself in.

And you know, it's probably about time for us to check out. All we care about are our SUVs, Bluetooth phones, laptops... our text-messaging, bottled-water-drinking, multi-tasking existence, feeding each other to the alligators and hoping they will eat us last.

We pay athletes millions of dollars a year to play

games for our enjoyment while we pay our teachers a wage just above the poverty level and the news media can only tell us about which celebrity is sleeping with whom, or the big wreck on the Interstate, or the innocent kid killed in a drive-by shooting. They cover hurricanes, tornadoes, earthquakes, and forest fires with timely precision, and remind us we have now spent almost \$500 billion on the war in Iraq.

In retrospect, you wonder why the planet let man evolve to the point that he has. The age-old question: Why are we here? One answer comes to mind – plastic! The earth wanted plastic and couldn't make it for itself. That's why we are

here — to make plastic?


Well, the earth is finished with us now. It has plastic and is probably sorry it does. The planet will shake us off like a bad case of fleas and begin to heal itself. I hope you don't think the planet perceives man as a threat to its existence. Man has been here 50,000 years and the planet two billion. Planet Earth is not afraid of us. Ask the people of the Gulf Coast if they felt like they were a threat to the planet the day Katrina came to visit.

In the meantime, golf course superintendents will give 100 percent effort to use in a prudent and safe manner their 1 percent of the earth's pesticides and fertilizers, and make

the world a safer place for the Haagen-Dazs-eating, Docker-wearing, and Volvo-driving environmentalists.

Doesn't it just amaze you that the industry which contributes so little to the earth's pollution problems has been singled out as one of the biggest offenders? Everywhere you go, and everyone you talk to says: "Those damn golf courses are ruining the world."

I guess it's easier to pick on the little guy and let the homeowners, industrialists and farmers go free to continue their evil, polluting ways. I just have one more thing to say: Google, Ipod, MP3, You Tube, Xbox, and GPS at the end of the day. This is Captain Jim. Over and out.



Legendary greens and bunkers have one thing in common...
they both began with the best soil.

Beneath every meticulously groomed green is dirt. And, the best dirt doesn't just happen. At **Golf Agronomics Supply & Handling** we've been perfecting golf course soil and sand for more than a decade. Our computerized soil blending equipment ensures that the mix you receive meets your exacting specifications – every order, every time. With production facilities located throughout the Southeast, Golf Agronomics offers volume orders and next day service.

GOLF AGRONOMICS SUPPLY & HANDLING

Serving the Carolinas and Florida
800-626-1359 • FAX (941) 955-4690
www.golfag.com



**Ordinance
'Exemptions'
Don't Mean
'Free Pass'**

GREEN SIDE UP BY JOEL JACKSON, CGCS

Golf courses have been very fortunate in the first round of local ordinances that have been passed this year. Beginning with Sanibel Island and Sarasota County – and other entities that have adopted similar versions of those two – golf courses are usually listed in a section titled “Exemptions.”

But don't stop reading there.

Because what “Exemption” means is that golf courses are exempt from the rules that have been put in place for fertilizing home lawns. They are not exempt however from adhering to some sort of nutrient-management guidelines. Those guidelines are contained in the Best Management Practices for Enhancing Water Quality on Florida Golf Courses (BMPs). The Golf BMP manual was published in January and has been sent to every golf course for which the FGCSA has an address. If you don't have one, give us a call.

There are specific limits on the amount of nitrogen and phosphorous that can be applied per application and per year, based on the north, central and southern climatic zones in Florida. These limits were based on Dr. Jerry Sartain's

research over the years at the University of Florida. His recommendations give a pretty good range of nutrient amounts, but of course each site has its specific needs. If special needs arise, you must document the soil and/or tissue test results that indicate you need to apply more than the amount allowable in the BMPs.

This means keeping accurate and complete sample records. If there is a fish kill or an algae bloom that gets someone's attention and the fertilizer police or local environmental protection agency comes knocking, you had better have your BMPs in order and not just gathering dust on the bookshelf.

The state and local governments are serious about addressing the possible impacts of nutrient leaching and runoff from fertilizer use. We can argue 'til the cows come home on whether the nutrients applied correctly to turfgrass ever leave the site in amounts that could do any harm to the environment. Non-point sources are hard to identify.

The N and P in your golf course ponds might be coming from the streets and storm drains in the

development surrounding your golf course. Or is it from your own fertilizer and fertigation operations? Do you observe reasonable setbacks from water bodies when spreading fertilizer or do you get as close to the lake as you can?

Check out the BMP sections that talk about applying fertilizer and about lake management. The city or county is holding you to those BMPs. They are not giving you a free pass to conduct business as fits your whim. They are no longer voluntary guidelines when they have been cited in a local law or ordinance.

I suggest you take a serious look at the checklist in the back of the BMP manual and begin to check off the things you are already doing and get a head start in figuring out your BMP scorecard and thinking about those practical, affordable things you can do, or verify that you are doing them already.

Folks, this issue isn't going away. Once the state fertilizer rule is written and adopted by the Legislature, many more cities and counties will likely enact that rule as their fertilizer ordinance. The goal of the Fertilizer Task Force is to have one consistent, statewide rule so businesses can operate efficiently across jurisdictional lines.

There will still be contentious times ahead as some of the early ordinances, while based primarily on science and BMPs, still have unscientific clauses like summertime “black-out” periods that say no fertilizer containing N and P can be

applied. No feeding during the growing season isn't logical from an agronomic point of view, but proponents equate rainfall with certain fertilizer runoff. Unfortunately, it may be up to a court to decide down the road.

Don't be surprised if, in the not-too-distant future, we are not asked to sign up or pledge to follow the BMPs as a matter of course to demonstrate environmental responsibility. Some industries like the Forestry Association have had BMPs for many years now and they do an annual survey to see how many people are abiding by their BMPs.

As I said, the environmental issue isn't going away and we must come up with a practical, rational and fair way to document the golf course industry's willing participation in efforts to manage our golf courses in a responsible way. We took more than two years to hammer out the Golf BMP Manual to create reasonable, science-based guidelines for golf course maintenance operations that would satisfy agronomic, economic and political requirements.

Now is the time for everyone to really start walking the talk. Effective BMPs are evolving guidelines based on the best and newest science available. If your course wants to stay in business and be competitive in this era of all things green and sustainable, remember the BMP Manual isn't a free pass, it's the How-To book of the future.

It's hard to beat the performance of TMI turfgrass varieties!

For Successful Seeding,
call . . .



Butch Gill.....706-883-8970
Roy Bates.....239-825-8064
Michael Bonetti.....561-236-3468

Bodie Boudreaux.....251-752-0198
Pete Giauque.....678-910-1215
Jeremy Harvey.....770-205-8754
Brent Holmes.....904-476-0413
Richard Kirkland.....863-698-8328
Glenn Zakany.....239-851-1541
Jeff Brown..... 863-581-0175



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.



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.



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.



TMI has spent years developing StarDust to be more disease resistant and is one of the darkest commercial *Poa trivialis* 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 trivialis* can only hope to achieve!

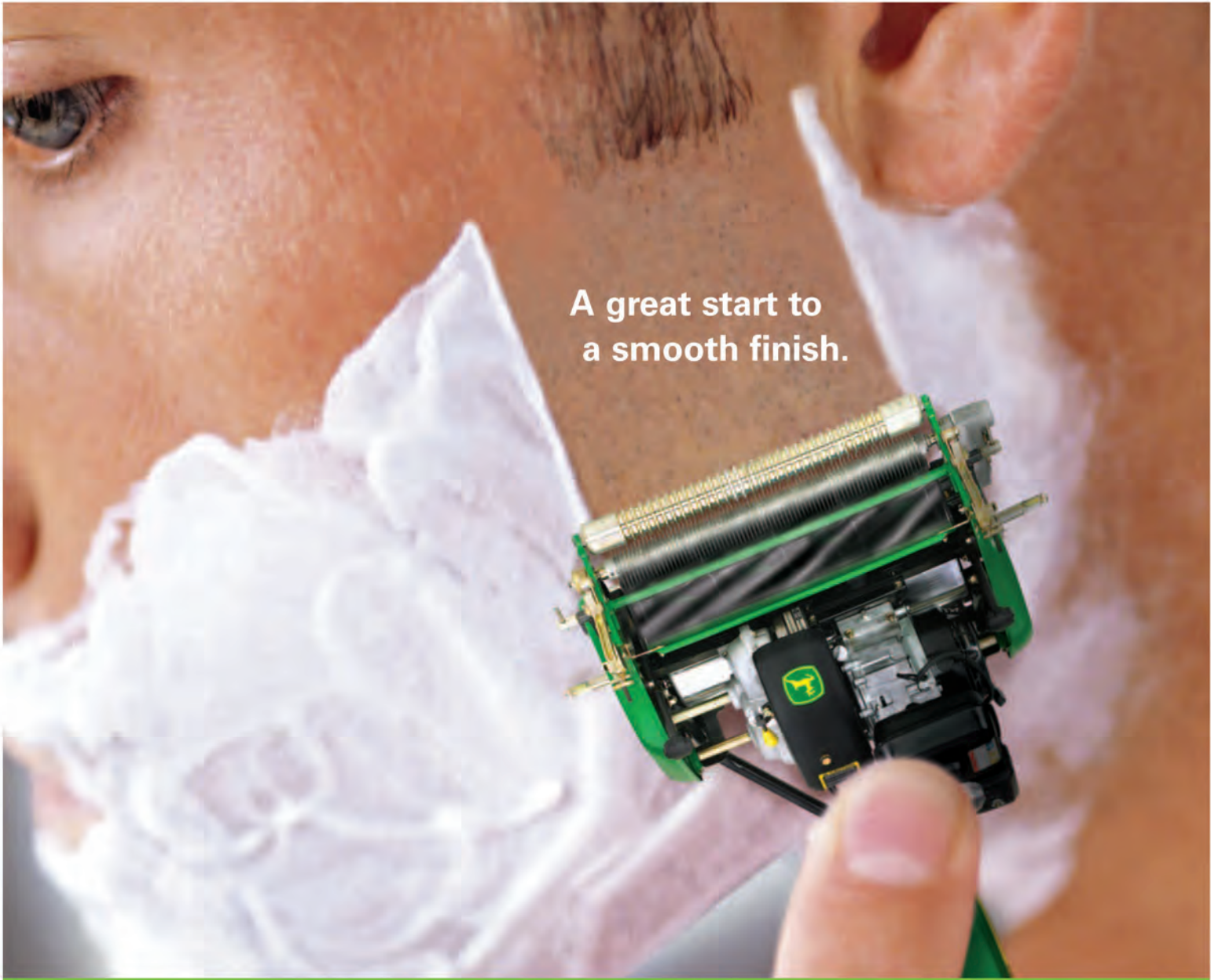


PIZZAZZ promises to set the standard for the next decade. Its dark green color and dense turf make it an attractive choice for parks, home lawns and golf courses. Clonal selections contained high levels of endophytes, and this synthetic variety is lower growing than many older varieties.


Perfecting Turfgrass
Performance.™



33390 Tangent Loop
Tangent, OR 97389
Phone: (541) 926-8649
800-421-1735
Fax: (541) 926-4435
www.turfmerchants.com



A great start to
a smooth finish.



Putting weight in all the right places. That's the essence of the John Deere C Series Walk-Behinds, mowing machines with proper weight distribution and balance. Being fixed-head mowers, the C Series walk-behinds stay engaged with the turf and always cut at a consistent height. They also feature a narrow front roller to rear drum distance for easy turning, maneuverability and clean-up cutting performance. And a dual-traction drive makes for even straighter tracking on greens.

For the consistent cut your greens deserve, call your local John Deere Golf distributor today.



www.JohnDeere.com



ShowTurf

SHOWTURF OF SOUTH FLORIDA
1365 NEPTUNE DRIVE
BOYNTON BEACH, FL 33426
(561) 732-8905

SHOWTURF OF SOUTH FLORIDA
4084 DUNCAN ROAD #3
PUNTA GORDA, FL 33982
(941) 575-0052