

Number 16 Hilaman Park G.C., Tallahassee Photo by Daniel Zelazek

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SPOTLIGHT: NATIONAL WINNERS, CHAPTER ROUNDUP

Joel Jackson won the GCSAA's Distinguished Service Award, Joe Pantaleo won the GCSAA golf championship and Darren Davis became the first two-time winner of the Leo Feser Award for the best superintendent-written article in *Golf Course Management* magazine.

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COVER STORY: TALLAHASSEE MUNICIPAL GCS.

Tallahassee is an island of golf opportunity located at the point where the state's peninsula takes a left turn into the Panhandle.

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Putting-green management is undergoing a world of change, and today's superintendent needs to proceed with caution when implementing management programs.

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Harrell's, Inc. Chairman of the Board Jack R. Harrell, Sr., 74 died March 28 in Lakeland following a lengthy battle with cancer.

OFFICIAL BUSINESS: CAPITOL UPDATE

Participants in the FGCSA's inaugural lobbying visit to Tallahassee all agreed that the trip had been worthwhile and should be a regular undertaking.

STEWARDSHIP: ECOLOGICAL CONSCIENCE

The Bonita Bay Group, a Southwest Florida developer, has created more Audubon International Signature Sanctuary golf courses than any other company in the world.

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Research reports presented at the annual South Florida Turfgrass Expo at the Fort Lauderdadale REC indicates the vast breadth of research done at the facility which soon is to be moved.

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Jim Walker fantasizes about Super Superintendent, Mark Jarrell wanders off the golf course to discuss American civilization and Joel discusses the basics, as in "A" is for Arsenic.

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The Florida Green

SPRING 2003

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

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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.

Summer 2003 - Overseeding Trends & Poa Annua Control

Do new grass varieties mean less overseeding? What types, blends, and rates do you use for greens, tees, fairways? Have water restrictions changed your plans? When do you seed? What is your program for controlling Poa annua and volunteer seed germination? Deadline: May 15.

Fall 2003 - Fouling the Nest

How today's superintendents are coping with the age-old maintenance problems caused by golfers.

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

Digital photos must be a minimum of 5 inches wide at 300 dpi for publication-quality reproduction.

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

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

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The 74th GCSAA Conference and Show is history but I would like to reflect on some of the highlights of the convention for those who may not have attended.

First, Florida superintendents walked away with several awards and they need to be recognized again and congratulated for their achievements.

Joe Panteleo, superintendent at Indian Creek Country Club in Miami Beach, won the GCSAA Golf Tournament with a 7-

Atlanta and Beyond

over-par, two-day total of 150. Conditions were quite cold and windy for this golf event at Hilton Head, S.C., but Joe prevailed and we're all very proud of him.

Joel Jackson, director of communications, was presented with GCSAA's Distinguished Service Award.

Joel's eloquent acceptance speech included praise toward superintendents Dan Jones and Tim Hiers and the impact that they have had on his career. He also thanked his wife Susan and daughter Jennifer, who were also in attendance, for their support. You have a wonderful family, Joel.

Darren Davis, superintendent at Olde Florida Golf Club, Naples, was awarded his second Leo Feser Award for his articles in Golf Course Management Magazine.

Scott Whorrall, superintendent at the Club at Mediterra in Bonita Springs, received the Environmental Leaders in Golf Award for national private clubs.

PRESIDENT'S MESSAGE

Again, congratulations to all of you. It's great to know that your efforts are appreciated.

Our annual FGCSA reception on Thursday evening was well attended by an estimated 600 people. A



"Big Thank You" to our sponsors who continue to make this an outstanding event every year. Thanks also to Association Manager Marie Roberts and Business Manager Mike Perham. They organize the party and make sure we don't run low on food and refreshments. The 50/50 drawing for our inaugural benevolent fund got off to a great start raising just over \$3,000 for members who are in need. Keith Longshore of Lesco had the lucky ticket in the fund-raising raffle.

David Court, CGCS

Keynote speakers at this year's convention had inspiring messages to lead off the convention. John

Kasich former Ohio congressman's message was "With Leadership and Teamwork We Can Make a Change." He said, "We are the kind of people who are based on the way we were raised, with values that have traveled through time." Those values being honesty, integrity, persistence and accepting personal responsibility. These are ideals exemplified by the successful people in our industry today.

At the Golf General Session, Captain Al Haynes delivered his awe-inspiring keynote address. Capt. Haynes was the pilot of the United Airlines flight that lost all hydraulic systems in the air July 19, 1989. His message focused on luck, coupled with teamwork, communications, preparation, execution and cooperation, all which enable him to land his DC-10 aircraft and save 185 of the 296 passengers on the ill-fated flight. He went on to say, "If something goes wrong, you

must be able to stop, think and react to the situation." It is also important to listen to your team members, including those you supervise. Even if you think you have the answer, they might just have one better." You can see how this applies to us as golf course superintendents and our everyday situations. Capt. Haynes's presentation included audio tapes of conversations from the cockpit to the tower and all of the emergency departments involved in this crisis. I noted that level heads reigned throughout this horrendous ordeal. Panic was never detected with these highly trained professionals.

At the convention, one always runs into old friends whom we haven't seen for a while. Maybe it's someone who worked with you as an OJT student or former assistant and now is a superintendent. I ran into both and renewed old friendships, and there are always good seminars and a trade show that has everything you could need at your course. One of the instructors who was missing this year was Dr. Bree Hayes. She was diagnosed with cancer and the treatments left her physically unable to attend. If you have attended her seminars you might drop her card and send get well wishes. I'm sure this would brighten her spirits.

I know this is a busy time of year with spring renovations and upcoming summer projects, but I urge everyone to attend some of your chapter meetings. The directors for your chapters work hard to provide good meeting sites, good educational programs and the host superintendents usually knock themselves out to make their golf courses the best ever for the meeting.

I often hear that some superintendents are turned off because they think their local associations are big "cliques." They say the same guys hang together, play golf together and don't allow anyone else into their group. That may be true in a few cases, but for the most part our members who attend meetings regularly are just more familiar with each other. So if you aren't attending meetings for this reason, try again and give people a chance to get to know you.

I am looking forward to the EGCSA Poa Classic weekend

I often hear that some superintendents are turned off because they think their local associations are big "cliques." ... That may be true in a few cases, for the most part our members who attend meetings regularly are just more familiar with each other. So if you aren't attending meetings for this reason, try again and give people a chance to get to know you.

> and the CFGCSA Crowfoot weekend. These are two weekends of some rest and relaxation and good fun for the family. Everyone needs a break once in awhile. Other events of interest will also be the Suncoast Scramble, SFGCSA Turf Expo, NFGCSA Mike Richards Memorial, Jeff Hayden Envirotron Classic, SFGCSA Missing and Exploited Children's Tournament, PBGCSA Future of Golf and TCGCSA Blue Pearl. Proceeds from these tournaments go toward turf grass research, scholarship funds and to other worthwhile causes.

> I hope to get to as many of these functions as possible and look forward to meeting as many members as I can. Please feel free to introduce yourself anytime, anywhere.

> > David A. Court, CGCS.

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FGCSA Director of Communications Joel Jackson, right, accepts one of three GCSAA Distinguished Service Awards presented in Atlanta by President Mike Wallace, CGCS. Photo by Bruce Matthews.

Distinguished Service GCSAA Honors Florida's Consummate Professional

Joel Jackson, CGCS was in a bind. Actually it was a triple bind. He had just learned of his

selection for a 2003 GCSAA Distinguished Service Award, but after a few moments of basking in the glow of the highest award his profession can bestow, the pit of his stomach began to get heavy.

The weight hung there and the award was presented Feb. 12 at the opening session of the International Golf Course Conference and Show in Atlanta. The DSA presentation followed the 2002 Wreath of Grass Award from the Florida Turfgrass Association by a few months.

"While I treasure the recent awards I have been given," said the FGCSA's director of communication of his season of heavy iron, "the biggest accomplishment or reward has to be perfect strangers coming up to me at meetings and conferences and telling me that they enjoy my columns and articles or that those writings helped them personally with a problem at work."

And then the pit of his stomach began to feel heavy again. His skin glistened like a New England pond in January and his heart, which has seen more bypasses than the city Los Angeles, began to pound.

Those who know him well can recognize his angst; they can probably visualize the gravity of his situation settling in: Joel Jackson is the editor of the Florida Green - the publication that should give the largest coverage to his accomplishment. - and therefore Joel Jackson was going to have to write something good about himself. Or, worse, he would have to ask somebody else to write something good about himself. Or even worse, he would have to abandon the journalistic principles he had absorbed in the past decade and ignore a very important news story.

Jackson, the consummate professional, trudged his way through weekly rounds of meetings, interviews, telephone calls, and deadlines in the course of his job, but the three-headed

Personal Information

Originally from: Tampa Family: Wife Susie (married June 1965), daughter Jennifer - creative director for Ensemble Productions, Los Angeles (past credits - film "Supernova," HBO Miniseries "Band of Brothers" Education Plant High School, Tampa

University of South Florida, Tampa; BA geology 1964 (charter freshman 1960) Southern Mill Creek Turf Boot Camp, Tampa, 1975

Employment

U.S. Coast Guard officer, 1965-68 University of South Florida, graduate teaching assistant, 1968-71 Orange County Schools, eighth grade science teacher, 1971-73 Golf course architect Bill Dietsch, Miami, field rep, 1972-74 Lake Buena Vista Club, Walt Disney World, golf course crew, foreman, assistant superintendent, superintendent 1974-88

Isleworth Country Club, Windermere, golf course superin-

tendent 1988-91 Osprey Ridge and Magnolia golf courses, Walt Disney World, golf

monster - the *Florida Green* deadline - loomed ever larger as it grew nearer.

As editor, he had led his publication to the GCSAA's top award 10 times in 11 years on the basis of high journalistic principles, which include thoroughness in reporting the news of his franchise. What was he going to do?

"I've decided to run the GCSAA news release along with the official photo of the presentation," Jackson said when his publisher asked how he was going to handle the situation. That would never do, said the publisher, who made other arrangements.

This is a brief profile of the man as seen by an outsider. The facts of his resume are known to most **Florida Green** readers and the highlights are listed here. But what kind of a man earns these kinds of honors? In the end, I come back to the phrase used earlier: he is the consummate professional.

It's not about technical skill and knowledge. It's about taking those things to the phrase we have all come to hate: the next level, which is the heart and attitude with which you apply those skills and knowledge.

"My standing goal always

Professional Affiliations Central Florida GCSA - all offices (president 1985-86) Florida GCSA - all offices (president 1989); Distinguished Service Award 1992 Florida Turfgrass Association -Publications, public relations, and conference committees; Wreath of Grass Award 2002 GCSAA - Certified Golf Course Superintendent 1985 (Retired 2003); Nominating, conference and show, publications, and government relations committees; 2003 Distinguished Service Award

course superintendent 1991-97

1998-present

FGCSA director of communications,

USGA - Florida Region Greens Section committee

International Network of Golf Agriculture Institute of Florida Unique Privilege

The Disney Years - Got to meet and chat with Bob Hope, Joe Thiesman, Byant Gumbel, John Denver, Terry Bradshaw, Michael Jordan, Michael Eisner and lots of good hard-working people.

was to be the best superintendent I could be," he said.

The same could be said about any task he has undertaken. Whether it's as a golf course superintendent, a teacher, a director of communication, a reporter, a naval officer or a day laborer - and Joel Jackson has been all of the above - he would strive to be the best he could be - the consummate professional.

I first met Joel in the fall of 1988 when part-time *Golfweek* columnist Mark Jarrell persuaded me to come talk to the FGCSA board about leaving my job as executive editor of *Golfweek* to become publisher of the *Florida Green*.

Jackson was vice president at the time, publications chairman and the object of Dan Jones's affection to be editor-in-waiting while Dan and his wife, Irene, wound down to retirement. But I don't remember Joel in those first meetings. He did nothing to call attention to himself - a trait, I have learned, that certainly helps define his character.

Of course he probably was absorbed in his job at the time. He had just taken on the responsibility of growing bentgrass greens year-around in Central Florida for none other than Arnold Palmer. But that was only the beginning. In the next 18 months, while trying to keep a delicate coolseason grass alive in Florida's brutal summer sunshine, Jackson also

- became editor of the Florida Green;
 became president of the Florida GCSA;
- underwent double bypass surgery (his first of three or four cardiac procedures);
- was host to the GCSAA International Golf Course Conference and Show's first-ever visit to Florida.

Oh yes. I think that was about the year that daughter Jennifer entered high school. If not, she was an eighth-grader, which is even worse!

Near the back of this issue is a column by Jim Walker about a mythical "S-Man," a superintendent who is expected to accomplish impossible tasks before breakfast. Those mythical tasks in Walker's cheek pale in comparison to the real-life challenges Jackson faced in 1989-90... and overcame.

But the man not only survived, he thrived even though the bentgrass path was far from smooth and Jackson ended up returning to Disney in 1991. Still that job with Palmer was the scene of one the highlights of his career.

"Arnold Palmer was playing golf with the CEO of the Nestle Corp. and told me, 'This is the way I always wanted the course to be,'' was the first thing Jackson said in listing his personal memorable moments.

Other highlights included making three treks to Augusta National to learn the secrets of preparing for the Masters. "We watched the evolution of golf course maintenance on the most coveted course in the game." he said.

In 1992, Jackson was awarded the FGCSA's Distinguished Service Award. It was well earned and an honor that most would consider the pinnacle of a career. Joel Jackson was just getting started.

He began writing articles for other publications in addition to the *Florida Green*, and he began attending meetings with regulators, legislative hearings and other organizations in the golf and turfgrass industries. He began writing letters to newspapers, lawmakers, bureaucrats and golf officials.

Soon Joel Jackson the information-seeker became Joel Jackson the sought-after spokesman for the golf-course-maintenance industry in Florida.

As the physical demands of the job and the stress of maintaining high-profile golf courses increased, another heart procedure convinced Jackson to "retire" so he could begin the career he had been preparing for his entire professional life: communicating the needs of the golf industry to its participants and the people who would regulate it.

He began work as the FGCSA's director of communications in 1998.

"I have always believed in communicating up and down the chain of command to keep everyone informed of what is expected and what is going on," he said. "Now my goals are aimed at taking the message of the golf industry to the legislators, regulators and general public."

Jackson now writes regularly not only for the *Florida* *Green*, but also for the national publication *Golfdom*, and for his hometown golf publication, *Central Florida Golfer* - defending the industry, challenging its regulators and patiently explaining the complexity of managing vast environmental systems.

When he writes and speaks for internal audiences, however, he preaches professionalism. Listen to the advice he would give the future generation of golf course superintendents:

"If you are bound and determined to become a superintendent, then supplement your agronomic and technical education with business and communication courses, including writing. I guarantee you that dealing with people - owners, committees, general managers, golfers, and your own staff - will be your most difficult task.

"You will have numerous sources for turf-problem solving, including your peers, suppliers, and consultants, but your face-to-face interactions with the people who count at your club will require you to be a good communicator and leader. Once on board, learn the





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SPOTLIGHT

business at your club. It is not sufficient to just run your department. If you understand how everything is connected and the revenues and expenses are in focus, you can make yourself more valuable and even a candidate for general manager if that is in your career path.

Ask questions. Admit mistakes. Always seek ways to improve and don't be shy about writing reports and memos that highlight your learning experiences from peer visits, at monthly chapter meetings and GCSAA conference and show experiences.

"It shows you are on the ball working to improve yourself and the conditions at your club."

From the man who walked the walk before he talked about it.

Larry Kieffer

Darren J. Davis Wins Second Leo Feser Award

Darren J. Davis, director of golf course operations at Olde Florida

Golf Club, Naples, was presented with the 2002 Leo Feser Award Feb. 12 at the opening session of the Golf Course Superintendents Association of America's 74th International Golf Course Conference and Show in Atlanta. It was marked the second time Davis has won this award.

The Feser Award honors the best superintendent-authored article published in the association's monthly magazine, *Golf Course Management*. The winner receives an all-expensespaid trip to the conference and show and will have his name engraved on a plaque for display at GCSAA headquarters in Lawrence, Kan.

Davis was recognized for his two-part article, "An Olde Florida Course Made New," published in the January and February 2002 issues of GCM. The article discussed the increasing problem of off-type bermudagrass. Because playability was being compromised by the progression of the "off-types," Davis and his staff engineered an aggressive re-grassing project that has been well-received.

Davis is the only two-time winner of the Leo Feser Award. He previously received the award in 1997



Darren Davis, right, from the Olde Florida G.C. in Naples makes history as GCSAA President Mike Wallace presents him with his second GCSAA Leo Feser Award. Photo by Bruce Mathews.

for his article "Sowing the Seeds of Knowledge," published in the December 1996 issue of GCM.

"Darren Davis's article, 'An Olde Florida Course Made New,' is an excellent story that celebrates the revitalization of the Olde Florida Golf Club," said Ricky D. Heine, CGCS, chairman of the GCSAA publications committee. "Darren is certainly a worthy recipient of GCSAA's Leo Feser Award."



The award honors the late Leo Feser, a pioneer golf course superintendent and a charter member of GCSAA. Feser is credited with the keeping the association's official publication alive during the Great Depression. For three years, he wrote, edited, assembled and published each issue of the magazine from his home in Wayzata, Minn.

Davis is also a regular contributor to *The Florida Green*. His regular Hands-On feature called "Super Tips" conveys cost-effective and innovative ideas he has discovered on his visits to golf courses across the country and around the world.

Davis's articles may be accessed at http://www.gcsaa.org/gcm/2002/jan0 2/01olde.html http://www.gcsaa.org/gcm/2002/feb0 2/02olde.html

CFGCSA Gives Presidents Award To Leventhal

The Central Florida GCSA rewarded Stuart Leventhal,



Stewart Leventhal, CGCS

CGCS at the Interlachen Country Club for his 20-plus years of participation and support in the central Florida golf industry by selecting him to receive a 2002 FGCSA President's Award for Lifetime Service.

Leventhal, originally from Natick, Mass. moved to Florida at age 5. His father was the general manager at the Wedgefield C.C. when Leventhal was in college and he worked part time on the course while pursuing a degree in criminal justice at the University of Central Florida in the late 1970s. Little did he realize that "Setting the Standard for over 20 years"

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SPOTLIGHT

he would return to golf and make a successful career in the fields of green.

As the harsh realities of a criminal justice career set in, Leventhal decided to capitalize on his experience in golf and he began taking ornamental horticulture classes at Valencia Community College to provide him with the basics in agronomy. Armed with this knowledge he landed the superintendent's position at Orlando's city-owned Dubsdread golf course, once a stop on the PGA Tour back in the 40s and 50s. Leventhal says he came of

age as a superintendent while at Dubsdread. "Golf course architect Lloyd Clifton was a consultant for the city of Orlando when I was at Dubsdread. He connected all the dots for me and tied all my practical experiences in the field and all my theoretical education in the classroom together."

After two years at Dubsdread, Leventhal took over the reins at the Rolling Hills C. C. in Longwood and got a taste of private-club operations during his three-year stay. In 1985, he was tapped to take over the 10-year-old Interlachen C.C. in Winter Park. Eighteen years later, his lightning-fast greens are a legend in the area.

Leventhal has given back to his profession by serving lengthy terms on the advisory committee for the Mid-Florida Turf Conference and on the board of directors for the Central Florida GCSA. He was president of the chapter for 1991-93. Leventhal also has been a long-time member of the Larry Kamphaus Crowfoot Open Committee, helping to make this one of the premier social/business events of each year. Leventhal, with the generous participation of the Interlachen C.C., has hosted the annual CFGCSA - FTGA Turf Research Fund Raiser, which brings superintendents and club officials together for education and golf each January.

Leventhal is a member of the Central Florida GCSA, the Florida GCSA, the Golf Course Superintendents Association of America and the Florida Turfgrass Association.

Congratulations and thanks to Stuart Leventhal, CGCS for his steadfast support of the profession and the golf course industry.

Joel Jackson

Chapter Round Up Cantwell Event Nets \$50,000

Calusa

In conjunction with the Everglades GCSA we want to thank everyone who sponsored and participated in the Mike Cantwell Memorial Tournament on January 17th. (*See sidebar*) We were able to raise \$50,000 for the Cantwell children's educational trust fund.

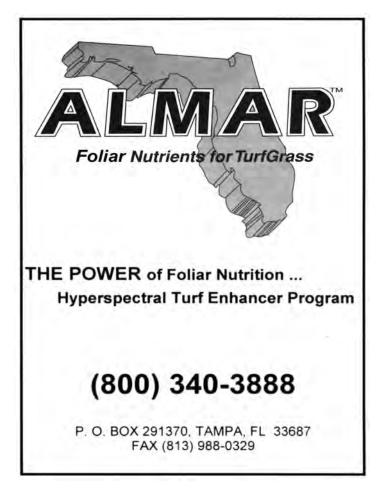
Central Florida

Walt Disney World's Bob Karnes, superintendent of the Bonnet Creek Club was recognized in the February 2003 issue of *Florida Golf Central* magazine for his environmental steward work in getting the Disney courses certified in the ACSP program. Bob was presented with a unique birdhouse by Fort Loudon Designs of Louisville, Tenn.. We are also proud of our hometown boy Joel Jackson, who was awarded one of the three 2003 GCSAA Distinguished Service Awards at the 74th International Golf Course Conference & Show in Atlanta. The recognition of Joel's long service to the industry was richly deserved.

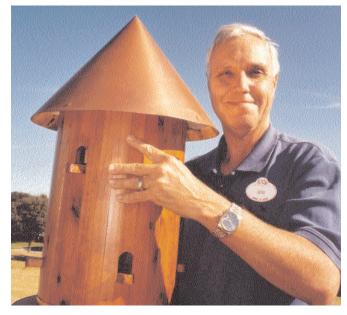
At our annual Superintendent/Vendor event at the Deltona Hills C.C. in February, we were blown away by the motivational presentation by Jim Cassis. Cassis spent 12 years with the Chicago Bears organization and his speaker's client list reads like a Fortune 500 directory. He was awesome. We're recommending him as a General Session speaker for GCSAA.

Everglades

We'd like to add our congratulations to our External Vice President Darren Davis for receiving his second Leo Feser Award at the GCSAA Conference in Atlanta. Davis is a proven communicator with his work with EPIC Productions' training videos and his Super Tips articles in the *Florida Green*. We would also like to recognize Scott Whorrall and the Bonita Bay Group







Florida Golf Central Magazine recognizes Disney Superintendent Bob Karnes for his environmental leadership with new birdhouse for his course. Photo by Joel Jackson.

for being the top-ranked National Private Club in the Environmental Leaders in Golf Award given by GCSAA and *Golf Digest* magazine. We received a nice thank-you letter from the Children's Home Society for our donations of cash and toys. They informed us that we helped to



Scott Whorrall (left) from The Club at Mediterra in North Naples accepts the Environmental Leaders in Golf Award for the top National Private Club from GCSAA President Mike Wallace, CGCS. Photo by Joel Jackson.

feed two families Christmas dinner and the toys valued at \$2,500 made for a Merry Christmas morning for a lot of kids. We are hoping for a big turnout at our EGCSA Spring Symposium to be held April 25. We have lined up speakers like Dr. Fred Yelverton, Dr. Frank Rossi, Dr. Joe





The Ridge Invitational Committee, from left: Tom Barnett, Jeff Brown, Clay Marshall, Steve Ciardullo, Chris Clarke, Roy Wilshire and Mark Hopkins. Photo by Joel Jackson

Dipoala, Frank Thomas/ EPA Water Shed Coordinator, and Lake City's John Piersol for a full day of education.

North Florida

We had a great turnout at the Duval County Extension Office for the FTGA Regional Seminar in January. At our March meeting we will have a presentation by Carolyn Silvers from the St. Johns River Water Management District on water issues as we seek to stay current and informed on our number-one resource. We are also busy signing up volunteers to act as TV spotters for NBC Sports for the TPC Championship in late March. On April 7 the Jacksonville G&CC will host the Mike Richards Memorial Tournament. This event raises funds for scholarships for turf students in the memory of two north Florida golf industry leaders - Mike Richards and Alan Maccurach.

Palm Beach

The Palm Beach-heavy FGCSA Golf Team No. 1 came in second at the GCSAA Golf Championship in February at Hilton Head, S.C. Congratulations to Mark Henderson, Steve Bernard and Tyler Warner for their fine play. Speaking of golf, the PGA Tour's Honda Classic moves to Palm Beach's Mirasol Club the second week in March and our chapter will once again be working as TV spotters and scorers for NBC Sports. It's a fun way to raise funds and to see the tournament from inside the ropes. We have two other big events coming up in April and June: the Chip Fowkes Memorial at Bocaire G.C. will raise funds for Chip's daughter's college education and the Future of Golf at The Falls C.C. will benefit turf research and junior golf programs.

John Foy, director of the USGA Florida Region Green Section wrote an article on the tough winter weather's effects on area golf courses that was printed in the Palm Beach Post's sports section. Thanks John. The golfers don't always believe us. They have to hear it from an outside expert! We bid a sad but fond farewell to our President Tyler Warner. Tyler had to turn his gavel over to Pete Powell as he stepped down from his superintendent's job at Addison Reserve to take a position with Golf Ventures.

Ridge

FGCSA Director of Communications Joel Jackson had to turn his 10-minute government relations update into a full presentation when our speaker failed to show up at our January meeting at the Lake Region Yacht & Country Club. With questions and input from the audience the session turned into a good discussion of the regulatory and public relations issues facing our industry.

March 3 marked an even dozen Ridge Invitational tournaments that Roy Wilshire, CGCS and the Grasslands C.C. will have hosted. Thanks Roy for helping us raise needed funding for turf research and the local charities we support. This year's champion was Brian Montillaro from The Hamptons C.C. in Auburndale. Brian, a 4 handicapper, had a hot putter as he fired an even-par 72 to win the event.

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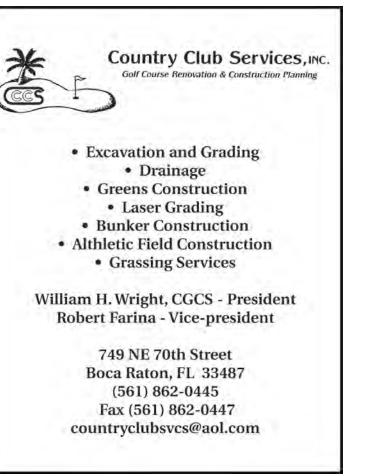
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CHAPTERS

Central Florida, Calusa, Coastal Plains, North Florida, Palm Beach, Seven Rivers, Treasure Coast, West Coast

SPOTLIGHT

Seven Rivers

Our leading turf research fundraiser gets a new name and a new Championship Sponsor April 21. In memory of our friend and mentor, Jeff Hayden, the 11-year-old event becomes The Jeff Hayden Envirotron Classic, and Golf Ventures, Inc. becomes the Championship Sponsor. We can't say enough thank-you's to Barbaron, Inc. and the Kitchen family for their leadership and generous financial support, which set a new benchmark for corporate funding for turf research in Florida.

At our February chapter meeting, Perry Haley from Harrell's talked about soil aerification and in March at Haile Plantation in Gainesville we will have a healthcare expert give us a presentation on wellness management.

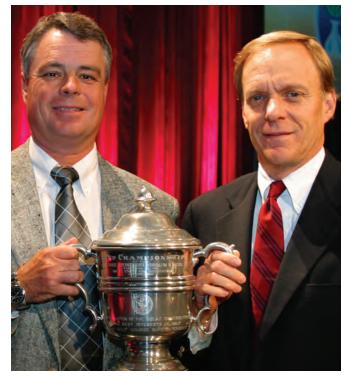
South Florida

We'd like to congratulate Joe Pantaleo, Indian Creek C.C. and our external vice president and the new FGCSA secretary-treasurer on his great victory as the 2003 GCSAA Golf Championship winner. Joe shot a final-round 74 on the always-tough Harbour Town course to take home



Brian Montillaro wins the 2003 Ridge Invitational. Photo by Joel Jackson.

the USGA Traveling Trophy. We have golf on our minds as the PGA Tour rolls into town the first week of March at the (Ford) Doral Open and begins its Florida swing. At our January meeting at Key Biscayne, we were treated to a presentation by Champions Tour (Senior PGA) player Christy O'Connor on life on the Tour and course set-up for a PGA event. O'Connor has won 12 European Senior Tournaments, two British Senior Opens, and two US Senior



FGCSA Secretary/Treasurer Joe Pantaleo from the Indian Creek C.C. in Miami is all smiles as he accepts the USGA Traveling Trophy from USGA's Danny Yates for winning the 2003 GCSAA Golf Championship. Photo by Bruce Mathews.



Cantwell Trust Fund Raiser a Big Success

On Nov. 11, members of the Everglades and Calusa Golf Course Superintendents Associations unexpectedly lost a longtime friend and colleague, Mike Cantwell.

To pay our respects to Mike and lend support to his wife Gwen and three children - Jessup 17, Alex 8, and Tracy 7 - the two chapters co-hosted a benefit golf tournament on Jan. 17 at Miromar Lakes Golf and Beach Club and the golf course at Grandezza.

Both golf courses and the local vendors, colleagues and other friends of Mike's rose to the occasion to make the event a huge success. In addition to having a sellout crowd of 250 golfers for the scramble event, paying \$100 a person, vendors were very generous in their support. Hole sponsorships were sold for \$200 each, and a variety of terrific silent auction items and raffle prizes were donated. Items ranged from rounds of golf at a number of the area clubs, golf equipment, vacations and even autographed sports memorabilia.

Both for enjoyment of those who participated and as a fund-raiser, the event was a huge success. The hole sponsorships raised \$12,400; the raffle generated \$4,660 and the silent auction added another \$7,080 to the total. In all, the event raised \$50,000, which was deposited into a trust fund that was established for the future needs of Mike's children.

events. We also got to break in Key Biscayne's brand new TiffEagle greens.

Suncoast

We held a joint Suncoast GCSA and Equipment Technicians Association meeting Jan. 27 at Jim Svabek's Bradenton C.C.. This superintendent/supplier event was conceived to show our appreciation for all the suppliers who faithfully support our events and programs throughout the year. Suppliers are invited to set up displays on the driving range and bring up to three pieces for demonstrations. Lunch included the now-infamous "Belly Busters" hot dogs and, after golf, we headed down to the maintenance facility

The Grandezza winning team was the twosome of Steve Simpson and Tim Denton and the foursome that took top honors at Miromar were Charlie McMullen, Lee Crosby, Kenyon Kyle and Rob Buege. Each winner was presented a plaque that was donated by the Trophy Case of Fort Myers.

It would be impossible to mention all of those who made the event a success but a special thanks is owed to the management and staff of both golf courses who were gracious enough to donate their facilities, and to Wiley McCall of Emerald Island turf who once again donated his time and money to prepare his famous barbecue dinner for all in attendance. The boards of both associations worked diligently on the event but a special debt of gratitude is owed to Jim Leiseberg, president of the Everglades GCSA and to Samantha Kriesch, executive secretary of the Calusa GCSA, who worked so hard to make the event a huge success

Contact information for those friends of Mike who may not have been able to contribute previously: The name of the trust fund is Michael J. Cantwell Memorial Trust Fund. The bank is Union Bank & Trust Co., 121 South 13th, Lincoln, NE 68505

The trustee for the fund is Kathy Lahman, 402-476-8681. The branch manager for the bank is Joan Zieger, 402-0323-1670. Darren Davis

for Andy, Mel and Bob's Famous Barbeque, which made the day complete and kicked off our 2003 season in fine form.

We will be hosting our annual Suncoast Scramble at Misty Creek C.C. on March 18. This superintendent/golf pro/club official/supplier team event is the epitome of cooperation across all areas of the golf business. Our President John VanVranken is now hanging his GCS shingle at the Stoney Brook at Heritage Harbor G.C. in Bradenton.

Treasure Coast

Kevin Downing organized a "Trends in the Club Industry" meeting in February with guest speakers from the Club Managers Association,

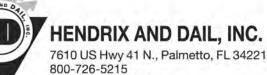




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SPOTLIGHT



The newly enacted FGCSA Benevolent Fund got a great start with over \$3,000 in donations at the FGCSA Reception in Atlanta. Photo by Joel Jackson.

USGA, and National Golf Foundation, and McGladrey Pullen, a CPA firm. It was an informative session for key decision-makers at golf clubs. The TCGCSA board also voted to donate funds to support the South Fork High School turf program and to donate \$5,000 to the Florida Turfgrass Research Foundation. The board also approved a \$5,000 donation to the Challenger School for disabled children to help with the cost of landscaping their new playground and pavilion. TCGCSA member Kevin Downing will consult on the design and plant material for this project.

West Coast

We had positive feedback from our first Chapter Vendor Day meeting at the USF golf course hosted by superintendent Mike Wilcox in December. We are looking forward making this an annual event. Our education committee has made a commitment to providing education with pesticide and GCSAA CEUs/points to satisfy pesticidelicense renewal and PDI/CGCS requirements. With that in mind, Dr. Lawrence Datnoff, plant pathologist with UF/IFAS spoke about pythium blight on overseeded turf at our January meeting at Crescent Oaks

GC. At our February meeting at Gerald Marquart's Largo G.C., Syngenta's Kevin Wasalewski and Steve Kammerer made a presentation on turf and ornamental diseases with the emphasis on ornamentals. Both presentations earned pesticide CEUs. The meeting at Largo is an annual tradition as Gerald always puts on a fun two-man scramble event at his nine-hole executive course. In March, at Jim Sharpe's Summerfield G.C., the International Sports Turf Research Institute will make a presentation on the properties and physics of soil including aerification and drainage issues.

Florida GCSA

The association is very proud of the fact that four FGCSA members won four top national awards at the 2003 GCSAA Conference. They have been mentioned in the various chapter sections above. President David Court, CGCS will be leading a delegation to Tallahassee to meet with key legislators as part of our commitment to reaching out and establishing relationships with lawmakers, media and the general public. Mike Goldie will be arranging appointments with Senate and House leaders to discuss issues facing the golf industry. In a move to encourage new members, the board approved prorating FGCSA dues for the rest of the fiscal year. The FGCSA Reception in Atlanta lived up to its reputation for good food and good fellowship. Marie Roberts estimates that nearly 600 people attended the event. The reception was also the debut of the FGCSA Benevolent Fund which took in more than \$3,000 in donations. The fund was made part of the FGCSA budget in response to the overwhelming need to support members' families in the wake of the unprecedented number of deaths of FGCSA members last year.

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Jake Gaither GC Hole Number 3 Photo by Daniel Zelazek

TEE TIME IN TALLAHASSEE

Twenty-Seven Holes of Municipal Golf

By Joel Jackson, CGC

Location. Location. Location. Tallahassee is an island of golf opportunity located at the point where the state's peninsula takes a left turn into the panhandle. With the exception of the state capitol, which has about a baker's dozen courses in the metropolitan area, golf courses are few and far between from the Gainesville/Lake City area until you get to Panama City and points west. The good news about operating a golf course in northwest Florida is that there haven't been any watering restrictions during the last drought period. The bad news is that just about every weather front passes through the area so there can be too much cloudy weather and plenty of cold snaps. But Mother Nature is fickle everywhere. FGCSA Coastal Plains Chapter President Jeff Heggen told me during my interview visit in January, "Today marks the third frost this week, Last winter we only had two all year."

Heggen oversees the maintenance on the two city golf courses; the 18-hole Hilaman Park G.C. and the 9-hole Jake Gaither G.C. Both are located on some hilly terrain which provides great views of the course and interesting golf shots: The courses also serve as part of the city's flood control system for storm-water runoff and retention. During unusually heavy rain events, several holes on the Gaither course can become impassable and the course has to shut down. We'll talk about water-quality issues a little later.

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COVER STORY

The City of Tallahassee has been in the municipal golf business since 1956 with the opening of the Jake Gaither Golf Course, which was named in honor of the legendary head football coach of the Florida A & M Rattlers. In 1981, the city purchased the Winewood G.C., also in south Tallahassee, and began making affordable and accessible golf a serious part of its parks and recreation program.

Traditional golf course business and turf management practices don't always easily blend into the policies and procedures and perceptions of how government must conduct its business when it operates with taxpayer's money. Even job titles and descriptions can become awkward when trying to compare apples with apples.

For example, in the golf world Jeff Heggen would be called a golf course superintendent, but in city terminology he's the supervisor of golf maintenance. Jeff's boss Bill Zimmer would be considered a director of golf over multi-course facilities, but in governmentspeak, he's called the superintendent of golf courses. And Jeff has "foremen" instead of "assistant superintendents." Regardless of the job titles, the duties are all familiar to the golf world.

While parks and recreation facilities play a big role in the lives of the citizens of any city, the budget allocations to these departments are often very conservative, so municipal golf course superintendents are some of the most frugal and innovative managers in the world when it comes to stretching the dollars to the maximum. Superintendents like Heggen might like to have more frills and eye candy (landscaping, etc.) but they opt for healthy turf and good playing conditions instead.

Heggen says, "We'd all like to dress up the course with annual and ornamental beds for the atmosphere, but all those things take more labor hours and maintenance dollars. The bottom line is good greens, tees and fairways first. Our goal is to make incremental improvements over time as warranted by increased revenues and customer response. We are constantly balancing cultural practices and pest control applications with considerations for the disruption of play."

Even though municipal budgets can be tight, Heggen says there's always a bright side to every situation, "Disposable income might be limited, but we have an ace in the hole when it comes to other resources. We have an engineering department for construction emergencies and the rest of the Parks and Recreation landscape equipment, like mowers and manpower, can be tapped for duty if any of our equipment is out of service or we get behind in our schedule due to weather events and storm damage."

Another positive aspect to being part of the city administration is ongoing employee training. Heggen says, "Sometimes the human resources training timetable isn't in sync with our special golf events preparation or turf maintenance plans, but that's not a big problem.

"While we have our regular staff and crew meetings for daily and seasonal operations, the job and personnel evaluation programs help to make us stay on top of our training and coaching responsibilities. Documentation, accountability and follow-up are the keys to success. The city does require continuing education credits for foremen level and up, so we have internal programs and well as industry topics to complete to maintain our progress in the system."

The last awkward topic is purchasing. It takes getting used to the government bid process method of purchasing because of the time lag in processing price quotes and getting approvals versus the booking of contract services for specific dates for minimal disruption to the course for the customers like contract verticutting or aerification and bulk fertilizer applications or Chipco Choice slit injections.

Heggen says, "It can be cumbersome at times, but you learn to really plan ahead and work with vendors on possible date changes if the paperwork isn't processed on time. Once you've gone through the process a few times you get used to what it takes to make it work for your maintenance programs. For example, I try to create a flexible range of acceptable fertilizer formulations that will be good for the turf and still allow the vendors and purchasing agents to submit and consider bids. A superintendent always has to learn how to adapt to get things done."

Heggen's adaptability was put to the test when he came on board in 1998 as a consultant to help finish the renovation to the Jake Gaither course. Soon afterward he was promoted to supervisor (superintendent) and was involved in the renovation of the Hilaman Park course. Jeff was no stranger to Tallahassee: his mother was a former city councilwoman and mayor, and Jeff got his AA from Tallahassee Community College (1980) and took various business management classes at Florida State University.

Heggen was set on being a business major, but found his way to golf when he moved to Ft. Lauderdale with his mother in 1982 and began doing odd jobs on a course called Holiday Springs. He worked on the crew from morning to early afternoon and then he picked up range balls in the late afternoon, and then hit balls or played golf till sundown. His handicap went from 17 to 4 in eight months. Now Heggen tries to play at least twice a month but he admits to teeing it up only nine times last year. About his game he says, "The good news is my game never changes. I'm obviously not a 4 handicap any more, but I always shoot 85-86 when I play.

It's weird and at the same time wonderful to be working here. I learned to play golf on this course with my dad when it was called Winewood, and now I'm back taking care of it. Life is strange."

Heggen's golf maintenance journey began in Ft. Lauderdale, but he got off track a little when he came back to Tallahassee in the early 1990s and began working for George Unglaub, who owned several Gulf Oil - now BP

 ∞

stations - in Tallahassee.

Heggen says, "I was headed for a management career with Mr. Unglaub's company, when my promotion hit a snag. I took on some part-time work at the Hilaman Park course about that time, and in the process of discussing future options with Mike Osley, the superintendent back then, I learned about the program in golf operations at Lake City. I had worked hard for Mr. Unglaub and he appreciated my efforts so much, that he paid my tuition to pursue my AS degree. I continued to work for him on weekends during my schooling. I will always be grateful for his help and support."

Heggen spent one year at Hilaman Park as an assistant (foreman) after graduation from Lake City, and then he moved to the St. Marco G.C. in Alpharetta, GA for two years before joining the International Golf Management's team at the Rolling Hills C.C. in Longwood. The Rolling Hills club, infamous for running through management companies like a dose of salts, did not renew its contract with IGM, and Heggen took on the role as troubleshooter for IGM and spent time at courses in Apopka, Melbourne and Valdosta, GA in 1996-97.

Heggen says living out of a suitcase got old after a while, and he discussed possible options with IGM. About this time Heggen was getting married and becoming an instant dad with three stepsons, so he wanted something a little more stable. IGM just didn't have any permanent openings at the time and Heggen amicably parted company with IGM, when the Jake Gaither renovation job became available with the city. Who says you can never go back?

Heggen said, "I've enjoyed being part of this great profession and a career with a variety of experiences, and I really enjoy where I'm working now. The city is supportive of the golf courses and has made a commitment to have good quality golf for our citizens. Randy Trousdell, director of the parks and recreation has been with the department for 30 years, and he has seen the progress we have made and he has been a great help and influence in making it possible. I would be content to make my career in the department as well."

But Heggen has lots to do and a long way to go before collecting his gold watch. Right now he is focusing on water quality issues on the golf courses and took the Water Quality Management and Lake and Aquatic Plant Management seminars at the GCSAA Conference last February in Atlanta.

Heggen explained, "We only have two lakes (14 acres) and they are on the Hilaman Park course, but those lakes serve a twofold purpose. They are holding ponds for surface runoff from the surrounding residential and commercial areas and they are our irrigation lakes. We use surface water for irrigation and only supplement with well water when the lakes get too low.

Consequently, whatever has washed into the storm drains is what we are putting on the turf. The good news is that, according to regular water sampling, the water leaving the golf

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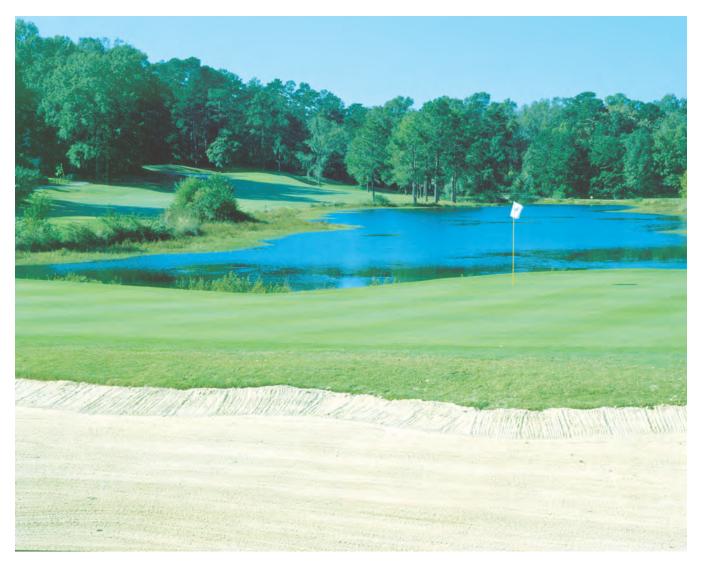
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COVER STORY



View from behind the 154-yard, par-3 12th hole. The tree-lined 15th fairway is on the left. Photo by Daneil Zelazek.

course property is in better shape than the water coming in, and we want to improve those numbers. We are investigating lake aeration systems and ways to further minimize any impacts from our maintenance operations utilizing aquatic plants and best management practices.

The availability and quality of irrigation water is always one of the key components in turf management, but so are soil conditions and shade. Heggen said, "During the renovation of the courses I got to see what was under the grass I was growing. On the 15th hole you could follow one of the irrigation ditch lines and identify five different soil types. So we have a mix of materials to deal with from sandy loam to red clay. The fairways are aerified at least two times a year and the tees three times.

Along the southern and eastern boundaries of the course are tall apartment buildings and mature trees, the five holes on the golf course immediately adjacent to them have to be managed to avert stress from low sunlight levels, especially from fall to spring when the sun is lower in the sky. Heggen uses walk mowers on the affected greens to reduce the mechanical wear factor and they have thinned the canopies of all the trees on the golf course property.

With an average of three employees per nine holes and a tight budget, Heggen keeps a close watch on the fertility program. "We keep the turf on the lean and mean side, but always thick and healthy. We can't afford to have growth spurts and excess clippings to clean up. We do a lot of foliar feeding and supplement with granular fertilizers monthly on the greens. We also use greens grade Milorganite at 3/4 lb/1,000 sq ft during overseeding and transition."

Heggen describes his pest-control programs as reactive as opposed to preventive. "We treat only in response to observable problems. I have budgeted to treat about 50 acres a year with Chipco Choice on all 27 holes. We generally have to do the tee and green complexes each year, but since you can often get good residual control with the product the remaining acres are treated based on monitoring and mapping of problem areas. No product ever gives 100 percent control, so we might follow up on hot spots with Orthene plus Impede during fullmoon cycles."

Full moons and moonlight lead us back to the municipal golf courses' reason for existence: to serve the public's desire to play golf. No segment of the golf playing population is as gung-ho for the game than John Q. Public. Heggen said, "Our official first tee time is 7 a.m., but I have seen folks teeing it up just after 6 a.m. They would go over to the tennis courts along No. 1 fairway and turn on the court lights so they could get a head start on the field. To aid and abet the earlybirds, we have street lights that illuminate No. 1 green and No. 2 fairway. We had to put a lock on the tennis court lights, but you've got to admire their determination for the game."

Heggen is also pleased that the recent renovation of the course in 1999 by architect Chip Powell provided Tallahassee golfers with a great public layout. "On a 6,400-yard golf course, Powell did a great job of giving us at

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

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

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Upright Leaf Blade Orientation

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

Impressive Leaf Texture

R

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



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

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

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

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

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SPRING 2003

COVER STORY



Variable pin placements and the elevation change on the 164-yard, par-3 8th hole make for fun and challenging golf. Photo by Daniel Zelazek.

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View from behind the first hole on the Jake Gaither golf course. Photo by Daniel Zelazek.

least two pin locations on every green that could challenge the best golfers while not increasing the maintenance costs to maintain the course. Our goal is consistent green speed from the first hole till the last putt drops on #18. We strive for daily green speeds of 8.0 to 8.5, but are able to go to 10 plus when needed for college tournaments or any other special event."

The biggest event of the year for Tallahassee's Parks and Recreation Department is The 11th Annual 5G's Tournament in April. The event was renamed this year as the Charles Billings' 5G Tournament in memory of the late City Commissioner Charles Billings. 5G's stands for Greater, Gaither Golf and Games Gathering. In a press release before his death, City Commissioner Charles Billings said this year's event was being dedicated to promoting golf for juniors and women of all ages. Billings went on to say that, "The 5G's is one of the largest and most integrated golf events in the country, and a great way to attract players from all over the Big Bend area who are eager to test their skills on the redesigned greens and newly irrigated fairways on the Gaither Golf Course.'

Congratulations to city of Tallahassee, Jeff Heggen and his staff for providing a great place for the people to enjoy affordable and accessible public golf.



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Hilaman Park G.C.



Maintenance Staff: Standing from the left: Forman Conrad Norton, Wiley Lewis and Mike Etheridge at Jake Gaither G.C., and at Hilaman Park G.C., Dwight Watson, Skip Norton, Brian Kelley, Kenneth Copeland, Foreman Rick Collins and (seated) Edward Gardner. Not pictured Mechanic Kirk Brewer. Photo by Jeff Heggen.

Tallahassee

Ownership: City of Tallahassee **Playing policy:** Hilaman Park G.C. (HP) -Public. 18 holes, 6,333 yards, par 72. Course/Slope Rating - 70.5/123. Jake Gaither G.C. (JG) - Public. 9 holes, 3,109 yards, par 36. Course/Slope rating - 67/110.

Designed by: Hilaman Park - Edward Lawrence Packard, opened in 1971. Opened as Winewood G.C.. Purchased by City of Tallahassee in 1981. Jake Gaither G.C was designed and built in 1956 by the Parks and Recreation Dept of Tallahassee. **Management:** Randy Trousdell director of parks and recreation; HP - William "Bill" Zimmer superintendent of golf courses (director of golf); JG - golf professional, Alan James; Jeff Heggen, supervisor (superintendent) of golf maintenance for both courses.

Major renovations/Ongoing projects:

Complete renovation of the Gaither course by Frank Burandt and Postelwait Construction in 1998. Renovation of tees, greens and bunker complexes on the Hilaman Park course by Chip Powell and Highland Golf in 1999. Converted greens from Tifgreen 328 to Tifdwarf. **Total acreage under maintenance both courses:**

121 acres (HP = 80; JG = 41)

Greens: HP = 5,650 sq.ft. = 2.5 acres. JG = 5,662 sq.ft. = 1.2 acres. Tifdwarf. HOC: .160 in. summer - .170 in. winter. Overseeding: Sabre II Poa trivialis @ a total of 8 lbs/1,000 sq.ft. Green speed goals: 8.0 - 8.5.

Tees: HP = 3.5 acres. JG = 1.5 acres. Tifway 419 bermudagrass. HOC: .60 in. - .75 in. Overseeding: Tri-Pro Ryegrass blend @ 300 lbs/acre.

Fairways: HP = 46 acres. JG = 22 acres. Tifway 419 bermudagrass. HOC: .60 in. - .75 in. Overseeding: Tri-Pro rye blend @ 250 lbs/acre. Roughs: HP = 28 acres. JG = 16 acres. Tifway 419 bermudagrass. HOC: 1.0 - 1.5 in.. No overseeding.

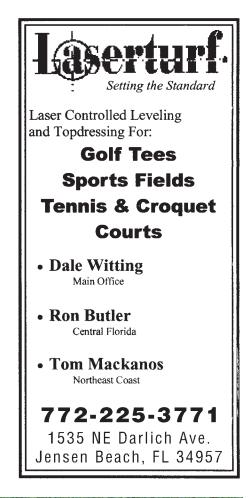
Bunkers: HP = 35. JG = 11. All machine raked with Toro 3020 and Toro 5000 with spring rake attachment.

Waterways/Lakes: HP = 2 lakes, 14 acres. JG has no lakes. The lakes at Hilaman Park are part of the municipal residential storm water runoff retention and drainage system.

Irrigation: HP: Twin Flowtronex VFD 75 hp @ 1600 gpm pumps. Source: Surface water with deep well supplement. Rainbird Maxi V with Freedom system. Individual head control on greens and tees. Dual head, double row coverage on fairways. No coverage in roughs. JG: Twin Flowtronex 30 hp @ 500 gpm pumps in two separate pump stations. Source: Deep well. Rain Bird Par Plus controls. **Total staff including superintendent:** HP = 8, JG = 3. 40 hours per week. No overtime. Two part time from May through September at 25 hours per week. Leadership: Foremen (assistant superintendents) Rick Collins at Hilaman Park; Conrad Norton at Jake Gaither (14 years); Kirk Brewer, mechanic Communications: Weekly GCM staff and safety meetings; biweekly department head meetings; monthly green committee meetings; Monthly club newsletter articles.



View from the 11th green across the lake to the 14th hole. Color coded flags: red (front), white (middle), and blue (back) help golfers with yardage and pin locations. Photo by Daniel Zelazek.



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Fun Facts



Jeff Heggen aka Beverage Cart Boy

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

- 1. Car: 1995 GMC Sierra It came with my wife. She got a new van.
- 2. The last good movie I saw: Signs.
- 3. I stay home to watch: CSI and Junkyard Wars.
- 4. The book I've been reading: Everything You Know Is Wrong.
- 5. Favorite meal: Steak, fries and hot bread.
- 6. Favorite performers: Faith Hill and Wayne Brady.
- 7. Prized possession: Letter of encouragement from Bart Starr after knee surgery took me out of football.
- Personal heroes: My mother (former mayor of Tallahassee) and Vince Lombardi.
- Nobody knows that: I listen to NPR radio while I drive.
- I'm better than anyone else when it comes to: Finding something positive even in a bad position or a terrible person.
- 11. If I could do it over: I would have been a better student.
- 12. I'd give anything to meet: Whoever it was that was smart enough to build the Great Pyramids.
- 13. My fantasy is: Play in the World Series of Poker in Las Vegas.
- 14. The one thing I can't stand is: People who know they are wrong but won't admit it.
- 15. If I could change one thing about myself: Take better care of my health.
- My most irrational act: Putting my fist through a wall - enough said.
- 17. The words that best describe me: Personable, dependable.

Jeff Heggen

Originally from: Wasau, Wisconsin Family: Wife Ruth; stepsons Brett and Robert (15year old twins) and Matt age 11.

Education: AA degree, Tallahassee Community College (1980); AS degree, golf course operations from Lake City Community College (1992). Various management classes, Florida State University.

Employment history: 1992-93 assistant superintendent, Hilaman Park GC; 1994-95 St. Marco GC, Alpharetta, GA; 1996-97 roving superintendent for IGM - Rolling Hills GC, Errol Estates, Melbourne and Valdosta. 1998 - Present superintendent Hilaman Park GC.

Professional affiliations and awards: GCSAA -11 years. FGCSA - 6 years. President Coastal Plains Chapter for the past two years.

Mentors: Mark Hoban, CGCS was the first superintendent I interned for. He taught me to balance between work and personal life. He also taught me that you don't have to change jobs every five years to have a successful career. Mike Osley, CGCS was the first superintendent I worked for after Lake City. He influenced my style of management in relation to working with the staff.

Entry into the business: In 1982 I moved to Ft. Lauderdale and got a job on the crew at the Holiday Springs GC. I don't know if it's even still around today, but I found out that this was the greatest kind of work in the world, being outside and working in golf. I've been hooked ever since. After some research, I enrolled in Lake City and here I am. I have to give a lot of credit to Mr. George Unglaub who owns a bunch of BP gas stations in the Tallahassee area. He helped me with my tuition to Lake City and gave me a job with a flexible schedule so I could attend classes and also earn my keep. Advice/Goals: As I get older I realize how wrong I was about what was important. My professional goals were just that - mine! Trying to make my staff achieve those goals caused many problems for all of us. I now better understand that if this is to be my career for life, we can accomplish a lot more if everyone around me is happy at what they are

doing. I try to create an atmosphere where the staff wants to come to work and enjoy the day. Life is too short to be unhappy especially since we must all work for the better part of our lives. My goal is to work and retire with the parks and recreation department. We have a good supportive organization and I hope to be able to help keep improving it for the people of Tallahassee.

Memorable moments: When I was 13, I met Coach Gaither from Florida A&M at a party and I got to meet four or five NFL stars including Rattler alumni and Dallas Cowboys star, Bullet Bob Hayes. While in the School of Business at FSU, I got to attend the grand opening of Disney's Epcot theme park. I found myself riding the elevator with Frank Borman and Mary Cunningham of Eastern Airlines. As a business major at the time I thought that was pretty cool hanging with the heavy hitters. Hobbies/Interests: I help coach sports teams my stepsons are on. Right now Brett and Robert act as assistant coaches with me for Matt's soccer team. I do play a little golf and shoot in the mid 80s.

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We Understand the Language of the Plant.

Managing Putting Surfaces

By Joel Jackson, CGCS

Putting-green management is undergoing a world of change, and today's superintendent needs to proceed with caution when implementing management programs. Yesterday's grasses - Tifgreen and Tifdwarf - are still in abundance, but the new ultradwarf bermudagrasses and the seashore paspalums are moving onto to scene rapidly.

Complicating the picture are the greens afflicted with off-types and/or mutations. These splotchy patches of turf are just different enough to create eyesores and putting surface disruption when changing heights of cut or trying to do some verticutting in the warm season.

In pursuing this topic, I learned one thing for sure: there is no one sure-fire method for grooming your greens. The key is to patiently learn what your turf will tolerate and how it reacts to changing weather conditions. All turf requires the basics of nutrition, water, aeration and thatch control coupled with a mowing program that fits the site and weather conditions. The trick is to learn what, when and how.

An unnatural variable is the demands and expectations of the clientele of a particular golf club. The need for speed, which is highly overrated, forces superintendents to keep the turfgrass living on the edge. One misstep in judging stress factors and greens can crash and burn when the weather goes south or the irrigation system misfires during a dry spell.

No one ever accused golfers of being rational or prudent. They can be brutal when the ecosystem of a putting surface gets out of whack and poor playing conditions manifest themselves. The cure is usually simple, but it isn't as fast as the failure. Raise the height, feed it and give it some time. It will usually always grow back unless there is something really nasty going on below the surface.

So much for the philosophy part of managing greens. What are people doing in the real world to keep the customers and their bosses happy?

Well for starters they had better be communicating constantly about their programs and products and the latest information coming out of IFAS and other turf research sources. As long as your customers know you are staying on top of technology and giving them as much information as you can, you can sometimes muffle some of the critical remarks.

Superintendents need to take juggling classes too. That's so they can keep the turf and the golfers happy at the same time. No mean trick sometimes, when Mother Nature's windows of prime agro-



Putting surfaces are the most intensely managed pieces of real estate on the golf course. Photo by Susan Jackson.

nomic opportunity are slammed shut for special events to promote the revenue stream. But turf is tough and if given half chance it will respond.

Let's look at a couple of scenarios and how your peers are coping with the challenges of managing today's putting surfaces.

Winter Pines Golf Club is a public golf course that does an excess of 80,000 rounds a year. Superintendent Joe Ondo, CGCS has been there for nearly 20 years so he knows his Tifdwarf greens like the back of his hand. Ondo manages 18 greens of different grass types and maturity as the club has embarked on a gradual regrassing program. The greens are ostensibly all Tifdwarf, but the grass came from different sod farms, so there are differences in responses and off types.

Because of the off types, Ondo says he can't take his mowers below .150 inch or they will scalp and be unacceptable. Fortunately his customers tend to be senior golfers who don't handle super fast greens anyway, so his 8.0 stimpmeter readings fit them just right. His number-one tool for grooming is judicious use of his verticutter when conditions are favorable, along with weekly spiking to keep the surface open for air exchange with the root zone. He backs off when it gets too cool for good turf recovery.

Because his course is so busy, it isn't feasible to completely shut down for routine cultural practices so, using pencil-tines on his aerifier, he does two or three holes a day ahead of play. There is minimal disruption to the putting surface with the small tines. Since he doesn't have one of the new spinner-

Quick Facts Box

- Superintendents should learn how their new greens respond before assuming old programs will work.
- Aggressive cultural practices are best done in late spring and early summer. Late-season weather can put the turf under stress.
- Don't starve the turf. A healthy turf will respond to manmade and weather stresses much better.
- Don't hesitate to raise the height of cut when the growing conditions worsen.
- Lighter and more frequent verticutting and top dressing are more effective.
- Communicate. Communicate. Communicate.

type top dressers, Ondo usually topdresses the greens only twice per year when he core aerifies.

Winter Pines irrigates with reclaimed water and Ondo can tell when the greens begin to seal up from the sodium and bicarbonate build up. He usually applies granular and/or liquid gypsum products twice a year to keep the soil in balance and the grass healthy.

Like most superintendents today, Ondo uses a combination of granular and liquid fertilizer applications to feed the turf. During normal operations he likes to apply a granular 10-1-10 from Howard Fertilizer and he switches to Harrell's 18-2-18 during transition. His liquid arsenal includes alternating blends of potassium nitrate at 10 lb/acre, 15-0-0 at 4 oz./1000 sq. ft. and a product called NPK also at 10 lb/acre.

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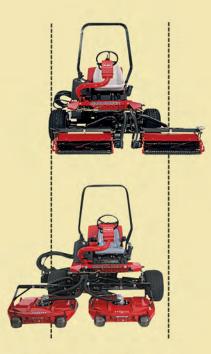
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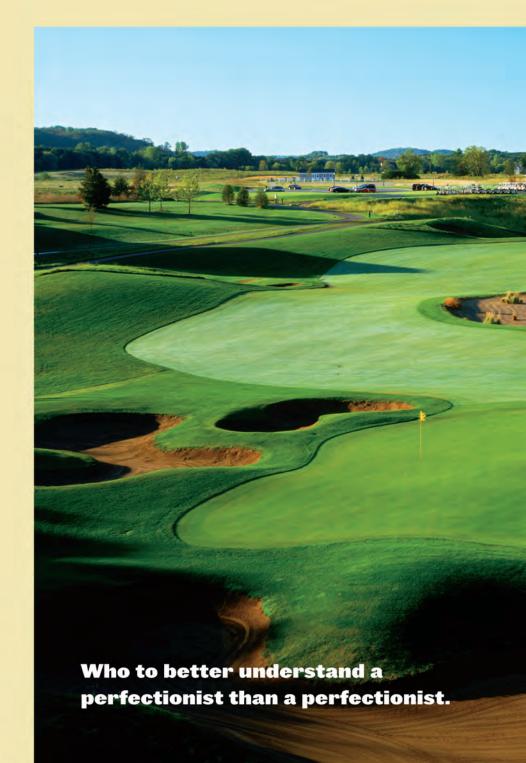
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Ondo's neighbor to the north, Stuart Leventhal at the Interlachen C.C. is a study in contrast as the private-club members want fast greens. Leventhal said whenever discussing greens management, the first thing that needs to be mentioned is the age and type of grass so everything can be put in the proper context. Interlachen's greens are seven-year old Tifdwarf greens. The course opened in 1975 so these membership's desires.

Leventhal used to believe in the leanand-mean school of fertility to get faster greens using only 6-8 pounds of Nitrogen per year, but he found he was battling too much turf stress and so he has upped his totals to 10-12 pounds of N per year and now grooms a much healthier surface for speed control. A typical program during warm season

No one ever accused golfers of being rational or prudent. They can be brutal when the ecosystem of a putting surface gets out of whack and poor playing conditions manifest themselves.

are second- or third-generation greens. Leventhal has been there since 1985. He currently has a chipping green planted in TifEagle for the members to evaluate a potential conversion to an ultradwarf surface in the future.

Leventhal's members aren't as much concerned with green color as they are with smooth, fast putting surfaces, so his mandate is to keep them quick while also keeping them healthy. Like all good superintendents who have to keep their greens near the edge, Leventhal keeps an eye on the weather and adjusts his routines as needed so as not to intentionally stress the grass.

With an average height of cut near .100 inch that means really paying attention to what's going on. The height is lowered to .09 inch for special tournament conditions and don't stay there more than a few days. With low mowing heights, any aggressive grooming or verticutting practices are limited to the active growing season and taper off in the cool months.

During the warm months, vertigroomers and brushes help stand up the grass for a clean cut to produce the needed speed. Leventhal's number-one tool for speed management is to double cut the greens. He finds that's the most effective and least stressful way to affect speed. A typical tournament greens preparation might be to double cut with triplex mowers followed by double-cutting with walking mowers with brushes followed by single- or double-rolling with triplex rollers. Yes, they are quick, but that fits the might be .5 - .75 lb. N/1000 sq. ft. every two or three weeks in a granular fertilizer. During cooler weather the program shifts to more foliar feeding with .1 lb. N/1000 sq. ft. in alternating blends of 20-20-20, iron, and a minor nutrient package.

Leventhal has also gotten away from the old aggressive Mat-Away verticutting practice and shifted to a schedule of more frequent but light verticutting, vertigrooming and topdressing cycles two or three times a month, depending on conditions. Aerification is accomplished by using deep tines in the spring and quadra-tines in the fall. A Sisis slicer is also used in the summer during the rainy season to help the greens dry out.

I haven't been ignoring putting green management on the new ultradwarf grasses, but the more I listen, the more obvious it becomes that the book on these new varieties is still a work in progress. The early fears were that these aggressive thatch producers would require drastic measures to keep the biomass manageable. After some preliminary assaults with severe deep verticutting, people like Matt Taylor growing Champion at Bonita Bay East and now Royal Poinciana found that a regimen of lighter but more frequent verticutting did quite well. The key is always to watch out for the weather and don't stress the plant when it doesn't have good growing conditions to recover. That means getting the most aggressive management practices done as early in the spring as possible. Late summer's tropical-storm season can be very

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stressful on the greens without the added injury of verticutting.

Bob Randquist, CGCS at the Boca Rio C.C. told me at the GCSAA conference in Atlanta that learning a new management program to deal with converting from Tifdwarf to TifEagle can be made a little easier by taking the GCSAA Managing Ultradwarf Greens seminar presented by Drs. John Cisar of Florida and Dave Kopek of Arizona State. Randquist said the seminar helped to speed up his learning curve and avoid a lot of problems.

One of the suggestions from the seminar was to remove every other blade from your verticut reels and go two ways on the green. The stolons are so thick in the ultradwarfs that a standard verticutter setup is essentially doing a severe scalp job on the stolons instead of a therapeutic thinning.

Also because of the feared thatch build up, the initial fertility programs tended to be of the lean-and-mean school and, just as Leventhal found out on his greens, it's better to work with a healthy turf plant than one that is anemic. That's especially true if you are going to stress it with some low cuts for special events.

Because to the dense growth habit of the ultradwarf varieties, foliar feeding is the most effective and popular means of supplying nutrients. Granular blends are still used, but are more effective when the turf has been opened up by verticutting and aerification. Sometimes even water penetration can be a problem on the tight turf, so regular spiking is another practice that has proven to be effective.

Perhaps an even more basic concept when discussing ultradwarf putting surfaces is undulations and surface contours. If you have greens with severe humps and bumps and your club is on a fast track to re-grass with an ultradwarf, take five minutes and consider your new mowing heights. The 1/8-inch-andlower effective cutting heights cannot be achieved practically on severely sloping greens without scalping. It may take more than just cutting off the old turf with a sod cutter and throwing down the new sprigs. Golf course designers have to modify their putting surfaces to accommodate these new parameters.

When it comes to tackling putting green management, don't ever forget your greatest source of information - your fellow superintendent who may have already broken the trail you are now following.

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HANDS ON

'JUNIOR TIPS' Photo Gallery Part 2





Working at the Car Wash

Want to make cleaning golf course equipment a little more fun for the staff? We all know the sizable investment that is made on golf course equipment these days as well as the value in keeping the equipment clean and in good working order. At Limestone Springs in Alabama a mini car wash was installed in the wash down area. The cleaners, wax and distribution equipment is located on an inside wall with the selector switch and overhead spray boom attached to the same wall on the outside of the structure.

Darren J. Davis

Here's Part Two of my Junior Tips, which we began in the Winter issue. They don't need a lot of explanation, just imagination, and a willingness to innovate and try new ideas that might save some time and money.

Photos by Darren Davis.



Where's My Tool Dude?

Looking for a tool but not sure where you or someone else last placed it? At Rio Mar in Puerto Rico a cabinet housing commonly used tools was labeled with pictures to provide an individual with a fool proof reminder of where a tool SHOULD be returned when it's not in use.

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By Don Benham

What is the old saying? I've got good news and I've got bad news, which do you want first? Let's start with bad news.

Several newspapers in the state have started their annual attack on golf courses and chemical use again. The articles generally quote somebody who makes scientific-sounding comments that are based on opinions.

In Manatee County the school board has decided to buy some land from the University of Florida to build a new high school. The land they are

Good News -Bad News

BENHAM'S BEAT



sity's agricultural station on State Road 70. The newspaper has written several articles saying how deadly the land is. Here are a few quotes from articles submitted to the paper. "To use pesticide applications on neighbors' yards or nearby golf courses are chemical attacks - surely not as severe as terrorists but chemical attacks nonetheless. Every day is code red to us." The last time I

buying is part of the univer-

Don Benham

heard this particular lady speak was at a department of health meeting in

Orlando where she had also said, "Golf courses are toxic holding ponds waiting to poison us." Many times the same people are quoted all across the state pushing their agenda to stop all chemical pesticide, herbicide, insecticide and fungicide applications.

There is a direct tie-in here to scare people into passing local ordinances that these items are in our drinking water and the ground children play on, and the real culprits are golf courses.

Enough of the bad news. What is the good news?

The *Palm Beach Post*, which has been very critical of golf courses, published a great article on golf courses and the difficulty of growing grasses this winter. They quoted John Foy and several golf course superintendents, including Mike Ballard at Abacoa Golf Course, Ray Kimberly at West Palm Beach Country Club and Mark Jarrell at Palm Beach National. I know that after the negative publicity two years ago, Mark Jarrell has been in contact with the paper to urge more balanced articles. His direct contact I feel has changed the way the paper reports about golf.

If your local paper writes something very negative that is not true, take the time to meet the reporter. Not to beat on him, but to provide him with facts. For example, how much water do we actually use? We are seen as heavy water users. You can create your own grassroots support and become one of the people contacted before they actually publish an article.

More Good news. I attended a Treasure Coast GCSA meeting on Wednesday, Feb. 26 at Port St. Lucie. The meeting started at 4 p.m. and had a great agenda. Opening speaker was Kurt Kuebler, immediate past president of the Florida Club Managers Association.

Kuebler is the general manager of Loxahatchee Club in Jupiter. He spoke on employee relations and methods to improve them. The club even has a scholarship fund for children of employees and is funded by members. He conducts weekly meetings with department heads, so all departments could share what was happening that week. He praised Mark Heater, the golf superintendent, for his leadership ability. Kuebler was an excellent speaker and gave at least 15 workable suggestions.

John Foy spoke not only on the weather but, on losing some chemicals and cautions us on how to use MSMA. He said methyl bromide will probably be available past 2005, which was good news. He classified nematodes today as our number-one pest problem.

National Golf Foundation's Barry Frank gave an overview of where golf was heading in number of rounds played and courses under construction.

McGladrey and Pullen CPA firm talked on how accounting decisions affect course superintendents also. For example to buy or lease equipment they passed out a complete booklet on trends of private golf clubs including average cost per hole for maintenance broken down by region. It includes a good checklist for superintendents.

This program was put together by Kevin Downing and I would highly recommend it to all chapters. The good news is how good the program was and the idea of putting it on at 4:00 PM in the afternoon. The bad news is it was under-attended.

(Editor's note: The Palm Beach Post also recently ran articles on the Audubon ACSP Workshops and the results of the Florida Golf Economic Impact Study.)

For information about the author, see inside cover.

Harrell's Founder Loses Lengthy Battle with Cancer at 74

Harrell's, Inc. Chairman of the Board Jack



R. Harrell, Sr., 74 died March 28 in Lakeland following a lengthy battle with cancer.

Harrell spent more than 50 years serving the turf and ornamental industry. His work began when his parents purchased a feed store in 1941 in downtown Lakeland. That location served local farm and ranch customers in greater Lakeland for many years. Harrell was thrust into leadership of the business following his father's sudden death in 1964. The company soon expanded by adding five retail locations across west central Florida. The focus of the business during the 60s and 70s was lawn and garden supplies.

Harrell then directed the company into the

In Memoriam

A Bull Gator in God's Garden

An obituary elsewhere in this issue will tell you the facts of the life and passing of Jack R. Harrell, Sr., but it cannot begin to tell the story of what Jack meant to the industry and to so many individuals in the business. I cannot speak for all of them. I can only tell my story.

When I left Disney in 1988 for a brief bout with bentgrass at the Isleworth G&CC, it was then I got to know and appreciate Jack Harrell as a supplier, a man and a friend. The fact that Jack mentored me as I battled bentgrass in Central Florida will not come as a surprise to many long-time superintendents in Florida. His helping hand has lifted many of us out of the doldrums of despair and confusion, and guided us along the path to success.

Mr. Harrell knew his own products. He fiddled around with them on his home bermudagrass lawn, so he could discuss the successes and limitations of each product. It was practical, cracker-barrel agronomy at its finest, and it was free for the asking. We asked often.

The most honest and truthful sentiment I can offer is the warm feeling and sense of ease that would come over a person when they engaged Mr. Harrell in conversation, whether it was business or personal. To me he had the charisma of an Arnold Palmer. He was someone who made you feel special and important in that moment.

I couldn't tell you about his business savvy in the terms of bean counters and annual reports. All indications were that he was a shrewd and infinitely honest businessman. He would never fail to thank you and tell you he appreciated you and not just your business. All I know as a customer is that the service and support provided by him personally or by his representatives was always superior and customer loyalty ran both ways.

The industry has been made much better because of him. The Harrell's Turf Academy is an almost-unprecedented event, where the company literally pays for your education, entertainment and meals for two days each year. His sponsorship of turf causes and events was always generous. He touched so many of us along his life's journey, that he earned the greatest riches of a lifetime - the love and respect of his fellow man.

Today I am sad at losing my friend and a great mentor in our business, but I am heartened to know that Mr. Harrell has been able to lay down the burden of his illness. And I can see the twinkle in his eye as the old Bull Gator takes a place of honor in God's garden in paradise.

> Joel Jackson March 28, 2003

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CALCIUM SILICATE CORPORATION LAKE HARBOR, FLORIDA • GENERAL INFORMATION: 863-902-0217 • SALES: 863-651-7133 specialty turf and ornamental market, beginning in the early 1980s. He oversaw construction of the company's first manufacturing plant and distribution center, which began operating in Lakeland in 1984. Through his initiative as chairman of the board, Harrell's has grown to be a recognized industry leader, serving turf customers across the Southeast and around the world. Harrell's serves the ornamental marketplace in all regions east of the Rocky Mountains. Manufacturing plants are now located in Alabama and South Carolina in addition to the corporate headquarters in Florida.

Known for his integrity and for his deep concern for people, Harrell was often consulted by industry associates throughout his home state. Superintendents would often request Harrell's assistance and advice regarding challenges faced on their golf courses. He received the Florida turf industry's highest honor in 1999 when he was awarded the prestigious Wreath of Grass Award. He also received the Larry Kamphaus Award in 2001, presented by the Central Florida Golf Course Superintendents Association.

Aside from work, Harrell's interests included golf, aviation, Lakeland High School and University of Florida athletics, teaching Sunday School, keeping up with his active 93-year-old mother and following the exploits of his large family.

He was a member of Lone Palm Golf Club in Lakeland and Black Diamond Golf & Country Club in Lecanto, Fla. He was a charter member and deacon of Lakeside Baptist Church in Lakeland, where he taught a men's Sunday School class for more than 40 years. He was a member of the Lakeland High School Century Club and was a Bull Gator at the University of Florida. He is a former chairman of the board of Lakeland Regional Medical Center and was a member of the Sixth Man Club at Florida Southern College.

Jack Harrell, Sr. is survived by his wife of 48 years, Norma; his mother, Lucile, Lakeland; by his sons, Jack, Jr., Lakeland, president and CEO of Harrell's; Fred, San Francisco, Cal.; daughters Susie Wilson, Lakeland, and Mary Lu Strawbridge, Ocala; and by 14 grandchildren.

In lieu of flowers, contributions may be made to Lakeland Christian School, 1111 Forest Park Street, Lakeland, FL 33803 or to Redeemer Christian School, 155 SW 87th Place, Ocala, FL 34476.

GCSAA Report GCSAA Considers Relocation to Sunbelt Cities... or Not

At its December planning meeting, the GCSAA board of directors engaged Chicago-based FPL Associates to narrow the study of the association's potential future headquarters location to three communities: Phoenix, Orlando and Jacksonville. In addition, the board reaffirmed the possibility of GCSAA remaining in Lawrence, Kan. During the weeks of Jan. 13 and 20, principals of the search firm visited Orlando and Jacksonville to ascertain what opportunities exist for relocation. The consultant's report was provided to the board at the pre-conference board meeting, Feb. 6-7 in Hilton Head, S.C.

Prior to the GCSAA Annual Meeting, a town hall meeting was conducted Feb. 13 at the conference and show to answer questions and discuss issues regarding the relocation feasibility study. Based on the feedback from the meeting, the board of directors decided to remove from the ballot the amendment intended to allow the board to select a headquarters location on behalf of the membership.

In a press conference Mike Wallace, Jon Maddern and Steve Mona pledged to make sure the members would have access to all the information regarding any possible relocation attempt, and play a key role in making the decision. Citing the input and education behind the PDI implementation, the GCSAA leadership promised a similar approach to the relocation discussion. The topic had been awkward to deal with and needed to be made public because everyone is very sensitive to the impact on the GCSAA staff.

Norman Supports Foundation

If past performance is an indication of future results, then The Environmental Institute for Golf should yield significant achievements given its association with professional golfer and

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800.442.9821 info@parkwayresearch.com Fax 281.590.3353 entrepreneur Greg Norman.

The highly regarded Australian has agreed to serve on the institute's board of trustees and head its newly created advisory council. Formerly The Golf Course Superintendents Association of America



(GCSAA) Foundation, the institute was borne out of a year and a half study that analyzed the needs of golf and the strategic focus of GCSAA's philanthropic arm. Through interviews, respondents indicated that GCSAA's development efforts should be directed to the subject of the environment and that the entity assigned that task should be

Greg Norman

easily identifiable with that cause. The name change became effective Feb. 1.

Given Norman's philosophies and previous commitment to environmental preservation in the areas of development, turfgrass and golf course design, he is a logical leader for the new advisory council and also as an additional member of the institute's board of trustees.

"There may be no issue more important to golf than its relationship with the environment," Norman said. "Research, education and technological advancements have resulted in positive results for golf's association with the environment, but we cannot rest on what has been accomplished. New challenges face the industry, and I am excited to be involved with The Environmental Institute for Golf because it has the opportunity to have a profound positive influence on the game and business of golf. I was flattered and humbled to be approached by The Foundation and I am committed to doing all that I can to make the institute even more successful."

As part of his commitment to the institute, Norman has agreed to a generous pledge to the institute. Norman's gift is the single largest donation ever made to the organization. In leading the advisory council, Norman will assist the board of trustees with fund-raising efforts and provide input regarding the strategic direction of the institute. The board of trustees will continue to be responsible for all decisions relevant to the institute.

"Greg Norman is more than just an hon-

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INDUSTRY NEWS

orary figure," says GCSAA CEO Steve Mona, CAE. "He wants to be involved and he is in a position to articulate the mission and goals of the institute to a wider audience than anyone. He has a tremendous passion for the institute and what it represents."

According to Joe Black, chairman of the institute's board of trustees, the advisory council will enhance the institute's ability to communicate environmental issues to a wider audience, making it more recognizable in the world of golf, not just the golf course management community.

"This is a natural fit for Greg given his passion for the environment and the fact that he has several companies within his organization that are involved in the golf course management profession with concerns for positive environmental practices," Black said.

Norman has not only proven to be one of the game's top players, but also one its most successful businessmen. As chairman and CEO of Great White Shark Enterprises, he has established thriving businesses in golf course design, development, turf, apparel and other areas. Through his work with his turfgrass company, Norman has become intimate with the growing and conditioning of turf. In terms of his work with the environment, his company Medalist Developments works through a unique program of five environmental strategies in creating each community - a practice that fosters collaborative relationships with key stakeholders.

The institute's emphasis on environmental stewardship will not be limited to its own initiatives; rather a philosophy of collaboration will serve as a guide to its activities. Partnerships will be sought with other organizations, including the USGA Green Section, U.S. Environmental Protection Agency, Audubon International, the Center for Resource Management and others.

Superintendents' and Owners' Shows to Merge

The Golf Course Superintendents Association of America (GCSAA) and the National Golf Course Owners Association (NGCOA) have agreed in principle to conduct a new golf facility management trade show in 2005.

The Golf Industry Show, which will combine the two organization's existing trade shows, will represent the full spectrum of golf facility management and golf business. The inaugural event will be conducted Feb. 11-13, 2005 in Orlando. Both organizations will continue to host their respective educational conferences, which will run concurrently with the trade show.

"This move is about creating more value for our members and industry partners," said GCSAA CEO Steve Mona. "There are many shared interests between GCSAA and NGCOA, not only on the organizational level, but for our respective members as well."

The objective of The Golf Industry Show is to present an industry trade show that represents significant aspects of a golf operation - from ownership, feasibility and design to construction and operation. By joining together, the NGCOA and GCSAA bring together two key components - ownership and golf course management - offering an enhanced trade show experience to both.

"We are responding to the needs of our

membership and other supporters," said Mike Hughes, executive director, NGCOA. "By launching this new show which will incorporate our existing shows, we are able to offer cost-effective solutions to members and exhibitors that attend both events."

Architect Pete Dye Accepts Old Tom Morris Award With a Challenge

The Old Tom Morris Award, is presented each year to an individual who "through a continuing lifetime commitment to the game of golf has helped to mold the welfare of the game in a manner and style exemplified by Old Tom Morris."

Dye, a member and past president of the American Society of Golf Course Architects, has designed some of the country's truly unique and challenging golf courses. Influenced by classical Scottish course design, he has created courses that combine those teachings with modern design. Dye has to his

credit course layouts such as

Vedra Beach, Fla.; Crooked

The Tournament Players

Club at Sawgrass, Ponte

Stick Golf Club, Carmel,

Ind.: The Ocean Course.

Kiawah, S.C.; The Honors

Tenn.; Brickyard Crossing,

Indianapolis, Ind.; and Old

Marsh, North Palm Beach,

Golf Club, Chattanooga,



Pete Dye

Fla. These and others have set him apart from his peers as an innovator in golf course architecture. Known for island greens, tiny pot bunkers and the use of railroad ties in bulkhead construction, Dye's golf course designs provide some of the most enjoyable challenges in golf.

While Dye accepted the award with honor and grace he threw down the gauntlet and challenged the audience to join architects and the USGA in putting limits on golf equipment technology which is threatening the design integrity of the world's historic golf courses.

Election of New Officers

Jon D. Maddern, CGCS at Elk Ridge GC in Gaylord, Mich. was elected president and succeeds Mike Wallace, CGCS who will become the immediate

past president for one more year on the board. Maddern becomes the seventh GCSAA president to come from Michigan.

CGCS, parks & recreation director for Mesa, Ariz. is our new vice president and Timothy O'Neill, CGCS, from the Country Club of Darien (Conn.) is secretary. Elected to two-

Jon Maddern, CGCS

year terms as directors were CGCS's: Robert Maibusch (Illinois); Ricky Heine (Texas); and Mark Kuhns (New Jersey). Incumbent directors David Downing (N. Carolina) and Sean Hoolehan (Oregon) will continue in the second year of their terms.

2003 Plants of the Year Part 2

In an ongoing effort to promote the production, sale and use of superior Florida-grown plants, the Florida Nurserymen & Growers Association announces the 2003 selections of the Florida Plants of the Year. This program was launched to promote under-utilized, but proven Florida plant material. These proven ornamentals are selected on an annual basis by a group of growers, horticulturists, retailers, landscape professionals and University of Florida faculty.

For a plant to be considered a Plant of the Year, set criteria must be met, including good pest resistance, require reasonable care and be fairly easy to propagate and grow. An award-winning plants must also exhibit some superior quality, improved performance or unique characteristic that sets it apart from others in its class. Here are two more 2003 selections for your consideration:

Common Name: Sandpaper vine or Purple wreath vine

Botanical Name: Petrea volubilis Hardiness: Zones 9-11

Mature Height and

Spread: 35', but may be maintained at 10-15' tall and wide

Classification: Tropical vine Landscape Use: Flowering vine for fence, trellis, arbor or pergola

Characteristics: This fastgrowing evergreen vine has large, coarsely textured leaves. Long arching sprays of amethyst-colored flowers bloom in late winter

Mature Height and

15' Wide

Specimen Tree

tree

Spread: 30-40' Tall x 10-

Classification: Evergreen

Landscape Use: Compact

Characteristics: This mod-

through the summer. The Central American native is a woody-stemmed climber that twines around any avail-

Sandpaper Vine

able support. Thriving in full sun, this tropical vine tolerates drought once established. The inflorescence is reminiscent of wisteria.

Common Name: Little Gem Magnolia Botanical Name: Magnolia grandiflora Little Gem Hardiness: Zones 7-9



Little Gem Magnolia

standard Magnolia. Smaller fragrant white blossoms 6-18" across appear in spring and then emerge sporadically through late summer.

Photos by Stephen Pategas-Hortus Oasis

Mark Woodard,

erate grower has compact, upright branches in a narrow form. The dark green

leaves with rusty-bronze coloring on the undersides are smaller that those of a



CARTS

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The FGCSA Goes to Tallahassee

By Joel Jackson

If we have learned one thing from all the Tom Morgan seminars on communications and the media, it is that the politicians will usually be forced into taking action once the media starts headlining the claims of activists. Dr. Morgan's take-home message is that we need to be proactive on all levels and with all audiences.

With the help of Dr. Morgan, the

world information resource when environmental issues come across their desks. We also decided to make the recent trends in IFAS budget cuts as our main topic of concern.

Mike Goldie has established a good working relationship with the state legislators, and that is evidenced by the personal comments about him from the legislators. We had appointments with representatives and senators who were on the appropriations, agriculture and natural resource committees and we ments that will force state money to be spent on votermandated projects.

The members of the 2003 Legislative Delegation were FGCSA President David Court, CGCS; Vice President Greg Pheneger; Director Darren Davis, Everglades GCSA and myself. We were joined by Coastal Plains Chapter President Jeff Heggen and Director Doug Abbuhl, who live in Tallahassee. We all agreed that the trip had been worthwhile and should be a regular undertaking. We also got a first-hand look at how valuable it is to have a good lobbyist. Mike did a good job. Our only regret is that we have underutilized him in the past.

We also got a lead on another way we can educate legislators from House Ag Committee Chairman Rep. Joe Spratt (R-Sebring). He mentioned that he would organize Legislator Ag Tours similar to the regulator tours to show freshmen legislators what Florida agriculture really looked like and how impor-



FGCSA Delegation: (Left to right) Front row: David Court, CGCS, Greg Pheneger and Doug Abbuhl. Back Row: Mike Goldie, Jeff Heggen and Darren Davis.

Everglades Chapter is currently working on a communications plan that hopefully will be a model for others to follow. The plan will create messages and opportunities targeted to reach superintendents, golfers, the general public, the media, regulators and politicians.

Background

Last year we participated in the Regulator Ag Tour coordinated by the Florida Fruit and Vegetable Association with a golf course stop at the Old Colliers GC hosted by Tim Hiers, CGCS. Thirty to thirty-five regulatory officials from the United States Environmental Protection Agency in Washington and Region 4 in Atlanta and officials from Florida Department of Environmental Protection and Department of Agriculture and Consumer affairs were on the tour and got an earful from Tim on how golf courses really work. We are going to be the first stop on the tour this year on March 31, and we plan to participate every year from now on.

Well, it didn't take too much thinking that if we are reaching out to the regulators we also need to educate our politicians about our industry. We began thinking about creating a delegation of FGCSA officers to work with Mike Goldie, our lobbyist in Tallahassee, to set up some appointments with legislators. Our mission was primarily one of introduction to let them know we are out there as a realwrapped up the two-day visits with a meeting with Charles Bronson, Commissioner of Agriculture and Consumer Affairs.

We left a folder with each legislator that contained

an executive summary of the Florida Golf

- Economic Impact Study; • 2000 US Geological Survey Report showing golf
- only uses 3.2% of the water statewide
- a series of GCSAA Green Tips fact sheets on golf courses and the environment, pesticides and water conservation
- a fact sheet on the benefits of turfgrass;
- two articles on golf course management and studies showing the use of pesticides and fertilizers are not harmful when used as directed.

Each meeting was slightly different and each member of the delegation shared something that showed how golf courses and our organization are dedicated to being good stewards of the environment. The questions and comments indicated that we definitely made a good impression with them.

With regard to the IFAS budget cuts, several of the legislators come from Ag backgrounds and they know how important IFAS is as a research and development resource for the ag industry in Florida, but they were candid about how difficult reversing the cuts will be in the face of all the constitutional amendtant it was to the economy of Florida. We will be working to get a golf course stop on the next tour that the legislators take.

We got to meet some of the other lobbyists at lunch on both days, and we got a crash course in Tallahassee politics. It was a very educational trip for us and will help us to plan our future visits. Mike had this message for anyone interested in reaching out to local politicians. He said, "The most effective way to get to know a legislator is to invite them to a local chapter meeting when they are out of session. They have a vested interest because you are the folks that vote for them and maybe donate to their campaigns. You can invite them to give a legislative update and over lunch you can talk to them about current issues. It's a good idea to make sure it's a well attended event so you have a good audience."

We have taken the first steps in making sure we reach out to our lawmakers with concerns and facts about the issues. Take time to do the same at the local chapter level.

Editor's Note: Just before deadline the latest word from Tallahassee and IFAS is that in response to concerns from Ag leaders, the legislature is pledging to hold to last year's budget totals and not make additional cuts as anticipated.

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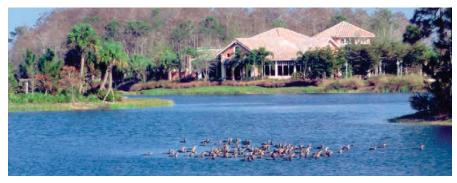


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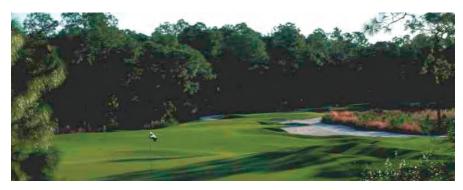
Developing Golf Courses In Harmony With Nature

Editor's Note: Not all developers deserve a bad rap when it comes to environmental impact. Bonita Bay is among those companies who take their stewardship of the land and its resources very seriously.

The Bonita Bay Group, a Southwest Florida developer known as a national leader for and enhance the environment in which we all live and work could be a page out of The Bonita Bay Group's business plan," said Dennis Gilkey, president/CEO of The Bonita Bay Group. "Since the planning of our flagship community, Bonita Bay, in the early 80s, it has been our steadfast mission to achieve the highest standards in terms of land plan-



The Brooks' restoration project returned a watershed flow-way to its natural state and rejoined 91 acres of wetlands, creating a nesting and roosting area for native birds.



Bonita Bay's Club at Mediterra won the National Private Club Environmental Leader's in Golf Award for 2002.



The Tom Fazio-designed Sabal golf course is located at Bonita Bay East on a site that includes 895 acres of cypress wetlands, 190 acres of pine flatlands, lakes and hundreds of Florida's state tree, the sabal palm.

environmentally responsible development, holds the distinction of having created more Audubon International Signature Sanctuary golf courses than any other company in the world.

"Audubon International's work to protect

ning and environmental preservation."

"The Bonita Bay Group has set a new standard," said Ron Dodson, president/CEO of Audubon International. "Their commitment to environmental excellence in the planning, construction and management of golf courses is certainly unique and provides significant benefits in terms of wildlife conservation, habitat enhancement, water conservation and water quality monitoring."

The company's long-term relationship with Audubon International has resulted in an impressive list of certifications:

The Club at Mediterra, with two Tom Fazio-designed courses, is the world's first private, 36-hole Audubon Silver Signature Sanctuary. The club's superintendent earned the highest award in the private club category of the 2002 Environmental Leaders in Golf Award, presented by the Golf Course Superintendents Association of America and *Golf Digest* magazine to the superintendent of a property that represents the highest level of commitment to environmental stewardship. Golf course superintendent Scott Whorrall accepted the award at the GCSAA Conference and Show in Atlanta in February.

The Estates at TwinEagles, with a Jack Nicklaus- and Jack Nicklaus II- co-designed course, became the 11th certified Signature Sanctuary in the state of Florida; the Nicklaus team has been chosen to design the community's second course, which will also be developed as a Signature Sanctuary.

Bonita Bay, the company's flagship community with three Cooperative Sanctuaries designed by Arthur Hills on the site, was an early Audubon International participant; Bonita Bay received the development industry's highest international honor when it was named the Outstanding Large-Scale Community of the Year by the Urban Land Institute.

Bonita Bay's two off-site courses designed by Tom Fazio became the world's first private 36-hole Audubon Signature Sanctuary. The club's director of golf course operations earned the GCSAA's 1999 National Environmental Steward Award in the privatefacility category.

The Brooks, a master-planned community, has been certified as a Cooperative Sanctuary through Audubon International's Business and Corporate Properties program.

"The Bonita Bay Group's commitment to the environment is evident from the moment they move earth, and from the moment they choose not to move earth," said Michael Stachura, *Golf Digest*'s associate editor who presented Bonita Bay with the 1999 Environmental Leader in Golf Award. "They walk the line between development and a commitment to environmental stewardship better than any enterprise or business I know about."

According to Fazio, designer of golf courses at Bonita Bay Club East and Mediterra, "The Bonita Bay Group, from day one, set out to establish new standards for environmental responsibility. The design process at Bonita Bay Group courses evolves from an extensive review of the natural systems present on site. Once we understand the existing conditions, we set out to restore, enhance and protect wetlands, vegetation and habitat. Mediterra and Bonita Bay Club East represent the best in responsible development, utilizing a scientific approach to create a much improved environment."

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"The Bonita Bay Group is an example, for those on either side of the development debate, of how the middle ground really can be achieved," Stachura added. "In an area where golf does not always get a glowing report card, The Bonita Bay Group shows not only the golf community, but also the global community, how to take care of the earth."

The Bonita Bay Group's approach to development and its participation in the Audubon Cooperative Sanctuary Programs yields benefits beyond the obvious, according to Gilkey.

"Developing in harmony with nature often includes restoring ecosystems to their historic integrity," Gilkey said. "Every property and golf course within our family of master-planned communities has been through aggressive programs, such as removal of exotic vegetation and replacement with native materials, restoration of wetlands and recreation of wildlife habitat. While this is not the most costeffective method of development, the returns more than compensate for that front-end investment, both in the sustainability of the land and the appeal this environmental work has to prospective buyers. So it's a sound way of doing business and a win-win situation. "We believe sustainability and respect for

nature is everyone's responsibility," Gilkey continued. "Participation in Audubon International programs that reach from major development projects to backyard efforts is one of the best ways we know to help businesses and individuals assure that what we enjoy today will be enjoyed by future generations." The Bonita Bay Group is a diversified company involved in the planning, development, sales and management of master-planned communities throughout Southwest Florida. The company employs more than 1,300 individuals and is developing six master-planned communities - Bonita Bay, The Brooks, Shadow Wood Preserve, Mediterra, The Estates at TwinEagles, and Verandah - along with 12 golf courses and two marinas.

The Bonita Bay Group team shares a dedication to exceptional customer service as defined in its E5 program: Ethics, Execution, Environmental Sensitivity, Excellence, Every Day.

Additional information about the company is available at www.BonitaBayGroup.com.

Stewardship Notes Operative Word in ACSP is 'Cooperate'

By Shelly Foy

Thankfully, winter is almost over and the sun is shining again in Florida! We certainly did not have our usual bragging weather this year. That Jeep Wrangler that I bought (and swore would never have the top on unless it was pouring rain) sadly has not been topless nearly enough because of the cold. When you are riding in a Jeep with the

top down, you tend to go slower so that you can take



everything in. You drive the back roads, the scenic routes, and you just think about things. At least I do, anyway. So on one of my recent gallivants around town I started thinking about the Audubon Cooperative Sanctuary Program and particularly the word *cooperative*. That one word emphasizes the

kind of relationship Audubon International wants with its members, but also stresses the value of reaching out as part of participating in the program.

The truly successful golf courses in the ACSP are those that do involve everyone, and, when you think about it, it makes perfect sense. If I am a golfer and I have a question, I am going to ask the golf pro. If I am working on the ACSP and need money, I am going to involve my general manager, green committee, beautification committee, etc.... because if they are supportive, they are going to make sure that I have the money I need. If I want to make a few changes on the golf course (like naturalizing areas), I am going to make sure that the golfers



are aware of the benefits beforehand so that they will embrace these projects. When I have questions, I want to surround myself with experts (Audubon staff and resource advisory group members) so that I can become more knowledgeable. If I want to show my neighbors that golf courses are beneficial to the community and the environment, I am going to invite some of them to be on my resource advisory group, or at the very least I am going to make sure I communicate our efforts to them.

Curious as to what others thought about the topic of cooperative efforts, I sent a few e-mails and wanted to share some responses.

Dr. H. Bernton, chairman, Audubon Committee and member, Windstar Country Club: The Green Committee is keenly aware

of our interest in mitigation efforts to enhance habitat and are supportive of suggestions for plantings that provide food and cover for birds and other small animals. I think it is important to have members of the club involved with Audubon activities, as it is an avenue for them to become stakeholders in the club, its golf course and our community.

Fred Yarrington, Audubon Committee and member, Hole-in-the-Wall Golf Club:

To achieve a fully integrated Audubon Cooperative Sanctuary Program, it is important to have everyone in the club involved. This is the only way for everyone to understand the purpose of the program, accomplishments, and future plans.

I have been involved in the ACSP for more than ten years, serving first as the chairman of our program, but more recently as a facilitator and supporter for the superintendent, who is the focus of our ACSP activities. I believe the golf professional and his staff also play a key role in the program, since members as a matter of convenience are most apt to seek information from them.

The pace of ACSP activities changes periodically and it has been interesting to see how support, appreciation and interest have evolved over time. We went through an active but not significant startup period, and then hit a flat spot when other golf-course priorities were deemed more important, and now have a program in place to steadily conserve water, minimize chemical applications and improve the wildlife habitat on our property. Without changing playing characteristics of the golf course, we have made a major improvement in the general appearance of our entire property by participating in the principles of the ACSP.

Alex Raimondi, CCM, general manager/COO, Wilderness Country Club:

I see the general manager's role as providing overall leadership for the ACSP and maintaining the club's long-term vision. The GM's involvement in the program is to provide support, assist in the education of members, and retain their enthusiasm. The GM has very high visibility and direct contact with the entire membership, allowing the opportunity to provide pertinent information to members on a one-on-one basis. The board of directors and club committees rely on the GM to provide appropriate financial leadership. This allows for proper funding of current and future ACSP budgets. The entire Wilderness ACSP is a complete team effort of staff and members. This teamwork builds and maintains excitement.

Susie Stiegmann, general manager, Shadow Wood Country Club:

I have the ability to provide support for projects the superintendent feels will enhance the ACSP. From a corporate perspective I am able to gather the financial support, and from a club standpoint, I can involve our members. Involvement brings knowledge, and the more a club is involved, the greater our ability to educate not only our members, but our critics as well.

Jan Weinbrecht, senior biological scientist, University of Florida, Environmental Horticulture:

One of the most rewarding elements in my career as a turfgrass research biologist has been the opportunity to interact with turfgrass professionals. I've learned a great deal of their challenges and accomplishments, and benefited

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tremendously from their knowledge. Yet, one of the more significant moments stemmed from a chance meeting back in 1996 with Bill Iwinski director of golf at Ironwood Municipal Golf Course in Gainesville. Bill touched on his desire to enroll Ironwood in the ACSP and that led to the formation of Ironwood's resource advisory committee, and ultimately Florida's first fully certified municipal golf course in July of 2000. As it turned out, Ironwood's Audubon Sanctuary Certification became an integral component in Alachua County's land conservation and acquisition program, as well as the City of Gainesville's Greenway Project.

Throughout the planning and implementation, we learned a great deal about watersheds and groundwater issues, wildlife habitats, plant communities and ecosystems. We came to know and befriend many individuals and groups who not only applauded the program, but also assisted in many of its accomplishments.

There were also those who challenged our goals and doubted our efforts, and to this day they persist. But, hey, that's all part of it. I've always viewed the sanctuary program as a very respectable and well regarded platform for those individuals who wanted to demonstrate their ability. It may not be a part of every course in Florida, but every course who is a part of the Program shares the same sense of pride and sat-

isfaction that we do at Ironwood. Bill Iwinski, PGA/golf course manag-

er, Ironwood Golf Course, Gainesville:

When we first joined the ACSP, there were several discussions between the superintendent and myself. We were pretty good with the lip service. However, full certification seemed like something only the elite courses achieved. We did not have a budget, we did not have a committee, and we certainly did not have the time.

Then God sent an angel in the form of Jan Weinbrecht, a turfgrass biologist from the University of Florida. Jan breathed new life and enthusiasm into our Audubon program at Ironwood. He had the expertise, and quickly divided the areas of responsibilities up to manageable tasks. We also set some deadlines. With these thresholds in place, we all had to be accountable for our respective areas.

I was responsible for outreach and education, but it did my heart good to see Jan canoeing in the lakes to get samples for the water quality. Jan was an excellent example and he worked harder than anyone. If the temptation to vacillate popped in your head, there was the vision of Jan carrying a canoe or bringing out a group of graduate students. This was work; however, Jan always desire for environmental stewardship and sustain- had a smile, a kind word, and a most positive attitude.

> If you want to be certified in the ACSP, you need a Jan Weinbrecht.

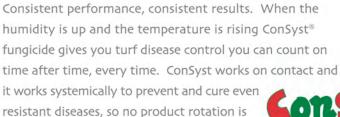
Audubon Cooperative Sanctuary Program

New Members

Cypress Woods G&CC, Naples Fiddlesticks CC, Ft. Myers Forest CC, Ft. Myers Frenchman's Reserve, Palm Beach Gardens Gator Creek GC, Sarasota Hammock Dunes - Creek Course, Palm Coast Heritage Palms G&CC, Ft. Myers Hollybrook G&TC, Pembroke Pines IGM Eagles Club, Odessa IGM Highland Woods G&CC, Bonita Springs Kelly Plantation, GC, Destin La Playa GC, Naples LPGA International GC, Daytona Beach Miles Grant CC, Stuart Misty Creek CC, Sarasota Orlando Outdoor Resort, Clermont Pine Tree GC, Boynton Beach St. Johns G&CC, St. Augustine Recertified ACS Lake Buena Vista Club, Disney World ('99) Lemon Bay GC, Englewood ('99) Audubon Signature Courses Sharks Tooth GC, Panama City Recertified Signature Courses Old Colliers GC, Naples ('01)



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Dianne Rabkin, administrative assistant, Twin Eagles Golf Club:

The administrative assistant's role in environmental programs may take on many forms. The AA may be asked to collect, type, copy, distribute, telephone, coordinate, budget, survey, and train in all areas of the program. More specifically the AA coordinates with the superintendent, staff, vendors, public, and guests regarding specific tasks required to maintain certification i.e. water samples, birding surveys, case studies, educational training (school programs), document projects, clubhouse displays, and recycling to name a few. The AA may be indirectly involved in many projects or specifically assigned to organize a school tour, take charge of a case study (ours was a littoral project), put up bird houses and so on.

Kenyon Kyle, golf course superintendent, Shadow Wood Country Club:

I believe when you have everyone involved, you have a higher long-term success rate. This generates more creativity and support for programs that may not be well received initially by the members. I see my role in the ACSP as facilitator. I enjoy helping bring other people's ideas to the table and helping them to gain a better understanding of how these programs impact our club.

Audubon provides a tremendous amount of depth. Many times, programs are incorporated to serve one need or purpose. I try to identify all of the benefits, and encourage others to think globally. For example; creating/restoring habitats is obviously viewed as being good for our wildlife, but it is generally overlooked that these programs also reduce expenses by reducing labor, water, fuel, fertilizer, pesticides, etc.

Matt Taylor, golf course superintendent, Royal Poinciana Golf Club:

One simple reason to get everyone involved in the ACSP is that you can get more accomplished in a shorter amount of time. Also, once everyone is on board, you don't have to spend all your time communicating or selling the projects. I see my role as the person who drives the program and keeps it up on the list of priorities. The fact that we are a certified sanctuary is just as important in our decision making as sound agronomic practices.

Ron Hill, director of golf maintenance, Amelia Island Plantation:

In this day and time, I feel that having everyone on our staff involved in the ACSP is a win-win endeavor. All levels of staff can contribute; from the general manager to the entrylevel equipment operator. They all bring another set of eyes to the scene, and if trained properly can become a very integral part of the golf operation program, as well as the ACSP.

The general manager, when playing golf, on occasion might spot leaking valves for irrigation heads or maybe a bubble in the fairway turf indicating a main line leak. The equipment operator may spot an area in a fairway or rough where birds are congregating and upon inspecting, he might suggest to a supervisor either an irrigation leak or simply too much water being applied. Water Conservation?!

The utility (course set-up) person might spot a few fish "gasping" for air in a lagoon, or the water might just look different than usual. He reports his findings to the supervisor. Water Quality?!

The general manager is playing golf with the executive chef, the chairman of the golf committee and the director of golf. The chairman hooks his shot into the woods. While looking for his golf ball, he spots a pair of night hawks with their young scurrying in the palmetto. Later in the round, another member of the foursome slices a tee shot, and while looking for his golf ball, he sees an owl tending to her baby that thought it could fly and consequently learned that it was not quite ready. The general manager reports his group's findings to the golf course superintendent, who in turn puts plans into motion. Wildlife and Habitat Management?!

I need to champion the value of the ACSP for Amelia Island Plantation and the surrounding community. I see my role as an educator, trainer, promoter, salesman, volunteer and a coach to keep the team challenged and working together to accomplish our ACSP goals.

Tim Hiers, golf course manager, The Old Collier Golf Club:

The Audubon Cooperative Sanctuary Program finds its true meaning in one word, *cooperative*. As a golf course superintendent who oversees this program, it is vital that he or she involve several people with an active interest in making the program productive. This might include an ornithologist, a botanist, a wildflower specialist, a native plant expert, etc. But, if the program is to be truly successful and sustainable, then it is vital that members of the management team support and participate in the cooperative adventure.

Members of this team would include the golf professional, general manager, assistant golf professionals, food & beverage manager, and anyone that makes regular contact with the members. The members themselves should be involved because they have a vested interest in seeing their golf course improve. At the very least, there should be consistent and effective communication with key members of the club. If all the key players buy into the program, participate and support it, then significant progress can be made on an annual basis to improve the golf courses appearance and environmental vitality.

The overall objective is to improve the golf course by using all resources efficiently and safely. This would include fertilizers, plant protectants, water, fuel, electricity, equipment and your staff. One way (and there are several) to reduce resource usage would be to reduce the amount of maintained turfgrass. This will involve the golf professional and key members. If they have already bought into the overall philosophy and goals of the ACSP, this should be a productive effort.

One way to effectively initiate this

effort would be to install native plants in turf areas that seldom received errant golf shots. This allows the golfer the opportunity to acclimate to the new environment without disrupting his or her game. The golf professional can be instrumental in helping the golf course superintendent select these areas and because he has been involved in the process he can also be an effective spokesperson and salesperson in promoting the new changes. This one example illustrates the benefits of involving the right players. Significant energy and time can be wasted if key players (like the green committee chairman or club president) do not understand or support the goals and benefits of the program.

Communication and participation are the cornerstones in an effective Audubon program. As these programs continue to grow, so does the future of golf and its beneficial impact on the environment and society.

ACSP Workshop Thanks

I would like to thank everyone who attended the ACSP Workshops in December. We were pleased with the turnout and the wonderful support we received from Pelican Sound, Mizner Country Club, Championsgate and Sugarmill Woods. It takes a lot of effort from a lot of people to put together four workshops in one week. David Court and Joel Jackson deserve a big thank-you for their efforts in promoting the workshops. Joellen Zeh, staff ecologist with Audubon International did a great job in explaining how the certification process works, and did not complain a bit about the rigorous schedule we had her on.

I would also like to thank all of the speakers who helped to make the workshops successful:

George McBath, ornithologist

Tom Coffey, president, Naples Orchid Society

Dr. H. Berton, chairman, Audubon Committee, Windstar Country Club

Russ Geiger, golf course superintendent, Hole in the Wall Golf Club

Todd Lowe, USGA agronomist

John Foy, director, USGA Green Section

Garth Boline, golf course superintendent, Chi Chi Rodriques Golf Course

Buddy Keene, CGCS, Gainesville Golf & Country Club

Jan Weinbrecht, senior biologist, University of Florida

Stuart Leventhal, CGCS, Interlachen

Bob Karnes, golf course superintendent, Walt Disney World

Troy and Peggy Ogden, Outdoor World

Bobby Ellis, golf course superintendent, Championsgate

Jeff Klontz, golf course superintendent, CC of Florida

Eric Knudsen, golf course superintendent, Mizner Country Club

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-Shelly Foy

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RESEARCH

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March Event Showcases Turf Research

Research and education programs beneficial to South Florida are part of a statewide program, with turfgrass scientists specialized in entomology, soil and water science, nematology, turfgrass breeding, plant pathology, weed science, and plant physiology. In combination with industry-generated funds, the effort depends on the support of tax revenues, which are allocated by the Florida legislature based on the importance of the turfgrass industry and its positive impact on Florida's economy and environment. measured once, 14 weeks after the initial treatment.

While some treatments had nematode population densities higher or lower than the untreated at one sampling date, there were no overall trends in nematode population reduction with any of the products. Visually, only CMP (an experimental mustard plant based product) and avermectin (a biologically-derived insecticide/nematicide) improved the turf consistently. These two products applied each month were generally as effective as two applications of Nemacur applied three months apart in enhancing turf performance. CMP in particular had consistently high visual performance compared to untreated, and outperformed Nemacur at most datacollection dates. No treatments had significantly greater root lengths than the untreated controls.

In 2003 we will be testing these same products, and perhaps a few additional ones. We will be moving to a site that is infested with sting nematodes as that nematode may be a better indicator species than lance and stubby-root nematodes. We

The brief summaries are intended to convey the diversity of what we are doing. This information is not presented to make recommendations for management decisions, including the use of particular products.

The South Florida Turf EXPO is cosponsored by the South Florida Golf Course Superintendents Association. The EXPO has provided funds used to build and maintain the Otto Schmeisser Research Green.

Van Waddill, Professor and Center Director

I thank my colleagues for their enthusiastic response, and submission of these research summaries. The brief summaries are intended to convey the diversity of what we are doing. This information is not presented to make recommendations for management decisions, including the use of particular products. The information is made available to stimulate discussion and careful observation among turfgrass managers, product manufacturers and representatives, and others interested, regarding turfgrass research.

Philip Busey and Diane L. Johnston, Editors

Nematodes

Alternatives to Nemacur for Nematode Management on Golf Course Turf

William T. Crow

In 2002 12 products were evaluated on FloraDwarf bermudagrass for ability to decrease nematode populations or nematode damage, or increase tolerance to lance (*Hoplolaimus galeatus*) and stubby-root (*Trichodorus proximus*) nematodes. Each product was applied at the maximum rate monthly for six months. The treatments were evaluated for visual performance, nematode populations, and root lengths. Each treatment was compared with untreated and fenamiphos- (Nemacur-) treated plots. Turf and nematode evaluations were made monthly, two weeks after each treatment. Root lengths were will also be conducting the test on a different bermudagrass cultivar to see if root differences can be better quantified.

This study is funded by a grant from the Florida GCSA, GCSAA and the Bayer Corp.

Relationships between Nematode Damage and Nitrogen Use on Turf

John Eric Luc and William T. Crow

Can nematode management have a positive environmental impact? What if managing nematodes could reduce nitrogen use and nitrate leaching into groundwater? Plant-parasitic nematodes damage turf roots, making the turf less efficient at extracting water and nutrients from soil. To keep nematode-damaged turf looking acceptable often requires additional water and nitrogen . Where does the nitrogen go that is not taken up by the turf? These questions are being explored in the following experiments funded by the FGCSA and GCSAA.

Greenhouse studies are comparing nitrate leaching and nitrogen uptake by turf from sting-nematode-infested and non-infested lysimeters. Field experiments are being conducted on a fairway in north central Florida to quantify nitrogen requirements of nematicide-treated and untreated turf. The experiment will have untreated plots and plots treated with Curfew Soil Fumigant (1,3-dichloropropene). Each of those plots will be divided into four levels of fertility. Tissue nitrogen will be measured every two weeks, followed by a fertility treatment as appropriate. Differences in percent nitrogen, grams of dry matter collected, total nitrogen uptake, and root density will be compared between nematicide-treated and untreated plots.

Nematode management on turf could be linked to reduced nitrogen use and reduced risk of groundwater contamination, which could help stimulate development of new nematode-management strategies and aid the registration of new nematicides for turf.

Can Using Poor Quality Water Actually Help Your Nematode Situation?

Adam C. Hixson and William T. Crow

In many coastal areas in the southeastern United States water restrictions are causing a headache for golf course superintendents, sports turf managers, and homeowners. Seashore paspalum (*Paspalum vaginatum*) has great potential for use in these areas. Because of its tolerance to drought and salinity, use of this grass in coastal areas may aid in conservation of fresh water resources.

Plant-parasitic nematodes are damaging pests of turfgrasses in Florida, with sting (*Belonolaimus longicaudatus*) and lance (*Hoplolaimus galeatus*) nematodes being the most damaging. It is unknown how these or other plantparasitic nematodes may impact seashore paspalum and how high-salinity irrigation will affect these and other plant parasitic nematode populations. Therefore, a salinity test was performed to examine the effects of high salinity irrigation on *Belonolaimus longicaudatus* and *Hoplolaimus galeatus*.

Treatments consisted of six different rates of salinity used to irrigate the grass on an asneeded basis. The irrigation treatments were formulated by concentrating deionized water to five salinity levels, (5, 10, 25, 40, and 55 ds/M) and deionized water to serve as a control.

This currently ongoing research has tentatively determined that at high salinity concentrations (25 ds/M and above), sting and lance nematode reproduction and feeding significantly decreases. Seashore paspalum has also shown to be susceptible to sting nematodes with a 30% to 40% root reduction when compared to uninoculated pots, but lance nematode data has proven to be inconclusive thus far.

Damage Potential of the Stubby Root Nematode Species *Paratrichodorus minor* and *Trichodorus proximus* on Bermuda and St. Augustine Turfgrasses

Johanna Welch and William T. Crow

Trichodorus proximus and Paratrichodorus minor are the most common species of stubby root nematodes found on turfgrasses in Florida. An experiment funded by the Florida Turfgrass Association compared the reproductive rates and root damage caused by these two stubby root nematode species on bermudagrass and St. Augustinegrass.

Twenty pots each of TifEagle bermudagrass and Floratine St. Augustine turfgrass were used for this experiment. Five pots each were inoculated with 400 T. *proximus*, 400 P. *minor*, or 100 *Belonolaimus longicaudatus* (sting nematode), and five pots were uninoculated controls. After inoculation, the plants were left for 100 days in a climatecontrolled greenhouse during which all of the plants

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During the Field Tours Dr. John Cisar explains the results of Ultradwarf Management studies done on the FGCSA research green. Photo by Joel Jackson

were watered and fertilized in an equal manner. Each test was conducted twice. Results were obtained through nematode assay of the soil and root length analysis.

All three nematode species reproduced on both turf species. Both species of stubby-root nematodes damaged bermudagrass roots, but *T. proximus* caused greater root reductions, equal to those caused by sting nematode (considered the most damaging nematode on turfgrasses). Bermudagrass root lengths were reduced 22% by *P. minor*, 41% by *T. proximus*, and 36% by sting nematode. Both stubby-root nematode species caused equal damage on the first trial on St. Augustinegrass, but *T. proximus* caused greater damage than *P. minor* in the second trial.

Sting nematodes did not damage Floratine St. Augustinegrass roots in either trial. The two stubby-root nematode species in this research are easily distinguished by a trained diagnostician. Based on these results and on field observation, the University of Florida Nematode Assay Lab has changed the damage thresholds used to diagnose nematode problems on turf. Separate thresholds are now used for each stubby-root nematode species.

Mole Crickets

Interactions between Mole Crickets and Insect-Parasitic Nematodes (*Steinernema scapterisci*, Nematac S)

Kathryn A. Barbara and Eileen A. Buss

Mole crickets (*Scapteriscus spp.*) are the most damaging insect pests of managed turfgrass and pastures in the southeastern United States. Although insecticides often provide effective shortterm control, long-term suppression of mole cricket numbers is needed. We examined the establishment and spread of the insect-parasitic nematode *Steinernema scapterisci* on golf courses. We placed 20 linear pitfall traps on two mole cricket hot spots within 10 different fairways on two Gainesville golf courses (40 traps total). Within each fairway, one hot spot (1/10th of an acre) was treated with nematodes and the other was left untreated. The rate was 1 billion nematodes per acre.

The average percentage of infected mole crickets before the fall 2001 nematode application



Dr. George Snyder summarizes the environmental information learned from a decade of studying pesticide applications to USGA greens from Nemacur to MSMA. Photo by Joel Jackson.

was 16.7 percent at Ironwood Golf Course and 20.4 percent at Gainesville Golf and Country Club. This showed that the nematode had persisted on these golf courses after earlier applications in 1988 and 1989.

Pesticides were commonly used on both courses. Post application infection to date is an average of 33.9 percent at Ironwood and 24.4 percent at Gainesville Golf and Country Club. However, over time, the percentage of infected mole crickets collected varies, often because of weather and mole cricket activity. Data also demonstrate that the nematode is moving into untreated areas of the golf courses.

Thus, use of *S. scapterisci* against pest mole crickets is a sustainable and low-risk IPM tool for turfgrass managers. The nematodes attack large nymphs and adults, reproduce inside their bodies within several days, and then disperse back out into the soil to infect other mole crickets. Our research, and that of Dr. Martin Adjei and Dr. J. Howard Frank, indicates that these nematodes work well over time where insecticides either cannot be used (e.g., pastures) or where insecticides have failed to control pest mole crickets.

Nematode populations persist for years and kill mole crickets in the soil, before they can lay more eggs in the fall and spring. We are continuing tests to evaluate the effect of these nematodes on mole cricket tunneling behavior and to see if soap flushes, which are currently monitoring methods, accurately indicate infection in mole crickets.

Integrated Pest Management of Pest Mole Crickets with Emphasis on the Southeast

J. Howard Frank and J. Pat Parkman

There are at least 70 species of mole crickets (*Orthoptera: Gryllotalpidae*). Some are rare, others are innocuous, and a few are important pests. These soil-dwelling pests damage underground parts of a long list of cultivated plants. Although tillage and flooding are used successfully in some situations to bring these pests to the soil surface and expose them to vertebrate and other predators, chemical pesticides are widely used.

Knowledge of their life history is used to time application of chemical treatments to save money, but is not used as widely as it might be. Classical biological control has been used against



Art Lewis of Lewis Equipment demonstrates a verticutting unit during the South Florida Turf Expo. Photo by Joel Jackson.

immigrant mole crickets in Hawaii, Puerto Rico, and the southern USA.

In Florida, three *Scapteriscus* species from South America cause major damage to pastures and turf and are targets of a classical biological control program. Population levels of two of the pest species have been reduced substantially in Florida by establishment of a tachinid fly (*Ormia depleta*) and a steinernematid nematode (*Steinernema scapterisci*) from South America. The nematode also functions as a biopesticide. Managers of pastures and turf in Florida have thus far derived benefits from these classical biological control agents without understanding their function: use of chemicals is reduced when mole cricket populations are lower due to action of these organisms.

Future enhancement of the action of *O*. *depleta* and of a sphecid wasp (*Larra bicolor*, which also was introduced from South America) probably will demand deliberate planting of nectar sources for adults of these biological control agents, and the advantage will be to managers who adopt such a strategy.

Chemical pesticide use is strongly promoted by a large chemical industry, whereas biopesticidal use has thus far been little promoted and sales have been few. Even managers who do not change their strategy of pesticide use in response to damage by mole crickets, and have no knowledge of the differing life cycles of the three Scapteriscus species or of the presence and action of the classical biological control agents, will derive benefit as these biological control agents (and a predatory beetle which has not yet been released) increase their distribution.

Soils and Water Effect of Fertilizer Rates and Sources on Nitrate Leaching and Turfgrass Quality.

Subhrajit K. Saha, Laurie E. Trenholm, and J. Bryan Unruh

Due to increasing concerns over potential pollution of Florida's water resources from fertilization of home lawns, there are statewide research projects designed to verify different aspects of turfgrass Best Management Practices. The objectives of this study are to evaluate differences in quality and fertilizer leaching between turfgrass and landscape plants in response to different fertilizer formulations.

The experiment is being performed in a climate-controlled greenhouse at the G.C.Horn turf field laboratory at the University of Florida in Gainesville. Floratam St.Augustinegrass is being compared with a mix of ornamentals including canna, nandina, ligustrum and allamanda. Plant material is growing in 80-gallon plastic pots in an Arredondo fine sand. There are three fertilizer treatments (16-4-8 quick-release, 15-0-15 quick-release, 8-4-12 slow-release) applied at 1.0 lb. N/1000 sq. ft. every other month. There are four replications.

Leachate is collected at three intervals following treatment and analyzed for nitrate and phosphate content. Quality ratings are taken weekly and multispectral reflectance readings are taken biweekly. Water is applied to meet the evapotranspiration. Turfgrass tubs are mowed biweekly by hand.

In this preliminary work, turf was more responsive than ornamentals to fertilizers and preliminary data indicate best turfgrass response from quick release 16-4-8 and 15-0-15 treatments. During the establishment period, water use was lower in turf than ornamentals

Fertilization of St. Augustinegrass And **Environmental Implications**

Dara M. Park, John L. Cisar, George H. Snyder and Karen E. Williams

A multi-faceted field-scale study evalu-

ating the effect of turfgrass nitrogen fertilization and irrigation maintenance practices on turfgrass performance and N leaching from St. Augustinegrass lawns was conducted over six bimonthly cycles. Water samples were collected and analyzed for NO3-N and NH4-N. Other data collected included clipping yields and turfgrass visual quality ratings throughout the year.

As expected, excessive N fertilization at approximately double standard recommendations resulted in significantly more N leaching. Conversely, reducing the N rate by half of the recommended rate did not significantly reduce N leaching but did lower turf quality ratings to levels below minimally acceptable values as the experiment progressed for sod grown with lower soil organic matter.

Homeowners should be encouraged to apply the appropriate amount of fertilizer N, since excess N results in adverse environmental impact. Too little N could result in the eventual overuse of fertilizer and pesticides to improve the quality stand of turf and/or result in the replanting of turf sod which also has environmental consequence.

The rate of irrigation played a role in reducing N leaching during several dry season cycles. During rainy weather, reduced scheduled irrigation was not effective in reducing N leaching. Slow-release N sources did not consistently reduce N leaching. This experiment compared readily soluble N from urea versus N from urea encapsulated

with a sulfur/polymer barrier as a means to provide controlled N release. Further research on the influence of other N sources to reduce N leaching is suggested to gage the effectiveness of other products to reduce N leaching.

The level of soil organic matter (SOM) in sod had significant impacts on N leaching. Higher SOM resulted in higher N concentrations in percolate before the initiation of N fertilization and in more N leaching after N fertilizer applications were made. However, higher SOM improved turf quality and clipping growth. Based on this research, N fertilization strategies could be optimized to provide quality turf with reduced potential N leaching by accounting for N contributions from SOM during the first year after planting. The influence of SOM over time needs further study to quantify the extent of N release over several years.

Evaluating Methods of Predicting Irrigation Needs of Warm-season Turfgrasses

Joon H Lee and Laurie E Trenholm

Water is one of the greatest limiting factors influencing turfgrass growth. Due to increased pressure to preserve water resources, there is interest in development of sensor-based technologies to indicate turfgrass irrigation requirements. This study is designed to determine what technologies might reliably and accurately predict

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irrigation scheduling needs of warm-season turfgrass.

Floratam St. Augustinegrass and Sealsle 1 seashore paspalum were established in 19-inch tubs in the Envirotron Turfgrass Research facility in Gainesville in the spring of 2002. Each grass was subjected to repeated dry-down cycles where irrigation was withheld. Data were collected on: a) shoot quality, leaf rolling, leaf firing, turf color; b) spectral reflectance data within 450 to 930nm; c) soil moisture content; d) leaf relative water content (RWC); e) chlorophyll content index. These evaluations were used to determine if irrigation scheduling could be determined.

Results of this study indicated that turf quality was highly correlated with visible range spectral reflectance (P=0.001), reflectance indices (P=0.001), and with soil moisture (P=0.001) throughout the dry-down cycle. As turf quality declined below acceptable levels, these sensorbased technologies were able to predict the need for irrigation scheduling.

Grasses

Evaluation of Ultradwarf Bermudagrass Cultural Management Practices

John L. Cisar and George H. Snyder

Florida leads the USA in numbers of golf courses and, with over 66 million rounds of golf played annually, there is great interest in improved putting surfaces. New ultradwarf bermudagrasses have been developed for better putting performance and are being planted in new and reconstructed greens. We are conducting research to develop information on ultradwarfs from which to base sound cultural management recommendations for golf course superintendents.

Thanks to the great support of the Florida turfgrass industry, we initiated in late September 1999, an ultradwarf cultural management research trial in south Florida at the Ft. Lauderdale Research and Education Center. The United States Golf Association has provided funds for the past two years to continue the research. This project was designed to identify the optimal cultural practices for best performance of three popular ultradwarfs and thus form the basis for management recommendations of these grasses under Florida conditions.

The grasses were selected based upon their use in Florida: Champion, TifEagle, and Floradwarf. The grasses were planted into an existing USGA green soil mix on a site near the Otto Schmeisser Research Green at the University of Florida's Fort Lauderdale Research and Education Center in south Florida.

Cultural management practices evaluated included fertilizer at two N rates (30 and 60 g N/sq. m.) which translated to 6 and 12 lbs. N/1000 sq. ft. and three N:K ratios (1:1, 2:1, and 1:2). In April of 2001, the fertilizer component was changed to 60, 90, and 120 g N/sq. m and the N:K ratios were reduced to 1:1 and 2:1 in order to evaluate a greater range of N rates. This fertilizer regime was continued through 2002.

Other cultural management treatments were light topdressing frequency (weekly vs biweekly) and shallow verticut frequency (3.4 mm setting weekly vs. biweekly). There were four replication of each treatment. The daily mowing height was set at 3.0 mm -3.4 mm (0.13-0.14 inches) during the period. Because of the number treatments (288 plots), the size of the new green was approximately 930 sq. m. (1/4 acre) in area. Evaluations were based upon visual turfgrass quality ratings, visual disease ratings, thatch ratings, turf leaf blade clippings and shoot counts. Significant treatment effects were observed for all parameters.

Influences of Shade on Dwarf-Type Bermudagrasses

Grady L. Miller, Russell T. Nagata, and Jeffry Edenfield

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

This study addresses the dilemma golf course superintendents have when managing putting greens subjected to light stress from excessive tree shade. We evaluated physiological and growth responses of the new ultradwarf bermudagrass cultivars (Champion, FloraDwarf, TifEagle and Reesegrass) when subjected to various levels of shade. We also evaluated potential advantages of slightly raising the mowing height. It was hypothesized that a slight increase in mowing height would result in an exponential increase in carbohydrate synthesis, potentially facilitating a more stressresistant turf. Results indicate that TifEagle and Champion bermudagrasses are capable of sustaining quality better than other dwarf bermudagrass cultivars when grown under reduced-light conditions.

FloraDwarf also responded slightly better to shaded conditions than Tifdwarf. None of the tested grasses performed well under dense shade or long periods of shade.

Weeds

Control of Goosegrass using Foramsulfuron (Revolver) as an alternative to MSMA

Philip Busey

Goosegrass is the most serious weed as reported by South Florida golf course superintendents and sports turf managers. MSMA and diclofop-methyl (e.g., Illoxan) are widely used for postemergence control of goosegrass in bermudagrass turf. Diclofop is usually inadequate for control of mature goosegrass plants. Repeat application of a mixture of MSMA + metribuzin (e.g., Sencor) controls mature goosegrass. MSMA contains arsenic. The Florida Department of Environmental Protection says that excessively high arsenic concentrations can frequently occur in South Florida golf course soils and water, associated with the use of organic arsenical herbicides such as MSMA. Alternative methods of controlling goosegrass are sought.

There were two experiments: at Sunrise Golf Course and Broward County's Brian Piccolo Park ballfield, involving mature stands of goosegrass emerging in a hybrid bermudagrass matrix.

At Sunrise, foramsulfuron in Revolver at rates of 0.4 and 0.6 liquid oz/1000 sq ft was compared with MSMA at 0.9 oz/1000 sq ft., with a second application of both products nine days after initial treatment. During 25 days after treatment, Revolver by itself at 0.6 oz/1000 sq ft caused a peak of 52 percent goosegrass injury (mean of six replications), compared with 42 percent injury from MSMA. There was no injury in either case to bermudagrass. In comparison, the MSMA + Sencor (at 0.33 lb/acre) caused a peak of 93 percent goosegrass injury, and a peak of 52 percent injury to bermudagrass. Sencor was not included as a tank mix with Revolver.

At Brian Piccolo Park, Revolver at 0.6 oz/1000 square feet was compared with MSMA at 1.0 oz/1000 square feet. Both products were mixed in all combinations with Sencor at 1, 2, 3, 4, and 5 ounces by weight/acre. Sencor was also used by itself at the same rates, and with untreated controls there were 16 treatment combinations in three or four replications. During 23 days after treatment, the MSMA mixtures required at least 3 oz/acre Sencor to achieve 80 percent goosegrass control, whereas Revolver achieved 80 percent control with no Sencor. Revolver + Sencor at 2 oz/acre achieved 100 percent goosegrass control, whereas MSMA mixtures required 4 oz/acre Sencor to achieve 100 percent control. There was more bermudagrass injury from Revolver mixtures than MSMA mixtures, at the same rate of Sencor. Revolver was as effective as MSMA in postemergence control of mature goosegrass, and observed injury to bermudagrass in these two experiments was acceptable. More research and pilot testing is needed to understand the use of foramsulfuron in the full range of environmental conditions in Florida golf courses.

Following this research, the foramsulfuron was labeled by Bayer Environmental Science as a new postemergence turfgrass herbicide Revolver, in accord with the approval of the US Environmental Protection Agency. It may be applied to bermudagrass and zoysiagrass on golf courses. A Florida pesticide registration is pending, therefore at the time of this writing, the product cannot be legally applied for golf course maintenance in Florida. This is not to be considered an endorsement or a recommendation to use foramsulfuron or Revolver in golf course turf. Any person who applies pesticides must adhere to the label and all other regulations. There is no data on its effects on tropical signalgrass and some other important weed species.

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AFTERWORDS

AS IT LIES

Golf's Super Hero... It's ESSSS-MAN

By Jim Walker

Faster than a speeding golf cart. More powerful than a frontend loader. Able to leap over the maintenance building in a single bound. Look, up in the sky. It's a flying mole cricket! It's a crop-duster! No, it's Superintendent Man.

Yes, Superintendent man (S-man) - strange visitor from another planet who came to earth with powers and abilities far beyond those



change the course of mighty irrigation systems. Bend PVC pipe in his bare hands, and who, disguised as

of mortal

men. Able to

Alan Weitzel, mild mannered regional manager for a great Metropolitan Parks Department, fights a neverending battle for smooth greens, lush fairways, and level tees.

Investigative reporting indicates Superintendent Man is married, has 2.5 children, owns a used minivan, drives a company pickup and lives in a tract house in the 'burbs. He plays golf, watches sports on TV and on undercover assignments may drop in at the local adult entertainment club for a beer.

Known as S-man to his friends, the list of his super powers is endless:

The artist formerly known as S-man is expected to maintain Augusta National conditions on Dog Patch muni-dollars.

S-man should provide perfect greens without ever applying the necessary cultural practices.

S-man should never delay morning tee times to fertilize. The hack-n'-slash dew sweepers will have none of that.

S-man should never ask the greens committee for new equipment. After all, that stuff is made of iron and should never wear out.

S-man should work seven days a week from daylight till dark,

He should never take a vacation. After all, he is the man of steel and only kryptonite (or is it Milorganite?) can hurt him.

S-man should be everywhere at the same time.

S-man should know the name of everyone who plays on his course, as well as their children and family pets.

S-man should never expect a raise. There's not enough money to give his crew a raise and pay higher and higher prices for supplies,

S-man should not get upset because he hears only complaints and never a compliment about anything and everything on the course.

S-man and all his family members should never be sick. That could take him away from his duties.

S-man should know two weeks in advance that his pump station will be hit by lightning.

S-man should know another S-man is trying to steal his mechanic side-kick and be able to talk him into staying on for less money.

Good thing S-man is a man of steel. He may not always like his job but he will always love the game and do his best.

Superintendent man really does have powers and abilities far beyond those of mortal men.

Letters Nutrition Principles Same for Man or Plant

Editor's Note: While this letter was in response to a Golfdom column, I thought the content worthy of sharing in light of the health issues our members have been facing.

Dear Mr. Jackson,

You wrote recently in *Golfdom* magazine of your concern for the health of the people in this profession. I wholeheartedly agree with your statements regarding our propensity to place our health as secondary to our jobs.

At the age of 28 I sought help for acid reflux disease. I had to

sleep in a chair for two or three hours each night so my food could digest before I could go to bed without problems.

This helped, but the problem worsened. I did not want to be placed on medication. I contacted a friend of the family, who had developed a line of nutritional products and asked for his help.

He asked questions about my diet. He explained that the high amounts of sugar and soft drinks in my diet were detrimental to the natural digestive process. This was causing my problem. How often do we emphasize that we should treat the problem rather than the symptom in turf? Medications from a doctor would have treated the symptom rather than the cause.

After changing my diet and adding some of his all-natural products to aid in my digestion, I totally eliminated my problem in less than a week and have not even had heartburn or reflux in more than a year. The products have also allowed me to lose 50 lbs. I now look and feel the way I should for a man my age.

In this past year I have done much study and realize that our bodies function very much like the plants we grow. Our bodies require a certain number and quantity of vitamins, minerals, and elements just as the plants do. Our problem is that we eat foods grown on nutrient-deficient soils so they don't contain all the nutrients we need.

We concentrate on N, P, and K for our turf, and the agriculture industry even more so. The problem is that our bodies need much more than the big three. What can we do?

To grow good grass on USGA-spec greens, we must regularly fertilize them in order to maintain proper nutrition. We can use granular, foliar, slow- or quick-release materials.

We can also use granular and liquid products for our bodies. The problem is that we do not have any true slow-release food. We literally need to spoon-feed ourselves daily to obtain our needed nutrients lacking in our food sources.

The lining of our intestines serves basically the same purpose as roots and root hairs (they even look similar). The proper nutrients must be provided and the proper pH maintained for this area of the body to take up the nutrients we need. A lot of our physical problems are in fact nutritional deficiencies.

The turf disease triangle that we learned also applies to people. There must be a host (person or plant), causal agent (worm, virus, fungus, insect, nematode), and the proper environment. The host and causal agent almost always exist. It is when the host is deficient and not healthy that the proper environment for the causal agent is created. We can prevent most of our physical problems by proper nutrition.

Why do I share this information? I believe that our industry has people who can solve the problems that we have by using information that is available. I hope that you will help educate them so we can start using some preventive maintenance on ourselves.

Please feel free to contact me with any questions you may have. Thank you,

> Brian Sarvis River Hills Golf & C.C. bsarvis@sccoast.net 843-602-1396

Brian,

Thanks for sharing your insights into diet, nutrition and health. *Editor*

USGA Green Section Southeast Regional Update When it Rains, It Pours, and Golf is Lousy!

Editor's note: Couldn't resist sharing this bit of irony from the USGA Southeast Region. The area gets 35 inches of rain in 90 days after four years of drought and the golfers want to know why playing conditions are lousy, and now some jobs are on the line. Unbelievable!

> By Patrick O'Brien & Chris Hartwiger

After going through one of the most prolonged drought periods in the history of the Southeast Region, Mother Nature has switched modes and excessive rainfall now has caused economic and playability issues at numerous golf facilities.

From 1998 through the summer of 2002, most areas of the Southeast Region have been under water restrictions due to limited rainfall. The period between September 2001 and August 2002 was the second driest recorded over the past 107 years by the National Climatic Data Center and NOAA. However, since the early fall, most areas have now received in excess of 35 inches of rainfall and the drought restrictions in most areas have been removed. The period between September and November 2002 was the 99th wettest over the past 108 years.

Unfortunately, the frequent rains and below-normal temperatures accompanying the cloudy weather with the rain events has caused wet soil conditions and impacted the health of both cool- and warm-season turfgrasses.

Numerous inquiries have been received by the USGA Southeast Region office regarding golf course playing conditions over the past 60 days. Many golfers are perplexed about why their golf courses have turned into swamps, why the putting greens are not as firm, and why the overseeding has failed. Some golfers are even now questioning the abilities of their golf course superintendents due to their dissatisfaction with the presentation of the golf course.

It isn't a surprise that golfers are upset.

Over the past four years, during the drought, course playability was excellent overall at most golf facilities. Superintendents repeatedly informed us of the positives of the prolonged dry weather including the following:

- The game is more fun to play when it is dry. The ball rolls farther and golfers can play more of a variety of shots.
- Maximized revenues no tee times lost due to weather.
- · Less disease pressure.
- Mowing schedule uninterrupted.
- Maintenance more efficient (i.e. no bunker washouts, debris removal, etc.)

Now with the extended wet weather, superintendents are noting the following negative impacts:

- Lost revenue. Days and weeks of tee times cancelled due to rain.
- Maintenance schedule disrupted.
 Crisis jobs more frequent (debris removal, bunker washout repair, etc.)
- Carts restricted to path more often.
- Ideal conditions for weed seed ger mination and spread of weed seed.
- Diseases more common. Other pests such as algae, earthworms, and fire ants more problematic.

As we travel around the Southeast Region, every course has been impacted negatively by many of the following: muddy fairways, poor overseeding results, fairway and putting green disease issues, cart damage to fairways and roughs, and thin turf, and tees with lower density turf.

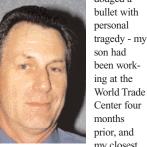
Fairway overseeding ended up being a complete waste of money in many instances and when successful, it was no panacea for these issues. Golfers should be patient and understand that course conditions aren't going to improve much until it dries up and the temperatures warm so the turf can recover.

Beyond Golf

By Mark Jarrell

My apologies in advance to my peers who expect this space to be devoted strictly to golf-course related issues, but I believe most will appreciate some provocative and controversial reflections on our country's future security since 9/11.

The terrorist attacks on our country have shaken us all and changed us forever. Maybe because I dodged a



my closest cousin working at the Pentagon was not on site - I've spent more time than most trying to understand the mentality of people who could commit such acts, and those around the world who cheered. That bastard Mohammad Atta had lived among us - had eaten dinner at The Olive Garden two miles from my house, for God's sake! - and was still filled with such hate for us that he could fly a plane into one of the World Trade Center Towers! Contrast this with my own and most Americans concern and misgivings about the possible

death of Iraqis as we go to war with that country.

Reading an article in American Heritage magazine introduced me to an author who not only has the background to offer valid answers and insights about our dangerous world. He is a brilliant, though controversial, strategic thinker who offers sound advice on U.S military, foreign, and domestic policy. His name is Ralph Peters, and he retired as a lieutenant colonel from the army in 1998. He has served at the Pentagon, the Executive Office of the President, and visited 50 countries from the Middle East to the former Soviet Union to Southeast Asia. He now writes, lectures, and consults. I purchased and highly recommend two of his books - Fighting for the Future - Will America Triumph?, and Beyond Terror - Strategy in a Changing World.

The books are mostly collections of essays, some of which in the first book were published before 9/11 (eerily prophetic and provocative!). I'm guessing (and hoping) that President Bush and his top advisors are very familiar with Col. Peters' work. Any American who wishes to better understand those who would not hesitate to kill us if they had the means, and revolutionary strategies for dealing with the threat they pose, should read these two books. I found I couldn't put them down, and consider them essential reading for all Americans to make better decisions at the polls, at home, and at the workplace.

You'll also feel better about being an American, as Col. Peters is adept at analyzing the strengths and marvels of our society, while acknowledging our weaknesses and offering strategies for succeeding against those who would exploit them to destroy us. Things like the American work ethic, the freedom of information dissemination, women in the workplace, the tolerance and socialization of our various religions - things we accept without realizing how unique they are to the planet and how central they are to our power and success as a society. Let me quote a few passages that I hope will whet your appetite enough to motivate a trip down to your favorite book store:

"While Europe sleepwalks toward a thirty-five hour workweek, we are moving toward the thirty-five hour day. The intense performance of our economy would be unattainable without the torrent of energy introduced by competitive female job candidates. American women revolutionized the workforce and the workplace. Future social and economic historians will probably judge that the entry of women into our workforce was the factor that broke the stranglehold of American trade unions and

Rub of the Grin

Creative Thinker Finds Ring. Think like a raccoon.

That's what Kenneth Gollihue thought after a crafty raccoon dashed off with a golfer's green tote bag containing snacks and a \$1,200 wedding ring at the Westin Innisbrook golf resort.

Raccoons and squirrels have been known to grab unwatched food and bags along the course north of St. Petersburg. So Gollihue, a veteran groundskeeper at the resort, knew he would have to, think like the pesky varmint if he was to find Helen Hutzler's missing ring.

"On the way home, I know it sounds silly, but I was starting to think, 'What would a raccoon do?" said Gollihue, 44, of New Port Richey.

The answer: The raccoon would run about 25 feet into a swamp, unzip the bag, and gobble the airline pretzels and sliced apples. It would then leave every thing else behind in the swamp.

And that's exactly where Gollihue found the half-submerged bag during his lunch break Thursday. The snacks were gone, but the ring was there and was returned to Hutzler, who gave Gollihue \$100 for his efforts.

Source: The State and Local section, Orlando Sentinel February 22, 2003. Reprinted with permission

gave a new lease on life to those domestic industries able to adapt. American women were the Japanese cars of business-labor relations: better, cheaper, dependable, and they defied the rules. Everybody has had to work harder and smarter to survive, but the results have been a spectacular recovery of economic leadership and soaring national wealth."

... continued on page 64

2002 Photo Contest Results

This is part three of presenting the four category winners of the 2002 photo contest.



First Place - "#1 Tee from the Grille Room" by Tom Biggy, Bent Tree C. C., Sarasota



Second Place - "Bridge Crossing" by Jason DiMartino, Audubon C.C., Naples.

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

Second Place - "Bridge Crossing" by Jason DiMartino, Audubon C.C., Naples.

2003 Photo Contest Rules Category 1 - Wildlife on the course: includes any critter on the course that walks flies, swims, slithers or crawls.

Category 2 - Formal Landscaping: includes annuals and ornamental shrubs and trees planted in formal beds on the course or club entrance. Category 3 - Native Areas: includes beds of native plants including trees, shrubs and grasses used in naturalized areas to reduce turf inputs and aquatic vegetation plantings used to create habitat and protect water quality.

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

1. Color prints or slides. Prefer prints. Only one entry per category. There are too many variables affecting publication quality to permit digital entries at this time. 2. Photo must be taken on an FGCSA member's course. Photo must be taken by an FGCSA member or a member of his staff. 3. Attach a label on the back of the print or slide which identifies the category, course and photographer. Do not write directly on the back of the print. Each print shall be attached to an 8.5" x 11" sheet of paper using a loop of masking tape on the back of the print. Slides should be in plastic sleeves for easy access for viewing.

4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the mounted print.5. Judging will be done by a panel of FGCSA members not participating in the contest.

6. Mail entries in a bend-proof package marked PHOTOS DO NOT BEND to Joel Jackson, 6780 Tamarind Circle, Orlando, 32819. Entries postmarked after Aug. 1, 2003 automatically will be entered in the 2004 Photo Contest.

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AFTERWORDS

A is for Arsenic

GREEN SIDE UP



A is for apple, aspirin and arsenic. An apple is a fruit. Aspirin is salicylic acid. Arsenic is a natural element classified as a "heavy metal" in the Periodic Table of Elements found in every chemistry class-

room and textbook in the world.

An apple a day purportedly keeps the doctor away. Too many apples and your digestive track may either be set free or bound up depending on your constitution and metabolism.

Take two aspirin to reduce a fever, ease joint pain and prevent serious damage from a heart attack. Swallow too much aspirin too often and you can thin your blood too much and also eat a hole in your stomach lining.

Take some arsenic atoms and combine them with some carbon, hydrogen and oxygen atoms and make MSMA. Dilute it with water and kill some weeds in turfgrass. Mix it in a cup of tea and serve it to some guests and you can write a comedy play

Joel Jackson, CGCS

called, "Arsenic and Old Lace." Maybe that's how arsenic came to be known as a poison, and forgotten as a naturally occurring element.

Of course it really depends on how much arsenic was put into the cup of tea, but then let's not quibble about details. It seems only Poison Control Centers at hospitals understand that "dose makes the poison." It has been shown time and again that practically any substance or product abused and used in excess can have negative consequences.

It is obvious that arsenic compounds and other pesticides along with many other substances including cleansers, solvents, petroleum products, and even medicines can have negative effects on human beings. It is how these products are used and how people are exposed to them that define the real risk to human health aside from allergic reactions.

The recent studies coming out of South Florida reporting high levels of arsenic in golf course water and soil samples reflect the total

arsenic and do not differentiate or explain where the arsenic comes from. Since arsenic is on the label of MSMA, then a direct link is inferred. But one study also inferred that 492 metric tons of arsenic was applied to Florida golf courses by simply multiplying the number of golf course (1400) times the average size (150 acres) by an average application of 11.7 lbs of MSMA per acre per year.

What is troubling is that the basic assumption that we apply MSMA to the total acreage of a golf course is incorrect, and thus puts the calculations way off the mark. We may be contributing arsenic to the environment, but let's get the numbers right first. We have responded to those miscalculations.

While the arsenic levels in the samples from South Florida are higher than the threshold levels set by state and federal officials. It is not clear from the studies if the arsenic is bio-available to humans or is just a calculated statistic in a laboratory. There is another whole discussion over background arsenic levels exceeding those threshold numbers in non-golf or non-agricultural lands.

The bottom line is that we need to know if our use of a legal, EPA-approved pesticide is potentially causing a problem of human health concern. EPA will weigh in on the issue soon enough as MSMA is currently under review by the agency.

In the meantime do yourself and your golf club a favor and explore your weed-control programs to see if there are any other products you can use to control your weed problems. Consider changing your preemergent herbicide strategies to require less post-emergent control. Do like some clubs and initiate a daily weed hunt where each employee mechanically removes 10 weeds a day. A simple thing like that can add up in savings in the chemical budget and also help the environment.

Even if more data and testing proves the "arsenic and old lace" poison syndrome is incorrect, regulators and politicians may not be able to defend a scientific position, but will have to resort to a political decision to appease the emotional concerns of the public. It happened in the wood-preservative industry. It can happen to the green industry as well.

You can help by calculating how much MSMA you currently use from your pesticide-spraying records and sharing that information with the FGCSA. See your chapter's external vice president for a copy of a confidential survey on MSMA use and send me your information, so researchers and regulators can get a real world handle on the issue.

... continued from page 62

"Faith enables, doctrine inhibits. In the true American grain, we are simply casting off that which has failed us. Faithless Europe meanders, while faithful Islam crumbles. We have gained an almost miraculous middle ground. A society that transcends its religious differences without losing its faith is invincible."

"At present, we are like a police department that ventures out of the station house every four or five years to combat crime for a day. Then, after a bath of rhetoric about no quarter for offenders, we go back inside and shut the door until the criminals again do something so heinous we have to put down our coffee and doughnuts and go back to work."

"Our great strengths are

wealth and raw power. When we fail to bring those strengths to bear, we contribute to our own defeat. For a superpower to think small - which has been our habit across the last decade, at least - is self-defeating folly. Our response to terrorist acts should make the world gasp."

*

"Although tactics may be similar, strategies for dealing with practical versus apocalyptic terrorists can differ widely. Practical terrorists may have legitimate grievances that deserve consideration, although their methods cannot be tolerated. Apocalyptic terrorists, no matter their rhetoric, seek your destruction and must be killed to the last man. The apt metaphor is cancer - you cannot hope for success if you only cut out part of the tumor. For the apocalyptic terrorist, evading your efforts can easily be turned into a public triumph. Our bloodiest successes will create far fewer terrorists and sympathizers than our best-intentioned failures."

"Never listen to those who warn that ferocity on our part reduces us to the level of the terrorist. That is the argument of the campus, not of the battlefield, and it insults America's service members and the American people."

*

"Any society that starves education is a loser. Cultures that do not see inherent value in education are losers. A culture that cannot produce a single world-class university is not going to conquer the world in any sphere. America's universities are triumphant. Once beyond the silly debates (or monologues) in the liberal arts faculties, our knowledge industry has no precedent or peer. Even Europe's most famous universities, on the Rhine or the Seine, are rotting and overcrowded. We attract the best faculty, the best researchers, and the best student minds from the entire world. This is not a trend subject to reversal; rather, it is self-reinforcing."

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"Perhaps truest of all our cliches is that 'ignorance is bliss.' Men and women do not want to know. They may be pleased to learn of the misfortunes of their neighbor confessional television shows have their roots in tribal whispers - but they do not want to know that their way of life, of belief, of organizing, learning, producing, and fighting is a noncompetitive bust. The greatest impact of this information age is that it makes the global masses aware of their inadequacy."

"We are entering a new American century in which we will become still wealthier, culturally more lethal, and increasingly powerful. We will excite hatreds without precedent."

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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.



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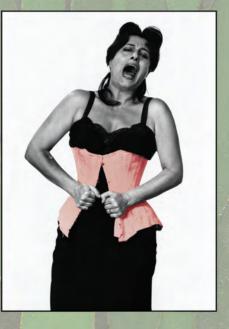
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