



The Florida Green

Winter 1999



#9
Pablo Creek Club
Jacksonville
Photo by Daniel Zelazek.

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*Pablo Creek No. 1
Photo by Joel Jackson*

**WINTER
1999**

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Mike hopes a harrowing personal experience will teach everyone that when you have your health, you have it all.

SPOTLIGHT HIGH HONOR, HIGH ATTENDANCE, HIGH STAKES 6
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About the use of trade names: The use of trade names in this magazine is solely for the purpose of providing specific information and does not imply endorsement of the products named nor discrimination against similar unnamed products. It is the responsibility of the user to determine that product use is consistent with the directions on the label.

The Florida Green

Official Voice of the Florida Golf Course Superintendents Association

Published four times a year:

On the twenty-fifth 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

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The Florida Green is published with the assistance of Janlark Communications, Inc.

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When was the last time you scrutinized your health as closely as the turf we grow for a living? We all know that with proper care and nurturing, turfgrass will withstand a tremendous amount of abuse.

What about the human body? Your body in particular? Allow me to divert from our normal message in this column, and share with you my recent experience. There is a message for everyone. If one of you is reached by it, we are all better off.

I visited my family doctor in the spring of 1998 in an effort to appease my wife. No joking! The first time we went to the doctor and they asked me what was wrong, I pointed to Marcy and told them to ask her. She told them that at nighttime my breathing had become labored, and snoring was presenting a problem for her efforts to sleep.

I had experienced several serious lung infections in the last five years. X-rays revealed nothing serious, and another mild case of bronchitis was suspected. Antibiotics offered no relief to my symptoms. After further tests I was pronounced to have developed asthma.

By midsummer things were deteriorating to the stage, that not only was it impossible for Marcy to sleep at night, some nights I couldn't sleep either. At our insistence, we were referred to a pulmonary specialist. Initially attempting to change inhalers that I had been prescribed for usage at night, he followed a conservative yet methodical attempt to eliminate possible causes for my problem.

Allow me to interject a sidebar. At this stage of my story, it is mid-July, and I am still in denial. I honestly did not believe that there was anything wrong with me. Other people sometimes questioned the wheezing that occurred with each breath. However, the change was so subtle it was almost indiscernible to me. It would not be until mid-August that I

accepted the fact that possibly something was wrong.

Little improvement from the change in inhalers was noted by the pulmonary specialist. The next order of business was a Pulmonary Function Test that measures different parameters in your lung's ability to function properly. Within two days of taking the test, I received a call from the doctor. My performance on one portion of the test was extremely poor, and he suspected a problem with the machine. I was prescribed to take a massive amount of steroids over the weekend and retake that portion of the test on Monday morning. Later that week (it is now the end of August), my doctor announced with great conviction that I did not have asthma. Something was **WRONG!**

Within eight days and after three diagnostic procedures, I was diagnosed with a cancerous growth in my left main bronchus. The shocker was the discovery that the normal procedure for its removal also entailed the removal of the left lung. I was stunned by this pronouncement.

I was fortunate. After much researching, networking and consulting with different physicians, and fighting with our insurance company, I was afforded the opportunity to go to Boston and have surgery performed by a pioneer in airway reconstruction. My lung was saved, and in the words of my pulmonary specialist after repeating the Pulmonary Function Test and office visit, I am a new man. It was truly a humbling experience. Now the moral of the story.

Don't take your health for granted. As you can see from my experience, you can not afford to. Go to the doctor and have a physical. Start an exercise program. Eat healthily. Whatever you decide, just remember the next time your turf is ailing, take time to reflect about your own health. Utilize the same thought processes that you employ to diagnose your turf's problem and compare them with how you have been feeling lately. Finally, take it from someone who now appreciates the adage, "When you have your health, you have everything!"

When You Have Your Health, You Have It All

PRESIDENT'S MESSAGE



Michael Perham,
CGCS
President
FGCSA

PREVENT

SUMMER PROBLEMS CAUSED BY WATER REPELLENCY!

UNTREATED

Summer stress conditions can prompt a rapid reduction in turf quality in tees, greens and fairways. By mid-summer, effects of extensive wilt, Localized Dry Spot (LDS) and turf decline are evident on this untreated tee (ladies tee box). Soil cores from symptomatic areas (inset) were powder dry, even after irrigation.



TREATED

Monthly applications of Primer 604 (started in late spring) on the men's tee box (of the same hole), showed superior turf quality. Even under conditions of severe summer stress, no afternoon wilt or LDS was observed. Soil cores from treated tee (inset) were uniformly moist, indicating improved penetration, infiltration and distribution of applied water (rainfall or irrigation).



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Dan Jones, CGCS - Career and Service

- 1965-70. Began superintendent's career at the Fountain Valley Golf Club in St. Croix, Virgin Islands.
- 1970-75. Built two courses at Cerromar Beach Hotel in Puerto Rico. Superintendent over four courses.
- 1975-80. Superintendent of 36 holes at Turnberry Isles GC in South Florida.
- 1978. Recipient of GCSAA's Leo Feser Award.
- 1980-98. Superintendent Banyan Golf Club, West Palm Beach.
- 1981-82. President of the Florida Turfgrass Association.
- 1976-80. Became editor/publisher of *The South Florida Green* Magazine for the South Florida GCSA.
- 1980-89. Continued as editor/publisher of *The Florida Green* magazine, when *The South Florida Green* changed its name and became the official voice of the newly formed statewide Florida GCSA.
- 1987. Recipient of the Florida Turfgrass Association's Wreath of Grass Award.
- 1987. Recipient of the Florida Golf Course Superintendents Association's Distinguished Service Award.
- Recipient of numerous GCSAA Newsletter Editor awards during his tenure with *The Florida Green*.
- April 1998. Retired from Banyan Golf Club. Now serving as East Coast Sales Manager for Toro Liquid Ag, Inc.

Service With Distinction

Florida's Dan Jones, To Receive GCSAA Distinguished Service Award

The Golf Course Superintendents Association of America has selected Dan Jones, CGCS to receive the 1999 Distinguished Service Award. The award will be presented to Jones during the opening ceremonies of GCSAA's 70th International Conference and Show to be held in Orlando Feb. 8-14.

He is the first Florida superintendent to receive the award. The late Tom Mascaro, agronomist and inventor of many turfgrass maintenance devices, received the Distinguished Service Award in 1976.

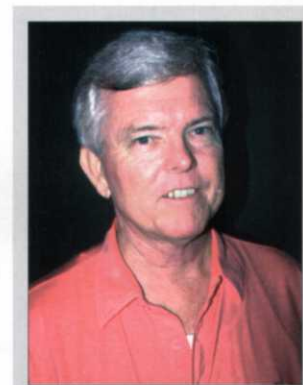
Jones's contribution to his profession spans more than 33 years of dedicated, professional service. Throughout his entire career he has been an innovator and experimenter of management practices and products. He has been a champion of the superintendent's professional image long before it became a national objective.

Dan was instrumental in getting the white amur grass carp introduced into Florida. Back in 1976-78, Dan was extolling the virtues of this bio-control measure to reduce the use of chemicals in Florida's waterways. Again he was way ahead of the national environmental movement.

Dan has been actively

involved in testing and evaluating turfgrasses and turf management products on his own golf course and then sharing the results by networking and articles in the *Florida Green*.

When golfers were bent on bringing bentgrass greens to Florida in the late 1980s and early 90s, Dan partnered with Dr. Milt Engelke of Texas A&M to evaluate of heat-tolerant bentgrass selections on his course. He has tried, used, tested and evaluated every



Dan Jones, CGCS

new product he felt might have merit and shared his successes and/or failures with his peers to help them find better ways to manage turf.

But perhaps one of Dan's greatest legacies is the growth and development of the *Florida Green* magazine into a unique trade publication.

For 13 years Dan and his wife, Irene, gathered information, cut, pasted, and assembled each issue in their own home, taking it from an eight-page, black-and-white newsletter to an

88-96 page, four-color magazine. They shepherded each issue to completion, cajoling and inspiring superintendents to write articles to make it a publication by and for superintendents.

One of the unique features of the magazine is that it did not have an ad sales department. As the magazine grew in stature and prestige, advertisers sought to be included in the most widely read golf course management publication in the state.

Setting standards for quality in photography, Dan and Irene nurtured the publication that now reaches across the nation to golf course superintendents, researchers, educators and professionals in all the allied associations and businesses on the golf industry.

Because of the high quality of the magazine, it also became a public relations tool for superintendents to proudly display in pro shops and locker rooms. It has become a vehicle for educating golfers as well as superintendents about turf management and the value of professional superintendents.

Dan's leadership and modeling of the prototype behaviors of a true professional in his field has been a shining example for three decades of superintendents.

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“...His work with the *Florida Green* magazine created the foundation for what has become the premier magazine of its kind. The *Florida Green* proved that an interesting and high quality “newsletter” could be used as an extremely effective vehicle for educating superintendents and elevating our profession. Dan has been a progressive leader and innovator. His ideas have helped make the Florida superintendents one of the most respected groups in the country...”

*Don Hearn, CGCS
GCSAA Past President
1987.*

“...Dan is truly a person of values, integrity and solid principles within the greenkeeping world. If our association has ever had a person that projects an image of what our profession is, Dan has portrayed that on a daily basis with dignity and a touch of class. He has worked tireless hours for his association’s benefit. I have known Dan for many years, he has always helped many of us during our years in office. I would be remiss to say that he has helped so many golf course superintendents to get into the business, to become active members of GCSAA and their own local chapter, that we all owe him this award and more.”

*Melvin B. Lucas, Jr,
CGCS, GCSAA Past
President, 1980.*

profession and his unwavering dedication to the art and science of turf management, the Florida GCSA nominated and now congratulates Daniel Jones, CGCS for receiving the GCSAA’s 1999 Distinguished Service Award.

FTGA CONFERENCE & SHOW

**Attendance Up,
Superintendent
Participation High**

The 1998 Florida Turfgrass Association Conference and Show, “Turf Web ’98” was a success in a many ways. The overall attendance doubled from the 1997 show, which pleased the exhibitors. There were more opportunities for superintendent-specific education and CEUs. More superintendents got involved. The FTGA named Tim Hiers, CGCS as the 1998 Wreath of Grass Award Winner.

While a lot more people in the turf industry could have shown up at the conference and trade show, exhibitors were pleased with the improvement over the ‘97 show. They recognized the hard work by the FTGA to make the ‘98 show a success.

In addition to traditional education sessions on insects, weeds and disease, there were plenty of opportunities for superintendents to get some inside information. The FGCSA coordinated three half-day GCSAA Etonic Seminars for those seeking certification credits. Those topics included Personnel Performance Management, Communications, and

**FGCSA Presenters at FTGA
Conference & Show**



Superintendents Matt Taylor and Rick Tatum and USGA’s John Foy at the ultradwarf forum.



Fred Klauk, left, and Tom Alex discussed



Darren Davis made two presentations.



Cary Lewis, CGCS, left, Prentis Knotts, CGCS, and Steve Pearson, CGCS, talked about managing people and flamingos.

Managing Hispanic Work Forces. The FGCSA also coordinated a workshop on poisonous snakes and organized two Innovative superintendent concurrent sessions and a forum on ultradwarf grasses.

In the forum, superintendents Rick Tatum and Matt Taylor teamed with USGA Green Section Florida Region Director John Foy to discuss the

characteristics and management practices observed in the new ultradwarf grasses for putting surfaces. That forum drew a packed house, and gave attendees a glimpse into the future.


In the concurrent sessions, Fred Klauk and Tom Alex took the audience through the paces of preparing golf courses for major professional golf events. In the second



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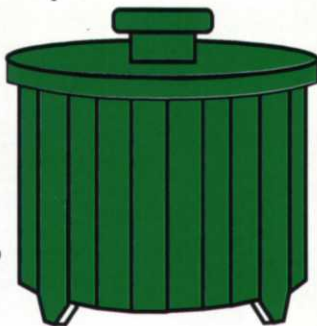
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Etonic Speakers at FTGA Conference



Former golf course superintendent *Gary Sweda* told his audience to be managers, not just “doers.”



Jennifer Thomas gave tips on communicating with Hispanics



Dr. Pat Schwab discussed “noise” in the communication channels.

session, Cary Lewis, CGCS and Prentis Knotts, CGCS discussed tips on how they organize, train and evaluate

employees for performance on the job. Steve Pearson, CGCS gave the audience a change of pace with a slide

presentation of the challenges of establishing a population of flamingos on his golf course.

Meanwhile, FGCSA Vice President Darren Davis was making presentations in FTGA Workshops and

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A Company You Can Grow With



Partnering for success, the FTGA and FGCSA shared booth space to meet and greet old friends and prospective members. Pictured from left, Chuck Garrett, Don Benham, David Bailey, Marie Roberts and Paul Illgen. Photo by Joel Jackson.

concurrent sessions. Davis teamed up with Matt Taylor in a workshop on Modern Golf Course Turfgrass Management Facilities. Davis partnered with Steve Beeman on "Where Turf Meets the Wetlands."

The commitment to

cooperation between the FGCSA and FTGA was never more apparent than the long-overdue pairing of the associations' host booths on the trade show floor. FGCSA Association Manager Marie Roberts and Director of Communica-

tions Joel Jackson worked hand-in-hand with newly appointed FTGA Director of Public Relations Don Benham to answer questions and hand out literature.

And finally at the

Banquet and Awards event, Matt Taylor gave the introduction and career highlights of Tim Hiers, CGCS who was presented the FTGA Wreath of Grass by David Barnes president of the FTGA. Tim has been



FTGA President Dave Barnes, left, presents Tim Hiers, superintendent at Collier's Reserve, with the FTGA's highest honor, the Wreath of Grass Award. Matt Taylor, right, introduced Hiers and presented the highlights of his career. Photo by Joel Jackson

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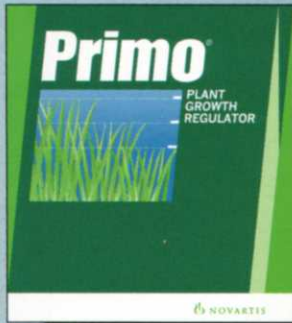
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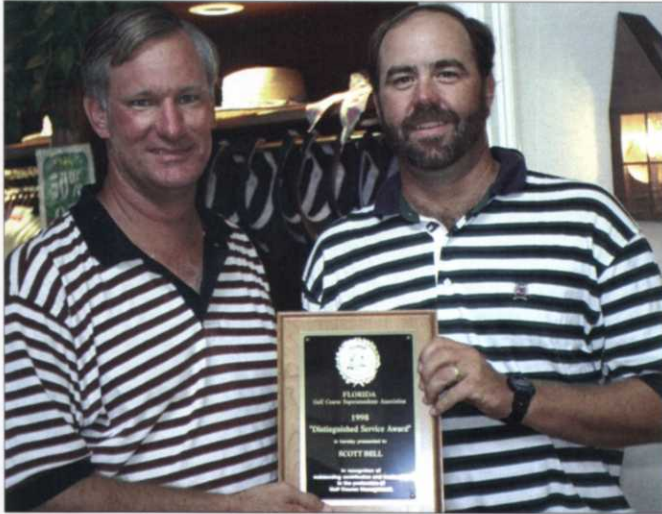
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FGCSA President Mike Perham, CGCS presents Scott Bell with the 1998 Distinguished Service Award. Photo by Joel Jackson.

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TREASURE COAST PRO/SUPT.

Bell Receives Fla. GCSA Distinguished Service Award

Following in a long list of FGCSA past presidents who remain active after their formal board service is over, Scott Bell's selection for the FGCSA Distinguished Service Award was announced at the FGCSA Annual Meeting at the Bay Hill Club in Orlando in August.

FGCSA President Mike Perham, CGCS presented Bell with his award at the Treasure Coast Chapter's pro/superintendent event at the Indian River Country Club in September.

In his acceptance remarks, Bell thanked his fellow Treasure Coast superintendents for their friendship, help and support over the

years. He especially thanked those members who founded and guided the Treasure Coast Chapter for making it the kind of association that one was proud to be part of. He said he was humbled and proud to join the ranks of previous DSA winners.

The Distinguished Service Award was traditionally presented at the Crowfoot Open Banquet in August, but the FGCSA Board recognized that it meant more to the recipients and the nominators to receive the award in front of their local chapter members, so the DSA and Presidents Award presentations have been shifted to local chapter meetings.

Bell, who was the president of the FGCSA in 1994-95 has continued to serve the members by writing many articles for the *Florida Green* and in fact his interest and participation led to his being named assistant editor to replace Mark Jarrell who stepped down because of time commitments to the Florida Turfgrass Association.

Bell is now writing topical editorials, reviewing editorial plans and proofreading articles for each issue. Asked to take a more active role to learn the mechanics of putting the magazine together, Bell unselfishly agreed to learn more about the magazine production in case he must take over for the editor. He will be given specific assignments each issue and may become the coordinator for a complete section to get a feel for story acquisition and the production process.

Bell has been the superintendent at the Bent Pine Golf Club in Vero Beach since 1986. He is originally from Ohio but attended high school in Fort Lauderdale. He graduated from Colorado State University in 1981 with a B.S. degree in Landscape Horticulture and credits CSU professor Dr. Jack Butler with getting him to switch from forestry to the fledgling turf program.

Bell's career brought him from an assistant

superintendent's job at the Pinery Club in Denver to the fun and sun capital of Ft. Lauderdale where he cut his teeth on Florida turf management as an assistant at Eagle Trace under the watchful eye of TPC legend Fred Klauk. Bell moved up to his first superintendent position at the TPC Monte Carlo golf club in 1984, and two years later he moved on to Bent Pine.

Bell is a devoted family man and spends quality time with his wife Debbie and his children Jennifer (14), Sara (12), Scott (10) and Allison (5). His hobbies include golf, waverunner riding, home improvement projects, travel and snow skiing.

In addition to his Treasure Coast, FGCSA and GCSAA service, Bell has been involved with the Indian River County School Board - Gifted Student Task Force, and he helped supervise improvements and construction of a community soccer field complex.



FGCSA President Mike Perham, CGCS presents Jim Callaghan with his 1998 Presidents Award. Photo by Joel Jackson.

TREASURE COAST PRO/SUPT.

James Callaghan Presented FGCSA Presidents Award

Jim Callaghan, winner of the FGCSA President's Award this year, was presented his award at the Treasure Coast Chapter's Pro/Superintendent event in September.

Jim came to Riomar Country Club in 1977 at the suggestion of Jim Moncrief, director of the USGA Green Section's Southeast Region. Jim worked under then superintendent Herman Morris for six months before Morris retired and Jim was promoted to golf course superintendent. Twenty-one years later, Jim is still going strong at Riomar.

Riomar is a unique, old-style Florida golf course located along the coast in Vero Beach with almost 2,000 feet of ocean frontage. The original nine holes were built in 1919 on virgin sand dunes and was designed by architect Harold Strong. The course was perhaps the first golf course built on speculation to attract real estate buyers to the Riomar area. This was a new concept at the time but one that we all are familiar with today. The second nine was built in 1962 and was designed by Ernest Smith of Tequesta.

During Jim's tenure, changes have been made to the golf course under the guidance of renowned golf course architect Joe Lee. As Lee stated, "We have put a new dress on the 'old lady'." Joe has also commented on Callaghan's ability "to grow grass on concrete."

Over the years Jim has

been busy preparing to deliver Riomar into the next millennium. A new, state-of-the-art irrigation system is being installed this summer and next summer will bring extensive regrassing of greens, tees and fairways. Jim is currently

researching the different turfgrass variety options available to the club.

In 1999 Jim was given a proclamation by the City of Vero Beach "In recognition of outstanding service to the community and for continuing efforts to

beautify and enhance our city."

Jim was one of the founding members of the Treasure Coast GCSA and served through all chairs of office including a term as president in 1982-83. Jim also served as the chapter



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newsletter editor of The Treasure Coast Tide from 1980-88.

Throughout his career Jim has been available to help his colleagues. His advice to other superintendents, and his personal credo as evidenced by his tenure at Riomar is, "to develop good rapport with your members, be available to answer questions and be the source of information about course conditioning. Get to know your members and understand their views."

Jim is originally from Freeport, Long Island in New York. He graduated from SUNY at Farmingdale in 1972 with a major in turfgrass management. While at Farmingdale, Jim

played on the golf team and their home course was Bethpage Black, the site of the 2002 U. S. Open.

"Bethpage Black was awesome and made me realize the shortcomings on my golf game," Callaghan recalls. Jim decided that spending more time on his studies should take precedence and it paid off.

He received a scholarship from the Long Island GCSA, two scholarships from Georgia and three scholarships from the GCSAA. He transferred to the University of Georgia and received a B.S. in agriculture in 1974.

Jim reflected that much of his success can be attributed to several

mentors including the late Sid Brown, superintendent of St. George's G & CC in Stony Brook, N.Y., and George Kozelnicky, professor of plant pathology emeritus at the University of Georgia and a GCSAA Distinguished Service Award winner.

He credits Riomar's hard-working golf course maintenance staff for sticking it out with him through thick and thin. But most of all, he thanks his family for putting up with all the weird hours.

Jim and his wife Joanne, a Florida native, live in Vero Beach. They have two children, son Justin, 19, and daughter Jocelyn, 12.

BILL LANTHIER, CGCS
Golf Ventures, Inc.

SOUTH FLORIDA GCSA EVENT

\$106,000 For Missing and Exploited Children

On Friday October 2, 1998, Colony West hosted the South Florida Golf Course Superintendents Association golf tournament to benefit the Florida Branch of the National Center for Missing and Exploited Children.

This was the 14th annual SFGCSA golf tournament that has continued to provide support for abused or missing children and their families throughout Dade, Broward, Martin and Palm Beach counties.

The tournament was founded by David Lottes and Bill Entwistle Sr. as a way of

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Joining Entwistle on the 1998 tournament committee were, from left, Bob Klitz, CGCS; Bryan Singleton, Bill McKee and tournament host Dale Kuehner. Photo by Mike Bailey.

channeling the golf course superintendents' fund-raising abilities into a local community charity. The National Center was formerly known as the Adam Walsh Center, which was formed in Hollywood when Adam Walsh was abducted and killed in the early 1980s

Lottes and Entwistle have stepped down from this event that they founded, and turned it over to the very capable hands of Bill's son, Billy Jr., the golf course superintendent at Flamingo Lakes, in Pembroke Pines. He has become the driving force for this event during the past eight years. The joke among former tournament board members is that the only way to escape Billy and this golf tournament is to move away like Mark Richard CGCS, and Ron Wright CGCS.

Each June, former tournament board members receive that fateful phone call from Billy, "Yo, Bob, we need to get going on this golf tournament!" We all try to hide from him, but his persistence pays off. We gather for our first meeting, and the ball starts rolling again.

Many of our Eagle (\$250) and Birdie (\$100) Sponsors have supported this event for all 14 years. These sponsors are so enthusiastic about supporting this event that their checks arrive only several days after we mail out our preliminary tournament information. This type of cooperation from our sponsors, and the sincere care and concern that they express for this cause, are key components for the outstanding success that occurs with this event each year.

On Oct. 2, Entwistle presented Nancy McBride, the Center's director, with a check for \$13,000. Every year our fund-raising goal increases, every year our sponsors respond.

More than \$106,000 in 14 years! I don't believe David Lottes and Bill Entwistle Sr. ever dreamed about this type of success, or that this event

would continue for so long.

This year Colony West provided an excellent site for an event of such complex planning and last-minute adjustments. Dale Kuehner, CGCS and his staff again provided outstanding course conditions after another tough September of growing grass under water.

South Florida had just sloshed through 22 inches of rain prior to this event and, after reviewing course



Superintendent Bill Entwistle, Jr., has assumed the role of permanent chairman of the South Florida GCSA's Missing and Exploited Children Tournament. Photo by Joel Jackson.

conditions, Dale's course appeared unaffected from the challenging grass-growing environment.

The intricacies of hosting this event — including grill placement for cooking 400 hot dogs, installing 45 tee and green sponsor signs, 144 very critical players, and an overbearing tournament director (Billy) — can be a challenging experience for most superintendents. Dale and his staff have done an excellent job in making this event such a success

The 1998 SFGCSA Tournament Committee included Bill Entwistle Jr., Dale Kuehner CGCS, Bob Klitz CGCS, Bill McKee, and Bryan Singleton. All of the SFGCSA Board members, would like to thank the tournament participants and our volunteers for making this tournament a consistent success. See you all next year

Volunteers: Angela McCommon; Erik Thor, Rayside Truck and Trailer; Tom McCulley; and Richard Levy. Special thanks to: Bill Rittberger, Rayside Truck and Trailer for the Hot Dog (400 Hot Dogs, and then we go eat lunch!) Eagle One Golf Products for donating all the sponsor signs.

BOB KLITZ, CGCS
General Manager
Orangebrook GC

FGCSA TEAM TOURNAMENT

Hurricane Georges Wipes Out Majority of Tourney Field

Hurricane Georges threw a kink in the plans to hold the Third Annual FGCSA Chapter Team Championship at Southern Dunes GC in

Results

1st Low Gross (59) Bob Burns, Ramon Perez, Chris Schibt, and Paul Blockens.

1st Low Net (61) Paul Thompson, Mark Owen, Mike Tchebanoff, and Brian Moldenhauer.

Haines City in September.

With the event rescheduled for Oct. 17, only five chapters were able to field teams as many courses began their overseeding preparations. A cloudy, blustery day greeted the field of diehard golfers, but the weather held off and the event is in the record books.

For the record, the West Coast Team, led by low gross winner Jim Torba of the University of South Florida GC, edged the Treasure Coast team by one shot.

Joining Torba on the West Coast team were Cary Lewis, CGCS, Renaissance Vinoy Resort; Mike Wisher, Bloomingdale GC; and Duane Van Etten, Lansbrook GC.

Torba's score of par 72 earned him a spot on FGCSA's No.1 Team along with Mark Hopkins, winner of the Poa Annua Classic in May and Chris Cartin who won the Crowfoot Open in August. The fourth spot on the team went to Buck Buckner who had the lowest average score in 2 out of 3 of the qualifying events. The team will vie for national honors during the GCSAA Golf Championship to be held in February.

Special thanks to host superintendent Bayne Calliavet and the pro shop and food and beverage staffs for another great event on a great golf course. Thanks also to Tom Benefield of



The West Coast Chapter Team, from left: Cary Lewis, Duane Van Etten, Jim Torba (low gross) and Mike Wisher.

Eco Soil Systems for sponsoring the beverages on the course and after golf.

Mark your calendars now for the last Saturday next September and I hope

to see more chapters send teams next year. Hopefully we won't have to dodge another hurricane!

JOE ONDO, CGCS



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Pablo Creek Club... Where Club is spelled G-O-L-F!

By JOEL JACKSON, CGCS

It has to be motivating and fun for a superintendent to take a position with a club that is first and foremost dedicated to the game of golf. Pablo Creek is just such a club, and Glen Klauk is the superintendent who gets to enjoy helping to make it a reality.

At the end of a winding, crushed-coquina road just minutes away from the metal and glass business centers of Jack-

No. 5
Par 3, 206 yards
Photo by Daniel Zelazek

North Florida Chapter

History: Serving the northeast Florida area or "First Coast" region, the North Florida Chapter began in 1961 as the Georgia-Florida Turf Grass Association. In 1967 the name was changed to the Florida-Georgia Turf Grass Association. In 1977 the chapter assumed its current North Florida GCSA Chapter status. Founding members were Buddy Clark, Baummy Baumgartner, Bob Willis, Crash Hall, Lou Chaff, Ed Dyer, Ed Matson, Amos Deathridge, Tom Svigel and Ron Hill.

Activities: Besides holding traditional monthly meetings, the chapter hosts two annual events: the Mike Richards Memorial Golf Tournament, which funds turf student scholarships; and the North Florida Transition Tournament, which is a weekend-long event that marks the change of officers and is a getaway for members and their families.

Mission: The North Florida Chapter supports the 4-H Club, The Ag Council, and the Jacksonville Area Golf Association. In 1998 the NFGCSA participated in the mayor's city beautification plan by donating 1,000 crepe myrtles to the community.

Current officers: president: Steve LaFrance, World Golf Village; vice president: Clayton Estes, San Jose CC; secretary/treasurer: Ed Neumann, Keystone CC ; external vice president: David Amirault, The Deerwood Club

Total 1997-98 membership: 126

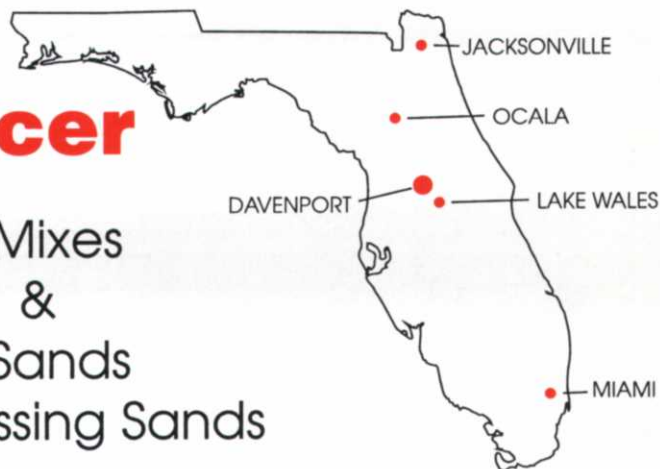
sonville, the Pablo Creek Club is nestled in a timberland wilderness along the banks of a tidal marsh southeast of downtown. The 18-hole, Tom Fazio-designed course winds through hardwood and pine forests and along the bluffs overlooking the marsh.

The only buildings on the site are the clubhouse and the maintenance building, and after two years of existence, the clubhouse just opened. No tennis courts. No swimming pool. No elaborate dinner service is planned here. It's breakfast, lunch and golf. Not necessarily in that order. Breakfast is on weekends only. This place is built to play golf!

Designed as a members' course, the greens and tees are located near each other to facilitate walking and using caddies. Fully 50 percent of the players I witnessed on my recent trip to Pablo Creek were walking. It was a sight reserved these days mainly for small municipal courses. It was like a picture

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Superintendent Garth Bolin of the Chi Chi Rodriguez Golf Club-Home of the Chi Chi Rodriguez Youth Foundation in Clearwater, Florida.

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From this back tee location on the 8th hole, it's a 226-yard carry to the green. Photo by Daniel Zelazek.

Shooting par is a very good score and birdies are hard to come by.

The course isn't tricked up. If you make a double bogey, it's because you didn't hit the ball.

from an old golf book with foursomes walking down the fairways with their caddies. A rare sight indeed, but inspirational and indicative of the “golf only” atmosphere that permeates Pablo Creek.

The club encourages its members to bring family and guests to use the course and about half of the 14,000 rounds last year was guest play. Superintendent Glen Klauk, who sports a six handicap, says, “Shooting par is a very good score and birdies are hard to come by. The course isn't tricked up. If you make a double bogey, it's because you didn't hit the ball.” Klauk's own game has been on hold the last two years as he dedicated himself to growing in the new course.

Growing in a new course was one of the reasons Klauk made the move to

Jacksonville after a long, successful career in Palm Beach County.

“I had lived and worked exclusively in Palm Beach County since I was in the first grade,” said Klauk. “I had 18 good years at Delray Dunes, my last position, but my mom and dad moved to St. Augustine and my brother Fred is the superintendent at the Tournament Players Club in Ponte Vedra Beach. It was time for me to make a change.

“Fred told me about this new project starting up so I came up to take a look. I came out here to the site in 1996 when just a few acres had been cleared. It was just so different from what I had been doing that I knew I wanted to put in my bid for the job.

“We hit the decks running. The project started in March and the last grass was

The number-one, day-to-day challenge is preparing the course as good as it can be for that particular day.

Glen Klauk, CGCS

Originally from: Hindsdale, Ill. Grew up in Palm Beach County from first grade.

Education: 1975 - B.S. in agriculture with a major in ornamental horticulture from the University of Florida.

Employment history: 1996 to present, superintendent, Pablo Creek, Jacksonville; 1978 - 1996, superintendent, Delray Dunes G & CC, Boynton Beach; 1976 - 1978, assistant superintendent, Coral Ridge CC, Ft. Lauderdale; 1975, spray tech, Frenchman's Creek, North Palm Beach; student internships, Lost Tree GC, North Palm Beach.

Professional affiliations/Honors: Member of GCSAA, FTGA and North Florida GCSA. Service: Currently a director of the North Florida GCSA. 1985-86, past president of the Palm Beach GCSA. Palm Beach GCSA Founders Member Award winner. Palm Beach Distinguished Service Award 1996. Poa Annuu Golf Classic Champion 1987. FTGA Golf Champion 1986. Certified Golf Course Superintendent 1985-1995.

People who have influenced your life and career: Too numerous to mention. I owe a debt of gratitude to my many fellow superintendents, supplier reps, turf instructors and turf researchers. All of them have influenced my approach to turf maintenance and golf in general.

How did you get into the business: Golf has always been a large part of my life, and I followed the example of my older brother, Fred (TPC), into the business. During the 1970s golf course maintenance was making a transition from "farmer learning golf" to "golfer learning farming."

Philosophy/Advice: Every day do the best you can. Then head home and try not to bring work home with you. Every year try to make the course look and play better for the same comparative month. Problems on the course generally are in conflict with Mother Nature. Change the course drainage, shade, etc. to work with nature's forces.

Memorable moments: Hole-in-one at the 17th hole at Delray Dunes while playing with some superintendent buddies. Skiing the mountains of Colorado and Utah. Driving a NASCAR race car at Orlando Speedway. The births of my two children, Lisa(16) and Kevin(11)

Hobbies and interests: My family, golf, snow skiing, tennis, and NASCAR racing.



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planted by July. It was intense, but well done. Fazio and his team do a great job of designing and constructing his courses. Every fairway out here has a minimum of a 2 percent grade. We're fairly sandy so we drain well, but when we get those big thunder boomers the water is moving somewhere.

"We retain the storm water runoff on site. We have a network of seven lakes and ponds that are all connected to a large retention lake that then feeds our irrigation lake. Even holes like No. 17 and No. 18 that overlook Pablo Creek are built to capture the runoff into sumps which pump the excess back into our irrigation lake. If we ever get severely inundated, flood waters stage through the lake system and then any overflow

filters and percolates through bleeder swales."

Building a course in a woodland habitat offers a lot of opportunities for managing turf in harmony with nature and Klauk did his homework early in the project.

"During the development of the greens sites I would ride around in the mornings around 9:00 a.m. and take photos of the shade patterns. Then in the afternoon around 3:00 p.m. I'd do the same thing. If I found morning and afternoon shade impacting the same greens, I'd take my findings to the designer and we'd discuss making adjustments to the site. We are continually evaluating shade problems as the course matures and making necessary

changes to keep the turf healthy."

Klauk listed the predominant trees on the course.

"In the hardwoods we have what I call 'the big six.' There's live oak, laurel oak, water oak, blackjack oak, hickory and magnolia. We also have plenty of slash pines and cherry laurels.

"Because of the woodland habitat, the irrigation design is not wall to wall. Steve Masiak, who works with the Fazio Group, calls it the 'soft look' where the irrigated and manicured fairways blend into the less irrigated roughs and then into the unirrigated natural areas. Native trees often don't adapt well to increased irrigation needed on the turf and so this type of coverage allows for them to coexist.



Morning shadows highlight the 424-yard, 11th hole. Photo by Daniel Zelazek.



Dawn breaks on the third hole, all 516 yards of it. Photo by Daniel Zelazek.

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Pablo Creek Club

Location: Jacksonville, Florida.

Ownership: Member Owned.

Playing policy: Private Membership and Guests.

18 holes: 7,026 yards. Par 72. Course/Slope Ratings: Championship Tees - 73.9/137; Long Tees - 72.3/133; Founders Tees - 70.4/129; Challenger Tees - 70.9/129.

Designer: Fazio Golf Course Designers, Inc.; Tom Marzolf, Blake Bickford, Steve Masiak.

Builder: Landscapes Unlimited.

Opened: 1996

Management: Jay Skelton, club president; Ritchie Bryant, general manager/director of golf; Glen Klauk, golf course superintendent.

Acreage under management: 350 acres. Turf acreage: 120 acres.

Greens: 3 Acres; average size: 6,500 sq. ft.; turf type: Tifdwarf; HOC (inches): .115-.125, spring; .130 - .160, summer; .150 - .190, fall; .135 - .160, winter. Overseeding: Poa trivialis @ 9 lbs./1000 sq. ft. & Penn Eagle 1.5 lbs./1000 sq. ft.; green speed goals: 9.0 - 10.5.

Tees: 4.5 acres; turf type: Tifway 419; HOC: .325, spring; .450, summer; .500, fall; .400, winter. Overseeding: perennial ryegrass @ 15-20 lbs./sq. ft.

Fairways: 30 acres. HOC: .375, spring; .500, summer; .500, fall; .450, winter. Overseeding: perennial ryegrass @ 350 lbs./acre.

Roughs: 60 acres. turf Type: Tifway 419; HOC: 1.5, spring; 2.00, fall. Overseeding: none.

Waterways/Lakes/Ponds: 18 acres. Water quality is enhanced by the use of aquatic plantings. All lakes stocked with largemouth bass and bream. All storm water filters through the entire seven-lake system and is used as an irrigation source.

Irrigation: Source: surface water (irrigation lake) with ground water recharge. Equipment: Syncroflo VFD 1000 gpm pump station. Toro OSMAC controllers (20). Toro 650, 690, 780 and 785 sprinklers.

Staff: Total including Supt., 15. Doug Sani, assistant superintendent; Chad Wells and Matt Seibel, second assistants; David Green, equipment technician; David Moore, assistant equipment technician.

Special or unusual conditions: All upland areas designated gopher tortoise habitats. No pesticides with an LD-50 of lower than 200 are allowed. Northeast Florida climate — damp; long, cool springs favor disease conditions. Raking out deer tracks in the bunkers after they forage for the acorns that fall from the trees.

Projects: Clearing of understory plant material to remove noxious, invasive plants; improve air circulation around greens and enhance views of Pablo Creek.

Maintenance equipment: Greens: Jacobsen 18-inch walkers. Tees: Jacobsen Greens King. Fairways: Jacobsen 3810, 5-gang mowers. Roughs: Toro Articulator Rotary Mower (Does a great job of mulching up leaves when they drop, and we have lots of trees!)

IPM programs: Weed Control: hand pulling or individual spot spraying of noxious weeds along wood lines and roughs. Time removal before they go to seed. Use of pre-emergent herbicides to reduce/eliminate need for follow up post-emergent spray programs. Fertility: use slow release fertilizers and fertigation to spoon-feed the turf according to its needs. Insect control: Use Chipco Choice for mole cricket control to avoid repeated applications of other insecticides.

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"One of the things we do constantly is to hand-pull invasive, noxious weeds along the wood lines. We were able to get a good start on this during the grow-in and it has paid dividends by keeping the seeds from spreading and sprouting in the turf. We will also spend a fair amount of time scouting and hand-spraying any crabgrass, goosegrass or Poa annua that pops up in the wood lines. We also chemically edge the natural crushed coquina cart paths and waste areas located at the tees with Round-up to control the runners.

"One area that seems to be the toughest for architects and superintendents to agree on is the character and nature of bunker faces. Steep bunker faces create wash-out problems in the sand and irrigation, fertility and mowing problems in the turf. I can't say we won all the discussions, but our opinions were heard.

"I understand that when a certain

look and appeal is built into the design, it is our job to maintain that look. But a few years after the architect is gone and the annual budget is up for approval, we are charged with keeping costs down as much as possible. That's when we start modifying some features to eliminate labor-intensive hand work that doesn't really need to be there."

The discussion of course design and hand work led to the topic of job satisfaction and the challenges facing superintendents in today's market. I asked Klauk what he thought were some key issues facing superintendents and the industry.

"Enjoyment of the job is the number-one issue regardless of where the pressure is coming from, whether it is club politics, inadequate budgets versus expectations or the type of turf and facilities. You have to be able to rise above it and deal with it or face burn-out!

"The number-one day-to-day problem is the challenge of preparing the course as good as it can be for that particular day. That takes everyone's effort to do it right.

"If someone falls short, then that creates a blemish. If everyone makes a blemish — and that's human nature, nobody's perfect — then it can be a problem. If the blemishes or mistakes are scattered out over the whole course, maybe they won't detract from the product you're trying to produce that day.

"There's a whole bunch of things that have to come off right to look good, and if you do everything correctly today that's just one day. You have to come back tomorrow and the next day and do it again and again.

"I try to tell the crew we are serving up a product just like a chef preparing a fine meal. Like the chef, we only have one chance to impress our customer for that meal. If it's not right, then it's

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The 14th green is at home among the hardwoods. Photo by Daniel Zelazek.

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The view down No.17 from the long tees. Photo by Daniel Zelazek.

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not right. The customer might not come back or at the least he's going to be dissatisfied for awhile.

"It can be a tough assignment to get psyched up day after day to oversee and perform this labor-intensive perfection day after day, but if we can't, who is going to motivate the crew? It is that struggle that sometimes leads to burnout.

"As far as an industry-wide issue, I'd say that labor is one of the toughest areas we are dealing with right now. I am very fortunate to have the crew that we do. They are mostly in their late 20s and most of them have aspirations to progress in this business. They come to work motivated and that makes us pretty "deep" in our roster when we have to cover vacations and emergencies. Doug Sani, my assistant, and David Green, the head mechanic, are very organized individuals and they have a knack for spotting things that need to be done before they become problems.

"Like I said, we are very fortunate. I know many courses in high-cost-of-living areas have a tough time attracting and keeping employees. This is an all-encompassing business that is more sophisticated and technical than people believe. They don't realize all the factors and teamwork that goes into producing these meticulous playing conditions."

Klauk believes in being out on the course with the crew as much as possible. He tries to be the last man through ahead of play to assure that there are none of those little human or mechanical errors that can add up to a poor-looking course.

"I don't mind getting out there with them on projects. I want them to understand that I'm not above any job out here. It gives me an opportunity to show them the how and why we do things in course maintenance. I have an array of tools in my cart and I don't mind fixing up a little problem here



Glen Klauk steadies the tripod while cover photographer Daniel Zelazek uses a truck bed to get the right perspective on a golf hole.

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No. 18 green as seen from behind the fairway bunker on the crest of the hill. Photo by Daniel Zelazek

and there, but if someone is having a bad day and making a lot of mistakes, I'll go get him or her to come back and do it right."

To help get it right the first time Klauk holds daily "talks" as he calls them to keep everybody on the same page about what's going on and what's expected.

"We don't have weekly crew meetings because we're on top of it every day," he said, "If we have a rainy day and the crew is in, then we'll have a formal meeting or training."

"We've been pretty busy with the grow-in and things are settling down as much as they ever do on a golf course. I'm looking forward to meeting and playing more golf with the superintendents in the area. It's always a good way to learn things by playing each other's courses and sharing ideas and problem solutions."

Klauk admits that he doesn't miss many days and it's hard for him to be



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- Choose from 5 or 8 blade reels with 72" or 85" cutting widths



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REELMASTER® 3100-D

	3100-D - #03200	3100-D w/SIDEWINDER - #03201
Engine	Kubota liquid cooled diesel, 3-cylinder, 21.5 hp @ 2500 RPM. 68.5 cu. in. (1123 cm ³) displacement. Pressurized lubrication system with 3.5 U.S. qt. capacity. Heavy duty, radial seal air cleaner. Fuel/water separator with visible bowl.	
Configuration	Rear mounted engine, front operator position. Rear mounted radiator. Two post ROPS and seat belt standard.	
Fuel Capacity	7.5 gallons (28 liters)	
Traction Drive	Series/Parallel hydraulic traction circuit provides continuous 3-wheel drive, in mow and transport. Hydrostatic traction drive provides infinitely variable speed in forward and reverse. 6 gallon hydraulic system capacity.	
Ground Speed	Mow: 0-6 mph (0-10 km/h); Transport: 0-9 mph (0-14 km/h). Reverse: 0-4 mph. (0-6 km/h).	
Controls	Forward and reverse traction control pedals, mow/transport lever, hand activated park brake, ignition key switch, tilt steering wheel lock, PTO switch, throttle, joystick control for cutting unit raise and lower (and for moving cutting units side-to-side on Sidewinder equipped models), cutting unit transport lock, reel speed and backlap control knob.	
Gauges	Hour meter, fuel gauge, cluster gauge with glow plug and charge indicator lights, and low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).	
Electrical & Interlocks	Traction pedal, operator presence in seat, PTO engage or disengage, and cutting unit mow or transport safety interlock switches.	
Tires	20x10-10, 4-ply Turf Trac.	
Steering	Power steering with tilt steering wheel.	
Overall Dimensions	Track Width: 55" (140 cm) Wheel Base: 56" (142 cm) Overall Length: 93" (248 cm)	Overall Height: 71" (180 cm) with ROPS Transport Width: 80" (203 cm), in 72" woc, 92" in 85" woc Approx. Weight with Cutting units: 1860 lbs. (844 kg)
Cutting Unit Configuration	Fixed position cutting units.	Operator controlled moveable cutting units travel ±12" (30 cm) left or right from center; total of 23" (61 cm) of infinite variability.
Cutting Unit Offset	4" (10 cm) in 72" (183 cm) width of cut 11" (28 cm) in 85" (216 cm) width of cut	Maximum 16" (41 cm) in 72" (183 cm) width of cut. Maximum 23" (58 cm) in 85" (216 cm) width of cut.
Certification	This product complies with the American National Standards Institute (ANSI B71-4 - 1999) and European Community specifications (CE Certified).	
Warranty	Two-year limited warranty, refer to operators manual for details.	

CUTTING UNITS

	27" (68 cm)	32" (78 cm)
Type	Three hydraulically driven, balanced cutting units, interchangeable to all three positions. 7" diameter reel.	
Clip Frequency/Backlapping	Manually controlled variable reel speed for adjustment of clip frequency. Standard on-board backlapping.	
Cutting Height	Height of cut ranges 1/4" (.6 cm) to 1 1/4" (4.4 cm) in floating position, 1/2" (1.2 cm) to 2 1/4" (7 cm) in fixed position.	
Bedknife to reel adjustment	Single point adjustment (SPA) of bedknife to reel.	
Width of Cut	72" (183 cm) overall width of cut.	85" (216 cm) overall width of cut.
5 blade reel	Model 03210	Model 03212
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PERFORMANCE

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JOBS The 3100-D is powered by a 3-cylinder Kubota® diesel. At 21.5 horsepower, this engine provides more power yet runs slower and smoother than other mowers in its class. Combine this engine with a 6 MPH mow and 9 MPH transport speed, and the choice of either 72" or 85" width of cut, and it's easy to see how the Reelmaster 3100-D can greatly increase productivity.

The Reelmaster 3100-D is equipped with manually adjustable variable reel speed and on-board backlapping. With your choice of 5 or 8 blade reels, the Reelmaster 3100-D will provide a precision cut for a wide range of applications.



COMFORT

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The Reelmaster 3100-D's unique machine layout eliminates the need to straddle the engine by placing the operator, rather than the engine, out front. The rear engine design places engine heat, noise and exhaust behind the operator for greater mowing comfort, productivity and safety.

Operation of the new Toro Reelmaster 3100-D is simple, thanks to the two pedal traction control, power steering, tilt steering wheel, adjustable seat,



and the easy-to-use joystick, which provides precise control of the cutting units while on the move.

SERVICEABILITY

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The rear engine design does much more than just add comfort. This design also provides easier access to oil and air filters, and other routine maintenance items, making the 3100-D extremely easy to service.

An additional benefit of the Toro Sidewinder system is the ease of access to the center cutting unit. A simple move of the joystick positions the center cutting unit within easy reach.



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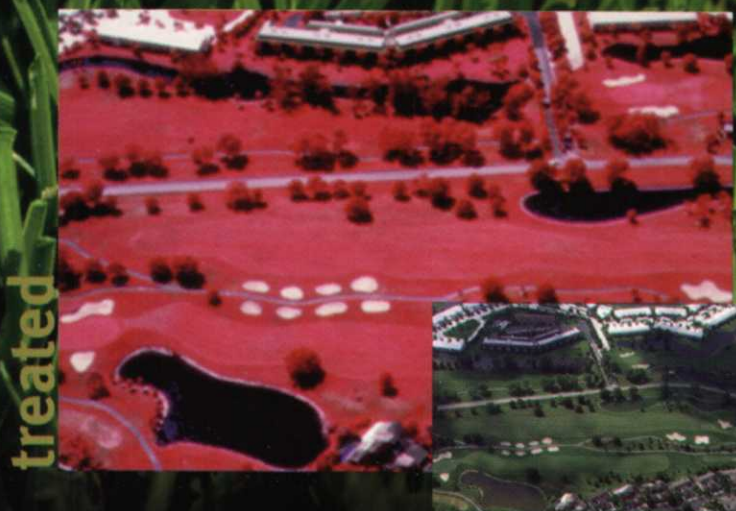


OUT-FRONT FORM The Reelmaster 3100-D features a unique machine layout. Positioning the operator in front of the engine delivers improved visibility, greater comfort and easier operation. The rear engine design also improves traction by distributing the 3100-D's weight equally to all three wheels.



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West Course (10th and 15th hole shown in left photo) was treated with 1 quart of InfilTRx per acre on a monthly basis beginning February 1998, the East Course (4th and 5th hole shown in right photo) was left untreated.

Near infrared and aerial photography at Imperial Golf Club in Naples, Florida, captures the benefits of using InfilTRx Soil Penetrant on fairways.

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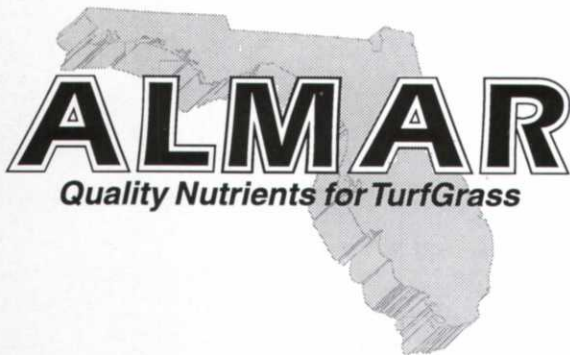
Photos were taken June 8th, 1998.



Taking weekends off from his job as an industrial photographer, Daniel Zelazek has combined his love of the game with his artistic abilities to create memorable covers for the Florida Green. Photo by Joel Jackson

...if you do everything correctly today, that's just one day. You have to come back tomorrow and the next day and do it again and again.

away, not because of the staff or the club, but just because he loves the game. He likes to tee it up at the end of the week and play his own course. And that's convenient because Pablo Creek was built for people who like to just play golf.



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A good walk not spoiled. Photo by Joel Jackson



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Forty-one Florida superintendents from around the state met in Orlando to learn about wetlands and golf courses. See story on page 52. Photo by Joel Jackson.

What are the ‘big rocks’ in your work life?

Three messages for Coping in Today’s Working World

One day a time-management expert was speaking to a group of business students. To drive home a point, he used an illustration those students will never forget.

Standing in front of this group of high-powered overachievers the speaker said, “Okay, time for a quiz.” He pulled out a one-gallon, wide-mouthed mason jar and set it on a table in front of him. He produced about a dozen fist-sized rocks and carefully placed them, one at a time, into the jar. When the jar was filled to the top and no more rocks would fit inside, he asked, “Is this jar

full?” Everyone in the class said, “Yes.” Then he said, “Really?”

He reached under the table and pulled out a bucket of gravel. Then he dumped some gravel in and shook the jar causing the gravel to work itself down into the spaces between the big rocks. Then he asked the group once more, “Is the jar full?” By this time the class was onto him. “Probably not,” one of them answered. “Good!” he replied.

He reached under the table and brought out a bucket of sand. He started dumping the sand in and it went into all the spaces left between the rocks and the gravel. Once more he asked the question, “Is this jar full?” “No!” the class shouted. Once again he said, “Good!”

Then he grabbed a pitcher of water and began to pour it in until the jar was filled to the brim. Then he looked up at the class and asked, “What is the point of this illustration?”

One eager beaver raised his hand and said, “The point is, no matter how full your schedule is, if you try really hard, you can always fit some more things into it!”

“No,” the speaker replied, “that’s not the point. The truth this illustration teaches us is: If you don’t put the big rocks in first, you’ll never get them in at all.”

What are the ‘big rocks’ in your life? A project that you want to accomplish? Time with your loved ones? Your faith,

your education, your finances? A cause? Teaching or mentoring others? Remember to put these big rocks in first or you’ll never get them in at all. Your jar can easily be filled with the sand and gravel of daily routine and distractions if you’re not careful about priorities.

So, tonight or in the morning when you are reflecting on this short story, ask yourself this question: What are the ‘big rocks’ in my life or business? Then, put those in your jar first.

2. The Art of Juggling

Brian Dyson, CEO of Coca Cola Enterprises, had this to say at a recent university graduation:

“Imagine life as a game in which you are juggling five balls in the air. You name them — work, family, health, friends and spirit — and you’re keeping all of these in the air at the same time.

You will soon understand that work is a rubber ball. If you drop it, it will bounce back. But the other four balls — family, health, friends and spirit — are made of glass. If you drop one of these, they will be irrevocably scuffed, marked, nicked, damaged or even shattered. They will never be the same. You must understand that and strive for balance in your life.”

3. Dealing with Stress

It’s here again. the time of year we all

Editor’s Note: Nobody denies that superintendents have stressful jobs. Everybody has stress in their lives. The trick is finding ways to deal with it successfully so it isn’t harmful. Here are a couple of articles that have messages for coping with stress. The first two came to me via the Internet. The third is printed with permission from the North Texas News.

dread, the 120 days that can make you, or break you, the dog days of summer. For most, it is a time to take a family vacation, but for the North Texas golf course superintendent, this is no vacation!

We start spending less time with our families and friends and more time on the golf courses we are responsible for. As the temperatures rise so do the temperatures of everyone involved from the membership to the executive staff and even within our own crews. Expectations are also up from member-guest tournaments to corporate outings. Everyone wants the golf course in the best shape possible.

Tolerance levels are at an all-year low. All things combined puts your stress level higher than the thermometer. If you're waiting for a freak cold front to come out of Canada to relieve some of your stress you might still be holding your breath come the end of September!

While surfing the Internet I ran across this interesting piece of information. The

10 Most Stressful Jobs

1. U.S. President
2. Firefighter
3. Senior corporate executive
4. Indy class race-car driver
5. Taxi driver
6. Surgeon
7. Astronaut
8. Police officer
9. NFL football player
10. Air-traffic controller

ten most stressful jobs listed above are based on 21 undisclosed specific job demands.

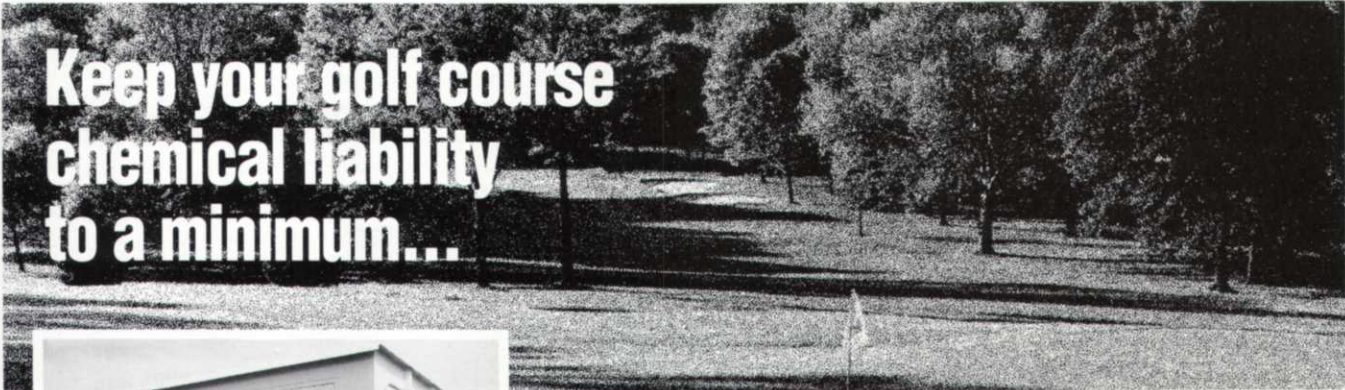
I can think of three of the top ten I would substitute "North Texas golf course superintendent" for. Wouldn't you love to take the summer off and be a NFL football player or an Indy race-car driver? Most of us couldn't make a very good living at it, but it would be fun. As

for the third substitution, I would not want to be a taxi driver but the thought of sitting in an air-conditioned car all day in August sounds a little appealing!

The truth is we all have stressful jobs and, when things don't go as planned on our courses, the stress level can rise dangerously. The following are a few things that can help relieve some of our stress.

Exercise. This one is on top of the list because there is nothing like a good workout or a long walk to relieve stress and also to clear your head. Sometimes you get too many things going on at once and a good workout can relax your mind enough to sort things out and help put things in the proper order.

Good nutrition. Your body has no real defense to protect itself against stress. Stress must be kept to tolerable levels using your mind. Stress was controlled better at a time when man ate foods from the land. Many foods taken from the land, especially the herbs, helped our bodies fight off some stress. But this kind



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of diet has been lost in today's society. We are all too busy to eat like we did 75 years ago. By staying away from certain foods we can help keep our stress minimized. High intake of alcohol, caffeine, processed foods and sugars cause fatigue, irritability, headaches and can add stress to our already overloaded days. Properly eating proteins, fibers and foods containing Vitamin B help steady our emotional thought processes and can alleviate some stress.

Recreational activities. Most of us like to play golf for recreation, but it is best to get away. Even at a different golf course your mind reverts to problems at your job. Early morning or early evening fishing is a good choice. A game of basketball or any kind of activity with your kids will help take your mind off what is happening at work.

Movies. There is nothing like a good movie to really take your mind somewhere else. Even though only for a couple of hours, you get caught up in the plot

and forget about everything else.

Massage. I have never had one, but the people who have say it is their best source of stress relief. A good work over can relax your tense muscles and also improve your circulation. This will help clear your head and help in making good decisions.

Sleep. That is a no brainer. We all know what lack of sleep can do to your day!

Everyone has their own methods of dealing with stress. Using the power of your imagination, meditation and prayer can clear your mind and help you put things in perspective. It is important that all of us find our own method in dealing with stress to keep our lives under control, and keep us all successful.

GENE DAHLEN,
Assistant Superintendent
Bent Tree C.C.

Wetlands Seminar Draws Full House

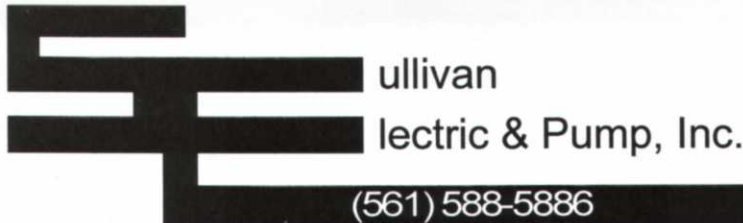
Forty-one golf course superintendents

from Jacksonville to Tampa to Palm Beach attended a day-long GCSAA Regional Seminar on wetlands and golf courses in Orlando Oct. 8.

The wetlands regulations have had a profound effect on how property owners and developers can use their land. These superintendents came to learn the regulatory restrictions and how they can maintain their golf courses without affecting the wetlands on their properties.

Barbara Beall, an environmental consultant from New York was the instructor. Beall has worked for state environmental agencies and the U.S. Army Corps of Engineers. She is married to a golf course superintendent, so she has a unique perspective and expertise on the subject.

In addition to learning about the regulations, ecology, functions and value of wetlands, the attending superintendents earned CEUs for certification.



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Successful Transition from Overseeding takes...

Planning, Preparation, Patience

After the disaster of El Nino last year, I think the topic of transition made a few people gun shy about contributing on this subject, but I managed to find a few brave souls who offered some comments about what they hope to achieve during the 1999 transition phase of overseeding management.

I found some common threads running through their comments: Planning was one, with grass variety selection being a key ingredient at the Grand Cypress and Celebration Golf Clubs followed by booking maintenance schedules a year in advance.

Preparation was next and that covers everything from having healthy turf in the fall going into overseeding to managing cultural practices in the spring.

And last but not least, patience! Patience in dealing with changing growing conditions... in letting your turf cover dictate the timing of some of your practices... in taking into account that with these persistent new grass varieties, maybe we should be calling it "summer transition" instead of spring transition.

Given normal conditions, it's relatively easy to grow turf in the dead of winter and the dead of summer.

But when the sun crosses the equator twice a year and the seasons begin to change, Florida superintendents are asked to maintain good playing condi-

tions while growing two or three different types of grasses at the same time. That's when patience by superintendents and golfers alike pays off.

JOEL D. JACKSON, CGCS

little more seed here and there, babied it a little bit and we always got there.

"Last year we never made it and we had a rough winter. I've never had so much explaining to do about course conditions to company officials and the pro shop for the guests in my entire 15 years.

"That experience made me realize that you'd better have a sense of urgency about getting the overseed established before the heavy play season starts. We are a resort and driven by our seasonal play. Guests arriving from up North for some high-priced winter golf don't care if you just had 40 inches of rain in 60 days, and they don't want explanations either.

"I will say this and then we can move on: My management team is pretty well educated about the

business. They trust me and they play a lot of golf at other places. They knew we weren't the only place having some problems. I used the reports from the USGA and from Dr. Elliott to give them the scientific agronomic reasons we were struggling with thin turf.

"January was the worst of it because we had to have tournament conditions in place for the LPGA HealthSouth event. We wore the place out. After that we started to slowly improve. Like I said, I thought we were bullet proof!

"Hello!"

Learning those tough lessons from El Nino, Alex is going to try a couple of things to ease the management of his



Grand Cypress superintendent Tom Alex shows the two different ryegrasses used in the seed blend applied to the rough. The larger "intermediate rye" plant on the right should transition quicker in the spring, giving the bermudagrass a better chance to fill in. Photo by Joel Jackson.

Tough Lessons Generate Some New Ideas

Tom Alex has been the superintendent/manager/director of golf course maintenance at the Grand Cypress Golf Club for the past 15 years. Known for the excellent conditioning of his golf courses, Alex admitted that last year's overseeding season was a real eye opener. It's difficult not to frame some of the practices we use in relation to what happened during El Nino last year.

"Going into last year, I always thought we were bulletproof," he said. "We have the resources and the talent to respond to unusual conditions. We always dusted a

overseeding from establishment to transition.

"Our biggest problem areas have always been our roughs," he said. The short-cut areas like greens, tees, and fairways do well under normal circumstances: as the weather warms up, the host bermudagrass does its thing and the overseeding dies out.

"But in the roughs with the taller heights of cut, the high traffic areas often require sod replacement. This year we're going to try a ryegrass blend in the roughs that is 50 percent perennial and 50 percent intermediate rye. The intermediate rye has characteristics similar to annual rye and we hope it will start checking out a little sooner to allow the bermudagrass to get more sunlight and warmth in the spring.

"On the greens we are going to continue a practice that worked well for us last year. In the past we had always renovated the greens aggressively beginning in mid-May when our greens fee rates went down. We would pull cores, verticut, clean up, top dress and drag.

"Some years that was OK... if it was a cool spring. But if it was real hot and dry we could end up wiping out all the *Poa triv.* When the *Poa* goes, it goes quick.

"Last year in May we just deep solid-tined the greens with the Verti-Drain and then rolled them. The deep tining gave the bermudagrass roots and chance to develop and we didn't damage the overseeding on top.

"We ran our fungicide program a little longer which helped the bentgrass in our mix. The *Poa triv.* melted out naturally with the onset of warmer weather. With rain and washing last year, and all the extra

seed we put down, we had quite a few thin areas we thought we would have to sod, but we only had two small areas we had to do. So we're going to try that process again this year."

Speaking of sodding, former years of wall-to-wall overseeding had led to a lot of resodding the roughs at Grand Cypress. The caravans of sod trucks going into the property were almost legendary. Alex has developed a strategy for dealing with transition in the rough.

"Around Easter we start lowering the rough cut down to one inch. That doesn't scalp or hurt the bermudagrass too much and reduces the rye canopy to allow sunlight and heat to help any bermudagrass that's there.

"In mid-May, with the reduction in greens fees, we double verticut the fairways and aerify the fairways and roughs. We apply a 1:0:1 fertilizer like a 15-0-15 with 50 percent slow-release nitrogen. Then we get in a truckload of ammonium sulfate and begin to scout and spot-fertilize the rough areas we think we can grow back in during transition."

"This is decision-making time. When the temperatures start to go up, we closely watch the dew patterns in the roughs. Lots of dew means lots of bermudagrass. In places where we have 50 percent dew, we will spot-fertilize weekly like a grow-in situation to bring them back.

"In the areas where we aren't seeing any dew patterns in the rye, we will start resodding. Those areas are usually the cartpath-to-fairway, high-traffic areas. If you don't see any bermudagrass down in there in April, you sure won't have any

in late May or June when a hot spell takes out the rye.

"We start the sodding process even with a good rye cover to avoid having to do it all at once in an emergency situation. This way we can do a truck or two at a time. We don't burn out the crew laying sod and we can manage and establish the new sod more easily."

In the area of weed control, Alex has a different approach from most. He has eliminated the spring preemergent application, and relies on a vigilant and persistent post-emergent spot-treatment program.

"Our spray techs will go through the courses weekly with a range of products usually Illoxan, MSMA, Basagran or 2,4, D. They scout and spot-treat only the problem areas. In the fall, we do pre-emerge with Kerb on the fairways and Surflan in the fairway bunkers, pine straw areas and ornamental beds. Any seed that gets into the greens bunkers is mechanically removed.

"We treat the fairways with Kerb for *Poa annua* control 60 days before overseeding. We don't charcoal them. Actually we have gotten the lead time down to 45 days before seeding with no adverse effects. I did an experiment a few years ago to check the interval. We applied some Kerb and then came back and seeded some rye from two to five weeks after the Kerb application. Germination seemed to be OK after three weeks.

"My intention on the fairways is just to control the overall population of *Poa annua*. Will we have some? Yes, but it won't get away from us. It is a livable

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threshold and we are being cost effective? While our post-emerge chemical costs are up some, the overall result by eliminating one preemergent application has saved us maybe 25-30 percent in chemical costs."

Summing up the topic, Alex said, "Dwight Kummer at Bay Hill put it best when he said, 'Think about all the practices we do when we have normal conditions. We can get by. But when conditions go sour and we try to maintain the same practices, we can have major failures.'

"That shows you how close to the edge we keep everything all the time. Two weeks of low sunlight and heavy play and all of a sudden you're in trouble. Last year kind of drove that nail home to me.

"Listen guys! Pay attention! I mean it's what we have to do. It's our business, but when the weather gets bad you'd better respond. Raise the heights of cut. Punch some holes. Watch your fungicide levels and keep those pin locations moving."

After a two-hour interview and ride around the course a final comment from as only Tommy can put it, "Are we done? You should get a paragraph out of that!"

Editors Note: The Grand Cypress Golf Club will be one of the stops on the GCSAA Turfgrass Tour during the conference and show in February 1999.

Poa Triv Plays Well, Exits Gracefully at Celebration

John De Matteo has been the superintendent at the new Disney Celebration Golf Club since it opened in April,



Superintendent John De Matteo checks the progress of the Poa triv germination in a fairway at the Celebration Golf Club. This is the third year in a row that De Matteo has seeded his fairways with Poa trivialis. Photo by Joel Jackson.

1996. Prior to that John was a regional superintendent for American Golf, responsible for eight courses in New York. John also spent eight years working as a technical representative for Loft Seed, Inc.

De Matteo has a different approach to overseeding than most, which helps set up his transition program.

"When we opened in 1996 we didn't want to have a lot of competition with the new bermudagrass, so we overseeded the entire course with *Poa trivialis*. We have

since modified our practices to use perennial ryegrass in the roughs to give better definition and contrast to the fairways which are still 100 percent *Poa trivialis*.

"I am also using ryegrass on the tees for better wear tolerance. The greens are still 100 percent *Poa trivialis*.

"There several reasons we still use *Poa trivialis* on the fairways.

"First and foremost is the way it transitions once the weather warms up. As the bermudagrass gets stronger with the heat, the *Poa trivialis* melts out, providing less

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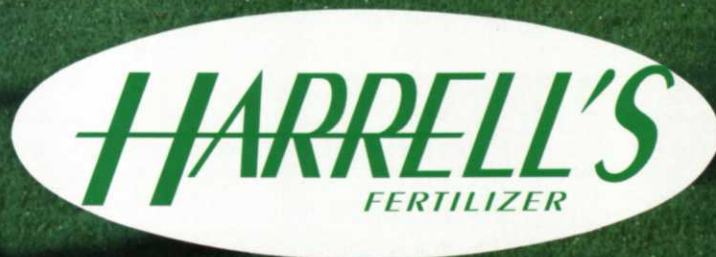
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Serendipity With Street Sweeper Helps Cut Grain Off Fairway

Isn't it funny how the tricks of the trade are sometimes discovered by accident? This is certainly the case with a technique that we utilize at Olde Florida to help reduce the quantity of grain and puffiness that can occur in our bermudagrass fairways.

While I was employed as an assistant golf course superintendent at the Loxahatchee Club in Jupiter, superintendent (at that time) Phil Shoemaker utilized a Model RHFA "Sweepster" 3-point-mounted sweeper to help clean up debris in fairways after core aeration.

The 6-foot wide, poly/steel brush normally used on roads or parking lots did a great job of breaking up the aeration cores and working the soil into the turfgrass. The organic debris that remained would be wind rowed to the side of the fairway with a blower and picked up later by a Toro Rake-o-Vac.

During the process of cleaning up the turfgrass we discovered that the broom would stand the turf up significantly when the broom rotated against the grain. After mowing the fairway, we then discovered that grain in these areas of the fairway was significantly reduced.

Upon accepting my current position, I also purchased a Sweepster broom for the same purpose of cleaning up after cultural

practices. However, we have taken this process a step further and incorporated the tool in to our grain-control program. In fact, the Sweepster broom does such a good job, the turfgrass in the fairways does not require any additional maintenance practices to reduce the grain. Consequently, with enough core aeration to reduce thatch, aggressive vertical mowing has all but been eliminated on our fairways.



Making one-way passes down a fairway against the grain, a tractor-mounted, street-sweeper broom, above, stands the turf up and then double-cutting the fairways, below, mows off the grain, producing good lies on upright grass



To perform the cultural practice of sweeping the fairways, the unit is installed on the back of our John Deere 5200 tractor. When the operator initially reaches the fairway they will scrape their hand or foot across the fairway to determine the domi-

nant direction of the grain. The broom is then engaged and travels against the grain, standing up the grain and/or stolons.

Since the grain on a fairway primarily grows the same direction, the tractor is backed up to the originating side of the fairway, staying off the turf that has already been broomed, and makes the next pass immediately adjacent to the previous pass. The operator continues this process

of sweeping the turf in one direction until the entire fairway is complete.

After the tractor operator has a few rows completed another operator cuts the "standing up" turfgrass with a fairway mower in the same direction the broom traveled, thus "cutting off the grain." After completing each pass, the operator mows the same area a second time in the opposite direction.

When complete, every inch of the fairway has been mowed twice, the first time against the grain and the second with the grain, primarily to give the turfgrass a cleaner appearance.

We have found this process to be a win/win situation. The golfers enjoy the better lie their ball receives as the turfgrass has a more upright growth pattern and the turfgrass is easier to mow and we endure less scalping from puffy turfgrass. Since the process is less disruptive to the turfgrass we have found the practice can be done numerous times of the year even in higher play months of spring and fall.

competition than some of the perennial ryegrasses.

"Second, the *Poa trivialis* gives a great playing surface — almost like a northern bentgrass fairway.

"Third, the small seed nestles down into the 419 bermudagrass during overseeding and reduces the chance of washing away if we get rains during establishment.

"Fourth, since it is a low-growing, fine-bladed variety, it is easy to mow and clean up fairways if you haven't been able to mow fairways due to bad weather. You know how thick ryegrass can get when you can't get to it!

"The *Poa trivialis* is seeded into the fairways at a rate of 90 pounds per acre. We don't do any special seedbed preparation. We keep our cut at .5 inch before and after seeding. It usually takes about two weeks longer for the seed to show up in the fairways than the greens. The Tifdwarf collars around the greens were a different story. We did verticut them twice with a Mat-A-Way, once this summer and again

in September before seeding on Nov. 2 this year."

So like Tom Alex, John is utilizing a grass-variety selection to help his transition in the spring. Having worked with Loft Seed, John believes in actively growing all the grasses on the course and letting nature take its course. While things can be done to encourage the bermudagrass, De Matteo says superintendents shouldn't resort to drastic measures like holding back the irrigation, or scalping the turf, or getting nitrogen rates too high.

"If superintendents want to play with the irrigation," he said, "they can maybe do more deep irrigation and reduce frequency, but you don't want to reduce the overall moisture. While trying to stress and thin the overseeding, you are also making the reemerging bermudagrass weak.

"I don't change the height of cut until our greens fee rates go down in May. Then I raise the height of cut to take the pressure off the bermudagrass. The warming weather will take out the *Poa trivialis*. How-

ever, we will lower the height of cut in the roughs to open up the ryegrass to allow more light to get to the bermudagrass.

"I do increase my nitrogen levels when the nights are consistently in the 60-degree range. I apply straight ammonium sulfate at .5 pounds per month for a couple of months when the bermudagrass shows signs of moving. At this time we also start slicing fairways and increase our normal winter spiking frequency on the greens to at least two times per week."

I asked De Matteo how El Nino affected his program last year.

"We were very fortunate last year," he said. "We had our seed down and up before the rains hit, so we got lucky on the front end. In the spring, I noticed the *Poa triv* hanging in longer because of the dry, cool nights that ran into May. The lower humidity actually helped all the cool-season grasses persist.

"In fact, when I worked in California, we had a heck of a time with transitions with the cool, dry weather out there. People

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don't realize how much transition is due to mild disease pressure that also helps to thin out the overseeding during humid weather. Last spring I was seeing substantial overseeding on the greens into June until the temperatures sky rocketed."

De Matteo hasn't seen the need for any preemergent weed control so far on the young course.

"If we develop some severe *Poa annua* areas, I would consider spraying them out and reseeding them since *Poa trivialis* will germinate at cooler temperatures than ryegrass. So far we just don't have a problem that warrants the time and expense."

Acknowledging the poor growing conditions that did befall the state last year, De Matteo said, "The best thing you can do for the turf is to raise the height of cut. In fact, my goal next year is to experiment with having good consistent greens without mowing them down to 1/8 of an inch or lower like we have done.

"In talking to our customers, I have heard them comment on how much they enjoy the course down the street. I know they aren't as manicured as we are, but they do have nice, thick turf on the greens. These golfers never mentioned the word 'speed.'

"When our greens fees go down in summer and we try to keep the greens on the edge, I don't think our customers really appreciate it. I'd much rather have good, consistent, healthy greens at that time of year without beating our heads against the wall."

Editor's Note: The Celebration Golf Club and Community will also be one of the sites visited on the GCSAA Turfgrass Tour during the conference and show in February 1999. The Celebration Golf Club is managed by American Golf.

You Can't Always Put Your Finger on What Happened

Spring transition is often an intangible process, and my results have ranged from, "When did it happen?" to "Why are the greens dirt?"

Fort Myers Country Club is a public golf course. Our greens fees go down in the spring and the number of players increases.

May is full of tournaments. This limits our ability to do any spring renovation.

What we try to do is have a seamless conversion from turf which is 80 percent perennial ryegrass and 20 percent *Poa trivialis* back to the host Tifdwarf bermudagrass. Through the winter we will spike weekly and lightly topdress every 2-3 weeks. We will start light verticutting on a weekly basis in March if the weather is warm.

Our height of cut for the season ranges from .175-.200 inches depending on the growing conditions. When we are pretty sure that the last cold front has passed through, we will lower our cut to .156 inch.

We don't change our fertility program except a slight increase to encourage the bermudagrass to cover thin areas more rapidly.

We attempt to control the emergence of volunteer ryegrass and *Poa annua* with a Barricade preemergent application in October. If we get some random germination around the first of the year, we will spray those areas with Kerb.

MIKE MONGOVEN, CGCS
Fort Myers Country Club

Transition Time Seems to Come Later and Later

It seems the transition time from overseeded turf back to bermudagrass has gotten longer and longer over the years. The new bentgrasses, *Poa trivialis* and ryes have become more heat tolerant and seem to want to stay around longer than I would like. Other than the normal slicing, spiking, light verticutting, lowering the cut and other usual cultural practices, we have found a few things that work well for us.

When Daylight Saving Time goes into effect in April, we start applying one pound of nitrogen per week to encourage the bermudagrass. This fertilizer push is a combination of quick- and slow-release granulars and liquid forms of nitrogen. These applications continue on both greens and tees until we aerate around the first of June.

We like to wait until we have about a 60-70 percent bermudagrass base showing through the overseeding so transition isn't too quick. We also use wetting agents to get us through warm and dry spring

periods when the transition is too rapid.

No matter how much we plan or what methods we use, Mother Nature has a lot to do with the success of all these practices.

JOE ONDO, CGCS
Winter Pines G.C.

Healthy Turf at Overseeding Makes Transition Easier

Transition starts before you drop the first seed. Healthy bermudagrass in October and November usually means healthy bermudagrass in June.

A lot of superintendents are dealing with tournaments through April, which can limit the start of any transition program. At Isleworth we start grooming in March to enhance our green speed, not to thin our overseeding. However, it must have some thinning effect. We begin light verticutting and topdressing every two weeks until we aerify in June. Other than spiking once a week, we do not get any more aggressive with cultural practices until aerifying in June. I have aerified in March and April, but the benefit is not worth the loss of valuable playing time.

Patience is the key. Maybe the term should be "Summer Transition." If I have overseeding on the greens through June and into July, I am probably having a pretty decent transition. I am not talking about a lot of *Poa trivialis* and bentgrass, but enough that you just keep seeing it here and there until it is finally gone around Independence Day.

Fertilizing is another tricky issue. The longer you can hold off without applying a pound of nitrogen with a dry product, the better. Although we use cool-season grasses as annuals, they are perennials and given the chance to "harden off," they will.

Often when you are trying to give the bermudagrass a jump start, you are also feeding a plant that is already a little stronger and just as intent on surviving. Of course, this tiny bit of wisdom is really relative to your seeding rate. If you have more bermudagrass than overseeding, then push when you are ready. If you don't have more bermudagrass, be careful.

BUCK BUCKNER
Isleworth Country Club



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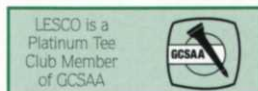
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1999 Florida Plants of the Year - Part 2

Editor's Note: Second in a three-part series showcasing the Florida Nursery Growers' 1999 selections of underutilized but proven Florida plant material.

Common Name: Desert Cassia

Botanical name: *Senna polyphylla*

Hardiness: Zones 9B-11

Mature height x spread: 8' x 6'

Classification: Large shrub or small tree

Landscape Use: Specimen shrub

Characteristics: Golden-yellow flowers

Usually multi-trunked, although it is possible to hold it to a single stem. The arching branches carry a profusion of tiny leaves which are practically hidden for most of the year by golden-yellow flowers. Full sun and a moderately rich, well-drained soil are the ideal conditions for growth. The long blooming period makes it an ideal choice as a feature plant for a choice spot in full sun in the landscape.



Common Name: Winged Elm

Botanical Name: *Ulmus alata*

Hardiness: Zones 5-9

Mature height x spread: 45' x 40'

Classification: Tree

Landscape Use: Shade or street tree

Characteristics: Deciduous tree with winged twigs

Medium-large size together with a moderate growth rate and attractive habit are bringing this native tree to the attention of urban street tree planners. It tolerates a range of soil environments including some alternation between wet and dry conditions. The dense and rounded appearance of the head in summer gives way to an attractive winter look when the winged branches add to the tree's interest. Forest specimens of up to 70 feet in height have been reported.



Common Name: B. J. Freeman Aglaonema

Botanical Name: *Aglaonema* 'B. J. Freeman'

Hardiness: Zones 10-11

Mature height x spread: 30" x 24" in 10" pot

Classification: Ornamental foliage plant

Interior/landscape use: Specimen plant for large location

Characteristics: Rich, green leaves overlaid with pewter. Good basal branching to give a full, upright plant

Outstanding for interior use under low light conditions. Grown on the dry side, it is long-lived with little change in size, but under greenhouse conditions in a 14" pot it will make a full, dense 40" x 30" specimen.



FTGA Update

Conference and Show to Emphasize Ties with UF/IFAS

The dust has hardly settled on the 1998 event and already plans and excitement are growing for the 1999 conference in Gainesville. The FTGA is modeling the '99 conference and show after other successful statewide turfgrass associations like Pennsylvania, Michigan and Ohio that partner strongly with their state university systems. This year, the FTGA wants everybody to "Experience the Connection" with the University of Florida by holding the 1999 conference and show on the Gainesville campus.



The Aug. 9-13 dates will fall between semesters, so it will be easy to get around town and the campus. Access to and tours of the G.C. Horn turf plots and the Envirotron will offer a unique experience for conference attendees. Laboratory and classroom demonstrations will provide a real hands-on atmosphere for the conference. Costs for attending the conference should be significantly reduced from recent years with lower set-up costs for the vendors and many reasonably priced hotels nearby.

It should be an exciting debut for a new era in Conference and Show strategy. Once again seminar plans are being made to offer a wide range of topics to meet the needs of all members of the turf industry. Look for superintendent panel discussions for practical information on issues you face everyday. Start planning now to attend this inaugural event.

Allied Association Committee

Building on the momentum of a successful 1998 conference and show, the Florida Turfgrass Association has set its sights 1999 on fulfilling its role as the umbrella organization for all facets of the turf industry.

With the formation of the Allied Association Committee at the fall board meeting last October, Chairman Vernie Pickardt of United Horticultural Supply and his committee will be looking for input and common goals of sod producers, lawn care businesses, pest control companies, sports turf managers, parks and recreation managers and vendors. Finding the keys to unlock the potential for an expanded membership base and participation by these allied associations will be a challenging task for this new committee.

Greg Norman Research Event

More than 80 players converged at Greg Norman's Medalist Club in Hobe Sound in August to participate in a turf-grass fund-raising tournament. The event was organized by David Barnes, immediate past president of the FTGA with the blessings of Greg Norman. It was a natural fit since Barnes heads the Greg Norman Turf Company in Avon Park.

Dr. George Snyder and Dr. Brian Skully from the University of Florida were on hand to meet and thank the players for supporting turf research. Norman generously donated the use of the Medalist Golf Club and stopped by after the event to hand out prizes and congratulate the winners. Norman, who was recuperating from shoulder surgery at the time, joked with the players and posed for pictures and signed autographs.

The course was in great shape but played tough as evidenced by Joe Ondo's winning score of 80. Norman ribbed the crowd by saying, "I thought you guys



Greg Norman presents Joe Ondo with the first place prize at the Greg Norman Turf Research Tournament.

were supposed to be good!" As he received his prize Ondo responded, "Well, we don't play golf for a living!"

As the event drew to a close, Barnes reported that nearly \$8,000 had been raised from the outing. Hopefully, this will become one of several annual events involving golf celebrities in turf research fund raising.

Editor's Note: Greg Norman returned to tournament golf competition in November, partnering with Steve Elkington at the Franklin Templeton Greg Norman Shootout in Thousand Oaks, Cal. Norman and Elkington won the event. It was Norman's first time to win the event in its 10-year history.

Florida Golf Alliance

FSU Conducts State Golf Economic Impact Study

FGA President Ron Garl and Treasurer Jack Brennan have been in contact with the Florida Sports Authority and the Florida Chapter of the Golf Course Owners Association to solidify membership and support for the survey.

Working with Larry Pendelton of the Sports Authority, The FGA has been in contact with Dr. Joe Cronin of Florida State University, who has embarked on conducting the golf economic impact study.

FGA board members were given a copy of an outline of the survey format for comment and suggestions. The board has pledged contact and informational support to Dr. Cronin to help facilitate the data-gathering process. At the same time board members are contacting all viable Florida golf associations about joining the Florida Golf Alliance.



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Arsenic in Old Space

Addressing the Problem Presents Costly Options

By J. CHRIS HERIN, P.G.

*Environmental Consultant,
ERM South, Inc., Boynton Beach*

Historical use of arsenic-containing pesticides and fertilizers has been blamed for the presence of elevated levels of arsenic in soil and ground water at some golf courses. The presence of elevated arsenic levels can lead to enormous expenditures to address the problem and can impair the ability of a golf course to operate.

The presence of arsenic at some of Florida's golf courses is attracting attention from EPA, the State of Florida and local government. In fact, several of these agencies recently organized a group to evaluate agency policy on this matter. Overlaid onto this is the fact that the State of Florida is taking a much more conservative view of arsenic and is considering making its arsenic cleanup criteria more stringent.

Having worked with several golf course owners who are dealing with recent findings of arsenic in the ground, we have developed a decision-making process to select a strategy for working with the state toward a practical solution.

Let's consider a case study. In this example, routine groundwater monitoring within a maintenance area (required for this golf course) found elevated arsenic levels. The owner was faced with a

request from the Florida Department of Environmental Protection to delineate the extent of elevated arsenic levels in soil and ground water by further testing. FDEP's objective for additional testing is to gain enough information to make a decision on how to address the elevated arsenic levels.

In planning the required work, we discussed several options which the owner could choose from. The pros and cons of each are provided below to show the thought process.

Option 1: *Address the arsenic as a localized problem in the maintenance area.*

If an isolated, relatively small affected area is identified, the FDEP will probably require management according to exist-

Cons: The cleanup portion of the project cost could be expensive (e.g.: the FDEP indicated a preferred remedy would be excavation and disposal of arsenic contaminated soil, which can cost well over \$100/ton). Also, there would still be an unresolved issue of potential arsenic presence at the rest of the golf course (a long history of applying arsenic-containing compounds made this a possibility) which could affect the owner if it needed to pursue refinancing or decided to sell the golf course.

Option 2: *Address the arsenic impacts as a golf-course-wide problem. The testing plan would be designed to investigate the possibility that elevated arsenic levels are present throughout the golf course.*

Pros: This approach would likely delay the expenditure of cleanup costs and may possibly avoid some of the typical cleanup costs. Although no policy has been finalized, some FDEP staff feel it may be impractical to require

cleanup of such a large area.

Cons: The assessment cost would be expensive (testing throughout the golf course). There would not be a quick resolution of the matter. FDEP indicated it does not have a policy for dealing with golf courses which have widespread arsenic, and this may delay a final decision on how to address the problem. FDEP indicated to me that progress on the development of a policy is slow and it feels the final policy may come from proposed resolutions that originate from the golf course industry. We do not know the financial impact of dealing with

FDEP indicated it does not have a policy for dealing with golf courses which have widespread arsenic, and this may delay a final decision on how to address the problem.

ing generalized state guidance. With this option, our plan for testing would attempt to focus only on delineation of arsenic excesses near the maintenance area. We would avoid looking elsewhere in the golf course.

Pros: The assessment portion of the project cost would be minimized. If we could show a delineated localized problem, then FDEP would likely require some form of active cleanup (e.g.: soil removal or capping and possibly ground water cleanup). With this option, the problem could hopefully be resolved relatively quickly (within a couple of years).

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FDEP's final policy, although we do know the policy will be more conservative if ground water in the area is used for drinking water.

Option 3: *Position ourselves to perform a risk assessment.*

Whether Option 1 or 2 is selected, it was worthwhile considering a risk assessment. For this effort, our testing would include collection of site-specific information that would enable us to evaluate the potential human health risk due to exposure to the elevated arsenic levels.

Pros: This work would enable us to present a better technical basis for whatever remedy we propose depending on whether or not undue risk is present. A risk assessment would probably be required by FDEP anyway if the desire is to propose a nonstandard remedy to resolving the problem (for example, proposing no cleanup and monitoring only or minimal cleanup) and if the plan is to propose arsenic cleanup criteria that are less stringent than the State's.

Cons: This adds another step and additional front-end cost to the project. The risk assessment may or may not prove successful in minimizing the total costs to resolve this problem. Also, this assessment (which would be in the public record) would present estimated risks to golfers, workers and others in the area.

In this example, the owner decided to evaluate the presence of arsenic throughout the golf course and to pursue a risk assessment. Hopefully, an argument can ultimately be made for a low-cost remedy. This outcome may be strengthened by the fact that the presence of arsenic is probably due to the legal use of pesticides and/or fertilizers. Whereas the FDEP may require cleanup for an isolated problem, some FDEP officials seem reluctant to require cleanup of a golf course-wide problem.

It is possible that more and more owners may be faced with these types of decisions (no one knows how prevalent this problem is throughout Florida). The opportunity is there for owners to have a say in how this matter will be addressed in the future. Since the State of Florida is

in the process of policy development, there is an immediate need for the golf course industry to actively work with the State toward a policy that is comfortable for both sides. It is worth expending some effort on this and the State is willing to listen.

Editor's Note: *Chris is working on behalf of several golf course owners to negotiate solutions with FDEP regarding the presence of elevated arsenic levels at golf courses. He is a member of a state task force charged with development of new environmental cleanup guidelines in Florida. As information comes to light which could be of use to the golf course industry, he plans to share this with the FGCSA. If you have any information (experiences at other golf courses, etc.) which could help him reach a practical solution to the arsenic matter, feel free to contact him at (561) 736-4648 or via e-mail at ermjsch@aol.com.*

FQPA Update

Environmentalists Get Off TRAC!

The Environmental Working Group (EWG), the most vocal anti-pesticide activist organization in the FQPA controversy, has resigned from the FQPA Tolerance Reassessment Advisory Committee (TRAC).

In a letter to Vice President Al Gore, EWG complained the Administration has failed to take "any tangible action to actually protect children from pesticides" and sharply criticized recently passed legislation that delays the phase-out of methyl bromide. EWG also claimed the Administration has been unwilling to act to reduce pesticide risks "in deference to economic concerns of agribusiness groups, pesticide companies and food processors."

EWG had threatened to pull out of the process earlier this year when USDA and EPA agreed to extend the TRAC sessions into 1999.

•The FQPA science issues framework was published in the Oct. 29 *Federal Register*. The framework is a schedule for the

issuance of a series of nine science policies to implement FQPA provisions. The framework is a direct result of TRAC discussions and comments on each interim science policy document will be invited through separate notices in the *Federal Register*.

•Idaho, Michigan, Pennsylvania, California and others are working on state resolutions supporting the industry position on FQPA that real exposure data should be used by EPA and that the law's deadlines should be extended to allow time to collect the data.

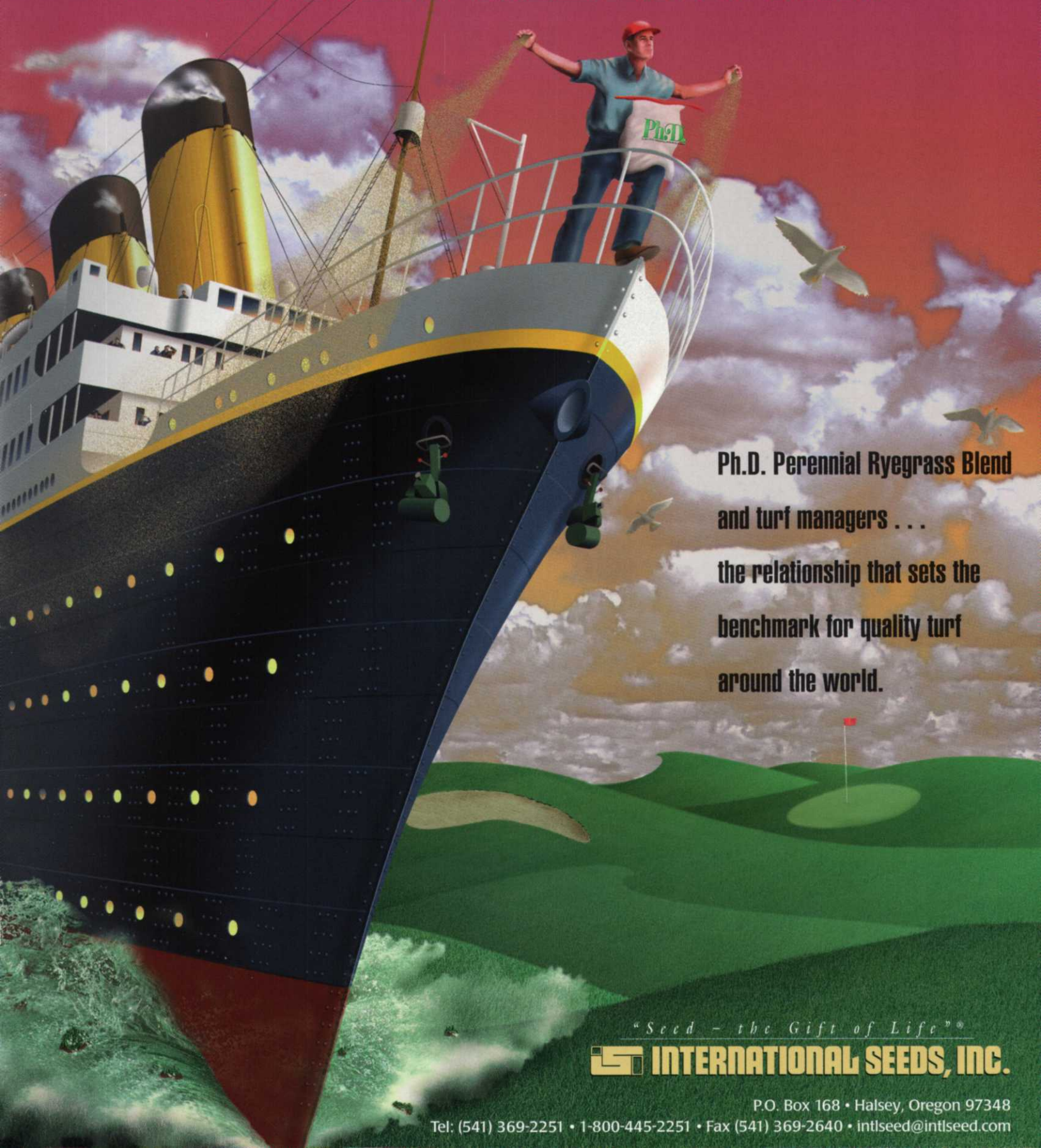
•The Western States FQPA Coalition will ask EPA to remove nonfood and nonfood-type uses from risk cup calculations in an issue paper being prepared by the group, reports the American Crop Protection Association (ACPA). Nonfood uses include sod production, ornamental nursery stock, and crops grown for seed. The position paper maintains nonfood uses do not pose dietary risk and that their removal from the process would allow for more efficient implementation of FQPA.

Reprinted from GCSAA's Government Relations Greens & Grassroots No. 47.

FQPA Letter Offer The Dialogue Continues

FQPA Implementation won't go away and neither should we! We need to keep emphasizing a scientific and realistic process to Congress. Joel Jackson, FGCSA Director of Communications will prepare a letter to your representative and senators for your signature on your club's letterhead. Just send three sheets of your club's letterhead and a self-addressed stamped envelope to Joel Jackson, FQPA, 6780 Tamarind Circle, Orlando FL, 32819. The letters will be returned to you for your signature and mailing to your legislators to keep the pressure on EPA to use good science and common sense in enacting the law.

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Creating a Haven for Fox Squirrels

A mixed tree stand dominated by native species, with an open understory and full palms, is a rich habitat for feeding and nesting. Photo by Rebecca Ditgen

Only a Few Courses Offer Habitat Suited for Large Populations

BY REBECCA SELFRIDGE DITGEN
University of Florida, Department of Wildlife Ecology and Conservation

From August 1995 to December 1997 I was fortunate to spend my days on 60 golf courses in south west Florida. I was there not to play golf but to search for and study one of my favorite animals, the Big Cypress fox squirrel (*Sciurus niger avicennia*).

The Bureau of Nongame Wildlife, Florida Game and Fresh Water Fish Commission, funded the study to see if golf courses can offer long-term refuge to these native squirrels which do not survive the pressures of dense development.

Squirrels and golfers know that all golf courses are not alike. The 30 months of field work clearly showed that some courses provide much finer habitat for fox squirrels than others.

On the larger scale, it became clear that planning and design strategies are critical to fox squirrels. Squirrel population levels are affected by isolation and clustering of courses, by traffic flow within and around a course, and by the density of development in and around a course.

On a smaller scale, at the level of course management, it is clear that tree species, ground cover, and human interactions can strongly influence squirrel numbers. Only a small number of courses offer habitat suitable for relatively high numbers of squirrels, and even these may not be secure for the long term. Given the variation in

landscape quality, I was able to identify management practices which can enhance habitat for fox squirrels if the species is present on a course.

Managing portions of a golf course for fox squirrels requires that you attempt to mimic elements of their native habitat. In southwest Florida fox squirrels live in open pine forests and make use of cypress stands, hammocks and occasionally the mangrove edges along the Gulf. They frequently move

Editor's Note: *The Florida Green has followed and reported on this study in two previous articles since its inception in 1995. We are pleased to present Ms. Ditgen's results and suggestions for ways golf courses can enhance the fox squirrel habitat.*

and feed on the ground and so benefit from an open understory. Managing the roughs and forested stands within a course with these habits in mind enhances opportunities for fox squirrels to feed and nest.

A consideration of tree species, understory management, palm trimming, and human activities will serve as a short introduction to landscape practices that can benefit these colorful squirrels.

Vegetation types

Pines appear to be a key element in fox squirrel habitat. Squirrels harvest the annual crop of cones, feeding on the seeds and depositing the stripped cores at the base of trees. The trees are also used for nesting, escape routes and resting.

Important though pines are, fox squirrels need a variety of tree species to flourish. Native cypress trees can furnish a high quality food source as

soon as the trees are old enough to produce their small round cones. The grand old cypress trees gracing the fairways of fortunate clubs provide excellent nesting sites in the large airplants clinging to their main branches and in cavities found high in their broad trunks.

Native oaks produce excellent food, as do figs, maples and a range of native trees and shrubs. Cabbage palms can offer safe nest sites and food. Whether nesting in palms, cavities, stick nests or airplants, fox squirrels use Spanish moss to line their nests whenever it is available. The maintenance or development of mixed wooded areas of native species, complete with airplants and Spanish moss, creates critical habitat for fox squirrels.

A wide variety of non-native species supplement wildlife feeding on some of the older courses in southwest Florida. Few of these tree species are being planted today and so I will not

In southwest Florida fox squirrels live in open pine forests and make use of cypress stands, hammocks and occasionally the mangrove edges along the Gulf. They frequently move and feed on the ground and so benefit from an open understory.

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Another study subject enjoys a large fungus dug from the rich litter layer beneath an open pine stand. Photo by Rebecca Ditgen

elaborate on them. I would instead encourage concentration on planting native species, both trees and shrubs, as they often require less care and water and they can provide food and shelter for native wildlife.

Understory

An open understory in tree stands is critical for the success of fox squirrels. Creating and maintaining an open understory is controversial and not part of the landscape plan of every course, but it is an essential landscape element in fox squirrel habitat. It benefits the squirrels even if all the trees are not native species. Native saw palmetto can be present but fox squirrels are not favored in a landscape with a heavy palmetto understory.

The open understory is most helpful to fox squirrels if it is covered with a layer of pine needles. The needle layer provides excellent areas for burying pine cones and acorns for later consumption. The acidic pine litter layer also appears to enhance the growth of mycorrhizal fungi which facilitate nutrient uptake by tree roots. The fungi are vital to pine survival and they provide a much-used food source for fox squirrels. Recent studies have shown that

squirrels spread the fungal spores as they defecate, providing further inoculation of pine roots. This is a good story for trees, fungi and squirrels.

Palm trimming

One of the easiest management techniques for fox squirrels, and a host of other native wildlife, is moderation in palm trimming, especially the native palms. Cabbage palms — by no accident the Florida state tree — have the look and grace of wild Florida. The layered leaves and long leaf bases of a cabbage palm provide a wonderfully protective shelter from tropical rains and winds, creating homes for native wildlife.

I was fortunate to witness more than one litter of fox squirrels starting life in the shelter of some rather full cabbage palms. The fullness of the palms was accomplished without distracting from the beauty of well-maintained courses.

The tropical palm trim so common on a number of courses may provide a “clean” look, but it turns our state tree into a useless remnant of a palm as far as wildlife is concerned. There are compromises in palm trimming. The extreme trim may be used on a few palms placed at dramatic points around the course if members prefer that look and the palms

in more secluded areas or near pine stands may be left with fuller crowns.

You do not need to stop trimming palms altogether to create usable habitat, but save enough leaves so that a dense upper crown remains and also keep long leaf bases in the crown to create a protected shelter in the top of the tree.

A few non-native palms found on golf courses can provide some of the benefits of the cabbage palms. Though I would not encourage you to plant the non-native palms, if you already have queen palms you know the fruits are highly sought after by fox squirrels.

The queen palm fruits can help the squirrels in the low food season of late winter and early spring. If you want to cut off the fruits so they will not litter the ground around the trees you might try placing them in an out-of-the-way area where squirrels can get to them for feeding.

Human interactions

Because golf courses are essentially human places, people who play there and squirrels who live there will eventually meet. Everyone will benefit and be happier if some thought is given to what people can do for and to squirrels.

Feeding — I have been on several courses where fox squirrels were common yet they were still wary of humans. They did not approach carts and they ran for cover when people or carts approached. That is the healthiest situation for both squirrels and humans. Squirrels should never be fed from golf carts or otherwise handed by people. They must never associate food and people.

Once fed from carts or otherwise by hand, fox squirrels become pests. They hang around tees and greens waiting for distracted golfers and then make off with the food supply. Cart-fed squirrels have a greatly increased risk of dying in a one-sided cart-squirrel accident or being pounded over the head by a golf club. They become unpopular and members may even lobby for their removal.

It is of course best to have an ongoing understanding and notices for members

about not feeding squirrels or other animals. Even one member who habitually feeds the animals can train them to be problem animals. If you already have problem cart trespassers try squirt guns to discourage them. Squirrels just need to get the idea that a cart will offer an unpleasant experience.

Feeding fox squirrels is not necessarily a bad thing to do, but it needs to be done so it helps the squirrels and does not aggravate the members. If you want to feed fox squirrels, it is best done by scattering food on the ground in an isolated location away from heavy cart traffic.

Placing it about on the ground instead of in feeders in trees may reduce transmission of diseases such as skin fungus. In the wild, fox squirrels eat nuts, seeds and some fruit. You will need to follow that pattern. Commercial seed mixes can be appropriate squirrel food and you may also place the fruits of trimmed palms in the mix. Squirrels should not be fed bread or processed foods and peanuts are not nuts.

Nest boxes

If your course is one of the many

with few ideal nesting sites, you may want to provide additional nesting sites in the form of nest boxes. Wood duck nest boxes work well for fox squirrels. Ideally they should be placed fairly high in pine or cypress trees, at least 25 feet from the ground, and be in a mixed cluster of trees.

You will need holes in the bottom for drainage and some circulation under the roof section. These boxes are often well used, both by females with litters and by individuals during extremely heavy rains and wind.

Education

One of the best ways to benefit fox squirrels is by providing information to members and guests. This might include signs asking players to watch out for darting squirrels along cart paths or club roadways or writing columns about habitat enhancement, feeding restrictions, or natural history of wildlife species that are common on your course.

Many club members are not familiar with our native wildlife and plants and a little information may go a long way in helping them to understand and appreciate the unique and beautiful natural heritage of Florida.

Squirrels should never be fed from golf carts or otherwise hand-fed by people.

In review

Whether you are the manager of an existing course with fox squirrels or you are involved in the planning of a new course, knowing what fox squirrels need can allow you to manage for their survival. Just remember the main areas of attention:

- Plant and maintain pines, cypress, oaks, maples, figs and other native trees and shrubs
- Maintain an open understory and create areas with a pine litter layer
- Trim palms moderately or not at all
- Consider human interactions- feeding, nest boxes, education

With careful planning, well-directed efforts, and good fortune you can help increase the feeding and nesting opportunities of the unique Big Cypress fox squirrel of southwest Florida.

An acknowledgment: In the course of my study I met a host of helpful and hardworking superintendents and assistant superintendents, many of whom shared my affection for these delightful fox squirrels. Their generosity and patience gave me access to the fox squirrels and their urban homes and I am deeply grateful for their assistance.

About the Author

Rebecca Ditgen is a wildlife ecologist in the Department of Wildlife Ecology and Conservation at the University of Florida. She conducted research on urban populations of Big Cypress fox squirrels as a Ph.D. student in that department and plans to continue her study of the species with a project in Big Cypress National Preserve. RSDitgen@ufl.edu.



A moderately trimmed cabbage palm provides a mid-day resting site for a Big Cypress fox squirrel whose fondness for pecans allowed him to be part of a radio-tracking study. Photo by Rebecca Ditgen



'Naturalizing' Means Restoring Ecosystems, Not Going Native

BY TOM STONE

President, Nature Golf, Inc.

The Audubon Cooperative Sanctuary Program, GCSAA, and the USGA have ignited an interest in naturalizing non-play areas on golf courses. The reasons vary greatly from environmental stewardship to cost reductions and everything in between.

But what might be right for the front nine may be entirely wrong for the back. Ensuring success in this process may be as simple as letting nature tell you what to do.

In naturalizing areas of the golf course, the long-term goal should be to develop a self-sustaining habitat which will survive with minimal outside assistance after it is established. Planting the wrong plant in the wrong area will probably lead to less than favorable results, requiring additional water, fertilizer, chemicals and labor. A little research before you plant will pay off greatly.

Most golf courses cannot be totally restored to their original native environment, but they can be naturalized to what they have become! The construction process moves soils around, changes elevations affecting water flow and drainage, and generally alters the original ecosystem. For instance, a wetland forest which has been drained, probably will not survive as it had naturally, and should be naturalized according to its new environmental features.

There are 17 different and distinct natural ecosystems throughout Florida. Some of the more familiar ones are coastal uplands, fresh water marshes, pine flatwoods, wetland forests and mesic-hardwood forests. Each ecosystem has natural plant communities affected by site conditions like soil type, water availability and climate. These plant communities are made up of trees, understory trees, shrubs, vines



Naturalizing out-of-play areas like this tee slope can save you labor hours. It is important to choose the right plant material that will adapt and thrive in the new conditions. Photo by Tom Stone.

and groundcovers, wildflowers, and aquatics.

Naturalizing the golf course is more than just planting some native plants. The following steps will allow this to be more successful:

1. Identify wildlife species whose habitat you are trying to enhance. What specific features are required for them: nesting areas, food sources, shelter, cavities, etc. Encompass their needs into your overall plan.

2. Identify the areas to be naturalized. Use a map of the individual hole or the whole golf course to mark out the areas to be considered. Consider corridors for wildlife to move within the course.

3. Determine how naturalizing an area will affect playability of the golf course. Will it slow down play or make the hole too difficult? Trees may be unacceptable because they close off a dogleg across water but native grasses may have a place in these areas.

4. Classify the areas being considered. Determine what type of ecosystem would occur in these areas naturally. Do water levels fluctuate, does this area stay flooded for months at a time, is this area well drained after a 4-inch rain?

5. Determine what types of inva-

sive plants or trees are already located in these areas. Implement a plan to eradicate or remove these species prior to naturalization.

6. Develop a plant palette of species which will survive naturally in these specific areas. You wouldn't expect a bald cypress to live on top of a sand hill or a pine tree to survive submerged for three to five months, so put the right plant in the right place.

7. Plant, fertilize, irrigate and use pre-emergent herbicides for the first year or two to allow for a successful establishment, then turn off the water, eliminate the fertilizer, and let nature do the rest.

The end result will be the successful restoration of ecosystems and habitat within the golf course.

The golfing experience will be greatly enhanced, allowing golfers to experience a more natural environment and see wildlife which they may not see anywhere else

Besides improving habitat for wildlife, naturalizing non-play areas of the golf course will reduce expenses for irrigation, fertilizer, herbicides/pesticides, and labor to maintain these areas.



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IPM Principles Apply Indoors as Well as Outdoors

BY JEAN CIBROROWSKI

*Minnesota Department of
Environmental Protection*

Integrated pest management is typically associated with treating pest problems which occur in landscape settings or agricultural fields.

How many of you have ever thought of employing IPM when treating indoor pest problems?

In most cases, when an indoor pest problem arises, people want the quickest solution; however, in the long run, a "quick fix" may not be the most appropriate. Just as in outdoor settings, indoor settings can also benefit from well-planned IPM programs which are proactive in nature.

The same principles which apply to outdoor IPM are also applicable to indoor IPM. Remember the six IPM "How To" steps: gather information and assess your situation; establish monitoring procedures; establish injury levels and develop economic thresholds; determine corrective actions; establish a good record-keeping system, and finally, evaluate your program's effectiveness.

It makes good sense to use IPM in indoor settings where humans and pets live, work and play. The goals of a good IPM program stress:

- 1) the importance of minimizing the risks to human health and the environment;
- 2) providing effective control of a pest complex by including alternative pest management strategies which are

least toxic to non-target organisms;

3) ease in carrying out a pest management program safely and effectively;

4) maintaining cost effectiveness both in the short and long term; and

5) appropriateness to the site.

When implementing a pest management program in buildings it is important to consider not only the pest but the environment in which the pest is found.

What factors are contributing to the pest's ability to survive and propagate? Where is the pest located, i.e., throughout the building or just locally in a specific area?

In order to manage the pest, you must be aware of its habits and location. The more information you collect, the better able you will be to make

Sanitation goes a long way in eliminating pest populations. Eliminating sources of water and food for potential pests is very important. Storage of items in the proper containers, off the floors, and in dry spaces can aid in preventing problems. Physical controls, including vacuuming, caulking cracks, placing traps and removing pests by hand play an important role too.

informed pest management decisions. Often by simply monitoring the pest, you will be able to determine its location and then, using one or more of several treatment options, control the pest so that it is below your accepted aesthetic, economic and/or safety threshold.

Remember, when treating any pest you must be aware of its life cycle so that you treat the pest during its susceptible life stage. Treatment of dormant stages will prove unsuccessful and a waste of time and money.

Broadly speaking, what are the treatment options for indoor pests? I will touch briefly on four general categories:

education, habitat modification, physical controls and chemical controls.

• **Education:** Often indoor pest problems can be drastically reduced or eliminated by education. If people understand what causes a pest problem, they may be better able to avoid behaviors which can lead to pest problems. For example, people may not realize that by leaving food and drinks out and not cleaning up spilled foods, they are creating the perfect environment for pests.

• **Habitat modification:** It is important to keep things clean. Sanitation goes a long way in eliminating pest populations. Eliminating sources of water and food for potential pests is very important. Storage of items in the

proper containers, off the floors, and in dry spaces can aid in preventing problems.

• **Physical controls,** including vacuuming, caulking cracks, placing traps and removing pests by hand play an important role too. Choosing least-toxic chemical controls such as desiccating dusts and insect growth regulators can also

contribute to your IPM program.

• **When chemical control is necessary,** consider the safety of the pesticide for humans, pets and the overall environment. Try to use a chemical which is species specific and always follow label directions.

Keep in mind that the aim of an IPM program is to manage pests over long time periods. You want to implement a program which will be viable now with continued efficacy into the future.

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University of Florida Field Days

Look Where Our Research Dollars Go!

In the last issue of the *Florida Green* we mentioned the association's annual budgeting process and how research funds are derived. In this follow-up article, take a look at the nearly three dozen research projects that were on display at the 1998 University of Florida Field Days in July.

Sometimes, the total scope of all the ongoing research gets lost in the focus on a few "hot button" issues. Our local and state fund-raising efforts help support continuing basic research and evaluation of products and programs which are essential as regulatory parameters change and new chemistry and grasses are developed.

G.C. Horn Memorial Turfgrass Laboratory:

Fertility, Nutrition, Growth Regulators and Environmental Impact Studies:

1. Comparison of Viking Ship and



Dr. Grady Miller explains the rhizotron operation and discusses the deficit irrigation vs. quality parameters study being done there. The rails in the foreground and background running left to right support a rolling roof to keep rainfall off the test cells. Photo by Joel Jackson.



Dr. Al Dudeck discusses the successes and failures of 40 bermudagrass selections being evaluated for use on fairways. Photo by Joel Jackson.

standard fertilization programs for golf greens and fairways – J.B. Sartain

A precise nutrient plan has been developed by Hydro-Agri (Viking Ship Fertilization Program) involving specific application times and materials. This project will compare the Hydro-Agri nutrient management plan with a standard plan. Turfgrass growth and quality will be compared using the two plans.

2. Effects of types and rates of N on growth and quality of turfgrasses – J.B. Sartain

Evaluate the effectiveness of different slow-release N sources in promoting growth and influencing quality of Tifway bermudagrass and ryegrass. Determine the application rate and environmental conditions on the response of the slow-release materials.

3. Comparative responses of Pursell's new coated products to other N sources under two N fertilization schemes on Tifway bermudagrass – J.B. Sartain

Evaluate the effectiveness of two new standard-sized coated urea products relative to five commercially available slow-release N sources applied at two rates to Tifway bermudagrass and maintained under fairway conditions. The N sources will be compared along with ammonium sulfate with 75% of the applied N originating from the slow-release sources.

4. Effects of Fe sources on growth,

quality, and nutrient uptake of bermudagrass – J.B. Sartain

Initiated to determine growth, quality, and iron uptake response of bermudagrass to the application of experimental iron sources. Study the staining potential of the various iron sources when left on a concrete surface under moist conditions.

5. Comparative responses of cool and warm-season turfgrasses to liquid and solid sources of N and K – J.B. Sartain

Various N and K nutritional products applied in different frequencies and rates to determine their influence on growth rate, visual quality, and nutrient uptake of cool- and warm-season turfgrasses and on maintenance of quality during transition from cool- to warm-season turfgrasses.

6. Influence of two growth regulator products on TifSport bermudagrass grow-in – J.B. Sartain

This research will evaluate the influence of different formulations of gibberellic acid (a known growth regulator) on top and root growth of TifSport bermudagrass during establishment over a 12-week period.

Turfgrass Breeding, Evaluation and Field Trials

7. Bermudagrass Fairway Trials – A.E. Dudeck

Forty bermudagrass selections were plug-planted June 27, 1995 in field plots at the IFAS Turfgrass Field Laboratory,

Gainesville. Plots are being fertilized with a total of either six or three pounds of nitrogen per 1000 square feet per growing season. Plots are being mowed five times per week at a height of 0.5 inches. Seven of the best-performing grasses were planted in fairway trials at the Palm Beach National Golf Course, at the Grand Cypress Golf and Country Club, and at the Gainesville Country Club.

8. Ultradwarf Bermudagrass Trial – A.E. Dudeck

Eight bermudagrass selections were plug-planted Aug. 5, 1997 in field plots to evaluate performance of ultradwarf bermudagrasses Champion, FloraDwarf, MS Supreme, and TifEagle. Plots are being fertilized weekly with 0.5 pounds of nitrogen per 1000 square feet. Plots are being mowed five times per week at a mowing height of 0.19 inches during the growing season. Clippings are being removed. After complete establishment of all grasses, alleys will be allowed to close and mowing height will be reduced to 0.12 inches.

9. St. Augustinegrass Performance In North Florida – A.E. Dudeck

Twelve St. Augustinegrasses were plug-planted on Aug. 8, 1995 in field plots at the IFAS Turfgrass Field Laboratory, Gainesville. Plots were fertilized with a total of four pounds of nitrogen per 1000 square feet per year. Plots were mowed three times per week during the growing season with a mulching mower set at a height of 2.0 inches. After two years, grasses having best turf quality, which averaged 5.6 on a scale of 1 to 9 where 9 = best turf quality, included FHSA-115, FHSA-117, FL 1997-6, Floralawn, Floratam, Floratine, MSA-11, MSA-31, and Palmetto. Grasses having best turf density scores, which averaged 7.2 on a scale of 1 to 9 where 9 = best density, included FL 1997-6, MSA-11, and MSA-31.

10. 1997-1998 Overseed Trials on Fairway and Putting Green Bermudagrass – S. F. Anderson and A.E. Dudeck

Forty-three cool-season turfgrasses

were overseeded on a Tifdwarf bermudagrass putting green and on a Tifway bermudagrass fairway at Gainesville. Studies were established from Nov. 7-14, 1997 and terminated April 30, 1998. On the putting green, grasses with best turf quality scores, which averaged 7.6 on a scale of 1 to 9 where 9 = best, included creeping bluegrasses, *Poa reptans*, DW 42 and DW 184, a mixture of 85% Power perennial ryegrass, *Lolium perenne*, with 15% 'Stardust' rough bluegrass; *Poa trivialis*; a mixture of 80% Catalina perennial ryegrass with 20% Winterplay rough bluegrass; and a mixture of 28% each of Atlantis, Imagine, and Lynx perennial ryegrass with 15% Fuzzy rough bluegrass. On the fairway, grasses with best seasonal turf quality scores, which averaged 7.2, included creeping bluegrasses DW 42, DW 184, and DW 208; and a mixture of 28% each of Atlantis, Imagine, and Lynx perennial ryegrass with 15% Fuzzy rough bluegrass.

11. Hawaii Bermudagrass Expansion – A.E. Dudeck

Twenty selections are being increased for field testing throughout the state. Seven of the best performing grasses were planted in fairway trials at the Palm Beach National Golf Course, at the Grand Cypress Golf and Country Club, and at the Gainesville Country Club.

12-13. Breeding Bermudagrass and Zoysiagrasses for Florida – B.T. Sculley

Thirty-seven genotypes of both bermudagrass and zoysiagrass along with known genetic standards are replicated twice in this study. This evaluation block in Gainesville is one of five statewide cooperative test sites for UF/IFAS turf germplasm.

14. National Bermudagrass Test – 1997 – A.E. Dudeck

This NTEP study is one of 17 being conducted throughout the southern United States. Sixteen bermudagrass selections were plug-planted Aug. 7, 1997 along 18 seeded types, which were planted Aug. 12, 1997 in field plots at the IFAS Turfgrass Field Laboratory, Gainesville. Plots are being fertilized at a rate of 4.0

pounds nitrogen per 1000 square feet per growing season. Plots are being mowed at least three times per week at a height of 0.5 inch.

15. St. Augustinegrass Cultivar Breeding and Evaluation Program – R.T. Nagata

The goal of the St. Augustinegrass breeding and evaluation program is to identify superior lines that can fill the current and future needs of the citizens of Florida and the southeast United States. These lines will be acceptable to both commercial sod producers and end users (homeowners, etc.), while minimally impacting the environment and require fewer resources for growth.

This research plot represents a part of the statewide evaluation program that has the same 100 lines planted in Jay, Gainesville, and Belle Glade. The turfgrass here was established as plugs June 27, 1997. At this time, several lines appear to be promising and will be advanced for further studies. These lines are NUF-23, NUF-32, NUF-56, NUF-80, NUF-94, NUF-129, NUF-148, NUF-155, NUF-164, and NUF 175. All of these lines have uniform appearance, are quick to grow into the plot area, and have very little gray leaf spot disease. Selected lines will be evaluated in larger plots under commercial turf production practices to study end use potential and longevity.

16. National St. Augustinegrass Test - 1996 – A.E. Dudeck

This study is one of seven being conducted throughout the southern United States. Ten St. Augustinegrass selections were plug-planted Aug. 15, in field plots at the IFAS Turfgrass Field Laboratory Gainesville. Plots are being fertilized at a rate of 2.0 pounds nitrogen per 1000 square feet per growing season. Plots are being mowed weekly with a mulching mower set at 2.5 inches. During the 1997 growing season, best turf quality, which averaged 7.7 on a scale of 1 to 9 where 9 = best turf quality, was produced by FHSA-115'. Second best group of grasses that produced acceptable turf quality scores, which averaged 6.1, included Delmar, FHSA 117, Floratam, Raleigh,



and 6-89-70 St. Augustinegrass.

17. National Zoysiagrass Test – 1996 – A.E Dudeck

This study is one of 16 being conducted throughout the southern United States. Sixteen zoysiagrass selections were plug-planted Aug. 19, 1996 along with eight seeded-types, which were planted Aug. 21, 1996 in field plots at the IFAS Turfgrass Field Laboratory, Gainesville. Plots are being fertilized at a rate of 0.5 pound nitrogen per 1000 square feet per growing month. Plots are being mowed weekly with a mulching mower set at a 2.0 inches.

Seeded cultivars of Chinese common, J-36, J-37, Korean common, Z 18, Zen-400, Zen-500, and Zenith produced unacceptable turf quality during the 1997 growing season. This was predominately due to mole cricket activity. Mean turf quality averaged 4.2 on a scale of 1 to 9 where 9 = best turf quality.

Vegetative zoysiagrasses having best turf quality scores, which averaged 6.6 included El Toro, HT-210, Jamur, Miyako, and Zeon.

18. Tall Fescue Germplasm Evaluation – R. R. Duncan and G. M. Prine

Plots of 10 tall fescue experimental lines from Dr. R.R. Duncan, University of Georgia, and four experimental lines from Dr. G.M. Prine, University of Florida, were seeded Jan. 9, 1998 in field plots located at

the IFAS Turfgrass Field Laboratory, Gainesville.

The purpose of this study is to screen for genotypes with heat and drought tolerance. A complete fertilizer totaling 2.0 pounds of nitrogen per 1000 square feet per growing season was applied during the winter growing season. Plots are being mowed weekly with a mulching mower at a height of 2.5 inches. No supplemental irrigation during the summer season was to have been applied, but due to the extended spring/summer drought, supplemental irrigation is being applied.

Herbicide and Nematicide Control Evaluations

19. Season-Long Grassy Weed Control With Various Preemergent Herbicides – G L Miller and J.S. Weinbrecht

Devrinol, a preemergent herbicide recently registered for use in ornamentals and turfgrass, was evaluated for summer annual grassy weed control in a stand of Tifway II standard comparison included Barricade, Dimension, Pendulum, Ronstar, and Surflan.

Plots were seeded with goosegrass and southern crabgrass at 30 seed/sq. ft. At 90 days after initial application, good (80%) goosegrass and southern crabgrass control was evident following all treatments. Despite irrigation efforts to maintain a healthy turf, there was concern regarding questionable germination response through the

unusually dry spring. To address this concern, an additional seeding was made July 7 in anticipation of more typical summer rain events, and to further evaluate season long efficacy.

Additional efficacy ratings were available for spotted spurge and globe sedge seedlings which became evident throughout the trial area during May and June. In this trial, good spotted spurge control was evident only with Pendulum. Good globe sedge seedling control was evident with Devrinol, Dimension, Pendulum, and Ronstar. Evaluation will continue through the winter season to monitor annual bluegrass efficacy.

20. Dr. Dunn has nematicide studies at the Turf Laboratory and the Envirogreen. See the Fall 1998 Florida Green.

Envirotron Complex

Rhizotron

21. Relationship Between Deficit Irrigation of Lawn Grasses and Quality Parameters. G.L. Miller and F.S. Zazueta

The purpose of this project is to measure St. Augustine and bahia turfgrass water consumption under stress in order to determine reduced-irrigation turfgrass water use coefficients. A computer control system was designed and installed to implement the following irrigation strategies: 1) timer based historical data, 2) daily water budgets, 3) sensor controlled, 4) neural network, and 5) visual stress.

Glasshouses

22. Phosphorus retention in USGA greens – E.A. Brown and J.B. Sartain

Determine the influence of sand coatings, soil amendments, and phosphorus source on the retention and leachability of P through a USGA green profile. Parameters include coated vs. uncoated sand; plain sand; Fe-humate, and peat amendments; and different sources of P fertilizer (MKP, 0-20-20, and CSP). Profiles were leached biweekly to evaluate leaching of P and tissue samples were harvested biweekly and evaluated for growth rate and nutrient



Dr. Jerry Sartain explains just one of eleven nutritional and environmental studies he has underway at the G.C Horn Turfgrass Field Lab and at the Envirotron Complex. Photo by Joel Jackson.

uptake. Iron and Al oxide coated sands with Fe-humate amendment retained more P. This study is currently in progress.

23. Lysimeter Study For Evaluation of Turfgrass Response to EDR Reject Water – O'Connor

24. Mini-lysimeters with bermudagrasses for K leaching evaluations – Kuen-Took Chung and J. B. Sartain

25. Cone-tainer production of turf samples for class demonstrations – G. L. Miller and T. Hoffner

26. The environmental impacts of golf greens establishment and post-construction maintenance – H.D. Gooding and J.B. Sartain

The impact of a choker-layer, soil physical amendments, N-fertilizer source and regime on N leaching during establishment and post-construction maintenance of a sand putting green were evaluated in two glasshouse studies. Preliminary results suggest that a choker-layer did not influence N leaching loss. Fertilizer source and physical amendments significantly affect leaching. Minimum N leached during post-construction maintenance period with all treatments.

Envirogreen and Glasshouses

27. St. Augustinegrass tissue N evaluation using a electronic chlorophyll meter. – G.L. Miller and I.R. Rodriguez

Evaluate the utility of a hand-held chlorophyll meter (SPAD 502) to assess the nitrogen status of St. Augustinegrass. Utilize this new technology to compare leaf chlorophyll measurements, tissue nitrogen and tissue iron as to their usefulness for predicting turf quality of St. Augustinegrass. Due to the cost and inconvenience of testing, most N fertilizer application recommendations are still based on fertilizer application schedules without measuring for plant deficiencies. A quick reliable method to diagnose turfgrass N status would be a valuable tool for golf course superintendents, consultants, and researchers.



Graduate student Ian Rodriguez explains how fast tissue-sample analysis is with Near Infrared Reflectance Spectroscopy (NIRS). The turnaround time is measured in hours instead of days. Photo by Joel Jackson.

28. Soil and Turfgrass Analysis Correlation – J. R. Higby and J. B. Sartain

By applying N, P and K at incremental rates, a range of plant available nutrients was established in the plant tissue and the underlying soil of two bermudagrass cultivars. This matrix allows for a statistical correlation to be performed by quantifying these parameters along with the results from frequent visual quality ratings.

Additionally, a mirrored, mass-balance lysimeter study is being conducted concurrently to determine any adverse environmental effects resulting from these differing application rates. This study will also provide an opportunity to evaluate new, site-specific, rapid analysis techniques over a wide range of nutritional values.

29. Nitrogen scheduling on USGA golf greens using NIRS technology – G.L. Miller and I. R. Rodriguez

Inconvenience and slow turn-around time restrict the usefulness of traditional wet chemistry tissue analysis for diagnosing N status in turfgrasses. Evaluate the

utility of near infrared reflectance spectroscopy (NIRS) in developing fertility programs for bermudagrasses grown on a USGA green. NIRS results correlated positively with Kjeldal N analysis (standard wet-chemistry analysis). This study shows that using NIRS for N fertility scheduling can result in high quality turfgrass with reduced N fertilizer used compared to other scheduling techniques.

Additional studies under way:

30. Soil Stabilization Using Subsurface Stabilization Mats For Sand-Based and Native Soil Athletic Fields – G.L. Miller And J.S. Weinbrecht

A soccer field containing four Enkamat products was built in one of Gainesville's city parks using the native soil. The field was sprigged to Tifway bermudagrass and is currently being grown in for further evaluations. Evaluation parameters include surface hardness and turf wear. To gain a better understanding of Enkamat's surface stabilization qualities on a sand-based system, a greenhouse evaluation is currently being conducted. These evaluations will be



compared to a control (no Enkamat) for a total of five treatments.

31. Evaluation Of Soccer Field Surface Hardness And Ball Roll Characteristics For Development Of Performance Standards – G.L. Miller

The two UF varsity soccer fields are being intensively evaluated for surface hardness using the Clegg Impact hammer and ball roll characteristics using the Soccer Field Gauge. In this study, the UF soccer fields are sectioned off in grid fashion (80 grid quadrants) so that we can

return to the same area for continued monitoring of the field surface hardness. Based on these evaluations, a set of performance criteria is being developed.

32. Dislodgeability Of Turfgrass-Applied Pesticides And Implications For Human Exposure – R.H. Snyder And J.B. Sartain.

Chlorpyrifos, fenamiphos, isafos, 2, 4-D and dicamba were applied to bermudagrass (*Cynodon dactylon* L. x *C. transvaalensis*) at their labeled rates. Dislodgeability of these pesticides onto cotton fabric, leather, golf balls, golf club grips, club face and cheesecloth were examined over time. These data were used to develop a comprehensive risk assessment.

33. Impact of amendments on the mobility of nutrients and water retention of USGA greens – J. A. Comer and J.B. Sartain

Comparison of nutrient and water retention capabilities of several different amendments in lysimeters simulating USGA constructed greens with a bermudagrass crop. The amendments studied were organic matter, potassium polyacrylamides, polyacrylamides, iron humate and zeolites. Amended soils had a higher tendency to retain nutrients and lower water usage in a USGA green than unamended soils.



From left, Dr. Lawrence Datnoff and Dr. John Cisar lay out compost topdressing experiment on the nursery green at Palm Beach National G.C. Unidentified UF research assistant in the background applies compost mix. Photo by Mark Jarrell, CGCS.

IFAS Researchers Conduct Studies at Palm B. National

There comes a time when research studies need to leave the artificial world of the university test plot and be subjected to real world conditions. Two such studies are under way at superintendent Mark Jarrell's Palm Beach National Golf Club in Lake Worth.

IFAS TurfCoordinator Dr. John Cisar is teaming with plant pathologist Dr. Lawrence Datnoff to evaluate the effects of topdressing golf greens with a compost material, and plant breeder Dr. Al Dudeck has planted 40 fairway bermudagrass selections for evaluation under normal maintenance conditions. Stay tuned for developments and hopefully more news on other on-site projects.



Dr. Al Dudeck brought a whole array of fairway bermudagrass selections down from the test plots in Gainesville to be grown out under south Florida conditions. Photo by Mark Jarrell, CGCS.

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Is turfgrass research important to you? Does the game of golf and your chosen profession mean enough to you to want to help find ways to make it more efficient and affordable, safer and more enjoyable, and less damaging to the environment?

Do you like living on the edge, or would you like new grasses, products, and practices developed that might help you to meet the extreme demands of your membership and increase your job security?

These questions are meant to be rhetorical, but the facts prove their validity. In 1997, only 27 golf clubs made contributions to the Envirotron or the FTGA Research Foundation. With 1998 nearly over, that number has dropped to 20. Contributions to the GCSAA's "Investing in the Beauty of Golf" Program so far are

overwhelmingly corporate — superintendent participation is less than 2 percent of our membership.

Our suppliers continue to bear the burden of supporting our research needs, while few of us earning our living in the golf industry make personal contributions, and those who benefit most — golfers — do virtually nothing except by the indirect costs passed on by our suppliers.

Those of us who serve our superintendent and turfgrass associations in Florida have scratched our heads for years trying to develop fund-raising methods able to meet our research needs. Our efforts have had some success — we have raised, on average, about \$150,000 per year as opposed to the \$30,000 a year back in the 70s and early 80s — but this increase has largely been offset by university budget cuts over the same period. The majority of this increase, again, has mainly come from our suppliers.

The ball game changed just as we became real players, and like it or not, this is how it will be played from now on, whether it be the University

of Florida or any other university. Each research faculty position costs the university between \$180,000 and \$250,000, and if we want them to do a research project, we have to pay for it. The University of Florida reports that it spent a total of \$1,985,556 on turf in 1997, committing 12.15 full time faculty equivalents working on 27 separate projects. Only \$109,273 of that nearly \$2 million came from industry.

Now we are once again faced with declining donations, just at the time we have finally gotten a turf coordinator in place and increased inputs and commitments to the turfgrass program from the UF IFAS administration. Some of our suppliers are questioning the value of their donations and are reducing their level of support, if not eliminating it altogether. This is the very time we all need to step up to the plate and help move our program forward, now that we have some momentum.

The FTGA now has Don Benham, director of public relations, in place to help with fund raising. There are several new fund-raising ideas being developed, such as an "initiative" to take to the Florida Legislature, a celebrity golf tournament, club assessments of \$2 per member per year, and the identification and solicitation of potential large contributors. The turfgrass certification program has begun to bring in a few dollars. Through Roy Bates and Ron Garl, we hope the new Florida Golf Alliance will bring in new research dollars.

These ideas may one day become reality and develop funding sources adequate to our needs, but in the meantime, donations are needed to allow us to fund our researchers and prove we are a viable and committed industry that can "partner" with our university turfgrass program.

I urge you to think seriously about your future and the industry you work in. If every golf club in Florida would donate just \$250 per year, we would have all the research funding we need. Don't leave everything up to your organizations and the volunteers who serve them! We're all in this together and it isn't fair for you to reap the benefits without contributing to the cause. Write that check today to your local chapter, the FGCSA, or the FTGA Research Foundation in support of turfgrass research!

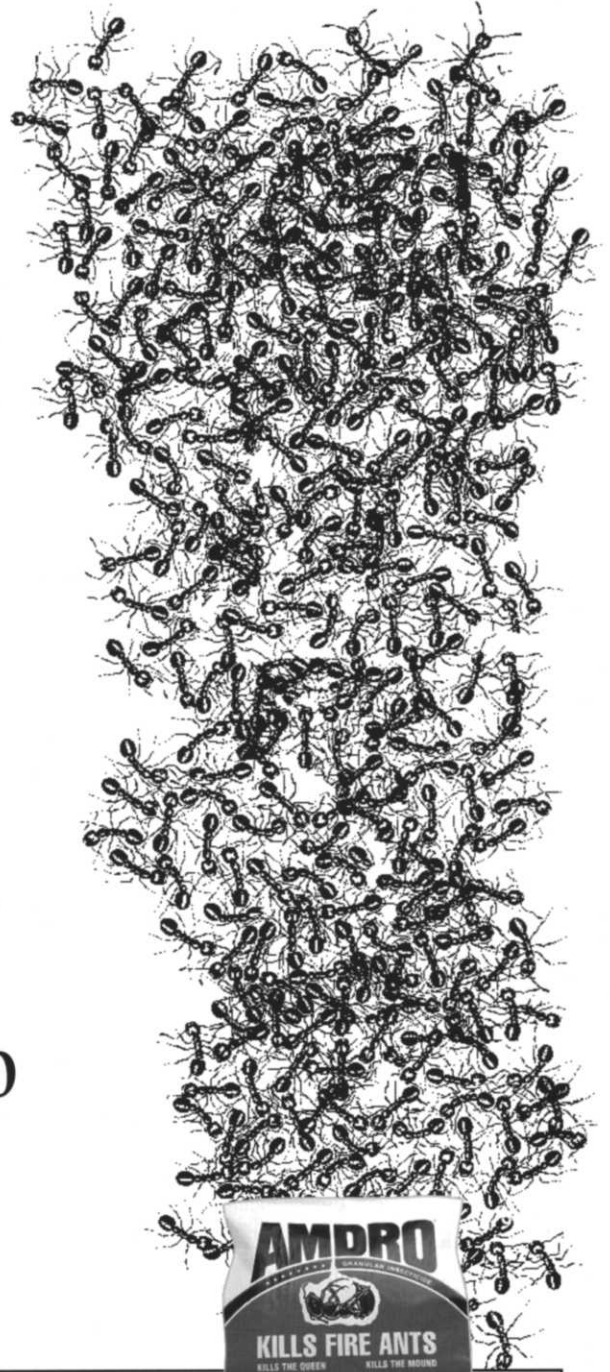
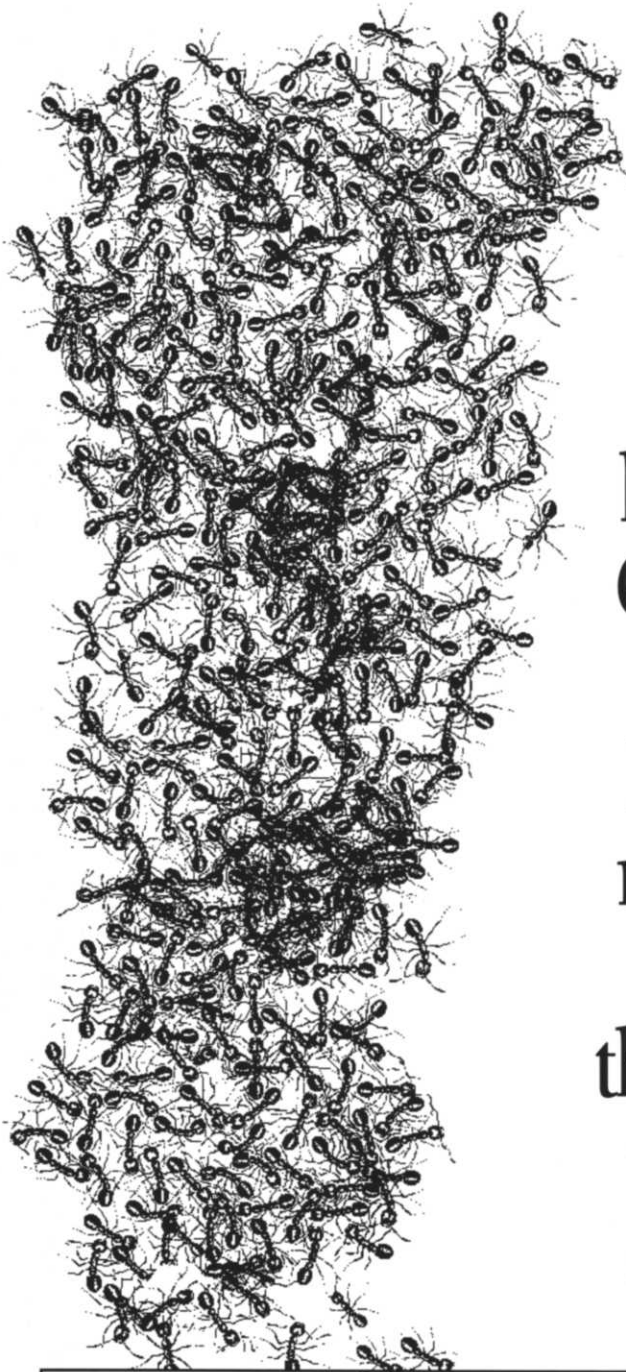
Small Gifts Make a Big Difference

Mark My Words

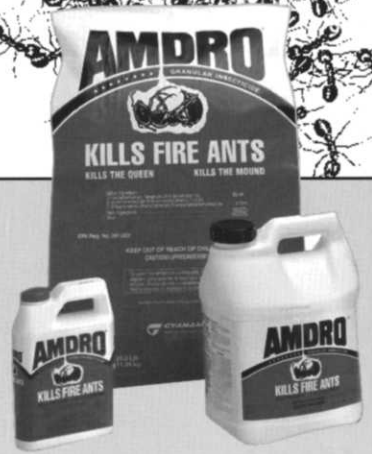
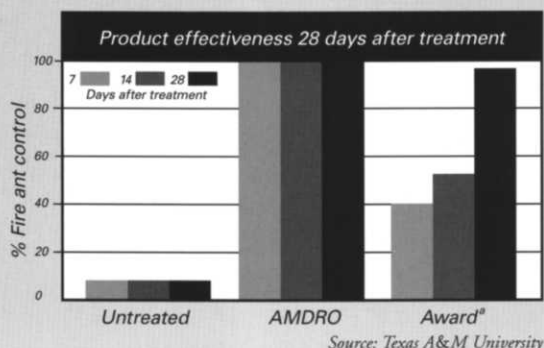


Mark Jarrell, CGCS
Vice President
FTGA

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you'll
have a
million
other
things to
worry
about.



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Call for Articles

This is a call for articles for the 1999 issues of the Florida Green.

Contact Joel D. Jackson, Editor for more information. Phone: 407-248-1971. Fax: 407-248-1971. E-mail; FLGrn@aol.com. All slides and photographs should include identification of persons in the picture and the name of the photographer.

HANDS ON TOPICS for 1999: Share your best practices and tips for these upcoming topics. Slides or photographs are encouraged.

- **Spring Issue** - Superintendent and Vendor Relationships
- **Summer Issue** - Soil Amendments: From Ceramics to Organics
- **Fall Issue** - Superintendent Image and Visibility

SPOTLIGHT: People and events making news in Florida. From award winners to chapter tournaments and other accomplishments. Send in your story. Slides or photographs encouraged.

SUPERINTENDENT'S JOURNAL: Personal observations or experiences related to any phase of the turf management profession. Slides or photographs encouraged.

PROFESSIONAL DEVELOPMENT: General management topics beyond turf. Examples: Education, facilities, personnel, computers, training, etc. Slides or photographs encouraged.

INDUSTRY NEWS: News items of interest to Florida superintendents from allied associations in the turf/

horticulture industry. Slides or photographs encouraged.

OPINION: Exactly what it means! Articles voicing a personal point of view on any topic concerning Florida superintendents. Slides or photographs encouraged.

RESEARCH: A section reserved primarily for university and technical authors to report on research results within the turf industry. Also reports of practical on-course testing. Slides or photographs encouraged.

RUB OF THE GREEN: Articles and anecdotes with a humorous twist. Slides or photographs encouraged.

STEWARDSHIP: Superintendents are invited to submit ideas and articles about environmental issues and initiatives at their courses. Slides or photographs encouraged.

1999 Florida Green Photo Contest

Category 1 - Wildlife on the Course: mammals, birds, reptiles, amphibians.

Category 2 - Course Landscape – Formal Plantings: annuals, shrubs, trees, entrance and tee signs.

Category 3 - Course Landscape – Native Plantings: aquatic vegetation, grasses, shrubs, trees and wildflowers.

Category 4 - Scenic Hole Layout Shots: sunrises, sunsets, frosts, storms and any other golf hole view.

Prizes

- First Place (\$100) and Second Place (\$50) in each category.
- Editor's Choice - Best Overall Photo - \$100.
- All winning entries published in the Fall 1999 issue.

Easy Rules

1. Color prints or slides. Only one entry per category.
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 to 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 photo shall be attached to a sheet of 8.5 x 11 lined paper. Line up the photo with the vertical and horizontal lines to square the photo on the page. Attach the print to the paper using a loop of masking tape on the back of the photo. Slides must be easily

removable for viewing.

4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the print or slide.
5. Judging will be done by a panel of FGCSA members not participating in the contest.
6. Mail entries in a bend-proof package to Joel D. Jackson, 6780 Tamarind Circle, Orlando 32819. No entries accepted postmarked after August 1, 1999.



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They Seem To Get It, But...

Thank you for contacting my office regarding the Food Quality Protection Act. It is good to hear from you.

In 1996, Congress passed the Food Quality Protection Act as the successful conclusion to a 15 year effort to repeal the obsolete Delaney clause. Unfortunately, Environmental Protection Agency implementation has not followed normal administrative procedures and there has been little or no opportunity for industry to comment.

There have not been incentives and streamlined registration for new products. The prospects have led members of the House Agriculture Committee to share their concerns with the EPA. I have cosponsored H. Con. Res. 290, and have also written to Administrator Carol Browner

Letters..

...to the Editor

expressing my concern for adherence to congressional intent.

Vice President Gore has intervened and given the assurance that industry concerns will be addressed: that there will not be significant cancellations during this year and there will be enough time for implementation and a satisfactory transition to the new guidelines.

It is important that practical alternatives be developed before essential products are canceled, and industry representatives are able to respond effectively to pest management challenges. It is imperative that the decisions

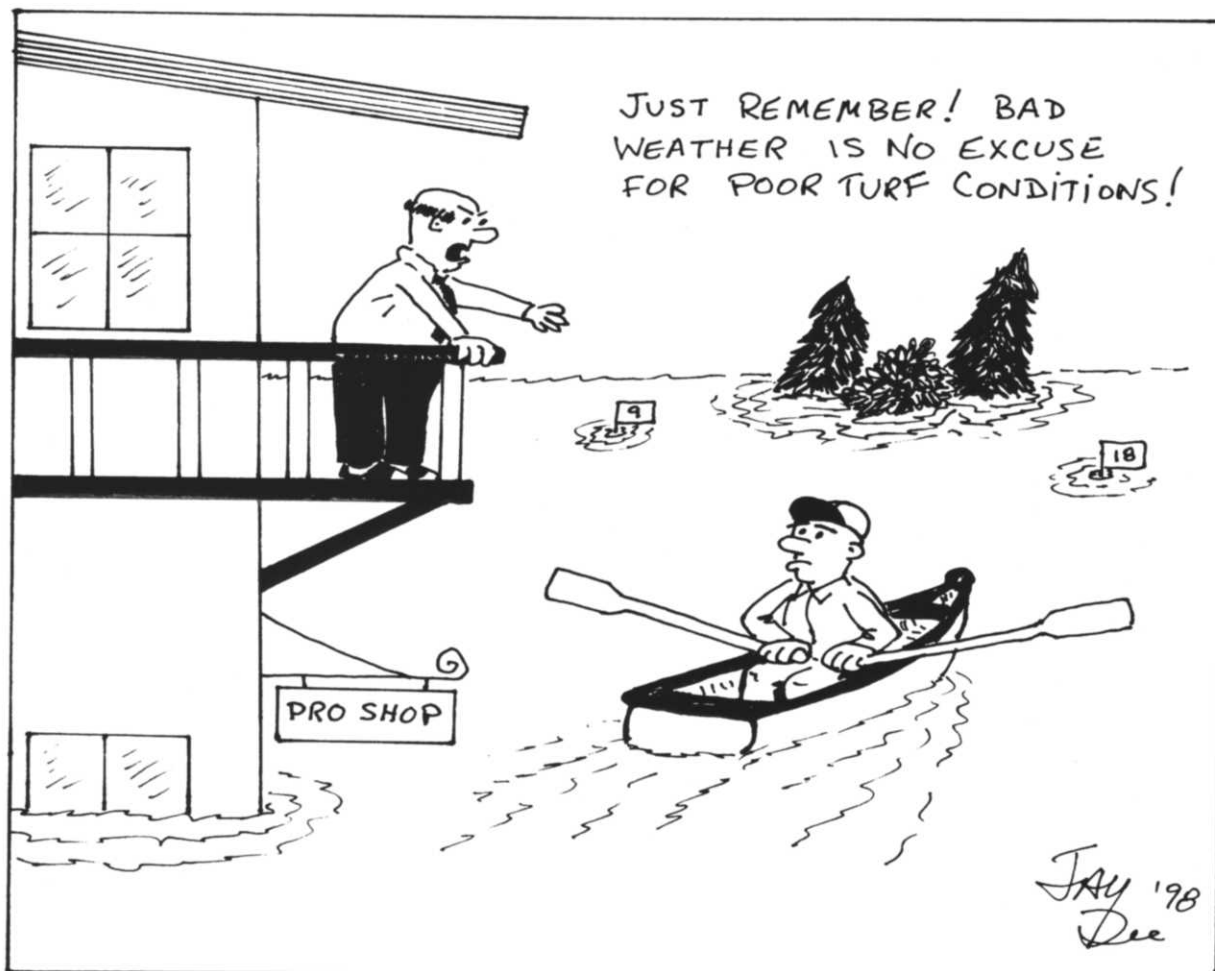
forthcoming are based on reliable data.

Thank you again for your correspondence. If I can be of further assistance with this or any federal matter, please contact my office.

Joe Scarborough
Member of Congress

The tone of the recent responses from Congress indicates they are aware of our concerns about EPA, but they are trusting that the agency is going to do the right thing. So far there is nothing to indicate that EPA has changed its overall approach and cancellation of products remains a real possibility. Please refer to the GCSAA Greens & Grassroots update in the Official Business section of this issue.

Editor



TRI-CUT MOWER



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There are so many “award shows” for every facet of the entertainment, media, and business industries. I thought I’d give out a few of my own. I call these awards the Editor’s Choice Awards or Echos. Some are serious and some are, well, you’ll see.

These awards are politically (in)correct, financially sound (cheap), medically approved (read side effects warnings) and environmentally sensitive (we use recycled paper). Did I mention low cal?

We tried to get Billy Crystal to host this year’s awards show, but he and Whoopi Goldberg and Robin Williams have taken on a new crusade dropping Comic Relief in favor of Green Relief. So for better or worse, acid or alkaline, I give you the 1999 Editor’s Choice Awards:

Best New Management Tool. Nominees: Computer, English-Spanish Dictionary, and Heritage fungicide. Winner: Heritage. A little dab’ll do ya!

Management Practice Least Likely to Succeed: Hand Mowing Fairways.

Best Quote From a Turfgrass During El Nino. Nominees: (1) “It’s not easy being green.” (2) “The grass is always greener on the other side of the fence.” (3) “Don’t Let the grass grow under

your feet.” and (4) Help! I’ve fallen and I can’t get up.” Winner by a thin spot: Number 4.

Best Newcomer Award. Nominees: Champion, TifEagle, and Floradwarf. And the winner is... oops! Sorry the results haven’t been tabulated yet.

Best Comeback Award: Nominees: John Glenn, Bill Bailey, Lassie, and Greg Norman. Winner: Greg Norman at the Shark Shootout (not counting Steve Elkington’s approach shots)! Hey Greg, thanks for the use of the Medalist. We must do it again sometime!

Toughest Act to Follow. Nominees: Garth Brooks, Spice Girls, Bill Clinton and the FQPA. Winner: EPA’s version of the Food Quality Protection Act. Bad actors. Dialogue hard to understand.

Best 1998 Election Results: Nominees: Gray Davis in California; George Bush in Texas; Jeb Bush in Florida; Jesse Ventura in Minnesota. Winner : Jesse Ventura. Now Minnesota has a governor who really can “wrestle” with their problems. I mean isn’t politics just one big fake, staged media event anyhow?

Best Print Ad and Thought For The Day. From Harley Davidson: “Life is Short . The Road is Long. Go Now.”

And the Editor’s Favorite, Best Line From a TV Commercial . “Yo quiero Florida Green Articles.” Does that ring a bell?

Happy New Year everybody! Keep the Green Side Up and be careful out there!

The ‘Echo’ Awards

Green Side Up



Joel Jackson, CGCS Editor

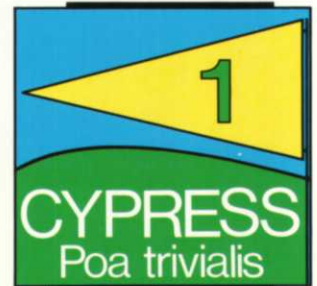
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Photo of 70% Cypress Poa trivialis and 30% Trueline Creeping Bentgrass Green courtesy of Banyan Golf Club in Palm Beach, FL. Dan Jones, CGCS Golf Course Manager




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