



The Florida Green

Fall 1998



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Lake Worth
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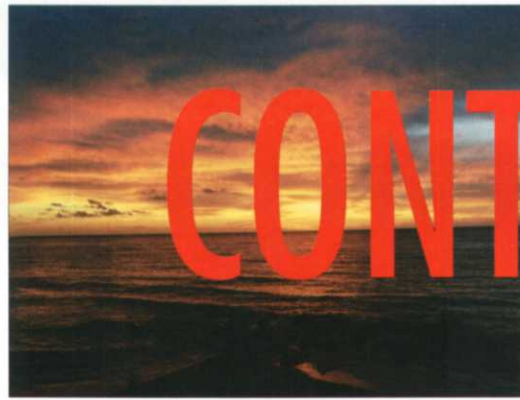
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The Florida Green

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My predecessors have left our association in a quite enviable position. Over the years, our membership services have expanded, we have added additional staff, all without a dues increase. Your Board has always addressed this situation with great trepidation every year when it comes time

to approve the next year's operating budget for the FGCSA. Let me provide you with a little insight as to how we concluded our last fiscal year.

At the conclusion of fiscal year 1997-1998 the FGCSA financial statement reflected a balance of \$272,172.16 with a total account surplus of \$36,590.78.

These funds are divided among four accounts:

1. FGCSA Operating Account
2. FGCSA Research Account
3. *Florida Green* Account
4. Reserves (in CDs)

Decisions were made at our Summer Board Meeting to appropriate these funds in such a manner as not to incur a dues increase for 1998-1999. For example, we have commitments to ongoing, multi-year research projects and maintenance of the Otto Schmeisser Research Green in Fort Lauderdale. The Board authorized the transfer of \$20,000 of the surplus to the Research Account to cover these anticipated expenses. Your association

will continue to support various activities within our state, and nationally as well through either direct funding or donations. In the not-too-distant future the well may run dry as costs increase. Eventually, in order to maintain and expand our efforts, it may require a dues increase,

One manner in which the membership can avoid this possibility is to continue to support your local association's fund-raising events. The support that the FGCSA receives from its local chapters is unprecedented. Many times we have called on our locals for financial support and they have always responded when asked. Your active participation at the local level enables your chapter to respond when the state association asks for assistance.

On a different subject, our editor also asks the chapters for assistance for the Hands On section of the *Florida Green*. The focus in this issue is on overseeding. In the pages that follow, read how some of your peers responded about their overseeding programs. Many age-old questions that come up every year are addressed. From when to seed, what to seed with, to close or stay open, to that ever-popular question, "Why do we overseed when XYZ Club across the street doesn't?"

This topic is just one of the many that reflect the tremendous diversity under which our members operate. However you address this issue, and many of the other complex problems we deal with on a day-to-day basis, here's hoping we all have a successful season.

Accounting and Hands On: Overseeding

PRESIDENT'S MESSAGE



Michael Perham,
CGCS
President
FGCSA



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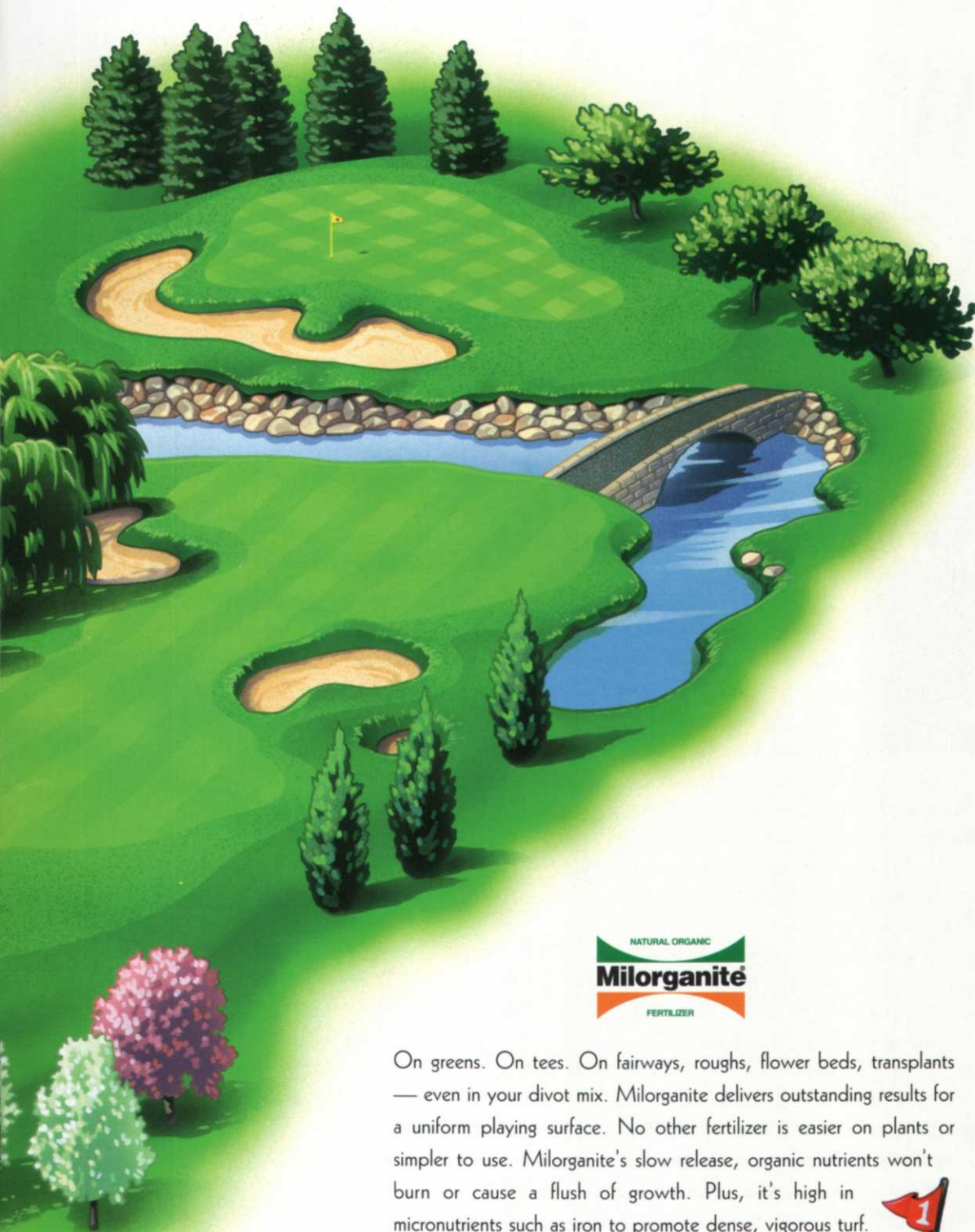
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Wanting to write an inspirational first editorial as vice president of the FGCSA, I looked back at some previous issues to refresh my memory as to what other officers attempted to relay in their messages. A common theme in several of the editorials dealt with getting involved in your association. While I agree with this sentiment 100 percent, I am going to come at you from a different point of view. I will be

the first to admit that association work is rewarding and is a valuable learning tool... but it may not be for everybody.

As you well know, we work in an exciting, ever-changing industry. And with any industry that is rapidly changing, the people that are most successful are those who continually educate themselves. How that education is obtained is

a personal decision. I would certainly concur with my predecessors that association involvement can increase your understanding of the profession. But is that the only way? Of course it is not.

I have heard every excuse in the book for why golf course superintendents remain close to home on their golf courses and rarely venture out to a chapter meeting, golf outing, educational seminar or conference. Some more popular ones include: I am too busy; my membership will not pay for it; it is during working hours; it is after working hours; I don't feel welcome; there are too many cliques; and the list goes on and on. I am sure you have all heard them and can add to this list.

However, I will give some credit to those who make these excuses if they are reading this editorial. Bravo! Read on! Reading trade journals such as this outstanding one is certainly one method to further your knowledge. I feel fortunate to have a lot of very experienced friends in this business as

well as some that are just beginning their careers. These turf managers work at a variety of different types and sizes of facilities all around the world. It is interesting to look at how many different ways they choose to further educate themselves. I will say I strongly believe there is no right or wrong way. We are all certainly different.

Some of my very good friends rarely, if ever, venture into a golf course superintendent's meeting other than a GCSAA national conference. Is that wrong? Are they missing out? Maybe, but those same people are the first to pick up the phone and call their peers, travel down the road to another course or even to a different state to enhance their knowledge.

From a personal perspective, I can honestly say that some of my most valuable knowledge in this business has been gained by visiting with my peers. It could be on their course, my course, at a meeting, or even in a social situation. I almost always learn at least one thing when I visit with a fellow golf course superintendent and I am not the sole recipient of this increased knowledge. My employer most definitely reaps the benefits as well

How you choose to continue your education is completely up to you. However, I am convinced that no matter how saturated the job market becomes there will always be jobs for quality, well educated, hard-working people. So, if you are happy working every day at your golf course with blinders on, I am happy for you. I am sure you are doing a good job and I wish you good luck. Hopefully, you will not have to compete for a job someday with a peer who has advanced himself or herself further based on his continuing education program.

I honestly hope all golf course superintendents strive to increase their knowledge daily so that, as a group, we can advance this profession to where it needs to be. There is no room for apathy, we need to unite as one and move forward as a strong, well-educated group!

Career Development Choices

UP FRONT



Darren Davis, GCS
Vice President
FGCSA

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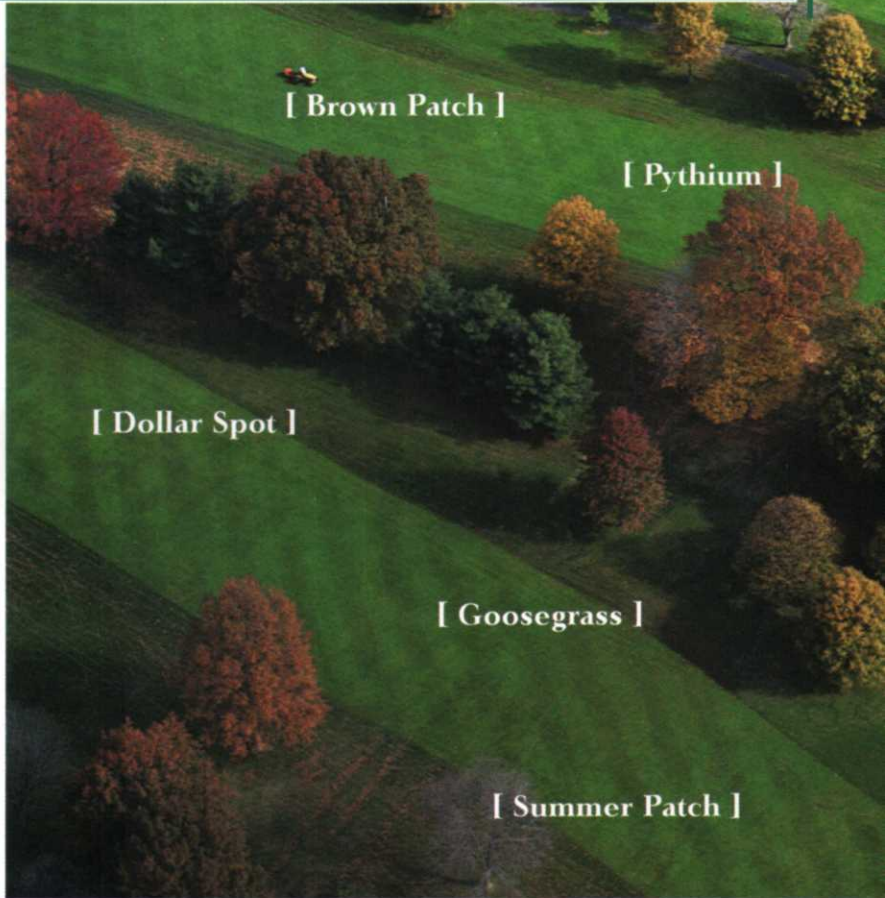
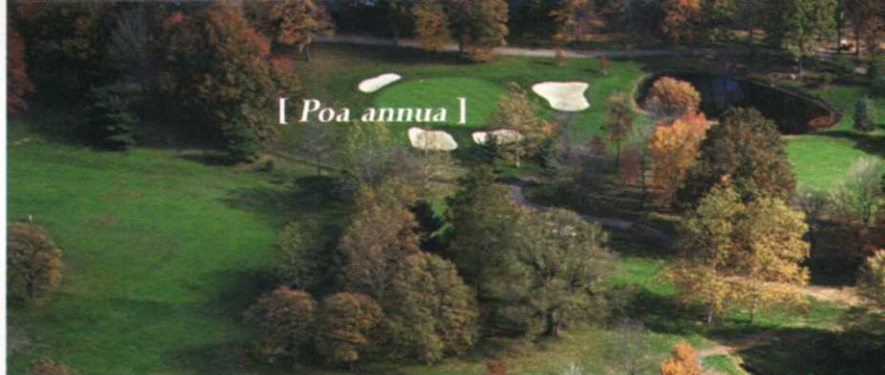
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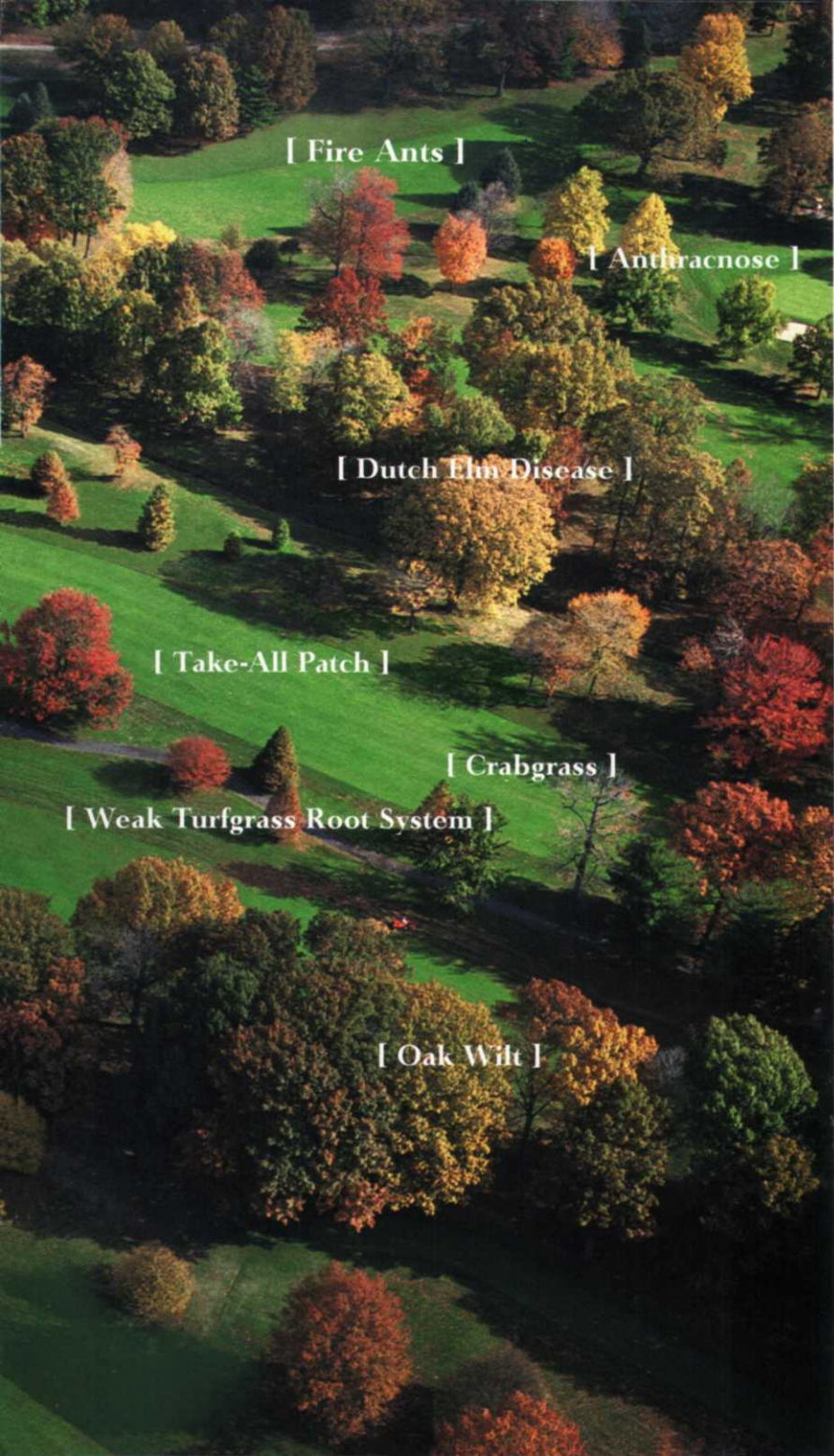


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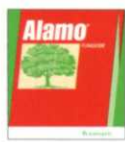
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Florida Green Celebrates 25th Anniversary

Florida GCSA History 101

This issue marks the 25th anniversary of the first appearance of the publication that eventually became *The Florida Green*. A look at the history of the magazine is meaningless without at least a quick look at the history of the association that decided to create such a publication.

The formation of an organized Florida superintendents association began April 22, 1939, when a group of South Florida superintendents met at the urging of then-GCSAA President Joe Ryan who happened to be visiting his daughter in Miami. After a series of informal meetings, an official organizational meeting was held May 13, 1939 at the Hollywood Country Club and the South Florida Golf Course Superintendents Association was formed.

The first officers were Jimmy Blackledge, president; Clyde Smith, vice president; and Mike Schuyler, secretary/treasurer. A committee was appointed to draft a set of bylaws and the annual dues of \$5 was agreed upon. Regular monthly meetings continued after that and consisted of a business meeting, round table discussions and then lunch and golf. By the July 1939 meeting three directors were added to the board: R.F. Lawrence, B.A. Yoder and Mark Mahannah.

In early 1940 the board discussed expanding the association to a statewide

organization. Responses to a letter sent to all the known superintendents at the time were so meager that the idea was abandoned except for some interest shown by the Tampa - St. Petersburg area superintendents, who founded the West Coast Association in 1949. The

South Florida Golf Course Superintendents also discussed merging with the Florida State Florist Association which was the leading influential horticulture group in the state at the time, and made an application to

join that umbrella group. Attendance at subsequent meetings fluctuated for the fledgling group, especially during the winter seasons. Soon the war years were upon the world and regular meetings were not scheduled, but several meetings were held each year and those members still on the area golf courses got together to discuss mutual problems.

After the war, the association grew steadily with modifications to the structure of the organization and the membership.

In 1961 a group organized as the Georgia-Florida Turfgrass Association which encompassed the North Florida area. The name changed to the Florida-Georgia Turfgrass Association and finally in 1977 to the North Florida GCSA.

In 1968 superintendents in southwest Florida could no longer tolerate the long drives on U. S. 41 to either Tampa or Miami to attend meetings, so they formed the Everglades GCSA and had a joint meeting with the South Florida GCSA in 1969. They played an informal golf

match against each other, an event that blossomed into the Poa Annua Classic.

The 1970s saw the formation of four new local chapters. In 1973-74 the Central Florida GCSA formed in Orlando. The Suncoast GCSA formed in 1976 and the Tri-

County GCSA split from the South Florida GCSA as the region's golf courses numbered close to 300. After some discussions over logical boundaries, it was decided that the South Florida GCSA would reside in Monroe, Dade and Broward counties. By May of '79 the Tri-County changed its name to the Palm Beach GCSA, and the Treasure Coast Chapter formed in July 1980.

During 1978-80 a statewide effort was made to bring all the local associations together as chapters of the Florida Golf Course Superintendents Association. In October 1979 the first board of the FGCSA was elected. In the late '80's and early 90's, the Ridge, Seven Rivers and Coastal Plains chapters have been formed for a total of eleven chapters.

Several FGCSA at-large members belong to the Gulf Coast GCSA which is affiliated with the GCSAA. While not currently an official chapter of the FGCSA, this chapter serves superintendents in the western Panhandle, Alabama and Georgia, and supports the IFAS WFREC in Milton.

The First Publication

Back in 1973 the South Florida GCSA decided to produce a magazine for its members, and in October 1973 the first issue of *The South Florida Green* went into circulation. Here are two excerpts from that inaugural issue:

Dedication

To the men who work "behind the scene" in all areas of research, we gratefully dedicate the first issue of *The South Florida Green*.

These men devote most of their time to solving all aspects of turf problems. For their dedicated devotion in making numerous contributions (for which they receive little public credit) The South Florida Superintendents Association members say, "Thank you, gentlemen."

The First President's Message October 1973

The South Florida Green is the first publication of The South Florida Golf Course Superintendents Association. This Association was organized in July of 1939. Jimmy Blackledge was elected the first President and is still one of the 152 active members.

This newsletter will attempt to bring an exchange of ideas, of old and new methods of turf care. Members are encouraged to submit suggestions and



The first issue of the South Florida Green, published in October, 1973, had eight pages.

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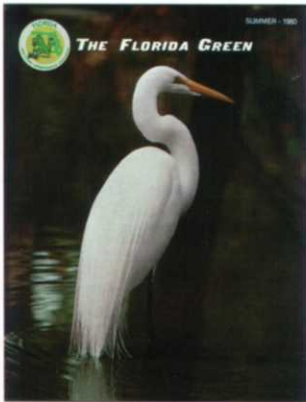
articles that will be of particular interest. Everyone is urged to participate so that we can all work together for the betterment of turf in Florida.

It is an honor for me to be President at the time of this first publication, which is the culmination of past efforts and interest of many officers and members.

Hopefully *The South Florida Green* will be a successful venture and a benefit to all

interested in the challenge of growing and maintaining fine quality turf.

Lou Oxnevad
Riviera C. C.



The Summer 1980 issue was the first to be called *The Florida Green*

Becoming *The Florida Green*

Finally with the organization of the FGCSA as a statewide association, on April 17, 1980, South Florida GCSA President Alan Weitzel made a motion to change the name of *The*

South Florida Green to the *Florida Green*. After much debate and in

the spirit of solidarity and unification, the South Florida Chapter's respected publication became the *Florida Green*, the official voice of the Florida GCSA. The Summer 1980 issue bore the new name.

Editors and Others

Mike Barger was the first editor of the *South Florida Green* and served until 1976. Dan Jones took over with the October 1976 issue and served as either the editor or publisher for nearly 14 years until the Spring 1990 issue. During that time Dan's wife Irene served as assistant editor as Dan and Irene turned their home into a print shop laying out the magazine. Dan's unparalleled

work as editor and at the same time a full time superintendent has earned him the title Editor Emeritus.

Dan remained the publisher of the magazine while Tim Hiers took on the role as editor for one year in 1984-85. In 1990 Joel Jackson became the editor for two years and turned over the magazine to Tom Benefield from 1992 until 1994. With the fall 1994 issue, Jackson resumed the editorship and continues in that role as part of his duties as FGCSA director of communications.

Other people who have made the magazine so successful over the years: Daniel Zelazek, cover photographer since 1981. Dick Long, printer for most

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Soil bacteria decompose organic matter, including cellulose and lignin in wood, a process essential to all life on Earth. Primarily they are found in the upper 12 inches of soil where their carbon food source is most prevalent and where aeration, mineral elements, pH and temperature are more ideal. A half thimble of productive soil may contain up to 3 billion bacteria from thousands of species that carry out different activities in soils.

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- **Phosphate-Solubilizing Bacteria** solubilize phosphorus for plants from insoluble mineral sources.
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of Dan's tenure. Max Brown, Tom Mascaro, David Bailey and Mike Bailey who served as associate editors, staff writers and photographers for the magazine over the years. Marie Roberts who has managed the advertising and Paul Crawford who has served as the business manager since 1992.

In the summer of 1989, Larry Kieffer came on board and served as managing editor for several years and continues to help produce the *Florida Green* as president of Janlark Communications.

The magazine under both flags has won its share of awards and recognition over the years, but the greatest reward for the association has

been the on-going success of the publication.

That success reflects the magazine's dedication to the simple basic values and mission outlined in that first president's message and dedication 25 years ago.

Today it remains a tribute to the pioneers who set the magazine in motion in 1973 and to those who have sustained it over the years.

To the advertisers, the readers and the contributors we say "Thank you, and may we serve you as well over the next 25 years.

"Happy Birthday, *Florida Green!*"



The 1998-99 FGCSA officers elected at the Annual Meeting in Orlando are (from left) Cary Lewis, CGCS, Secretary/Treasurer; Joe Ondo, CGCS, Past President; Darren Davis, GCS, Vice President; and Mike Perham, CGCS, President. Photo by Joel Jackson.

23rd Crowfoot Becomes First Larry Kamphaus Crowfoot Open

The 23rd anniversary of the Central Florida Chapter's summer event took a new

name this year. The Crowfoot Open was renamed the Larry Kamphaus Crowfoot Open in memory of the long-time chairman of the event. Kamphaus and his wife Vilma organized the Crowfoot for 13 years and Kamphaus was a superintendent at Walt

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Disney World for 27 years before he passed away in June of 1997.

The committee also initiated an annual Larry Kamphaus Award to be presented to the Central Florida Chapter member who exemplified the characteristics of: loyalty and service to their employer, strong family values and service to church, community and profession. The first award went to Jim Ellison, CGCS, of the Arnold Palmer Management Company. Ellison was the long-time superintendent at the Bay Hill Club in Orlando and has remained connected to the Palmer organization for over 20 years. Ellison also served on

committee and Central Florida Chapter Board of Directors.

Ellison was presented with an inscribed crystal bowl denoting the occasion. Vilma Kamphaus was also presented with a larger version of the bowl which will have the winners' names inscribed each year. Mrs. Kamphaus acknowledged the memento in a poignant acceptance speech. She remains active, serving on the committee to help the Central Florida Chapter with this major social and fund-raising event.

The weekend of activities kicked off with the summer board meeting of the Florida Golf Course Superintendents Association Aug. 1 at the Bay Hill Club in Orlando. Guests

included Dr. John Cisar, turf coordinator for the University of Florida IFAS, and Mike Goldie, lobbyist for the FGCSA and FTGA.

Goldie gave an update on the past year's legislation which did not have any negative aspects for the turf industry. He previewed the upcoming elections, noting candidates that have an understanding of turf issues. He has asked for support of golf outings for legislators as a way of establishing relationships and discussing our issues.

Cisar talked about the results of the recent IFAS/ Industry retreat and the continuing process of refining his job description. Meetings with the adminis-

tration and a Turf Advisory Working Group will help clarify how the turf coordinator's role will function within the university's hierarchy.

The normal business meeting followed (see the summer board meeting minutes in the Sept./Oct. 1998 issue of the Green Sheet for details). After the summer board meeting adjourned at 4:30 p.m., the FGCSA annual meeting was called to order for the purpose of electing new officers. The nominated slate of Mike Perham, CGCS, president; Darren Davis, GCS, vice president; Cary Lewis, CGCS, secretary/ treasurer was elected by a unanimous vote.

At 8:00 a.m. Sunday, 15

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Dale Mitchell (left) and Richard Colyer (right) present Joe Ondo, CGCS with a check for \$3,000 for turf research from the Golf Agronomics Supply and Handling (GASH) rebate program. The FGCSA is deeply appreciates the consistent support GASH has shown for our turf research programs. They too are "True Believers!" Photo by Joel Jackson.

superintendents attended a GCSAA Etonic Leadership Series seminar entitled, "Computers for Golf Course Maintenance."

The presentation by Gary

Bueltel, CGCS, CTM of the Lost Creek Country Club in Austin, Texas focused on ways superintendents can use computer software to maximize their time,

productivity, and demonstrate their value to their club.

Bueltel gave numerous examples of how investing the time to learn to use spreadsheets to provide various financial and operational scenarios to his management, increased his visibility and professionalism within his club. The theme of the presentation: Save Time. Save Money. Save Your Job! Bueltel has made computers a hobby and builds customized computer systems for superintendents. If you are interested in learning more about how computers can help you in your job in the high tech '90s, give Gary a call at (512) 899-1971. It's never too late to learn more!



Dale Kuehner, CGCS, 1996-97 FGCSA president (left) performs his last official act for the FGCSA board by presenting Joe Ondo, CGCS with his plaque and gavel as Joe becomes the newest past president. Photo by Joel Jackson.

Later that same day, everyone gathered at the Bay Hill Club for the annual banquet. Good food and fun were the order of the evening as the crowd enjoyed with

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The 1998 Larry Kamphaus/Crowfoot Open



Director of Communications Joel Jackson, CGCS thanks Dale Kuehner, CGCS for his four years of service as an association officer and presents him with a bound edition of Florida Green issues containing his President's messages. Dale will continue to be active as the FGCSA Voting Delegate. Photo by Joel Jackson.



Speaker Gary Bueltel, CGCS (left) with Geoff Coggan, CGCS FGCSA Education Committee Chairman at the Etonic Leadership Seminar, "Computers and Golf Course Maintenance." The theme of Gary's seminar, "Save time. Save money. Save your job!" Photo by Joel Jackson.

long time friends and business associates. Following dinner, a casino night was held to play for raffle tickets for the door prizes.

On Monday, coats and ties gave way to shorts and spikeless golf shoes as a full field teed off on the Bay Hill course. Host superintendent

Dwight Kummer took mercy on the amateurs and the field played from the middle tees rather than the Tour tees like last year.

The course was in great shape for the event. The Central Florida team of Chris Cartin, Jeff Cotton, Tom Alex, and Barry Troutman captured the Chapter Team event with Cartin also taking low gross honors.

In the Commercial Division Joe O'Donnell of Sunbelt Seeds won low gross and Butch Singo of Harrell's, Inc. took low net honors.

Tom Alex, 1998 Chairman of the Larry Kamphaus Crowfoot Open, announced last week that the event netted approximately \$4,000 that will be donated for turf research.

Managers Invite Superintendents to CMAA Meeting

In a move to provide better relations between club managers and golf course superintendents, Mike Fiddelke, president of the Florida Chapter of the Club Managers Association of America, suggested to the CMAA members attending their annual meeting in Naples this past August to invite their superintendents to come along.

The CMAA board had organized a turf-oriented program with such speakers as Chris Hartwiger and John Foy from the USGA, and Dr. John Cisar, turf coordinator for the University of Florida. Approximately two dozen superintendents were able to

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University of Florida's IFAS turf coordinator, Dr. John Cisar opened a few eyes to the extremely low risk of pesticide exposure on golf courses with his presentation at the joint club manager/superintendent workshop in Naples. Photo by Joel Jackson.

attend and over 100 people attended the turf workshop held at the Registry Hotel in Naples.

Hartwiger, who covers the northwest Florida and other southeastern states for the

USGA Green Section, discussed the top ten myths in turf maintenance. The list actually reached 17 items, but Hartwiger says the top ten title was a little more catchy! Hartwiger also discussed

bunker maintenance and the concept of using a report-card evaluation approach so the green committee and superintendent could set priorities, goals and expectations for maintaining the course bunkers.

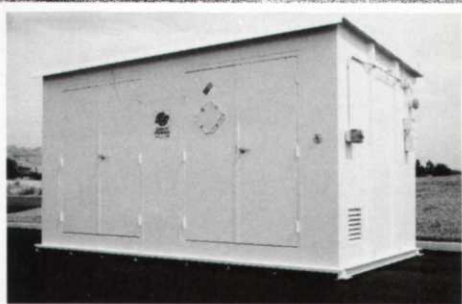
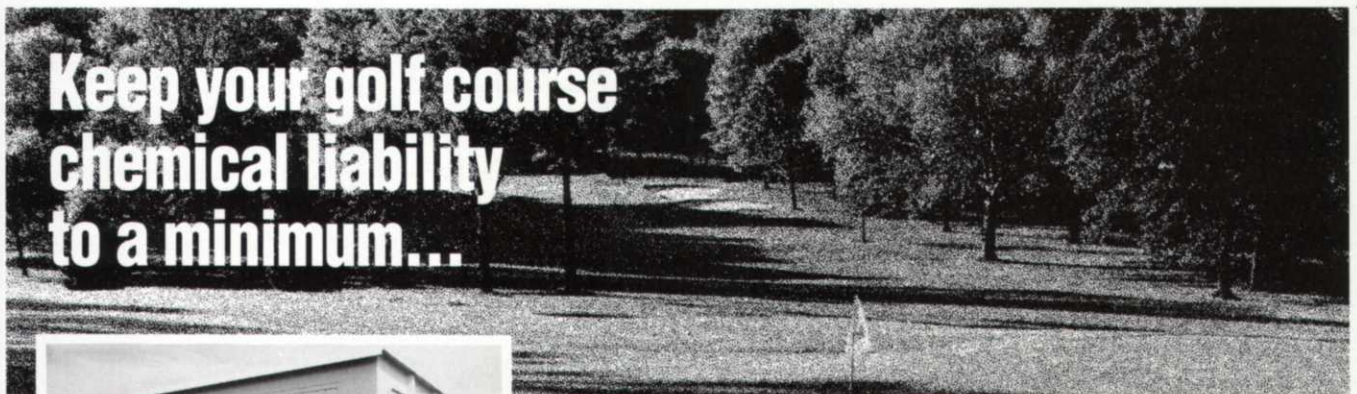
Foy used a similar report-card approach for a total maintenance plan for the conditioning of a golf course. This approach forces a club to identify and discuss specific complaints, weaknesses, features, factors and causes for greens conditions.

The report-card method is detailed in an article by Jim Moore in the USGA's March/April 1998 Green Section Record.

Dr. Cisar discussed the mission of the University of Florida's Institute of Food and Agricultural Sciences and

how IFAS serves the golf industry through its education and research programs. Cisar then presented the results of his work on the "Dislodgeability of Pesticides." The good news for those concerned about exposure to pesticides is that after rigorous attempts to pick up pesticides that have dried on turf, only .0018 micro-grams of material could be detected. That's 18 ten-thousandths of a micro-gram. That is well below any levels for potential health concern according to EPA human safety exposure figures.

The three-day event which included a banquet and a golf tournament provided an informal atmosphere where club managers and superinten-



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dents from around the state could network and discuss common areas of concern. Hopefully more joint events like this can be held in the future.

Third Time's a Charm for Coastal Plains Chapter

The Coastal Plains Chapter, which serves the Tallahassee area, held its Third Annual Coastal Plains Classic Golf Tournament to benefit turfgrass research July 13 at the Golden Eagle Country Club in Tallahassee. In a promotional flyer, the chapter provided their mission statement for the event:

"The Coastal Plains Chapter is a non-profit group of turfgrass-related commer-



Bill Humphrey, Lesco, Inc. of Tallahassee, tees off in the Third Annual Coastal Plains Golf Classic held on the beautiful rolling Golden Eagle Country Club golf course. Photo by Joel Jackson.

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Bill Allford was the host superintendent for the Third Annual Coastal Plains Golf Classic. Proceeds from the tournament benefit turf research. Photo by Joel Jackson.

the outstanding golf facilities in our area. One reason we are able to improve conditions at our golf courses is due to the advancements made through turfgrass research.

Because we are committed to making these advancements, we have chosen to aid them by holding the Coastal Plains Classic Golf Tournament. Proceeds from last year's tournament were donated to support turfgrass research at The Coastal Plains Station

cial members and golf course superintendents. Our group is responsible for maintaining

in Tifton, Ga. and the University of Florida Station in Milton, Fla."

Doug Abbuhl, president of the Coastal Plains chapter, reported that the event should clear about \$4,200 to be donated to turfgrass research.

This year's two-man team event was won by Kyle Beebe and Kevin Nelson in the Low Gross Division and Tom Davis and Dave Melsow in the Low Net Division.

Bill Allford, host superintendent had the gorgeous rolling golf course in immaculate condition for the event.

The tournament committee, consisting of Doug Abbuhl, Mike Bishop, Gerri Buchheit, Todd Carlton and Bill Humphrey, want to thank Novartis for being the keynote sponsor and the

following sponsors:

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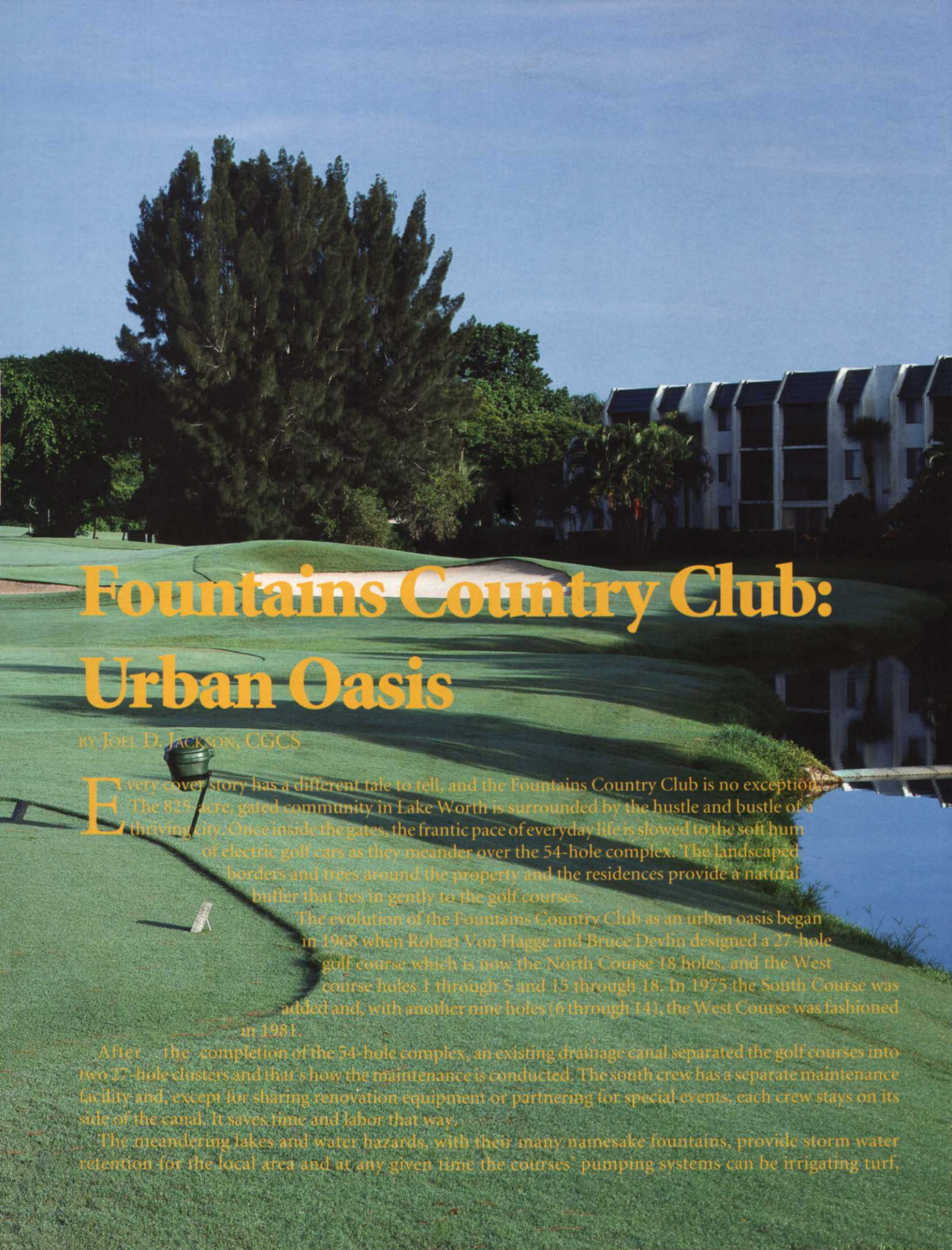
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Par 3, 200 yard,
#8 North,
Photo by Daniel Zelazek.



Fountains Country Club: Urban Oasis

BY JOEL D. JACKSON, CGCS

Every cover story has a different tale to tell, and the Fountains Country Club is no exception. The 825-acre, gated community in Lake Worth is surrounded by the hustle and bustle of a thriving city. Once inside the gates, the frantic pace of everyday life is slowed to the soft hum of electric golf cars as they meander over the 54-hole complex. The landscaped borders and trees around the property and the residences provide a natural buffer that ties in gently to the golf courses.

The evolution of the Fountains Country Club as an urban oasis began in 1968 when Robert Von Hagge and Bruce Devlin designed a 27-hole golf course which is now the North Course 18 holes, and the West course holes 1 through 5 and 15 through 18. In 1975 the South Course was added and, with another nine holes (6 through 14), the West Course was fashioned in 1981.

After the completion of the 54-hole complex, an existing drainage canal separated the golf courses into two 27-hole clusters and that's how the maintenance is conducted. The south crew has a separate maintenance facility and, except for sharing renovation equipment or partnering for special events, each crew stays on its side of the canal. It saves time and labor that way.

The meandering lakes and water hazards, with their many namesake fountains, provide storm water retention for the local area and at any given time the courses' pumping systems can be irrigating turf,

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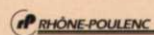


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#6 West, a 329-yard, par 4 is part of nine holes added in 1981 to complete the 54-hole complex. Photo by Daniel Zelazek.

One benefit of some of the 30-year-old waterways is a population of very mature largemouth bass which provides good sport for residents and some off-duty staff members

discharging storm water or recharging lakes.

One benefit of some of the 30-year-old waterways is a population of very mature largemouth bass



The par 5, 535 yard #3 hole on the North Course is part of a string of challenging beginning holes. Photo by Daniel Zelazek.

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#4 North, a 440 yard par 4, built in 1968 is a good example of greens bunkering and run up approach areas in the Von Hagge/Devlin design. Photo by Daniel Zelazek.



This picture of the green on the par-4, 390-yard #7 North shows how a golf course offers peaceful natural surroundings even though located in an urban residential area. Photo by Daniel Zelazek.

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A big banyan tree and big bunkers guard the par 5, 467 yard, #11 North hole. Photo by Daniel Zelazek.

which provides good sport for residents and some off-duty staff members, reports Mike Perham, CGCS, director of golf course maintenance.

“Managing the waterways is definitely a balancing act,” said Perham. “We have to time our irrigation cycles and aquatic weed control versus rainfall events and storm water discharge. You have to pay attention to the needs of the turf and the algae and weed populations. Unfortunately we can’t control the quality of the water we bring in from the county’s drainage canal to recharge our lakes. It can be infested with weeds at times, which means we have to deal with them eventually.”

Mike has been real busy since his arrival at the Fountains in May, 1995.

“We have had a major renovation project each year since I’ve come on board. With 27 holes that are 30 years old, we have had to update and upgrade some of the infrastructure and

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playing surfaces. Two of the most important improvements have been to the irrigation systems on both 27-hole complexes. We did the North complex last year and this year, we are doing the South complex.

“Although it has made for some nonstop summers around here, I’m glad the members have been willing to

support the improvements. It just means we are being given the tools and resources necessary to provide more consistent playing conditions.” (See *Major Renovations on page 38*).

Directing the operations for a 54-hole complex is quite a change for Perham. He made the decision to come to the Fountains after spending 11 years

It meant leaving the confines of a 75-acre golf course with a staff of 12 and taking on 325 acres of golf course with 54 employees.

at The Moorings Club, an 18-hole golf course in Vero Beach. Perham said, “Professionally for me, it was the most dramatic change I had ever contemplated. It meant leaving the confines of a 75-acre golf course with a staff of 12 and taking on 325 acres of golf course with 54 employees.”

“I now have two superintendents with their respective crews, an equipment manager, a landscape crew, and an administrative assistant that I depend on for the day-to-day operation of the facilities. I talk to each superintendent in the morning for updates



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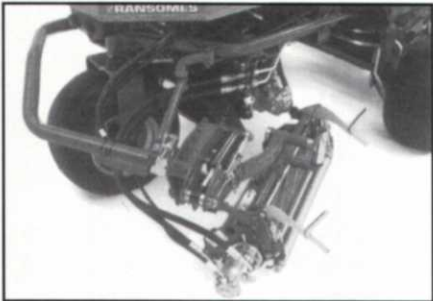
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Mike once offered this advice to superintendents who may be contemplating taking on a multi-course operation which requires more administration and less hands on.

1. “Feel comfortable with the immediate professionals you will be working with on a daily basis. I never would have accepted this position if I had not felt good about my relationship with the general manager and director of golf.”
2. “Hire good people and hold them accountable. This advice is never more important than in a large operation like this. If someone is not doing their job, and you have to do it, you do not need that individual. That may seem harsh, but you must realize this is the only way you will accomplish the job for which you were hired in the first place.
3. “Have fun! It is imperative to maintain a positive mental attitude about your job. Truly enjoy what you do, and take pride in your accomplishments.

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and questions between 6:30 and 9:00. By 7:15 I am riding the courses checking on the progress of projects and checking holes for general turf conditions. This is the most peaceful time of day and usually the only time I get to see the courses consistently.”

Perham makes it habit to have lunch with the director of golf or the club manager three or four times a week to keep communication flowing. Lunches also provide the opportunity to meet with other club officials and his green committee chairman to discuss ongoing or upcoming projects. In the afternoon Perham tries to get out on the course again for a quick tour to catch other areas missed in the morning.

“The North Course takes the brunt of play,” Perham said. “It is situated next to the main clubhouse and the

Major Renovations/ Projects

1998 — South Course: Installation of new Rain Bird Cirrus irrigation system. 1400 heads. 2500 gpm Flowtronex/PSI pump station. Contractor: Fleming Brothers; Greens, tee and bunker renovations South 27 holes. Contractor: Quality Grassing; Installation of pesticide mix-and-load bay and equipment wash rack at South Course maintenance complex. Contractor: Eco Soil Systems;

1997 — North 27 holes irrigation upgrade. Rain Bird Maxi 5 Control system. Dual head system around greens. Replaced swing joints and re-tubed all heads. Contractor: Fountains GC staff;

1996 — Rebuilt North GC greens to USGA specs. Improved driving range tees and mounding. Contractor: Haverland Blackrock.

1995 — Reconstruction of holes #2, 3, 4 on South Course. Excavation of four lakes, fairway drainage, mounding, tees and cart path construction. Irrigation installation on three holes. Contractor: Haverland Blackrock & Fountains GC staff.

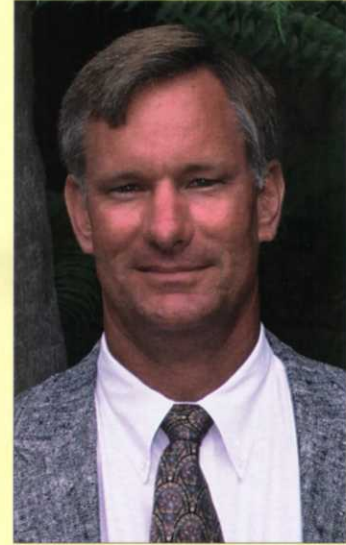
Michael Perham, CGCS

Originally from: Charleston, South Carolina. Raised in West Palm Beach, Florida.

Family: Wife, Marcy (Married 20 years in November). Children: Laura (15), Christopher (12).

Education: Lake City Community College, 1978. Cardinal Newman High School, West Palm Beach.

Employment history: 1995 to present, Fountains Country Club, Lake Worth; 1984 - 1995, golf course superintendent, The Moorings Club, Vero Beach; 1980 - 1984, golf course superintendent, Boca Del Mar C.C., Boca Raton; 1978-1980, assistant superintendent, Turnberry Isle C.C., Aventura; 1977, OJT, Bay Hill Club, Orlando; 1975-76, crew member, Indian Springs C.C., Delray Beach; 1974, crew member, Boca West Club, Boca Raton.



Professional affiliations: Member of: Florida GCSA (Treasure Coast Chapter board 1985-91, president 1986-87); (Palm Beach Chapter board 1983-84); Florida Turfgrass Association (FTGA board 1983); and the Golf Course Superintendents Association of America. Served on various GCSAA committees.

People who have influenced your life and career: I think the most important thing that I was taught was to have a good work ethic. Do a day’s work for a day’s pay. This was ingrained into me early in life by my father. During the early formative years of my career, I was fortunate to work for two true professionals: Jim Ellison at the Bay Hill Club and Dan Jones at Turnberry Isle. The ability to work for these two individuals and observe the manner in which they conducted themselves influenced me greatly.

How did you get into the business: I started playing golf in elementary school. Family had a membership at original PGA Club, now BallenIsles. Played quite often with and Dad and my brothers. The summer between my junior and senior year in high school, My brother John was doing an OJT at Boca West. He got me the job. I hated it! After high school, John had graduated from Lake City Community College and was working at Indian Springs. I decided to try golf maintenance again for one more summer. I enjoyed it more and went to see Dr. Nutter at LCCC in the summer of 1975. Entered the Golf Operations program in 1976 and been doing this line of work ever since.

Memorable moments: The many friendships developed over the years. Being involved with various associations enables you to meet people from different parts of the state and country. I enjoy going to meetings and playing other courses primarily for the learning experiences, but also for the chance to renew old friendships.

Hobbies and interests: Aviation, golf and cycling.



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

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Fountains C.C.

Location: Lake Worth.

Ownership: Membership

Playing policy: Private.

54 holes: North Course - Par 71 at 6840 yards. Course Rating: 73.7 Slope Ratings: 130. West Course - Par 71 at 6793 yards. Course Rating: 73.2 Slope Ratings: 132. South Course - Par 72 at 6783 yards. Course Rating: 72.6 Slope Rating: 133.

Designed by: Robert Von Hagge and Bruce Devlin. Greens, tees and bunker work by Jeff Myers of JCM Group.

Opened: North 27 holes 1968 and 1969. South 27 holes: 18 holes built in 1975. Nine holes added and original South 18 reconfigured in 1981.

Management: William O'Connor - general manager; Mike Nedrow - director of golf; Donald Honig - club president; Ed Freedman - green committee chairman; Mike Perham, CGCS - director of golf course maintenance; golf course superintendents: North 27 holes - Pasi Pussinen; South 27 holes - Aki Polvikoski; administrative assistant - Mary Lips.

Acreage under maintenance: 325 acres of turf.

Greens: 9 Acres. Average size: 6,500 sq. ft. Turf type: Tifdwarf. HOC = .140 - .175. Overseeding: 2/3 Poa trivialis, 1/3 bentgrass = 10-12#/M. Green Speed Goals: Membership happiness.

Tees: 4 acres. Turf type: Tifway 419. HOC = .450. Overseeding: Perennial ryegrass = 15#/M.

Fairways: 140 acres. Turf Type: North 27 holes = Heinz 57 variety. South 27 = Tifway 419. HOC = .575 - .675. Overseeding: North Course = Perennial ryegrass @ 350# per Acre.

Roughs: 172 acres. Turf Type: Tifway 419 and Heinz 57 Variety. HOC = 1-3/8" to 1-3/4". Overseeding: None.

Waterways/Lakes/Ponds: 50 Acres. Recharge water for the lakes is drawn from a large Lake Worth Drainage District canal. This canal is infested with numerous aquatic weed varieties, causing constant weed control problems in the golf course lakes. In addition, the golf course lakes serve as storm water retention and discharge for the property.

Irrigation: North 27 holes has three separate pumping stations with 1950 gpm capacity. 978 heads (Toro and Rain Bird), 47 Rain Bird MSC plus controllers. South 27 holes (See major renovation projects section on page 20.)

Staff: Total including superintendents 54. 2 assistants. 5 mechanics. 4 pest control techs. 2 irrigation techs. 4 clubhouse landscape maintenance. 2 tree crew.

Special or unusual conditions: Biggest challenge is the lack of a monostand of turf on the North 27 holes due to the age of these holes. The different varieties respond differently to conditions and maintenance practices and create a challenge to manage.

Maintenance equipment: Greens: 16 Toro Greensmaster 1000 walk mowers. Tees: 6 Ransomes Triplex mowers. Fairways: 4 Ransomes 300 5-gang mowers. Roughs: 4 Toro Reelmaster 7-gang ground drive units. Slopes: 4 John Deere 2653 mowers. Rotary/Trim mowers: 4 Ransomes 728s.

Cultural programs: Greens - Light verticut every two weeks. Hollow tine aerify 2x per year. Deep drill 2x per year. Hydroject 8-9x per year. Tees - aerify 3x per year. Verticut and topdress 3x per year. Fairways - Verticut once per year. Core aerify 3-4x per year. Roughs - aerify 3-4x per year.

Wildlife inventory: The lakes have very mature largemouth bass. Herons and other wading and water birds. Flocks of wild parrots can be noisy at times.



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Reelmaster 5400-D
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• Easy to operate joystick conveniently raises, lowers cutting units

• Standard on-unit backlapping keeps reel maintenance quick and easy



• 5 or 8-blade fairway cutting units ensure superb ground following and excellent cut

• Manually adjustable variable reel speed lets you adjust machine's performance to the specifics of your course



SUPERIOR TRACTION Choose from 2 or 4-wheel drive. Hydrostatic transmission coupled to a mechanical drive axle ensures sure-footed performance on hillsides or soft turf. On-demand 4-wheel drive means power is always available at both front and rear axles when needed most.



TWO POWERFUL CHOICES The Reelmaster® 5200-D offers 28 hp – plenty of muscle for many applications. Or, choose the 35 hp Reelmaster 5400-D for more challenging terrain, grasses or climates. Durable Kubota 3-cylinder diesel engines power both models, with easy service access.



OPERATOR COMFORT Deluxe seat, convenient hand controls, easily visible gauges and an uncluttered floorboard increase operator comfort and productivity. A simple joystick raises and lowers cutting units for cross cutting or transport.

PRECISION CUT Choose from Toro's high quality 5 or 8-blade cutting units. Free floating cutting units, with variable down pressure, ensure superb ground following. Manually adjustable variable reel speed allows you to adjust the machines cutting performance to your mowing conditions. On-unit backlapping keeps reel maintenance easy and convenient.

PRODUCT PROFILE



THE REELMASTER 5200-D is available in 2 or 4-wheel drive. The mower's 28 hp Kubota diesel engine offers ample power for traction and cutting in a wide range of conditions. Yet, its light weight is easy on the turf.

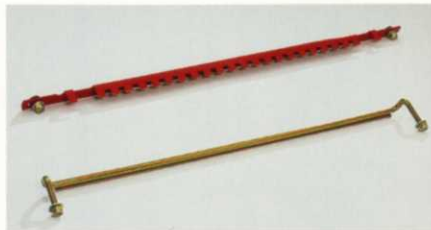


THE REELMASTER 5400-D, also available in 2 or 4-wheel drive, packs an impressive 35 hp Kubota diesel engine. This mower is well-suited to hilly golf courses, those in higher altitudes, or other more demanding conditions.

ATTACHMENTS AND ACCESSORIES



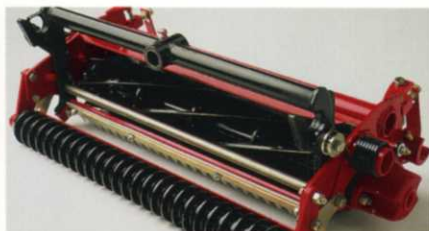
THATCHING REELS Quick-attach thatching reels offer greater versatility. Standard configuration includes $\frac{3}{4}$ " spacing, a Wiehle front roller with scraper and a solid rear roller with scraper.



FRONT AND REAR ROLLER SCRAPERS Effective cleaning action helps keep cut consistent by preventing clipping build-up. Scrapers mount easily and are adjustable for different turf conditions.



HEIGHT OF CUT EXTENSION Extends mower height up to $1\frac{3}{8}$ " for flexibility to maintain a wider range of course conditions.



COMB Abrasion resistant nylon comb gently grooms grass for optimum cutting. Assists in preventing excessive horizontal growth. Regular use may help control grain and thatch.



GRASS BASKET KIT Easy to handle, high capacity baskets provide thorough clip collection. Baskets mount to carrier frame, not cutting units, to ensure cutting unit stability.



TORO ACE™ SYSTEM Hand held diagnostic tool permits easy machine troubleshooting. It can determine whether a problem is hydraulic or electrical, saving the mechanic time.

REELMASTER® 5200-D & 5400-D



REELMASTER® 5200-D & 5400-D

	5200-D - #03540 5200-D 4WD - #03541	5400-D - #03543 5400-D 4WD - #03544			
Engine	Kubota liquid cooled diesel, 3-cylinder, 28 hp (20.9 Kw) gross @ 3000 RPM. 68.5 cu. in. (1123 cm ³) displacement. Pressurized lubrication system with 4.0 quart capacity. Heavy duty two stage, radial seal air cleaner with dust bowl. Fuel filter/water separator with visible bowl. Electric fuel pump.	Kubota liquid cooled turbo diesel, 3-cylinder, 35 hp (26.1 Kw) gross @ 3000 RPM. 68.5 cu. in. (1123 cm ³) displacement. Pressurized lubrication system with 4.0 quart capacity. Heavy duty two stage, radial seal air cleaner with dust bowl. Fuel filter/water separator with visible bowl. Electric fuel pump.			
Radiator	Mid-mounted radiator with industrial tube and fin construction. 7 fins per inch. 7.5 quart (7.1 liter) capacity.				
Fuel Capacity	10 gallon (37.9 liter) diesel fuel.				
Traction Drive	Power to the front drive wheels is via a hydrostatic transmission coupled to a mechanical drive axle. Toro 4-matic on-demand 4-wheel drive, consists of drive shaft connected to mechanical rear drive axle.				
Ground Speed	0-10 mph (0-16.1 km/hr) forward; 0-4 mph (0-6.4 km/hr) reverse.				
Tires/Wheels/Pressure	26x12-12 front drive tire provides maximum traction ability while minimizing turf abrasion. 19x8.5-8 rear tire.				
Gauges	Hour meter, speedometer, fuel gauge, temperature gauge, cluster gauge with glow plug and charge indicator lights, low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).				
Controls	Power steering, adjustable seat position, single forward and reverse traction pedal, traction speed limiter, brake pedals, parking brake latch, ignition key switch, PTO switch, throttle, joystick control for cutting unit raise and lower, reel speed and backlap control knobs.				
Electrical & Interlocks	12 volt maintenance free battery, 530 CCA. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, operator presence in seat, PTO engage or disengage safety interlock switches.				
Reel Speed Control	Reel drive circuit is split into front and rear independent circuits. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are manually adjustable between 300-2050 RPM (250 RPM in backlap).				
Cutting Unit Suspension	Equal geometry independent suspension arms with positive down pressure to each cutting unit, adjustable to five settings in eight pound increments.				
Overall Dimensions	Height 56" (142 cm); 81.5" (207 cm) w/ROPS	Length w/o baskets 103.5" (263 cm)	Wheel Base 58" (147 cm)	Overall Width/Transport 87" (221 cm)	Front Wheel Tread 70" (178 cm)
Weight*	2,320 lbs. (1,054 kg) - 2WD 2,675 lbs. (1,216 kg) - 4WD		2,330 lbs. (1,059 kg) - 2WD 2,685 lbs. (1,221 kg) - 4WD	*Approximate, with 8-blade cutting units.	
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 the Operator's Manual for further details.				

5 AND 8-BLADE CUTTING UNITS, MODELS 03506 AND 03509

Type	Five 21" (53 cm) wide welded reels. 5" diameter. Front or rear discharge. Fully interchangeable.
Width of Cut	95" (241 cm) with five cutting units.
HOC Range	1/4" - 3/4" (6.4 mm - 19 mm) standard, 3/4" - 1 1/8" with optional high height of cut kit (P/N 83-5300).
Clip Frequency/Backlapping	Manually controlled variable reel speed. On-board backlapping standard. Model 03506: .62" - 1.17" (15.7 - 29.7 mm); 5 blade reel at 5 mph (8 km/h). Model 03509: .40" - .73" (10.2 - 18.5 mm); 8 blade reel at 5 mph (8 km/h).
Rollers	Front 2.5" Wiehle roller standard. Optional solid front roller. Rear roller optionally a 2" or 2.5" solid roller.



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first several holes tend to play left to right which is how 80 percent of golfers play, so you could call it user-friendly. The other two courses hold their own, however, and offer the members a good variety of holes and challenges."

During the busy fall and winter season, Perham has all 54 holes open and ready for play Tuesdays through Sundays. On Mondays — even in season — he is allowed to take 18 holes out of service in rotation for special maintenance programs to keep the courses in shape. In the summer he has to keep only 18 holes open. The majority of the summer golfers only play nine holes before it gets hot. Of course the past couple of summers, at least 18 holes have undergone major renovation.

The members at the Fountains had concerns about rough conditions this past winter just like golfers all over the state. Perham praised his green chair-

"One good thing is that a lot of the members play in a golf league that plays at different courses. They can see and compare conditions at different times. I think they have learned that no course is perfect all the time. Sometimes we look better than others and other times we don't. It is definitely a learning process for everyone."

man for stepping up and supporting him and the staff during the tough times.

"One good thing is that a lot of the members play in a golf league that plays at different courses. They can see and compare conditions at different times. I think they have learned that no course is perfect all the time. Sometimes we look better than others and other times we don't. It is definitely a learning process for everyone."

Perham was happy to note that the Fountains graded out very well according to members' observations.

"Each superintendent and green committee needs to discuss and agree on what conditions the members want and expect. Call it a plan. Call it goals. Whatever. Write it down. Now everybody should be on the same page.

"Our members want a good, smooth, consistent surface for normal everyday play. We are not locked into



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Control panels for the new Flowtronex VFD installed on the South Course are located next to an existing rest room building (above). The new pumps are housed in an underground vault in the background.

Left, Mike shows off the new underground pump installation. Residents requested a change in the old pump house location due to noise. The new location will be bermed and landscaped and very quiet.

Fountains Snapshots By Joel Jackson



Irrigation contractor at work installing a new system on the South Course. Mike has his plate full with three or four projects underway this summer!



Mike checks out grow-in progress on the South Course greens. The Tifdwarf sprigs are just a few weeks old. The bunker crew is cleaning up and edging the bunkers behind the drain installation team in preparation for adding new sand.

a specific number on the Stimpmeter. In fact, we don't own one. I like to keep the greens at a consistency so that I am a couple of days of double cutting or vertigrooming and rolling from tournament conditions. We don't want to have to make drastic height-of-cut changes to achieve faster speeds. Again it comes back to understanding and agreeing on what conditions are expected."

Oddly enough, Mike has fielded a few complaints about the greens being too fast on occasion.

"During the fall when the bermuda-grass growth slows down and the overseeding isn't mature, the surfaces can be a little faster than normal. Then we get into the seed establishment period the greens slow down as we manage the seedlings into a mature stand of grass. We just have to make sure we are doing a good job of keeping the members

"We just have to make sure we are doing a good job of keeping the members informed of what's going on."

informed of what's going on."

Keeping people informed is also a goal of Perham's as he assumes the presidency of the Florida Golf Course Superintendents Association. Beginning in 1983, Mike has been involved in professional association business, having served on local chapter boards and becoming president of the Treasure Coast Chapter in 1986-87. He has served on FGCSA, FTGA and GCSAA committees involved with publications, chapter relations, research and education.

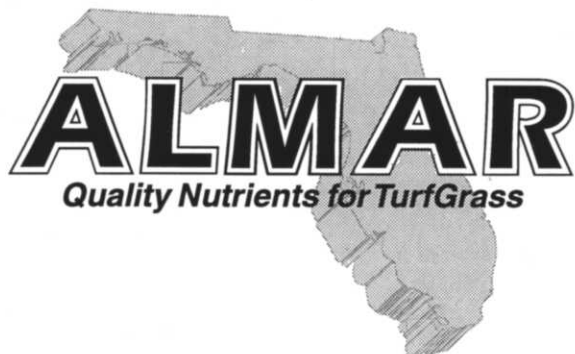
Like many of his predecessors, Mike

would like to see more participation from the rank-and-file members.

"I go to meetings and play golf courses for the educational value and experience. The volunteer service to the associations has helped me become a better manager and superintendent. I also value the friendships I have made through the local, state and even national association activities."

Looking back over the changes in his daily job responsibilities and the progress being made renovating the golf courses Mike said, "The transition from a hands-on golf course superintendent to more of an administrator was very difficult. Now, three years have passed and I look forward to going to work every day."

Editors Note: As we went to press, Mike was recuperating at home from radical surgery. He expects to be back to work soon.



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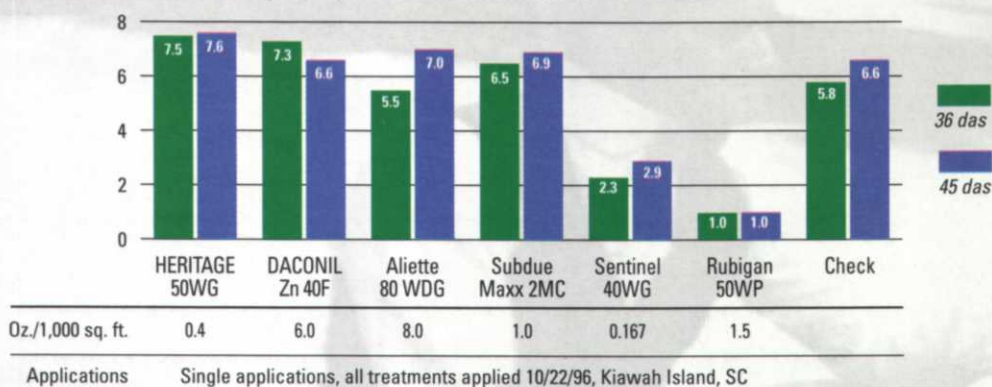
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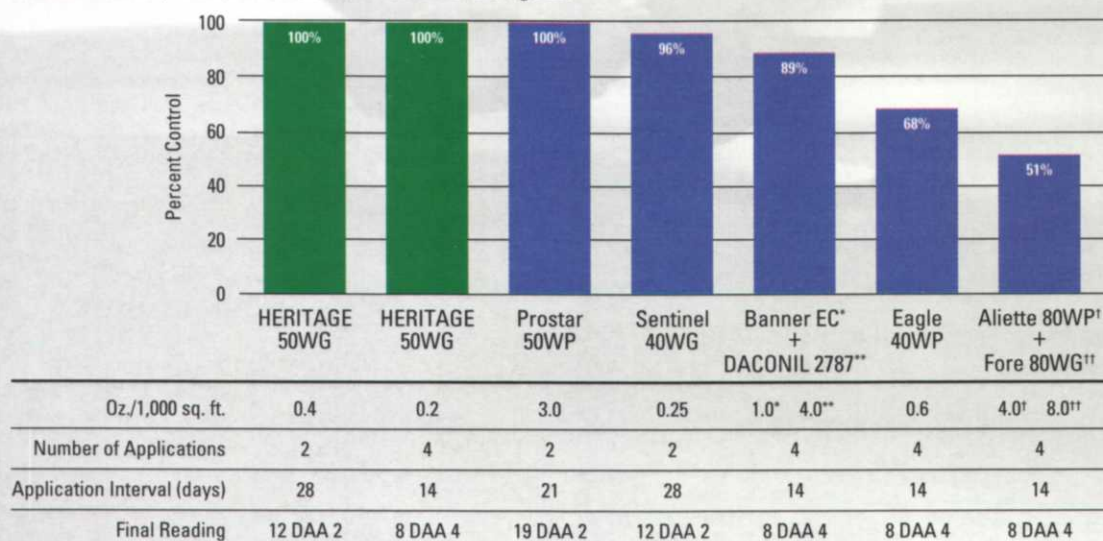


Dr. Bruce Martin, Clemson University, 1996

US11-97-P502

¹Turf Quality Scale: 0-9 scale, 9=best das = days after seeding

Brown Patch (*Rhizoctonia solani*) on Colonial Bentgrass

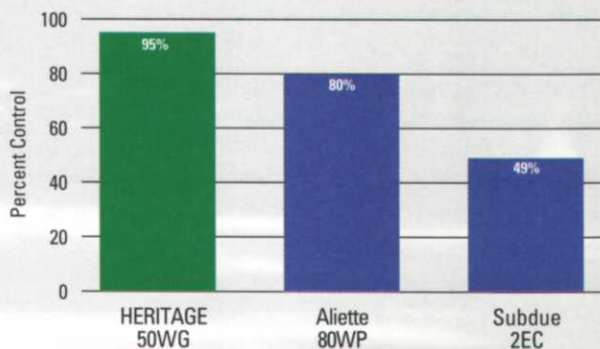


Dr. Pat Sanders, Penn State University, 1994

US 66-94-P356



Pythium Blight (*Pythium aphanidermatum*) on Perennial Ryegrass

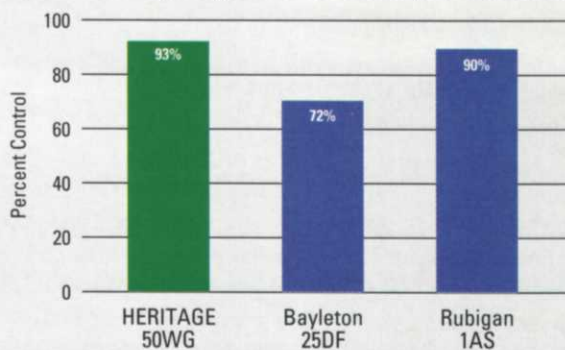


Oz./1,000 sq. ft.	0.4	8.0	2.0
Application Interval (days)	Four applications, all treatments applied at 14 day intervals, final readings 8/4/94		

Dr. Lee Burpee, University of Georgia, 1994

US 80-94-P353

Take-all Patch (*Gaeumannomyces graminis var. avenae*) on Colonial Bentgrass



Oz./1,000 sq. ft.	0.4	4.0	4.0
Application Interval (days)	Two applications, all treatments applied at 28 day intervals		

Dr. Pat Sanders, Penn State University, 1995

USNP-95-PO19

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Tales From The Other Side of the Desk

BY ROBERT G. KLITZ, CGCS

Orangebrook Country Club

Recently, several golf course superintendents in Florida have accepted the challenge of becoming a general manager. Geoff Coggan, CGCS at the Great Outdoors in Titusville and Mark Richard, CGCS at the Fort Walton Beach Golf Club are two former South Florida Chapter members who have moved into managing the operations of their respective clubs. Was the CGCS behind each of our names one of the reasons we were selected for these positions? Good question. Delicate subject.

As a golf course superintendent, I wondered what the next step would be after becoming certified. My position as general manager was not a position that I was seeking, but rather one that I was selected for based on the skills that I had developed and displayed as a professional in a management position. If you are currently working as a golf course superintendent and apply for a job as general manager at another club, your chances of receiving an interview are probably slim. Most superintendents have made the progression from superintendent to general manager at the club where they are currently working.

What exactly are the general manager skills that an employer is looking for? The most important skills would have to be the ability to communicate and deal with people. When I was job hunting, I went on an interview for a golf course superintendent's position at a very impressive facility in Boca Raton.

The director of golf operations was surprised that I was outgoing, and that we were engaged in comfortable, intelligent and articulate conversation. He mentioned that most of the superintendents he knew appeared to be more comfortable talking to turtles on the golf course instead of communicating with their members, customers or co-workers. Although this gentleman's comment was funny at the time, it was also disturbing. How can superintendents overcome this

Superintendent reflects upon transition from superintendent to general manager.

stereotype and continue to develop necessary skills while battling this perception?

The "turtle type" superintendent would have some difficulty stepping into the role of general manager. Resolving crisis situations like the smoothing of many ruffled feathers, and the handling of virtually all delicate issues are typically handled by the GM. How do you as a superintendent develop those kind of interpersonal skills?

There are several options for learning new skills or strengthening old ones. The GCSAA offers communication seminars at the national conference and a local presentation can be arranged at the chapter level. Local workshops that teach these skills are available through community colleges, independent seminars put on by Skillpath and Fred Pryor Seminars and some local businesses.

Another method of learning these techniques in a "hands on" environment is to become more active at your own club. Whether you are an assistant or a superintendent you can still play golf with your members, or regular customers and start to develop relationships with some of these people one-on-one.

Be prepared for some criticism and react positively. The people you interact with may be harboring five years of frustration over various golf course issues. They will unload on you, because no one else ever took the time to listen. As you feel the hair on your neck stand up in defiance to the criticism, smile and take notes. Reply positively and openly, and try to take action on their suggestions and comments. Suppose they point out that the mirror in the restroom on the 12th hole was broken four years ago and never replaced, and then they see that it is repaired the next time they play golf. You

may have won a friend for life.

Attending club committee meetings, club golf outings and functions at your course is another way of becoming involved with your membership. Through active engagement in discussion and conversation over club issues, you will project your interest and concern regarding the property and the golf course conditions. Volunteer to serve on a long-range planning committee to not only enter your input regarding future goals, but to further your relationship with some key people at your club. Through these professional interactions your ability to work with and understand your membership will contribute to your overall goal of developing your communications skills.

An obvious way to expand your skills needed as a general manager candidate is to become actively involved in your golf course superintendents' associations. Your involvement at the local chapter, state and national levels helps your association and profession move forward and helps you develop skills and contacts that will benefit you throughout your career.

Volunteering to serve on various committees and as an officer will teach you to look at the big picture on issues. You will learn how to conduct meetings, mobilize and direct resources and see how various clubs operate by helping to secure and schedule meeting sites and educational speakers. All of these association experiences will develop your written and oral skills and provide you with insights helpful for club organization and operations.

One of the more challenging relationships is the one between golf course maintenance and golf operations. Through all of the overlapping responsibilities, occasional conflicts of interest, and a variety of other issues, this is the most important, and sometimes the most strained relationship in the club operation. Your goal, as a general manager candidate, should be to enhance your knowledge and understanding of the golf operation.

This increased exposure will help you prepare for the massive operational responsibilities without going through a

traumatic culture shock later. There are a multitude of issues a golf professional handles daily from cashier drawers being short \$50, scoring that 150-man shotgun tournament, stocking merchandise, handling a screwed-up tee time, booking functions, soothing irate members. As superintendents, we may not feel these things are important as we deal with our own problems, but they are part of the total club experience for the members.

One of the most enlightening experiences I have had in learning golf operations is to operate the pro shop counter or cash register for several hours one day a week. This helped me maintain an open relationship with my customers, and keeps me in tune with my cashiers' operational challenges. Members and customers feel comfortable discussing their concerns and comments in the pro shop environment. This may sound like a crazy idea for a golf course superintendent to try the same thing at their club, but give it some thought.

The golf professional should enjoy your support. He will get part of a shift covered at no additional expense to the operation. Someone trustworthy will be behind the counter. A knowledgeable person will be answering all questions about course conditions intelligently.

The benefits for the superintendent will be an understanding of how valuable the pro shop staff can be in explaining challenges you face on the course. You will see how many phone calls the staff handles regarding greens conditions, aerification and overseeding. You will hear most conversations with the staff are not about golf clubs and balls but about cart path rules, green speeds and broken locks on restroom doors. After this experience you will not only realize that you need to update the staff on course conditions more frequently, but that you have a large group of people to add to your Christmas list.

Another area that some golf course

superintendents have limited experience with is the golf car fleet. Although it looks fairly simple to train someone to wash off a cart, park it and plug it in, there are many more details that need to be addressed. Servicing batteries, reporting damage from customers, repairing flat tires, waxing, detailing, greasing and reporting mechanical problems. All of these issues have to be addressed, implemented and documented. Talk to your golf professional about his/her program. You may learn something you can utilize in your own operation.

The financial knowledge required for the general manager's position will probably be the most difficult information for the typical golf course superintendent to learn. The GCSAA offers financial management seminars, and a manual is available for studying for the CGCS exam. Neither of those resources is going to give you a complete understanding of the financial systems in use at your club.



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Some clubs discuss the current financial picture with their department heads at weekly staff meetings. This discussion typically describes how the revenue from the previous week compares to the expenses of the maintenance and clubhouse and pro shop operations. A day or two of bad weather will cause some long faces in the staff meeting.

Some clubs will share a report of only the maintenance expenses with the superintendent. If you want to become more aware of the club's total financial picture, ask the general manager if this information could be included at the staff meetings. If that isn't feasible ask if you could be copied with the information or if he would go over it with you on a regular basis. Either way, as you review the weekly figures, you should develop a greater un-

derstanding of the financial picture of the club and the impact your actions as superintendent has on the overall operation.

One of the most challenging aspects of the transition from golf course superintendent to general manager is the relationship between the new GM and his/her new superintendent. If the new GM is promoting his/her old assistant to the position, the transition should go smoother. But now, as the new GM, how do you restrain yourself when your new superintendent wants to try a technique that is different from anything you would have done as superintendent? Do you bite your tongue and let the "rookie" trip and fall and learn from the school of hard knocks, or do you delicately point out how the "new" idea might cause prob-

lems and how your "old" way would provide better results? This relationship can be one of the toughest to handle in your new GM position.

In August 1997, David Lottes, vice president of Southern Golf Appraisals, interviewed me for the position of general manager at Orangebrook Country Club. During the interview David stated that the general manager's position presents a new and challenging situation every day. As a golf course superintendent I was used to facing challenges and obstacles on a regular basis. I had to learn the skills of an agronomist, environmental steward, equipment operator, mechanic, plumber, electrician, spray technician, carpenter, painter, family counselor and mediator.

As a general manager I have had to expand my horizons to include knowledge of janitorial services, air conditioning service, alarm systems, video surveillance systems, exterior high intensity lighting for the driving range, telephone systems, voice mail systems, ball dispensing machines, credit card validators, disputed credit card charges, proper cash handling techniques, golf merchandising and displays, inventory control, cash register programming, tee time reservation systems and numerous other unfamiliar tasks.

As golf course superintendents, some of us will be provided with the opportunity to move into a general manager's position. This will be a challenging task for most superintendents. But with the skills you have mastered and displayed in organizational ability and staff management, an owner should be able evaluate your competency prior to placing you in this new position. Making the move to general manager may seem a daunting task. By preparing now for this future opportunity, your transition into this new role can be as smooth as your best putting green.

Editor's Note: Robert G. Klitz, CGCS is the general manager for Golf Hollywood, a golf-course management company that is currently managing three facilities for the City of Hollywood.

Attitude Check

You know you are a general manager and no longer a superintendent when....

You are driving to work in a heavy rain, and you are no longer thinking about if you have enough car wax to keep the crew busy waxing equipment, but you start thinking "There goes \$10,000 in revenue."

When customers are complaining about: Food quality in the restaurant. The air conditioner leaked in the merchandise storage room ruining your winter stock. A customer wants their emergency room medical bill covered from when they were hit in the head by a golf ball on the driving range. You long for the days when all you had to do was remind your guys to check the oil in the greens mowers.

You are worried about making sure all the driving range balls are picked up before golf course maintenance starts mowing.

You no longer are asked to lunch by your turf sales reps.

You no longer put on sunscreen at 4:30 am after you brush your teeth.

You wear nicer shoes to work (but you keep your boots under your desk)

You very rarely get caught in a rainstorm.

You still carry a pocket knife(not in a belt holster): but it is now used for opening mail and packages; rarely gets to cut a weed out of a green; and never gets to cut irrigation hydraulic tubing anymore.

You think a lot more about beautifying the Clubhouse landscaping, instead of thinking of it is an afterthought and a nuisance.

You still drive a pick-up truck, but it stays a lot cleaner.

The smell of gear oil, hydraulic fluid, and diesel fuel has been replaced by the aroma of copy machine toner, cigars and perfume.

You can no longer postpone a haircut by wearing a hat for two weeks.

You wake up in the middle of the night, with rain pounding on your bedroom window, hoping you will be able to let carts out in the morning, instead of wondering if your assistant turned off the irrigation before he went home.

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Moonlighting in Turf Research

I am an assistant superintendent/spray tech at Pine Island Ridge C.C. in the Fort Lauderdale area. My work week, Monday through Thursday and Sunday morning, lends itself to having a second job.

While taking a plant pathology class at the University of Florida Research and Education Center in Fort Lauderdale, I was talking to another student about extra work.

She mentioned that on weekends she worked on campus in a research capacity. I thought to myself, "What better thing to do than be a research assistant for the University of Florida?" I mentioned my interest in turf and that I would even be willing to donate my time if necessary. She recommended that I talk to Dr. Phil Busey.

While attending the 1998 Turf Exposition at the FLREC campus I talked to Dr. Busey. He is a 22-year employee of the University specializing in turfgrass production and weed control. He was enthusiastic about my interest in working Friday to Sunday and my willingness to donate my time. That Friday I showed up ready to get started.

After spending a few hours getting acclimated, Dr. Busey gave me 240 abstracts (article summaries) on torpedograss, *Panicum repens* to go over and choose the most relevant articles on torpedograss control. BASF let Dr. Busey in the loop on its current quinclorac (Drive) trials for the control of torpedograss in bermudagrass at Broken Sound in Boca Raton. By the way, there have been some very promising results.

What else could you want for a first assignment? I spent the weekend going over the abstracts, which were filled with technical information. Even though I was donating my time I was learning. The next Friday Dr. Busey said he wanted to put me on the payroll.

Normally, on Fridays we visit local golf courses and talk to superintendents about weed control problems. If they have a weed they can't control, we make sure they have the proper identification and then discuss management options.



Dr. Phil Busey (left) hired John Rowland as a research assistant at the University of Florida's Ft. Lauderdale Research and Education Center after John volunteered to work on his days off. John is the Assistant Superintendent at the Pine Island Ridge CC in Ft. Lauderdale.

Dr. Busey and Diane Johnston, a biologist, compiled a list of "Herbicides and PGRs Labeled for Bermudagrass Turf in Florida" which we can use as a reference. Although we are primarily interested in weed control, we hear questions about other turf problems.

What valuable insights I am getting into the profession. It is also rewarding and educational to be able to participate with superintendents discussing their problems with Dr. Busey!

On Saturdays and Sundays I work primarily on weed-control experiments. One current project is the control of goosegrass in bermudagrass. We are comparing the effects of non-selective herbicides to selective herbicides.

A one-time crown treatment application of Round Up (glyphosate) spraying only on the center 3 inches of the plant compared to a complete saturation of the plant with MSMA/Sencor (metribuzin) using two applications two weeks apart showed similar control results.

However, we found that applying Round Up only as a crown treatment may cause less damage to the surrounding bermudagrass compared to spraying the entire plant (approximately a one foot diameter) with MSMA/Sencor.

I also do computer work for Dr. Busey. One job was to scan the minutes of the

1949-1959 Florida Association of Golf Course Superintendents meetings. This work will help preserve the minutes in full color detail for future generations to see.

I have a flexible schedule at the University of Florida. Dr. Busey is generous in allowing me access to information contained in his office. He even outfitted my desk with a computer.

The other researchers on the FLREC campus are also generous in their willingness to answer questions on subjects in their specialties.

I also have a great boss in John Troonin, the superintendent at Pine Island Ridge Country Club. He has never turned down my request to attend a seminar, superintendent meeting or other educational opportunity.

I appreciate his willingness to teach me the ins and outs of golf course management.

I hope to maintain my involvement with the University of Florida even after I become a superintendent because the link to the university and faculty is priceless!


John Rowland Jr.
Assistant Superintendent,
Pine Island Ridge C.C.
Research Assistant,
University of Florida, FLREC



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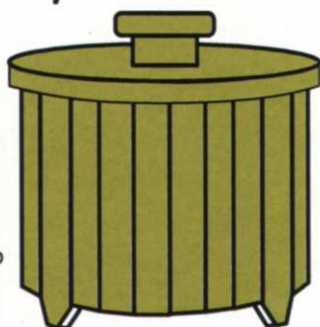
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1998-99 Overseeding Season

BY JOEL D. JACKSON, CGCS

Superintendents have developed a comfort zone with the overseeding ritual based on their local course conditions and member expectations; geographic location and average weather patterns; past performance of seed varieties and management routines; and timing of special events. Last year El Niño turned the winter season into a nightmare for many superintendents and golfers alike.

Superintendents can't always select the best time to overseed based on current weather data or predictions. They are forced to select seeding dates based more on club activities and tournaments.

The Disney Golf Classic in October and the Bryant Gumbel Celebrity Tournament in November come to mind. We were often seeding courses the first of December after all the major events were over.

Last year, we got caught by El Niño's rains and application after application of seed was followed by heavy rains. The courses that were able to seed early last year generally were more successful.

As if it weren't enough of a challenge all winter to get the greens in acceptable shape, the second half of the season turned into a record-setting drought and heat wave.

All that seed applied again and again to produce a marketable playable surface choked out the bermudagrass and then shriveled up under the wilting heat, leaving big bare patches on the greens. If superintendents tried (or were forced) to maintain tight greens instead of reacting to the conditions, they generally had a rough transition.

What's in store for us this year? El Niño shouldn't make a repeat appearance. That phenomenon is usually on a two to three year cycle. Tad Altman,

Stonebridge CC, Naples; Scott Bell, Bent Pine GC, Vero Beach; and Joe Ondo, CGCS, Winter Pines GC, Winter Park wrote articles on their plans and we have four more superintendents from around the state participating in a *Florida Green* overseeding questionnaire to share their plans and tips for 1998. Good luck!

Overseeding Procedures for Greens and Tees

We overseed around the second week of November.

On the greens we will put down 10 pounds of poa trivialis per 1000 sq. ft.: 4 pounds in two directions using a drop spreader and 2 pounds with a rotary spreader over the top. In about a month we put down another 2 pounds with a rotary spreader. The tees will be seeded with a drop spreader at 15 pounds per 1000 square feet of a seed mix which is 85% perennial rye grass and 15% poa trivialis. No other areas will be overseeded.

After seed is spread, we drag it in with a mat that has carpet attached to it. The greens and tees will not have any seed bed prep except for a topdressing around a week prior to seeding.

After seeding is complete, the mowing height will not be changed. Greens will be mowed at .156 (5/32) inch, and tees will be at 3/8 inch. The only change in mowing practice will be raising the turf groomers to keep from pulling out the seedlings.

Two weeks after germination we lightly topdress the greens and apply fertilizer at 3/4 pound per 1000 sq. ft. Four weeks after germination we put the groomers down to bedknife height.

Six weeks after germination with proper weather conditions, we mow the greens at .140 (9/64) inch. At this height we do regularly scheduled fertility programs. Some of the fertilizer applications are granular and some are foliar. Fertigation supplements are applied most of the winter at low rates.

When all is right with the weather, it is usually smooth sailing until spring. Unfortunately we have not had many "right with the weather" times lately.

To get through these difficult times we raise the cutting height to acceptable levels and increase foliar applications of plant health products (like medicines you take when you have a cold or flu). All situations are evaluated at time of need.

A light topdressing is applied every two weeks during cooler months. We put a microbe solution on our greens and tees monthly all year.

After implementing this program we have decreased our fungicide use to a very low level. Last year with the heavy rains we had good turf quality with little fungus. The biggest difficulty was lack of sunlight that required us to apply more plant nutrients directly to the leaf tissue more often.

Another thing we found out last winter was that our pre-emergent chemicals did not last as long as they should because of rain flushing. Our second pre-emergent application will be applied earlier this time to keep the volunteer rye from becoming a problem.

After 14 years of overseeding under my belt, I have come to the conclusion that if you keep it simple and stay on top of the program you can get a great final product and still sleep at night.

Tad Altman, GCS
Stonebridge Country Club

Managing Overseeding Through the Season

After many years of overseeding, we have established a strong-enough stand of bentgrass so that we do not have to overseed any more. As the years progressed, certain greens got stronger bentgrass cover and over the past 10 years we have converted a couple of greens per year to where we are now.

Bent Pine now has all of the greens predominately in bentgrass. During the summer, some greens will show some bermudagrass trying to reestablish, but we try to keep it from spreading too much.

The decision to overseed is only the beginning. Decisions need to be based on geographic location, rates, type of seed and time of desired transition.

The decision needs to be made to de-

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termine if you want to “interseed” (mainly for color) or if you want a full-blown overseeding where you establish a solid bentgrass or poa trivialis putting surface. We always overseeded to establish a solid bentgrass surface. Years ago we seeded with a bent/poa trivialis mix but we found in late April and May, the poa would discolor as the temperatures rose. We then used only bentgrass. We targeted June as our transition month.

We always overseeded during the first week of October. For bentgrass to be fully established and growing laterally via rhizomes, you need 12 weeks. Usually by Christmas the seed was mature. We cut back on the fertility before Labor Day in order to slow the bermudagrass growth rate. Two to three weeks prior to overseeding we applied a starter fertilizer, liquid organic phosphorus. We have had the luxury of the club closing down during the first two weeks of October for seasonal preparations, including overseeding.

The Sunday evening before closing we verticut, spiked, mowed and sprayed the greens so that on Monday morning we could seed the greens in the dew and see our spreader tracks. We verticut with verticut reels mounted on our Toro Greensmaster 3000Ds. As our Tifdwarf greens got older, we verticut as many as six or seven times per green.

This is a critical call based on the green’s health, age and fertility. You need to get good seed-to-soil contact to help the seedlings root and establish quickly. After verticutting, we mowed to clean up and then spiked with our trap-rake-mounted spikers. At this point we applied Subdue fungicide to protect the seeds and seedlings from Pythium and then went home for the night.

The next morning we seeded into the dew, watered it in and, once the greens were dry, topdressed fairly heavily with a 90/10 coarse mix. After dragging in the mix, we fertilized with an organic greens fertilizer. Finally we sprayed the greens with a broad-spectrum fungicide and insecticide. For the next five or six days we kept the greens wet through a combination of irrigation and hand watering. Usually after four or five days, the seed began to germinate.

As we all know at seasonal clubs, we are judged by our greens from November to May. They are often the topic of choice on the cocktail circuit. Generally the decisions that you make and the actions that you take in September, October and November determine the success or failure of your whole season.

Being closed is extremely valuable to establishing an excellent putting surface. We would wait for seven to ten days until we finally walk-mowed the greens at 1/4 inch. For the next month we scouted for pests and mowed as little as possible. We tried to skip mowing on any weekday morning without dew. We waited a month before we began to lower the cut.

At this point we switched to a liquid-only fertilizer program, which included a program of liquid micronutrients and organics. This benefited us because, as the height of cut was lowered, the exposed dry, granular fertilizer affected ball roll and we would have to mow without buckets.

As we all know at seasonal clubs, we are judged by our greens from November to May. They are often the topic of choice on the cocktail circuit. Generally the decisions that you make and the actions that you take in September, October and November determine the success or failure of your whole season.

Remember that good seed-to-soil contact needs to be made, but you still must have some bermuda around to protect and hold the new seedlings. Finally, watch your mowing heights. Mowing too low, too early can stress a good stand of grass. Don’t forget about your greens during the weekends and hopefully you’ll have a great stand of grass all season.

*Scott Bell, CGCS
Bent Pine Golf Club*

Winter Pines Overseeding

The past three years we have been overseeding the Monday after Thanksgiving because November is still a very

busy month while December and early January are slow. Also the greens were so nice in November we hated to start seeding into them. After last year, we have decided to seed around the first of November just in case. We have been using a mix of ryegrass and poa trivialis, but this year we will go with a blend of Sabre II and Winterplay poa trivialis on the greens.

We will start with 5 lbs./1000 sq. ft. of the poa triv blend and continue dusting the greens every week until we get the coverage we want, which is 12 to 15 lbs./1000 sq. ft.. This way we feel we can give our players a better putting surface with minimal disruption in shorter time frame. Some of our weak greens may get a little ryegrass to help them out. Collars and approaches will be seeded with 15 lbs./1000 sq.ft. of Brightstar perennial ryegrass. Tees will be overseeded with 15 lbs./1000 of Cutter Lowgrow perennial ryegrass. Three of our par-three fairways and the clubhouse area will be seeded with Brightstar ryegrass at 10 lbs./1000 sq. ft.. The rest of the fairways and roughs will not be seeded.

Primo has not been used yet on our bermuda for overseeding establishment. The shorter days, cutting back on nitrogen, and regular verticutting still seem to be working so far. The greens will be verticut in two directions and then lightly topdressed about a week before overseeding to establish a good seed bed. Tees, collars and approaches will be verticut one day earlier and mowed down to 3/8 inch. After seeding, these areas will be topdressed with an 80/20 soil blend and matted in with a rug. No topdressing will be used on the greens after seeding.

Mowing on greens will begin at about

1/4 inch and gradually be lowered to 5/32 after good establishment. All other areas will start at 1/2 inch and lowered to 7/16 inch until transition begins.

No pre-emergent herbicides will be used on greens, tees, approaches or any other seeded area. Poa annua has not been a big problem and any area that gets infested will be dealt with on an individual basis. Around the second week of November, one pass of XL granular will be applied with a drop spreader around all seeded areas. One pass of Barricade will be sprayed on slopes and outside the XL granular-treated areas. During the third week of November a 10-0-20 fairway fertilizer blend with Barricade will be spread on fairways and roughs with hand work in the tight areas.

A preplant greens fertilizer of 12-24-12 is usually applied at seeding and a liquid preplant is used as the seed begins to pop. Milorganite is used at half rates every other week depending on weather for the first two months. A second pre-

El Niño caused us some weak turf and forced us to speed up our plans of rebuilding four greens this year sooner than we wanted.

plant application may be made in a month, depending on how much more seed needs to be added.

Usually on greens, IBDU at 0.5 lb./1000 sq. ft. along with liquid Ferromec and potash is used every other week during the season. All other areas receive similar treatments. Par-three tees might get a little extra.

The greens are spiked weekly with a Cushman pull-behind spiker. No other cultural practices are done until later in the season, when we verticut and double mow.

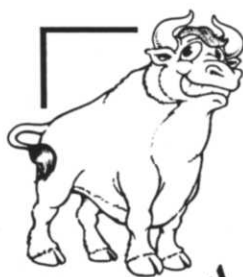
Spraying is done with Banol or Subdue as preventive Pythium control after the seedlings emerge. Preventive sprays are done every other week using Daconil

2787, Dithane or Cleary's 3336. Dithane or Fore are used after the seed is established for any necessary algae control.

El Niño caused us some weak turf and forced us to speed up our plans of rebuilding four greens this year sooner than we wanted. The new Heritage fungicide was a big help to our turf and we will not hesitate to use it sooner if poor conditions exist.

As most of you know, soil testing will tell you what other nutrients you might need for good turf. I will give some of the new wetting agents a try if needed. Let's hope El Niño doesn't rear its ugly head this year!

*Joe Ondo, CGCS
Winter Pines Golf Club*



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1998 Overseeding Questionnaire

Participants: John Kopak, Alaqua CC, Longwood; Jim Martello, Halifax Plantation, Ormond Beach; Mike Mongoven, CGCS, Fort Myers CC, Fort Myers; and Steve Pearson, CGCS, The Falls CC, West Palm Beach (Pearson no longer overseeds, but these were the programs he found successful).

1. Timing

a. When will you put down your seed this year?

Kopak: I've selected the first week of November. We don't have any special events scheduled. I feel early November is in the window of opportunity for good germination temperatures in case October is too warm or December is too cold. But we all know Mother Nature will determine the overall weather conditions.

Martello: Around Thanksgiving. I want the bermuda as inactive as possible.

Mongoven: Our dates are based on economics rather than agronomics. We will overseed greens the first week of December.

Pearson: I used bentgrass in our greens mix so I started in October and hoped for cool weather since bent takes longer to establish.

b. Will you put out the seed in split applications?

Kopak: Yes. I will start with 6 lbs./1000 sq. ft. and follow up with two 2-lb. applications for a total of 10 lbs./1000 sq. ft..

The timing of the second and third applications is based on weather conditions and how establishment is coming along.

Martello: No. We will put out all the seed in one application making four different passes across the greens. We will monitor thin areas and touch up as needed four to six weeks later.

Mongoven: Yes. We will apply the seed in multiple light applications, maybe until March 1. Last year we even applied later than that.

Pearson: No. As long as the rain forecast for the next five days didn't show any significant rainfall.

I felt the stand of turf would become denser faster and it was important to get the greens right as soon as possible before the members came back.

2. Seed Varieties

Kopak: On the greens I've been happy using Cypress poa trivialis for the past four years. I feel the costs are in line and the performance over a wide variety of conditions has been to my liking. On tees and collars we put down 21 lbs./1000 sq. ft. of Evening Shade perennial ryegrass in 7-lb. increments going three different directions.

The par-three and driving-range tees get an additional 7 lbs./1000 sq. ft. Fairways are seeded at 250 lbs./acre with the same ryegrass.

Martello: We use a total of 7.5 lbs. of poa trivialis. No more, no less. I'm growing bermudagrass and I want to protect my host plant. Collars are done with a ryegrass and poa trivialis blend at 200 lbs./acre. Tees: ryegrass at 400 lbs./acre. Fairways: ryegrass at 300 lbs./acre. We follow up on tees weekly and hand-topdress with seed/soil mix through January.

Mongoven: Greens: 85% perennial ryegrass/15% poa trivialis blend. Tees and around some bunkers: ryegrass.

Pearson: We overseeded greens only: 6 lbs. poa trivialis and 2 lbs. bentgrass per 1000 sq. ft. The varieties depended on what worked well in each particular area and what was available.

3. Establishment procedures

Including seed bed preparation. This includes use of Primo, verticutting, mowing, top dressing, pre-emergent herbicides, and fertility programs.

Kopak: Primo — I may use Primo on fairways if they're growing fast. I may experiment on a couple of greens this year to compare establishment success. I haven't used it on greens before. You should never try a new procedure on all your greens without testing it first.

We all know what works at one course doesn't always work the same somewhere else.

Verticutting — Two directions on greens and one way on tees two weeks before overseeding. Topdressing — One light straight sand application on greens and one medium straight sand application on tees prior to seeding. Pre-emergents — A band of XL granular is applied with a drop spreader around the outside of tees, collars and approaches. Then we make rotary spreader passes outside of that. We outline fairways with Barricade using only the center boom section.

Then we fill in the rest of the area with the total boom operation. Fertility — Pre-plant and establishment: 3-9-9 granular on greens and a liquid 10-34-0 at the rate of 1.0 lb. of phosphorus/1000 sq. ft. During the season: less phosphorus and more nitrogen spoon fed, alternating granular and foliar feedings. If fungicides are needed they can be added to the foliar mix along with sugar. I like to apply 0.75 lb./1000 sq. ft. of ammonium sulfate to the fairways every six weeks.

Martello: Primo — Since I go out later, I don't feel I need to use it. Verticutting — Ongoing normal routine. Not just for overseeding. Mowing — prior to seeding 5/32 inch. Raise height to 3/16 inch. Seed out on Monday. First mowing the following Saturday. Topdressing — Biweekly and the day we overseed. Pre-emergents — four to six weeks prior to seeding we use Pre-M to frame-in all non-seeded areas, two booms wide. We use XL close in and around bunkers. Fertility — No special preplant mix. During establishment a typical 1:1 N:K fertilizer with maybe a little Milorganite. Use our regular granular program the rest of the season. If it gets wet, we will apply foliar sprays to feed bermuda year round.

Mongoven: Primo — just beginning to use it on greens before seeding. Verticut — two directions the morning of seeding. Mowing — Double cut at .180 inch morning of seeding.

Five to seven days later depending on germination, mow in the afternoon at .225 inch. Continue mowing in afternoons for the next three or four days. Topdressing — right after seeding, using a sand/charcoal mix. Pre-emergents —

First of October apply Regalcalde and fill in with Barricade in hard-to-spread areas. Fertility — Granular 5-10-10 after seeding. Spray 9-27-0 after germination. Soluble fertilizers sprayed on 7-14 day intervals combined with granular program every two to three weeks, depending on analysis.

Pearson: Primo — Used to apply right after verticutting at 6 oz./acre. Verticut four directions, enough to leave slits showing. Mowing — Prior to verticutting 5/32; after overseeding raise height to 7/32. Continue for 10 days after germination. Used walk mowers with solid rollers.

Then in five-day increments, drop height 1/32 until turf is dense; then lower 1/64 at a time until .125 is reached or lower if desired. Topdressing — After overseeding heavy enough to “bed” the seed.

Very light applications weekly until reaching ultimate density. Pre-emergents — Been too long to recommend products or timing. Fertility — One-time pre-plant after verticutting and before overseeding.

A weekly foliar program would follow with a fungicide included. During the season twice per week a soluble slow-release fertilizer would be applied at .05 lbs. N per week.

4. What are some your management programs after establishment.

Kopak: Volunteer ryegrass is treated with TFC (Tall Fescue Control). I like to slice the greens every two weeks with a

deep slicer. This really saved our greens last year with all the rain we had. We topdress monthly. We roll the greens only for special events. Spray programs — I like to stay on a preventive fungicide program. Heritage is used during establishment. Mancozeb products used for algae as needed.

Martello: We mow daily with walk mowers, dropping in height from 3/16 to 5/32 with establishment. In the spring we start double cutting three to four times per week to encourage transition.

We slice biweekly during the season. In March we start a biweekly program of vertigrooming and topdressing.

No rolling. Spray programs are as needed only.

Mongoven: We mow with triplex mowers set from .200 to .175 inch. (Possibly lower if the stars are aligned properly!) No groomers. Roll twice a week. Verticut lightly starting in April every two weeks. Spray program — Normally don't use a preventive program. Last year was an exception.

Spray greens weekly with either a complete soluble fertilizer, micronutrients or a wetting agent.

Pearson: We would incorporate whatever it took to produce a good, true putting surface including topdressing, Primo and rolling (maximum twice a week). All was dependent on the health and vigor of the turf.

5. What are your plans for turf stress management in case of adverse condi-


tions like El Niño?

Kopak: Raise the height of cut and do more frequent slicing. I would rather hear complaints of slow greens than hear complaints of no grass to putt on!

Martello: Slice greens biweekly. If it gets real wet, increase to weekly slicing even daily if necessary. You have to keep them opened up when it gets dark and wet.

This practice alone has literally been our saving grace in bad winter weather conditions. Manage your irrigation watering very carefully.

Mongoven: Jog to relieve stress. Pray. On the turf, be quicker to apply fungicides.

Pearson: The height of cut has more to survivability than anything else. Continuously monitor soil temperatures, days of no sunlight, and water (rain) problems. Adjust height accordingly. 

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DARREN J. DAVIS

*Golf Course Superintendent
Olde Florida Golf Club*

IPM, Integrated Pest Management, or Integrated Plant Management is a buzzword in the industry that lately golf course superintendents have been bombarded with almost daily. Golf course superintendents know that IPM has been employed on golf courses for years.

Although the definitions for IPM vary, one key component in a well-accepted IPM program is the reduction of pesticide use. Hand-removal of weeds is one method to decrease the use of herbicides. Some may feel this practice is too time-consuming and the benefit is not worthwhile.

If you run the numbers, the result may surprise you. For example, let's assume you have a 20-person staff. If 20 people take the time to hand-pull 10 weeds a day, five days a week (take the weekends off!), these 20 people would remove 52,000 weeds annually without one ounce of herbicide.

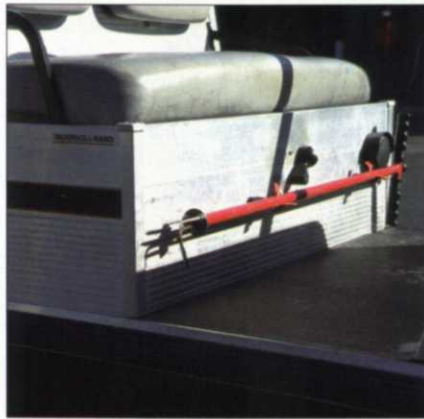
You be the judge: is it practical? In addition to the obvious benefit of fewer weeds and less herbicide, would your golfers rather see employees removing weeds while waiting for the golfers to play out of the way? Or would they rather see the employees sitting on their rear ends?

Golf course superintendents are well aware that hiring and keeping quality staff members can be a challenge. Too often, employees would prefer to perform duties that afford them the ability to sit on their butts all day.

Well, that topic is a different, complicated issue that each superintendent has to overcome. One way to motivate staff members to pull weeds by hand is to install "weed poppers" on the equipment.

From our experience, employees are much more likely to accomplish the goal of 10 weeds a day if they do not have to get their hands dirty.

To assist in this challenge we purchased a supply of "weed poppers" from a local vendor and our head equipment technician installed clips on the equip-



Mounting the weed tool on vehicles (above) keeps them handy and eliminates forgetfulness. Former assistant superintendent Russ Mollberg (right) is shown popping one of his quota of 10 weeds a day. A crew of 20 can harvest 52,000 in a year. Photos by Darren Davis.

ment to secure the tool in place. With the tool provided in a location that does not allow the employee to "forget it at the shop," we feel the goal of 52,000 weeds a year is obtainable.

Can this help your operation? That is for you to analyze. Has it reduced the amount of herbicides that we have used? Absolutely! In fact not one ounce of post-emergent herbicide for goosegrass or crabgrass has been applied to our greens, tees or fairways in over four years.

Tree/Boom Guard

As the assistant superintendent at Boca Grove, I like to do a lot of the spraying—especially the herbicides—so I know how and where the applications are done.

We have more than 1800 orange trees remaining from the original grove on the property. When I have to spray near the trees, even though we have break-away



booms on our Hahn sprayer, the fittings on the booms can nick the trees and leave small and unattractive scars on the bark.

I had an idea to create a tree (or boom) guard to create a neutral, flat surface that wouldn't cut the bark. From our mechanic, I got a couple of used Toro bedknives that were being discarded. I secured the bedknives to the ends of the outrigger booms with a couple of hose clamps. Now these flat surfaces recoil harmlessly off the trees without leaving any scars whatsoever.

*Jeffrey Roth, AGCS
Boca Grove Golf & Tennis Club*



The installation of a used bedknife on the leading edge of the breakaway boom on the spray rig protects the trunks of trees from nicks and cuts by the bolts and fittings on the boom. Photo by Jeffrey Roth.

“Today, I need to be an agronomist, a negotiator, a mechanic and an accountant.”



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Lake City CC's Ed Combest Retires *Honored by Golf Ventures*

Ed Combest may be retiring from his position at Lake City Community College, but his legacy will live on through Golf Ventures.

Combest, a retired Navy chief, joined Lake City Community College in 1975 as the program coordinator and has turned a fledgling golf course equipment mechanics program into a turf equipment management program with national renown.

Golf Ventures supplies chemicals, granular and liquid fertilizers and various golf accessories to more than 1000 golf courses in Florida and Southeast Georgia and employs many graduates who have trained at Lake City Community College.

"The success of Golf Ventures is directly related to Ed and his teaching ability," says David Cheesman, vice president of sales for Golf Ventures, and a 1984 LCCC graduate. "As an instructor, Combest has taught many of our employees in turf equipment management as well as instilling many positive traits such as sound business values and the way to present ourselves in a professional manner."

"Ed Combest has been a pleasure to work with over the years, and I greatly appreciate the job he has done in training many of the present technicians in our industry," says Don Delaney, vice president of sales for Golf Ventures and a 1973 LCCC graduate.

To show LCCC and Ed Combest its appreciation for their work and studies in the turf equipment management program, Golf Ventures provides students at Lake City Community College with internships to earn school credit, and supplies the equipment technicians program with over \$45,000 worth of equipment to train students. A yearly graduation banquet is also sponsored by Ransomes and Golf Ventures, Ransomes distributor. Two scholarships are awarded each year for equipment technicians, and golf



David Cheesman(left), Vice President of Sales for Golf Ventures and a 1984 Lake City graduate, congratulates Ed Combest on his retirement as Program Coordinator for Lake City Community College's nationally recognized Golf Course Equipment Technicians Program.

course graduates.

To further appreciate Combest, the division faculty as well as the golf and mechanic alumni are honoring Combest with a benefit golf tournament with Golf Ventures as one of the sponsors at the Lake City Country Club. All proceeds go to endow a scholarship fund for the turf equipment management program. Plans are to raise \$25,000 which will be augmented by the state to produce a total of over \$40,000. The money will be invested and produce more than \$2,000 a year for the Ed Combest Scholarship Fund.

Lake City Instructor nominated to state panel

In other news congratulations are in order for John R. Piersol, chairman of the division of Golf/Landscape/Forestry at Lake City Community College. Piersol has been nominated to serve on the state Technical Committee for Agricultural Business and Natural Resources Education, a committee composed of Florida agriculture industry professionals and educators.

The task of this group is to advise the Department of Education on the status of the agriculture industries in Florida and to recommend additions, deletions

or other changes in agribusiness education programs statewide.

Piersol has a B.S. in horticulture from the University of Delaware (1970), M. S. in horticulture from Colorado State University (1974), and credits towards an Ed.D. from the University of Florida. Piersol has been at Lake City Community College since 1974 and chairman of the nationally recognized division of Golf/Landscape/Forestry since 1987.

He resides in Lake City with his wife and four children. Lake City Community College has nationally recognized programs in golf course operations, forest management, landscape technology, turf equipment management and a new program in irrigation management.

From the Turf Coordinator's Desk

Dr. John Cisar writes:

- The University of Florida Turf Team will once again display posters detailing new and ongoing research at the Florida Turfgrass Conference and Show in Tampa. The faculty will be on hand to discuss their research and answer questions.

- Thanks to everyone on the faculty and in the turf industry for their participation at this year's retreat in West Palm Beach. A package of material generated from the retreat was sent by the FTGA office to the retreat attendees and the UF administration. Progress continues to be made as we position the turf coordinator to facilitate a more accessible and unified turf faculty.

- At the Florida GCSA board meeting in Orlando, we discussed the local chapters inviting UF faculty to be speakers at their monthly meetings. It is my understanding that the FGCSA chapters will pick up lunch and golf expenses for any speaker. Long distance travel and lodging should be discussed with the chapter to make sure it is clear what the chapter can cover, but the opportunities are out there for chapters to get quality presenters for their educational sessions.

- The turf coordinator will meet regularly with the Turf Advisory Working



Sixteen faculty members of the University of Florida's IFAS Turf Team met with 26 members of the Turf Industry in an historic gathering in West Palm Beach to discuss the best ways to serve the Turf Industry in Florida. Photo by Joel Jackson.

Group (TAWG) as part of the coordination effort of the turf team. The TAWG will be made up of administration, department heads, and center directors. Topics discussed at the most recent meeting: Retreat report, coordinator report, coordinator duties, turf design team update.

As part of the effort for the turf coordinator to be visible to the industry, recent travel for July and August:

- FTGA Turf Certification Meeting, Belle Glade.
- Seven golf course test site visits.
- Two NTEP turf trial visits, Jupiter Island Club.
- Cricket Association. Retreat planning.
- GCSAA Program, Cherry Hill, NJ.
- IFAS Field Days, Gainesville.
- Golf Course tours of five courses in Naples.
- Florida GCSA Board Meeting in Orlando.
- Club Managers/Superintendent Workshop, Naples.

Florida Golf Alliance Update

The Florida Golf Alliance met Aug. 10 at the Registry Hotel in Naples. In attendance were President Ron Garl; Vice President Roy Bates; Treasurer Jack Brennan; Director Mike Fiddelke. Guests: Sylvia Garl and Joel Jackson, FGCSA director of communications.

The resignation of FGA Secretary Ann Palmer of the Mercury Titleholders was announced. Ann has moved out of the

state. A motion was made to elect Joel Jackson as the new secretary. The motion was approved.

The FGA bylaws were presented for final approval. All board members were also given copies of the 1998-99 business plan and asked to review and give feedback prior to release to new prospective members.

The first-year goal of conducting a total golf economic impact study was the next topic of discussion. The board decided that Roy Bates and Jack Brennan would meet with Mike Goldie and Larry Pendelton to discuss the feasibility of involving the Florida Sports Foundation in funding the impact study to be done by Florida State University. Later reports indicate that such a study is under way and the FGA will support the research efforts by the FSU professors.

Roy will tweak the mailing list of potential member associations and the letter of invitation to join the FGA from Ron and a copy of the business plan will be sent to all prospective golf associations in the state.

The board then watched an eight-minute video on Golf House Tennessee, which showed a superb effort by the Tennessee golf industry to organize and unite state golf associations in one location.

1999 Florida Plants of the Year

Part 1

Last year we participated in the Florida Nurserymen and Growers Association's

inaugural "Plants of the Year" program by publishing the 1998 selections of underutilized but proven Florida plant material. The plants are chosen by a committee of horticulturists, nurserymen, educators, landscape architects and other members of the horticulture industry representing Central, North and South Florida.

We present the 1999 Plants of the Year selections in a three-part series to make readers aware of landscape materials that are successful in the diverse Florida environment.

Black Sweet Potato

Common name: Black sweet potato.
Botanical name: *Ipomoea batatas* 'Blackie'

Hardiness: Zones 9-11. **Mature height & spread:** Trailing, about 9 inches tall, vines 6-8 feet long. **Classification:** groundcover or basket plant. **Landscape use:** Groundcover in partial shade. **Characteristics:** Deep purple-red leaves

Strong groundcover forming low, dense mounds in rich, moist soil; prefers a little shade but will thrive in full sun if the water supply is constant. The dark foliage is a good foil for other plants and is valued for use alone or in mixed baskets and window boxes. Edible storage roots with greenish yellow flesh, a firm texture and mild flavor will form late in the season.



Firespike

Common name: Firespike. **Botanical**



name: *Ondontonema strictum*. **Hardiness:** Zones 8-11. **Mature height & spread:** 4'x4'. **Classification:** Shrub. **Landscape use:** Specimen shrub. **Characteristics:** Brilliant red inflorescences through much of the year.

The dark green leaves are a perfect backdrop for bright red inflorescences produced through much of the year and each lasting several weeks. The plants are equally happy in sun or moderate shade and appreciate ample water. The individual flowers are small but the whole spike is often flattened or contorted like a cock's comb giving an even better show. With a relatively fast growth rate, this shrub makes a great trouble-free backdrop to your borders.

Snailseed



Common name: Snailseed. **Botanical name:** *Cocculus laurifolius*. **Hardiness:** Zones 9b—11. **Mature height & Spread:** 18' x 12'. **Classification:** Landscape shrub and cut foliage. **Landscape use:** Hedge, screen in sun or shade. **Characteristics:** Dense growth that stands hand-pruning well to make an informal hedge.

Handsome evergreen foliage provides a dark green background for other plantings. The foliage is valued for flower arranging, and is distinctive for the prominent veins running the length of the simple leaves. Its moderate growth makes it an excellent choice for the landscape in areas where it is hardy.

Turfax Tidbits Plants Have Sweet Tooth Too

In my many years of pursuing the perfect putting surface, I have heard more than once that spraying a sugar solution on turfgrass helps supplement the plants'

While the basic concept of foliar carbohydrate applications has been demonstrated through research conducted 40 years ago, it is only recently that interest has arisen concerning this technique.

carbohydrates. I came across this article in the May/June 1998 issue of *Turfax* that gives some conditions and caveats on this practice.

Q. Is the use of sugar applications to turfgrasses beneficial?

A. Based on the research conducted by J. Beard in 1957 and 1958, it has been documented that the leaves of creeping bentgrass (*Agrostis stolonifera*) have the capability to take up foliar-applied, water-soluble carbohydrates, such as glucose, fructose or sucrose. The first two are monosaccharides and the third is a disaccharide. Further, it was demonstrated that these foliar-applied carbohydrates are readily translocated to metabolic sites in the plant where they are utilized in growth processes for the leaves, stems, and roots.

When adequate carbohydrate supplies are not available via photosynthesis and from storage sites within the plant, a foliar application of a water-soluble carbohydrate may prove beneficial. Such conditions include

- (a) closely mowed turfs growing in the spring and autumn period under favorable temperatures for rapid shoot growth,
- (b) severe turf scalping that results in root dieback,
- (c) loss of the root system following spring root decline of warm-season turfgrasses, and
- (d) during periods of tissue hardening prior to the onset of an environmental stress. Applications of water-soluble carbohydrates are not effective during severe heat stress conditions of midsummer.

While the basic concept of foliar carbohydrate applications has been demonstrated through research conducted 40 years ago, it is only recently that interest has arisen concerning this technique. Additional practical field research is

needed concerning the most effective timings and rates of application. A potential negative dimension in the use of foliar-applied carbohydrates is the potential to induce accelerated spore germination/fungal invasion of turfgrass leaves, which increases the severity of attack by certain fungal causing diseases.

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Lebanon Awarded Distribution Rights for IBDU

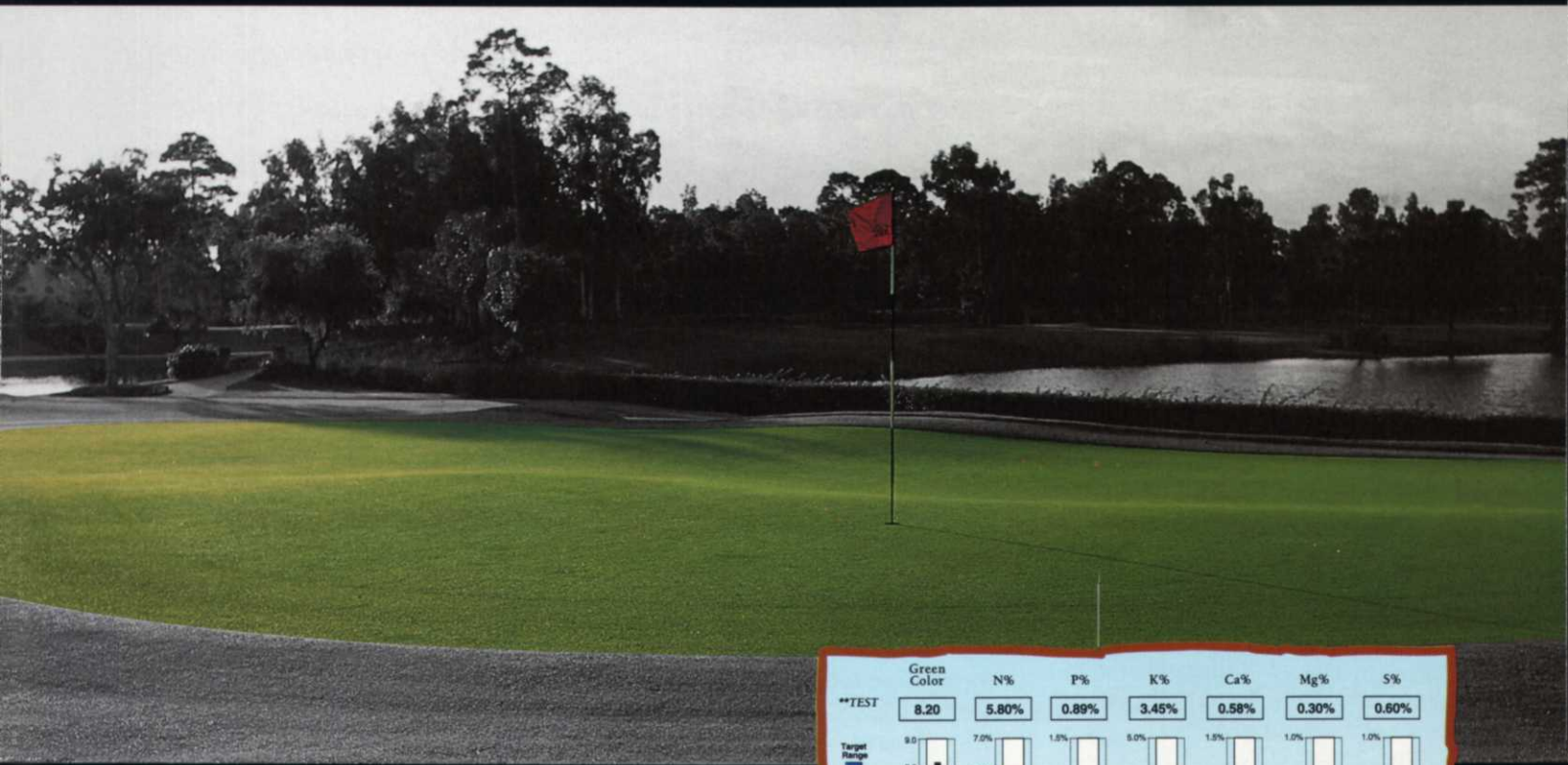
Isobutylidene diurea (IBDU), the much-coveted nitrogen source in the popular turf fertilizer line, Par Ex, will now be available from Lebanon Turf Products..

Isobutylidene diurea, in the past sold to the professional turf management market by Vigoro as IBDU™, will be sold under the trade name IsoPRO™ in 15 different blends including 21-3-16, 24-4-12 and 31-0-0, Grosh said. Lebanon already markets isobutylidene diurea in homogeneous granular form as IsoTek31™.

Lebanon has signed a marketing agreement with a subsidiary of Nu-Gro Corp. (TSE-NU), the new owner of the production facility for isobutylidene diurea, located in Bucks, Alabama. Nu-Gro recently purchased the Bucks plant from IB Chemical Company, a partnership of subsidiaries of Celanese and Mitsubishi.

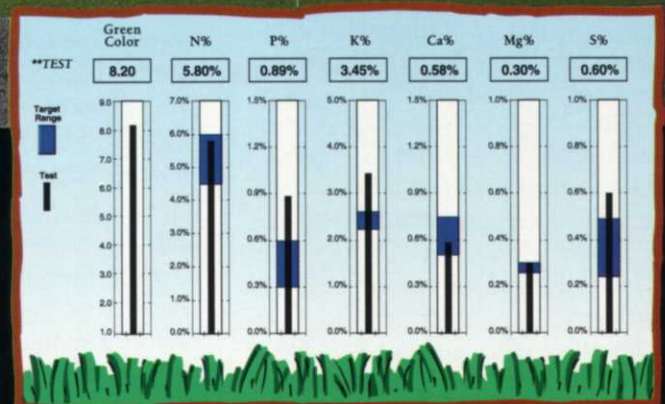
Vigoro had held a supply contract with IB Chemical Company. IMC Global recently divested its Vigoro Professional Turf division and the isobutylidene diurea supply agreement was terminated. Lebanon jumped at the chance to become the marketer of isobutylidene diurea.

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FQPA Update Vigilance Still Needed Despite Positive Indications

Until procedures for implementation of the 1996 Food Quality Protection Act are formalized, we need to stay vigilant and ready to present the facts and our views on the methodology that the Environmental Protection Agency uses to reassess tolerance levels of all pesticides.

The following communications are mostly positive in nature and show that pesticide users around the nation are being heard in Washington. However, the final determinations have yet to be made and strong opposition to pesticides remains active. From GCSAA correspondence:

- The Florida FQPA Working Group is planning to contact Florida senators and representatives during the August Congressional recess to help them realize the impact FQPA has on all pesticide users, not just food crops.

- EPA is beginning to release preliminary risk assessments on organophosphate (OP) insecticides. As assessments are released, anyone can submit data on the products. Products on the August list include Namacur and Mocap. The set of documents is reportedly more than 1,000 pages and is being analyzed by industry advocates and registrant companies. Industry experts warn that the preliminary

In a recent federal court decision, EPA was strongly criticized for publicly committing to conclusions before scientific research is begun. The court threw out EPA risk assessments on second-hand smoke, and accused the agency of adjusting scientific procedure to validate its public conclusion.


assessments do not incorporate new required data and are overstated. Refinements will follow. EPA plans to post more information on its web site at two locations: www.epa.gov/opppsp1/fqpa/ and www.epa.gov/oppead1/trac/. Industry advocates warn that EPA's action will likely prompt activist groups including the vocal Environmental Working Group to release more alarmist reports to the media about the danger of OPs.

- Marcia Mulkey, EPA director of office of pesticide programs, gave an update on FQPA issues at a session in Idaho in late July. She reported that EPA is waiting to see manufacturers' data before issuing a broad data call-in on OP use and exposure data. A consumer information brochure mandated by FQPA was due for release to grocery stores in late August. A draft reportedly had little information about the risks and benefits of pesticides, and focused on children's exposure. Mulkey admitted that EPA is concerned about starting a food scare and losing credibility as it implements the law.

- The National Association of Counties passed a resolution urging EPA to implement FQPA using the best available scientific data on pesticides, residues and toxicity, so that the important pesticide uses are preserved, and called for Congressional oversight of EPA.

- Opinion editorials throughout the country have criticized the new law and EPA's approach to implementation of the new law. Guest editors have said that EPA's "ban now, ask questions later" spells problems for consumers and disaster for farmers, and questioned whether EPA is acting to fix a safety problem that doesn't exist.

- In a recent federal court decision, EPA was strongly criticized for publicly committing to conclusions before scientific research is begun. The court threw out EPA risk assessments on second-hand smoke, and accused the agency of adjusting scientific procedure to validate its public conclusion. In wire reports, predictions were made that other agency efforts based on policy-driven science could face similar scrutiny—including the particulate matter/ozone rules, global warming theories, and phasing out the use of chlorine. Advocates at RISE note that pesticide manufacturers are facing a similar circumvention of science by EPA in the implementation of the Food Quality Protection Act, in particular the debate on OP risk assessments.

- GCSAA's Cynthia Smith reports that recent meetings in Idaho and Washington, D.C. have indicated that golf-course use of pesticides is not being factored into the "risk-cup analysis" for OP tolerance reassessments. This does not mean the turf care industry will not be impacted depending on what manufacturers are forced to do to gain reregistration. 

FQPA Letter Writing

If you have had good intentions about writing your senators and congressman about EPA's implementation of the Food Quality Protection Act, but just haven't been able to get around to it. Here's an offer you can't refuse. Joel Jackson, director of communications, will prepare a letter for your signature on your club's letterhead. Just send three sheets of your club's letterhead stationery to draft letters to both Florida senators and your congressman/woman 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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Audubon Proposes Partner Chapter Initiative

Background

The Audubon Cooperative Sanctuary System would like to partner with GC-SAA-affiliated chapters on a project to create greater awareness, participation, and stewardship action in the Audubon Cooperative Sanctuary Program for Golf Courses within each chapter.

Currently, about 15 percent of the golf courses in the U.S. are registered in the ACSP for Golf Courses and approximately 25 percent of those are certified in at least one of the six categories, mainly environmental planning.

It is believed that much greater participation can occur if:

- superintendents are properly informed about the program,
- they have a structured step-by-step approach;
- they have a comfortable time frame to work with, and have the support and dedication of their local GCSA chapters, GCSAA and the Audubon Cooperative Sanctuary System.

Goals

To increase the percentage of golf courses in the U.S. registered in the ACSP for Golf Courses; to increase the percentage of golf courses working towards becoming a Certified Audubon Cooperative Sanctuary; to recognize GCSA chapters for outstanding environmental stewardship commitment, to certify a large number of courses simultaneously.

Policy & Procedures

The ACSS will assist and recognize chapters that cooperate in this initiative. To become an Audubon Partner, a chapter must have at least 50 percent of its members registered in the ACSP, and be committed to following the guidelines of this initiative.

Workshops will be conducted by the ACSS and hosted by others, such as ACSP member courses within the chapter.

Objectives

- Establish step-by-step approach for the certification process through workshops.
- Develop timely workshops so golf courses can achieve full certification within a three-year period. Each workshop will give the participants the opportunity to fulfill the requirements for certification in at least one certification category during the workshop.
- Identify potential golf courses and superintendents to participate.
- Develop an environmental stewardship work ethic within the chapter.
- Establish the most effective and smoothest approach to the certification process for certifying many golf courses simultaneously. Recognize the chapter that participates through certificates, press releases, and listings in GCSAA and , Audubon International publications and its web site.

Workshop Format

Each workshop will be a half-day event and primarily focus on one of the certification categories. Two workshops will be conducted each year, one in the fall and one in late winter. This provides the best opportunity for the superintendent to attend and participate. The workshops and their topics will be scheduled so the participating courses can become fully certified by the end of the last workshop.

Workshops will generally begin with a short lecture covering the topic, having participants fill out the Request for Certification with the assistance of an ACSS staff member, and prepare the participant for the next scheduled workshop.

Workshop Schedule and Events

First Year

- Environmental Planning is for courses that have not received certification in this category. Includes a two-hour lecture covering EP and the scope of the entire certification and workshop process.
- Water Conservation

Second Year

- Integrated Pest Management

- Wildlife Habitat Management

Third Year

- Water Quality Management
- Outreach and Education

Two-year Plan (Optional)

Depends on the status of the participants - Three all-day workshops.

First Year

- Environmental Planning
- Integrated Pest Management
- Water Conservation .

Second Year

- Wildlife Habitat Management
- Water Quality Management
- Outreach and Education

ACSS will provide an instructor along with the usual membership materials at the workshops. The participating chapter must cover ACSS traveling expenses.

PGA St. Lucie West Attains Certification

PGA St. Lucie West Country Club has achieved designation as a Certified Audubon Cooperative Sanctuary by the Audubon Cooperative Sanctuary System, the educational division of Audubon International endorsed by the U.S. Golf Association. PGA St. Lucie West Country Club is the 21st in Florida and the 144th course in the world to receive the honor.

“PGA St. Lucie West C.C. has shown a strong commitment to its environmental program. They are to be commended for their efforts to provide for wildlife on the golf course property,” said Joellen Zeh, staff ecologist for the Cooperative Sanctuary System.

Rick Wise, CGCS, director of golf operations for PGA Golf Properties of Florida says, “PGA St. Lucie West’s commitment to the preservation of wildlife habitats, as well as water quality and conservation is now and will remain a priority. Perpetuation of natural conditions will always be our primary goal. This accomplishment falls in line with the PGA’s environmental commitment.”

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New biological nematicide 'disappointing'

Quite a few new product announcements cross our desks each month, usually accompanied by fairly extensive marketing literature. One such packet arrived recently, touting a new biological nematicide: DiTera, from Abbott Laboratories. Upon first glance, DiTera has all the qualities turfgrass managers are looking for as an alternative to the 1960s chemistry of Nematicur and Mocap:

- Biological origin — DiTera is a product of the fermentation of a naturally-occurring fungus (*Myrothecium* s p.), which was originally isolated from a cyst nematode

- U.S. EPA registered — with the signal word "Caution" and a 4-hour reentry interval (compared to "Danger" and 48 hours for both Nematicur 3 and Mocap 20G)

- Broad-spectrum control — of root knot, cyst, lesion, stubby root, sting and several other nematode species

- Low toxicity — acute oral, dermal and inhalation LD50 rated in Category IV (practically non-toxic)

- No toxicity toward non-target organisms — including beneficial nematodes (free-living, saprophytic and insect-pathogenic species), birds and aquatic wildlife

- Flexible application timing and methodology

- No restrictions on the number of annual applications.

All this sounds great. So what is the problem? Apparently, DiTera doesn't work terribly well controlling nematodes in turfgrass. The first "red flag" we noticed was a very limited list of turf-related references included in the promotional package: one golf course superintendent and a spray applicator in Florida, and an Abbott Labs field technical specialist. No university references at all — highly unusual. Perhaps this might be one of those "snake oils" that don't work.

Coincidentally, we received the May issue of *The Newsletter*, published by the Golf Course Superintendents Association of New England, which cited the 1997



Dr. Robert Dunn explains the progress of his research into biological controls for turf damaging nematodes at the July 1998 IFAS Field Days in Gainesville. Photo by Joel Jackson.

Turfgrass Nematode Studies performed by Dr. Robert Wick at the University of Massachusetts, Amherst. The research, funded by Abbott Labs and GCSANE, basically compared DiTera to Nematicur and a control, over two years, on two different putting greens, on ring, lance, stunt and root-knot nematodes.

Some excerpts from the results:

- "Ring populations were not significantly reduced by either DiTera or Nematicur..."—1996

- "DiTera did not reduce lance populations..."—1996

- "Stunt was not reduced by either the DiTera or Nematicur..."—1996

- "Ring and lance populations were not significantly reduced by either DiTera or Nematicur..."—1997

- "Nematicur significantly reduced stunt populations but DiTera did not..."—1997

- "Only Nematicur reduced root-knot juveniles compared to the control..." — 1997.

We contacted Dr. Rob Wick at UMass to confirm if we were reading the results

correctly. His reply:

"I had high hopes for DiTera but it failed miserably. I am even retesting it again at 2x rates this year. I do not believe it will work for nematodes in turf, and I can't recommend it. Please call Bob Dunn, nematologist in Florida, who is also studying this product."

In the interim, we had contacted Dr. Bruce Martin at Clemson University, who concurred that results in his field trials to date have been disappointing. "It is early, however," he added, "and more data is needed before we can tell how DiTera might fit in a nematode management program."

Following Dr. Wick's suggestion, we contacted Dr. Robert Dunn, professor and extension nematologist at the University of Florida, Gainesville.

"DiTera kills nematodes in vitro very well," he said. "Unfortunately, the performance of the product in turfgrass systems, particularly in the sandy soils characteristic of golf greens, has been disappointing. I have yet to get a positive re-

sponse on a continuous basis, but I'm still looking for the secret. Frankly, I'm puzzled..."

Dr. Dunn forwarded a summary of the nematode research in progress at the University of Florida, which follows.

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1998 Nematology Studies at the University of Florida Envirogreen

Three nematology experiments are under way at the University of Florida's Envirogreen research facility for the 1998 season. Funds provided by the Florida Turfgrass Association have made it possible to hire an assistant, Mr. Paul Fox, to attend to this and related field research in turf nematology this year. Cooperation of the manufacturers of products being tested in Trial 2 (Nematicide Product Evaluation) also has been critical for establishing that study.

Biological control of turf nematodes

The nematodes' natural enemies that seem to be most promising for use as biological control agents are bacteria in the genus *Pasteuria*. Most work with these microbes has been done with root-knot nematodes as pests of annual food and

feed crops. In some cases, *Pasteuria penetrans* has caused nearly complete collapse of extremely virulent root-knot nematode populations associated with peanut and some vegetable crops. I believe that I have isolated a *Pasteuria* that attacks the turfgrass root-knot nematode. Dr. Robin Giblin Davis (nematologist at UF AREC at Fort Lauderdale) has identified a related *Pasteuria* species that attacks sting nematodes in south Florida.

The Envirogreen has been found to be infested with both turf root-knot nematodes and sting nematodes, so it presents us a good opportunity to study these microbial enemies of two different turf nematodes in a field situation. In this experiment, there will be 10 plots treated with each of four treatments:

- *Pasteuria* specific to the turf root-knot nematode which is present at high levels in the Envirogreen
- *Pasteuria* specific to the sting nematode, which is present at low levels in the Envirogreen
- both of the above nematode parasites
- untreated control

We will sample regularly to study what percentage of each nematode species may become affected by its specific parasite, and how fast that infection may spread from the point of application, and what effect those infections have on nematode populations and turf growth.

Nematicide Product Evaluation

The turf industry desperately needs

objective comparisons of many products now available or being prepared for marketing for nematode control. Some are old nematicides being suggested for a relatively new use; others are entirely new biologically derived materials for which few or no data are available on their efficacy as nematicides. A single rate or sequence of applications of each of these products (list below) will be applied and nematode populations and turf quality monitored through the summer. Additional trials of some of these products will be conducted at other sites.

- Actinovate Plus® (*Streptomyces lydicus* WYEC108; Natural Industries, Inc.); University of Wyoming scientists have reported that this species can colonize the root zone of many kinds of plants and provide some protection against infection of those roots by fungal parasites. The manufacturer believes it can have a similar effect on nematodes.

- Agrimek® 0.15 EC (*avermectin B*; Novartis); the active ingredient of this well-known miticide-insecticide is very toxic to nematodes in vitro (in the lab—literally, "in glass") and in animals. However, there has been little success in getting it to behave well in soil and plant systems, at least in part because of very rapid and tight binding to soil organic matter and/or clay. We hope that the defined sands of USGA spec greens are a medium in which that binding is less of a problem, so the active ingredient can reach nematodes.

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tode-trapping fungi; Circle One, Brooksville, Fla.) A mixture of fungi antagonistic to nematodes formulated in a dry powder that is to be dissolved in water for spray application. Most field soils that have had any plants growing in them recently will already have large numbers of spores of such fungi in them.

- Deny®9 (0.6% *Burkholderia* (=Pseudomonas) *cepacia*, > 8.8 x 10⁹ viable cells/fl. oz.: CCT Corporation): a rhizosphere bacterium that has been reported to colonize root surfaces and provide a barrier to infection by some fungal and bacterial pathogens of several kinds of crops: manufacturer believes it will do same for turf nematodes.

- DiTera (dried culture of a fungus, *Myriotheecium verrucaria*, Abbott Laboratories): a fungus culture selected for toxic properties against plant-parasitic nematodes, now being marketed for control of root-knot and cyst nematodes on selected crops in California, Previous results on turf in Florida, Georgia, South Carolina, and Massachusetts have been disappointing, but we will try the most promising treatment sequence.

- MYX-473® (a pelargonic acid derivative: Mycogen Corp.): showed real promise in laboratory tests, but this is the first year of field tests on several Florida crops.

- Nemafer® (mixture of rapeseed meal and neem oilseed meal, from Atlantic Australasia Ltd., in Australia): a top dressing or soil amendment based on two naturally nematicidal plant products that have

We will sample regularly to study what percentage of each nematode species may become affected by its specific parasite . . .

been used successfully for centuries in some parts of the world, but this is a first test of this mixture on fine turf in the U.S.

- Neotrol® (composed 100% of ground-up plants of a patented variety of sesame; Parkway Research Corp.): another naturally nematicidal plant product, but there are serious questions of rates that might be most effective on turf in sandy soils, and against the range of nematodes normally found with turf.

- Safe-T Green® 18 (A proprietary blend of linear secondary alcohols reacted with ethylene oxide; SMI); researchers in Mississippi and Louisiana have had some success with this product on both turf and cotton, but results have not been consistent. This is the first test on turf nematodes that I know of in Florida.

- Telone® 11(1 ,3-dichloropropene; Dow AgroSciences); long known as an effective soil treatment for nematode control before planting many kinds of crops, but traditional rates are too phytotoxic to be applied to living turf. Application of

selected lower rates by sub-surface soil injection has been very effective for reducing nematode damage to bermudagrass roots in sod farm conditions.

- Turfcure 376® (metam-sodium. AmVac); another soil fumigant well known as a preplant treatment; recent work in several Florida locations indicate that this may be safe for use at very low rates for nematode control under golf course conditions.

Population Dynamics of Turf Root-Knot Nematode

Since this area of the Envirogreen has been found to be infested with varying levels of the turf root-knot nematode (*Meloidogyne graminis*), we are presented with an excellent opportunity to monitor its seasonal fluctuations at this site by simply sampling each plot at regular intervals.

In addition to the product comparison described above, I also have in progress four golf course evaluations of DiTera, separate rate studies with Neotrol, Nemafer, Safe-T-Green, and Turfcure, a rate study with the biological agents (Actinovate, Deny, and Prosper-Nema), and commercially-applied field demonstrations/trials of Turfcure and Telone. There are large-scale trials of Agrimek being installed by Novartis this week, which I also expect to overview.

Robert A. Dunn
20 June, 1998

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Letters..

...to the Editor

Food Quality Protection Act

GCSAA Role

I attended the Western Crop Protection Association conference on FQPA, and am coming to realize that the use of pesticides on golf courses will not be part of the risk cup analysis, i.e., while we knew applicator (occupational) exposure will not be included, I think exposure to golfers will not be included either. That doesn't mean the outcomes of the EPA analysis won't affect us as manufacturers decide what to do! But I think EPA won't be using any data from golf courses.

Your interaction with IWG (via Florida FQPA Working Group) allows you to keep up on these things — what do you think?

How is your model survey coming along? Is it something that I can/should share with our leadership? The Government Relations Committee meets in October, and I have on the agenda to discuss what more GCSAA could/should be doing. Could you make me a list of your ideas? I would appreciate it very much. I'm not sure RISE is doing enough for us, and may be depending too much on ACPA (American Crop Protection Association).

Do you have plans to attend the RISE annual meeting in West Palm Beach? Let me know if you need program information.

Cynthia Kelly Smith, JD, CAE
Government Relations Counsel,
GCSAA
(Email)

While it is heartening that golf courses may not be included in risk and exposure analysis, the danger lies in manufacturers possibly limiting labeled uses of pesticides to achieve EPA tolerance reassessment approval. Only when we can be assured that manufacturers will not have to eliminate labeled uses for minor crops — turf and

"I believe that a large and burdensome system of government regulations usually does more harm than good. Before the late Congressman Delaney passed away, he expressed his wish that these conditions be flexible as scientific discovery progressed."

ornamentals — can we relax our vigilance in the FQPA implementation process.

I had advised Ms. Smith that superintendent response to the Organophosphate Use survey has been disappointing so far. Should we be placed in the position to demonstrate the minimal impact golf courses have on risk and exposure, we do not have any survey results or facts to back up our claims. Please talk to your chapter's external vice president and get a copy of the form which asks you to document OP and Carbamate use from May 1997 to May 1998. Sources will be kept confidential.

Tim Hiers will be making a presentation at the RISE annual meeting and has agreed to discuss the golf course position with the director of RISE. Based on Tim's comments, we may be able to provide GCSAA with some more ideas on how best to address the FQPA issue.

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Senator Weighs In

Thank you for contacting me regarding the Food Quality Protection Act (FQPA). It was good to hear from you.

The President signed the FQPA into law on August 3, 1996. Previous laws prohibited the use of any pesticide or food additive that had been found to cause cancer in humans or animals, no matter how low the estimated possible threat. Modern technology, which makes chemical traces noticeable up to parts per billion, has made this absolute standard unworkable and nearly impossible to implement. The Food Quality Protection Act of 1995 amends the Federal Insecticide, Fungicide and Rodenticide Act and reforms the 1958 "Delaney clause" to allow the Environmental Protection Agency to ensure a

"reasonable certainty of no harm."

I believe that a large and burdensome system of government regulations usually does more harm than good. Before the late Congressman Delaney passed away, he expressed his wish that these conditions be flexible as scientific discovery progressed. Since 1958, our knowledge of the effects of these chemicals has grown tremendously, making the "Delaney clause" both obsolete and a hindrance to American competitiveness.

I have heard from many Floridians concerned with the manner in which the Environmental Protection Agency will collect data and make decisions. It is my sincere hope that the FQPA will lead to practical, scientifically based standards incorporating data made available by both the people who make and use pesticides.

Again, thank you for taking the time to contact me. Knowing your thoughts about this important issue helps me better represent you and the state of Florida here in the United States Senate.

Connie Mack
United States Senator

This is the second letter I have received from Senator Mack on the FQPA subject. I share it to provide you with talking points about the original reasons and intent of the FQPA law. Words like flexible and practical and scientific are in the letter of the law. It remains your responsibility as a citizen and pesticide user to make sure the bureaucrats do not cloud the issue and alter the intent with personal and political agendas. See the FQPA Update article in the Official Business section for other developments on the FQPA issue.

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**Far and Away
But Not Forgotten**

The Gulf Coast GCSA serves superintendents in Florida's Panhandle, southern Georgia and southeastern Alabama with education and turf research support. The new IFAS Research and Education Center in Milton has become a focal point for its activities. The Gulf Coast GCSA is affiliated with the GCSAA.

A demonstration of foliage plants and annuals for use in golf course landscapes drew lots of interest from Gulf Coast superintendents at the July Field Day at the Milton WFREC. Photo by Joel Jackson.



You never know what a UF IFAS Extension professor will be doing when you drop in. Dr. Bryan Unruh adjusts the bedknife on a Toro walk mower at the Milton Campus, also known as the West Florida Research and Education Center. Photo by Joel Jackson

Dr. Unruh and Mark Richard, CGCS discuss the progress of the new ultradwarf turf plots on the Milton WFREC USGA-spec green. Photo by Joel Jackson.



FGCSA At-large member and former South Florida superintendent Mark Richard, CGCS is the manager of the Fort Walton Beach Golf Club. Mark is also the East Zone director for the Gulf Coast Chapter. Photo by Joel Jackson.



Central Zone director for the Gulf Coast Chapter is Chip Owens, CGCS. Chip is the superintendent at The Moors GC which hosts the Emerald Coast Senior PGA Tour event. Photo by Joel Jackson.



Another former South Florida superintendent is Ron Wright, CGCS at the Country Club of Mobile. He is an FGCSA member at large and the West Zone director for the Gulf Coast Chapter. Photo by Joel Jackson.



Palm Coast Firestorm



Timber harvesters race against the clock to harvest and salvage trees damaged beyond natural healing during the firestorm of Florida's East Coast. Many man hours will be spent evaluating and tagging damaged trees for harvest or removal for safety reasons. Photo by Joel Jackson.

Fourth of July Fire Storm

The final insult from the El Niño phenomenon that dominated our winter and spring weather patterns was a 90-day drought that led to ravaging wildfires when lightning sparked 70 to 100 brush fires in June as sporadic rains returned. Brevard, Volusia and Flagler counties were hardest hit as the fires, fanned by high winds, became uncontrollable over the fourth of July holiday.

A tour of the area, one week after the fires were extinguished, revealed that several courses sustained damage to the woods adjacent to the course, but Matanzas Woods GC in Palm Coast suffered the most, losing a couple of tractors and mowers and a rain shelter on the course. They also sustained some damage to the clubhouse. The course will remain closed until repairs are made.

It was interesting to note that the superintendents at all three courses made every attempt to protect the course and the equipment under their charge, except when under official evacuation orders. They all agreed that the controlling factor in the movement and intensity of the fires was the wind speed and direction. Narrow strips or fingers of burned areas could be seen showing the routes the fires took

to access various areas and leave others alone.

Mike Fabrizio, director of golf course maintenance, was overwhelmed by the fury and intensity of the fire storm that destroyed nearly 50 homes in the surrounding area.

"I thought we might be able to help control the fire with our irrigation and the open spaces to act as fire breaks, but we lost the electricity to the pumps from the fire and there was no stopping that monster as it roared through." The dense pine woods that surrounded the homes and golf holes and the high winds were a deadly combination.

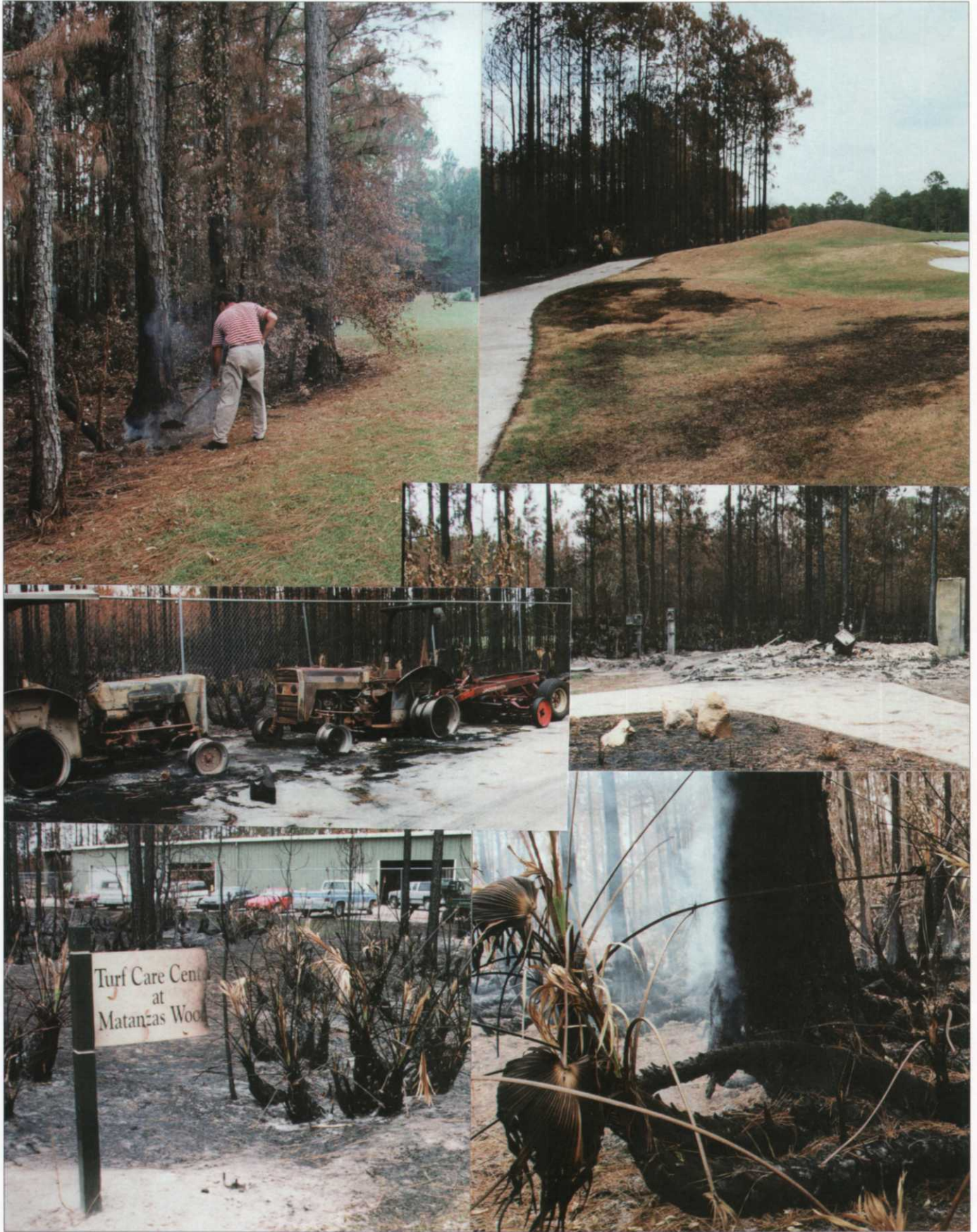
Scott Bessette at the LPGA International GC in Daytona Beach said that northwest winds had the fire bearing down on the LPGA headquarters and the Indigo Lakes development a little farther to the east. Both properties were under mandatory evacuation orders. However, the firefighters were able to establish a line of defense using the LPGA course and control the fire. Scott was allowed back in

and he was able to use the irrigation on the south course to help preserve some of the surrounds of the greens and tees.

Bobby Gonzalez at River Bend GC in Ormond Beach watched the fire detour around a large open field and then try to move down the rough of his fourth hole. Fortunately firefighters were able to cut a fire break and stall the fire before much of the woods was damaged. Here are some of scenes one week after the fire storm.



Matanzas Woods superintendent Andy Maguire (left) and Mike Fabrizio, CGCS, director of golf course maintenance and construction for the Palm Coast Resort smile for the camera, but have been spending long hours getting the course back in shape. Photo by Joel Jackson.





Scott Bessette, superintendent of the LPGA International Golf Course spent the night with fire fighters as they used the golf course as a line of defense to get the fire in their area under control. Photo by Joel Jackson.



In Ormond Beach, Riverbend superintendent Bobby Gonzalez is standing by a fire break cut by fire fighters that stopped a fire after only minor damage to the rough along the 4th hole. Photo by Joel Jackson.



One week after the woods along the LPGA fairways were totally devastated, six to eight inch tall wiregrass clumps can be seen rising from the ashes as Mother Nature atones for her fury. Photo by Joel Jackson.



Blowing in from the northwest, wildfires came within 20 yards of the LPGA headquarters building with lots of LPGA historical memorabilia. Photo by Joel Jackson.

4th Annual Florida Green Photo Contest

Perennial contestant Gary Grigg, CGCS remains in focus with a stunning photograph of a pair of eastern bluebirds to capture first place in the Wildlife category in the fourth annual *Florida Green* Photo Contest. Congratulations as well to Mark Jarrell and Lear Despeaux for submitting their winning entries.



First Place, Scenic hole: Balloon over Boca Rio Golf Club. Photo by Lear Despeaux.



Second Place, Wildlife: Sandhill Crane. Palm Beach National Golf Club. Photo by Mark Jarrell, CGCS.



First Place, Wildlife: Male and female eastern bluebirds. March 1998. Royal Poinciana Golf Club. Photo by Gary Grigg, CGCS.



First Place, Course Landscape: Green and Gold. Palm Beach National Golf Club. Photo by Mark Jarrell, CGCS.



Second Place, Course Landscape: Royal Poinciana Golf Club Putting Green. Winter 1997-98. Photo by Gary Grigg.

It's been such a busy year I didn't realize that the last issue was my last President's Message for the *Florida Green*. I have a few thank-yous to pass along even though my presidency is now officially over.

First I would like to thank Darren Davis and Marie for organizing a combined two-day meeting and chapter planning session at the Grenelefe Resort last November. Joe O'Brien from the GCSAA was the facilitator and all chapters were represented. One of the outcomes of the meeting was that everyone agreed we needed to hire an additional staff person for the FGCSA. This idea had been talked about

since 1984 and it finally became a reality this year.

Joel Jackson was appointed in January of this year to the position of director of communications. The director has been and will attend chapter meetings, workshops, FQPA meetings and other functions around the state. We realized we couldn't get away from our jobs as much as we would like as volunteers, so now we have a staff person who will keep us informed of issues which affect the FGCSA.

We had another combined meeting this year with the Florida Turfgrass Association board which served to improve communication and cooperation between the two associations, particularly in the areas of FTGA conference education and

research fund-raising. We have also partnered closely on working out details on the new IFAS turf coordinator position.

I'd like to thank our education chairman, Geoff Coggan, CGCS for the job he did this year in arranging the statewide FGCSA Pesticide Safety seminars and the two Etonic Leadership seminars at the Poa Annuua and Crowfoot events.

A big thank you to Mike Perham, Darren Davis and Dale Kuehner and the rest of the board for their help and advice this past year. Thanks also to Marie Roberts, our association manager, for keeping me straight on what and when things needed to be done, especially when my *Green Sheet* President's Messages were due.

We are working every day in a great industry that is constantly changing. Whether it's EPA, FQPA, Mother Nature, employee problems or hydraulic leaks each day has a different challenge for us. We must try to keep abreast of everything that is going on and deal with it accordingly.

Hopefully you are getting the information you need from the GCSAA, FTGA and FGCSA and you are reading it. Thanks to Joel Jackson for proofreading and editing my President's Messages. I hope you gave the topics some thought and consideration.

As I write this, my term as FGCSA President is officially over, but I will continue to serve on various committees as past president and beyond. I will stay involved and write more articles to share ideas and experiences. Thanks for a great year and here's to continued success in the years to come for everyone.

Thank You

Fore-mer President's Message



Joe Ondo, CGCS
Past President
FGCSA

I've just returned from a meeting in Orlando at the Florida Fruit and Vegetable Association building in which the new vice president for IFAS, Dr. Mike Martin, was introduced to the ag industry by UF President John Lombardi. On first impression, we've got a capable and motivated man now in charge of IFAS, and he may be the man of vision to lead Florida agriculture, including turfgrass, into the next century.

Sitting around the table with leaders of such industries as citrus, cattle, sugar, tomatoes, strawberries and poultry was gratifying, because I think turfgrass should be aligned with agriculture rather than pigeonholed into its own special niche

that no one seems to care about except us "grunts" who bear the burden for a huge but unmotivated industry. I feel more of a kinship with the people who were in that room than I do with the majority of the members who play my golf course; more importantly, I think it in our best interests to get on board with agriculture

in dealing with IFAS and the Legislature. David Barnes and Ralph White, also in attendance, agree that we should strengthen these ties and begin active participation in this group, probably the core of a revitalized Florida Ag Council.

The meeting was an eye-opener. Apparently turfgrass isn't the only commodity group less than satisfied with its relationship with IFAS. In some regards, such as input into research project selection, we exert more control than most of the other groups — even those who put in a lot more money than we do.

A big concern — one I hadn't realized — is how often an IFAS researcher accepts grants from an environmental group or a regulatory agency like the South Florida Water Management District, and the results are used to harm, hobble, or destroy some part of Florida's agricultural industry. As it was pointed out to Drs. Lombardi and Martin, none of us minds adjusting to concerns based on real science, but pseudo-science and politically motivated regulation is unacceptable and especially galling if its basis comes from an IFAS department which is also heavily funded by our industry.

I've been in Dr. Lombardi's presence enough

times now that I shouldn't be surprised by the depth and range of his intellect and insight. Nevertheless, I was impressed by his understanding of agriculture and the strategies and technology it must develop to face the challenges of a global economy. He told of changes already in place, such as faculty accountability, financially crediting the proper department for students taught, and of consolidating the IFAS and UF budget proposals — all of which should be of benefit to IFAS — leaving me with the impression that he fully understands that agriculture is the foundation of our society.

I am not so naive as to think that "feel good" meetings always translate into action, but I am encouraged that we have a president and a vice president who will help us to help ourselves. The accomplishments of the past two-and-a-half years are significant even if we have been disappointed in the pace at which they have happened and at those needs as yet not met.

We finally have a turfgrass coordinator, Dr. John Cisar, to take the lead in our dealings with IFAS and unify the various stations into a coordinated, effective program. We have more turfgrass students at the University of Florida than we've had in many years and, for the first time, they can get a degree in turfgrass science. We have two new turfgrass breeders, Drs. Russell Nagata and Brian Scully, who are talented, dedicated, and dynamic. We have a pathologist renowned for his rice disease research, Dr. Lawrence Datnoff, who wants to work in turfgrass if he can get some financial support. We have a whole new branch in Milton headed by Dr. Bryan Unruh that is enhancing the entire turfgrass program rather than just serving its region.

Thanks to our equipment manufacturers and distributors, the turfgrass program has over \$100,000 worth of new equipment with which to maintain the plots and research greens. While many other turfgrass programs in the South are going south, we continue to make progress.

The FTGA and the FGCSA are working together on strategies to increase funding for turfgrass research projects. Ron Garl, as the new president of the Florida Golf Alliance, and Roy Bates are working to secure support from the allied organizations of that group as well. With continued effort, we will make the UF Turfgrass Program the best in the country, serving the needs of the biggest and best golf and turf industry in the country.

IFAS, Agriculture and Us

Mark My Words



Mark Jarrell, CGCS
Vice President
FTGA

This is my first day on the job, so be patient. I realize that I am trying to fill some very big shoes. Mark Jarrell has done a great job and has written some very fine articles that I certainly enjoyed reading over the years. Mark is moving on to serve on the FTGA board and we all wish him well.

As I watch the news these days, it seems that there are many popular storms out there. First there was Bonnie, a category-three hurricane that churned off the Florida coast for days and made many people nervous. As she finally turned to the north and headed toward the Carolinas, we turned our attention to Danielle. At

the same time, President Clinton was bracing for a hurricane named Monica.

As superintendents, we deal with storms all the time. Like President Clinton these storms can be political and caused by other people. These storms can be large weather- and news-makers like hurricanes and El Niños or they can be groups that don't see things the way that we do. I am amazed sometimes how much we depend on the weather. Starting in the fall, we worry about too much rain washing our seed. If we get a good germination, we then worry about weather that is too hot and/or wet if you seed early, or too cold and wet if you seed later.

Once we have established our overseeding, then we have to contend with El Niños, then droughts, then even forest fires. We then depend on the weather for a smooth transition. It's funny how we are never satisfied with the weather. It seems that it can be too hot or too cold, or too wet or too dry. I guess that no matter what, we just have to deal with it and hope for better in the days to come.

Our jobs are multi-dimensional and weather is just one of the factors that can affect our jobs. A few years ago I remember that I was talking to a fellow superintendent and I caught myself complaining about the weather. At that point I finally realized that day in and day out, we have

some of the best weather in the country and, from then on, I vowed to try to not complain about something that I have no control over.

To a degree we do have control over some of our political storms. It takes patience and control to make this work and sometimes it still may be a hopeless situation. As superintendents we may need to sell ourselves and our programs and I have found that the proactive approach has worked best. Being a good grass grower rarely is enough anymore. Members like to see you around. Make it a point to be seen if only briefly during important club or course tournaments.

Ride the course or at least nine holes in reverse order on a busy day so that many of your golfers can see you. Take every opportunity to write an article in the club newsletter. Get to know the other chairpersons at your club as well as the directors. Try to play golf with members when the time is appropriate.

You may even want to briefly hang around the pro shop to be available to the members. This way if a member has a question, you can answer it directly. Overseeding is such a critical time of the year it is important to be visible. Your reputation for the year is dependent on your getting those little seeds up and growing and molded into an acceptable putting surface by New Year's.

As we head into the overseeding season, keep your head up and keep moving forward. It seemed for a while that every time that I put out seed, it would rain cats and dogs sometime during that week. It got to the point that other superintendents in Vero Beach would call to find out when I would be seeding so that they could pick another week. My first year at Bent Pine, I got 13 inches of rain in the first two weeks that my seed was down. We've all had weeks like that but we keep on going. It keeps our jobs interesting.

I am looking forward to this new position with the *Florida Green*. We can always use stories written by our fellow associates in this great business. As we go into the fall season, be sure to have fungicide on the shelf and an umbrella handy.

Stormy Weather

The Bell Tolls



Scott Bell, CGCS
Assistant Editor

You say you had a lot of rain this past winter? Your course lost some revenue? You say you had a tough time with your greens. Well aren't you glad you didn't have to rebuild Pebble Beach? After finally drying out and putting it back

together, they just finished playing a golf tournament in August that they started in January.

You say you were hit with a scalding hot drought this past spring, and you had a rough transition? Well, aren't you glad you didn't have to evacuate the county because a wildfire

was burning up your golf course? At least now they've got better air circulation around those greens.

You say your irrigation system is outdated and you had a rough time watering during the drought? Had to work overtime and do extra hand watering. Well, aren't you glad that, when the rains finally came, they didn't come all at once and wash away the dam that controlled your irrigation lake. Here you go. Hook up to this 2-inch fire hydrant and water the course. The city will fix that dam when they can get around to it!

You say you have to use the summer months to do projects because that's when the members are gone and it cuts into your summer vacation. Well how would you like to have five summer renovation projects going on at once. They're all interdependent and one contractor is

holding up the others and you've got a course to open in 60 days. Not even lawyers can solve this one!

You say you got some heat over the course conditions this past winter? You thought you had the course back in good shape. Well, how would you like for a buddy to call you and tell you he just saw your job advertised in an out-of-town paper? The good news is the superintendent who is still the superintendent can apply for his old job which he still has while they search for someone else.

These are just a few examples of when your grass is greener than the other guy's. About the time we think we're getting dumped on by someone or by nature, there's always somebody that's in the same boat or even in worse shape.

That's why a visit to your local superintendent chapter's monthly meeting can be very therapeutic and ease the weight on those sagging shoulders and put the spring back in your step. You are not alone when the slings and arrows of adversity are hurled at you. It is how you handle the pressure that helps you through these ordeals. There's strength in numbers, so get on over to that next meeting and find out how your peers are coping with the frustrations of this wonderful but often wacky profession.

And then there is this one. The big guy from Arkansas leans on the podium, looks right into the camera, shakes his finger at us and says, "I never had sexual relations with that woman..." After reading the Starr report, I'd say he's really got a problem. He doesn't even know what sex is!

Keep the green side up and be careful out there!

So You Think You've Got Problems?

Green Side Up



Joel Jackson, CGCS
Editor

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