



The Florida Green

Winter 1997



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WINTER
1997

FOREWORDS PRESIDENT'S, VICE-PRESIDENT'S MESSAGES 6
President Dale Kuehner points out that winter not only marks the annual invasion of tourists and seasonal residents, it also marks a season of opportunity. VP Joe Ondo notes that asking questions of your peers is an excellent way to learn this profession.

SPOTLIGHT DISTINGUISHED SERVICE, PRESIDENT'S AWARDS 12
Paul "Crayfish" Crawford won the 1996 DSA and Clem Stewart was one of two to win President's Awards last year.

OFFICIAL BUSINESS GCSAA NOTES, LEGISLATIVE UPDATE, WATER 16
Florida superintendents were present in several articles in a recent issue of GCSAA's *Newsline*. Lobbyist Mike Goldie sets the scene for the upcoming session of the Legislature.

COVER STORY FROM BADLANDS TO GRASSLANDS 22
Grasslands CC in Lakeland is a perfect example of how a golf course makes great use of once-barren, unproductive land.

HEADS UP MANAGEMENT COMPANIES 41
The mere mention of them too often strikes terror in the hearts of superintendents. They've been around for quite awhile and they're here to stay... and they have a lot to offer.

HANDS ON COURSE GROOMING 52
Mowing techniques, reel maintenance, "detailing" the golf course and a look at one course's overall grooming program fill up the peer-education section.

RESEARCH FGCSA TURF RESEARCH UPDATE 63
Chairman Kevin Downing discusses the FGCSA research program's funding sources, operations, coordination with the FTGA, and plans for incorporating research at the Envirotron in Gainesville and the research station in Milton.

SUPERINTENDENT JOURNAL ETHICS, RUB O' THE GREEN, TRIVIA 64
Paul Dushane has a clear, consistent philosophy for adhering to the Code of Ethics. Randy Ashton offers some dubious honors. Turf Trivia offers another installment in the series of little publicized or overlooked benefits of turf — golf or otherwise..

AFTERWORDS REASONED RHYME, JARRELL, JACKSON 70
Observations of the profession set to verse by Joel Jackson, dark clouds and silver linings by Mark Jarrell, and a new definition of "Tiger Tees" by Joel Jackson.

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The Florida Green

Official Voice of the Florida Golf Course Superintendents Association
Published four times a year:
On the twenty-fifth of January, April, July, and October

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

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

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

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Advertiser Index

Agro-Tech 2000	20	Parkway Research Corp	70
Aimcor	65	Pike Creek Turf Farms	28
Almar Chemical Co.	71	Pursell Industries	38
Aquagenix	69	Rain Bird	01
Aquatrol	25	Rainbow Grassing	72
Century Rain Aid	53	Regal Chemical Co.	47
Ciba Turf Division	02	Rhone Poulenc	26
DuCor International	24	Roots	17
E.R. Jahna Industries	74	Sisis	49
Epic of Wisconsin	15	Smithco	19
Floratine Products Group	78	South Florida Grassing	62
Florida Silica Sand	14	South Florida Turf Products	71
Golf Agronomics Supply	68	Southern Golf Products	21
Golf Ventures	73	Spread-Rite, Inc.	24
Green Way	48	Standard Sand & Silica	55
Harrell's	49	Subaqueous Services Inc	40
Haverland Blackrock Paving	28	Sullivan Electric	59
Hi Tech Chemicals	42	Sunniland Turf Products	67
Howard Fertilizer	37	Terra	13, 77
IMC Vigoro	33	The Lake Doctors	72
ISK Biosciences	57	Tifton Physical Lab	45
Jacobsen Dealers of Florida	C2	TMI Turf Merchants	C3
John Deere	66	Tom Burrows Turfgrass Svc	70
Laserturf	70	Toro Dealers Of Florida	Center
Lesco, Inc.	29	Toro/Liquid Ag	09
North Georgia Turf	20	UAP/Florida Inc	61
Nucrane Corp.	C4	Valent USA	07
Nutri-Turf, Inc.	43	Zeneca	10,50,79

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Ready or not here they come! With the North getting cold weather and early snowfalls and Florida being mostly dry and sunny, this looks to be an excellent year for Florida golf courses.

The fall has always been my favorite time of the year. The cool mornings, mild days, and the changing license plate colors say winter is approaching. This is the time of year when driving becomes a contact sport and shopping is a test of patience.

Since the summer of '96 was a picnic compared to the summer of '95, golfers will be in for a treat at their favorite courses.

This winter will provide a lot of opportunities for continuing education. In February the GCSAA will be holding its conference and show in Las Vegas. This is an event that should not be missed.

The conference allows superintendents to learn all the latest information and see the newest products for golf course management in one place. The FGCSA will be holding its state reception on Sunday, February 9. Look for more information in the mail. In March the South Florida chapter will be hosting its annual Turfgrass Expo in conjunction with the IFAS Field Day.

This event showcases equipment

from the major manufactures and allows you to compare them side by side at the Fort Lauderdale Research Station. The proceeds from this event support the research green at Fort Lauderdale.

During April the USGA will be holding its regional conferences in West Palm Beach and Orlando. The USGA program is an excellent one to invite your greens committee chairman or club manager to attend.

I am proud to announce that the state association has completed the GCSAA affiliation process. We received our certificate from the national after our November board meeting. By the time you read this, most if not all the local chapters will have also completed the affiliation procedure.

This past November I had the pleasure of attending the Florida Golf Summit in Tallahassee. The meeting was sponsored by the Florida Sports Foundation and included people involved with every facet of the golf industry.

I want to thank Tim Hiers for the excellent job he did at the economics and environmental roundtable discussions. We were able to meet a lot of important people at this event and hopefully were able to educate them about the importance of supporting turfgrass research.

Only time will tell if we were truly successful.

*Here they
come!
Are you
ready?*

**PRESIDENT'S
MESSAGE**



Dale Kuehner, CGCS
President
FGCSA

FOR DINNER, HE'LL HAVE
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We are never too old to learn, and one of the best ways to learn is to ask questions!

In my eighteen-plus years of working in Florida, the one thing I've learned is to always ask questions.

Asking Questions

I have listened to and talked with a lot of people over the years who have said, "I wonder how he or she did this or that to their course, or why they did it." I have played a lot of golf courses in Florida

and around the country. I also see things I might like to try at my club or at least learn more about.

FORE!



Joe Ondo, CGCS
Vice President
FGCSA

When I have a question, I try to make it a point to ask that person after I play the course at a chapter meeting or to call later to find out about whatever caught my eye.

It could be a maintenance practice, a landscape planting or anything unusual that stood out while I played the course. I have been fortunate to work for and get to know a lot of superintendents in our profession who have helped me in

my career by sharing answers to my questions.

A word of caution. Be careful about what you say if you see a fertilizer burn or sprayer mistake. Some people are reluctant to discuss the bad things that happen. If you mention you have had a similar problem at your club, then it might be easier to bring up the subject in conversation.

There's another wrinkle to asking questions. I play a lot of tournament golf and I am often paired with members of various clubs. When they find out I'm a superintendent, they start asking why their superintendent does this or that.

If it is a simple question about grass types or weed identification, then I'll answer. But, I always tell them to ask their superintendent why he maintains the course a certain way, or why an area is a problem.

We are never too old to learn, and one of the best ways to learn is to ask questions!

Some people are reluctant to discuss the bad things that happen. If you mention you have had a similar problem at your club, then it might be easier to bring up the subject in conversation.

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Dr. Max Brown,
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Clem Stewart receives President's Award

BY TERRY WOOD

Royal Wood G & CC

I remember the first time I had any contact with the Everglades Golf Course Superintendents Association. It was the spring of 1980, and I was employed as a salesman for an irrigation wholesale company.

At the second meeting I attended, I was paired with Clem Stewart and two other superintendents for a round of golf at North Port Country Club in Port Charlotte. We had a good time, and the thing I still remember is what a gentleman Clem was. The entire foursome treated me very well and made me feel welcome in the association.

Clem and I recently sat down for a talk and he told me a brief history of his life in the golf course business. Clem was born in Pinehurst, N.C. in 1933. He came from a large family, and two of his sisters were married to golf course workers.

That helped him to start working on a golf course at the age of nine, emptying grass baskets. His first real job was in 1952 at Pinehurst. Then in 1956 he took his first superintendent job at Reynolds Park Municipal in Columbia, S.C.

In those pre-civil rights days, Reynolds Park was for whites only. Four years later Clem was in charge of adding nine more holes to the nine hole Winston Lake Park course in Winston Salem, N.C. This was a course for blacks. Turf knows no color!

After five years Clem decided to seek greener pastures, I mean fairways, in sunny Florida. This landed him at the Naples Beach Hotel and Golf Club for eleven years.

Then Clem decided to move to the big city of Fort Myers and maintain the golf course at Seven Lakes for another stint of 11 years. In 1990 he worked at Naples

1996 President's Award Winners

Steve Kuhn

Clem Stewart

Shores and has been at Imperial Wilderness since 1992, in charge of the entire property.

There have been a few changes in this industry in the last 44 years.

Clem recalls the non-motorized push mowers used to mow greens. Then a big improvement came along — the reel-powered mower. This was not that popular because it was just that much heavier to mow with and transport.

At one time Clem was a scratch golfer, and he still gets great enjoyment from the outdoors... He loves to work with the soil.

He also recalled early in his career that he had six holes to maintain at a particular course. He would water, mow the greens and tees, and repair ball marks.

Some of the other improvements besides mowers were irrigation systems and the overall quality of grass varieties. But the one thing that happened that most surprised him was the introduction of the golf cart. Clem never thought he would see the day that something would replace the caddy!



It was in 1968 that Paul Nevers, Bob Sanderson, Dwight Wilson and several others invited Clem to join in the formation of the Everglades Golf Course Superintendents Association.

This was right up his alley, because Clem had also helped to form the Piedmont (N.C.) Chapter in the mid 1950s and was once the vice president of the Carolinas Association.

In 1972-73 Clem was the president of the EGCSA and has been a member of the GCSAA since 1957. Clem and Paul became great friends, like brothers, golfing in the Carolinas and Georgia in the summers and making that annual trip to Augusta for the tournament.

Paul will be deeply missed by Clem and the rest of us as well.

At one time Clem was a scratch golfer, and he still gets great enjoyment from the outdoors and the many nice people he has met over the years in this business. He loves to work with the soil.

His garden includes broccoli, corn, tomatoes, beans, cauliflower, greens, squash, onions, lettuce, cabbage and carrots. Clem and his wife, Barbara have four sons, Wayne, Ronnie, Randy and Chris, and one daughter, Terry.

In closing, Clem's advice to everyone is, "There has got to be an education in anything you do."

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Paul 'Crayfish' Crawford, CGCS

BY JOEL D. JACKSON, CGCS

The man does love his lobster diving! Fishing and lobster diving are hobbies that makes finding Paul a hard task on his days off during Florida's lobster season.

We all kid Paul about his lobstering exploits, but we got serious last August when the FGCSA said "Thank You" for over a decade of service to the association by naming him recipient of the 1996 Distinguished Service Award.

Paul served as president of the FGCSA in 1993-94. He served in the various officer chairs and on many committees prior to that, and has remained very active since.

He served on the GCSAA Chapter

Relations Committee during the crucial and uncertain times when new management was coming on board. The now-annual Chapter Relations meetings in Lawrence are a cornerstone of the operation of the GCSAA, serving to give staff and board members immediate feedback and input on member concerns.

Paul is now serving as business manager of The Florida Green. His common sense and vision coupled with Marie Roberts' handling of the advertising duties helps keep the magazine successful. They almost make being the editor fun!

Paul hangs his hat at the Palm Beach Country Club where he has for the past 14-plus years. He came to the Palm Beach C.C. via Jupiter Hills C.C., Harbour Town Golf Links at Hilton Head, SC and Michigan State University.

Paul shocked his family when he informed them he was going to attend the MSU turf program to become a "greenskeeper." Thank goodness for you, me and the FGCSA that he did.

"I would like to see some new people get involved in state and local affairs," Paul once told me. "Maybe they just need to be nudged or encouraged a little to step forward. I think many are afraid to come forward because they perceive it as a big demand on their time.

"Certainly it does take some time and effort on their part, but with our association manager, Marie Roberts, as their right hand, it isn't as difficult as one might think.

"When I was asked to come on the board, I went to my green chairman and asked him how the club felt about the idea. I told him I wanted to run it by them



After roasting his friend Paul Crawford (right), Butch Gill congratulates him on winning the 1996 President's Award.

before I accepted.

"He was a successful businessman involved with his associations. He knew that being involved meant I would be exposed to the latest information in the business and that would be an asset to the club.

"He also knew that it would be a personal asset to my growth and development. The more you are involved the more you know. The more you know the further you go. It's like fuel. So, ask your members, your committee, your boss! You might be surprised at their answer."

Receiving a plaque isn't such a big deal, but it is symbolic. Best of all it gives us an excuse to stand up, put our hands together in long and loud applause and say, "Thank you for giving us your time and energy!"

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GCSAA News



Florida superintendents were highlighted in the November edition of GCSAA's Newsline.

According to Newsline, Gary Grigg, CGCS of the Poinciana C. C. in Naples was in Washington recently to give staff members of EPA's Office of Pesticide Programs an education in the real life challenges of a golf course superintendent.

These staffers are ones who help originate regulations and policy matters affecting golf courses, and many of them are not familiar with the game of golf or a superintendent's responsibilities in turfgrass management.

Gary described the varying climatic and pest pressures on turfgrass from all different regions of the country and even the micro-climates within a golf course.

He emphasized the complexity of superintendent's jobs today by comparing an ad that ran many years ago with a

detailed position description from a recent advertisement, which demanded a superintendent who had kept abreast of developments of several areas of plant science and biology.

The ad also illustrated the pressures superintendents face trying to please a demanding clientele, be good environmental stewards, and work within their budgets.

The briefing was part of a GCSAA strategy under the Pesticide Environmental Stewardship Program (PESP) to work as a partner with the EPA to reduce the risks of pesticide use. This strategy includes elements of research, member education and communication, public education and communication, awards and government relations activities.

Ann Leslie, chemist for the Office of Pesticide Programs thanked Grigg and Cynthia Kelly, J. D., GCSAA's government relations counsel, in a recent e-mail: "Thanks to you and Gary for an outstanding presentation. Our audience was very interested and learned much, so your mission was accomplished."

In another story, the Treasure Coast Chapter was recognized for its work with Audubon International in producing a training video for teachers' to use in the Audubon Sanctuary Program for Schools.

Hobe Sound Elementary School was one of two case studies filmed to explain the various project a school could undertake. GCSAA also deserves credit for helping the National Turfgrass Evaluation Program survive. The U. S. Department of Agriculture was proposing to eliminate funding for the program in 1997.

GCSAA responded by working with its members whose elected officials served on congressional committees that developed the USDA budget. Member phone calls and letters helped save the day as the NTEP budget received a 10% increase instead of being cut.

Kevin N. Morris, national program coordinator for NTEP praised GCSAA's response along with other organizations for sending the message to Congress and the USDA that turfgrass is a viable and growing industry nationwide.

Legislative Update

BY MIKE GOLDIE

Government Relations Consultant

The 1997 Florida Legislature will, for the first time since Reconstruction, be controlled by Republicans. Senator Toni Jennings will be the President of the Senate, where Republicans have a 23 to 17 majority. Representative Daniel Webster will be the Speaker of the House, which has a 61 to 59 Republican majority. Speaker Webster defeated a coalition of Democrats and two Republican Cuban legislators when three conservative Democratic legislators pledged their support for Speaker Webster and a 64 to 59 victory.

What will be the impact of the Republican control of the Legislature? Less governmental regulation and a more pro-business attitude should be expected, but only time will tell.

On November 18 and 19, 1996, Florida Golf held a meeting of the industry in Tallahassee. The meeting coincided with the Legislature's Organizational Session and included panel discussions on the economic impact of golf and related business on the state economy, environmental issues, charitable and educational programs. A reception was held with members of the Legislature to make them aware of golf and its impact on our state.

The meeting was the idea of a task force of the PGA, LPGA, Florida Golf Association and others and was hosted by the Florida Sports Foundation, a public and private group whose purpose is to promote sports in Florida.

Through the efforts of Mark Jarrell, Roy Bates and Dale Kuehner, the Florida Golf Course Superintendents' Association and the Florida Turfgrass Association were asked to participate on all the panel discussions. Other association

A sleeping economic giant in Florida now hopefully has been awakened.

members who attended and participated included David Barnes, Tim Hiers and Ron Garl.

The meeting was the first attempt to form a unified effort to present the voice of golf to the Legislature. Everyone who attended the meetings voiced their support for such an effort. Tim Hiers and others voiced their concerns on environmental issues and public perception of golf and the environment.

The meeting was a good and positive first step in uniting the industry, but it is up to each association represented to continue this effort. Golf has been a sleeping economic giant in Florida, and now hopefully it has been awakened.



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The future of water supply planning

BY STEVE LAMB

*MacVicar, Federico & Lamb
Water Resource Consultants*

Florida has long since recognized the need for water supply development.

At least 25 Commissions or Committees have provided recommendations on water since 1971. The common theme of these recommendations was that water supply development cannot be accomplished only through regulation and that future water supply sources must not only be identified through data and technological advancements, but they must also be funded.

Two reports were released in December of 1995 addressing water policy and it was anticipated that the 1996 legislative session would address needed legislative changes to assist in Florida's water supply planning efforts. The first report, prepared by the Select Committee on Water in the House, *Water Supply Policy Considerations - Interim Project of the House Select Committee on Water - December 1995*, concluded:

There is a big difference in mandating water supply planning and making it happen.

Continued focus on planning and integrating land and water planning without water supply development is not a complete fix.

A slightly different approach though with the same message is found in the recommendations of the Water Management District Review Commission in their December, 1995 report, *Bridge Over Troubled Water*.

Existing mission of water management districts includes water supply development.

Florida must maximize the availability of water supplies for all users.

The 1996 legislative session did produce more than forty bills addressing

water including a comprehensive water supply planning and development bill. At the conclusion of the sessions, however, only two bills passed. One removed some obsolete language which had directed the Department of Environmental Protection to present state water policy to the legislature in 1995 and the second addressed the water wars in the South West Florida Water Management District. The lesson here may be that unless the Water Management Districts and the users can solve their water supply problems the legislature will act to address the issue. We can't assume that the lack of a comprehensive water bill passing in 1996 means that the session was unsuccessful regarding water. Based on the number of bills filed, the legislature clearly sees a need to address the subject. Unlike prior years, the process was opened up to general discussion and dialogue was begun on finding a solution. This dialogue in-

Future water sources must not only be identified but they must also be funded.

cluded more than the traditional Tallahassee "lobbyist," but reached to the actual user groups. It may have been the most detailed and far reaching discussion ever at that level of government.

The select committee staff produced a draft bill implementing the recommendations contained in their report. The initial draft prepared proposed to utilize the traditional agency planning and regulation functions and tools to deal with water supply development, but added schedules for development of plans. The drafts were a good start to focus the discussion, but they were lacking the direction users thought was needed to develop a workable water supply development plan. The consensus was that more than a schedule was needed to solve the water supply planning problem. The existing statutes had required the agencies to do planning for more than 25 years.

In response to concerns on the proposed planning process, the House Select

Committee on Water Policy informally established an ad hoc committee consisting of representatives of user groups, including turfgrass, environmental groups and the agencies to develop an alternative bill. The ad hoc committee focused on the need for providing a clear planning process with an achievable deliverable of alternative water supplies.

The first redraft bill was an extremely detailed document, in fact too detailed for many. It provided a framework and guidance for the types of actions that are needed to address water supply planning. This draft was replaced by a third draft prepared by the committee removing some of the detailed planning language and included language from the first draft dealing with the balancing of existing use with the environmental needs in developing minimum flows and levels, and the development of interim plans with shared adversity for both people and the environment when minimum flows and levels are exceeded. Enough people were uncomfortable with the changes that had further changes not been made, the Tallahassee wisdom was that the bill would have died.

Continued discussions by the ad hoc committee produced a fourth bill among the participants. Again not all users groups agreed with this draft. The lack of agreement was not with what the bill said, but what it did not address. There was a realization that in areas where minimum flows and levels are exceeded a moratorium on new uses and cutbacks on existing uses was a distinct possibility. This was particularly alarming to existing and future users in the Tampa and Miami areas.

Because of the lack of understanding on minimum levels and flows; what they are, how they relate to the protection of the environment, how allocation relates to minimum flows and levels, how regulation relates to planning, and where reservation of water for environment needs fits in, the 1996 legislative process became one of compromise, which lead to a path of the least common denominator. Each change in the bill drafting process made necessary by the lack of consensus on complex water management

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issues, reduced the detail and certainty of the water supply development process necessary in the statutes, and in the end no bill was adopted.

The key issue which prevented a refocus back to a comprehensive water supply development process was concern on the implementation of any adopted water supply plan:

- Some did not want to focus on implementation so as not to appear that they were in favor of raising taxes.

- Others did not want to focus on implementation because they did not want to agree to put the districts in charge of water supply development without seeing the actual water supply development plan.

- Some were suspect of water planning becoming another hurdle in the local government comprehensive planning process, and

- Still others were concerned that identification of problems without clear solu-

tions and funding would result in moratoriums on water supply hookups.

It was also clear that funding for water supply alternatives development was going to be an issue and that the water management districts would not be able to absorb the cost of water supply development alone.

Already this year, discussions on water supply planning and development have been initiated both by users groups and the agencies in anticipation of the legislative session. Governor Chiles has issued an executive order dissolving the Water Resources Coordination Commission and has directed the Department of Environmental Protection to prepare an Annual Water Resources Work Plan to improve efficiency and coordination of the Department of Environmental Protection and Water Management Districts.

The Governor's office has also issued an additional executive order addressing the establishment of minimum flows and

levels, Water Supply Planning, Water Supply Development and Funding, and the implementation of the recommendations of the Water Management District Review Commission. A public participation process to develop recommendations on effective means of water supply development and funding has been initiated with the intent of providing the Governor and legislature with appropriate recommendations by February, 1977. With the foundation laid in 1996, 1997 may indeed be the year for meaningful legislative action on meeting Florida's long range water supply needs.

(Editor's note: The water resource consulting firm of MacVicar, Federico & Lamb has been retained by the FTGA with support from the FGCSA to represent the interests of the Florida turf industry in all matters relating to legislation, regulation and allocation of water use.)

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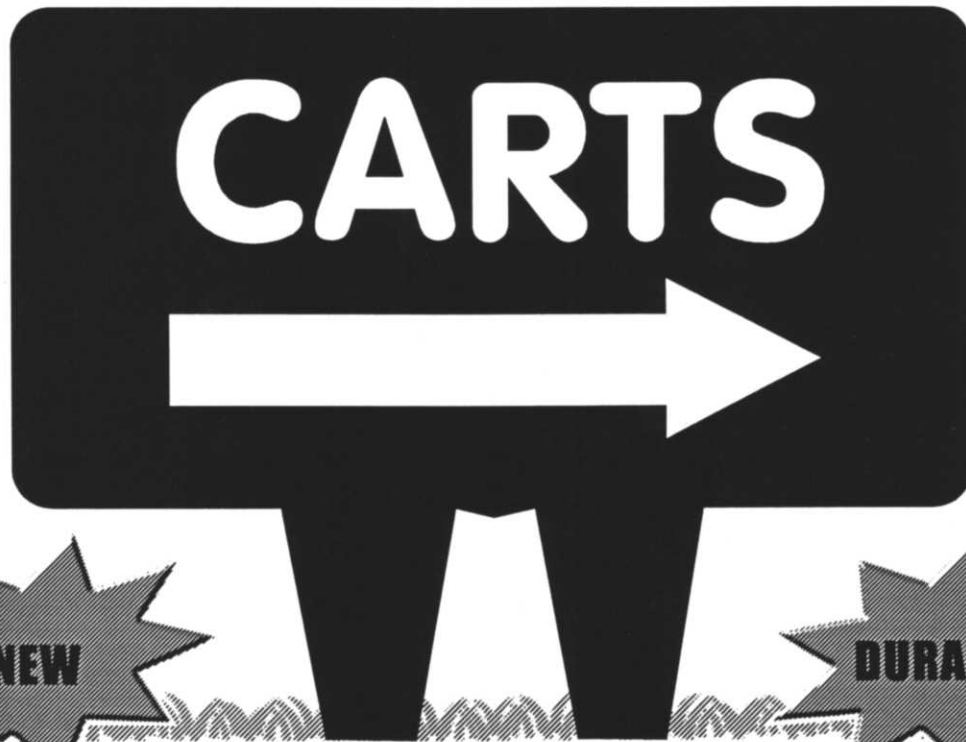
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From Badlands...

*This huge flat bunker on the 2nd hole sports a siphon sump drain system.
Photo by Daniel Zelazek.*



to Grasslands

BY JOEL D. JACKSON, CGCS

Twice reclaimed, Grasslands is a perfect example of how a golf course makes great use of once-barren, unproductive land. Years ago the San Gully Mine ranged over the site extracting Polk County's phosphate riches.

After the mine played out, a large portion of the site became a municipal landfill. Today, a rolling 18-hole golf course provides home sites, recreation, relaxation, wildlife habitat, employment and revenue for the community.

'I have always loved the natural look and feel of the Scottish courses, and Grasslands has a lot of that flavor.'

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Oddly enough, it is a mining company that has reclaimed the land and converted it into a viable entity.

The Drummond Company, a coal mining operation out of Jasper, Ala. has ventured into the golf development business in a very significant way. With a love for the game and a desire to diversify its holdings, the Drummond Company owns and operates three golf clubs.

In addition to the Grasslands, there are Rancho La Quinta, which hosted the recent PGA Tour Skins Game, and Old Overton in Birmingham, Ala. designed by Tom Fazio and named Best New Private Club for 1995 by *Golf Digest*.

Grasslands is getting into professional tournament golf by hosting the first Nike Tour event for 1997. The tournament week begins after the Super Bowl and runs from Jan. 30 to Feb. 2.

PGA Tour agronomist Jeff Haley has already made two visits and is pleased with the overall conditioning.

The man responsible for getting it ready is Roy Wilshire, CGCS. Roy has been at the Grasslands for four years and seems very comfortable in his role.

Keep it natural

"I have always loved the natural look and feel of the Scottish courses, and Grasslands has a lot of that flavor," said Wilshire during our December ride through of the course.

Open spaces with only a few trees, the course fits Wilshire's evolving management philosophy.

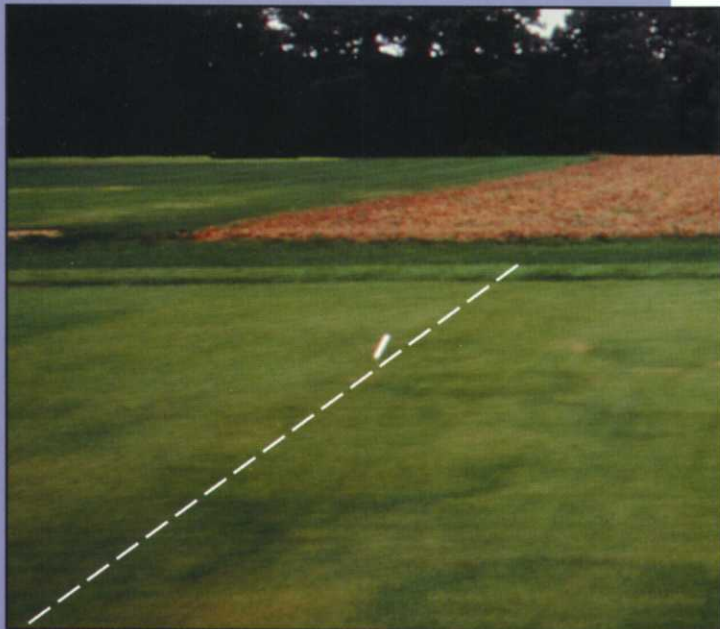
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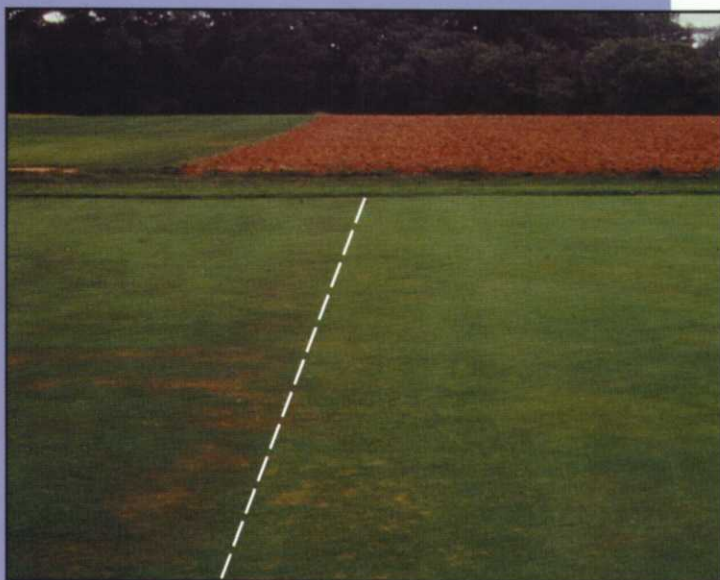
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Both areas exhibit the presence of Fairy Ring. The area on the right received 2 treatments of AQUEDUCT at 8 oz./1000 sq. ft. Treatments were applied one week apart.

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COVER STORY

tion purposes, and it is a more natural state for the turf. Keeping it on the leaner side makes it easier to groom. We always supplement for color, but I keep my nitrogen as low as I can for healthy turf," he said.

"Through the green, we make five to seven granular applications and only two or three of those are wall-to-wall. The rest are fairways only.

"During favorable weather we can apply two to three pounds of nitrogen with fertigation. Because of the heavy nature of the subsoil, I couldn't rely on a liquid program very much. The summer before last year, there were 60-day periods when we didn't water fairways at all.

Wilshire is just as frugal with fertilizer on his greens.

"I let weather and clippings yield dictate when we fertilize the greens," he said.

"Generally, we only apply six to eight pounds of nitrogen per year. Eight pounds is on the high side and usually means we had a tough transition and I had to push turf recovery in the spring.

"People can get caught up in Stimp-meter readings and green speeds. You need to keep the grass healthy. I will supplement with a foliar spray of 20-20-20 for color, but I try to stretch a nitrogen application as far as I can. When we do fertilize greens, it is at a rate of 0.5 pound to 0.75 pound per 1,000 square feet."

Drainage

As we rode the course, it was obvious that the Grasslands had received a heavy rain from Sunday's cold front passage through the area. Since Roy had mentioned heavy soils earlier, I asked him how the course drained.

"The surface drainage is fantastic," he said. "We can take a thunderstorm deluge and move the water off very rapidly. We do run into management concerns when it rains and stays cloudy for several days.

"The soil reaches field capacity quickly and then we have to be patient and let the conditions dictate what we can do. I have been experimenting with Primo growth regulator to help us through rainy periods to lessen the need to mow as often.

"When the mined-out areas of the course were filled and leveled, a lot of the



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Roy Wilshire, CGCS

- 1. Originally from:** Andover, Kansas.
- 2.. Family:** Wife - Sharon. Children - Tiffani (8) and Maci (6)
- 3. Education:** BS in Agriculture with Turf Management emphasis from Kansas State University 1981.
- 4. Employment History:** 1993 to present, Superintendent, Grasslands C. C.; 1990-92 Built course in Houston, TX. Also an executive in small management company. 1986-90 Superintendent, Lochinvar G. C., Houston, TX; 1985-86 Superintendent, Elkins Lake C.C., Huntsville, TX; 1982-85 Assist. Supt. Colonial C. C., Ft. Worth, TX. 1974-85 Summer crew member Crestview C. C., Wichita, KS.
- 5. How did you get into the business?** My neighbor was going to work on a golf course. I loved golf, so I went with him. That was the summer of 1974. I knew from that point what profession I wanted to pursue.
- 6. People in or out of the industry who have influenced your life and career.** My parents for allowing me the opportunity to attend college. Mr. Tom Leonard, who was truly a wise man. He would share his experiences of the ups and downs of the profession with me or anybody who needed assistance. I watched and listened and learned.
- 7. Goals/Accomplishments:** Graduating from college. Becoming a certified superintendent. Being very active in all my Superintendent affiliations. Work philosophy: Utilize all you have been taught. Be consistent in your course set up. Be consistent in dealing with personnel. Mother nature always controls the game.
- 8. Advice to prospective and new superintendents:** Follow the above. Be loyal to your employer and maintain the highest standards of this great profession, and play the game of golf.
- 9. Professional affiliations:** CGCS member of GCSAA; FTGA; President of the Ridge Chapter of the Florida GCSA; Past President South Texas GCSA in 1991.
- 10. Hobbies and interests:** They have narrowed over the years to golf and attending Daytona and Talladega NASCAR events. Helping fellow superintendent, Ray Cuzzone with his race car. Doing some landscape design work away from the course.

silts and clays from the spoil piles were used. And the back nine — where the landfill area was — is capped with soil with a lot of fines in it so we don't have great percolation.

One unique drainage feature that Roy showed me was the internal subsurface sump drain complex in the large bunker on the second hole.

"This bunker is so large that when the trucks hauled in the sand, they had to get into the bunker and they completely tore up the standard drain field. It would take six or seven hours to pump out this bunker after a heavy rain.

"Dennis Hurley of Turf Drainage of America out of Slidell, La. installed the sump system for us. It works like a water bed siphon. It is a water primed system that uses air to push water. It can even push water up hill. It is expensive, but the payback is there in labor savings and playability. I plan to do three more large fairway bunkers."

Bunker Management

Since Roy was getting ready for the Nike tournament and bunker conditioning is receiving more attention all the time, I asked him about his bunker management methods.

"We do have some steep bunker faces that I check regularly because we have to work them so often after a storm. My philosophy is to keep the sand as thin as possible to keep them firm. We add very little sand to them.

"We primarily have Standard 37M as our primary sand. I am adding a little coarser 37C from time to time for balance. We have so much fine soil from the reclamation that it migrates into the bunkers.

"Eventually, we will have to redo the bunkers. It will be an ongoing process just like the drainage."

"There is an up side to the poor soils though! The heavier soils aren't as friendly to mole crickets so we don't have to spend as much money as some sandy courses to manage them.

"We will apply Oftanol to the fairways and green and tee slopes and surfaces in the spring and then spot treat problem areas as needed. In Texas where I came from, I don't know of anyone who even

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Aquatic plantings buffer the shoreline on the 4th hole. Photo by Daniel Zelazek.



Hole #16. A short but feisty par 3 on a windy day. Photo by Daniel Zelazek.

has a mole cricket program, but at last report they were moving west. When I was there, the worst areas were around the greens interfaces and then it was still a case of spot treating only.'

Florida vs. Texas

I asked Roy about comparing Florida turf management with his Texas experience.

"I am very comfortable working with heavy soils, so Grasslands was not a big transition for me," he said. "I don't know how I would have handled a sandy course. It would have been a very different experience from what I'm used to.

"The bermuda turf management is pretty much the same, especially in Houston which is almost at the same latitude.

"The biggest headache I had was trying to manage the bentgrass in the Ft. Worth area. The weather can be so severe and changeable. Bentgrass in Houston wasn't as bad because the weather was milder.

"We were talking about mole crickets

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Robert Toski, Southwest Florida, 941-250-2000
Greg Cotton, Southeast Florida, 305-614-4100

Stan Hildreth, East Central Florida, 407-353-4133
Vicki Flynn, Polk County, 941-293-3147
Sondi Stanfield, Customer Service Representative,
800-282-9588



One of the indigenous live oaks on the relatively undisturbed 5th hole. Photo by Daniel Zelazek.

earlier. I think the reason they haven't taken over like in Florida is because of the weather. In the winter, the cold fronts can last seven to ten days not one or two like here. I guess they don't find it as hospitable there!"

Other challenges

Asked about any other major management challenges, Wilshire allowed that keeping sedge under control in the heavier, wetter soils was probably the biggest weed problem.

"It is a continuous program," he said. "We get good results with Image and Manage, but you can't ever totally keep it out. We will apply Barricade in the spring wall-to-wall, and in the fall we spray unseeded areas. We add some Gallery for broadleaf control in selected areas like the bunker faces.

"We do have some torpedo grass

patches in the old landfill portion of the back nine that are always tough to get rid of, but they aren't a real big problem."

And what other problems did the old landfill area present to the Grasslands staff?

Wilshire smiled and said, "Well we sometimes find some interesting things when we stick a shovel or a trencher in the ground.

I have only seen old newspapers from the 1960s. Other than being yellow like a paper left out in the sun for a few days, they are very legible. Seems odd reading about a 1965 Mustang for \$1,200. The subsoil conditions must be very anaerobic for the paper to not decay more.

The wildest story I ever heard happened before I got here. A drain crew ended up removing a swing set, refrigerator and an oven from the floor of a bunker."

Associations and professionalism

As we finished up our ride, I asked Roy about his views on the profession and association membership.

"In Texas, I served as president of the South Texas GCSA and on the board for six years. I have just moved up to president of the Ridge Chapter of the FGCSA here."

There has been a lot of editorial commentary lately about job security and association politics. I asked Roy how he reconciled his service.

"There is no question that you must respect your employer. You represent the company you work for wherever you are and no matter what you're engaged in.. You can never take that for granted.

"But I also feel there is always room for a superintendent to get involved in his professional associations. I have al-



The Grasslands Golf Course Maintenance Staff. Photo by Joel Jackson.

Grasslands Country Club

Location: Lakeland, Florida.

Ownership: Drummond Company.

Playing policy: Private.

Management Team: Club Manager, Gordon McIntosh; Head Golf Professional, Steve Knott; Green Chairman, Brant Martin; Director of Golf Operations, Drummond Co.

Designed by: Bob Cupp & Jerry Pate. Construction by: Wadsworth Construction Co.

18 holes: Championship Course = Par 72 at 7,040 yards.

Course/Slope/rating: Gold = 73.9/129; Blue = 71.5/124; White = 69.4/118; Red = 71.7/121.

Major Renovations and Projects: Ongoing drainage improvements. Tee renovation. Bunker renovation. Have installed Turf Drainage of America's Siphon System. The first all-subsurface internal sump system in a large bunker.

Acreage under maintenance: 119.7 acres.

Waterways: 25 acres.

Greens: 2.5 acres. Average size = 5,500 square feet. Turf type = Tifdwarf. HOC: .130 -.135. (At overseeding HOC = .150.) Overseeding: *Poa trivialis* @ 10 pounds and 2 pounds of bentgrass per 1,000 square feet.

Tees: 2.2 acres. Turf type = Tifway 419. HOC: .375. Overseeding = 15 pounds per 1,000 square feet of perennial ryegrass.

Fairways: 55 acres. Turf type = Tifway 419. HOC: .450 - .600. Overseeding = 450 pound of perennial ryegrass per acre.

Roughs: 60 acres. Turf type = Tifway 419 and Common Bermudagrass. HOC = 1.25" - 2.0". No overseeding.

Irrigation: Source = Surface water.

Staff: Total of 18 including superintendent. Assistant superintendent, Sean Seymour.

Special or unusual conditions: The course is built on a reclaimed phosphate mine and a portion is also on a capped landfill. Lots of clay and silt. The Drummond Co. was awarded The Distinguished Service award for Environmental Planning.

Interesting and unusual features: Changing contours from decomposition and shifting of the phosphatic clays. Sometimes we unearth unusual items when digging in the landfill portion of the course.

Mowing equipment: Greens putting surfaces and collars - Toro 1000's. Tees - Greensking IV's. Fairways - Ransome 300's. Roughs - Toro Reelsmaster and Articulator. Approaches - Toro 3100's.

Cultural practices: Aerification — Greens 3 times per year. Tees and Fairways 2 times per year. Verticut — Greens as needed. Fairways in the Spring. Fertility - Greens 8-10 pounds per year. Fairways 6 pounds per year. Roughs 4 pound per year. One to two pound of the total is applied through fertigation.

Wildlife inventory and special management programs: Alligators, bobcats, wild hogs, bald eagles, cormorant, egrets (Great White and Snowy), herons, ibis, sandhill crane, wood stork. This site is a natural habitat. We don't have any special programs. We just follow best management practices.

ways been honest and up front with my employers about how important and rewarding it is to me to be able to participate.

“You can’t get heavily involved if you don’t have their support and understanding.”

When asked why bother to get involved, Wilshire said, “There is that opportunity to help others. The sharing of ideas and experiences with your peers. I don’t expect to change the world, but maybe giving some honest input on an issue that matters will help make a difference in our business.”

We also talked about the pressures

and trends of the business. Wilshire said, “Sometimes the demands on the turfgrass are extreme and unrealistic, but I don’t know many superintendents who aren’t willing to at least try to attempt to provide what is wanted.

I think the golfers need to learn more about the limits of the grass. Television golf is great for the business but it can foster unrealistic expectations when clubs don’t have equal resources to produce the desired results.

I have gone through a time when I couldn’t abide a brown spot on the course, but I have learned to be more flexible and take what mother nature gives me to

work with. She doesn’t always play fair.

“You have to be confident in your ability. You can’t do the job from a position of fear. You have stand your ground on some issues and yet be flexible if you expect longevity in your job.

You have to understand what your boss is looking for and deliver it to the best of your ability. You must be able to accept alternatives.”

Roy Wilshire and the Grasslands are a good fit. A naturalist superintendent in charge of a course that has been reclaimed for a more natural existence. A more acceptable alternative than just a hole in the ground.



The 18th hole and Grasslands Clubhouse. Photo by Daniel Zelazek.



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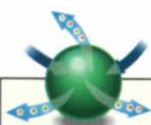
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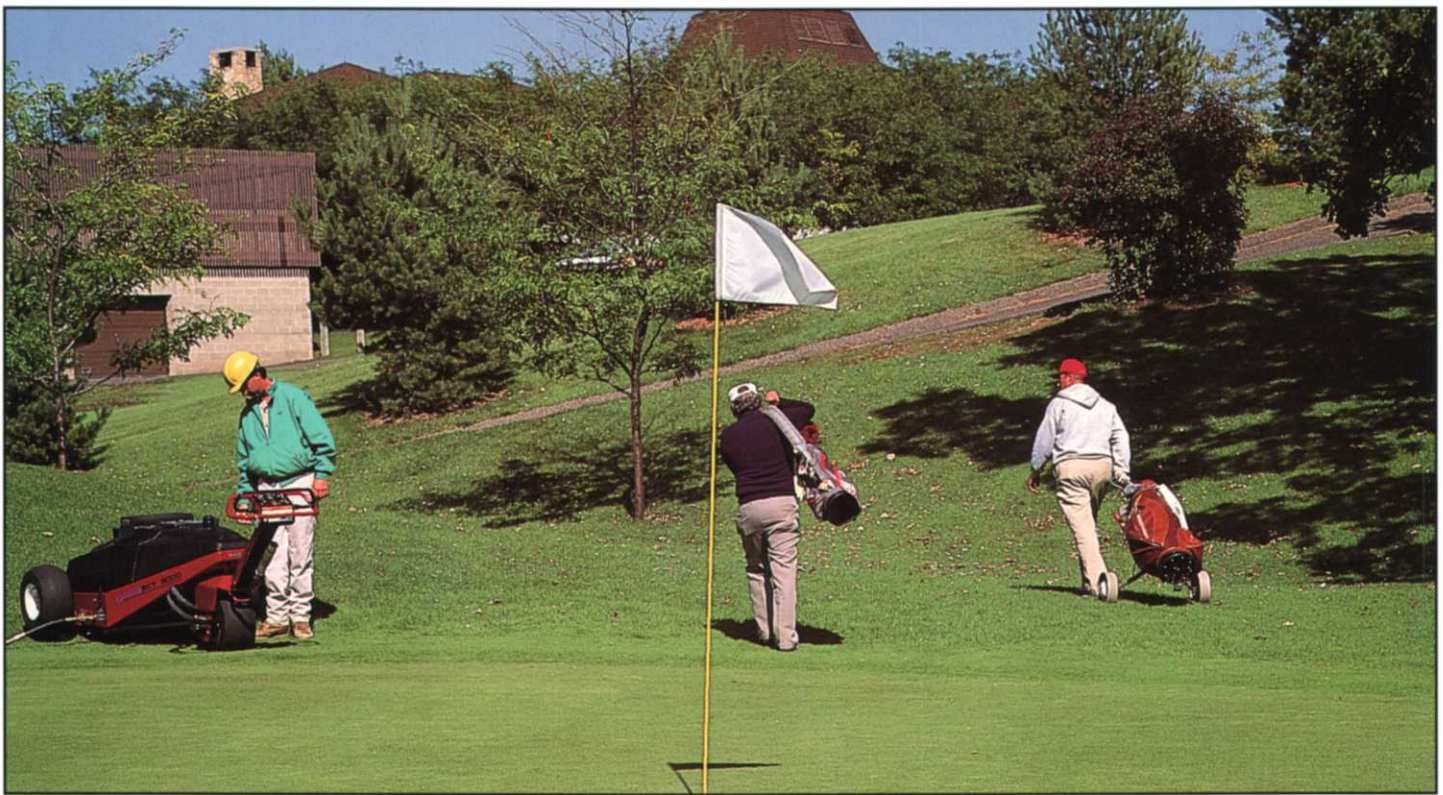
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A proven cultivation tool that helps you sustain healthy turf throughout the entire growing season without causing surface disturbance.





HydroJect[®] 3000, More Than Just An Aerator.

Since its introduction, the Toro[®] HydroJect 3000 water injection aerator has proved to be an essential tool in helping golf superintendents and other turf managers establish and maintain healthy turf throughout the growing season.

The advantages of the HydroJect 3000 extend beyond those of traditional core aeration. High velocity water injection more deeply penetrates (an average of 4" to 8", or beyond 20" with additional shots) and laterally fractures soil layers. This deeper and adjacent

penetration advances root growth and improves water uptake which in turn gives you a more stress tolerant turf and a more uniform appearance.



No Surface Disturbance.

With HydroJect there's virtually no disturbance of the turf's surface. Because there's less risk of injury to the plant and root, there's no need to wait for prime soil or weather conditions. Aerate your greens and other turf areas when they need it most; under a hot stressful summer sun or just before tournament play. HydroJect allows you to precisely manage your turf.

Regular Use Can Bring Dramatic Results.

Superintendents continue to establish their own water injection aeration programs. Typical use varies from every week to occasional spot applications. However, the most dramatic benefits have occurred with greens that were treated on a regular two or three week cycle. In some instances, plans to rebuild greens have been dismissed due to the agronomic improvements that followed regular HydroJect use.

Although not intended to replace coring, use of the HydroJect 3000 will likely reduce your need to core aerate. The practice of core aerating every spring and fall may now be altered to once in the spring followed by regular water injection aeration throughout the remaining year.

Preserve Your Course Image and Save.

Since HydroJect leaves no messy cores, your golfers can play without delay and you preserve the aesthetic, playable image of your course. There's no need to pay a crew for cleanup or topdressing either. Just one operator handles the job. You may even avoid greens reconstruction with regular HydroJect use.

Very Versatile.

Serving all golf course areas, the HydroJect 3000 is useful on greens, tees, fairways, roughs, cart paths, or localized dry spots. It's more than just an aerator. It can smooth surfaces, apply wetting agents and enhance your turf and soil management practices.



Faster Putting Speeds.

Riding on two rollers, HydroJect® 3000 smooths greens as well. You'll achieve a more uniform putting surface and increase your putting speeds 15 to 20 percent. Or, maintain existing putting speeds while mowing at a higher height of cut. The HydroJect easily adjusts to roll at 4 mph.



Better Sod and Seed Establishment.

The practice of water injection after laying sod accelerates the mixing of soil layers and promotes deeper root growth. Similarly, the HydroJect

can advance seed germination by loosening the soil and creating channels for rapid root establishment.



Promotes Root Growth.

Research conducted at Michigan State University and use by current owners demonstrates improved root growth. In some areas root initiation and development occurred at times when root decline would be the norm. Typical use results in stronger grass plants with increased resistance to stress. Growth occurs throughout the soil profile, not just in the initial hole. This is due to the fractured zone of influence that only the HydroJect can create.



New Wetting Agent.

Wetting agents have been successful in maintaining healthy turf. Toro now offers a wetting agent to be used through the HydroJect 3000. Help improve the efficiency of your water use or improve the efficacy of other products you apply.



Water Requirements.

Clean water is essential to the performance of the HydroJect 3000 water injection aerator. The machine is equipped with an on board 5 micron filter to protect the internal components. Some water can prematurely clog this filter due to excessive sediment, algae or plankton. To prolong the life of the

5 micron filter, Toro offers a 25 micron pre-filter and housing that may be installed at the quick coupler. All situations are different, however, and may require alternative pre-filtering methods. Examine your situation to determine which method is best for you.

Athletic Field Advantages.

The HydroJect® 3000 will improve appearance, performance and perhaps the safety of your athletic field. Use it to establish and maintain a healthy stand of turf in high traffic areas like the mid-field, sidelines or goal mouths. Besides providing you with an aesthetically better playing surface, compaction relief benefits may reduce the potential for player injury. HydroJect 3000 use can also improve your water infiltration rates



to avoid puddling and reduce the time it takes for a field to recover after rain.

Landscape Opportunities.

Residential, corporate, school or campus grounds. The HydroJect 3000 is ideal for these areas as for others in need of compaction relief or increased water efficiency. Especially useful in those high traffic areas or to promote sod or seed establishment. And best of all, no one is bothered by messy, unsightly cores or the aggravation of clean up.

Spacing.

The HydroJect 3000 offers you 4 different space settings to meet your individual needs and applications.

The 3" setting is standard for most aeration needs. The zone of influence of a single shot of water has an approximate 3" diameter depending on soil types. With a 3" diameter, 100% coverage can be achieved. For areas that require intense treatment, simply set the

spacing selection to 1.5". This will give you more holes with over 100% coverage. If you must accomplish

Spacing (inches)	Productivity (Sq. ft./hr.)
1.5	6,500
3.0	13,000
4.5	19,500
6.0	26,000

the treatment faster, yet still want some of the water injection benefits, select 4.5" or 6".



Simple to Operate.

New operators can be trained quickly. Four easy steps engage the unit for aeration: 1) throttle machine up, 2) lower the machine on to its rollers, 3) press the engagement button and, 4) depress the traction bail in the direction of travel you want to go.



Durable Performance, Reliable Build.

Because the HydroJect 3000 never penetrates the ground itself, there are no tines to break or wear when detrimental conditions are encountered. All internal, high pressure water components are made of corrosion resistant materials to prevent deterioration.

HydroJect® 3000 Specifications*

POWER TRAIN SYSTEM						
ENGINE	Onan P224, 4 cycle, opposed twin, air cooled, 24 hp (18 kW) @ governed maximum 3600 rpm. 60 cu. in. (983 cc) displacement. Electric start. Solid state ignition. Heavy-duty valve package. Extended service air cleaner. 3 quart (2.8 liter) oil reservoir.					
FUEL SYSTEM	10.5 gallon (39.7 liters) fuel capacity for over four hours of operation. Includes fuel shut off valve. Uses unleaded gasoline.					
TIRES/WHEELS	Three interchangeable, smooth tread tires; 18 x 9.50-8, 2-ply, pneumatic, tubeless tires with drop center demountable rims.					
TRACTION DRIVE	Hydrostatic variable volume pump and low speed, high torque, 24 cu. in./rev. wheel motor. 5 quart (4.7 liter) reservoir and suction line with 25 micron filter. Traction to propel unit is through single drive/steer tire at tiller. Traction pump driven by continuously engaged belt.					
TRACTION CONTROL	Traction control lever moves back and forth to control variable speed and traction direction.					
TRANSPORT LIFT	12 volt linear screw actuator, 6" (15 cm) stroke; raises and lowers lift arm/transport tires and activates hole spacing.					
GROUND SPEED & SPACING	Aerating speed: 0-2 mph (0-3.2 km/h) (both directions). Transport speed (capable only when up on all three tires): 0-4 mph (0-6.4 km/h) (both directions).		Spacing in the Direction of Travel (inches (cm))		Productivity (sq.ft./hr (sq.m/hr))	
			1.5" (3.8)		6,500 (604)	
			3.0" (7.6)		13,000 (1,208)	
			4.5" (11.4)		19,500 (1,812)	
			6.0" (15.2)		26,000 (2,415)	
BRAKE	Drum and shoe type parking brake.					
ELECTRICAL SYSTEM	12 volt, Group 28 battery with 525 cold cranking amps. 20 amp charging system with circuit breaker protection. Solid state potted electrical controller and sealed weather pack connections.					
FRAME	Formed and welded steel construction.					
CONTROLS/GAUGES	Engine panel: throttle, choke, key switch, hour meter, supply water pressure gauge, circuit breaker, roller wash control and spacing control lever. Steering handle: bidirectional traction lever, aeration start and stop buttons, transport/aerate lift toggle switch, and parking brake with buzzer.					
AERATE WIDTH	33" (83.3 cm); with 11 nozzles spaced every 3" (7.6 cm)					
OVERALL DIMENSIONS & WEIGHT (approx.)	Height	Length	Width	Wheelbase	Weight	
	42.8" (109 cm)	96.3" (245 cm)	63" (160 cm)	53" (135 cm)	1,150 lbs. (522 kg)	
WATER INJECTION SYSTEM						
WATER SUPPLY	Required water supply: 8 gpm @ 20–80 psi (30.3 liters per minute @ 1.3–5.5 bars). A water pressure sensor disengages the water system if the water supply at machine drops below 20 psi (1.3 bars). Supply water filter with replaceable 5 micron element; P/N 86-8620. Quick connect water hose coupling for attaching to water hose supply.					
PUMP	Toro exclusive (patent pending) stainless steel head, 3 piston type with forged crank shaft, stainless push rods. Nominal performance is 4 gpm @ 5000 psi (15 liters per minute @ 344.8 bars). Pump is driven by two belts electromagnetically engaged.					
ACCUMULATOR	Water energy storage device; nitrogen gas charged to a maximum of 2500 psi (172.4 bars).					
CAM CASE	Cam actuates valve to release water to the manifold at 5.3 cycles per second (320 injection per minute). Case also serves as a 4 quart (3.8 liters) oil reservoir. Cam gear electromagnetically engaged and driven through flexible coupling from engine.					
VALVE	Valve housing provides high pressure water passage area. Pressure balanced valve spool with hardened stainless seat. Bleed valve in base allows bleed off of high pressure and drain down for cold weather storage. Bolted flanges and O-rings mate all components to valve body.					
ROLLERS	Pivoting aluminum rollers reduce compactive ground pressure and uniformly smooth the surface. Adjustable flow spray wash system maintains clean rollers. Variable roller washing requires up to 4 gpm (15 liters per minute) additional water flow.					
PRESSURE RELIEF VALVE	Poppet type preset to 5000 psi (344.8 bars). Corrosion resistant stainless and brass materials.					
MANIFOLD/NOZZLES	Stainless steel nozzle bodies with check valves and hardened stainless steel discharge orifices. Check valves may be reversed in body to block unused nozzles. Optional sizes/diameters with staggered pattern available.					
NOZZLE SIZE & DEPTH CHART		Nozzle Size				
		Drill Size	Decimal Size	Metric Size	Approximate Depth**	Maximum # of Nozzles in Use
	Standard—	#53	.0595	1.511	4–6" (10–15 cm)	11
		#46	.0810	2.057	5–7" (13–18 cm)	6 (must block 5 nozzles)
	#56	.0465	1.181	3–4" (10–15 cm)	6 (use w/five #46 nozzles)	
	**Depths beyond 20" (51 cm) can be obtained using additional shots. See Operator's Manual complete details.					
OPTIONS	Wetting Agent; (2) 2.5 gallon (9.5 liter) jugs, P/N 86-8530. 25 Micron Pre-filter and Filter Body, P/N 80-9590 and 80-8600.					
WARRANTY	One year limited warranty; 120 days for contract or rental use. Refer to the HydroJect 3000 Operator's Manual for further details.					

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Golf Course Management Companies: Friend or Foe?

BY SCOTT BELL

Bent Pine G.C.

Although the concept is not new, the mere mention of the term "management company" sends chills down the spines of many Florida superintendents. Like many words and phrases in the English language, this expression is interpreted differently by different groups of people.

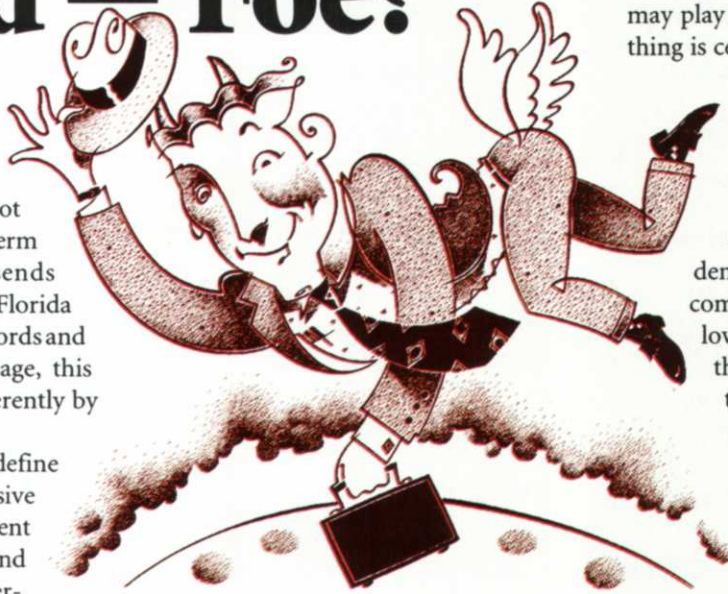
While a city manager may define it as a way out of an expensive labor contract, the superintendent may define it as low wages and lost control, while other superintendents see the phrase as an opportunity to make more money without the hassle of a layman directly supervising the position.

Management companies are not new as they have been around for more than 20 years. When I graduated from college in 1981, my two best offer came from "management companies."

The position I took started me out as a training assistant for not much money, but it offered a training program, nationwide advancement and access to the operations of a large corporation.

I am trying to be objective in this article so that all sides of this controversial subject are expressed. I hope to show not only the obvious superintendent point of view from both the pro-management company side and the feelings of superintendents who have been displaced as the result of a management company takeover. Other views on this subject will also be addressed by others in the golf course maintenance industry.

Before I go any further, I want to describe my definition of a management



company. These companies come in many shapes and sizes, with a variety of goals to accomplish.

The one common denominator among all of them is to make money. These companies do not exist to give superintendents and their staffs jobs. Business in this country has changed forever. Gone are the days where companies are able to compensate employees well and still make a profit.

Instead, the bottom line and investor dividends have caused companies to tighten belts, cut costs and lower payrolls. Many industries, most notably medical or service industries, have gone to management companies to improve profits.

In relation to golf course maintenance, some of these companies own the courses while others simply lease or are under contract to maintain the turf. Some companies offer a complete package from the dining room to the 18th green.

In the early 1980s I worked for Club Corporation of America. At the club

where I worked, they ran the dining room, pro shop and golf maintenance. I have also worked for the Tournament Players Clubs, and they also ran the entire operation.

Recently in my town a management company was brought in to run the golf course maintenance operation at our county course. Management companies may play many different roles, but one thing is certain — they are a part of the business.

Superintendents' Fears

Probably the biggest concern among superintendents in regard to management companies is the loss of jobs and lowering of salaries. The fear is that management companies, in their desire to reduce costs to produce low bids, will also scale back superintendent salaries.

To the superintendent at a course which is about to be taken over, the only choices may be to move on or take what the management company offers. This offer may be higher or lower than what the superintendent presently earns.

As with any management shake-up, some people do not survive, and management companies must choose the people who will make their operation work.

Unfortunately not all of us are perfect — some superintendents may not be willing to work hard enough to fit into a company's plan. If this is the case and a superintendent is let go, it is easy for that person to complain of the management company's treatment.

But perhaps if that person had been doing their job all along the management company would not have come in. It is hard to say who is right and who is wrong.

This underscores the complexity of the issue. Do we as superintendents have to fear management companies more than the general manager, project manager or greens committee that we presently work for?

In my research, I found that high su-

hire a great superintendent who would do a super job within the prescribed budget.

As we all know, the world is not perfect!

In regard to salaries, Scott Zakany of International Golf Management (IGM) maintains that in every situation that IGM has entered, the superintendent's salaries have either stayed the same or gone up.

Jerry Redden of Professional Turf Management (PTM) said his company also follows this practice. IGM offers other benefits including insurance packages, educational reimbursement for career development, retirement planning and encouragement to participate in the FGCSA, GCSAA and FTGA.

In addition, the hiring of a management company can bring a new attitude and new methods that energize the club.

According to Zakany, a large majority of the golf courses that they become involved with are lower-budget courses that truly need professional guidance and direction.

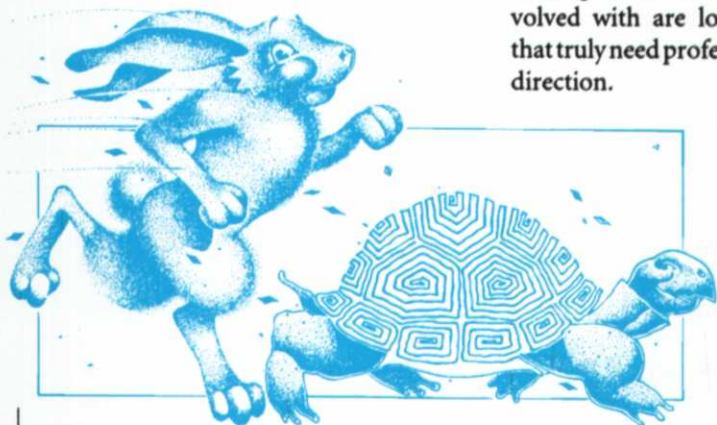
In these situations, courses that IGM manages get a well-trained superintendent, or they train the ex-

isting superintendent if that person shows a willingness to learn and improve. The superintendent is then given guidelines to follow, from shop cleanliness to IPM and the Audubon Cooperation Sanctuary Program.

In my opinion, situations like this are good for our industry because superintendents' careers are improved and advanced. The quality of superintendents hired tends to be quite high — Zakany said that 21 of 22 superintendents hired have college degrees, and three are certified.

Not all management companies are the same. The good things that one company may do are not always equaled by others, and usually the mistreatments and firings by one company will get all the attention.

This is unfortunate, but not unusual. The rumor mill is fed not only by super-



Management companies may offer lower starting salaries for assistant superintendents but greater opportunities for training, specialization, and advancement.

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intendents but slighted suppliers and others who are affected when a management company takes over a course.

Code of Ethics

In the final analysis, the biggest question many superintendents have relates to ethics.

How can a company follow the GCSAA Code of Ethics and not solicit jobs while a golf course superintendent is still employed? Is a mass mailing advertising the company any different from a superintendent who randomly mails resumes to clubs?

IGM says that they do not mass mail, relying instead on word-of-mouth communication, magazine advertisements and trade shows. Zakany says that when an owner or club calls, he answers their general questions.

If it goes beyond that, he requests to talk to the superintendent. Zakany feels comfortable that IGM is following the Code of Ethics.

Zakany added that in most cases clubs have liked their superintendent and did not pressure IGM to replace him or her. If a management change is requested, IGM has tried to relocate the superintendent to another IGM location provided the person shows competence and ability.

I know that we have received phone calls and mailings from management companies at my club. Is this ethical? On the other hand, our club has also received mass-mailed resumes from superintendents wanting to relocate to the Sunshine State.

Are we just dreaming when we expect everyone to follow the Code?

Has the business world finally caught up with golf? It would be nice to know that if you do a good honest job, your employment will be secure. I hope in most cases this is true.

The best advice I can give is to do a good job and let the chips fall where they may. Just as there are good and bad superintendents, there are good and bad management companies. Do they all behave in the same manner? Probably not. Are they good for our industry? Friend or foe? That's for you to decide.

Management firms mixed bag for superintendents

Reprinted from Golf Course News, November 1996

Should superintendents see the growing influence of management companies as a good thing or bad thing in terms of career development, professional responsibility, salaries, benefits, etc.?

Josh Lesnik, Marketing Manager, Kemper Sports — In our case it's a good thing. We stress the importance of maintenance, which means a talented superintendent would mean as much or more to us than at a single-course operation. Superintendents are very appreciated [well paid].

Our superintendents are in charge of their individual courses. They may answer to someone in the home office. But they make up their own budgets and submit them to people here [corporate office] who understand what they are talking about. You could compare it to the relationship to a managed health care setting.

Marc Bergschneider, Chairman, National Fairways, Inc. — It's definitely a plus. There are more opportunities for career development by enhancing the services provided at a single course, grow a particular operation, manage multiple courses or go back to school.

Entry-level positions may not be as lucrative [as salaries at non-management company courses]. But that's offset by salaries paid head superintendents and those overseeing multiple courses.

Tommy Witt, GCSAA board member, chairman of GCSAA Career Development Committee and head superintendent at Wynstone Golf Club in Chicago — Management companies may represent a threat to one superintendent and an opportunity to another.

They generally provide more job security, the opportunity to move to another job without leaving the company and benefits that often surpass those at individual-owner golf courses.

But salaries tend to be lower. When a

management company enters an area, they tend to pull down or slow salary increases at surrounding courses. And when a management company superintendent is put in charge of several courses, the increased salary often doesn't match the increased responsibility.

Management companies are here to stay, but they still control a small part of the marketplace [an estimated 5 percent of U.S. courses]. Superintendents should view them as another option. The key is to figure out what the upside potential is and then make an intelligent decision.

Tim Hiers, head superintendent, Colliers Reserve in Naples, Fla. — There are places where management companies can be successful, especially in large, multi-hole facilities. However, I believe it could be extremely difficult for a management company to equal the quality output, level of care, constant attention to detail and the overall efficiency of an experienced, qualified and skillful golf courses superintendent on his or her home turf.

If management companies continue to emerge, there could be fewer traditional superintendent jobs. However, other opportunities within a management company, such as a consultant, could present themselves.

Depending on the variety of situations and circumstances, a superintendent who continues to demonstrate value to his or her organization through ongoing education, top-quality management, desire to excel, and a balanced personal life, shouldn't be overly concerned.

There will be exceptions to this. But if the superintendent produces a quality product for a competitive amount and communicates it to the necessary powers, that person will probably continue to be a successful individual in this profession.

The Bottom Line

BY DALE REASH, CGCS
Countryside C.C.

If you want to start up a controversial group discussion I guess you could use the topic "Management Companies in the Golf Industry." There seem to be a tremendous number of these companies out there today.

Are some good? Yes.

Are some not so good? Yes.

Whether they are good or bad, they all have one thing in common. The bottom line! These companies are in business to survive and make a profit. Along with profitability, these companies work to enhance the level of quality and efficiency in clubs and facilities. That is primarily how they are judged.

You will find that the companies that can blend profitability with quality enhancement and sound

business practices will be the long-term respected survivors in the golf industry.

Although everyone has the right to an opinion as to whether a company is right or wrong, honest or dishonest, ethical or unethical, it is merely their opinion. The "make it or break it" opinions and perceptions for the companies lie with the owners and members at golf club facilities who pay these companies to provide a service for mutually beneficial results.

Having worked for one of these management/ownership companies for nearly 20 years, I have experienced a great number of positive professional and personal opportunities.

The financial and job security factors are probably the highest on the list. However, things such as continued education, support for industry involvement, insurance and retirement programs, intercompany networking, legal support, purchasing power, technical support and other benefits are also just as important.

Some people may think that the drawbacks of working with this type of company are a lot of paperwork and too many policies, procedures and restrictions. These activities are only the by-product of running a business or, in the situation of a golf course superintendent, managing a maintenance operation.

Also, accounting systems and reports are invaluable when tracking the financial trends of revenues and expenses. It is

much easier to make purchasing decisions when these reports are produced on a regular, frequent schedule. Planning and forecasting are great tools to help keep operations organized.

Policies on operations, wages and hour issues help staff operate within efficient and legal boundaries. These activities are only part of the "on the job" educational sources provided by the companies that help to develop staff personally and professionally.

Any company that is developing and maturing is going to have its share of growing pains. Their policies, guidelines and operating procedures may need to be reevaluated and adjusted over time in order to keep up with competition and changing trends.

Those that are able to listen and react to industry and member feedback will have a better chance of surviving in their competitive arena.

Individuals in the golf business who understand the concept of the management company and are willing to be part of their teams will also be the individuals who will help direct and guide those companies toward improving, strengthening and providing a better quality service to their industry and clients.

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Microbes: Snake Oil or Revolutionary Product?



BY MIKE HAMILTON, CGCS

One of the fastest growing technologies in the golf maintenance industry today is microbial technology. I am sure by now you've either read information about microorganisms, had discussions with other superintendents about them, or you've been contacted by someone selling the technology.

Is the use of these organisms for plant growth warranted, or are they just another snake oil?

I think before you can answer that you must have an understanding of how microorganisms actually perform in the soil rhizosphere, or root zone.

The reason most new technologies in the golf industry get thrown into the category of snake oil is that it's human nature to be skeptical. It's easy to think that if these microbial products are as good as billed, they would have been around 25 years ago.

After all, most of us old-timers were pretty well educated 25 years ago. We were never taught to incorporate and feed organisms, and we were surely never taught that our cultural practices are what cause the demise of the organisms.

A lot of the blame for superintendents' attitudes has to be credited to the companies that sell the products. Many marketing strategies promote products as the cure-all of cure-alls. This overbearing type of marketing usually breeds skepticism.

Any intelligent superintendent knows that you can't rely on one product to maintain turf. It takes a combination of many tools, and good weather conditions, to make a maintenance program

successful.

The key to understanding technology is that it evolves, and with the development of the computer industry it is evolving at phenomenal rates of speed. Therefore it is only logical to assume that sooner or later there will be revolutionary products developed that will change the way we maintain our turf.

Technologies are being refined that are consolidating many of the commonly-used tools of today and making others obsolete. Many of the microbial programs being advocated today can be very effective tools, if used appropriately.

Many marketing strategies promote products as the cure-all of cure-alls. This overbearing type of marketing usually breeds skepticism.

Microbes are not new — they have been around since the beginning of time. Microbes can survive almost any atmospheric condition. Plant life and microorganisms have evolved and flourished on the earth for the past 500 million years without any help from man.

Plants have been able to do that because of natural balances and cycles that occur in nature. Plants and microorgan

isms have an interdependent relationship, and one could not survive in nature without the other. Put simply, microbes feed plants and plants feed microbes.

But how?

Plants use sunlight to execute photosynthesis. One of the processes of photosynthesis is to produce carbohydrates which the plant uses to do many metabolic functions.

What very few people understand is that 25% of all the carbohydrates produced are forced out through the roots into the root zone. This is the plant's way of enticing microorganisms. The carbohydrates provide a food source for the microorganisms.

Microorganisms feed plants in a couple of ways. When plants defoliate, microorganisms break down and decay the organic material dropped by the plant. The microbes then process in their digestive systems nutrients, acids, enzymes, coenzymes, and every other substance

that make up the hemicellulose of the plant.

When the microbes age and die, they release these processed nutrients and substances. The processed nutrients create long chains of amino acids and proteins that are used as a food source by plants.

Microbes also devour elements that are in the soil. They transport them and process them for the plant. When the plant is being fed in this manner, it doesn't have to expend any energy to feed itself.

Sounds pretty simple, right? So if all this really happens why do we have to use fertilizers and chemicals to keep plants alive? Because of man! In the last few centuries man has ignored the laws of nature and started growing plants with synthetic fertilizers and chemicals.

It has become a necessity to use man-made products because we are disturbing the natural relationship between plant and microbe. The disruption of the cycle has not been done just to be malicious—

it has been done to feed an overcrowded planet.

To feed mankind, we harvest plants for food instead of letting them return to the soil. Harvesting does not allow the nutrients and hemicellulose to return to the soil. Since microorganisms are not replenishing nutrients to plants, we have to do it with man-made fertilizers.

What is missing from man-made fertilizers are all the compounds that make up the hemicellulose. This deficiency causes a decline in the populations of beneficial plant-growing microorganisms.

Once the beneficial microorganisms dwindle, the root zone repopulates with organisms that are either detrimental to plant growth or do nothing except occupy space and eat carbohydrates. Many of these organisms cause disease. To control disease we use fungicides, which kill not only the disease pathogens, but even more of the beneficial organisms.

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When you get an extensive extermination of microbes, which you get from fungicides, the plant will emit pheromones to attract organisms to the root zone. Then it becomes a race for the organisms to repopulate the root zone. The organisms that usually win are the pathogens. Most pathogens reproduce from spores, and fungicides don't kill spores.

Most of the beneficial organisms reproduce sexually. The bad thing about using man-made products is that the more you use them, the more you have to, because you kill the antagonistic organisms that are preventing the pathogens from occupying the root zone.

We create even more of a deficiency in golf course maintenance by cutting the turf much lower than it is genetically designed to grow. When turf is cut low, the amount of photosynthesis is decreased because the leaf area has been reduced.

A reduction in leaf area means carbohydrate production is diminished. A diminished carbohydrate source means there is not substantial food to sustain a sufficient population of microorganisms.

When you begin understanding this relationship you begin to understand that it is truly magical that plants can survive

man. Like all living things plants are survivors. If there are not enough microbes to feed the plant, the plant will initiate its energy to process its own food.

The plant will begin sending out negatively-charged electrical impulses. These impulses attract positively-charged elements that are in the soil. This process requires energy. The plant uses energy to pull the elements into the exchange zone of the plant.

It also requires energy for the plant to turn the elements into amino acids and proteins. All this extra energy the plant is using is being directed away from other metabolic processes. This energy drain causes stress and imbalances in the plant.

When the plant has to feed itself it is not selective of the elements that it takes up. This can drastically affect balances in the plant. The uptake is simple electricity. The plant takes up the first available positively-charged element in the soil. Unless you have perfectly balanced soil, deficiencies will occur in the plant.

However, when microbes feed plants, they are selective—they can break chemical bonds that tie up elements. When you have sufficient populations of beneficial microbes, the nutritional balances inside the plant will be much greater than the

balance in the soil. This can be detected by tissue testing on a regular basis.

Many years ago microbiologists began to study plants that flourished in nature. Through these studies the scientists discovered that several different species of organisms occupied the root zone. These beneficial species performed many different functions to help the plant grow. Some processed nutrients, some affected gas and water exchange, some were antagonistic and defended the root zone from pathogens. Scientists also found that when everything was in balance, the plants became selective of the organisms that occupied the root zone. In the last few decades microbiologists have learned how to isolate and culture the beneficial species of organisms. The problem that arose was getting living organisms from the laboratories to the field. In the last ten years breakthroughs have been made that enable us to get the organisms into the soil alive. Solutions and other carriers have been developed that hold the organisms in a hibernative state. When these solutions and carriers are added to water the organisms slowly rejuvenate and migrate to the root zone.

When you begin understanding this relationship you begin to understand that it is truly magical that plants can survive man. Like all living things plants are survivors. If there are not enough microbes to feed the plant, the plant will initiate its energy to process its own food.

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Repopulating the root zone with an adequate amount of microorganism that will be beneficial to the plant can be achieved in a very short period of time.

One of the early mistakes made with microbial technology was to think that merely incorporating the organisms into the soil would solve the imbalance and deficiencies. Something that you have to understand is that the number of organisms is directly proportionate to the amount of carbohydrates in the soil.

So to achieve the goal of sustaining a sufficient population of beneficial organisms you must supplement a carbohydrate source. You also have to replace the hemicellulose that you remove when you remove clippings.

There are hundreds of compounds that make up the hemicellulose in plants. A plant must have all the components in hemicellulose reprocessed, so that it can achieve natural balances.

When the plant gets into balance, the energy is then directed to its metabolism instead of using it for food production or a number of other stress factors. When the plant achieves these balances it will allow the plant to grow to its genetic potential. When the plant is in balance the beneficial microorganisms will thrive, and an interdependent relationship exists.

There are still skeptics who say you cannot incorporate non-indigenous species of organisms in specific areas. However, most of the organisms that are being used by the microbe companies are indigenous to most areas of the United States.

There may be a few that are not indigenous but they are being fed a pure food source before they enter the root zone. Because they are strong going into the battle they have a very good chance of surviving and establishing in that specific area.

Soil microbiology is much more complex than I just explained. I tried to make this abstract as condensed and simple as I could so that you would understand it without hundreds of hours of studying and years of research.

Repopulating the root zone with an adequate amount of microorganism that will be beneficial to the plant can be achieved in a very short period of time. There are long-term effects from using microbes that I did not discuss that are even more astonishing.

So is the use of microorganisms a snake oil approach? No chance. Is the use of microorganisms revolutionary? I would say so. Any product that can minimize the use of pesticides and fertilizers, and enable you to grow turf as good as or better than you are doing now, has a place in every maintenance operation.

Is the use of microorganisms a cure-all?

No, but it is a tool that you can use in conjunction with other proven cultural practices, to give insurance against plant stress and, even more important, personal stress.

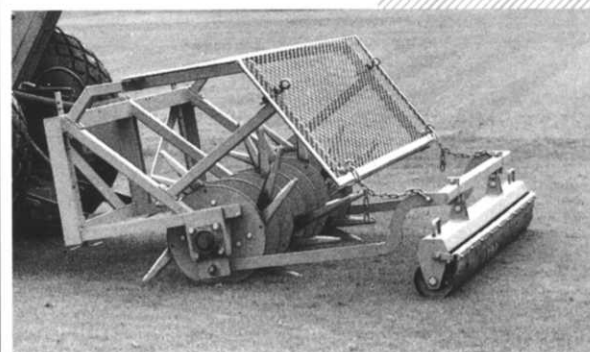
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Course Grooming

BY KEVIN DOWNING, CGCS

Willoughby, G.C.

Years ago when I started as an assistant superintendent at Doral C.C. in Miami, one of my principal jobs was to work with the four course foremen on issues that golfers would notice.

These individuals were great people who worked closely with the crew but really didn't focus on the issues that golfers notice. Providing them with small lists to take care of the little things was part of my job as an assistant, but the philosophy has stuck with me during my years as a golf course superintendent.

Since I usually play golf at least once or twice a week, my scorecards are always filled with notes written in the margins. My rounds are usually played late in the afternoon or sometimes early on the weekends before play starts.

Most of the time I either play with one other individual or just as a solo so I can concentrate on the course conditions. The next day these notes have either been incorporated into the daily assignments or scheduled into future work programs.

This year we have implemented a new

system so that the "little issues" are handled by the same individuals. I selected two part-time people off my staff, Larry Drew and Ron Schurk, who have demonstrated tremendous initiative and awareness of our course needs.

Not every course can set aside two men for these jobs, but the concept of "attention to the details" will make each and every facility more pleasing to the members and golfers.

Clean Cut: Mowing Techniques

BY JOE DOUGHERTY

Presidential C.C.

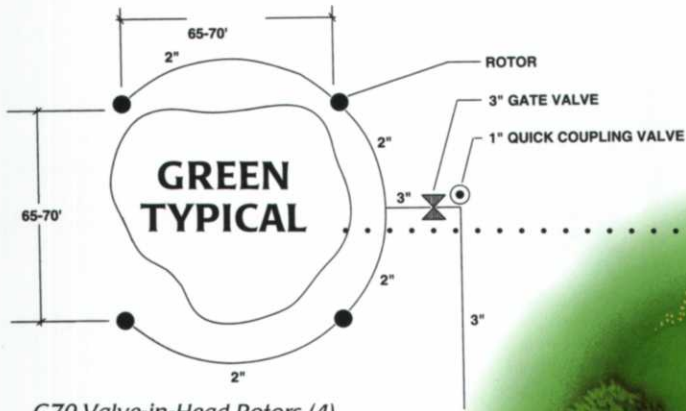
As any golfer knows, when a putt rolls true, or when your balls sits up on the fairway or can be seen in the rough, it's generally the result of good mowing technique, courtesy of the golf course maintenance department.

Although courses differ in levels of perfection, the ultimate goal is to get the job done well enough to make play more pleasurable and appealing to the eye. The three factors that make that happen are operating ability, a good and thorough mechanic and the superintendent with the plan, vision and motivation.

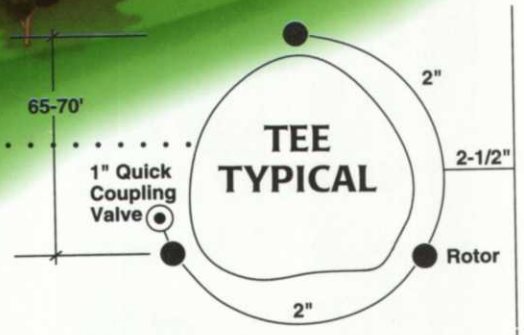
"An operator is as good as his equipment," they say, but experience wins out. A person who cuts fairways on the same gang-unit for ten years can hear and see when their machine is faulty and report it to their mechanic. A new operator must be trained to think this way, be attentive



Rob Haas, superintendent of Miami Shores C. C. with a walk-mowing crew member.



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Presidential C. C. mechanic Jim Burns lapping greensmower reels.

and have pride in the job being done. Learning to communicate with the mechanic is very important to get the job done efficiently.

The mechanic must be thorough in their upkeep of the equipment and the sharpness and consistency of the reels and blades. Oil fluid checks, lapping, bearing checks and gauge reading will promote consistent results.

When lapping reels, grit density should conform to the cut (120 Gr/greens, 80 Gr/fairways and 50 Gr/roughs). A good reel man who does nothing but grind

reels and bedknives is a great asset if your budget allows it.

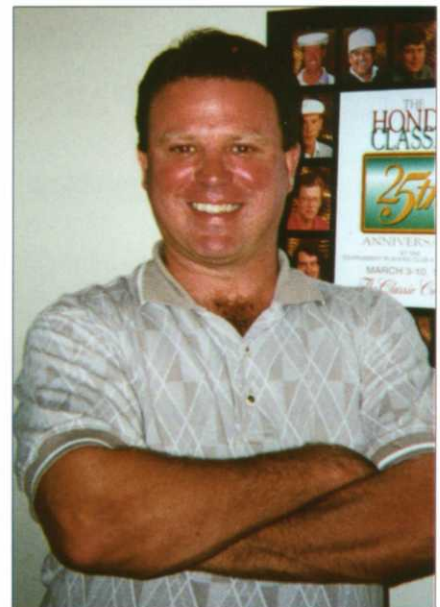
The superintendent's responsibility is to coordinate all of this and keep close watch on mowing heights and shape of cuts to promote visual delight. Mowing is more frequent during the rainy season, so define your cuts for the winter months in November.

Most courses use triplex mowers to cut their greens, but some still use walk mowers, which are better because they cause less stress to the turf and promote a faster ball roll.

Award-winning landscaper and former golf course builder for the Fazio Group, Rob Haas (my good friend and superintendent at Miami Shores C.C.), walk mows every day with four men doing five greens each with beautiful results. Our budget at the Presidential C.C. is somewhat lower, so we use two triplex mowers to cut the front and back nines. We have quick, true greens because our mechanic, Jim Burns, stays on a regular program of maintenance (checks fluids daily, lap weekly, bearings and tire pressure every 10 days, etc.)

On the other end of the spectrum is Mark Rice, superintendent at the Blue Monster at Doral C.C., home of the Doral Ryder Open. He maintains with walk mowers less than 1/8-inch height on his greens and double cuts every day for the tournament.

Keep the machines running clean and sharp, and motivate the operators to have pride in their work. Be creative, like my buddy Tony Ursoleo, superintendent at Bonaventure C.C. and Resort, who cuts a pro-walk from the tee to the fairway or a sweeping approach to the par three holes. Golfers always appreciate a clean-cut course.



Joe Dougherty, superintendent of the Presidential C. C.

Reel Maintenance

BY JOE ONDO, CGCS

Greensmower reels are checked twice a week and lapped once a week during the bermuda growing season. Reels are checked and lapped every other day for the first two weeks after seed has germinated and twice a week after seed is up and going good.

Our mechanic usually mows nine greens twice a week. We feel it gives him a chance to see how the mower is performing that week, and we can use him to fill in for someone who is sick or on vacation at certain times of the year.

Being a public golf course, we don't do much extra topdressing other than at aerification time, which we usually do three times — in the late spring, early summer and fall.

After topdressing, reels are usually

raised 1/16 inch and greens are skipped for a couple of days, until they are mowed again and lowered back, usually, to 5/32" after about a week. Instead of topdressing, greens are verticut lightly more often (every week to ten days) or greens are double cut two or three times a week.

We are not looking for fast speeds, just smooth and consistent ones for our customers.

All these practices are during transition, summer, and into the fall before overseeding. Any grinding for green and tee-mowers is usually done about a week after topdressing or a week before overseeding dates.

Greens (5/32") are mowed daily except after topdressing and the first week of overseeding. Tees (7/16") are mowed three times a week. Fairways (3/4") are

Our mechanic usually mows nine greens twice a week. We feel it gives him a chance to see how the mower is performing that week, and we can use him to fill in for someone who is sick or on vacation at certain times of the year.

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mowed three times a week during spring until Primo is sprayed, then we go to twice a week during late spring, summer and fall, and back to three times until daylight savings ends.

At that time it is usually done once a week to clean up divots until springtime.

The rough and banks are usually mowed once a week at 1 1/4". Bunkers, fences and the clubhouse area is Flymo work weekly.

Lakes and canals are done about every three weeks unless Primo is used. Then it is on an as needed basis.

Heights of cut pretty much stay the same on a yearly basis except the greens, which are raised to 1/4" during seeding and gradually lowered until we reach 5/32".

We have two Toro Greensmasters and two Jacobsen Greensking IVs for tees, collars, approaches, some small par 3 fairways, the practice area and the clubhouse area. One Toro Hydraulic Seven Gang is used for fairways—we can change height of cut quickly and mow banks and

some rough if needed when we get behind.

There's one Toro Parkmaster Seven Gang with ground driven reels for roughs and banks. We feel that we don't have enough bunkers (22) and miscellaneous areas for a trim mower, so Flymos and string trimmers do all that work.

We have four full-time employees, one part-time (20 hours per week), one mechanic and one landscape person, plus myself, on our crew. Everyone is mowing or changing cups on Monday, Wednesday and Friday so Tuesday and Thursday are days we use to spike, verticut, spray, fertilize and do other maintenance work.

Every full-time person usually has to work one day on the weekend unless we need more for a shotgun start or special tournament.

After morning work, bunker work, Flymo work, mowing banks and roughs is done from #18 backwards, so we only bother one group of players at a time. This schedule gives the mechanic time in the morning to do maintenance on the

big equipment and the afternoon time for the smaller pieces.

Clippings are caught on greens and tees, collars and approaches and scattered in the rough. Fairways that leave clippings early are usually removed later, or the operator starts later in the morning. This is not a problem when we use Primo.

The green mowing pattern is changed daily, while tees, collars, approaches and par 3 overseeded areas are striped during the season. Fairways are not striped but changed from right-to-left to left-to-right every other time.

If all we had to do was fertilize and mow grass here at Winter Pines, it wouldn't be too bad with our crew. But throw in all the curve balls Mother Nature has in store for us at times, and it can get pretty hectic. As with any operation, we have made changes and fine-tuned our schedule during the 17 1/2 years I've been here, and we will continue to do so in the years to come.

'Detailing' the golf course

BY LARRY DREW
AND RON SCHURK

Willoughby, G.C.

Two men are assigned to course grooming. They are the "detailers." One tends the front nine, one the back nine, and they team up to care for the driving range.

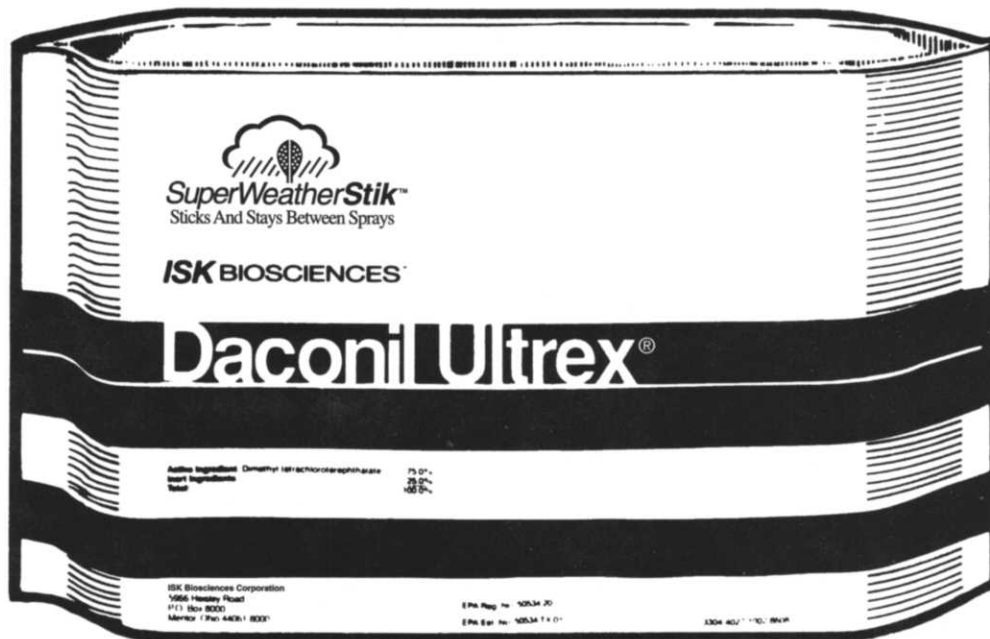
Each man has a golf cart equipped with a sand bucket for divots, a weedeater, loppers, pruning shears, hedge clippers, a blower, a machete, a weedpuller, a rake and a ten-gallon spray tank.

They also pull a small trailer to collect debris, etc.



Fully equipped Detail cart with long time employee, Larry Drew. Photo by Kevin Downing.

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*Pine needle accumulation on the tees causes havoc to mowers and is unsightly. Detail personnel takes care of this problem before play gets there.
Photo by Kevin Downing*

Normally their pre-play routine starts by sweeping divots and tees from the range using a mechanical “Parker sweeper,” which is pulled behind one of the carts. Then fairway divots are filled and miscellaneous debris is picked up. It is also the time to trim fairway drains and irrigation heads as needed.

Once play begins, work shifts to areas that are less likely to interfere with golfers. These duties include filling the divots, trimming cartpaths, miscellaneous weeding, spraying beds and tree rings, and range work.

We are six weeks into the program, and it is starting to show results. Cartpaths are clear, tree rings and beds are sprayed and, although a great deal of work remains, at least a start has been made.



*Members recognize the need for special attention throughout the course. Each employee is assigned a select nine holes. Part time employee, Ron Schurk, works four days a week on the front nine.
Photo by Kevin Downing.*



*If a drain needs trimming, the detail employees have their equipment with them.
Photo by Kevin Downing.*



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Cypress Run

Since we are a private club, we have the luxury of closing when necessary. From June through October the course is closed all day every Monday. November through May the course is closed until 10:00 a.m. every Monday

BY MICHAEL J. SWINSON,
CGCS

Cypress Run is a private, equity-owned golf club. We accommodate approximately 30,000 rounds of golf per year. Having such a limited number of golfers is helpful to our maintenance program. Our members understand that our practices are necessary and for their benefit.

Since we are a private club, we have the luxury of closing when necessary. From June through October the course is closed all day every Monday. November through May the course is closed until 10:00 a.m. every Monday.

We maintain approximately 110 acres of bermudagrass. All of our turf is 15 years old. Our 419 fairways cover approximately 30 acres. They are mowed all year a maximum of three times a week, usually Monday, Wednesday and Friday with two Toro 5100D lightweight fairway mowers.

One mower is used for each nine. The height of cut in the summer months (June through October) ranges from .437 to .5, depending on weather conditions. From November through May, when we have overseeded with perennial ryegrass, our height of cut is between .5 and .562.

We change our direction of cut each time we mow using the clock method. This helps us reduce grain and provide a smoother playing surface. For special tournaments we double cut as needed.

To produce continuous striping we will mow in the same direction for several days in order to "burn in" our stripes just prior to an event. This gives us the TV look, especially in the winter.

Most of our mowing is accomplished in the mornings by noon. In the afternoon, any clippings left on the fairways are either re-mowed or blown off with a

tractor-mounted 3-point hitch blower.

Our six acres of 419 tee tops and green collars are mowed all year a minimum of three times a week, usually on Monday, Wednesday and Friday depending on the weather. The height of cut corresponds with the fairways. The direction of cut is changed each time to help reduce grain and provide a smooth playing surface. The tee tops, green collars and approaches are all mowed with two Toro 3000 Greensmaster mowers using no baskets.

Operators are instructed to mow each set of tees on the hole in the same direction. To accomplish this, the operator picks a fixed point such as a tree, post or the center of the fairway with which to line up his mower.

Starting from the back tee he proceeds to make a down "pass" on that tee and each consecutive tee in a straight line to his reference point. The operator then mows the next pass as an up pass and so on until the tees are completely mowed.

No matter how the tee is shaped, the stripes will all match on each tee when viewed standing on them looking out to the fairway. This is usually done on Fridays and for special tournaments — it's also known as "tournament cut."

The green collars are mowed in two directions. The first pass is made clockwise, and the second pass is made counterclockwise. The collar is then mowed out to the approach for approximately four passes parallel with the green.

No baskets are used. The height of cut is maintained in conjunction with the fairways, usually between .437 and .562, depending on the weather and overseeding.

Our 419 rough covers approximately 70 acres. This includes all green slopes,



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fairway rough and lake banks. The height of cut is between .75 and 1.125, depending on the weather and time of year.

For our large areas of turf we use two Toro ground-driven seven-blade pull-behind rough units. We have chosen this type of unit due to its dependability, lack of major hydraulics and its weight.

The operators mow their own nine first and then switch over to mow the other nine. They double cut in areas where they can maneuver. Two mowers are necessary in our situation to provide a level playing surface so that the ball sits on the grass instead of in it. This helps keep our rough tight most of the year.

For all other bermuda turf areas where the pull-behinds cannot mow, such as areas between the sand bunkers and the green or sand bunker fingers, we use a four-wheel drive Toro 3500 diesel mower.

Although this mower is large and has major hydraulics, it provides an exceptional cut when operated properly. The operator must be cautious using this mower on slopes and around tree rings to

prevent a tire burn on the turf. We have found that with this piece of equipment it is best to have only one dedicated operator.

Our greens are Tifdwarf bermuda that are maintained between .156 to .125, depending on the time of year, weather conditions and overseeding with 100% Poa Trivialis.

The greens are hand-mowed approximately 300 days of the year. They are not mowed on Mondays, giving them a day of rest and also enabling us to fertilize, verticut, topdress, etc. We own eight Toro Greenmaster 1000s with four of them being used daily and the other four as backup and for special tournaments.

The change to walkmowers was made in 1992 in order to eliminate the triplex cleanup tire ring and to prevent hydraulic leaks. All mowing is done in the early morning unless we are in the beginning of our overseeding, when we start mowing about 10:00 a.m. dry with no baskets, so as not to pick up seed.

Perimeters are mowed four out of the

six days, depending on stress conditions. The direction of cut is changed daily using the clock method. Our Saturday cut is 6-12, also known as the "tournament cut."

For special tournaments we will double cut and/or roll to accomplish the desired speed. We always mow with baskets except the day after granular fertilization. Operators are also instructed to empty their buckets frequently, especially before making their perimeter pass.

Throughout the year we use PGRs, especially on fairways in the rainy summer months. They are also used on bunker edges and tee tops. We recently used them on our greens at low rates to help with the mutations and contamination.

We were happy with the results and have now made PGRs a part of our overall maintenance program in order to help reduce mowing.



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FGCSA Turf Research Update

For years the FGCSA has had a very active committee involved in bermudagrass research specific to golf courses. We have been involved with the University of Florida's Fort Lauderdale Research and Education facility and have supported our technician, Marcus Prevatte, who is responsible for upkeep of the bermuda observation plots.

Our yearly expenses for this operation range between \$25,000 and \$30,000 and we have enjoyed a great relationship with Dr. Monica Elliott, Dr. David Buchanan, Dr. John Cisar and all of the additional support personnel at the experiment station.

The funding for this project has predominantly come from the following sources

1. Proceeds from the Turf Expo sponsored by the South Florida GCSA.
2. Various donations by other FGCSA chapters.
3. Proceeds from fund raising golf tournaments.
4. Donations of cash or materials from companies.
5. Revenue from rebate programs like CIBA, GASH, Valent and Dow Elanco.

This year we have added the involvement of the Florida State Golf Association which promotes amateur golf and golf related services.

The financial philosophy of the committee has been focused around two goals which are to keep a year's worth of operating expense in reserve and encourage participation from companies if we are involved with product evaluation.

Another goal has been to keep a core group of individuals intact and add people when the situation warrants or people with an interest. The benefits of this program have been tremendous but there comes a time for change within the committee and a reevaluation of our state-wide programs.

Starting in the Fall of 1996, we have combined a majority of the individuals from the FGCSA Research Committee into the FTGA Awards (Research) Committee. They will still be two separate bodies, but there will now be a strong emphasis on continuity as we enter a new era of cooperation with the University and the turf industry.

With the advent of the Envirotron in Gainesville and the new research facility in Milton, Florida, we will be called upon to assist these new programs. As part of this new-found enthusiasm for turf throughout the state, the FTGA has begun working with IFAS to encourage hiring an overall turfgrass coordinator who can better serve the industry and the University.

Speaking as an 18-year volunteer, this kind of coordination should enable our industry to gain more valuable information with a lot less confusion. Funding the right individual will not be an easy task. In the meantime, Dr. Jerry Sartain will be working with the FTGA and the FGCSA to implement this cooperation between the associations.

The following is a suggested time frame for reviewing industry needs:

December— Committee meets with coordinator to discuss research needs and industry problems.

January— Requests for proposals are distributed to the University Experiment Station. Budget amounts are set by the committee.

February— Proposals are submitted and in turn distributed to committee members.

March— One day proposal review meeting. Proposal presentations by researchers. Breakout

meetings. Awards committee convenes for discussion and final decisions. Researchers meet with coordinator to discuss concerns. Discussions and approvals. Group discusses approved projects and ones that need further work for re-submission next year.

July — Experiment station to provide executive summary of ongoing projects and mail to committee members.

August or September — Researcher presentations at initial session of annual FTGA Conference.

We don't have all the answers, but at least a good first effort is being implemented to improve the current situation. One hurdle we will still need to cross is the industry requests for more product evaluation and how this fits into the University format.

Please give me a call for questions or comments.

K. D. Downing
FGCSA Research Committee Chairman

Editor's Note: Congratulations are in order! Kevin Downing was recently elected to the Board of Directors of the Florida State Golf Association. With this organization also involved in funding turfgrass research via the Cal Korf Turfgrass Research Program we now have strong representation in all major turf research efforts in the state.

ETHICS (*eth' iks*) *n.pl.* 1. *The principles of honor and morality.* 2. *Accepted rules of conduct.* 3. *The moral principles of an individual.*

“Morals are an acquirement — like music, like a foreign language, like piety, poker, paralysis — no man is born with them.” — Mark Twain

That is the literal definition of the word, to clarify its meaning for each of us. The quote may be telling each of us that we must work at achieving and upholding morals, or ethics, such as our code of ethics for the Greater Detroit GCSAA.

On par with the President

Pertaining to that code of ethics, its interpretation and all of its ambiguity, allow me to present three fictitious scenarios that each of us could find ourselves involved in at any time during our careers as golf course superintendents. These three scenarios may or may not involve ethical or moral questions. You be the judge. Ethical questions can be

interpreted and argued by both sides of a conflict until each is blue in the face. In my humble opinion, there are simply too many excuses that can be dreamed up to explain away a question of individual morals or ethics when a much wanted, or much needed, job is available.

So as you read on you will find that I personally only have one thought on the matter of ethics — it is one simple idea. An idea that may enable us to prevent and to solve many of the problems associated with our code of ethics. An idea to put an end to the useless and often harmful rumor mills. An idea to, in the long run, strengthen professional ties amongst us all. I am certain there are many other possible ideas as well. This is just my one simple idea. I urge you to please consider its use. Its potential benefit could someday be realized by each and every one of us.

Scenario #1: Paul Annuia has been an assistant superintendent for three years. A head superintendent position that he feels qualified for is rumored to be available, but has yet to be

publicly advertised as open. Paul decides he would like to apply for the job. Before Paul proceeds any further, what should he do? Answer: Call the present superintendent.

Scenario #2: Harry Roote is a successful and well-known superintendent, employed at his present position for nine years. One day a member of the board of directors at a nearby country club plays golf at Harry's course and is duly impressed with the playing conditions. The member tracks Harry down on the golf course and proceeds to tell him that his club is very disappointed with its present superintendent and that they are letting him go. He further states that he has the ability to hire a replacement and asks Harry if he would like to have the job. Before Harry proceeds any further, what should he do? Answer: Call the present superintendent.

Scenario #3: Dolly Spot is a golf course superintendent who has a friend who owns a golf course across town. The friend just recently purchased the course and doesn't have much, if any, experience with the golf course industry. Since Dolly is a friend and has much experience with golf course management, the owner looks to Dolly for advice. He asks Dolly to visit the golf course, take a tour, and give him any recommendations that she may have on the care and upkeep of the property. Before Dolly proceeds any further, what should she do? Answer: Call the present superintendent.

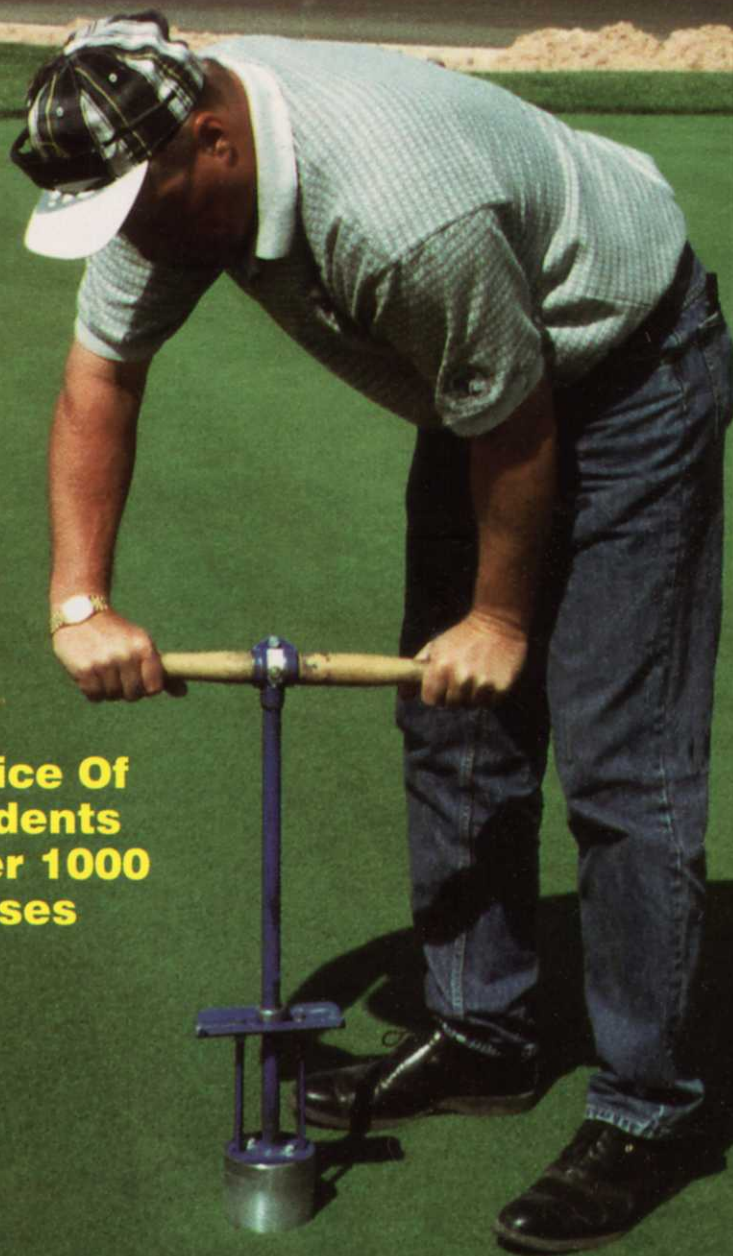
There you have it. That is my simple idea and my simple solution to 99.9% of all code of ethics dilemmas: Call the present superintendent. In each of the scenarios, a simple phone call could prevent an undesirable

Editor's Note Ethics vs job changes is always a thorny issue in our business where professional courtesy, personality, common sense, honesty and fairness all get tangled up with expediency, callousness and restraint of trade. I came across a simple straight forward attempt at educating others to the issue in Paul DuShane's President's Message in the Fall 1996 issue of Greater Detroit GCSA's newsletter, *The Patch of Green*. It's worth spreading around.

BY PAUL DUSHANE

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We could all do ourselves a favor to be as honorable and moral as we possibly can, whether pursuing job openings or offering a helping hand

situation from ever occurring. In scenario #1 and #2, Paul Annu and Harry Roote should call the present superintendent to:

1. Confirm that the position is open.
 2. Offer congratulations if the superintendent is leaving on his own accord, or condolences if the superintendent was let go.
 3. Question the superintendent on particulars about the position and the golf course.
 4. Ask for any advice or helpful tips.
- If unable to reach the present superintendent for some reason, such

as if he or she has already left the position, try phoning the individual at home if at all possible. Most superintendents will be happy to offer any information they can about a job.

Communication between professionals can prevent many undesirable situations and uncomfortable or untoward feelings from spoiling a potentially beneficial relationship. The worst thing that could happen would be for the individual to say "no." At least in your mind you will know you tried to communicate.

To conclude this statement about ethics and morality, please ponder the following quote and remember its meaning as you deal with your fellow golf course superintendents on a professional level: "I would rather be the man who bought the Brooklyn Bridge than the man who sold it." — Will Rogers

We could all do ourselves a favor to be as honorable and moral as we possibly can, whether pursuing job openings or offering a helping hand.

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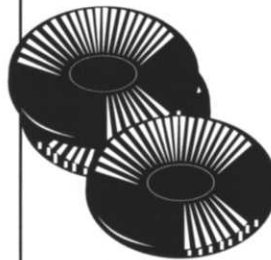


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Rub of the green

Out of Bounds II

BY RANDY ASHTON, GCS

Southern Golf Club

Having been in the golf course business for almost 20 years, I felt it was time to reward the people that have helped me survive its ups and downs.

The Agronomy Award: To the golfer who once stopped me while aerifying greens and insisted that I cease putting sand on the greens and start using soil instead.

Honorable Mention: To the individual who advised me that if I watered the greens for two hours every night during the summer, I would not have a care in the world.

The Health and Safety Award: To the obese golfer who approached me with a

beer in his hand and a cigarette dangling from his lip, demanding to know what I was spraying on his greens and if it would kill him years later. I assured him he had nothing to fear from any chemical I might spray.

Honorable Mention: To the golfer who plays golf because his doctor told him to get more exercise. This is the same fellow who always uses a golf cart to drive up to the slopes and park on collars. I have seen him get some useful exercise, however. He may spend five minutes or more trying to dig his golf ball out of the cup with his putter.

The "I Leave My Brains at Home When I Pick Up a Golf Club" Award: This is a tough one. I have noticed that when seemingly intelligent people get to the golf course their reasoning ability, eyesight and hearing leave them. How else do you explain a normal-thinking human looking directly at a yardage sign that states, in bold letters, "Wet Paint," then reaching out to touch the sign,

promptly becoming agitated, and expecting me to do something about it.

But this award, I believe, should go to the golfer who, after approaching a roped off area and squeezing through a two-foot walkway with his cart, kneels down and bends metal stakes and tells you, when confronted, that he thought the opening was for golf carts.

I cannot blame only golfers in this business, so my last award goes to some of my previous employees. I watched them do many strenuous tasks like laying sod all day in the August heat, weeding and edging bunkers and I tried to determine what the most distasteful job in this business actually was.

The Toughest Job in Golf Course Maintenance Award: To the employee who finds the act of pulling the dip stick out of an engine and checking it unbelievably loathsome.

Editor's note: Credit Georgia GCSA's magazine, Through the Green .

Duststorms Got Members Trading Carts For Camels?



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Turf Trivia

Editor's note: Here's another installment in the series of little publicized or overlooked benefits of turf — golf or otherwise. I hope you take the opportunity to copy them and put them up on locker room or pro shop bulletin boards. It's an easy way for you to help educate the golfing public at the grass roots level.

Soil Building

Topsoil takes thousands of years to develop. It is lost quickly by wind and water erosion. Turfgrasses finger many fine rootlets into all crevices of the soil where they grow and as they decay, they turn clay into topsoil! Grass is the most effective plant in conditioning the soil.

Lawn grass roots are continually developing, dying off, decomposing and redeveloping. Every individual plant of Kentucky bluegrass produces about three feet of leaf growth each year under favorable growing conditions.

The average lawn produces clippings at the rate of 233 pounds per 1000 square feet a year. By leaving clippings on the lawn and allowing them to decay in place,

the equivalent of three applications of lawn fertilizer is made.

This process builds up humus, keeps soils microbiologically active and, over time, improves soils physically and chemically. Microorganisms in the soil feed on grass roots.

Worldwide grassland soils are best in terms of productivity. Grass improves the soil by stimulating biological life in it and by creating a more favorable soil structure for plant growth (*Hamm 1964*).

Erosion Control

Lawns protect our natural soil resource. Grass roots hold the soil in place, and grass leaves act as a covering to protect soil particles from blowing or washing.

Soil erosion is one of "the most pressing environmental issues facing the U.S. today. Nearly 6 billion tons of soil wash or blow away each year, a figure now exceeding the total amount of erosion experienced during the devastating 'Dust Bowl' years of the 1930s." This soil erosion costs between \$6 billion and \$16 billion per year. All of us share in paying this cost (*Payne 1987*).

Wind causes loss of soil by erosion of bare earth. The lighter soil particles, lifted by the wind and held in suspension as dust, create a safety hazard by reducing visibility. Soil particles that are larger may be dropped and deposited, and in the process act as abrasives. Even a 2-inch bare spot on the ground can be subject to



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erosion, so plant densities of at least 70% are recommended. A good turf cover meets this need.

The most common soil-eroding agent is water. The impact of raindrops on bare soil displaces the particles and causes them to mix with water and be carried away. The leaves and stems of grass plants cover the soil and intercept the raindrops. They also help to control runoff by interfering with the water as it flows across the ground, slowing the velocity and allowing water to infiltrate the soil (*Hamm 1964*).

Turfgrass roots penetrate into the soil and hold particles so that they are not lost by wind and water erosion. Fine fibrous roots make up an extensive, branched system that is characteristic of the grass plant. Up to 90% of the weight of the grass plant is in roots (*Brown 1979*).

Grass binds the soil more effectively than any other plant. One single grass plant grown under ideal conditions has a tremendous root system — 387 miles of roots (equivalent to the distance between New York and Montreal!) Howard Dittmer at the University of New Mexico estimated that a Kentucky bluegrass plant can have 2,000 root branches (*Owens 1980*).

Roots also loosen the soil and add organic matter, both of which increase soil permeability so there is less water runoff. The denser the cover, the more efficient the turf is in preventing erosion (*Watschke 1987*), and grass plants remove soil particles from silty water. Studies show healthy lawns absorb rainfall six times more effectively than a wheat field and four times better than a hay field (*Anonymous N 1987*).

Plant transpiration pulls water out of the soil, helping to keep the soil from getting waterlogged (*Margolin 1975*).

When new roads are being built, grass seed or sod is put in place as soon as the proper grade is made in an area to prevent soil erosion. The medians are often protected by grass even before the road surface is put down because without such protection, soil would move with wind and water and cover the roadway (*Heady 1968*).

Golf turfgrass in the United States protects two million acres against soil

erosion. Numerous golf courses have been built on old waste landfills, turning unproductive regions into useful sites and undesirable locations into desirable ones. This is direct land conservation plus conserving topsoil by grassing highly erodible land with turfgrass (*Payne 1987*).

Silt has filled many water systems around the world. The U.S. Soil Conservation Service found that reservoirs with

dams averaging 30 feet high often filled in completely with silt in 29 years. Grass areas protect soil from eroding and prevent the loss of lakes and reservoirs (*Heady 1968*). They also lessen the cleanup of drainage channels (*Schery 1976*). These water storage spaces are important for water supply and also provide desirable recreation areas.

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No Rhyme Nor Reason

BY JOEL D. JACKSON, CGCS

Last winter when I wrote the free verse editorial titled, *The Superintendent*, it generated more calls and comments than any other editorial I had ever written. One fellow superintendent even sent me a framed copy of it.

So this year, I thought I'd share some other verses I wrote about golf courses. Don't panic. This isn't a trend. Consider it a belated Christmas/New Year's gift from an editor who thanks you for the opportunity to write about what we do. I hope the following lines conjure a memory or two or give you pause for thought about this great profession.

Fairways

Broad shouldered and muscular
Like pack animals
The rolling fairways carry the burden of play
Without protest

Seldom pampered and often taken for granted
Serving their masters in silence
While the greens, like spoiled children
Clamor for attention

The fairways become like the eldest sibling
Having to rapidly mature beyond actual years
To help the golf course family
Withstand the daily assault on its character

Sometimes they receive honorable mention
For their yeoman service
But mostly, they leave the spotlight and adulation
To their little brothers, the greens

Take a moment and praise the fairways
They carry us from tee to green in such grand fashion
Never asking much in return
Just a little respect and dignity

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From sunrise to sunset
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meet the demand

We can hardly get the turf mowed and
get out of the way

Rainy days and frost delays cause
nothing but chaos

As precious tee times are ignored by
fickle Mother Nature

The Finance and Accounting
Department smiles at the bottom
line

As revenues skyrocket off the chart
While we watch the turf on the course
disappear

Under the endless grinding parade of
cleated feet

Days of cloudy cold fronts rob the turf
Of its vigor and nutrient reserves
And agronomic explanations of
conditions

Are met with indifference by those
seeking perfection

Overseeding decisions made in the
fall

Are either praised or cursed as the
winter unfolds

And the well made plans of
management

Become a roll of the dice at the mercy
of the elements

Somehow the course will survive
Battered and bruised, but alive
Eagerly awaiting
The renewal that always comes with
spring



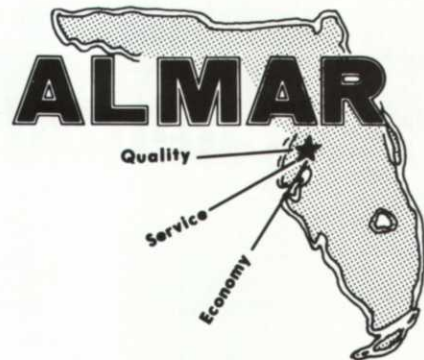
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Thunderstorm

First I heard it,
Rumbling off in the distance.
Then I saw it,
Purple, black and grey.
Rushing in from the west,
Devouring the horizon.

Blotting out the sun,
It turned day into night.
Illuminated only by
Blue-white lightning flashes.

Crack! Pow! Boom!
Cannon shots. Tympani drums.
The thunder claps shattered the clouds
And rolled across the heavens.

Then the rain began.
Big fat splattering drops at first.
Then like a solid grey wall,
Shutting out the world.

Puddles turned into lakes and rivers,
And then into tumbling waterfalls.
Carving deep canyons
In the faces of the sand bunkers.

In twenty minutes it was over.
The golfers and the crew
Emerged from their hiding places
To resume the serious business of golf.



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Dedicated spray vehicle chassis, 2-passenger, 200-gallon (760 L) rated capacity, low profile sprayer, 27-hp (20 kW) liquid-cooled engine, 4-wheel 11.16:1 2-speed Hypoid axle, coil springs with straight axle front suspension, front and rear shock absorbers, 18 x 9.50-8 front tires, 24 x 13.00-12 rear tires, wide seat and backrest, 4-wheel hydraulic brakes, light switch, hand throttle, tachometer, hour meter and battery, hydraulics with remote outlets, OSHA certified ROPS standard equipment, variable speed governor.

• TANK CONSTRUCTION

200-gal (760 L) capacity; low profile; heavy-duty, chemical resistant, lightweight molded fiberglass tank mounted to rugged carbon steel frame; color impregnated in exterior gel coat to ensure extra long life; deep suction sump; antivortex plate; 16" (406 mm) hinged leak-proof twist-lock lid with air vent is located on corner of tank for ease of filling

• CONTROL OPTIONS

SDI Electronic Boom Spray Control: Console includes pressure gauge, pressure adjustment switch, master and individual on/off switches, electric pressure regulator, 3 solenoid valves, boom feed hoses, console, mounting stand

• AGITATION

Triple Venturi jet agitation has adjustment valve on agitator and bypass

• LID

16" (406 mm) diameter, hinged, leak-proof twist-lock lid with large air vent

• SIGHT TUBE

External sight tube resists discoloration and includes calibration marks for checking tank level

• PUMP

Hydraulically driven centrifugal pump attains up to 60 psi with 55 gpm

• STRAINERS

Nylon lid strainer basket and Hi-Flow™ clear bowl suction strainer with high-impact nylon construction; stainless steel screen, 40-mesh standard

• FRAME

Heavy-duty fabricated carbon steel channel frame, hydraulic cooler attaches to frame and provides reservoir and cooling for system; must be used on 1992 or newer Turf-Truckster

• BOOM ASSEMBLY OPTIONS

(Boom assembly not included with tank)

All boom assemblies feature self-returning boom hinges for forward or rear breakaway, easy fold-up for travel.

20-Ft "Wet" Boom: 3-section, stainless steel pipe; 12 diaphragm check nozzles on 20" (508 mm) centers with 12 XRVS extended range flat fan tips

20-Ft "Dry" Boom: 3-section, adjustable spacing with 12 diaphragm check nozzle bodies set on 20" (508 mm) spacing with XRVS extended range flat fan tips

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The Logo Man

I'll tell you true,
I don't feel dressed.
If I don't have a logo,
On my sleeve or my chest.

Got my Jacobsen hat,
And my Toro jacket.
My Rain Bird shirt,
With the three button placket.

Got a Swinging Mickey shirt,
and white Goofy shorts.
I even have three hats,
From NBC Sports.

Got shirts like Ashworths, Antiguas,
Polos and Gants.
Also have green, brown, and blue pairs,
Of new Docker pants.

Burlington Gold Toe,
Is the brand of my socks.
And I jog around town,
In pumped up Reeboks.

Shark on my sleeve,
Bear on my chest.
Umbrella on my collar,
I'm really well dressed.

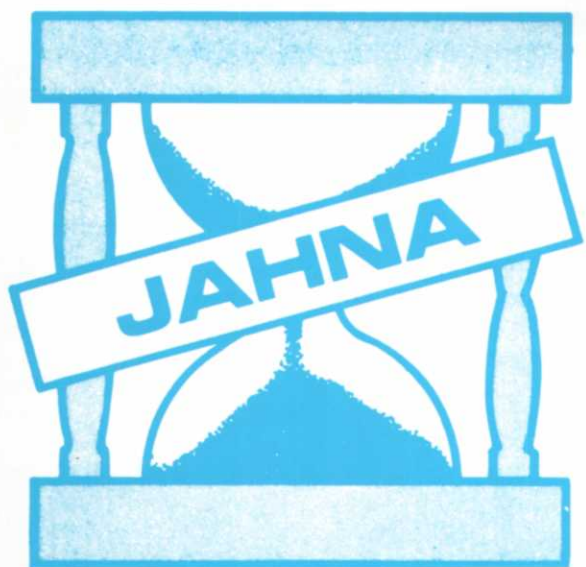
Sartorial splendor,
Was never my plan.
Fate had me picked
as the new Logo Man.

Sundown

Was there ever a better time
to see a golf course
than at sundown?

All the cares and worries
and harsh realities of the day
are softened.

And in the twilight,
the turf turns from tweed
into velvet.



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1997 Photo contest - Category 3 — Native plantings, Gulf Muhly. No. 17 tee at Disney's Eagle Pines GC. Photo by Joel Jackson

3rd Annual Florida Green Photo Contest under way

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

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

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

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

Prizes

- 1st Place (\$100) and 2nd Place (\$50) in each category
- Editor's Choice-Best Overall Photo - \$100.
- All winning entries published in the Fall 1997 issue.

Easy Rules

1. Color prints or slides. Only one entry per category.
2. Photo must be taken on an FGCSA member's course. Photo must be taken by an FGCSA member or a member of his staff.
3. Attach a label to the back of the print or slide which identifies the category, course and photographer. **DO NOT WRITE DIRECTLY ON THE BACK OF THE PRINT.** Each photo shall be attached to a sheet of 8.5 x 11 lined paper. Line up the photo with the vertical and horizontal lines to square the photo on the page. Attach the print to the paper using a loop of masking tape on the back of the photo. Slides must be easily removable for viewing.
4. A caption identifying the category, course and photographer should be typed or printed on the sheet of paper below the print or slide.
5. Judging will be done by a panel of members of the FGCSA not participating in the contest.
6. Mail entries in a bend proof package to: Joel D. Jackson, 6780 Tamarind Circle, Orlando 32819. No entries accepted postmarked after August 15, 1997.

Thanks to Shelly Israelson and Bob Sanderson for responding to my entreaty in the last Florida Green for answers to explain why so many

superintendents don't participate in the various turf research rebate programs we've established. The fact that they were the only ones who responded makes me conclude that apathy is, indeed, the primary reason.

Reasons Bob and Shelly offered included: distributors shipping a

generic brand even though a name brand was ordered; tight budgets closely monitored by accounting departments; and just being too overwhelmed by job and family concerns to get involved.

Bob also expressed a concern about how much of the money we donate actually makes it to the research program or scholarship we designate. For Bob and everyone else who doesn't know: the reason we like to put everything through the FTGA is because the FTGA has a special arrangement with IFAS. One hundred percent of every dollar we donate goes directly into the project we designate. Most other contributions are charged about 25% for overhead, so we are fortunate to be given this "favored" status.

I am extremely happy to report that the Valent Corporation will still be making the \$20,000 donation (\$10,000 each to the FTGA and FGCSA) for turf

research we had projected. There were concerns the effect on Orthene sales from the introduction of Chipco Choice and the generic Orthene. I hope all superintendents who have contact with Peter Blum will thank him for his efforts in initiating this program.

On November 18 and 19, FGCSA President Dale Kuehner, FTGA President Roy Bates, Tim Hiers, David Barnes, Ron Garl and I went to Tallahassee for a golf industry summit meeting. The meeting was organized by the PGA Tour under the auspices of the Florida Sports Foundation.

The purpose was to bring together the various golf industry organizations to express views and concerns, and see if there was enough interest and support to warrant the formation of an umbrella organization. The consensus was, yes an umbrella organization was needed to collect and disseminate pertinent information and to help pull the golf industry together for mutual benefit.

Without a doubt, thanks in large part to Tim Hiers' outstanding presentations each day, our contingent seemed the best organized and most professional of any of the organizations in attendance.

A follow-up meeting was held on Dec. 4 in Orlando, and Roy Bates reports that he volunteered the FTGA as the interim caretaker of this as-yet unformed association.

We all are hopeful that this is the beginning of an organization that will finally unite the golf industry's various factions into the economic and political force it can and should be.

Dark Clouds and Silver Linings

Mark My Words



Mark Jarrell, CGCS Assistant Editor

There's more than fertilizer in this bag.



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I have to admit my skepticism. After all, I did put a lot of time and effort into the failed Florida Golf Council a few years ago.

There seem to be so few outside of our side of the business who can see the big picture or have a vision of the future. A perfect example is the Hobe Sound golfer who wrote complaining to Golfweek after their issue completely devoted to "Golf and the Environment"

Mr. Ken Chilvers wrote: "I find it impossible to believe that Golfweek thinks its customers (avid golfers) would be

pleased to have it devote virtually an entire issue to 'Golf and the Environment.' What could be adequately said in three paragraphs you've managed to cram into thirty pages or so... come on! We buy your magazine to read about golf. Not to have some liberal nut try to make us feel guilty about playing a great game."

If Mr. Chilvers represents the "average golfer," (and I think he does, which is why I quit writing for *Golfweek* after eight years), then how are we ever going to harness all this potential golf industry clout when our typical customer doesn't

have a clue about the influence and power of the environmental movement and its correlation to escalating golf course development, construction, and maintenance costs?

Too many golfers categorize golf as just a game like tennis or bowling are just games, and fail to acknowledge golf's unique connection to the environment or their responsibilities as players. The mentality seems to be, "Golf costs a lot to play. I pay the freight, and I don't want to be bothered with the details. If it begins costing too much, fire the superintendent and get somebody in that can do it cheaper!"

Thank God only a small fraction on the working side of the golf industry has this attitude, or golf would already be dead. If golfers don't begin getting a clue, golf will be dead in the not-too-distant future.

Enough negativity!

On the positive side, I'd like to report that we are making progress with IFAS and the turf program at the University of Florida. This column was due before I could get an update on the Turf Coordinator position, but last I heard we had narrowed the field of applicants from seventeen down to five.

In addition, the program review team has been selected and the review will take place in mid-February.

But the most encouraging news I have to share (remember you heard it here first) is that the two people named to the new half-time positions in turf breeding at the university are absolutely first rate, enthusiastic and dedicated! Drs. Brian Scully and Russell Nagata have been "playing" with turfgrasses for the past year or so in their spare time from working with corn, beans and celery.

David Barnes and I got a private tour of their turf collection and facilities in Belle Glade on Dec. 4 during the station's 75th anniversary celebration. These guys are extremely sharp, and I predict great things from them in the near future if our industry properly supports them!

We owe IFAS Vice President Dr. Jim Davidson a big thank-you for those appointments.

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Hold that Tiger! Hold that Tiger!
Yes, that 20-year-old golfing phenom, Tiger Woods, passed through my backyard last October.

**'Tiger Tees'
may get
new
meaning**

For looking and acting like a nice young man, he sure did a rotten thing to my golf course. By bouncing second shots off of previously unreachable par fives, he changed forever the perception of difficulty on the venerable Magnolia Course.

When Jon Brendle and Mark Russell of the PGA Tour, told me Tiger was averaging over 300 yards on his drives to Big Bad John Daly's 288-yard average, I asked, "How? The USGA sees to it that we're all using the same equipment according to the laws of physics."

Well, according to the laws of physics, Tiger's got "The Technique." Translate that into a limber 20-year-old back. Coupled with good living and right thinking, Tiger's got the golf world and Madison Avenue by the tail.

If his lumbar vertebrae hold up, we'll all be retrofitting our courses with Tiger Tees.

It was amazing to see the impact that young Woods had on our tournament.

As soon as we had his signed commitment to play in our hands we doubled up on the hot dogs and Port-o-lets. I don't have final numbers and I couldn't print such state secrets anyhow, but suffice it to say, they were the largest

galleries and biggest sales we've had in a long time.

I've never seen security escorts walking a pro around 18 holes before. Of course, I've never seen a 20-year-old gazillionaire up close and personal before either.

Before Tiger mania sweeps the entire golf world, I did note with some interest that it was the veteran players Tom Watson and Fred Couples who walked off with \$360,000 in the recent Skins Game.

Tiger did manage to make my annual salary by earning one skin. I guess what they say really is true — "Drive for show. Putt for dough."

I wish young Mr. Woods well. He has brought a spark of interest and a new energy to golf with his game from another galaxy. He's going to break a lot of old records and write some new legends and folklore before he's done.

...

Before I'm done, please note my new work phone number on the masthead page of the magazine. I am returning to Disney's Osprey Ridge Golf Course after the first of the year. We are reorganizing some of our roles at Disney under the leadership of Gary Myers, CGCS, our new manager of golf course maintenance. Gary comes to Disney from TPC Scottsdale in Arizona. In addition, Gary also had responsibilities for several TPC courses in the mid-Atlantic and southeast regions.

Happy New Year everyone, and remember: Keep the green side up!

**Green
Side Up**



Joel D. Jackson, CGCS
Editor

SOMEWHERE THIS YEAR A SUPERINTENDENT PLANTED THE ONE MILLIONTH POUND OF CYPRESS POA TRIVIALIS!

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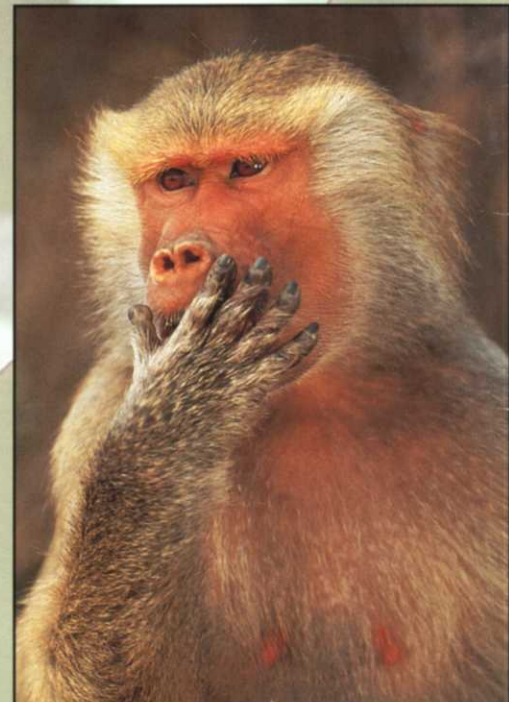
Photo of 70% Cypress Poa trivialis and 30% Trueline Creeping Bentgrass Green courtesy of Banyan Golf Club in Palm Beach, FL. Dan Jones, CGCS Golf Course Manager



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