



The Florida Green

Spring 1995

*The Sanctuary
12th hole
Sanibel Island*

Before Arnie's Army sees the first fairway at Bay Hill, this army has seen them all.

As a player and course designer, Arnold Palmer is legendary. In addition to conquering the Masters, British and U.S. Opens, he counts victories in 61 PGA tournaments. His style and personal commitment to the game have earned him a loyal army of followers. That same commitment has led him to choose Jacobsen.

Take our fairway mowers for example. They deliver flawless performances at The Bay Hill Club, Arnie's home course and site of the Nestle Invitational.

The ST-5111™ offers the productivity of an 11-foot cut with quality results due to its amazing balance and touch.

The LF-100™, with our patented Turf Groomer® fairway conditioner, delivers a

tournament-quality cut to show off every nuance of your fairways.

While the LF-3810™, the original heavy-duty lightweight, provides the power to cut every other day with a beautiful finish even the pros can appreciate.

The entire line produces results anyone can be proud of. Because as Arnie knows, when you've got an entire army watching your every move, it's important to look your best.

THE PROFESSIONAL'S CHOICE ON TURF.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.



Tresca
4827 Phillips Highway
Jacksonville, FL 32207
(904) 448-8070
(800) 262-6741

Tresca
3930 N. Orange Blossom Trail
Orlando, FL 32804
(407) 291-1717
(800) 235-6481

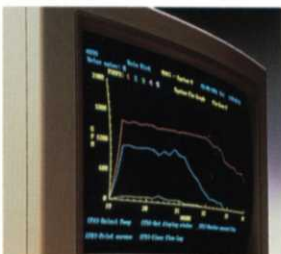
Tresca
6025 Highway 301 N.
Tampa, FL 33610
(813) 621-3077
(800) 304-5690

**KILPATRICK
TURF EQUIPMENT**
901 N.W. 31st Avenue
Ft. Lauderdale, FL 33311
(305) 792-6005
(800) 432-0066



NUMBER SEVEN GREEN
PEBBLE BEACH GOLF LINKS®

Renovation by Rain Bird



What do Pebble Beach Golf Links®, Cypress Point Club, Muirfield Village, Shinnecock Hills Golf Course and La Quinta-Mountain Course have in common? Irrigation renovation by Rain

Bird. In fact, five of the TOP TEN* golf courses in the United States have all upgraded their irrigation systems in recent years with state-of-the-art Rain Bird irrigation products.

Whether you have a nine-hole country club course or a world-class tournament course, you can achieve excellent results by choosing Rain Bird irrigation products for your renovation needs.

Each course presented unique challenges. That's why at Rain Bird, we offer a complete range of irrigation

products: Irrigation Control Systems—MAXI® V, PAR, MSC satellites—and The Freedom System™, our newest wireless technology; remote control valves, both self cleaning and pressure regulating in brass or plastic; quick coupling valves; and your choice of DR impact drive or EAGLE™ gear drive rotors.

In addition, Rain Bird won't leave you high and dry after the sale. Rain Bird's

Technical Service staff, along with our worldwide network of distributors, assures you immediate after-sales service and parts availability.

Before you choose an irrigation system, consider Rain Bird.

IT'S THE PRODUCT OF CHOICE.



**FOR YOUR CREW, THE GOOD NEWS IS THEY WON'T
HAVE TO SPEND AS MUCH TIME MOWING.**



Some of your crew may think we invented Primo® to improve the quality of their lives.

What we had in mind, actually, was improving the quality of your course.

With Primo, you don't have to mow as often. Which frees up time to rebuild sand traps, tend to flower beds, and take care of all the other things that usually get put on the back burner.



© 1995 Ciba-Geigy Corporation, Turf and Ornamental Products supports the DON'T BAG IT™ program. Always read and follow label directions.

**THE BAD NEWS IS THEY'LL HAVE PLENTY OF TIME
TO WORK ON EVERYTHING ELSE.**



Primo works by redirecting the growth of your grass. It gives you a thicker, more compact stand, more root mass, and ultimately, better-looking grass.

So if your crew's time could be better spent on some-

thing other than mowing, start using Primo.

We can't promise them more time at the beach, but at least they'll still get plenty of sun.





Officers

President Scott Bell
Bent Pine GC
6001 Clubhouse Drive
Vero Beach, FL 32967
(407) 567-9422

Vice President Greg Plotner, CGCS
Tampa Palms G&CC
5811 Tampa Palms Blvd.
Tampa, FL 33647
(813) 972-3375

Secretary/Treasurer Dale Kuehner, CGCS
Colony West Country Club
6800 NW 88th Ave
Tamarac, FL 33321
305-721-5980

Past President Paul Crawford
Palm Beach Country Club
P.O. Box 997
Palm Beach, FL 33480
(407) 845-2395

Directors

Central Florida Joe Ondo, CGCS
Winter Pines Golf Club
(407) 657-7565

Everglades Mike Mongoven
Fort Myers CC
(813) 278-7261

North Florida Kimberly Shine, CGCS
Windsor Parke GC
(904) 223-0886

Palm Beach Chip Fowkes
Frenchmen's Creek GC
(407) 622-1188

Ridge Alan Puckett
Lake Region Y&CC
(813) 324-4678

Seven Rivers Mike Swinson
Crescent Oaks GC
(813) 938-5832

South Florida Al Ross, CGCS
Sunrise CC
(305) 305-742-4545

Sun Coast Jim Miller
(813) 923-4707

Treasure Coast William Lanthier, CGCS
Mariner Sands GC
(407) 283-0202

West Coast Chip Lewison, CGCS
Gator Creek GC
(813) 922-0833

Staff

Association Manager Marie Roberts
1760 NW Pine Lake Dr
Stuart, FL 34994
Phone: Days (407) 692-9349
(800) 732-6053 (Florida WATS)
(407) 692-9654 (Fax)

CONTENTS



SPRING
1995

FOREWORDS PRESIDENT, PUBLICATIONS CHAIRMAN 2
President Scott Bell says ethics is a matter of professionalism and respect. ...Greg Plotner says a management group taking over a golf course is not necessarily a negative event in a superintendent's career.

SPOTLIGHT 66TH ANNUAL GCSA CONFERENCE AND SHOW 8
Florida Green Editor Joel Jackson left his kit in San Francisco, but recalls mainly some career-enhancing events... A Florida superintendent, Gary Grigg, CGCS, is now president of the GCSAA... *The Florida Green* shines again... South Florida and Everglades Chapters hold well-attended educational events.

COVER STORY THE SANCTUARY AT WULFERT POINT 28
Credited as Sanibel's first settlement, Wulfert Point was the Calusa Indians' home for nearly a thousand years as recently as 800 AD. It's now a wildlife sanctuary and preserve and — a golf course.

HEADS UP: INTEGRATED PEST MANAGEMENT 46
IPM is a management plan that utilizes a variety of control measures to keep turfgrass pest populations below levels that are economically and aesthetically damaging. This is the fifth in a six-part series on the Audubon Cooperative Sanctuary Program.

HANDS ON PROFESSIONALISM 62
Ethics and professional development are discussed by members of our organization.

THE FLORIDA TOUR WHERE THE PROS PLAY? 68
Florida is the home of many professional golf tournaments. Here begins the first of three reports on the courses hosting these tournaments and the challenge undertaken by the superintendents and their staffs to get courses in tournament shape.

RESEARCH BLUE-GREEN ALGAE 76
Blue-green algae appear to be the predominant species associated with bermudagrass putting greens and tees in the southeastern U.S. A report by Monica Elliott and Marcus Prevatte.

HEALTH & SAFETY DEATH LURKS IN THE SUNSHINE 84
If you think working in the sun is healthy, don't be so eager to take off your shirt.

AFTERWORDS: JARRELL, JACKSON 86
Jarrell is optimistic about the golf industry while Jackson seeks professionalism in the world of Forrest Gump.

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

Editor Joel Jackson, CGCS
Disney's Magnolia G.C.
Address Florida Green business to:
6780 Tamarind Circle
Orlando, FL 32819
(407) 248-1971 Florida Green voice/fax
(407) 824-6298 Work
(407) 351-3729 Home

Assistant Editor Mark Jarrell, CGCS
Palm Beach National G.C.
7500 St. Andrews Rd
Lake Worth, FL 33467
(407) 965-0046

Publications Chairman Greg Plomer, CGCS
Tampa Palms G&CC
5811 Tampa Palms Blvd
Tampa, FL 33647
(813) 972-3375

Business Manager Paul Crawford
Palm Beach Country Club
P.O. Box 997
Palm Beach, FL 33480
(407) 845-2395

Editor Emeritus Dan Jones, CGCS
Banyan GC
West Palm Beach

COPYRIGHT NOTICE: Copyright 1995, Florida Golf Course Superintendents Association. All rights reserved. May not be reproduced in whole or in part without written permission of the FGCSA. **EXCEPTION:** Official publications of all golf course superintendent associations affiliated with the Golf Course Superintendents Association of America are welcome to use any material contained herein provided they give credit and copyright notice.

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

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

EDITORIAL: All inquiries should be directed to the editor, Joel Jackson, CGCS. Unsolicited manuscripts and photographs cannot be returned.

Contributors to this issue

Cover Photographer: Dan Zelazek

Cover Story Writer: Joel Jackson, CGCS

Hands On Package: Joel Jackson, CGCS, coordinator

Audubon Series: Shelly Foy, coordinator;

The Florida Tour: Joel Jackson, CGCS, coordinator; Kelly Cragen, GCS; Wayne Kappauf, CGCS

Research Report: Monica Elliott, PhD; Marcus Prevatte

Health & Safety: Cheryl Jones

Spotlight: Mike Mongoven, CGCS; Joel Jackson, CGCS; Marie Roberts; Joe Ondo

Afterwords: Mark Jarrell, CGCS; Joel Jackson, CGCS

Copy Editor: Jennifer Jackson

Production

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

President Larry Kieffer

Project Manager Philip Pettus

JANLARK
COMMUNICATIONS, INC.

208 South Main St. • P.O. Box 336
Auburndale, FL 33823
813-967-1385 Fax 813-967-4553

Advertiser Index

| | | | |
|----------------------------------|----------|-----------------------------------|--------|
| AgrEvo | 8-9 | Nucrane Corp. | C3 |
| AgrEvo | Insert | Nutri-Turf, Inc. | 71 |
| AgriGro | 55 | Otterbine-Barebo Inc. | 63 |
| Agro-Tech 2000 | 67 | Parkway Research Corp | 82 |
| Almar Chemical Co. | 71 | Partac Peat Corp | 80 |
| AmerAquatic Inc. | 40 | Pennington Seed | 31 |
| Arbor Tree & Landscape | 63 | Precision Laboratories | 32, 85 |
| Atlantic FEC Fertilizer | 81 | Rainbird | 1 |
| Boynton Botanical | 51 | Rhone Poulenc | 35 |
| Brevard Oil | 83 | Safety Storage Inc | 75 |
| Ciba Turf Division | 2-3 | Scotts Co. | 67 |
| DuCor International | 82 | Smithco | 39 |
| Envirogenesis | 87 | South Florida Grassing | 74 |
| Envirogenesis | 38 | South Florida Turf Products | 67 |
| Environmental Waterway | | Southern Ag Insecticides | 77 |
| Management | 37 | Southern Golf Products | 27 |
| E.R. Jahna Industries | 77 | Spread-Rite, Inc. | 80 |
| Florida Silica Sand | 70 | Standard Sand & Silica | 73 |
| FGCSA | 15 | Subaqueous Services Inc | 44 |
| Go-For-Supply | 73 | Sullivan Electric & Pump | 79 |
| Golf Agronomics Supply | 45 | Sunniland Turf Products | 63 |
| Golf Link | 71 | Terra Asgrow | 20, 21 |
| Golf Ventures | 65 | Tifton Physical Lab | 66 |
| Greg Norman Turf | 69 | TMI Turf Merchants | 33 |
| Harrell's, Inc. | 11 | Tom Burrows Turfgrass Svc..... | 80 |
| Haverland Blackrock Paving | 37 | Toro Dealers of Florida | Insert |
| ISK Biosciences Corp. | 23 | Turf Specialties | 59 |
| Jacobsen Dealers of Fla. | C-1, C-2 | United Horticultural Supply | 49 |
| Kubota Tractor Corp | 61 | Valent USA | 57 |
| Lesco, Inc. | C4 | Van Waters & Rogers | 19 |
| Liquid Ag Systems, Inc. | 83 | Vicksburg Chemical | 7 |
| Lofts Seed, Inc. | 41 | Vigoro Industries | 43 |
| | | Zeneca | 25, 53 |

Advertising Information

The Florida Green welcomes advertising inquiries to:

Marie Roberts, Association Manager

1760 NW Pine Lake Drive

Stuart, FL 34994

407-692-9349

800-732-6053 FL WATTS

*Professionalism
makes us
all better
superintendents*

Part of the territory of the Presidency is dealing with different questions of ethics. The ethics question can encompass many different behaviors and situations. In fact

the GCSAA Code of Ethics listed on page 23 of our 1995 Membership Directory lists 12 items that every superintendent member of the FGCSA and GCSAA has agreed to live by. As President, the most common questions I hear refer to items 7, 8, and 9 that are employment-related. The Code, however, covers many areas of professionalism and following them makes us all better superintendents.

When you hear “Code of Ethics” violations discussed most people think of other superintendents soliciting a job that is presently filled. As you should know this is strictly forbidden, and you should not talk to any club unless the position has been vacated or the current superintendent notified. This also pertains to “advising” or “consulting” with a club without first speaking to the superintendent and letting him know the situation.

A general rule to follow is to always call the superintendent before playing or visiting his course. One complaint that I received this year was from a superintendent who lost his job when his course signed a contract with a golf management company.

He was never called before someone visited the course and spoke with the owners. Is this a violation of the Code of Ethics? When a company solicits business at a course behind the superintendent’s back, is that any different than another superintendent coming in and soliciting his services?

Please don’t take this wrong! I am not against management companies that abide by our Code of Ethics. Good management companies have helped our industry by

getting qualified people into clubs that were not being properly run. They have helped clubs that could have been potential time-bombs for the industry. Most of the people that I know who run or work for many of the management companies are very good superintendents. Most of them tell me that they have helped the superintendent at the contracted club.

The “ethics” question arises when a course owner, operator, or board is solicited without the superintendent’s knowledge. I know at our club we receive junk mail addressed to the President from companies who claim to manage our club. Some even call on the phone and, of course, I have never been notified! I have also received mail from mostly out-of-state superintendents who mass mail resumes to clubs probably wanting to move to the “sunny South.” This, also, would seem to violate the Code.

The Code of Ethics touches other phases of our profession as well. Read them if you haven’t, or read them again if it has been a while since you last looked at them. The whole Code just makes good sense to follow. It advocates strong management and business practices. It also stresses professionalism in endorsement and purchasing matters, and in association conduct.

Our industry has been making great strides to earn respect in and out of the golf world. Our actions at a club can set an example that can affect many people. We develop reputations through our sound management techniques and business practices. If someone manages poorly or repeatedly exercises poor judgment, he may put a bad taste in many people’s mouths towards superintendents in general.

To be accorded respect by others, we must first respect ourselves and our profession. Remember, we work in a great industry with a lot of fantastic people. We always need to treat and respect others the way we would like to be treated and respected.

**President’s
Message**



Scott Bell

Scott Bell, CGCS
President, FGCSA



**UNLESS YOU CAN CONTROL YOUR WEATHER,
YOU'D BETTER CONTROL YOUR N AND K RELEASE.**

THERE ARE TOO MANY THINGS ABOUT RUNNING A COURSE THAT YOU CAN'T CONTROL. LIKE WEATHER, TRAFFIC AND GREENS COMMITTEES.

BUT YOU CAN CONTROL THE DELIVERY OF NITROGEN AND POTASSIUM TO YOUR TURF. WITH K-POWER®.

K-POWER POTASSIUM NITRATE PROVIDES A BENEFICIAL BALANCE BETWEEN POTASSIUM AND NITRATE NITROGEN NOT FOUND IN OTHER POTASSIUM SOURCES. AND K-POWER'S BREAKTHROUGH POLYMER COATING, MULTICOTE®, RELEASES

BOTH NUTRIENTS TO YOUR TURF EVENLY OVER TIME.

THAT'S GOOD TO KNOW, BECAUSE A PROPER N:K BALANCE IS KEY TO HEALTHY TURF. AND A HEALTHY PAYCHECK.

K-POWER GIVES YOU CONTROL OF NUTRIENT DELIVERY ACROSS YOUR ENTIRE FERTILITY PROGRAM: GREENS GRADE, FAIRWAYS AND SOLUBLES. SO GET A LITTLE MORE CONTROL OVER YOUR DESTINY WITH K-POWER.

FOR MORE INFORMATION, CONTACT YOUR DISTRIBUTOR OR CALL US AT 1-800-227-2798.



**THE
GOOD
STUFF™**

Vicksburg
chemical company

© 1995 VICKSBURG CHEMICAL. K-POWER AND MULTICOTE ARE REGISTERED TRADEMARKS OF VICKSBURG CHEMICAL. **ATI** COMPANY

The next is yours

MAKE IT WITH AgrEvo™

Experienced pros know. Mother Nature is a formidable adversary.

Pros who have mastered the turf & ornamentals game know a strong opening won't be enough to beat back the competition. They know when to apply a strong offense or strong defense. . . when to strike quickly. . . when to play the waiting game. Grounds management is complex. Climate, geography, weeds, disease and the environment can affect your game plan.

When it comes time to make a move, experienced, grounds managers rely on AgrEvo for a complete product line of herbicides, insecticides, fungicides and fertilizers — all designed to provide you with a strategic edge.

It's your move. Checkmate turf & ornamental problems with knowledge, experience and AgrEvo.



A company of Hoechst and NOR-AM

Specialty Products

AgrEvo USA Company
Little Falls Centre One, 2711 Centerville Road
Wilmington, DE 19808

For further information contact your Florida representative.

West Coast
BRIAN MacCURRACH
(813) 678-3100

East Coast
BOB HICKMAN
(407) 831-8729

move



IMPORTANT: Please remember always to read and follow carefully all label directions when applying any chemical.

A favorite topic of conversation among superintendents at times is discussing the pros and cons of management groups operating and sometimes owning country clubs.

Tampa Palms Golf and Country Club was purchased in December of 1992 by a management group, and I have been a part of their organization ever since. There are a couple of things concerning management groups that I would like to point out.

First of all, Tampa Palms was opened for play in 1987 at the height of a sluggish real estate growth period. The developer had many problems early on, and membership sales for the club were few and far between. People feared the club was unstable and the press in the Tampa area did a lot to back up those fears. The club being a fine facility with a great golf course struggled for years using different management groups, each with different philosophies. Every time a change came, I wondered if I would be part of that change.

Finally in December of 1992, the club was sold for a cash price

to the management group for whom I am now employed. I was scared to death during Christmas that year in fear of being let go, and my resume was quickly updated as I prepared for the worst. I was soon surprised at the group's professional mannerisms and then realized that they needed help in being brought up to speed with the various operations of the club. They assured me that my position was not in danger and to keep up the good work that my staff has always done on the golf course. The course was one area that they were not worried about.

Changes in club operations were definitely made. Some faces also changed, but in my opinion, all for the better. The club now has a vision and a means by which to focus on that vision with all department heads having responsibilities that will allow the club to grow and prosper. Membership is now flourishing and the facilities at Tampa Palms are a most popular spot for business gatherings and weddings.

The management group in place at my club has definitely helped make Tampa Palms what I always thought it would be — a great club where I am proud to be employed.

In this case, one can easily see that ownership and operation by a management group at my club is for the better. This group is strong financially, service oriented to their members and provides a good working environment with long-term benefits for their employees. They have been in the business for years and are well-respected.

But what about those other groups that are out there chasing contracts, you might ask. We all know horror stories exist about management groups moving in and shutting off the cash flow, and with it goes the conditioning of the golf course. This will continue to happen, for not much can be done about such radical decisions. But let's hope most groups realize where dollars can be made, and that's in golf! Their biggest assets are the courses they amass and there's no denying it! If they destroy their courses, then they destroy themselves.

Superintendents will always be important to these management groups. We are the meat and potatoes of their operations. We will be asked to maintain our courses on a tight budget, do more with less labor and possibly work for a wage less than what we might consider fair. But let's face it — we are professionals and we will always try to find a way to maintain our courses in the best condition that they can be. As one might say, "It's a superintendent kind of thing."

Some superintendents might have to "suck in their gut" a little if a management group takes over operations at their clubs. Some will cope with the situation and be successful, and others will fail. Some will be happy and others will not. Some will take new jobs and others will remain. What's good for one is not necessarily good for the other.

This trend of management groups taking control of club operations is not new, and it appears as if it is kicking into high gear. For this one individual, it's been a good ride so far. I just don't want to crash and burn anytime soon!

Superintendents will always be important to management groups

Plotner's Page



Greg Plotner, CGCS Publications Chairman

POLYON[®] RONSTAR[®]

**TWICE
THE
POWER.**

(half the work!)

Full season fertilizer—with no more

weeds. You know about Polyon[®], the controlled-release fertilizer that gives a season's worth of nutrients with one application. Now Harrell's custom blends Polyon[®] with Ronstar[®], the just-as-long lasting pre-emergent herbicide that doesn't root prune.

Stronger, healthier turf and half

the work. Call today **1-800-282-8007** for details on how Polyon[®] Fertilizer with Ronstar[®] can be your answer to successful turf.

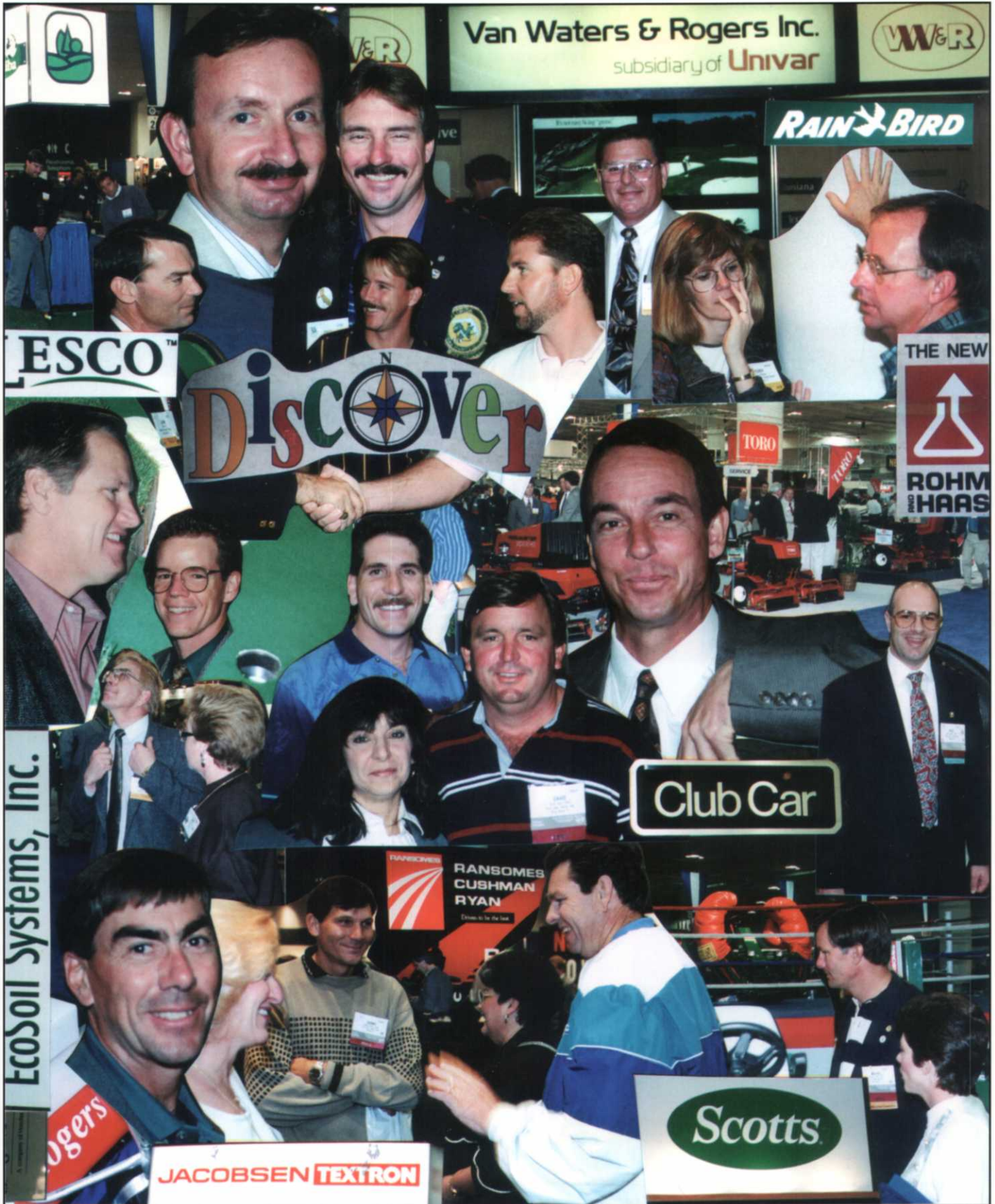
Polygon is a registered trademark of Pursell, Inc.



POLYON[®] WITH Ronstar[®]

The full season fertilizer and herbicide you've been counting on.

66th Annual GCSAA Conference and Show



gave plenty of memories...99.5% good



I Left My Shaving Kit in San Francisco

BY JOEL D. JACKSON, CGCS

The tourists on the interstate seem somehow far away
The dazzle of the theme parks is for another day
I've been terribly alone and forgotten at the airport
I'm heading home from the Conference by the bay
I left my shaving kit in San Francisco
High in a hotel it calls to me. . .

I hate to admit it, but I really did leave my shaving kit in San Francisco. Is my advancing age catching up to me? I must have whistled, hummed and sang the original version of that song one thousand-two hundred times as I walked to the Moscone Center, rode the elevators at the hotel, or set up my pan-handling station by the BART entrance.

I'd say pan handling, otherwise known as creative begging, was the number two industry in San Francisco right behind high-priced restaurants. Let's just say that in my travels this has been the only place where you can get a \$3.75 cocktail for \$7.60.

But lest you think I'm bashing the city of seven hills, let me set you straight. I love to travel and the Golden Gate city and the 66th Annual GCSAA Conference and Show gave me plenty of memories. 99.5% of them all good and worthwhile. The people were friendly without exception, well maybe a few territorial disputes between waiters as to who should have gotten that big party in their section.

The views from the hotel rooftop restaurants and lounges were spectacular. The mist and fog was always present. I only saw the sun when I arrived on Wednesday and not again until I was somewhere above the clouds flying home the next Monday. Even then we had to close the window shutters so people could watch the in-flight movie. The same one we saw coming out! You'd think they could have a west-bound movie and an east-bound movie. Aren't most tickets round trip?

This was also the first trip that I can remember experiencing jet lag. The alarm was set for 6 a.m. Left Coast Time but the old bod kept coming alive around 2 or 3 a.m.. That made for some long days. Some people had much longer days and week than I did.

Education

For the early arrivals, there were sixty one- or two-day seminars to choose from on Monday through Thursday. If you couldn't make the trip until later in the week there is always the Innovative Superintendent sessions beginning at 6:30 a.m. Friday and Saturday. These are great pearls of wisdom from practicing superintendents.

It's like our usual monthly meeting peer networking except with a podium, a microphone and a slide projector. And for those inquiring minds who can't sit still for 8 to 16 hours and don't need the CEU's for recertification, there are the AM and PM Concurrent Sessions with three 25-minute presentations going on simultaneously covering different topics. My only formal class that week was on Chapter Publications. That seemed apropos for an editor to attend.

That's just the formal education. If you don't participate in your local chapter meetings, I can't begin to explain the value of peer networking. If you don't call or talk to your neighboring superintendents at home, how can I possibly tell you about what you can learn from a Ted Horton, or a Bruce Williams that operate world renown facilities with golf histories and traditions that are legendary.

And here at the GCSAA Conference and Show all the best and the brightest, the most successful, the most committed, the most professional superintendents are all gathered in one place to simply learn more and try to become even better. You just don't know what you're missing.

I wish the owners, Budget Committees and Greens Committees could understand that as well. What's \$2,000 in the budget, three hundred pounds of shrimp cocktail? What's more important over the span of a year at the club, the shrimp cocktail or an educated, motivated superintendent who knows he has the club's support to attend the GCSAA event? The answer seems simple doesn't it?

The Environmental General Session was on Sunday and it was one of the best attended I have ever seen. I think the message is finally out, and superintendents are taking responsibility for their stewardship roles. It was refreshing to hear a media person like John Stossel of ABC acknowledge that, if you get past the "need for speed" in reporting environmental issues and look at the facts, the real cold hard facts, the media is misplacing and misreporting the real issues and risks for the sake of headline grabbing "bad news." It was also good to here him tell the world that over-regulation is strangling the economy except for the lawyer's wallets.

Show Time

What is new? What's hot? What are you going to buy? Well, there are a lot of new companies out there with Natural, Enviro-, Bio-, Organo- in their names. Everybody is trying to capture the interest in doing things the right way. Just check out the research especially in "real world" situations. If you find something that works well for you, let us all know.

More folks are looking at the mid-size fairway mowers. Maybe they can get a little more productivity than the light-weights. And there's a tub grinder for pulverizing limbs and trees when you don't have a place to put dead and damaged vegetation. Grind it into mulch and put it back. How about that satellite tracking system? You can put it on golf cart and track slow play, cart path only violators, send emergency messages to the golfer, they can order food and beverages and get specific yardage to the hole. The list is seemingly endless.

Attention golf course workers, you can put it on turf equipment and track work progress as well! Each superintendent had a different objective and items they needed to research. What a great time for it. Brands A, B, and C all in one place.

The show was big! There were two halls. One on either side of Howard Street. There was a connecting underground corridor. The vendors in the North Hall were saying that everyone was in the South Hall, and the vendors in the South Hall were

Please see Page 18

**THE FLORIDA GCSA WOULD LIKE TO THANK
THE FOLLOWING SPONSORS FOR SUPPORTING THE
1995 SAN FRANCISCO RECEPTION**

DIAMOND SPONSORS

**AgrEvo
Ciba Geigy
Club Car
Florida Superior Sand
Golf Agronomics**

**Helena/Ag Resources
Kilpatrick/Jacobsen
NuCrane Machinery
Nutri Turf
Pursell Industries**

**Quality Grassing
Sandoz Agro., Inc.
Southern Golf
Terra Asgrow
Tresca Industries
Valent, USA**

**SPECIAL THANKS to our DOUBLE DIAMOND sponsor:
VIGORO INDUSTRIES**

GOLD SPONSORS

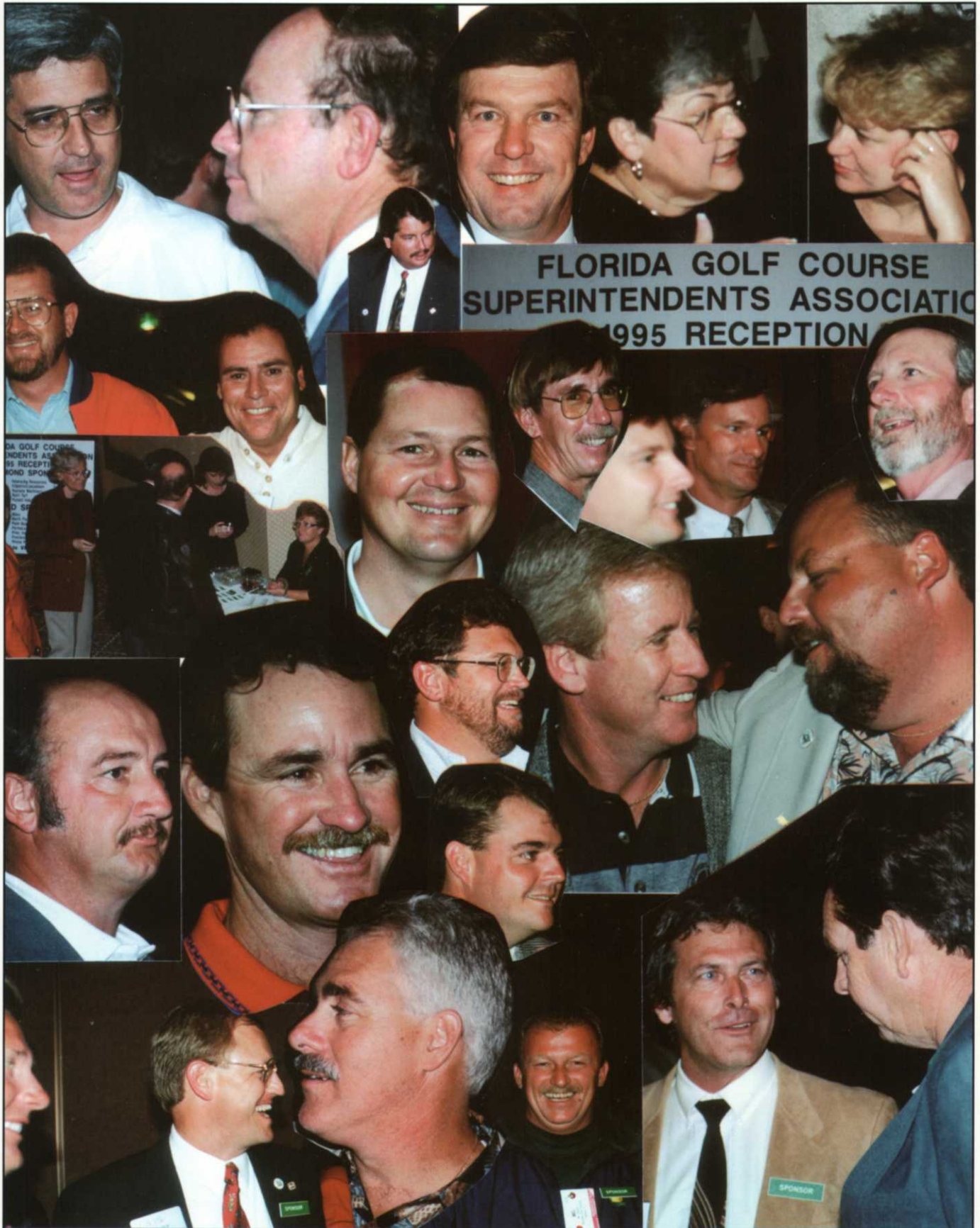
**American Cyanamid
Central Florida Turf
DowElanco
E. R. Jahna Industries
Golf Ventures
Lake City Alumni
Lesco**

**Liquid Ag
Miles Specialty Products
North Florida GCSA
Palm Beach GCSA
PermaLock Industries
Pifer, Inc.
Precision Laboratories**

**Rhone Poulenc
Rohm and Haas
Sunniland
TMI Turf Merchants
United Horticulture
Van Waters & Rogers
West Coast GCSA
Zaun**

**HOPE TO SEE ALL OF YOU NEXT YEAR
IN ORLANDO
FOR THE 1996 RECEPTION**

The people were friendly without exception...



Get ready for GCSAA 1996 in — Orlando



1995 GCSAA Golf Championship delights all

BY JOE ONDO

The 1995 GCSAA Golf Championship was played in Monterey, California, and in partnership with the Toro Company, was a huge success.

In addition to the full rain suit, shirt, hat and other tee prizes, each player also received complimentary continental breakfast each day and a 19th hole reception after golf was finished. If anyone played in this year's tournament and was not satisfied, he or she must have had a bad golf week.

The tournament was played at five courses in the Monterey area in some of the best weather Monterey and the GCSAA have had in years. Temperatures were in the high 70s to low 80s all week for this event.

The championship division played Poppy Hills and the

Bayonet Course at Fort Ord. In the team competition, Carolina's A Team was the gross point winner, with Georgia second and Florida finishing ninth.

Congratulations are in order to Todd Barker from Utah for firing a great 144 total and a 7 shot win in individual competition over Paul Jeff and Mike Wilson. Low for Florida were Mark Hopkins and Joe Pantaleo, who finished tied for 14th overall.

In addition to everything else, Toro has also donated \$1,000 in the name of tournament winner Todd Barker and \$500 in the name of the low gross Carolina team and low net Midwest team to the GCSAA Scholarship and Research Foundation.

Toro also donated \$100 for every low gross and low net winner in their respective flights.

Congratulations to GCSAA and Toro for a fantastic event.

Honey, after the classes were over ...we all went back to our respective hotel rooms and studied our notes and read trade magazines...

from Page 14

saying that everyone was in the North Hall. All I know is that when I worked the Florida booth on Friday, we were in a Side Hall and hardly anybody could find us! We weren't being discriminated against. All the Allied Associations like USGA, NGF, BIGGA, etc were in there along with the main GCSAA booths. It was just out of the main flow of traffic.

Florida Host Booth

In case you didn't know, the GCSAA 67th International Golf Course Conference and Show will be in Orlando February 5-12, 1996. We handed out a lot of Florida Green copies, FGCSA lapel pins and Orlando activity brochures supplied by the Chamber of Commerce. We played a continuous video on Orlando, gave out lists of Central Florida golf courses accepting GCSAA tee times next February, and answered all sorts of questions in general.

For my boss if he reads this, every time somebody talked about bringing the family, I tried to sell them on staying at Disney. I told them we had a wide price range of accommodations and a shuttle that runs to the Convention Center. I was right about the shuttle wasn't I?

And just who gave freely of their time to work the booth Friday, Saturday, and Sunday? You'll find their pictures in the photo collages. For Marie Roberts our Association Manager, boy those California guys next door were really envious of our planning, organization, and all the goodies! Nice job, Marie!

FGCSA Reception

While we are leaders in many areas, it took us awhile to finally start scheduling a formal reception at the national conference. This year was our 5th. We started out in a small hotel suite in Las Vegas in 1991. Now we have the hot ticket on Friday night. Many of the other associations, notably the Wisconsin GCSA in partnership with Milorganite, have been doing it for years. It gives everyone a specific time and place to get together and compare notes when we're all far from home. It's a great idea. We also

invite industry leaders and GCSAA candidates to stop by so we can get to know them better. As you can see from our "thank you" ad, we aren't doing it alone. We have a lot of partners that help to make it a success.

Philanthropy

The FGCSA renewed its annual membership in GCSAA's Platinum Tee Club when Scott Bell handed GCSAA President Joe Baidy a check for \$5,000 for the GCSAA Foundation. The O. J. Noer Foundation also received a check from Scott for \$500 as we continue to support their highly successful research efforts.

Night Life

Honey, after the classes were over, after the Moscone Center doors were closed and locked, we all went back to our respective hotel rooms and studied our notes and read trade magazines. Once or twice I turned on the PBS channel and watched the Frugal Gourmet and Yanni at the Acropolis.

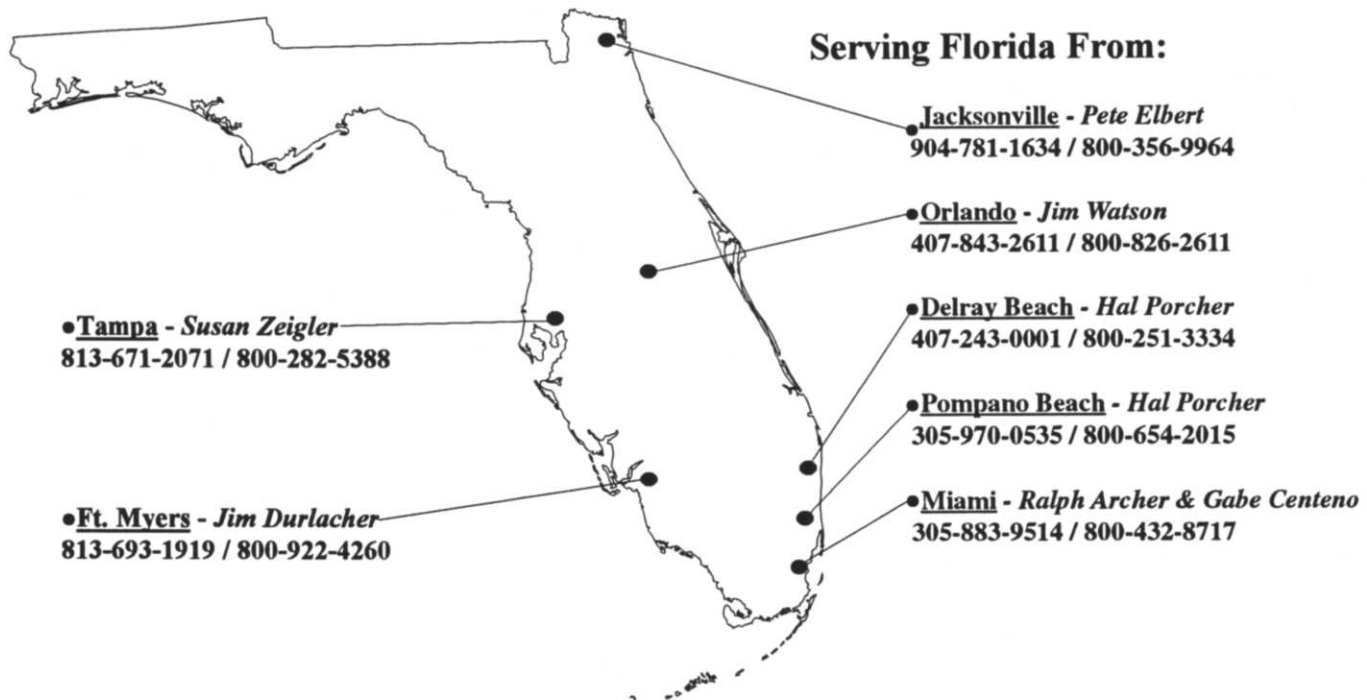
I heard rumors that some people rode cable cars to Fisherman's Wharf and Chinatown and dined at lavish restaurants. Some even went to a place called Club Oz high atop the Westin St. Francis hotel and danced the night away. I don't know if that's true, but I know I wasn't in Kansas anymore!

Summary

Another conference has come and gone. New experiences. New memories. I'm glad I got to go. I know how fortunate I am to be able to go. I'd like to think that I'm a better because of the experience. Perhaps a little wiser, maybe more tolerant of shortcomings, certainly more excited about the future. But, I'd like to think that I deserved to go, that I had earned the privilege to represent my club and my association because of what I do the other 51 weeks of the year. That doesn't apply to just me. It applies to every man and woman who bears the title and responsibility of a Golf Course Superintendent.

See you in Orlando in 1996!

**FOR YEARS THE BEST SOURCE FOR
TURF CHEMICALS HAS BEEN RIGHT
UNDER YOUR
NOSE.**













Professional Products For The Turf Industry



Van Waters & Rogers Inc.

subsidiary of **Univar**

"Where Service Is Our Only Business"

Adjuvants from Terra
buffer, improve  mixability,
reduce  drift, suspend,
defoam, increase  deposition,
penetrate, spread,  wet,
cover, coat,  hold, protect,
prevent  evaporation, mark,
extend, solve  problems,
clean,  and pay off 
with improved  pesticide
application & performance.

Make the most of your pesticide investment this season.
Talk to Terra for the right products, advice and service.

Always read and follow label directions.



Contact Your Nearest Florida Service Center

- **Alachua**
Highway 441
(904) 462-1242
- **Arcadia**
122-A N. 11th Ave.
(813) 494-4400
- **Belle Glade**
1033 NW 16th St.
(407) 992-4004
- **Boynton Beach**
9293 State Road 7
(407) 737-1200
- **Ellenton**
3203 US Hwy
301 NE
(813) 722-4564
- **Ft. Pierce**
7361 Commercial
Circle
(407) 466-6607
- **Hastings**
8520 Highway
207 East
(904) 692-1502
- **Homestead**
790 NW 10th Ave.
(305) 247-1521
- **Immokalee**
800 E. Main St.
(813) 657-8374
- **Plant City**
103 S. Alexander
Street
(813) 752-6351
- **Plymouth**
2975 West Orange
Blossom Trail
(407) 886-4744
- **Quincy**
Rt. 1, Box 378
(904) 442-9000
- **Tavares**
13539 Southridge
Industrial Dr.
(904) 343-5577
- **Vero Beach**
9035 17th Place
(407) 562-2142

- **Wauchula**
804 S. 6th Ave.
(813) 773-4543



Florida Superintendent Gary Grigg now president of GCSAA

It took awhile, but the state with the most golf courses in the USA finally is home to the President of the GCSAA. Our congratulations to Gary Grigg, CGCS on his recent election that culminates 5 years of service on the board of directors and 24 years as a member of GCSAA.



Gary Grigg, CGCS

Gary is currently the superintendent of the Royal Poinciana Golf Club in Naples.

In a phone interview after the election Gary reiterated his pledge to carry out the three mandates endorsed by the current GCSAA Board of Directors: (1) Communicate the positive impact of golf on the environment; (2) Enhance the image of the golf course superintendent; (3) Work with chapters to serve members.

There are several initiatives in place that are making items one and two a reality: Publications, support for the NY Audubon Sanctuary Program, and the new ESPN TV show *Par for the Course* are some ways these things are happening. Item three is undergoing a rigorous committee review right now. There is a lot to do to re-establish the proper affiliations with all the listed member Chapters and the GCSAA.

Gary has a busy year ahead and we wish him and the entire GCSAA success as we chart the course for an exciting future. With high hopes and support we welcome Gary and his vision and leadership to Florida.

— Joel Jackson

Florida Green rates best in GCSAA GCSAA Chapter Publications Contest

The winners of the GCSAA Charter Publications Awards as announced in San Francisco:

Category 1

Best overall: (Tie) *The Grass Roots*, Wisconsin GCSA, Monroe Miller, editor; *Through The Green*, Georgia GCSA, Karen White, editor.

Runners-up: *The Newsletter*, GCSA of New England, Michael Nagle, CGCS, editor; *Tee to Green*, Metropolitan GCSA, Tim Moore, editor.

Category 2

Best Overall: *The Florida Green*, Florida GCSA, Joel D. Jackson, CGCS,

editor. (Editor's Note: Contest entry, Summer Issue 1994 . Tom Benefield, CGCS, was the editor of record.)

First Runner-up: *The Greenerside*, GCSA of New Jersey, Illona F. Gray, editor.

Second runner-up: *Northern Ohio Turf*, Northern Ohio GCSA, Daryl C. Decker, CGCS, editor.

Category 3

Best Overall: *California Fairways*, California GCSA, Helen M. Stone, editor.

Runner-up: *A Patch of Green*, Michigan & Border Cities GCSA, Paul T. Kolbe, editor.

Eighth Annual SFGCSA Exposition

450 attend IFAS Field Day in Fort Lauderdale

Please turn page for photo report

New attendance records were set as more than 450 people registered for the IFAS Field Day/Eighth Annual SFGCSA Exposition held at the University of Florida Fort Lauderdale campus on Thursday, March 16th.

Attendees were separated into two groups, landscape maintenance and golf course personnel. It was standing room only for the third year in a row as University of Florida professors gave their morning lectures. Then the golf course crowd moved to the turf plots where six major turfgrass equipment companies demonstrated 42 categories of maintenance equipment worth more than \$4 million.

With eight years of experience behind them, the South Florida GCSA superintendents were able to pull this demonstration off in less than two hours. that is really "moving 'em in

and moving 'em out" thanks to Master of Ceremonies, Bob Klitz, CGCS, President of the South Florida Chapter.

The rest of the day included table-top presentations by thirty-two turf related companies followed by an outstanding barbecue under the big top. The afternoon program consisted of on-site presentations of current research projects being done on the bermudagrass plots at the Research and Education Center.

Preliminary figures indicate that close to \$20,000 will be raised for the FGCSA research green thanks to the donations of the suppliers supporting the day's events. The Board of Directors of the SFGCSA would like to thank Dr. Monica Elliott and all the suppliers who made this event such a success.

Marie Roberts, Association Manager

Everglades GCSA Spring Seminar

Turf experts speak to 75 superintendents

Spring Seminar

The Spring Seminar held by the Everglades Chapter had a power-packed line-up of speakers. The seminar was held at the Worthington Country Club in Bonita Springs. Approximately 75 golf course superintendents were in attendance.

Gary Grigg, newly elected President of the GCSAA led off the day with a review of the last 12 months and of the new leadership team. He also laid out his agenda for his Presidency. His three major goals are to communicate the positive impact golf courses have on the environment, enhance the image of the golf course superintendent, and work with chapters to assist members.

Shelly Foy discussed the reasons why golf course superintendents should be involved in the New York State Audubon Sanctuary System for Schools. This forum gives us a great opportunity to make sure children are getting the facts and also is a means to reach teachers, parents, and administrators. All proceeds for the seminar will go to sponsor schools in Collier, Lee, and Charlotte Counties. As Shelly stated, "Let's make kids the winners today!"

Ron Dodson, president of the NY State Audubon, reviewed the most frequently asked questions about the Sanctuary Program.

1. NY State Audubon was formed in 1897 with Teddy Roosevelt as its initial president. It was organized to promote conservation using positive efforts.

2. The different Cooperative Sanctuary Programs are an effort to expand communication between different groups.

3. There are 35 different Audubon Societies across America. All with different views and goals.

4. Each participant in the Cooperative Sanctuary program determines how and to what extent the program will run.

5. The goals of the NY Audubon are the same today as they were in 1897. Its main objective is to supply materials to promote conservation by using positive efforts.

6. The programs will increase public awareness of the value of golf courses

7. Clubs certified in the program can focus on educating the community and engage in or host research that will scientifically prove the positive value of golf courses for wildlife habitat.

Dr. Al Dudeck reviewed the turfgrass certification program established by the state of Florida. The initial turf within the program is FloraTex bermudagrass. the program was formed by the Florida Foundation Seed Producers and it licensed the FTGA to oversee the program. Only one grower was authorized to grow foundation grass. The program will be monitored by the Florida Department of Agriculture and Consumer Services. It has strict laws in place to prosecute the unlawful distribution of FloraTex. The most important ingredient of the program is the golf course superintendent who must demand certified turf and also help police unethical vendors.

Dr. Clark Throssel of Purdue University discussed water quality and the impact it has on golf courses. he defined salt as any negative ion except OH, combined with any positive ion except H +.

Managing salt is best achieved by:

- (1) Making efforts to insure good drainage,
- (2) Planting salt tolerant species,

Please see Page 26

INTRODUCING NEW ADVANCED SPRAY-DRY DACONIL ULTREX™ FUNGICIDE



- Mixes fast, won't settle out and won't clog nozzles.
- Improved control of tough Brown patch plus equally exceptional control of 14 other major turf diseases and algal scum.
- Virtually dust-free, low-foaming formulation makes handling easier.
- Pours completely out of the bag, so there's no waste or need to rinse bags before disposal.

ISK BIOSCIENCES™

ISK Biosciences Corporation
Turf & Specialty Products Division
1523 Johnson Ferry Rd., Suite 250
Marietta, GA 30062

Always follow label directions carefully when using turf and ornamentals plant protection products.
™Trademark of ISK Biosciences Corporation.

Scenes at the Eighth Annual SFGCSA Exposition



When you think you need Roundup, try REWARD®.

With REWARD herbicide, there's no waiting for it to go to work. Because REWARD is absorbed by broadleaf and grass weeds just minutes after application. On golf courses, around residential and commercial turf, greenhouses and nurseries, in right-of-ways — wherever you have a weed problem. REWARD is especially good for spot treatments, edging, tree wells and other areas where you need quick, effective weed control. Unlike other herbicides, REWARD can be used in both aquatic and grounds maintenance situations. Plus it's rainfast in only 30 minutes.



Also with REWARD, there's no worry about the surroundings. It stays where you spray it, controlling weeds without affecting non-target vegetation, fish and other wildlife.

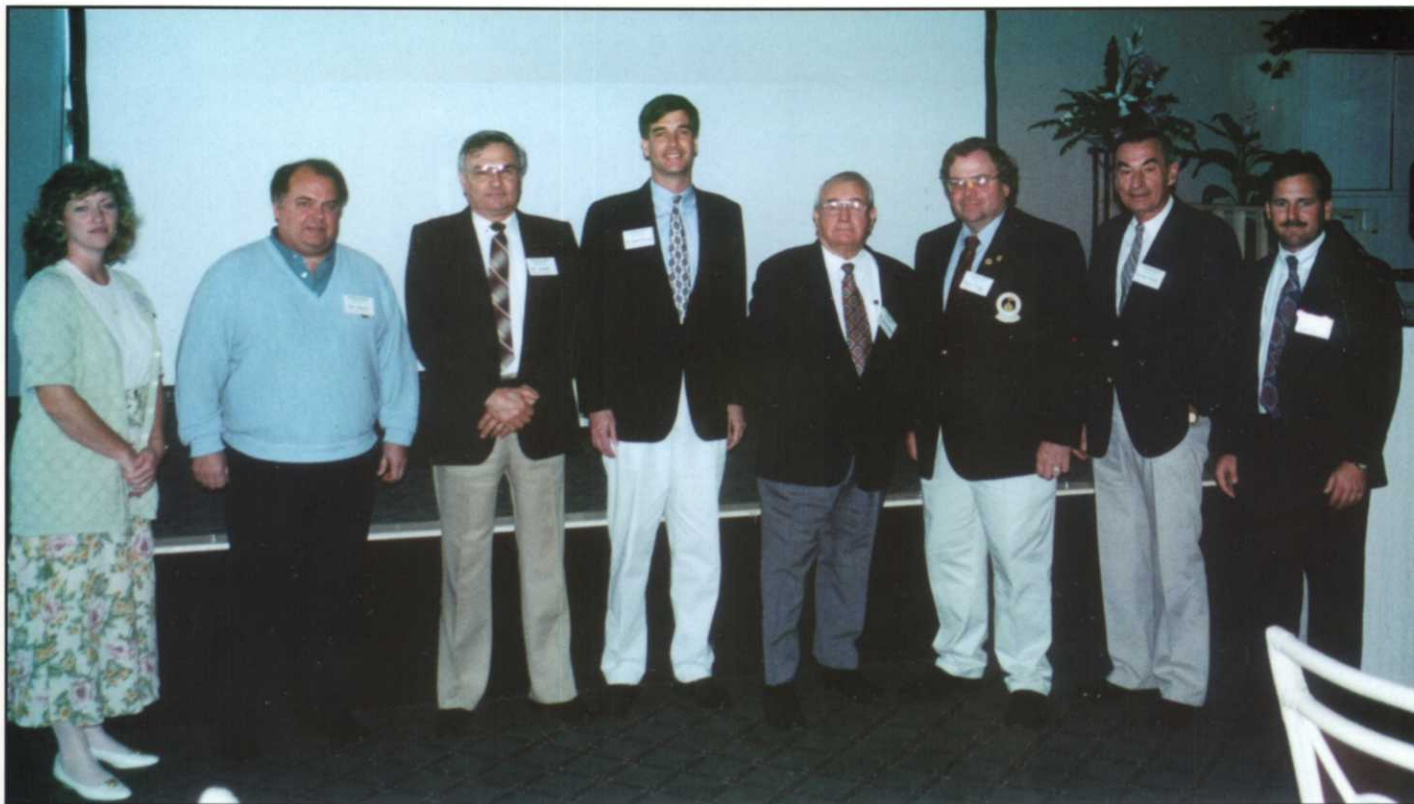
NO WAIT. NO WORRY.

REWARD herbicide. For broad-spectrum weed control without the wait — and without the worry.

For more information, contact your distributor or call Zeneca at 1-800-759-2500.

Always read and follow label directions.
REWARD® is a trademark of a Zeneca Group Company.
Roundup is a trademark of Monsanto Company.
©1995. Zeneca Inc. A business unit of Zeneca Inc.

ZENECA
Professional Products



EGCSA Seminar seekers, from left, are Shelly Foy, Ron Dodson, Dr. Al Dudeck, Dr. Clark Throssel, Dr. Jim Watson, Gary Grigg, Dr. Joe Duich and Wayne Kappauf.

Everglades hosts power-packed line-up

continued from Page 23

(3) Leaching excessive salts, and

(4) Managing the available water sources. He also pointed out that gypsum can help sodium problems but not other salt problems.

Dr. Joe Duich of Penn State University discussed putting green speed. He revealed that the stimpmeter was originally meant as a means to measure uniformity of the greens on a course. Good players like fast greens because it limits the number of players who have a chance to win. The fanatical demand for fast greens has been caused by such dramatic improvements made on all other areas on the golf course.

Dr. Duich reviewed his finding on the different methods used to decrease ball deceleration. Double cutting has been the most desirable method of increasing speed, and it has been the most widely used.

The perception that dry greens are faster did not hold up to scientific analysis:

Light frequent topdressing can increase stimp readings by six inches or more.

Wetting agents do not speed up greens.

Brushes do not speed up greens, but they do make the putting surface more true.

Rollers can increase speed by two feet, but the effect will not last until the next day.

In addition, Dr. Duich gave some tips to making more

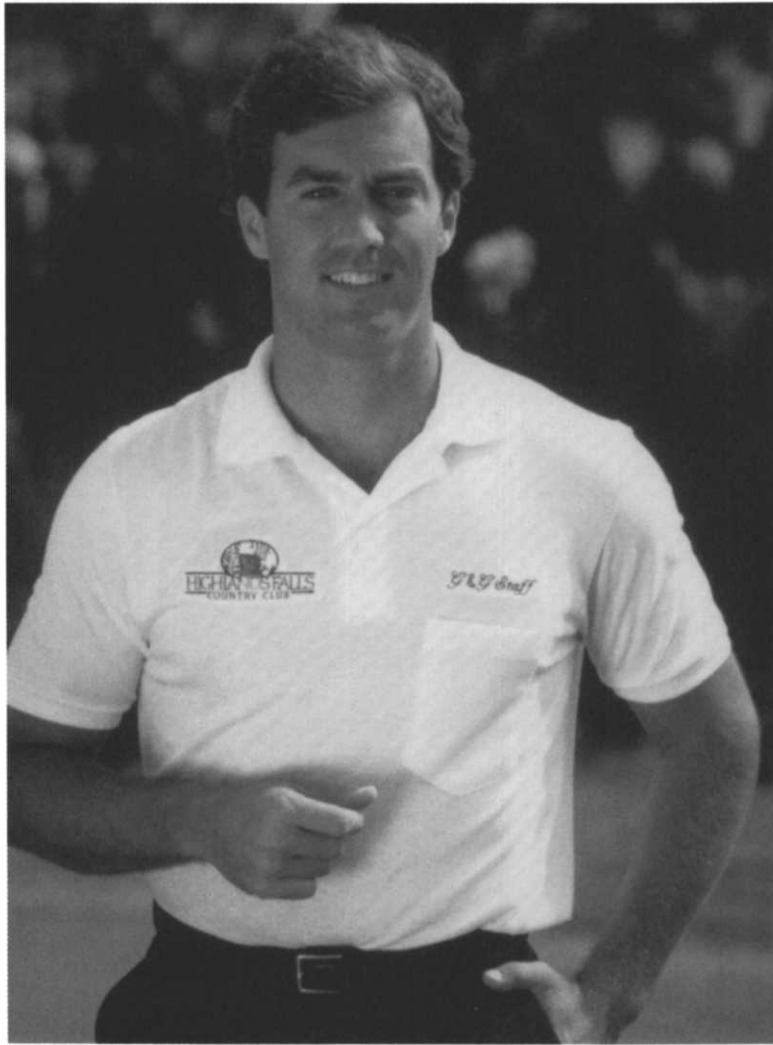
accurate stimpmeter readings: Consistently measure in the same area on a green, and make sure that the distance in one direction is not more than 20% greater than the opposite direction.

Dr. James Watson of the Toro Company reviewed environmental concerns for the golf course industry. He was encouraged by the most recent Environmental Summit. He reviewed the positive attributes of turfgrass. These benefits are even a greater reason why golf course superintendents and developers must continue to do the right thing. We must limit disruption of native materials during construction of golf courses. Applying pesticides and fertilizers must be done judiciously and always according to the label. We must establish Integrated Pest Management programs and pest damage thresholds. Be precise with irrigation and diligent in our efforts to reduce water consumption.

As golf course superintendents it is our responsibility to become more proactive in our efforts to change the public perceptions of golf.

All of the speakers focused on what we as golf course superintendents can do to enhance our image and that of golf. Hopefully, their combined wisdom will be manifest in many positive results.

*Mike Mongoven, CGCS
Assistant Director of Golf
City of Fort Myers*



Steve -

Took your advice and called Southern at 1-800-233-3853. Thanks a lot! The crew now looks professional in their new custom embroidered uniforms from Southern.

Also bought their new Surveyor stripe flagsticks and added their embroidered checkered flags. Our design looks great and everyone is impressed with the durability of the flag. Southern is really the best and easiest way to go for flags, flagsticks, and uniforms!

PS. Saved a ton of money, too!

Bob



Our logo

Stripes like this

Turned aluminum ferrules - will work in all putting cups.

SOUTHERN IS THE CREATOR AND RECOGNIZED LEADER IN THE DESIGN AND PRODUCTION OF THE MOST DETAILED AND BEAUTIFUL CUSTOM EMBROIDERED GOLF FLAGS IN THE WORLD. CALL AND FIND OUT HOW EASY IT IS TO MAKE THAT NEXT TOURNAMENT OR CLUB EVENT SPECIAL!



1-800-233-3853

FAX 1-800-277-7701

Southern · 297 Dividend Drive · P.O. Box 2899 · Peachtree City, Georgia 30269

COVER STORY



*The Sanctuary
at Wulfert Point*

The tee shot carries over native area on the seventh hole.



A sanctuary and a golf course wrapped in a wildlife preserve

BY JOEL D. JACKSON, CGCS

A golf course sanctuary wrapped in a U.S. Wildlife Preserve might seem to some to be like the old saying, “a riddle wrapped in an enigma wrapped

in a paradox!” To those of us who have witnessed the tremendous diversity of wildlife on our golf courses, the term, sanctuary, is perhaps indeed a most accurate description.

Last year when Dan Jones told me there was a new 18-hole private club on Sanibel that we might want to consider for the magazine, I was amazed. I knew South Seas Plantation resort had a nine-hole course on the tip of Captiva Island just north of Sanibel, but I wasn't aware that there were two other public access courses, Beach View and The Dunes, on Sanibel. And now a new private, 18-hole, championship-length course. It

was hard to imagine.

Many of you may know Sanibel Island as the sea-shell-collecting capitol of Florida. What you may not know is that they have some of the most rigid rules about any type of development in the state. There are no towering condominiums or gaudy signs of rampant commercialism like those

found in most of our coastal areas. No McDonald's or Burger King's. There are, however, over 40 award-winning restaurants from The Mucky Duck to Windows Over the Sea.

Jerry's, the main grocery store, is hard to spot hidden in a grove of trees. Everything is low key, low profile, slow paced and quality driven. It is one of the few places left where one can truly enjoy a Florida barrier island environment.

Wulfert Point is credited as Sanibel's first settlement. The Calusa Indians called it home for nearly one thousand years as recently as 800 AD. It wasn't until around 1887 that the first modern homesteader's began arriving raising citrus and vegetables. Disastrous hurricanes in 1910, 1921, and 1926 finally ended these efforts and the farms were replaced by Clarence Chadwick's lime and coconut groves. This small agricultural community had a school, a post-office store and about one hundred citizens for a brief history of little more than forty years.

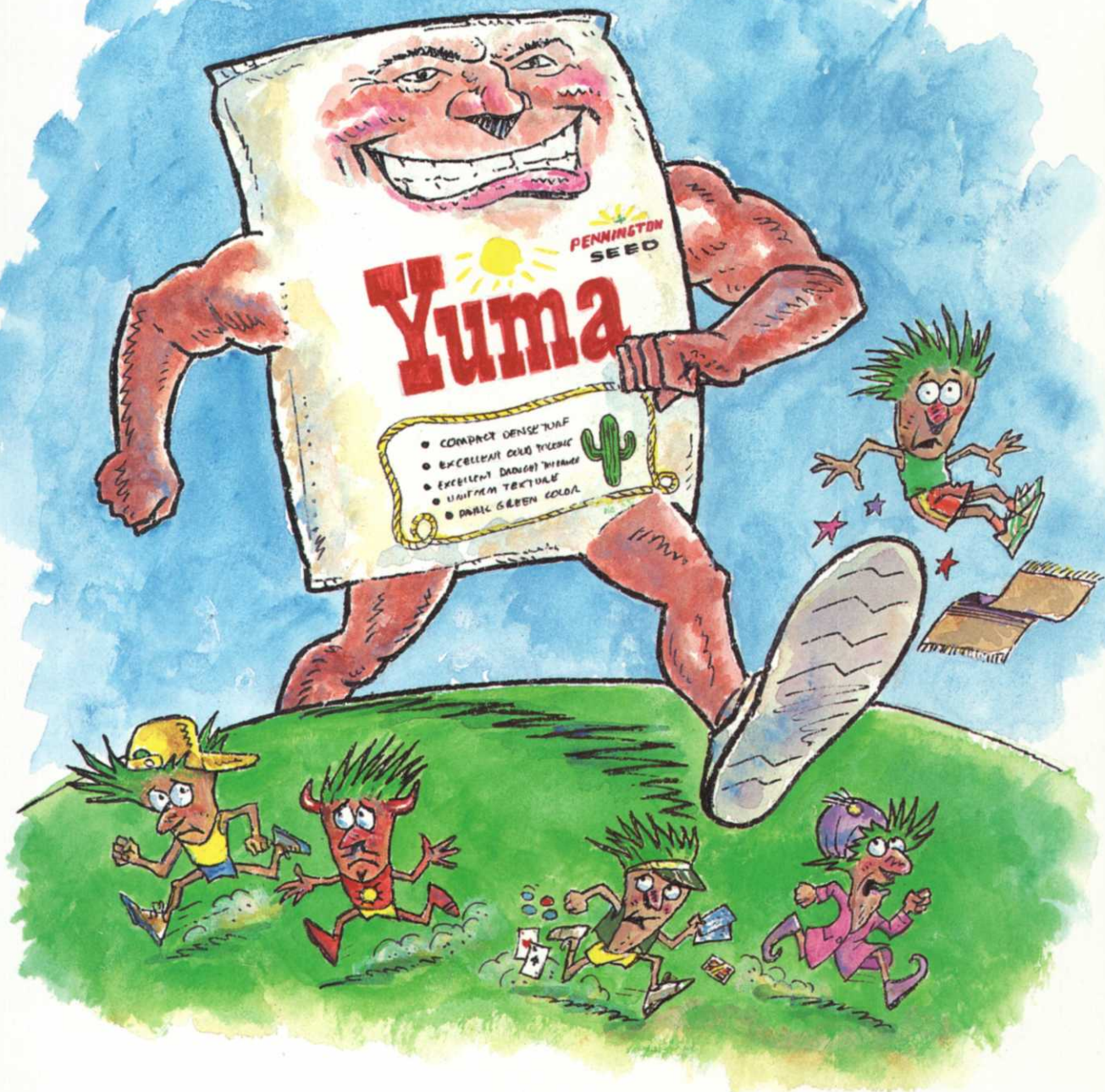
Nearly 70 years later, the owners of the Wulfert Point area had to overcome some stiff opposition to exercise their private property rights to develop the area. After much negotiation, the permits were granted. In return the developers had to build a wastewater treatment plant to serve Captiva and Sanibel Islands; design the course to retain run-off from the development; and then deed a strip of land around the development to the U.S. Fish & Wildlife Service, which puts The Sanctuary technically within the boundaries of the John “Ding” Darling Wildlife Preserve.

Getting the development approved and constructed was a challenge in itself. And now Tim



Wulfert Point is credited as Sanibel's first settlement. The Calusa Indians called it home for nearly one thousand years as recently as 800 AD. It wasn't until around 1887 that the first modern homesteader's began arriving raising citrus and vegetables.

Introducing New Yuma Improved Turf Type Bermuda From Pennington Seed
We're Gonna Kick Some Grass!



Pennington Seed is proud to introduce the new kid in town... and he's a tough one. Our new Yuma improved turf type bermuda is drought tolerant, low growing, has excellent turf density and a rich green color. Yuma also features quick germination and rapid recovery from mechanical injury. In fact, once established, it requires less water than many other bermudas. It's perfect for golf course tees, fairways and roughs, as well as athletic fields and other turf areas. Write or call us today for more information on Yuma - it's one tough son of a gun.

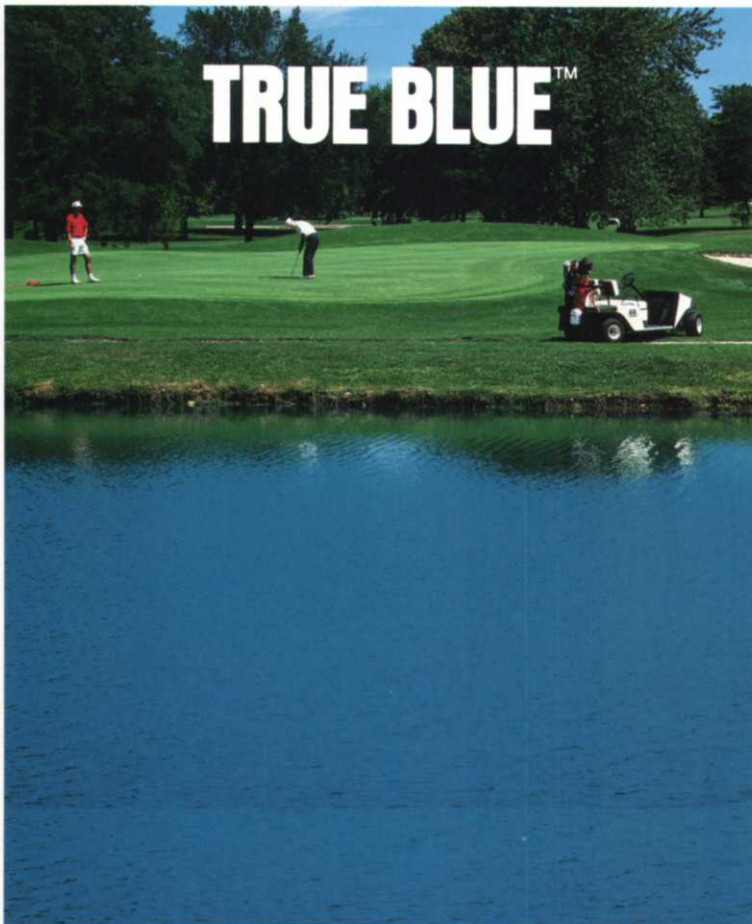


Call 1-800-285-SEED

for a Pennington Seed Specialty Turfgrass Distributor near you



Par three 4th hole borders Pine Island Sound.



The better, more natural looking lake and pond dye

Why settle for artificial looking dye when TRUE BLUE™ will give your lake or pond a natural, living color appearance. The secret's in our tried and true blue formula that makes the other brand look unnatural by comparison.

Try it and see for yourself why TRUE BLUE is fast becoming the preferred lake and pond dye. The one that's a natural. For more information and a technical bulletin, call or write today.



No Blue



TRUE BLUE



PRECISION LABORATORIES, INC.

Distributed by:

Gold Kist, Inc.
P.O. BOX 2210
Atlanta, GA 30301
800-241-4966

Harrell's, Inc.
P.O. Box 607
Lakeland, FL 33802
800-282-8007

TRUEBLUE is a trademark of Precision Laboratories, Inc.

YEARS OF UNIVERSITY TESTS SHOW CYPRESS POA TRIVIALIS AS THE SUPERIOR CHOICE FOR OVERSEEDING!

Since 1991, Cypress Poa trivialis has had a proven record in university trials for being better and different than comparable varieties. Differences such as a darker genetic color, faster establishing rate, and better disease resistance.

Instead of taking our word for it, here is what the experts have to say...



Cypress' prostrate growth habit is apparent in these P.V.P. trials. One picture is worth 1000 words.

TMI will be happy to send to you copies of the complete trial data for any of the trials we have mentioned below.

| University of Florida 1991-92 Overseeding Trials Gainesville, Fla. | | |
|--|--------------|-------|
| | Mean Quality | |
| | Scores | Color |
| Cypress | 7.2 | 7.8 |
| Sabre | 7.2 | 5.4 |

| University of Arizona 1992-93 Overseeding Trials | | |
|---|--------------|-------|
| | Mean Quality | |
| | Scores | Color |
| Cypress | 5.4 | 5.3 |
| Laser | 5.0 | 5.0 |

USGA Stimpmeter tests at University of Arizona revealed a higher average ball speed of 92 inches for Cypress; better than for Laser.

"Although Cypress and Sabre Rough Bluegrass had equal seasonal Turf Quality Ratings of 7.2, the 'Cypress' cultivar had better color and less dollarspot disease in May."
Univ. of Florida Gainesville 1991-1992 overseed Trial.

| Turfgrass | Monthly and seasonal mean values for turf quality on cool-season grasses overseeded on a 'Tifdwarf' bermudagrass putting green from Dec. 1993 to Mar. 1994 at Gainesville, Fl. | | | | Mean |
|------------------------------|---|------|----------------|------|-------|
| | Dec. | Jan. | Feb. Rating | Mar. | |
| Cypress | 6.8 | 8.2 | 8.0 | 6.8 | 7.25a |
| Colt | 7.1 | 8.2 | 7.8 | 8.5 | 7.19a |
| PT-GH-92 | 6.3 | 7.8 | 8.0 | 7.1 | 7.19a |
| LPT-CT (Loft) | 6.6 | 7.8 | 8.0 | 6.8 | 7.16a |
| PT-GH-89 C11 (Dark Horse) | 8.1 | 7.3 | 7.8 | 7.0 | 6.97a |
| Danish Common | 7.5 | 8.2 | 7.5 | 5.8 | 6.94a |
| LPT-HWY (Loft) | 6.6 | 7.7 | 7.9 | 8.2 | 6.88a |
| Winterplay | 6.6 | 7.5 | 7.8 | 6.3 | 6.88a |

Quality mean based on eight visual ratings on a scale of 1-9 where 9 = best

| Establishment rate of Poa trivialis varieties overseeded on dormant bermudagrass in Florida (data from Dr. A.E. Dudeck, Univ. of Florida) | | | |
|--|------------------|----|----|
| days: | 7 | 14 | 21 |
| | —% ground cover— | | |
| 1991 | | | |
| Cypress | 2 | 23 | 79 |
| Sabre | 2 | 17 | 70 |
| 1992 | | | |
| Cypress | 87 | 93 | 86 |
| Laser | 36 | 58 | 83 |

CERTIFIED



FOR YOUR NEAREST DISTRIBUTOR CONTACT:

TMA TURF MERCHANTS

33390 TANGENT LOOP • TANGENT, OR 97389
PHONE: (503) 926-8649
OUTSIDE OREGON: 800-421-1735

FAST-PUTTING, LOW-MOWING, GOOD LOOKING CERTIFIED CYPRESS!

Sever, the superintendent, and his staff have a unique opportunity to demonstrate that properly-executed turf management techniques can be quite harmonious with nature. It will be an exciting and interesting project to watch in the years to come.

During the construction process, generating good usable fill was difficult as most of the clearing work had to be done by dragline. Much of the needed fill had to be trucked in from the mainland which was an expensive proposition. Fortunately the character of the golf course did not require high mounds, but rather subtle mounding, which Arthur Hills masterfully blended to the low lying island features.

Consequently, the course does not look artificial or imposed on the landscape. It flows gracefully through the habitat framed and accented by the more than 10,000 trees that were moved and replanted along its route. Those trees were tagged by Sanibel's Vegetation Inspector, Steve Mullins. It is Steve's responsibility to see that any developed property follows the landscaping and native plant guidelines required by the City of Sanibel.

Of paramount importance during this phase was minimal impact on the existing wildlife. A state-licensed handler was hired to relocate any of the over 200 gopher tortoises on site that might wander into harm's way. They were placed into three specially protected areas to keep them safe. Over three miles of plastic barrier fencing was erected to separate wildlife areas from construction activities.

One of these areas was known as the Eagle buffer area and was the site of an active bald eagle nest. It was off limits to any development within 750 feet during nesting season October 1 to May 15. Natural screens of tall Australian pines were left intact to prevent even visual contact. No foot or motorized traffic could approach the nest at anytime. A 60-foot perch pole was erected near the nest for their future use while the eagles were gone during the summer. Unfortunately, the nest was destroyed by Hurricane Andrew and the eagles relocated to an adjacent area on Sanibel. They are still seen on the golf course and frequently use the perch pole.

I saw no eagles during my interview ride with Tim, but I did see an abundance of wading birds and two very large gators taking the morning sun. On this day in February, the course and the native vegetation were reacting to a rare frost earlier in the week. The sun ricocheted off the shiny sleek bark of the tropical gumbo limbo trees as their thinned out canopies provided little shade. The prolific sea grapes had slimmed down for winter as

well. But the turf was green and the pattern of carefully crafted stripes stood out like vivid light and dark shadows in the fairways.

The greens were tight and closely cropped and to the trained eye there was evidence of a recent light top dressing. The bunkers were all neatly raked in swirling patterns and tiny white shell fragments in the sand tied the brand new course instantly to the legacy of the island.

As we rode the course, Tim detailed some of the challenges facing his department:

"Our irrigation water, as you might expect, has a high salt content ranging from 1200 to 2900 parts per million. I always thought 2000 ppm was considered lethal for fine turf."

I asked why he wasn't using effluent from the waste water plant that had to be built. "We will eventually, and I can't wait till that happens, he said, "but right now, there isn't enough demand from Sanibel or Captiva to even warrant starting up the plant."

"Our soil also has a high pH, around 8.0, from the calcareous sand profile. We apply sulfur seasonally and we also buffer our irrigation water to prevent further aggravation of the problem. We go through a tank of buffering solution each month.

"We don't get that much annual rainfall, maybe averaging only about 30 inches per year. We can get the showers from the south and west, but most all the easterly afternoon thundershowers rain out or split before they reach us.

"It has something to do with the physical orientation of the island and the surrounding water. Even the south-

ern part of the island gets more rain than we do here on the northern end.

"When we do get rain we have to retain the runoff from the development and golf course on the course itself. It isn't that evident just looking at the course, but the margins of the course actually have a five and a half foot berm designed into the roughs.

"Retention lakes and spreader swales and drains all hold the water until it percolates or evaporates. If we get inundated and the lakes fill up, we can have some soft wet areas around the mouths of some of the drains for a day or two."

"Another challenge comes from residing and operating in a U. S. Fish & Wildlife Preserve." I work very closely with the Director of the Preserve, Lou Hinds. I have to submit a list of chemical products I would like to use to the Fish & Wildlife

'I have to submit a list of chemical products I would like to use to the Fish & Wildlife regional office in Atlanta. They study the list and delete any product they don't want us to use.'

Control Summer Stress Complex^{*}

*Occurs when stresses such as Rhizoctonia and Pythium species combine with heat, traffic and other factors. This results in reduced turfgrass vigor.



RHONE-POULENC AG COMPANY
P.O. Box 12014, 2 T. W. Alexander Drive
Research Triangle Park, NC 27709
1-800-334-9745



At hole 16, gentle mounds and swales aid drainage and add interest.



The 10th green uses a bit of the native wilderness to guard itself.

regional office in Atlanta. They study the list and delete any product they don't want us to use. So far, we have not had any problems that we couldn't treat successfully with the available chemicals.

"We obviously hope that the biological controls being introduced will prove to be very effective. That would be a plus for everyone!"

As we continued our ride, I spied some folks working in the adjacent woods.

Tim explained, "We also use the services of an outside contractor for another unique requirement of the development permit. We have to go through annually and scout for and remove any exotic vegetation even if it was here before the development began."

I couldn't help but notice how immaculate the course was as we toured. It reflected the conscientious nature of Tim's management style, and the integrity of the ownership and the staff of The Sanctuary.

Superintendents are always interested

in the work routines and staffing levels of other operations. I'm no different.

At The Sanctuary, the crew works Monday through Friday. They can't get started until 7:30 a.m. because of a noise ordinance. Consequently, the first tee times aren't until 8 a.m. The crew works ten hours on Mondays and leaves early on Fridays. Half the crew works each weekend, alternating weekends. The crew is paid overtime for the weekend work.

"We pay a pretty good wage, Tim said, "and you have to remember most of these folks have to come a long way to get out here to the island. We provide uniforms, lunches, toll money, and a good insurance package. In my experience, this has to be one of the best groups of people I've ever had assembled on a crew."

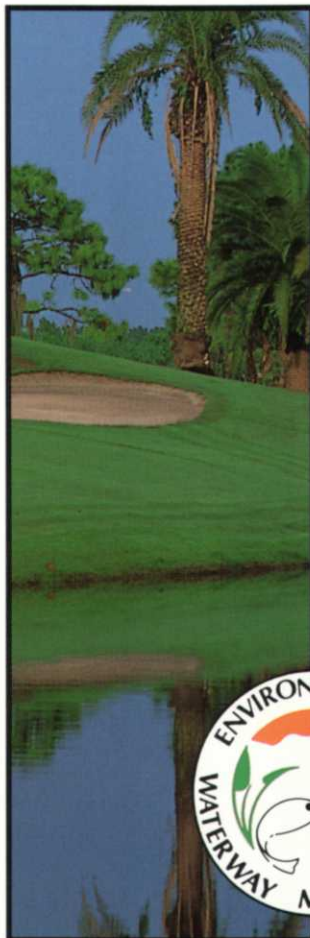
Tim was also quick to credit his assistant, Kyle Sweet, with helping to make the job run smoother and the management programs successful.

"Kyle is an outstanding person. He's ready if the right opportunity comes along." And in return, Kyle is impressed by Tim's consistency. He said, "Tim follows through on all the cultural programs. This is one of the few places I've seen where we have been able to become so successful in the needed cultural practices. Tim requires it. I wanted to experience a unique, high-quality operation and this is a great place to be."

This team work and commitment extends to the ownership as well. Tim said, "We have had very few complaints from the owners or members. Our membership is somewhat unique. At a lot of clubs the members winter down in Florida all season. Play is steady but it seems as though they come in for a month or so and then leave. The owners are extremely conscientious. They ask lots of questions if they see something they don't understand. They listen. If a problem exists, it's solved. I appreciate the fact that they are committed to doing things right!"

Doing things right! A common thread connecting Tim Sever, The Sanctuary, and Sanibel Island.

Editors Note: For further details on The Sanctuary's maintenance facility, check out Tim Sever's IPM article in the Heads Up section of this issue.



Environmental Waterway Management... "Preserving Your Liquid Assets"

Golf Courses have Lakes, Ponds, Canals and Water Everywhere! Many of these water bodies are used for irrigation, fishing swimming, drainage or simply as hazards to the navigating Golfer on your course. If you allow Algae, Grasses and other noxious weeds to grow unchecked, they will rapidly take over your precious waterways. Don't allow your waterway problems to get you in over your head. Just call the experts at Environmental Waterway Management.



For a FREE site analysis, contact
Environmental Waterway Management

- North Florida Branch Office Jacksonville
- West Central Branch Office Tampa
- Southwest Branch Office Sarasota
- Sub-Branch Office Fort Myers
- Central Florida Branch Office Orlando
- Sub-Branch Office Vero Beach
- Sub-Branch Office Palm Beach
- Corporate Headquarters East Coast Branch Office Fort Lauderdale

1-800-832-LAKE
©1991 Environmental Waterway Management



NEW PUTTING GREENS! PLAYABLE IN THREE WEEKS!

HAVERLAND BLACKROCK CORP.

The innovators in Golf Course Construction can rebuild and recontour your greens and have them back in play immediately!

THE BIG ROLL SOD PEOPLE

LASER GRADING

INSTALLATION:

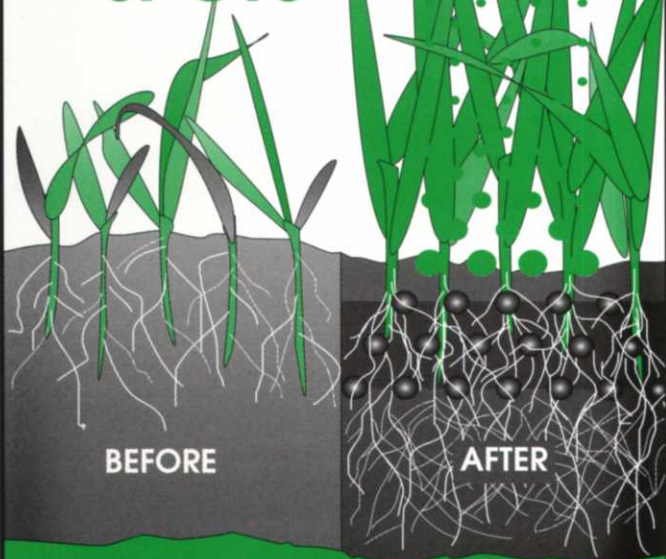
Tees, Greens, Fairways, and Athletic Facilities

- USGA PUTTING GREEN RENOVATION ■



9819 STATE ROAD 7 ■ BOYNTON BEACH, FL 33437
(407) 369-7994 ■ FAX (407) 364-1118

ELIMINATE HOT SPOTS



BEFORE

AFTER

envirogenesis™

TurfBloom

TurfBloom creates a membrane barrier at the soil surface that inhibits water evaporation.

TurfBloom is ideal for areas with limited water supply or poor irrigation coverage.

TurfBloom is not a polymer and has no negative impact on soil.

**Reduce Water Usage with
One Annual Treatment!**

envirogenesis™
solutions for a cleaner environment

Call Envirogenesis to place your order today:

1-800-814-1324

Envirogenesis, Inc. • 5712-K General Washington Drive • Alexandria, VA 22312
703-941-3900 • FAX 703-941-1508



Tim Sever

Golf Course Superintendent The Sanctuary GC

Originally from: Clearwater, Florida.

Family: Wife, Nedra. Children: Justin (3).

Education: Graduated high school in Dunedin, Florida. Has attended the GCSAA Conference & Show and FTGA Turfgrass conference annually since 1988.

Employment: Sanctuary G.C. since 1992; Sugarmill Woods, Southern Woods and World Woods, Director of Maintenance, 1988-1992; Bardmoor C.C./Bayou Club, Assist. Supt., 1983-88 (J.C. Penney Classic); Firestone C.C., Akron, Ohio; Countryside C.C., Foreman, 1977-1982.

Hobbies/Interests: Camping, fishing, golf, home projects, home life.

Professional affiliations: FGCSA, GCSAA, FTGA.

Memorable moments: Being involved in the planning and construction of 66 holes of golf (Southern Woods, 18 holes, and World Woods, 48 holes) while maintaining a 27-hole complex at Sugarmill Woods.

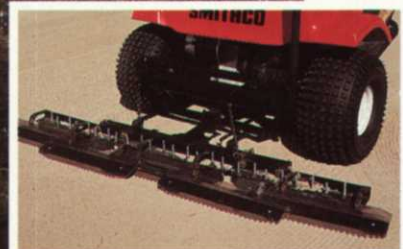
Advice: Learn as much as you can continually. This business is changing almost daily. Concentrate on interpersonal skills. You are only as good as your staff. Treat people the way you'd like to be treated. Explain what and why you do things. Knowledge makes a better employee. Hire a good assistant. It can make you a better superintendent.

Mentors: My dad, *Robert I. Sever Jr.*, Always preached that if a job was worth doing then do it right! *John Luper*. His management style in handling people with different personalities. He had confidence in me and let me experiment with various jobs and projects. Promoted me to my first Assistant Superintendent position at Bardmoor.

SO QUIET, YOU CAN HEAR A PUTT DROP

World's first electric bunker rake Exclusive ultra-quiet finishing rake

Sand Star E



NEW SILENT SAND FINISH RAKE



SMOOTH, FIRM FINISH... NOT SOFT

SOLD AND SERVICED BY:

KILPATRICK TURF EQUIPMENT

901 Northwest 31st Avenue ■ Ft. Lauderdale, FL 33311
Telephone: 305-792-6005 ■ Fax: 305-584-5831

TIECO/GULF COAST

540 W. Michigan Avenue ■ Pensacola, FL 32505
Telephone: 904-434-5475 ■ Fax: 904-434-2786

TRESCA INDUSTRIES

4827 Phillips Highway ■ Jacksonville, FL 32247
Telephone: 904-448-8070 ■ Fax: 904-448-2725
3930 N. Orange Blossom Trail ■ Orlando, FL 32804
Telephone: 407-291-1717 ■ Fax: 407-297-6166
6025 Highway #301 ■ Tampa, FL 33610
Telephone: 813-621-3077 ■ Fax: 813-620-0303

ALWAYS OUT FRONT

SMITHCO

WAYNE, PENNSYLVANIA 19087



Native grass planting guards 5th hole.

On Course, In Harmony With Nature.

Nothing adds more to your world than a healthy lake. A lake, like a golf course, needs management care. Keep your lake "on course" with AmerAquatic. Our unique "spot treatment" method minimizes herbicide use and keeps the water environment in harmony with nature. For algae and weed control, fish stocking, aeration, lakescaping, mitigation, lake design and more, call AmerAquatic. *Your lake's best friend.*

FLORIDA • GEORGIA • CAROLINAS 800-432-1349

AmerAquatic™ *Your lake's best friend.*SM

LASER

Poa trivialis

IS PROVING ITSELF...

Over

At Arnold Palmer's Bay Hill Club, Orlando, FL

"I've been overseeding with 100% Laser since it was first introduced. Now I wouldn't use anything else. It really does an excellent job for us at Bay Hill." Dwight Kummer


BAY HILL CLUB

and Over

At Buck Creek Golf Plantation, No. Myrtle Beach, SC

"Using Laser in conjunction with perennial ryegrass has enabled me to reduce the total poundage, counter the wear associated with heavy play, provide an ultra smooth transition in fall and spring, and provide our golfing guests with an outstanding putting surface. I've heard many comments such as, 'Best bent greens we've played here on the beach'." John E. McWhite


BUCK CREEK
GOLF PLANTATION

and Over

At Bonita Bay Club, Bonita Springs, FL

"I have used Laser *Poa trivialis* for the last several seasons and I have been very pleased with its color, texture, establishment, spring transition and especially with its durability. It's definitely part of my future overseeding plans." Mark Black

Bonita Bay Club


and Over

At Grayhawk Golf Club, Scottsdale, AZ

"At Grayhawk Golf Club we use an 85/15 blend of Palmer II/Prelude II/Laser on our fairways, roughs, and tees. The high seed count of the Laser blend allows us to reduce our seeding rates and prep work while providing a superior playing surface compared to straight perennial rye." Mike Pock


GRAYHAWK
GOLF CLUB

and Over

At Lake Nona, Orlando, FL

"I normally utilize a 50/50 blend of bentgrass/*Poa trivialis* for my greens overseeding program. This year however, because our tournament schedule dictated a later overseeding window, I will use straight Laser *Poa trivialis* at a slightly higher rate. This will be the fourth year I've used Laser. During those years, we've experienced a variety of weather conditions and traffic challenges. Laser has consistently exhibited good color and the drought tolerance that is so important in achieving a smooth spring transition. That was the reason I tried Laser in the first place and it has performed very well." Ken Glover


LAKE NONA

and Over Again

At Hunter's Creek Golf Course, Orlando, FL

"For the past five years, we have overseeded our greens with straight Laser. Year after year, Laser has out-performed the other *Poa trivialis* varieties we've compared it against. It has consistently proven to have better color, quicker establishment, better disease resistance and better durability under high traffic. Laser produces an excellent putting surface. Our observations have convinced us that Laser is the superior choice of *Poa trivialis*." Craig A. Shelton


HUNTER'S CREEK
GOLF COURSE



Tournament-quality greens are expected at **Arnold Palmer's Bay Hill Club**. Overseeding with 100% Laser every year helps Dwight Kummer meet those expectations.

Let Laser prove itself again...on your golf course.



Lofts Seed Inc.

World's largest marketer of turfgrass seed

Bound Brook, NJ 08805

Lofts/Great Western
Albany, OR
(503) 928-3100
(800) 547-4063

Lofts/Ohio
Wilmington, OH
(513) 382-1127
(800) 328-1127

Lofts/Maryland
Beltsville, MD
(301) 937-9292
(800) 732-3332

Lofts/Pennsylvania
Allentown, PA
(610) 266-6612
(800) 708-8873

Lofts/New England
Arlington, MA
(617) 648-7550
(800) 648-7333

Sunbelt Seeds, Inc.
Norcross, GA
(404) 448-9932
(800) 522-7333



The Sanctuary Golf Club

Above are Superintendent Tim Sever (right) and Assistant Superintendent Kyle Sweet. Right is The Sanctuary golf and landscape staff.



Location: Sanibel Island, Florida.
Ownership: Sanctuary Golf Club, Inc.
Playing policy: Private — 350 equity memberships
Management: Project Manager, Paul Scoggins; Golf Professional, Art Smithwick; Club President, Jeffery J. Milton; Chairman of the Board, John Nauman; Food and Beverage Manager, David Williford.
Designed by: Arthur Hills
Opened: 1993, 18 holes.
Acreage: Total turf = 88 acres. Lakes = 10 acres.
Tees: 5 acres, Tifway 419. HOC = .438. Overseeded w/ Sabre Poa trivialis.
Greens: 3 acres, Tifdwarf. HOC = .157 (During season = .125). Average size = 6,000 square feet. Overseeded w/Cobra creeping bentgrass @ 4 lbs. per 1,000 square feet and Sabre Poa trivialis @ 6 lbs. per 1,000 square feet. Green speed 8 - 10.
Fairways: 40 acres of Tifway 419, HOC = .625.
Roughs: 41 acres of Tifway 419, HOC = 1.00 summer, .500 November - April.
Irrigation: Source: Deep wells. Salt concentration 1200-2900 ppm. Controls: Network 8000 computer system.

Staff: Assistant Superintendent, Kyle Sweet (2 years).
Equipment Technicians: Head Technician, Tony Hansard (2 1/2 years); Assistant Technician, Rex Schad. Pest Control Technician, Brian Johnson. Irrigation Technician, Scot Marion (2 1/2 years). Administrative Assistant, Joni Stokes (2 1/2 years). Foreman, Tom Wesendorf. Landscape Supervisor, Frank Delatorre.
Total Staff: 24, including superintendent and landscape crew.
Wildlife Inventory: Mammals – river otter, raccoon, wildcat, skunk, opossum, armadillo, Florida panther (probable, but unproven). Reptiles – alligator, American salt water crocodile, diamondback rattlesnake, coral snake, gopher tortoise, eastern indigo snake. Birds - bald eagle, pileated woodpecker, red-shouldered hawk, kestrel, moor hen, blue and green-winged teal, mottled ducks, pied-billed grebe, great horned owl, wood ibis, white ibis, brown pelican, sandpipers, plovers, knots, gulls, terns. Migratory birds include all the ducks, loons, white pelicans, sharp shinned hawk, red tail hawk, and peregrine falcon. And all of the warblers and other song birds.

Graduated With Honors From Over 25 Prestigious Universities

HERE'S AN HONOR ROLL OF LEADING
UNIVERSITIES WHICH HAVE PROVEN
THE OUTSTANDING PERFORMANCE
OF IBDU® SLOW RELEASE NITROGEN:

UNIVERSITY OF WISCONSIN
PURDUE UNIVERSITY
CORNELL UNIVERSITY
UNIVERSITY OF RHODE ISLAND
THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY OF KENTUCKY
NORTH CAROLINA STATE UNIVERSITY
CLEMSON UNIVERSITY
UNIVERSITY OF GEORGIA
THE OHIO STATE UNIVERSITY
MICHIGAN STATE UNIVERSITY
VIRGINIA POLY TECHNIC INSTITUTE
COLORADO STATE UNIVERSITY
UNIVERSITY OF HAWAII
RUTGERS UNIVERSITY
AUBURN UNIVERSITY
LOUISIANA STATE UNIVERSITY
TEXAS A & M UNIVERSITY
UNIVERSITY OF CALIFORNIA
WASHINGTON STATE UNIVERSITY
OREGON STATE UNIVERSITY
UNIVERSITY OF IDAHO
UNIVERSITY OF NEBRASKA
UNIVERSITY OF ILLINOIS
UNIVERSITY OF FLORIDA
UNIVERSITY OF GUELPH

Why do competitive fertilizers "go to school" on Par Ex® with IBDU® slow release nitrogen? Maybe it's because IBDU®'s been passing the test at major universities for more than 20 years.

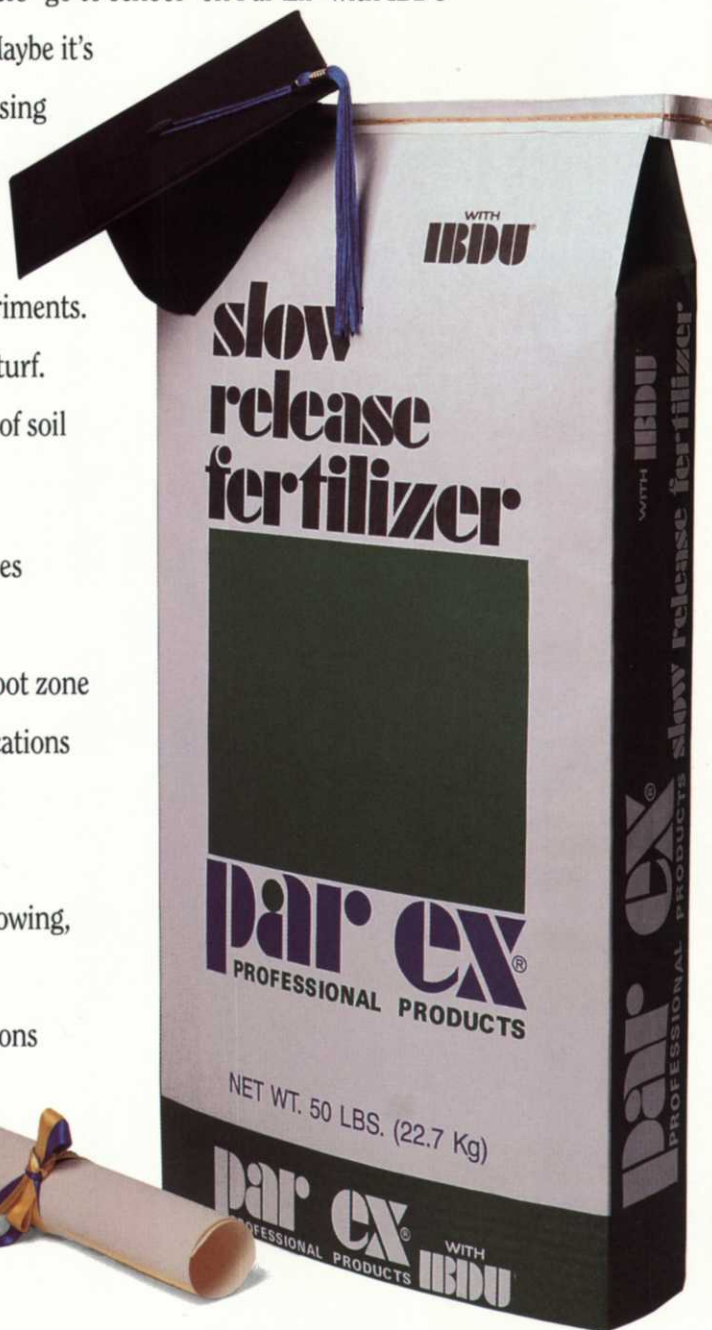
Not just in controlled laboratory experiments. In actual field testing. On all types of turf. Under every conceivable combination of soil and weather conditions.

Par Ex® earns straight A's when it comes to performance:

- Steady, continuous feeding to the root zone
- Extra staying power for fewer applications
- Primarily unfazed by temperature, moisture extremes
- Uniform turf growth for reduced mowing, labor costs
- Unmatched for late season applications

To study up on Par Ex®, call us at 1-800-767-2855.

We'll show you how to get an advanced degree of IBDU® slow release nitrogen for your turf.



**PAR EX® GIVES YOUR TURF AN ADVANCED DEGREE
OF SLOW-RELEASE NITROGEN**

Shhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhh!

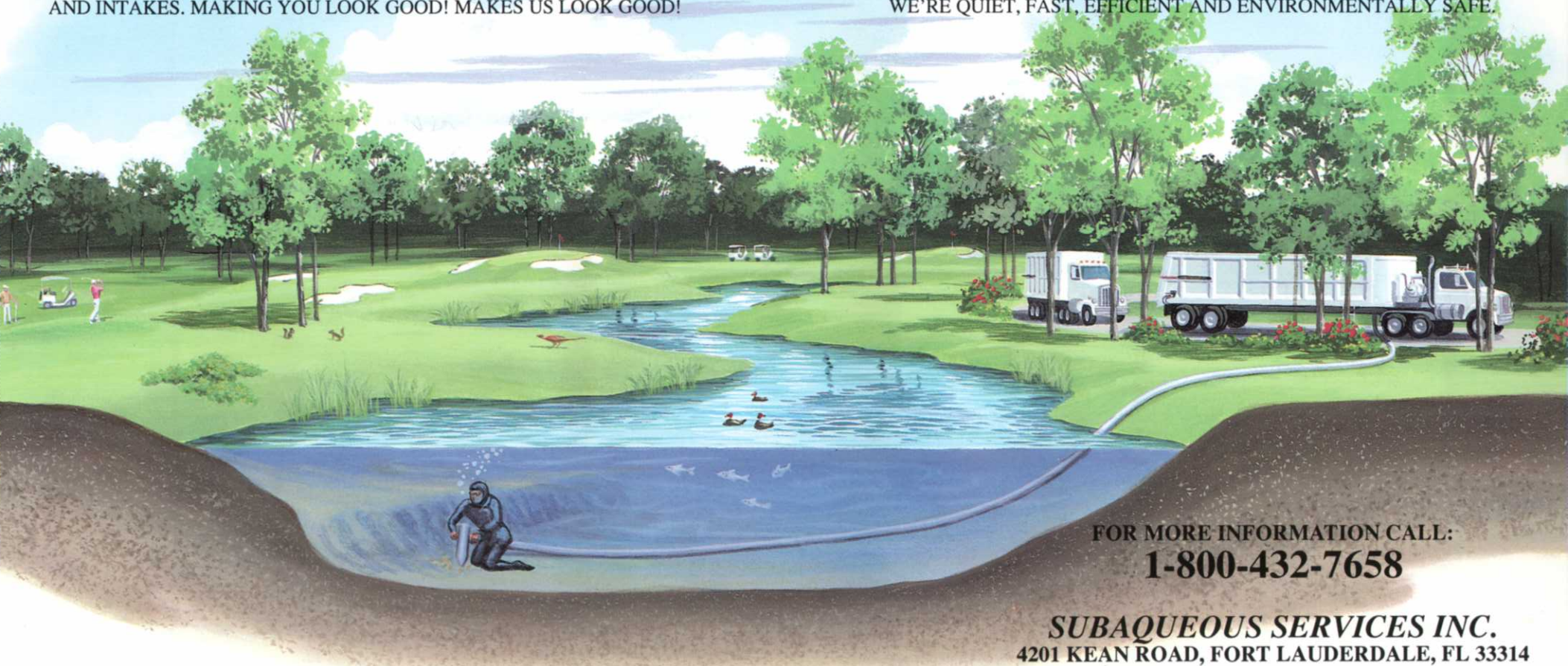
with **HAND DREDGING** the play goes on!

◆ EXCLUSIVE HAND DREDGING ◆

WITH OUR PATENTED SYSTEM THE ***PLAY GOES ON!*** WHILE WE CLEAN DREDGE YOUR LAKES, PONDS, CULVERTS, PIPES AND INTAKES. MAKING YOU LOOK GOOD! MAKES US LOOK GOOD!

◆ EXCLUSIVE PUMP & DUMP ◆

WITH OUR PATENTED SYSTEM PUMP & DUMP WE PUMP DIRECTLY INTO OUR WAITING TRUCKS, FAR FROM THE DREDGE SITE. WE'RE QUIET, FAST, EFFICIENT AND ENVIRONMENTALLY SAFE.



FOR MORE INFORMATION CALL:

1-800-432-7658

SUBAQUEOUS SERVICES INC.
 4201 KEAN ROAD, FORT LAUDERDALE, FL 33314
 SERVING FLORIDA FOR OVER 20 YEARS

and

TORO®

present...



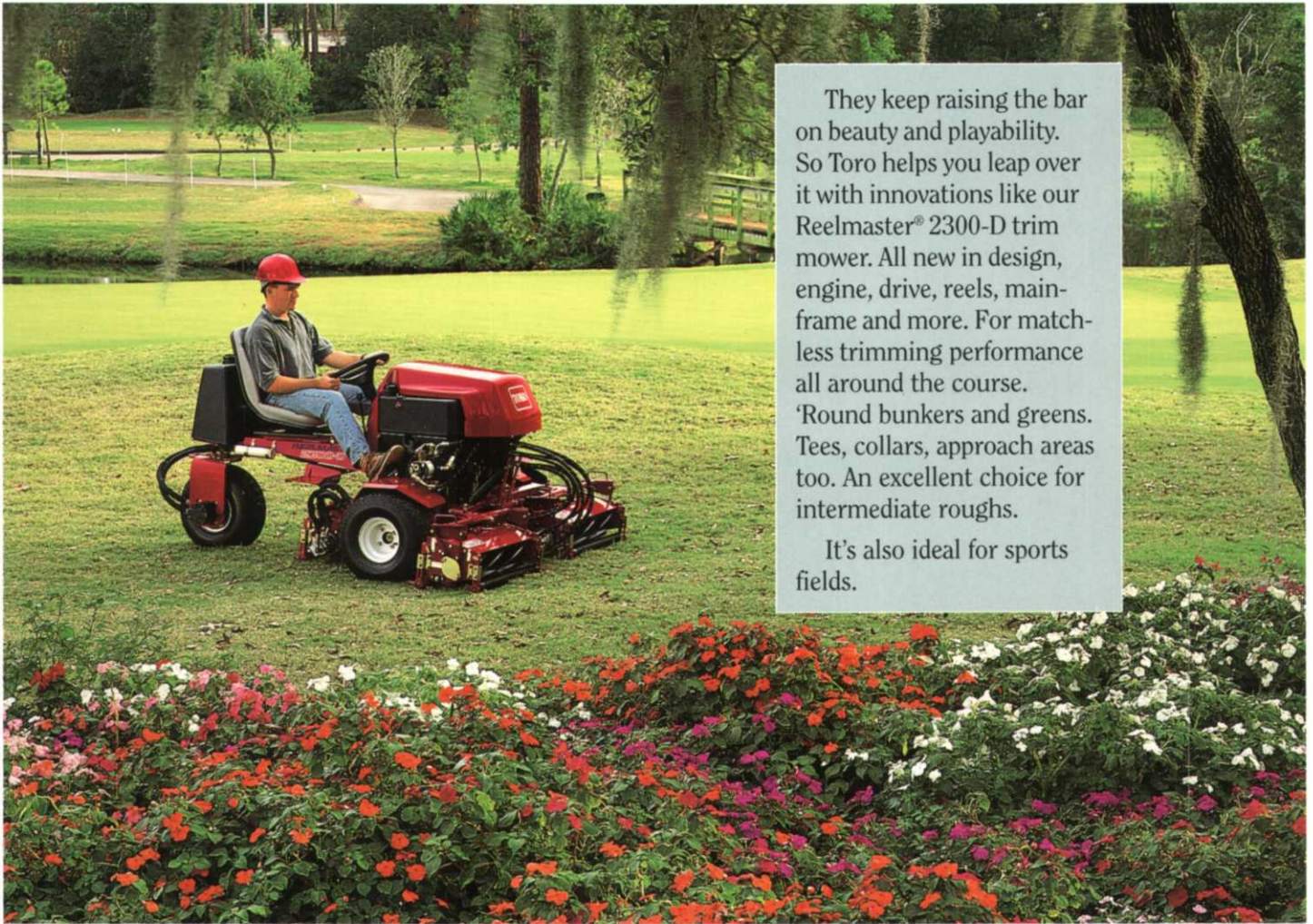


Reelmaster[®] 2300-D All Purpose Trim Mower

New engine. New drive. New reels.
Everything's new except the basics of the
renowned Reelmaster family.



REELMASTER® 2300-D: *All new from top to turf.*



They keep raising the bar on beauty and playability. So Toro helps you leap over it with innovations like our Reelmaster® 2300-D trim mower. All new in design, engine, drive, reels, main-frame and more. For matchless trimming performance all around the course. Round bunkers and greens. Tees, collars, approach areas too. An excellent choice for intermediate roughs.

It's also ideal for sports fields.



Hydraulic Reels

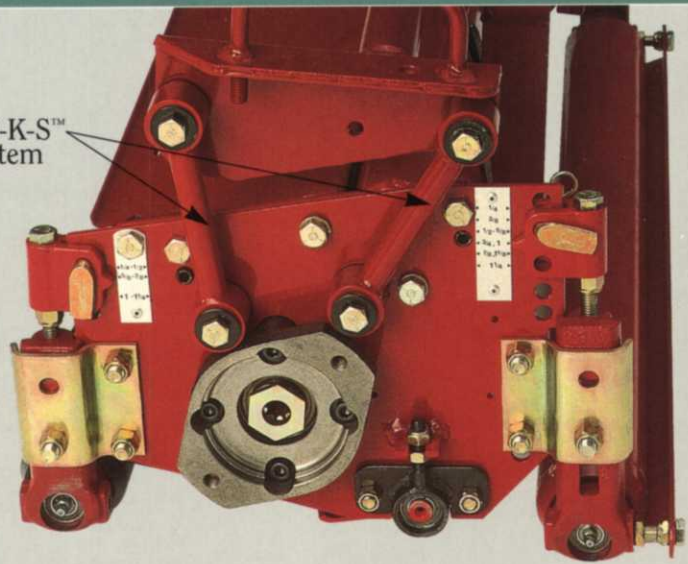
You need high torque reels with variable reel speed to work in all kinds of grass and terrain, including early morning, wet grass. The 2300-D delivers with a new hydraulic reel system with three interchangeable reels, that you set: fixed or floating. These 7" diameter, 26" wide reels together provide a productive 72" cutting width.



The Cutting Edge

A superb quality of cut is a given at Toro. The 2300-D takes that tradition a step farther with its new patent pending suspension system called L-I-N-K-S™. The L-I-N-K-S system and an adjustable spring counterbalance dramatically enhance ground contour following with no extra down pressure. The result is quality at the cutting edge.

L-I-N-K-S™
System



Nimble Maneuverability

Its lightweight, balanced design makes Reelmaster® 2300-D remarkably maneuverable. The two outer cutting units positioned out front, afford the operator a clear view for close trimming. And steering is virtually effortless.

Power To Spare

The power behind the 2300-D is a new 18 hp Perkins diesel engine. Teamed up with efficient hydrostatic traction, hydraulic oil cooler and 3-wheel drive, it generates reserve energy for really tough jobs.



Reelmaster® 2300-D Specifications* (cont.)

| REELMASTER 2300-D, DIESEL 2WD, MODEL 03421 4WD, MODEL 03426 | | | | | | | | | | |
|---|--|--------------------------|--------------------------|--------------------------|---------------------------|--------------------|--------------------|---------------------------|--------------------|--------------------|
| MAIN FRAME | Frame consists of formed steel, welded steel and steel tubing components. | | | | | | | | | |
| BRAKES | Service braking accomplished through dynamic characteristics of hydrostat. Parking brake is actuated by ratchet hand lever on the operator's left hand side. | | | | | | | | | |
| STEERING | Pinion and sector gear with solid drag link to rear steer wheel arm. | | | | | | | | | |
| CONTROLS | Foot operated traction pedal and traction pedal stop. Hand operated throttle, ignition switch, reel engagement switch, reel unit lift lever, parking brake and seat adjustment. Model 03426 only: 2-position selector valve for 2- or 3-wheel drive selection. | | | | | | | | | |
| GAUGES & PROTECTION SYSTEMS | Hour meter, temperature gauge. 4 light warning cluster gauge: oil pressure, water temperature, amps and glow plug. High water temperature shut-down. Electric traction pump de-clutching switch for cold start. Engine pre-heat incorporated into ignition switch. | | | | | | | | | |
| SEAT | Optional Cushion Seat (Model 30796) or Deluxe Suspension Seat (Model 30797) adjustable to operator weight, fore and aft, w/removeable fold-up armrests. | | | | | | | | | |
| ELECTRICAL FEATURES | 12 volt, Group 55, 450 cold cranking amps at 0°F (-18°C), 75 minute reserve capacity at 80°F (27°C). 14 amp alternator with regulator/rectifier. Seat switch, PTO and traction interlock switches. Indicator light when cutting units are running. | | | | | | | | | |
| OVERALL DIMENSIONS | Wheel tread width: 54.5" (138 cm). Wheelbase width: 55" (140 cm). Overall length (includes out front hoses): 98" (249 cm). Overall width: 76.5" (194 cm). Transport width: 72" (183 cm). Overall height (top of steering wheel): 44" (112 cm). | | | | | | | | | |
| WEIGHT (WET) | <table border="1"> <thead> <tr> <th></th> <th>5 Blade w/Wiehle rollers</th> <th>8 Blade w/Wiehle rollers</th> </tr> </thead> <tbody> <tr> <td>Model 03421 (2WD):</td> <td>1475 lbs. (669 kg)</td> <td>1495 lbs. (678 kg)</td> </tr> <tr> <td>Model 03426 (3WD):</td> <td>1505 lbs. (683 kg)</td> <td>1525 lbs. (692 kg)</td> </tr> </tbody> </table> | | 5 Blade w/Wiehle rollers | 8 Blade w/Wiehle rollers | Model 03421 (2WD): | 1475 lbs. (669 kg) | 1495 lbs. (678 kg) | Model 03426 (3WD): | 1505 lbs. (683 kg) | 1525 lbs. (692 kg) |
| | 5 Blade w/Wiehle rollers | 8 Blade w/Wiehle rollers | | | | | | | | |
| Model 03421 (2WD): | 1475 lbs. (669 kg) | 1495 lbs. (678 kg) | | | | | | | | |
| Model 03426 (3WD): | 1505 lbs. (683 kg) | 1525 lbs. (692 kg) | | | | | | | | |
| OPERATOR TRAINING VIDEO | Standard Operator Training Video demonstrates procedures for safe operation and daily maintenance; English and Spanish versions. | | | | | | | | | |
| WARRANTY | One year limited warranty. Refer to the Operator's Manual for further details. | | | | | | | | | |
| CERTIFICATION | The Reelmaster 2300-D complies with the American National Standards Institute (ANSI B71.4-1990) and European Community (CE) specifications with required kits and ballast installed. | | | | | | | | | |

| 5 AND 8 BLADE CUTTING UNITS | | | | | | | | | | |
|---|--|---|------------------------|------------------------|--------------------|---------------------|---------------------|------------------|----------------------|---------------------|
| TYPE OF CUTTER | Three 27" (68 cm) cutting units supported by equal length independent lift arms; interchangeable to all three cutting unit positions. | | | | | | | | | |
| CUT WIDTH & HEIGHT | 72" (183 cm) width of cut. Height of cut (HOC) range: ¼" – 1¾" (6.4 mm – 44.4 mm). | | | | | | | | | |
| HOC ADJUSTMENT | Positive position settings with separate fine adjustments for leveling either end of roller, or extending height range. | | | | | | | | | |
| CONSTRUCTION | 5 or 8 blades, 7" (18 cm) diameter, welded to 5 stamped steel spiders. Reels mounted on greaseable self-aligning ball bearings. | | | | | | | | | |
| FREQUENCY OF CLIP | <table border="1"> <thead> <tr> <th>Reel speeds shown are at variable speed set to maximum rpm:</th> <th>5 Blade @ 880 reel rpm</th> <th>8 Blade @ 880 reel rpm</th> </tr> </thead> <tbody> <tr> <td>@ 4 mph (6.4 km/h)</td> <td>.96" (24.4 mm) clip</td> <td>.60" (15.2 mm) clip</td> </tr> <tr> <td>@ 5 mph (8 km/h)</td> <td>1.19" (30.3 mm) clip</td> <td>.75" (19.1 mm) clip</td> </tr> </tbody> </table> | Reel speeds shown are at variable speed set to maximum rpm: | 5 Blade @ 880 reel rpm | 8 Blade @ 880 reel rpm | @ 4 mph (6.4 km/h) | .96" (24.4 mm) clip | .60" (15.2 mm) clip | @ 5 mph (8 km/h) | 1.19" (30.3 mm) clip | .75" (19.1 mm) clip |
| Reel speeds shown are at variable speed set to maximum rpm: | 5 Blade @ 880 reel rpm | 8 Blade @ 880 reel rpm | | | | | | | | |
| @ 4 mph (6.4 km/h) | .96" (24.4 mm) clip | .60" (15.2 mm) clip | | | | | | | | |
| @ 5 mph (8 km/h) | 1.19" (30.3 mm) clip | .75" (19.1 mm) clip | | | | | | | | |
| BEDKNIFE TO REEL ADJUSTMENT | Single knob screw adjustment for bedknife to reel, located at center of bedbar. Adjustment knob detent with .001 movement of bedknife for each indexed position. | | | | | | | | | |
| SUSPENSION SYSTEM | Fully floating with adjustable spring counterbalance. Patent pending L-I-N-K-S™ cutting unit suspension system provides fore and aft oscillation. Main center pivot allows side-to-side oscillation. Cutting units can be locked into fixed (fore/aft) position for use without front roller. | | | | | | | | | |
| CUTTING UNIT LIFT | Hydraulic cutting unit lift with automatic reel shut-off. All 3 units are controlled with one lever. | | | | | | | | | |

| REELMASTER 2300-D ACCESSORY MATRIX | | | | |
|--|----------------------|----------------------|---------------------|--------------------|
| | 5 Blade, Model 03461 | 8 Blade, Model 03462 | Cushion Seat, 30796 | Deluxe Seat, 30797 |
| Traction Units, Model 03421 and 03426 | Opt. | Opt. | Opt. | Opt. |
| Armrest Kit, Model 30707 | — | — | Opt. | — |
| Full Front Roller Kit (3), Model 03440 | Opt. | Opt. | — | — |
| Sectional Front Roller Kit (3), Model 03445 | Opt. | Opt. | — | — |
| Wiehle Front Roller Kit (3), Model 03450 | Opt. | Opt. | — | — |
| Anti-scalp Front Roller Kit (3), Model 03447 | — | — | — | — |
| Roller Scraper Kit (3), P/N 60-9560 | Opt. | Opt. | — | — |
| Comb Kit (3), P/N 67-9400 | Opt. | Opt. | — | — |
| Grass Basket Kit (3), Model 03443 | Opt. | Opt. | — | — |
| Skid Kit (3), P/N 70-1410 | — | — | — | — |
| Rear Weight ¹ | Opt. | Opt. | — | — |
| Rear Weight/Grass Basket ¹ | Opt. | Opt. | — | — |

*Specifications and design subject to change without notice. "Toro" and "Reelmaster" are registered trademarks and "L-I-N-K-S" is an unregistered trademark of The Toro Company, 8111 Lyndale Avenue South, Bloomington, Minnesota 55420-1196. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. Consult your local Toro distributor.

♻️ Easy on the environment. 50% Recycled Fiber — 10% Post Consumer.

Commercial Products



Helping you put quality into play.®



Operator Friendly

Forward, reverse and braking all with one pedal. A single lever lowers, engages, disengages or raises all cutting units. Deluxe suspension seat. Removable armrests. Fingertip controls. Intelligent instrumentation, including an electric de-clutching button for cold starts. Plus operator selectable 2 or 3-wheel drive on the go.

Simple Service

All maintenance components like engine oil and air filters are within easy reach. The hydraulic reels of the 2300-D permit on board backlapping. No removal or replacement required.

Custom Cutting

You can customize your Reelmaster® 2300-D with 5 or 8 blade floating cutting units that can quickly be converted to a fixed position. Other options include full, sectional and Wiehle front rollers; a comb kit, and baskets.



Reelmaster® 2300-D Specifications*

| REELMASTER 2300-D, DIESEL 2WD, MODEL 03421 4WD, MODEL 03426 | |
|---|--|
| ENGINE | Perkins, 4 cycle, 3 cylinder, liquid cooled, vertical OHV, diesel engine with centrifugal water pump. 18 hp (13.4 kW); governed to a maximum speed of 3200 rpm. 41.2 cu. in. (676 cc) displacement. Forced lubrication gear pump. Mechanical centrifugal governor. Mechanical fuel transfer pump. Fuel filter/water separator with replaceable filter element. 12 volt (0.7 kW) starter. Heavy duty remote mounted air cleaner. Spin-on oil filter. Side mounted industrial radiator, 7 fins per inch. Approx. 5 quart (4.7 liter) capacity. |
| FUEL CAPACITY | 6.5 gallons (25 liters). |
| TRACTION DRIVE | Model 03421 (2WD): Hydrostatic, closed-loop drive; variable displacement piston pump, infinitely variable in both forward and reverse direction. Two high torque hydraulic wheel motors. Front mounted oil cooler and shuttle valve provide positive closed-loop cooling. Model 03426 (3WD): Three high torque hydraulic wheel motors. 3-wheel drive; two position selector valve located below seat, push for 3-wheel drive and pull for 2-wheel drive. Front mounted oil cooler and shuttle valve provide positive closed-loop cooling. |
| GROUND SPEED | Mowing speed: 0-5 mph (0-8 km/h); transport speed: 0-8 mph (0-13 km/h); reverse speed: 0-3 mph (0-4.8 km/h). |
| CUTTING UNIT DRIVE | High efficiency fixed displacement pump and 3 gear motors connected in series. Each gear motor has a crossover relief valve. Backlap capability. Variable reel speed to match cutting conditions. |
| HYDRAULIC OIL CAPACITY/FILTER | Remote mounted, 2.3 gallon (8.7 liter) oil reservoir. 25 micron remote mounted spin-on filter. |
| TIRES/WHEELS | Two front traction drive tires, 20 x 10-8 tubeless, 4-ply rating. Rear steering tire and tube; 20 x 8-8, 2-ply rating. Demountable front rims. Recommended tire pressure: 12-16 psi (83-110 kPa). |



Traction Action

Reelmaster® 2300-D is better balanced with its engine positioned over the front wheels. Making it a reliable hill climber. And large flotation tires not only improve traction but also minimize scuffing. You don't have to sacrifice traction for gentler turf work. The 2300-D is perfect for areas where low compaction is a concern.

Three Wheel Drive

For amazing traction and versatility. Hillside mowing is just one example. Toro's unique 3-wheel drive hydraulic system gives you greater control, going uphill or down, and provides safer operation.



"Open front" greens like number 15 offer golfers alternative shot-making strategies.



COMPUTER-EXACT CUSTOM MIXES. EVERY ORDER. EVERY TIME.

Every order received by **Golf Agronomics** is prepared in our fully computerized machine. Double screening capabilities ensure that your first mix portion is the same as your last.

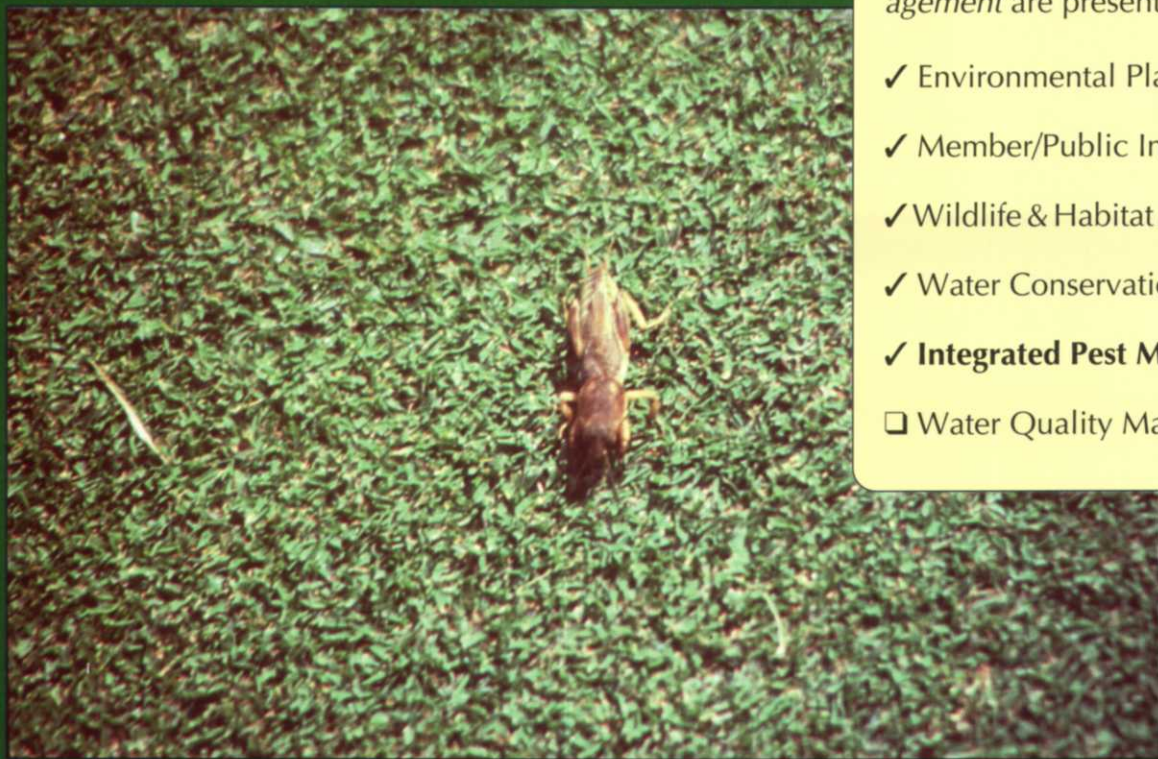
Golf Agronomics meets all your top dressing needs with its ability to customize your mix with a variety of soil

amendments including: **Dolomite, Hi-Cal, Wetting Agents, Charcoal, Humic Acid, Minor Elements, Rock Phosphate, Gypsum.**

Golf Agronomics donates a % of every ton of top dressing sold to the FGCSA. Since its opening, **Golf Agronomics** has donated in excess of \$11,000. Our sincere thanks to all of our customers.

**Golf
Agronomics
Supply &
Handling**
(800) 626-1359
(813) 955-4690 Fax
P.O. Box 3455
Boynton Beach, FL 33424

Integrated Pest Management



ACSP: Part V

In Part 5 of this series on the Audubon Cooperative Sanctuary Program for Golf Courses, ideas for fulfilling the *Integrated Pest Management* are presented.

- ✓ Environmental Planning
- ✓ Member/Public Involvement
- ✓ Wildlife & Habitat Management
- ✓ Water Conservation
- ✓ **Integrated Pest Management**
- Water Quality Management

IPM - Your Key to the Future

BY TOM BENEFIELD, CGCS

Integrated Pest Management — IPM for short — is the golf course maintenance buzz phrase of the nineties. While some groups are just now catching on to this method of controlling pests, we in the golf industry can be proud that we have been pioneering these practices for a long time.

IPM doesn't mean that you eliminate chemical treatments. Rather it means that you use a variety of methods, scouting, and control agents to minimize damage to the turf to an acceptable level. That level of acceptance will vary from course to course and budget to budget. The wholesale application of chemicals is not only a poor management practice, but it is also a tremendous waste of money.

Biological pest-specific products are the new-

est control agents in expanding IPM practices. Biologicals don't always work as fast as the old synthetic chemicals, but they can be just as effective and certainly more environmentally friendly when they are applied correctly. The greatest obstacle to overcome when using biologicals is the old "instant fix" or "immediate results" mind set. Dr. Vargas of Michigan State told me that successful pest suppression only comes from putting out large numbers or colonies of biologicals frequently, at night, and with water.

As we look to the next century which is quickly closing in on us, researchers are giving us hope for new solutions to old problems. I think it safe to say that there are biologicals in your future. As you can see from the following articles, the future is "now" for some of us.



Properly watered turf is more resistant to insects and diseases.

IPM STRATEGIES

for golf course maintenance

BY DR. KIMBERLY ERUSHA

DIRECTOR OF EDUCATION USGA GREEN SECTION

REPRINTED WITH PERMISSION FROM THE AUTHOR

The ultimate goal of any turfgrass management system is to establish and maintain a high quality turf at a reasonable cost, without being detrimental to the environment. With increasing concerns from regulatory agencies and the public about the environmental impacts of pesticides on surface and ground water, and on people, wildlife and other organisms, an understanding and application of integrated pest management (IPM) principles to turfgrass management programs is essential.

What is IPM?

IPM is a management plan that utilizes a variety of control measures to keep turfgrass pest populations below levels that are economically and aesthetically damaging, without creating a hazard to people and the environment. These control measures include:

1. Inspection and monitoring
2. Proper cultural control methods
3. Biological controls
4. Using adapted species and resistant cultivars
5. Practicing proper sanitation measures to prevent the spread of disease
6. The use of the most appropriate pesticide when necessary

An important point to remember is that an IPM plan does not preclude pesticide use, but seeks to reduce dependency on pesticides. The objective of any IPM program is to reduce pest populations while keeping pesticide applications to a minimum.

IPM control strategies

A variety of control tactics are available to the turfgrass manager. IPM involves understanding how these control tactics interact to influence the overall health of a turfgrass system. The primary objective in any IPM program is maintaining strong, healthy, actively-growing turfgrass that can resist and recuperate successfully from environmental stresses, pest damage, and weed infestations. IPM control strategies include:

Species and cultivar selection

Introducing a species outside its range of adaptation increases its susceptibility to pests and stresses. Turfgrass species and cultivars must be selected to match local environmental and playing conditions. Where possible, select adapted species and cultivars that minimize water and pesticide use.

Mowing practices

Mowing height and frequency are directly related to the turfgrass species and growth rate of the plant. To minimize stress on the plant, no more than 1/3 of the leaf blade should be removed with any one mowing. On greens, cutting heights consistently 1/8 inch or less can place the turf under severe stress during weather extremes. Use of lightweight mowers on greens and fairways tremendously reduces soil compaction effects on turf growth.

Irrigation practices

Properly watered turf is more resistant to insects and diseases. Excessive irrigation is one of the most common problems observed in the field. It is important to survey the irrigation system to ensure that all irrigation heads are working and set



Spot spraying, one form of weed removal, puts the chemical only where it's needed.



Some weeds are best removed by direct pulling.

IPM means using a variety of control measures

properly to obtain uniform coverage.

Irrigation frequency should be dictated by meeting the evapotranspiration (ET) requirements of the plant. Irrigating deeply and less frequently produces a turf with a deeper root system and improved overall turf health. Care must be used when irrigating shallow-rooted turfs. Monitor root depth, soil moisture, ET conditions, and use visual inspection to determine turf irrigation needs.

Fertility and pH management

Fertility is a necessary component of turf management. No one fertilizer program or fertilizer can suit all situations. The type of program must be decided on by the golf course superintendent based on the specific conditions of the golf course.

Fertilization should be scheduled to meet the nutritional and growth requirements of the plant. The frequency of fertilizer application will vary depending on the turfgrass species and the type of fertilizer. Slow release fertilizers such as IBDU, sulphur coated urea, or natural organic materials, should be used on golf courses when possible. Use low rates of inorganic fertilizers with any one application.

A soil test is the best diagnostic tool available for assessing soil pH and phosphorus and potassium needs of the turf plant, as well as other nutrients. Soil test results serve as a guide for proper application of nutrients, avoids the waste of excessive fertilizer applications, and insures that nutrients are applied in the proper proportions. Once the turf has become established, soil tests should be conducted every 1-3 years.

Thatch control

The potential for thatch problems varies with turfgrass species, intensity of culture and traffic. Thatch becomes a problem on fairways and greens when it accumulates to a depth that increases potential for puffiness, mower scalping, disease development, and localized dry spot formation.

Avoiding excessive fertilization is an important consideration for preventing excessive thatch formation. For greens, light vertical mowing at intervals dependent on the growth rate of the plant can be effective in controlling thatch formation. Topdressing is also an effective tool to enhance the rate of biological degradation.

On fairways, excessive thatch can be avoided by preventative cultural practices, such as use of appropriate turfgrass cultivars, maintaining appropriate soil pH, utilizing soil cultivation techniques to enhance soil oxygen levels, proper irrigation, moderate nitrogen fertilization, and use of pesticides only as needed. Corrective measures for thatch control, including verticutting and core aeration must be used if accumulation exceeds 0.5 inch. Verticutting and core aeration are best accomplished during periods of active turfgrass growth.

Rootzone management

Improving soil characteristics can have a positive impact on turfgrass health and can decrease the need for chemical inputs. Proper soil drainage is critical for root growth and overall turf health.

Water movement through the soil is disrupted when layering occurs within the soil profile or when compacted soil conditions exist. There is no single solution to all soil problems. Methods to help solve the problem include core cultivation, high pressure water injection aeration, and deep tine aeration. It is important to determine the cause of the problem and then select the best corrective measure.

Good surface drainage through surface contouring alleviates ponding of water created from runoff, although it does not correct underlying soil problems. Properly installed subsurface drainage is an effective way of keeping a golf course in play and avoiding turf damage.

Traffic control measures

With the rising number of golfers on golf courses and the increase in the use of golf carts, traffic must be carefully monitored on the golf course to decrease potential wear and soil compaction problems. Rotate traffic patterns by planned movement of cup and tee markers. Distribute cart and foot traffic over wide areas and use cart paths where traffic is highly concentrated.

Tree management

Trees play a strategic role in golf course design and style and are a valuable asset in the golf course landscape. Tree placement should be carefully considered and turfgrass cultural practices

Our commitment to your success continues with TURFGO® products.



As part of our continuing commitment to turf care professionals, United Horticultural Supply proudly features our own TURFGO® line of fertilizers, chemicals and turf seed.

These top pros have discovered that TURFGO® products are premium quality in addition to being environmentally sound.

For example, TURFGO® Dursban* 2 Coated Granules provide cost-effective, broad spectrum control of turf insects, including worms and crickets. It bonds tightly to plants and soil providing residual control that's hard to match.

Also, TURFGO® Dursban 2CG's active ingredient forms a vapor in the turf's micro-climate, providing control even where sprays can't reach.

Whatever your need, United Horticultural Supply has a product that performs as promised and is always in good supply. Call us at 1-800-457-0415 for more information.



United
Horticultural Supply

* Dursban is a registered trademark of DowElanco



IPM strategies —

need to be closely monitored in shaded areas. Increase light penetration through the tree canopy by selectively thinning the crown and pruning lower tree limbs. Enhance air movement in pocketed areas by judicious removal of shrubs and trees in the avenue of prevailing winds. Along fairways and greens, root prune trees that are competing excessively with the turfgrass for water and nutrients.

Pest forecasting techniques and equipment

Many tools are now available to the golf course superintendent to aid in forecasting potential problems on the golf course. Weather stations aid in monitoring potential weather conditions that are conducive to disease development. Diagnostic kits are available to the golf course superintendent to provide rapid, on-site test for disease detection and monitoring pathogen levels. New computer forecasting models aid the superintendent in disease, insect and weed control applications.

Alternative pest control measures

Biological controls regulate pests by introducing natural enemies to the turf environment to combat turf pathogens. Some biological products are now available for turf, and research shows that the potential of such products is bright.

Spray only when necessary

There may be times when the use of a pesticide is the most effective way to control a turf problem. Select a pesticide that provides the most effective control of the weed, disease, or insect, while presenting the least possible hazard to people, wildlife and the environment.

Control measures used should be evaluated periodically to determine if the desired results are being achieved, and the control plan should be adjusted if necessary. Diagnosing, evalu-



Consistent cultural programs keeps turf healthier and reduces need for chemical applications.

ating and controlling a turf pest problem follows a logical sequence. Each situation is unique, however, and adjustments should be made to the overall program as circumstances change on the golf course.

Communication and education

Communicate with and educate course officials and golfers about the IPM strategies that are taking place on your golf course and explain why they are being undertaken. Letting golfers know you practice IPM helps them understand and accept your management decisions.

Success with an IPM program depends on being alert to potential problems, following proper cultural practices, carrying through with a well-conceived maintenance plan, and selecting the best corrective measures to ensure the best quality golf course conditions with the least impact on the environment.

The golf course monitoring program

The first step in establishing an IPM program should be developing and maintaining a regular monitoring program to collect information about pest activity occurring on the golf course. Regular monitoring provides a record of active insect, weed, and disease populations, and any resulting damage, and also provides follow-up information on the success of particular control measures. Monitoring can be done by a golf course employee who has formalized training in field diagnosis of weeds, diseases, and insects. This person, often referred to as a scout, examines the golf course on a regular basis and although they may have other duties to perform on the course, the primary responsibility should be the IPM monitoring program.

Monitoring frequency varies for each portion of the golf course, depending on available time and operating budget. The greens and tees usually require the greatest attention and initially should be monitored daily or every other day. Fairways and roughs may be monitored less frequently if labor and time

are a concern. The time spent monitoring will be reduced significantly once indicator areas, or "hot spots," for particular pests are identified. Early morning monitoring is preferred, as disease symptoms and signs are most conspicuous prior to mowing, and this time interferes least with play.

Keep accurate records as each site is monitored. Scouting records can be used to make pest control decisions. Look for trends that suggest pest numbers are increasing to levels that warrant control measures being taken. Early detection can often minimize damage and severity.

Several years of monitoring records will establish pest threshold levels specific to your golf course, further improving pest control decision-making. A monitoring program may not always reduce the number of chemical applications, but it will assure that pesticides are being used in the most judicious manner.

— Dr. Kimberly Erusha

KNOW THE DIFFERENCE



LARGER BLUE FLAG
Iris versicolor

BOYNTON BOTANICALS

9281 87TH PLACE SOUTH • BOYNTON BEACH, FL 33437
(407) 737-1490 • (800) 642-1033 • (407) 738-9598 FAX

IPM for Audubon

Cost Effective and Smart

ROB KLOSKA, GOLF COURSE SUPERINTENDENT
THE CHAMPIONS CLUB AT SUMMERFIELD

Most golf course superintendents have some kind of integrated pest management program at work on their course, even if it isn't a specific written program. It could be their aerification program, their vertical mowing program, or their method and frequency of pesticide application.

One of the requirements to earning Signature status in the Audubon Society of New York State's Cooperative Sanctuary Program is the creation of an integrated pest management program. Our program here at Summerfield, as anywhere else, is a function of our budget. Therefore, we stress the "basics" in our program, and we practice "tolerance" when it comes to certain pests. We try to let particular problems run their course so to speak, while staying on top of others to prevent them from becoming "budget killers." Because we don't treat any area on the course on a preventive basis, we must be extremely attentive to day-to-day changes on the course.

With an annual operating budget well below the average used by private facilities in the area, the centerpiece of our program is our basic cultural practices. Aerification of greens, tees and fairways, and vertical mowing of greens and tees are the cornerstones of our cultural practices. Our greens are topdressed one or two times per week, year round. The use of slow release fertilizers is also important. The computer irrigation system, in combination with all of these programs, has allowed us to gain maximum root growth and turf density.

Our herbicide program is where we practice the most tolerance. Greens are obviously a priority, however problems in the

fairways and roughs are left to run their course unless catastrophic. When we do spray, we try to use chemicals with the least residual values. This year, we will use a nematode product to control mole crickets.

Fungicides are only used during overseeding establishment. Our choice of fungicides is one that has contact and systemic control.

Because of these programs, our chemical budget was well below \$20,000 last year. We are expecting an increase this year due to the 100 inches of rain that fell on our site in 1994. Our turf vigor has suffered drastically in the early months of 1995 and the cool temperatures have hampered our recovery efforts.

Our equipment maintenance program is another key part of our IPM program. The reels of the greens mowers are ground once per week and the tee mowers every other week. This insures the best possible mowing results and at the same time helps minimize the amount of mechanical stress exerted on the turf. Back lapping has been completely eliminated.

In 1995, we are hoping the introduction of growth regulator treatments on our tees and fairways will further help our IPM program. The objective here is to minimize mowing requirements and thatch while not compromising turf quality.

IPM programs are as different as the courses they are used on, but their goals and effects on the environment are the same. Our program has served us well and will undoubtedly be refined throughout this year. For this Signature Cooperative Sanctuary Golf Course, our IPM program is truly cost effective and smart.

Editor's Note: *The Champions Club at Summerfield is the first "public" golf course designated a Signature Audubon Sanctuary.*

ACSP Certification Tips

When applying for certification through the ACSP for your IPM category, you are asked to obtain a signed statement from the Green Committee showing the course management's commitment to IPM and proper turf management. This statement of support will help you gain the backing of the Green Committee.

Here are some examples of IPM Statements:

The Jiminy Cricket Golf Course is committed to the management of the golf course through the use of integrated

pest management (IPM) techniques. It is our intent to continually upgrade this management approach with new information, equipment, or materials which will reduce the need for pesticides.

Pesticide use has been, and remains, a last resort decision due to membership concern, environmental unknowns, and economical reasons.

Mr. Tom Bird, President
Mr. Jon Cage, General Manager
Mr. Joe Bone,
Golf Course Superintendent



The Blue Bird Country Club is committed to the principles of integrated pest management. Current practices and future plans are compatible with the concept of maintaining adequate playing surfaces while keeping our use of chemical fertilizers, pesticides and herbicides to a minimum. We will continue to educate ourselves in IPM methods and apply management strategies that promote a high degree of environmental quality on our golf course.

Mr. Jim Dandy
Green Committee Chairman



New Scimitar® GC

All the Assurance You Need from the Grounds to the Golfers

As a golf course superintendent, there's more to your job than just caring for the grounds. You also have to care about the environment and the people on the grounds. New SCIMITAR GC gives you all the assurance you need to take care of your entire job—from the grounds to the golfers.

New SCIMITAR GC delivers superior, fast-acting control of tough turf and ornamental pests on your golf course. It quickly controls a broad spectrum of pests including chinch bugs, bluegrass billbug adults, mole crickets, sod webworms, fire ants, and even suppresses certain grubs. All at extremely low use rates, an economical price, and without an annoying odor. Which means no raised eyebrows from your Greens Committee and no raised voices from your golfers.

The advantage of SCIMITAR GC is the patented microencapsulation. This encapsulation gives you the best of both worlds—fast action and controlled release for control of both surface and subsurface pests. And SCIMITAR GC is packaged in convenient 32-ounce squeeze-and-pour containers for easy use.

So rest assured—New SCIMITAR GC provides the control you need for your grounds and the confidence you demand for your golfers. For more information about SCIMITAR GC, contact your Zeneca Professional Products representative, or call 1-800-759-2500..

ZENECA
Professional Products

SCIMITAR GC is a restricted use pesticide. Always read and follow label directions carefully. SCIMITAR® is a trademark of a Zeneca Group Company. A business unit of Zeneca Inc. ©1995. Zeneca Inc.

Biologicals and organic/natural products —

Soil microbial enhancement

BY CHIP FOWKES
GOLF COURSE SUPERINTENDENT
EMERALD DUNES GOLF COURSE

Superintendents that would like to incorporate the use of biological enhancement into their management programs will find it difficult to find empirical data to guide them. There are more companies everyday claiming that various combinations of bacteria, organic amendments, bio-stimulants and other bugs in a bottle will solve most of the problems associated with the management of fine turfgrass.

The most common claims are:

1. Thatch reduction
2. Disease suppression
3. Nematode control
4. Control of black layer
5. Sodium reduction-increased percolation
6. Increased nutrient availability, especially nitrogen
7. Improvement of irrigation water quality

The chance of these benefits without the use of chemical applications or mechanical manipulation sound too good to be true... and they are. We have all been around long enough to know that there is no easy way to manage turf at the level we maintain today. When the water injection aerifiers arrived, they were never meant to replace core cultivation, and the increased effectiveness of growth regulators is not likely to put mower manufacturers out of business soon. These new developments are tools to be used in conjunction with the tried and true methods that experience and science have proven effective over the years. The use of biological agents to improve the health and

quality of our turf should be viewed the same way.

These techniques can only be effective if they are part of a truly integrated plant management system. The difference between the use of organic materials and biological agents, and the other techniques mentioned is that they have been in use for many years. Where a plant is growing in its native environment and is not subjected to artificially induced stress, this is the normal equilibrium of the rhizosphere, and the application of fertilizer and pesticide is not necessary. In turf management, we generally give the plant the opposite conditions, subjecting it to unnatural soils and demanding quality at the expense of resistance to stress. The goal that we are pursuing at Emerald Dunes is to modify the soil environment to make it the most efficient natural growth medium for the turfgrass. The practical results of these efforts are hoped to be an increased ability of the plant to resist debilitating stress factors under normal growing conditions.

While there is not a lot of available research on the use of plant growth rhizobacteria (PGPR) on turfgrass, there has been work in this area as early as 1890 in regard to agricultural crop production. Studies were done first in Russia and Eastern Europe with inoculating seeds with cultures of bacteria to improve plant growth. Work in this area progressed into the 1970s in India and the U.K. with the introduction of bacteria into the growing medium in the greenhouse and positive results were observed on growth promotion.

In Australia however, field trials using the procedures showing success in the laboratory did not produce the same results.



Practical Application I – Seminole Golf Club

HAL HICKS
SUPERINTENDENT

As with a lot of golf course superintendents, I have been experimenting with various “materials” in hope of finding a way to reduce the need of applying various chemicals and fertilizers to the turf. Humic acid is a great example. Just ten years ago, this product was probably not used very much. Today, I know many superintendents that use humic acid in combination with topdressing or through direct spray applications. The concept behind humic acid is that it allows the bermuda plant to be more receptive to taking in needed nutrients, which in turn allows for higher efficiency.

In line with this concept, I have also been experimenting with the injection of microbial bacteria and nematode suppressing materials through our irrigation system. Again, the idea behind the

use of these “materials” is that they supposedly enhance nutrient release from fertilizers, improve soil structure and water infiltration, suppress disease and nematode activity and reduce thatch.

But in reality, what does all this mean? The bottom line is that — to date — I cannot dispute or verify any of the claims these products make. I have not witnessed any great change in our turf that I can definitely state is a result of these “natural” products. But what I do know is that we have moved into a new environmental age. As a result, probably more and more “natural” products will be introduced into the market in the near future. Time will tell what does and does not benefit the turf. But, if successful, the concept of using “natural” products to reduce chemical and fertilizer use is excellent. I hope that in time these “natural” products prove successful and reduce some of the stress on the golf course superintendent.

The concept behind humic acid is that it allows the bermuda plant to be more receptive to taking in needed nutrients

Turf Formula[™]



The Natural Solution

Agri-Gro of Florida, Inc. introduces **Turf Formula**, "The Natural Solution" for quality Turfgrass maintenance. Florida golf course superintendents are experiencing the following benefits of **Turf Formula**:

1. Increased Soil Microbial Activity
2. Increased Root Mass and Root Penetration
3. Helps Eliminate Algae on Greens
4. Increased Aerobic Bacteria, a Natural Predator to Nematode Eggs
5. Increased Water Penetration and Percolation
6. Aids in the Decomposition of Thatch

Turf Formula is a non-toxic and environmentally safe product which contains stabilized micro-organisms from the following genera: *Azotobacter*, *Bacillus* and *Clostridium*.

Turf Formula is a premium soil amendment and bio-catalyst with a four year shelf life.

For information and product availability:

GOLF VENTURES
2101 East Edgewood Dr.
Lakeland, Florida 33803

1-800-330-8874
(813) 665-5800
Fax (813) 667-0888

UNITED HORTICULTURAL SUPPLY
3632 Queen Palm Dr., Suite 306
Tampa, Florida 33619

1-800-457-0415
(813) 628-0496
Fax (813) 664-0371

VAN WATERS & ROGERS, INC.
4240 L.B. McLeod Rd.
Orlando, Florida 32811

1-800-826-2611
(407) 843-2611
Fax (407) 649-8433

LIQUID AG SYSTEMS, INC.
5610 N.W. 12th Ave. Suite 211
Ft. Lauderdale, Florida 33309

1-800-884-6942
1-305-776-2288
Fax (305) 776-6942

Soil microbial enhancement

The theory developed from these experiments was that the inoculum which was not normally found in the rhizosphere could not compete with native bacteria.

The idea of a dynamic microbial equilibrium that is established in the root zone of the plant led to the belief that any introduced microorganism will not be able to establish itself in the soil.

Two important breakthroughs in recent years have brought the use of biological agents for plant management into practical use. The discovery of mutant strains of bacteria that lived off root exudates and altered the indigenous microbial populations of the root zone, to allow their colonization throughout the season, and techniques to measure their establishment. Selective breeding for host specific strains that process known plant pathogens or biodegrade organic matter has brought us the products being marketed today.

The area most likely to be successfully colonized by beneficial microbes is a newly constructed USGA style green. This is basically a sterilized soil medium where the inoculum can be more easily established. Along with the microbes, it is important to supply a food source until the root system becomes sufficient to support their growth. The supplier of the microbes should be able to recommend an available substrate.

If the supplier can't provide this information, you should reconsider using the inoculum he is selling. Some bacteria are inoculated onto fertilizer carriers that supply an adequate food source for a short time.

Another important consideration is that the inoculum must be delivered to the rhizosphere, as bacteria are not all mobile and must have moisture present to survive and move to the desired location. The incorporation of bacteria and a food source into the soil before planting may provide the best opportunity for establishing healthy colonies where they can do the most good.

Practical Application II Banyan Golf Club

DAN JONES, SUPERINTENDENT

At Banyan Golf Club we have been working on biological control agents for many years. We started with the white amur fish in our lakes to reduce the undesirable aquatic vegetation. We have not had to conduct mechanical removal or herbicide applications for 15 years and our lakes remain weed free.

We have introduced the red eye fly and the *steinernema scapterisci* nematode for mole cricket control. The results are inconclusive at this point.

A strict IPM program has reduced our pesticide usage by 40%. We spray for curative control only.

We are currently in the process of setting up a program to control diseases and parasitic nematodes with microorganisms.

The future of biological and organic control of pests is exciting, and Banyan Golf Club plans to stay on the cutting edge.

The application of products through irrigation systems is an efficient method for moving the microbes into the soil, however may not be cost efficient due to application in non target areas. If the entire course is to be treated, this is probably the best way available to move the bacteria into thatch or the root zone.

Core cultivation before inoculation should greatly improve their ability to reach the intended destination. It is important to know the part of the plant the microbes are designed to work, as applying them incorrectly or without a sufficient food source will ensure their failure to establish and compete.

Once the colonies become established, there are products available to be applied in granular form or through fertigation that will aid in their survival and efficient growth.

There are additional factors that directly affect the life processes of the microbes and their ability to perform the task they were applied for. Extended wet periods or very compacted soils can rob the bacteria of oxygen necessary to remain in an anaerobic state and some re-inoculation may be necessary after the poor conditions are alleviated. There is conflicting data on the effects of chemical pesticide on non target microorganisms, so the manufacturer of the bacteria should be consulted as to when re-inoculation can safely take place. These factors indicate that the most efficient way of en-

couraging the establishment of beneficial microbes would be a system that provides a constant source of inoculum, with the proper food source, through a well-designed irrigation system.

The ability to do this is available today, but the cost is high and the results are difficult to quantify and cannot be expected to give rewards for two or more years. There are also products that can be applied with spray equipment on specific areas like greens or trouble spots and watered in.

At Emerald Dunes, we feel that we are receiving benefits from our management program that justifies its continuance. The use of chemical pesticides and amount of fertilizer applied has decreased gradually over the past three years. There has not been a significant cost reduction in the fertilizer budget since the nutrient sources used are more expensive per pound, however less frequent applications provide for some labor saving and less disruption of play.

The course seems to recover more quickly from poor weather conditions and stand up better to heavy traffic. Overall, we feel the quality of the turf above and below the ground has continued to improve with no corresponding budget increase since our biological enhancement programs were begun. Our knowledge of the symbiotic relationship of the plant, soil and microbial populations is

Continued on Page 59



Either Protect Your Turf, Or Enlarge Your Sandtraps.

Mole crickets. Fireants. Cutworms. Sod webworms. Armyworms. Fleas. Chinch bugs. Wasps. Who knows what they could eventually do to your golf course? Exactly why you should protect all of your greenery with ORTHENE® Turf, Tree &



Ornamental Spray. It's easy. It's economical. It controls the broadest spectrum of tough turf pests. And best of all, it's a heck of a lot better than the alternative. For more information, call 1-800-89-VALENT. Professional Products Team



Now in easy-to-use Water Soluble Pouches.

Metamorphosis —

Maintenance barn to maintenance facility

BY TIM SEVER
SUPERINTENDENT
THE SANCTUARY GOLF CLUB
SANIBEL ISLAND

As golf course superintendents are trying and succeeding in improving our professional image, it's time to also improve and update the image of the old maintenance barn.

Although this article is geared more toward the design and building of a new maintenance facility, there are areas that could be useful in renovating or upgrading of an existing facility.

The first thing you need to do in planning a maintenance complex is to be as up to date as possible on all of the local, state and federal regulations pertaining to this type of facility. Most of the time, you would take your layout to an engineer or construction consultant and let them put the finishing touches on your plan, making sure it conforms to all of the pertinent regulations. They will come up with a set of working drawings and a set of specs for the proposed builders.

Remember that you don't often have a second chance to design or build the facility. Take your time and think through all the different aspects of the facility, from adequate parking, equipment and fuel storage to office space. I'm no expert in the field of design, but I have been fortunate enough to have been involved in the design and construction of three maintenance facilities. If there is a single most important thing I brought to these facilities, it was convincing the ownership that this was a very important piece of the development puzzle. This is the hub of all maintenance that is performed on the project. It has to be efficient, well designed and well run, with safe operation as the foremost aspect of the facility.

With that said, I would like to touch on certain design criteria that should be considered.

Office, lounge and restrooms

It is important that each person on your office staff has a place to do his or her paperwork and reports.

The lounge should be sized so that it will allow the entire crew to sit and eat, or attend staff/safety meetings. It should have a minimum of a refrigerator, microwave and sink. We sized ours so that we could include lockers for employees. This keeps the jackets, rainsuits, etc., from laying around. We also have a TV and VCR in this area to help us in training and safety meetings. This is also the area where we keep our haz-com plan and other important information.

Restrooms should be designed to accommodate maximum staff size.

Equipment, small tools storage

The equipment storage area should be well thought out. Every piece of equipment should have its own place. Nothing is worse than having to move 2 or 3 pieces of equipment to get to the one you need. Also, the more equipment you can keep

under cover, the longer it will last.

Small tool storage is also in this building. We have a 15 x 15 caged area that can be locked and is adequately sized to store hand tools.

Mechanics office, shop and parts

These areas should be adequately sized according to your equipment inventory. The mechanic needs to do his paperwork, parts inventory, parts ordering, preventive maintenance reports and fuel reconciliation and monitoring reports. Most important, it should be an area that can be secured, or at least out of the main flow of traffic. Employee accessibility to this area should be restricted to eliminate potential liability and insurance risks.

Chemical, fertilizer storage

There are a couple of options pertaining to these areas:

Continued on Page 60

Practical Application III Fiddlesticks Country Club

LOU CONZELMANN, SUPERINTENDENT

Currently there are two beneficial nematodes available for the control of mole crickets: *Steinernema scapteriscus* (Proact) and *Steinernema riobravis* (Lesco, Vector). I have not had experience with the Vector product, therefore I cannot comment on its performance. My experience with *Steinernema scapteriscus* began several years ago when Fiddlesticks Country Club became a site where research through the University of Florida was conducted using these nematodes. Through the years I have seen this product effectively kill many mole crickets.

The nematodes carry a bacteria which is released into adult mole crickets. After entering the nematode, the bacteria kills the mole cricket within a couple of days. They are most effective against adult mole crickets, so are best used in the spring and fall when adults are present.

I have seen mixed results with Proact applications. I attribute this to application methods. Since ultra violet radiation is harmful to the nematodes, they need to be applied at dusk or later. Also, the turf should be irrigated before and after application. Fertigation systems can also be used to apply nematodes. I haven't used the fertigation system for nematode application, but I'm beginning to do some experimenting with it. I feel that it may be an excellent method of nematode application.

As with chemical insecticides, nematodes need to come into contact with the mole crickets. Timing of application and thatch now come into play. Recently, I



Fiddlesticks

From Page 58

have seen some low pressure injection systems which may be a good option for applications.

Nematodes are environmentally safe. No protective clothing is needed for applications. They do not harm humans, fish, or any other animals. Hopefully we will be using many effective products in the future that have absolutely no negative affect on the environment.

Scouting and mapping can be an effective cost saving procedure for nematode applications. Mole crickets seem to congregate in the same areas year after year. Limiting treatment to these specific areas can provide acceptable control and be cost effective.

Beneficial nematodes have proven to reduce mole cricket populations while being completely safe to the environment. As we fine tune application methods and find a way to insure contact between nematodes and mole crickets, this will become a more popular method of control.

Soil microbial enhancement

From Page 56

increasing as we continue to research this exciting aspect of our profession.

Finding reliable information to assist you can be obtained by asking sales personnel to provide you with studies that support the effectiveness of their products. If you have access to the Internet, there are papers available through the Turfgrass Information File at 20676POC@MSU.EDU. Or, use a go-pher to find topics under agronomy, sustainable agriculture, biological research, or any other catch work you think might work.

Two additional sources are:

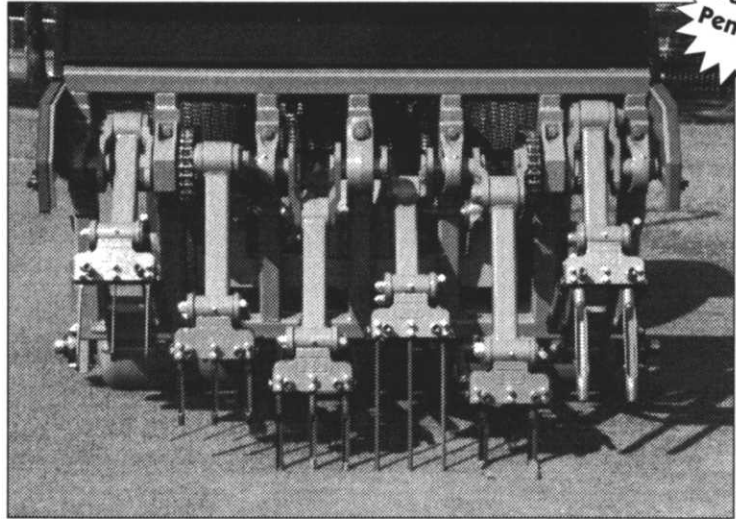
Turf Grass Trends 1775 T. St. NW Washington, DC 20009-7124

Many good book titles are available through:

CRC Press, Inc. 2000 Corporate Blvd. NW Boca Raton, Florida 33431

THE SOIL RELIEVER

A Soil Aerator For The 90's And Beyond.....



Patent Pending

YES – The Soil Reliever is a deep tine aerifier!

YES – The Soil Reliever can be used for any aerification task!

YES – The Soil Reliever will fit most tractors!

YES – The Soil Reliever is made in the U.S.A.!

YES – The Soil Reliever is built to last!

YES – The Soil Reliever is practically maintenance free!

YES – The Soil Reliever is proven!

YES – The Soil Reliever will give you a greater dollar value over all other types of aerifiers!

**BEFORE YOU BUY ANY AERIFIER –
LOOK AT THE SOIL RELIEVER &
COMPARE!**

Free Brochures and/or Video!

Financing and Contract Service Available

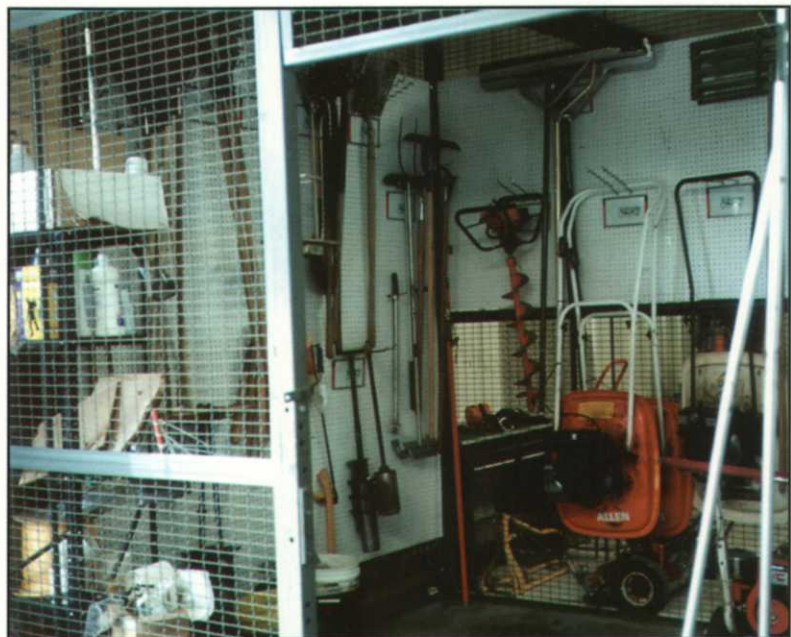
Turf Specialties, Inc.

Thomas St. Romain
1-800-752-5189
Florida Distributor

TURF
SPECIALTIES, INC.



The Sanctuary maintenance facility (left). Note the required containment around fuel tanks (background) and the fertigation tanks (right). Below, are indicated proper storage of chemicals (left) tools and equipment (right).



- 1) Prefab metal type building, or
- 2) Concrete structures

We chose the concrete structures. An article in the *Leader Board* from the GCSAA is a good guideline for this area. You need to have a dedicated storage building, not vulnerable to flooding, and accessible to fire engines and delivery vehicles. It should have an Impermeable concrete floor with bermed perimeters to catch and hold spills. Good ventilation fans and spark-proof wiring help prevent explosions and fires. Security, particularly locks and inaccessible windows, emergency supplies and first aid station with emergency shower immediately ac-

cessible should also be available. The size of this structure would depend on your operation. There should also be an impermeable surface outside the chemical storage area for your mixing and loading.

Fuel storage

There are three basic options:

- 1) Above ground storage tank (AST) with self-containment (e.g. Convault) steel tank that is encased in concrete.
- 2) Underground storage tank (UST). You gain more space with this type, but there is more monitoring and record keeping.

We chose the third option:

- 3) An AST with a containment wall around it. With this type of fuel storage, the area has to have impermeable floors and walls. Walls should be poured solid and reinforced. The containment area should be sized so to hold at least 110% of the largest tank.

All of the different types of storage areas should have overfill protection, leak detection and an impervious surface for filling of equipment and vehicles. For any of these tanks, you must meet the insurance requirements for financial responsibility.

Storage bins

Storage bins for topdressing, mulch and sand are probably not considered a necessity, but I recommend that if space permits, you should make this part of your plan. Separate bins for each will considerably cut back on the amount of contamination and waste of these materials. It will also add to the overall cleanliness of the facility. Usually these bins have reinforced concrete floors and walls and graduated side walls from front to back. These areas can have a roof added, but have to be designed so large trucks can have access.

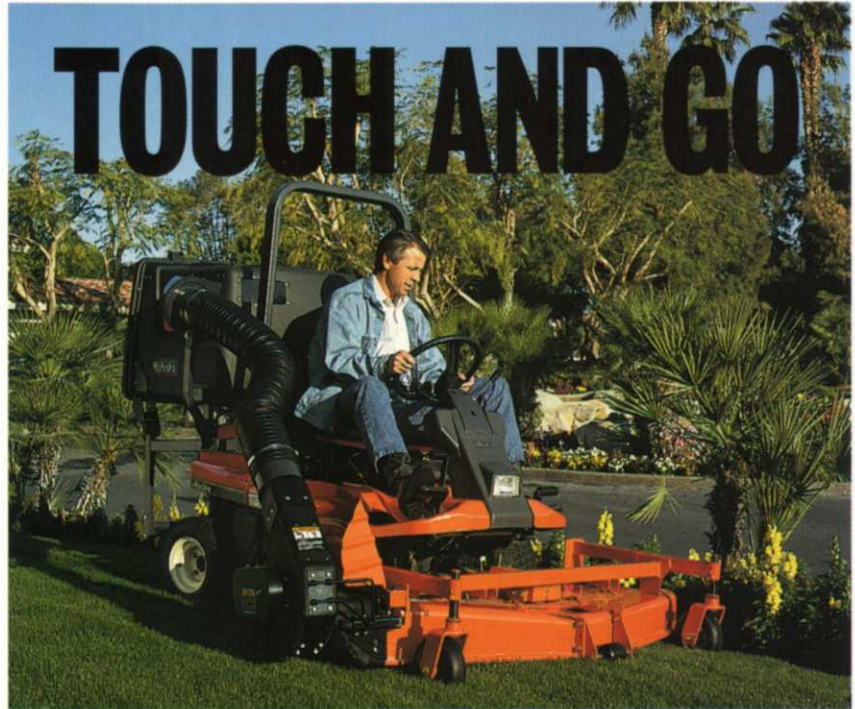
Signage and safety

This area pertains not only to new facilities, but existing ones as well. You should have a hazard communication plan set up and operational and all pertinent signage in place.

Cleanliness

Once again, this applies to all maintenance facilities, new and old. This goes hand in hand with the safety of your maintenance operation. Everything should have its place, not blocking a fire exit, safety signage, etc. You should practice what you should be preaching. There is a certain image that we need to promote. We are professionals and should look the part. I can remember being told by a superintendent that I worked for that first impressions were important. We have a lot of vendors and other professionals that visit us on a daily basis. Some never even see the golf course. I know what my first impression would be, "I sure hope this guy doesn't take care of the golf course the way he takes care of his maintenance facility."

It doesn't take that much time to keep the maintenance areas clean. We have two people who clean the lounge, offices and equipment area daily. It takes approximately 30 minutes. On Fridays, we remove all of the equipment from the shop and vacuum, blow and sweep the entire complex. It takes two hours to accomplish this. I do think that good housekeeping procedures carry over to the golf course.



Kubota's GF1800 diesel front mower gives you "on command" 4WD with the touch of a pedal. Mow slopes and work the toughest terrain with its foot controlled 4WD that engages and disengages without stopping.

Power-matched with Kubota's 18HP liquid-cooled diesel engine that's designed to work clean, quiet and efficient. This easy maintenance diesel is rubber mounted to reduce vibration and cool air, rear discharged for increased operator comfort.

Hydrostatic transmission eliminates clutching and shifting while a hydraulic lift system, tilt wheel and cruise control add to operator efficiency.

The tight turning GF1800's smooth, shaft-driven PTO easily attached to a choice of 48", 54" and 60" mower decks.

There's even an optional grass catcher with a choice of hopper or bag types.

Touch and go with Kubota's GF1800 diesel front mower.

Kubota Tractor Corporation markets a full line of tractors through a nationwide network of over 1,000 dealers.

Kubota



See the Kubota dealer nearest you!

BOYNTON BEACH

Florida Coast Equipment
9775 W. Boynton Beach Blvd.
(407) 369-0414 • (800) 343-7594

KISSIMMEE

Kissimmee Tractor & Mower
1770 E. Irlo Bronson Memorial Hwy.
(407) 846-2400

WINTER HAVEN

Polk Tractor Co.
3450 Havendale Blvd.
(813) 967-0651 • (800) 532-8783

MIMS

Robinson Equipment
3030 Cuyler Road
(407) 267-2023 Sales • (800) 654-5894 Parts

NAPLES

Naples Rent-All & Sales
2600 Davis Blvd.
(813) 774-7117

Professionalism

In the strictest terms, a profession is an avowed occupation. Professionalism then becomes an attitude about that occupation. It is a portrayal of your personal integrity regarding the work that you do for pay. Business practices, communications, continuing education, discipline, ethics, environmental stewardship, image, personal conduct, professional association participation, regulatory compliance, turf management, and training are all areas of our occupation that should be executed with the highest professional standards. They are the benchmarks by which we, as individuals, and our profession are measured.

— Joel D. Jackson, CGCS

A Question of Ethics

I am writing this in an anonymous fashion because I do not want to implicate anyone for wrongdoing, but I sincerely believe the subject that I am about to embark upon definitely needs to reach all of our people in the golf course management industry.

I recently experienced a problem with my putting surfaces at a facility where I was employed. The cause for the problem was beyond my control, but as we unfortunately see all too often, I was asked to resign my position because it is the easiest way for management to save face and calm down the membership.

After leaving, and a few weeks of self-evaluation, I felt that there were things that I could have done better dealing with the situation, and know that at least I have learned a few things from this bad experience.

My reason for writing, however, is not for sympathy, but to tell of a situation that is to me, becoming very alarming in our profession. The number of people that encroached upon my position by calling my manager, trying to be the first to get their foot in the door, before an official announcement was issued, was beyond belief!

My manager was very professional, and denied that there were going to be any changes made, but many he told me of were very aggressive and continued to call him. Many of the job seekers were people looking to move from the ranks of assistant superintendent to their first head superintendent position.

The person who eventually took my place was a former employee of mine. He never had the ethical decency to call me to see what the situation with me was. He interviewed with our management and

accepted the position, all without even calling to let me know he was involved in the process.

I realize that there are many people out there that are graduating from turf school and need to find golf course superintendent positions, but these people need to realize that the GCSAA has a good code of ethics in our business. It is everyone's responsibility to uphold it. I know for fact that my replacement took the job for a much lower salary than I was being paid. I believe he never had any concern for upholding the salary scale for my area. I doubt if he ever tried to find out what the range was.

Before I interviewed for the job, I first called the chapter leaders to introduce myself and to find out about the area salaries and other important information about their group of superintendents. It was very easy to do, and believe me, it helped me in my negotiations. It also helped the existing superintendents to continue to upgrade their salaries.

We all have a tremendous responsibility in our business, and it has taken a lot of hard work by all of us to get the due respect and compensation we are receiving today. I am hearing about more and more superintendents being replaced by people that are coming in 10-15K less than the previous superintendent almost on a daily basis.

These people don't realize the tremendous amount of pressure that is associated with being the head superintendent. It is impossible to imagine until you are in that position. When I left the ranks of assistant superintendent, I fortunately listened to my boss, and although I was very eager to get my first head job, I went to the bargaining table determined to be paid for the responsibility that I was tak-

ing on, and to uphold the salary range of the superintendents in the region.

The kind of cut-throat behavior that I have experienced, and am hearing about, needs to stop. We are all facing more and more responsibility and pressures from the public and media, and I feel that well-educated, ethical, and hard working golf course superintendents will meet these challenges head on.

As we become more and more responsible, we deserve to be compensated well for the great amount of time and effort required to do our jobs to the highest standard. We do not need our own people shooting us in the foot. They will be the ones who eventually will pay the price. — Anonymous

Getting the Right Man for the Job

Greenskeeper, Golf Course Superintendent, Agronomist, to Golf Course Manager. The role today of the old "Greenskeeper" has expanded and taken on various new titles and responsibilities. The position is one that requires managerial skills, business understanding, accounting and budgeting skills, environmental knowledge and, of course, good grass growing abilities. Therefore, more than ever, there is a strong need for good assistant superintendents/assistant golf course managers. After all, we are only as good as the staff that works for us.

Obviously, the first step to having a good assistant is hiring the right person for the job. One thing that I have found very advantageous is establishing a good internship program. Having the opportunity to monitor a turf student's work habits as an apprentice gives the superintendent a "sneak preview" prior to hiring the intern as an assistant. I personally have employed three of my former interns as assistants and helped two others gain employment as assistant superintendents. If you are not able to view the applicant as an intern prior to employment, it makes the interview process even more critical in order to employ the right person for the job.

The first step in the interview process

Since 1978

ARBOR TREE & LANDSCAPE Co., Inc.

What to look for in a tree company

- 15 years working on golf courses
- Certified Arborist staff
- The same faces, year after year
- Million dollars in truck and equipment
- Able to work around rain days
- Talk to a person not a machine
- Right tool for the right job

Service • Communication • Care

WPF 407-965-2198

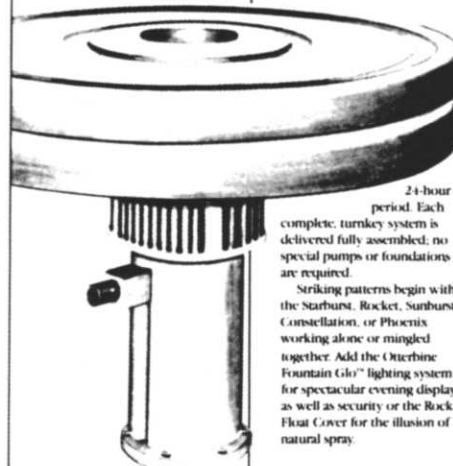
So FL 1-800-932-7267

Troubled waters?

Otterbine Aerators

The prescription for troubled breathing, poor circulation, and changing temperatures in ponds and lakes is practical engineering that is esthetically pleasing.

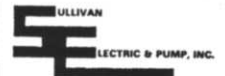
These aerators range in power, circulating from 600,000 to 20 million gallons of water in a



24-hour period. Each complete, turnkey system is delivered fully assembled; no special pumps or foundations are required.

Striking patterns begin with the Starburst, Rocket, Sunburst, Constellation, or Phoenix working alone or mingled together. Add the Otterbine Fountain Glo™ lighting system for spectacular evening display as well as security or the Rock Float Cover for the illusion of natural spray.

Otterbine Aerators meet the water management needs of golf courses, parks, recreational lakes, office developments, and residential condominiums. Call or write for more information:



(407) 588-5886



Duststorms Got Members Trading Carts For Camels?



After you've done everything else right, why take short-cuts on course maintenance with ag-grade fertilizers? Sunniland's custom blends are formulated specifically for your course. Uniformly granular, too, eliminating hazardous dust on the course, your equipment, pools and members! The course will look superb and so will you. We knew you wouldn't mind if we cleared the air on course maintenance, so phone our Sunniland Golf Products Representative today.



**SUNNILAND
CORPORATION**

Post Office Box 8001 • Sanford, Florida 32772-8001 • Phone (407) 322-2421 or (800) 432-1130

is analyzing the resumes. When looking over a resume of an applicant, some of the things I look for are education, past achievements or awards, memberships in turf-related organizations and, most importantly, work history. When I look at work history, I look at several things. Are the clubs the applicant worked at comparable to my operation? did the person show stability in his employment history, or did he change jobs frequently? Finally, are there any gaps in his employment history? Also, if I have the references of the applicant, I look to see if they have included references from ALL of the previous employers. If one or more previous employers were omitted, I inquire to find out if there was a motive behind the omission or if it was just an oversight.

These are all things that can be discussed in an interview. I feel work history is critical in the discussion. The applicant should have several years of good work experience, preferably as a technician or better. Training an assistant superintendent fresh out of school with little work experience is a task very few of us have the time to do. All the formal education in the world can not prepare an individual for a job in the turfgrass profession unless it is combined with work experience.

When interviewing an applicant for an assistant's job it is critical for the superintendent to be prepared, organized and consistent. A prepared, written interview is extremely helpful especially if more than one person is being interviewed.

A past employer of mine, a superintendent, once put me through a three-hour written prepared interview for an assistant in training position. The questions ranged from agronomic, personnel and ethics to personal and professional goals. Needless to say, the superintendent giving the interview was an extremely organized professional. This interview taught me a lot, and I have adopted some of the questions in my interview process.

A prepared, written interview also allows the interviewer to fairly evaluate all the applicants.

Selecting the right person for the job essential. Often you spend more time with your assistant than you do with your own family. If the fit is not right, it will

create friction and unneeded stress on all parties involved.

The assistant superintendent must be able to relay his and your desires to all members of the maintenance staff. The assistant must also be mature enough to communicate with the youngest and oldest employee regardless of the assistant's own age. This is why I feel confidence (not arrogance) is a key personality trait of the assistant.

The assistant superintendent must also serve as a role model for the maintenance staff. The staff will look to this individual for guidance. If the assistant has bad habits, they will undoubtedly be picked up by the staff. The assistant should look and act at all times like the maintenance staff has been instructed to do.

If the crew members see the assistant breaking a rule that they have been told to follow, it will most likely result in bad work habits or poor attitudes.

Finding and hiring the right assistant superintendent can make you or break you. The assistant is the heart of the maintenance staff. It is this individual that will serve as an extra set of eyes, ears and a nose for you while he is on the golf course. It is for this reason, and others, that you must inform your assistant of all the activities, goals and plans that you, the superintendent, have. The more educated this person is, the easier it will be for him to do his job. Don't forget — the better he does his job, the better the golf course and you look! The hard work that you go through in hiring, training, educating and allowing the assistant to mature professionally will pay off for the assistant superintendent, superintendent, the membership and the golf course conditioning.

— *Darren Davis*, GCS Olde Florida Golf Club, Everglades Chapter

From School to Assistant

Becoming an assistant after college is a period of transition when several decisions need to be made. The choices decided upon make a definite impact on one's career.

That first assistant's job a person holds

makes such a lasting impression that careful consideration should be placed on all decisions. Several of the decisions include: a suitable location, the type of organization, the superintendent and one's goals.

The chosen location is a lesser factor with some than with others. It is, however, a concern that should be addressed according to the region, climate and type of turfgrass the assistant is looking to gain experience with.

The type of organization can be a difficult decision to make due to the variety of opportunities available. An assistant should look at public, private and municipal courses along with management groups. When looking at these options, one should focus on its reputation, budget and membership in the past, present and future.

One of the most important choices is a superintendent. This person gives an assistant the proper training to eventually become his equal. A superintendent should be experienced and knowledgeable about the different aspects of the industry. His long and short term goals should be realistic and attainable. He must be aware and willing to spend time training an assistant on the most up-to-date products and trends. He should be consciously aware of the environment and, most importantly, he should be able to clearly communicate his objectives.

The final part of deciding on where an assistant's career will begin lies with the goals he sets. These must be attainable goals in order to become successful. Some goals might include developing strong leadership qualities; fine tuning management skills; and gaining, not expecting, the respect of employees.

Graduating from college can be a fulfilling experience just as beginning a career in the golf business. The novice assistant will look forward to becoming involved in the different affiliations of the industry. This transition of graduating from college to becoming an assistant superintendent can be accomplished by setting high expectations and challenging oneself to become a future superintendent.

Tim Haskins, Assistant GCS, Olde Florida Golf Club

Golf Ventures—Florida's Leading Full Service Supplier to the Turfgrass Industry



Fertilizers

- LYKES High Quality greens and fairway mixes—stock grades or custom formulations—in bag or in bulk.
- RINGER Turf Products
- Nutriculture

Chemicals

- Fungicides • Herbicides
- Insecticides • Pre-Emergents
- AQUATROL Wetting Agents
- Venture Foliar Nutritional

Soil Amendments

- PSA™— Prescription Soil Amendment
- Agri Gro
- Dakota Reed-Sedge Peat

Equipment

- RANSOMES • CUSHMAN • RYAN
- CLUB CAR CARRYALLS • STEINER
- Daihatsu Hijet • Florida Sprayers
- SDI Sprayers • Foley and Supreme Grinders
- Brouwer • Redmax • Gandy Spreaders

Seed—LOFTS/SUNBELT

- Laser Poa Trivialis • Sabre Poa Trivialis
- Palmer II Perennial Ryegrass
- Prelude II Perennial Ryegrass
- Penncross Bentgrass

Accessories

- STANDARD Golf • PAR AIDE Products
- Perma-Sign Granite Signs
- Lewisline • American Eagle
- Flexstakes • Motorola Radius Radios
- Fox Valley Marking Paint
- PinHigh Lapping Compound
- Hole-in-White (cup whitener)

Contract Services

- Floyd-McKay Deep Drill Aerification
- Slit Seed Incorporation of Granular Insecticides



2101 E. Edgewood Dr.
Lakeland, FL 33803
(800) 330-8874

15864 Brothers Ct., SE
Ft. Myers, FL 33912
(813) 481-1358

14513 N. Nebraska Ave.
Tampa, FL 33613
(813) 975-0606

Chrysler-Plymouth Tournament of Champions

North-South Course at Grand Cypress GC, Orlando
Head Superintendent: **Tom Alex**; North-South Superinten-
dent: **Shane Mathews**; Assistant Superintendent: **Andy Smith**;
New Course Superintendent: **Dan Burdette**.

Saturday, January 14th. It is exactly one week since a devastating storm front wreaked havoc on metropolitan Orlando with squalls and tornadoes. Another severe front indicated by a brilliant red slash on the weather radar is advancing slowly across the state toward Orlando. It is the morning of the third round of the LPGA Tournament of Champions. Central Florida is once again under a Tornado Watch

Tom Alex and staff wait anxiously for a sunrise that won't happen. Finally, when enough twilight is showing they begin their morning course preparation routine with one eye on the radar and an ear tuned for thunder. Tom is the first to admit that they are blessed with a small field of players (40) which translates into 9:30 and 10:30 a.m. tee times off the first tee only. This gives the crew ample time to double and triple cut the greens as needed for required speed; mow tees, collars, approaches, fairways, fair-rough cut and hand rake bunkers ahead of the first group.

During the day if any inclement weather threatens, a crew member stands by each green with a squeegee to remove any possible sanding water. Later in the afternoon as the players begin to clear the first few holes the crew duplicates the morning routine and in addition mows the primary roughs to boot.

Actual preparation for the event and in turn the fall/winter season begins in October with the overseeding of the golf course. The unusually warm fall required additional seed applications above the normal 100,000 pounds to achieve desired density in fairways and roughs. The normal 10-lbs.-per-thousand bent/poa mix on the greens ended up closer to 14-lbs.-per-thousand. Tom prefers multiple mowings (2-3x) in the morning and evening to achieve green speed rather than mechanical rolling for this event. He explained, "The LPGA requested a course that

Where the Pros Play

Florida leads the nation in hosting a total of 14 combined LPGA, PGA, and Senior PGA golf tournaments. This is part one of a three part series that will cover those fourteen events. We hope to provide a glimpse into the trials, tribulations, and triumphs that come with preparing for these special events. Along the way we may also discover some turf management tips and techniques that will help you prepare for your own special tournament!

had firm, fast fairways and greens that would hold shots. I felt that if we rolled these greens too much they'd be too firm to accept their approach shots."

Tom is able to put close to 50 people on the tournament course for the daily preparations by borrowing staff from the other courses on property. In fact, Dan Burdette comes down from the New Course one month prior to the event and oversees the North nine and resident superintendent, Shane Mathews concentrates on the South nine which has the finishing holes. Their goal is to have "No Ground Under Repair" or as Tom put it, "no white paint" by the LPGA advance team. They succeeded in reaching that goal for the second straight year

The radio crackles, "Tom there is a severe storm cell moving in with lightning activity!" Pow! A bolt hits nearby. Tom calls Shane and Dan to get the crew off the course until the cell passes. Tom and I are in an open cart making a mad dash for shelter ourselves. As the rain drenches us and runs down our faces, Tom turns to me grinning and says, "Hey Joel, just another day at the office, right?"

Well, the tournament got lucky and the front passed without postponing the round. Months of planning and hard work could have been wiped out in an instant, but fortunately not this time! Everything else went as planned and Dawn Coe Jones shot a 7-under score to win the event. Sometimes you wonder how many people realize just exactly how much work and effort was on the line during those tense hours as the storm poised to strike. For Tom and staff and all of us, it is just another day at the office.

*Joel D. Jackson, CGCS
Disney's Magnolia GC*

Tifton Physical Soil Testing Laboratory

Specializing in:

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

1412 Murray Avenue
Tifton, Georgia 31794



T. Powell Gaines
(912) 382-7292



South Florida Turf Products INC

1-800-432-2214
407-746-0667

**Distributors for
Howard Fertilizers**
**QUALITY FERTILIZERS & CHEMICALS
FOR THE TURF INDUSTRY**

P.O. Box 8081
Jupiter, Florida 33468

Predictable Results.

In managing golf course turf, it's what matters most. As specialists in turf care, we look long and hard for products that are truly superior before we present them to you. We insist manufacturers prove their claims in the lab *and* the field, because we're committed to your results - on your course and for your bottom line. Call. Let us demonstrate the terrific results you'll get with these technically superior products.

AXIS™

Amends soil to give you more leeway managing the crucial air/water balance in root zones. Aerify, rototill, topdress. More porous than clay-based amendments. Does not compact. Proven effective in USGA greens.

BREAK-THRU™

The most effective wetting agent known to science (that you can afford). Proven safe. Decrease pesticide use while increasing effect. Save 40% or more on soil conditioning. Affordable dew control.

AGRO-TECH 2000 Inc.

PLAINSBORO, NJ
1-800-270-TURF

Available in Florida from: • GO-FOR SUPPLY 1-800-475-7081
• DICK BLAKE 407-736-7051

Scotts® Custom Application Service: perfectly accurate, perfectly convenient.

Scotts Custom Application Service is the thoroughly professional way to apply fairway fertilizers and combinations without leaving tracks and without overlays, skips or interruption of play. Specially designed application trucks and computer-controlled equipment maximize spreading accuracy. And high-intensity lights on the trucks allow pre-dawn and after-dark applications, so there's no need to close the course or interrupt tee times.

Contact your Scott
Tech Rep or call
1 800/543-0006



Professional Turf Services
...The Scotts Difference®





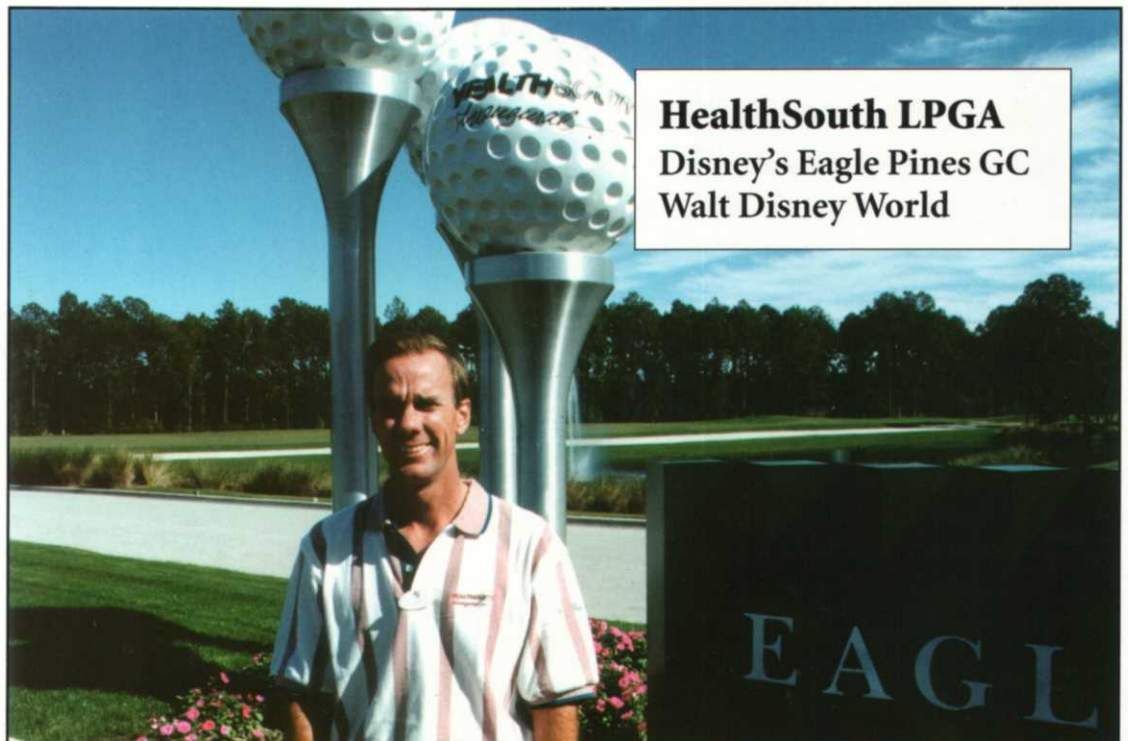
**LPGA Tournament of Champions
North-South Course at
Grand Cypress GC, Orlando**

Head Superintendent Tom Alex (top left) checks with weather radar. North-South Superintendent Shane Mathews (above in print shirt) goes over last minute details with crew. Assistant Superintendent Andy Smith, far left, and New Course Superintendent Dan Burdette await word to get started.

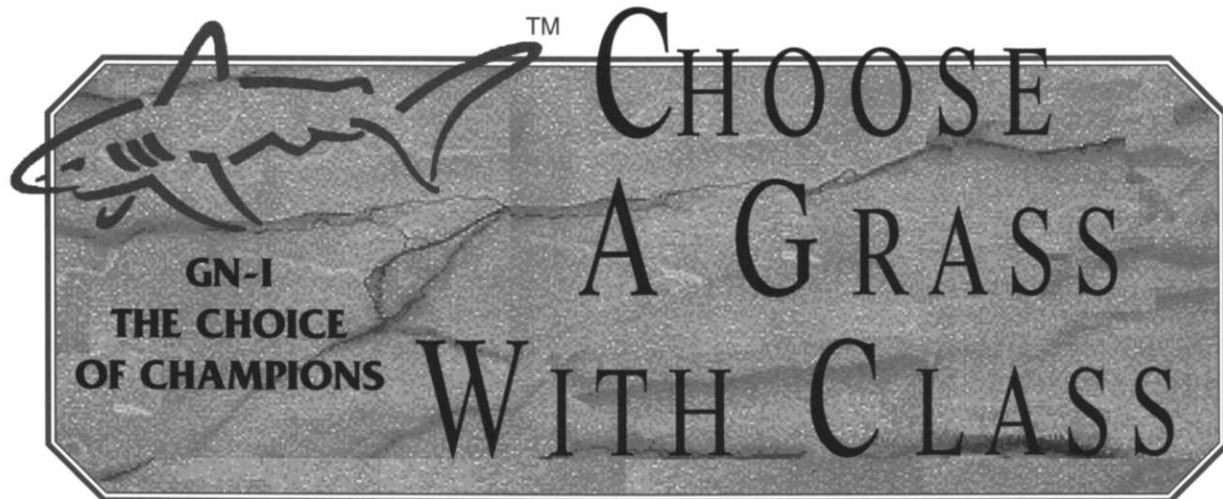
See story, Page 66



Disney's Bonnet Creek Head Superintendent Scott Welder (above) Eagle Pines Superintendent Pat Hennessey (right) faced a tournament week with a very busy schedule. See story, Page 70.



**HealthSouth LPGA
Disney's Eagle Pines GC
Walt Disney World**



PROUDLY PRESENTED BY
the new Greg Norman Turf Company, this hybrid bermudagrass has a deep green color, better tolerance to low temperature and parasitic nematodes and thatches less than other hybrid bermudagrasses. Bred and developed in 1989 by Australian turf breeder, Hugh Whiting, GN-1 has proven superior in its use on fairways 17 and 18 at the Medalist Club in Hobe Sound, FL.

OTHER BENEFITS:

- FASTER DIVOT RECOVERY
- HIGHER BALL ELEVATION
- PATENTED
- DNA FINGERPRINT
- CAN BE MAINTAINED AT FAIRWAY AND TEE CUTTING HEIGHTS

OTHER GRASSES AVAILABLE AT GREG NORMAN TURF COMPANY

- 419 Tifway Bermuda (Golf course quality)
- Georgia-Certified Tifdwarf (Planted with Georgia-certified stock)

NEW PRODUCTS COMING SOON

- Dwarf Perennial Peanut
- Floradwarf Bermuda (New Hawaiian Dwarf)



**FOR MORE INFORMATION
PLEASE CALL: 1-800-871-7570**

**GREG NORMAN TURF COMPANY
4520 KINSEY ROAD, AVON PARK, FL 33825
TEL: 813-452-6595 FAX: 813-452-5079**

HealthSouth inaugural

Disney's Eagle Pines G.C., Walt Disney World

Manager of Golf Facilities: *Larry Kamphaus*, CGCS; Bonnet Creek Head Superintendent: *Scott Welder*; Eagle Pines Superintendent: *Pat Hennessey*.

A funny thing happened on the LPGA Tour this year. After the Tournament of Champions was over, the players just had to go across the street for the next tour stop. Eagle Pines is literally less than a mile from Grand Cypress.

Besides being the first full-field event of the year for the LPGA, it was the 2nd professional event in less than four months for Eagle Pines. The Walt Disney World-Oldsmobile Classic PGA event was played there in mid-October. In fact it wasn't until sometime in November that the decision to have the LPGA event at Disney was finalized.

Time, tide and tournament sales wait for no man. Pat and his crew had to prepare for this new event in the midst of a busy, already-booked, schedule of group tournaments and resort guests. The worst unavoidable conflict came Monday of tournament week when the course hosted a 144 man shotgun tournament in the morning and a 90-man shotgun in the afternoon the day after a heavy rain event on Sunday.

It was a tough assignment to get ready for the LPGA at the same time. Because of the normal maintenance programs, there wasn't a lot of extra work to be done other than sprucing up the native areas with fresh pine straw. Pat was able to assign one temporary foreman to oversee a crew of part-time workers to get that accomplished.

During the tournament itself, Pat ran his schedule basically like he does for the Classic. The regular crew is split into morning and evening shifts. The morning shift of 14 people comes in at 2 a.m. and rakes the bunkers until daylight. Then they mow greens, tees, collars and approaches. They also drag the fairways to remove the dew.

The evening shift of four people mows and blows fairways, and top dresses divots on tees and fairways. Because of the stress from heavy traffic already on the greens this season, Pat opted for a combination of double cutting and rolling to achieve the desired 9.5 speed on the greens.

The HealthSouth Inaugural was also the debut of The Golf Channel's tournament broadcast coverage. The new cable entity got to cut it's teeth on this event, and Scott and Pat got to help

them through this first broadcast.

The most amazing challenge and accomplishment of this event was that it went from non-existence to successful completion in eight to ten weeks. Pat gives the lion's share of credit to Head Golf Professional, Kevin Weickel for coordinating everything between Disney, LPGA, Del Wilber Management, and The Golf Channel.

Pat predicted that it would be a veteran shotmaker who would win the tournament. He was right. It was patient Pat Bradley who battled Pete Dye's challenging layout to a 5-under score and a victory. By dawn the next day the course was ready for normal resort guest play with all traces of the tournament magically gone overnight.

Joel D. Jackson, CGCS
Disney's Magnolia GC

Royal Caribbean Classic

Links of Key Biscayne, Florida

Superintendent: *Mark Richards*

The sixth annual Royal Caribbean Classic was hosted this year by superintendent Mark Richards at the Links of Key Biscayne. Mark has been working for Metro Dade County for ten years, with the last seven spent at Greynolds Park in North Miami. He began working at Key Biscayne on December 19, 1994 with only a month to prepare for the tournament.

The first decision Mark made was to overseed the greens because, like many other golf courses in South Florida, the greens were still recovering from all the rain we had in 1994. Mark overseeded the greens with *Poa Trivialis* at a rate of 10-lbs.-per-thousand-sq.-ft. on Dec. 30-31. The greens were touched up with another 5-lbs.-thousand-sq.-ft. on Jan. 13. The tees were scalped down to take out as much thatch as possible. They topdressed tees heavily and brought the height back up to one-half inch.

Richards began rolling the putting surface during the Pro-Am on Wednesday and Thursday and once after the first round of the tournament. He brought the height down to .145 (accugauge), double cut in the morning and once after play was finished. The results were greens that were rolling 10 to 10.5 on the stimpmeter. Although Mark seemed to be worried about the



**Special
GOLF
COURSE
MIXES**

Sterilization Available

Since 1948

**Florida Silica
Sand Co., Inc.**

Dade County Broward County
949-3521 923-8323

1-800-330-3521

**Complete Line Of
LANDSCAPE
Materials**

**Red Ball
Diamond Clay**



• TURF TRACER • FOAM GARD • RUST BUSTER • BEAUTY
 GREEN • PENETROL • KICK IN THE GRASS • TURF IRON • SUPER WET • EV R GREEN
 KNOCK M' DED • GRIME OFF • GREEN LAPPING SOAP • RUST BAN • GREEN MAG/C
 TURF KOTE • WATER PENN • GREEN MASTER • SCRAM //



CHEMICAL CO. INC.

P.O. BOX 18101
 TAMPA, FL 33679

CALL COLLECT:
813-839-3363

STUART COHEN
 EAST FLA.

RUSS VARNEY
 WEST FLA.

THE ELEMENTS OF GOLF...

Introducing **GolfLink**, the industry's first complete satellite golf weather and information service. Our unique satellite technology and easy-to-use format far outperforms any dial-up services you may have used. For under two dollars a day, GolfLink offers detailed lightning analysis, full color forecast maps, golf association news, USA TODAY headline news and sports and financial information.

We've put together for you all of the crucial weather and lightning information to ensure the safety of your golfers — and all the sports, news and financial information to keep them coming back for more! There's no equipment to purchase and no installation fee.

Call 1-800-508-7367 for 60-Day Trial Offer.*
 *\$159 non-refundable fee includes two months service and shipping.

GolfLink
 GOLF COMMUNICATIONS, INC.
 4811 Lebanon Road, Suite 107
 Hermitage, Tennessee 37076
 (615) 888-8158
 1-800-508-7367

LIGHTNING DATA NOW AVAILABLE



Nutri-Turf, Inc.

ONE OF THE ANHEUSER-BUSCH COMPANIES

16163 LEM TURNER ROAD
 JACKSONVILLE, FL 32218
 (904)764-7100

TOLL FREE: 1-800-329-TURF

SPECIALIZING IN BERMUDAGRASS

- GOLF COURSE QUALITY
- ATHLETIC FIELDS
- COMMERCIAL GRADE FOR HIGHWAYS AND EROSION CONTROL

A COMMITMENT TO QUALITY

- PLANTING SERVICES AVAILABLE
- CUSTOM SOD INSTALLATION
- "BIG ROLL" SOD FOR FAST, ECONOMICAL INSTALLATION



Royal Caribbean Classic

Links of Key Biscayne

Superintendent Mark Richards checks green while preparing for tournament.



The Intellinet Challenge
The Vineyards, Naples

Superintendent Pete Metcalf, photo left.

GTE Suncoast Classic
TPC of Cheval Tampa Bay, Tampa

Superintendent Chuck Green (above left) and Assistant GCS Scott MacEwen check green with a stimpmeter.

greens a week before the tournament, most of the praise was about how great they putted. J.C. Snead, who won in a playoff against Raymond Floyd, gave special thanks to the golf course superintendent. The announcers on ESPN also gave rave reviews of the course condition all weekend.

One of the superintendent's worries during the tournament came in keeping a watchful eye on all the service companies that came out to set up tents for all the social events. On Wednesday night after the first day of the Pro-Am, one of the companies was setting up patio tables and hammered an umbrella stand down through a 3" irrigation line and an 8" main line.

Mark and his crew began digging out around the pipes at 7 p.m. and, due to the proximity of the 8-inch main, it was dug mostly by hand. They had to cap the 8-inch to finish the watering

cycle that evening, and everyone called it a night around 2 a.m. They left the 8-inch capped until after the tournament was finished.

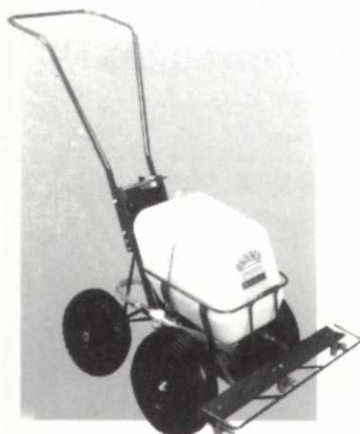
Mark said he relied on his previous experience, as well as the support of others. He would like to thank Steve Kuhn, Monica Elliott, Bill McKee and Chuck Gast for all their help. He also said he would like to pass on thanks to some vendors for their contributions, including Florida Superior Sand, Kilpatrick Turf, Liquid Ag, Du Cor Chemical, Atlantic Fertilizer, and Hector Turf.

Once again, congratulations go out to Mark Richards for a job well done

*Kelly Cragen, GCS
Biltmore GC, Coral Gables*



USA DIST. FOR ALLEN WALKOVER SPRAYERS



GO-FOR
SUPPLY



THE PROFESSIONAL

Tank Capacity: 5.5 Gallons:
Delivery Volume: 33 Gallons/acre

This elite sprayer is designed and built for the professional user for the accurate treatment of large areas of fine turf, such as bowling greens, cricket squares, golf greens and tennis courts.

We go for you!

Order by phone or fax
1-800-475-7081
Fax: 813-475-7081

For Go-For Distributor nearest you call 1-800-475-7081

ACCESSORIES

American Eagle
Bayco
EZ-Rake
Fairway Markers
Flex Stakes
Fore Par
Markers, Inc.
Master of the Links

Par Aide
Rico
Standard
Southern
T.A.T. Golf Signs
MISC.
Barrier Net
Chain, Rope
Marking Paint &

Chalk
Grid System
Igloo Coolers
Tee Towels
SEED
TMI - VIP Blends,
Poa Triv., Rye, Bent
EQUIPMENT
Allen

Broyhill Sprayers
(Grains Keeper)
Red Max
Stihl
Tanaka
Tool Totes
**FERTILIZERS &
SOIL AMENDMENTS**
Axis

Break Thru
Howards Fertilizer
Plant Marvel (Nutriculture)
**PARTS & SHOP
SUPPLIES**
Accu-Gauges
Back-Lapping Machines
Grinders
Lapping Compound

Lifts & Lift Tables
R & R Distributor
Safety Equipment
Tire Changers
Tools (Wholesale)
SERVICES
Pesticide Applications, Inc.
Campbell Aerifications
Services

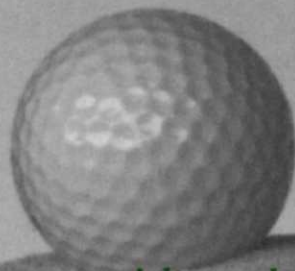
GO AHEAD!

TAKE YOUR BEST SHOT WITH STANDARD SAND.

We produce sands especially for golf courses, following U.S.G.A.'s strictest guidelines. We service all of Florida and the Caribbean with:

- Greensmixes
- Greensmix Sands
- Topdressing Mixes
- Dry Sterilized and Screened Topdressing Sand
- White Trap Sand
- Nonwhite Trapsand
- U.S.G.A. Gravel
- Choker Sand

We designed the popular #37M trapsand. Please call us for a FREE load.



For your specialty sand and gravel needs, call us toll-free today at: **1-800-475-SAND**

Distribution points: Jacksonville, Miami, West Palm Beach, Fort Lauderdale.

The Intellinet Challenge

The Vineyards, Naples Florida

Superintendent: *Pete Metcalf*

Every superintendent will face the challenge of preparing for a tournament. For most of us, it is the Member-Guest or Club Championship. Pete Metcalf, however, prepares his golf course for some of the greatest golfers of all time. When February rolls around in Naples and the likes of Raymond Floyd, Lee Trevino and Arnold Palmer come to town, you can bet that the Vineyards will be ready.

I talked with Pete shortly after the tournament and he informed me of the extremely rigid standards set forth by the Senior PGA Tour. As a veteran of five Senior PGA events, Pete has learned what he can and cannot do before the tournament. Even summer programs are timed to reduce any possibility of inferior playing conditions in February.

About eight weeks prior to the tournament, Pete begins to bring his golf course to a new level. Actually, he brings his course up to a new standard of excellence and a lower level of cut. Mowing heights begin to move downward for greens, tees, fairways and upward for roughs.

Greens are lightly top-dressed and lowered gradually to 1/8-inch, which gives them 9.5-10.0 roll on the stimpmeter. This year the greens were overseeded with Cobra bentgrass and Sabre, Poa trivialis blend and as usual they were perfect. Tees

and fairways were mowed at 3/8-inch and were firm and fast for the pros. I was very surprised to hear that members played right up to tournament time. In fact, I think Pete even had some "walk-ons" during the tournament.

Because the Vineyards is a 36-hole club, Pete had adequate staff to prepare for the tournament, but he did admit that he paid just a little more attention to the south course.

Pete has an outstanding staff at the Vineyards. His assistants, Jim Vajen, Ron Boettger and Kyle Nygard, constantly remind crew members their goal was perfection. When a man the size of Pete Metcalf exclaims that there will be no tolerance of mental mistakes, you can bet the farm that there won't be. When the tournament is over, I am sure each and every crew member will be proud to be part of another great tournament at the Vineyards.

This year was no exception. The course was in great condition. Unfortunately, bad weather shortened the event to thirty-six holes. But from the winner, Bob Murphy, to the very last place man in the field not a negative comment was heard. Although tournament conditions cannot be maintained year round, maybe some of us can hold our own little championships and try to be like my hero, Pete Metcalf.

Wayne Kappauf, CGCS
Island CC, Marco Island

419 SOD

Tifdwarf

University of Georgia Release Lot #G8003-JK

★ Reworking & Planting Fairways, Tees and Greens

★ Rolled Sod •• Sprigs
Hydromulching, Seeding & Mulching

South Florida Grassing, Inc.

1-800-483-4279
407-546-4191

P.O. Box 725
Hobe Sound, FL 33475

GTE Suncoast Classic

TPC of Cheval Tampa Bay, Tampa, Florida

Superintendent: Chuck Green

Chuck Green arrived at TPC Cheval just in time to get the course ready for the Senior PGA Tour qualifying school, the qualifying finals and the GTE Suncoast Classic all back-to-back. He credits his Assistant, Scott McEwen for working a "trillion hours" to make it all successful. Little did Chuck know that Central Florida's "one week of winter" was just about to happen.

The Senior Tour officials requested a green speed of 9.5 on Cheval's severely undulating putting surfaces. To achieve this, Chuck began mowing ten days before the event, twice daily, with walking mowers with verti-groomers set 1/32 below the bedknife. During the tournament the greens were double cut in the morning and evening to keep the speed consistent.

Five days before the tournament, that "week of winter" I mentioned earlier, arrived. The course suffered two frosty mornings and a six hour freeze. The turf went off-color. Fortunately, the temperatures bounced back rapidly and the turf responded to be in great shape for the competition. No rabbits out of the hat, no cards up the sleeve, no smoke, no mirrors. Just patience in dealing with Mother Nature and having faith in your programs.

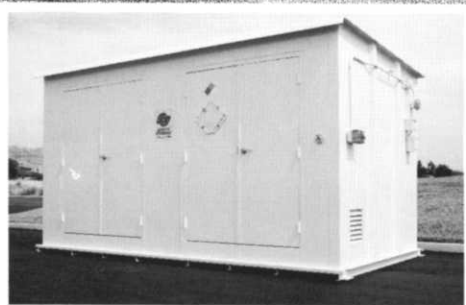
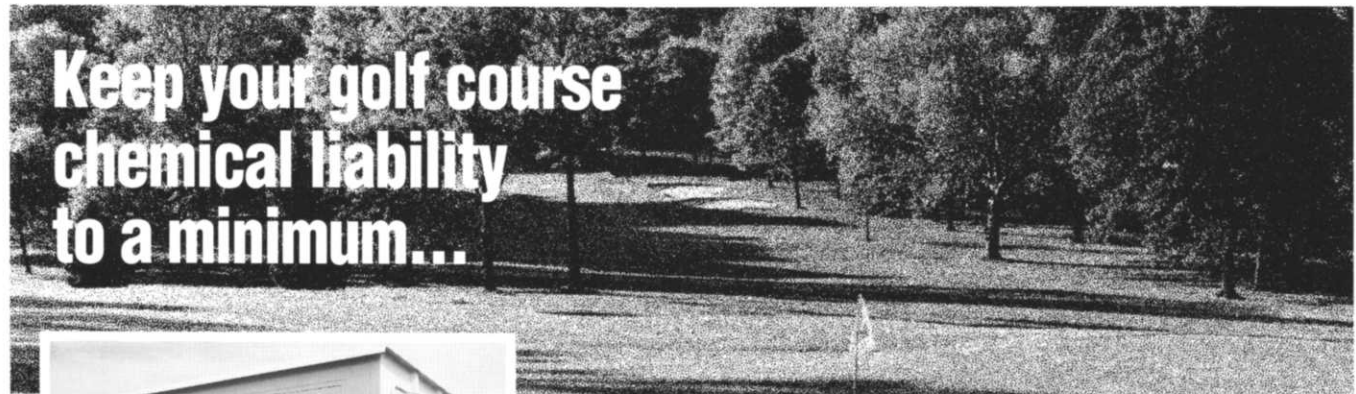
Yes, faith and a full staff of 20 people who worked two shifts

daily. Starting each day at 3:30 a.m. and working till 9-10 a.m. Then back again at 3 p.m. till midnight. Everybody worked a 7 day week and put in 80-100 hours. Chuck also said that the loaner equipment he had available was a must for the success of the operation. The only problem encountered was with the night work. One operator misjudged the distance of an oncoming vehicle in the glare of the headlight and turned into some curbing and damaged a reel. That's one of the pitfalls facing any operation that has to rely on lights to get work done for special events or dawn tee times.

The weather turned out great for the event. The galleries were estimated at nearly 200,000 for the week ranking the tournament in the top three in attendance.

In fact, crowd control was a concern to Chuck as curious onlookers strayed into areas that were being mowed in the afternoons. But the crowds also saw Dave Stockton Sr. fire a nine under score to win the event. No time to rest for Chuck. He's on his way south to grow in a new TPC course. Former Central Florida superintendent, Steve Sorrell, returns from South Carolina to take over TPC Cheval.

*Joel D. Jackson, CGCS
Disney's Magnolia GC*



Safety Storage, Inc. prefabricated, relocatable buildings provide a low-cost solution to safe storage, containment, mixing, and dispensing of golf course chemicals and hazardous materials.

Safeguard personnel, avoid the liability arising from soil and groundwater contamination, meet fire safety needs, and achieve full compliance with federal, state, and local regulations.

Building sizes range from 5' to 32' in length with capacities up to 320 sq. ft. Standard features include continuously-welded, heavy-gauge steel construction, secondary containment sump, removeable fiberglass floor grating, and chemical resistant coating inside and out. Select from a full range of options

**For complete details, call us toll free at:
1-800-330-6949**

...professional hazardous materials storage solutions



SAFETY STORAGE™

PETRO-CHEM EQUIPMENT CO.
8302 Laurel Fair Circle, #130
Tampa, FL 33610
Phone: 813-621-6949
Fax: 813-626-5468



Plots with better turfgrass quality were treated preventatively with either mancozeb (Dithane T/O or Fore) or chlorothalnil (daconil 2787) fungicides at 14-day intervals.

Management of blue-green algae on putting greens

MONICA ELLIOTT AND MARCUS PREVATTE

UNIVERSITY OF FLORIDA

FORT LAUDERDALE RESEARCH AND EDUCATION CENTER

The two most common types of terrestrial algae are green algae, often called true algae, and blue-green algae. The latter are actually a type of bacteria and are also referred to as cyanobacteria. In general, the blue-green algae appear to be the predominant species associated with bermudagrass putting greens and tees in the southeastern U.S. A preliminary survey of putting greens in south Florida demonstrated that the dominant blue-green algae species were *Oscillatoria*, *Lyngbya*, and *Nostoc*. This was also found to be true on bermudagrass greens in Mississippi (Maddox and Krans, 1991). In general, the algal species associated with aquatic environments, such as lakes and waterways on the golf course, are not the same species associated with the greens and tees.

There are two types of algal problems on putting greens and tees, surface algae and the "black layer" phenomenon. "Black layer" is a more complex problem that includes not only blue-green algae but also sulfur-reducing bacteria and specific anaerobic soil conditions created in the soil. The controls for black layer are quite different from controls for the algal slime or crusts observed on bermudagrass putting greens surfaces. The research discussed below was conducted on surface algae as that appears to be the primary problem observed in Florida.

Algae are not plant pathogens. They do not infect (penetrate) the turfgrass plant and cause a disease. If the algae population

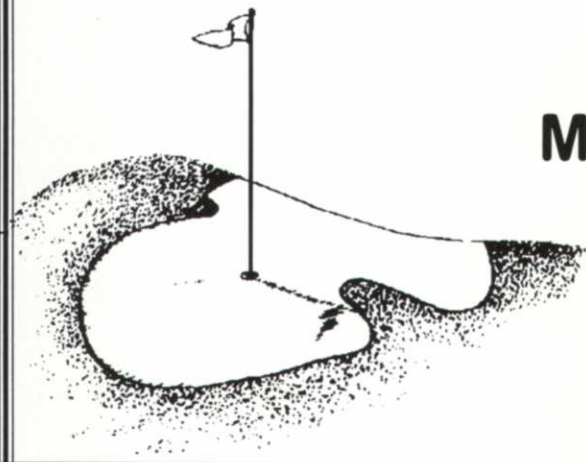
increases significantly, they will "slime" the turf and create thin to thick crusts on the soil surface, but they have not physically attacked the turfgrass. While it is possible that blue-green algae produce toxins which may inhibit turfgrass growth, this has not been proven to date. In most cases, it appears that the algal crusts are simply preventing the bermudagrass from physically growing into this area.

Why do blue-green algae "bloom" on putting greens? Because we (Mother Nature and humans) provide them with the perfect environment. By mowing the putting greens extremely short, especially in the summer months, the soil where the algae live all year is exposed to sunlight. Add in excessive rainfall or irrigation, frequent nitrogen applications and a high soil surface pH and an ideal breeding spot for blue-green algae is created.

You must determine the cause of the algal problem before you attempt to fix it. The cultural controls are fairly obvious - dry out the soil surface, break up the algal crusts and alter management or environmental factors which are conducive for algae development. A shady area that never dries out is a perfect place for algae. Document the problem with pictures and facts to convince the management or membership that the landscape needs to be altered.

The weather cannot be controlled, but it is possible to alter irrigation practices that may be contributing to the problem. The algal crusts can be broken by spiking, verticutting, aerifying, hand-raking or any other method that physically disturbs the crusts. Drying out the soil surface can be difficult, especially during a summer with above normal rainfall. Light topdressings

What's tougher than mole crickets and nematodes?



SUPERIOR QUALITY
MILES TURF PRODUCTS

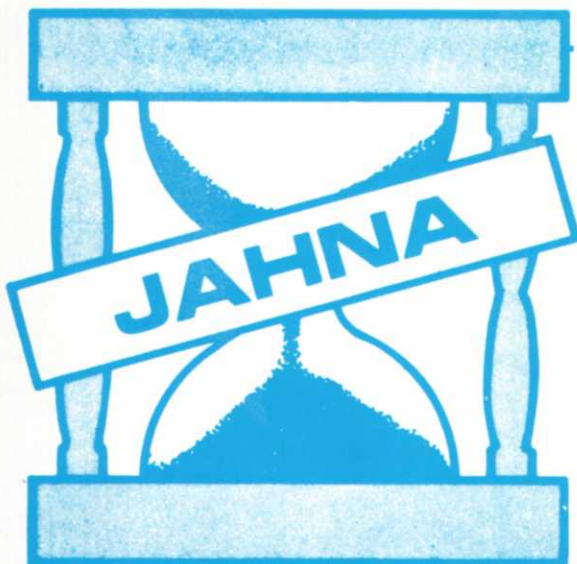


SOUTHERN AGRICULTURAL INSECTICIDES, INC.

P. O. BOX 218
Palmetto, FL 34220
1-800-477-3285

P. O. BOX 429
Hendersonville, NC 28793
1-800-627-1121

P. O. BOX 85
Boone, NC 28607
1-800-477-8843



Your Sand Man

Choker Sand • Greens Mix Sand • Pea Rock

White Trap Sand • Dolomite • Hi-Cal

Dry Sterilized Top Dressing Sand

All Sands meet U.S.G.A. Specs

E. R. JAHNA INDUSTRIES, Inc.

Lake Wales, FL 33859-0840 • (813) 676-9431

Research Table 1.

Fungicide use to control blue-green algae (cyanobacteria), before the algae develop (preventatively) and after they develop (curatively) on the FGCSA bermudagrass putting green at the Fort Lauderdale R.E.C

| Treatment/Formulation* | Rate per 1000 sq ft | Spray Interval [†] | 1993 Quality Scores [‡] | | 1994 Quality Scores [‡] | |
|------------------------|---------------------|-----------------------------|----------------------------------|----------|----------------------------------|----------|
| | | | Preventative | Curative | Preventative | Curative |
| Daconil 2787 90% WDG | 3.5 oz | 14 days | 5.9 bc | 5.2 b | 5.5 a | 3.2 b |
| Daconil 2787 90% WDG | 3.5 oz | 28 days | 5.3 d | NT | 4.4 c | NT |
| Daconil 2787 90% WDG | 6.5 oz | 14 days | 6.5 a | 5.5 ab | 5.5 a | 3.8 a |
| Daconil 2787 90% WDG | 6.5 oz | 28 days | 5.6 cd | NT | 4.6 bc | NT |
| Dithane T/O 75% DF | 6.0 oz | 14 days | 6.6 a | 6.0 a | 5.5 a | 3.6 ab |
| Dithane T/O 75% DF | 6.0 oz | 28 days | 6.1 b | NT | 4.9 b | NT |
| Dithane + CS-7 75% DF | 6.0 oz | 14 days | 6.5 a | 5.8 ab | NT | NT |
| Dithane + CS-7 75% DF | 6.0 oz | 28 days | 6.5 a | NT | NT | NT |
| Dithane M-45 80% WP | 6.0 oz | 14 days | NT | NT | 5.5 a | 3.6 ab |
| Fore 80% WP | 6.0 oz | 14 days | NT | NT | 5.5 a | 3.5 ab |
| Algaen-X 20% L | 4.2 fl oz | 14 days | 4.3 e | NT | 3.9 d | NT |
| Algaen-X 20% L | 12.5 fl oz | 14 days | 3.9 f | NT | NT | NT |
| Control | | | 4.3 ef | 4.1 c | 3.9 d | 2.6 c |

*Daconil 2787: ISK Biosciences chlorothalonil; Dithane T/O, Dithane M-45, Fore: Rohm & Haas formulations of mancozeb; Algaen-X: Scotts (Grace-Sierra) quaternary ammonium salts; CS-7 is a spreader-binder surfactant that was added at the recommended rate of 1 pint per 100 gallons of fungicide solution.

[†]Preventative applications were made on 14 day and 28 day intervals and were initiated before algae had developed. Curative applications, applications made after the blue-green algae were already present, were made on 14-day intervals only.

[‡]Quality scores are based on color and density using a scale of 1 to 10 (best quality). Values are means of four replicate plots for nine (1993) or 10 (1994) rating dates. Means in the same column followed by the same letter were not significantly different (P=0.05) according to Waller-Duncan k-ratio t-test. NT=not tested.

of root-zone mix will help absorb some of the moisture and will physically mask the problem areas. However, during the rainy season, it may require more than cultural controls to prevent a blue-green algae problem.

While some superintendents have used a dilute bleach solution (ex: Chlorox) for algal control, the product does not have a legal turf site pesticide label. Certain fertilizer materials, copper sulfate and hydrated lime, have been recommended for algal control. Copper sulfate has a tendency to burn closely mowed turfgrass - especially if the wrong formulation is used. Hydrated lime is effective in initially desiccating (drying out) the algal layer, but it also helps to create an ideal environment for blue-green algae because it increases the soil surface pH. If the root rot disease Bermudagrass Decline is active, the hydrated lime will increase disease activity as this fungus prefers the high soil pH also.

In 1991 when preliminary studies on

blue-green algal control were initiated, the only legal chemical control for algae was the fungicide mancozeb (ex: Rohm & Haas Fore, DuPont Manzate 200, LESCO 4 Flowable Mancozeb). While there is nothing wrong with having only one chemical for control of an organism, it makes plant pathologists like myself very nervous since this would be an ideal situation for chemical resistance to develop within a population. There was also some concern at that time that this fungicide chemical group would be removed from the market. That would have left the golf course community without a legal chemical control product. This was the motivation for initiating this research project.

The two most likely fungicide candidates for algal control at that time were anilazine (ex: Dyrene) and chlorothalonil (ex: Daconil 2787) because these products had been or were still being used in paints for inhibiting algal growth. Anilazine was not included in the study

since it was not expected to be manufactured, and so available for use, in the near future. Quaternary ammonium salts (e.g. Algaen-X) were evaluated beginning in 1993.

Materials and methods

The experimental site for the chemical trials in 1991-1994 was the FGCSA Research Green located at the Fort Lauderdale Research and Education Center. The 'Tifdwarf' was cut 6 days a week at 3/16 inch. During the summer cycle (May through October), the green was fertilized with 1/2 lb. nitrogen per 1000 sq. ft. every two weeks using a slow release fertilizer source. No other chemical pesticides were applied as a broadcast treatment. If necessary, *Bacillus thuringiensis* (Bt formulated as DiPel) was used to control sod webworms, and spot applications of Dursban insecticidal bait were used for mole cricket control.

To increase algal development, the experimental site was irrigated twice each

Over the four-year period, various fungicide treatments were examined...

day (10 AM and 4 PM) for 7 minutes, even on days when it rained. No cultural controls were utilized in these studies, so the area was not verticut, aerified or topdressed during the study periods (July-October) each year. This method was utilized to insure that the fungicides were being evaluated under moderate to severe environmental conditions for algal development. In other words, a superintendent's worst nightmare come true!

Over the four-year period, various fungicide treatments were examined but Dithane (75% mancozeb DF; the labeled rate) and Daconil 2787 (90% chlorothalonil WDG; two rates) were always examined each year as preventative treatments applied at 14 day intervals. In other words, after the first application of fungicides was made, the twice daily irrigation cycles were initiated. In 1993 and 1994, these fungicides were also examined as: (a) preventative treatments applied at 28 day intervals, and (b) curative treatments applied at 14 day intervals in

which the fungicides were not applied until the algal population had increased substantially. Other treatments during the four year period included quaternary ammonium salts (ex: Algaen-X), maneb, Dithane (mancozeb) with a surfactant, and three different formulations of mancozeb.

The fungicides were applied in 3-5 gallons water per 1000 sq. ft. using a backpack CO2 sprayer and boom with 40 psi pressure at the handle and stainless steel 8002 Tee Jet nozzles. Deionized water was used to eliminate any interaction due to water source, especially pH effects. The 3 gallon rate was used for all fungicide treatments except the Algaen-X which was applied in 5 gallons water according to the label and information supplied by the company (Grace-Sierra) in 1993. Each plot was 25 sq. ft., and each treatment was replicated four times.

Results and discussion

The rate at which the algae developed differed between years, primarily due to

the precipitation received during each study period. Plots were rated for quality (color and density) and amount of algae present in each plot. Only quality scores are presented as they are the most accurate assessment of fungicide effect since some products were phytotoxic. The area used for this experiment was of limited size, so it was impossible to use every treatment every year. Results for 1993 and 1994 are presented in Table 1. During July through September, the FLREC received 25 inches of rain in 1993 and 39 inches of rain in 1994. Except for Dithane M-45, only data for products with legal turf site labels are presented. One note on interpreting the table, values in a single column followed by the same letter are NOT statistically different.

Prevention or reduction in algal development was consistently observed when chlorothalonil (both rates) and mancozeb (the labeled rate) were applied at 14 day intervals AND treatments were initiated at the time the environmental pressure for algal development increased



SERVICES

DESIGN, SALES, INSTALLATION AND SERVICE OF ALL TYPES OF GOLF COURSE AND COMMERCIAL IRRIGATION PUMP SYSTEMS.

FULLY STOCKED WAREHOUSE WITH SPECIFIC EQUIPMENT TO MEET YOUR IRRIGATION NEEDS.

FULLY EQUIPPED, RADIO DISPATCHED TRUCKS PROVIDE 24 HOUR EMERGENCY SERVICE.

COMPLETE CRANE SERVICE.

INHOUSE PUMP REPAIR FACILITY.

MOTOR REPAIR AND REWIND FACILITY.

PREVENTATIVE MAINTENANCE PROGRAMS.

TOTAL LIGHTNING PROTECTION AND INTERFACE SYSTEMS. UL LISTED INSTALLER.

UNDER WATER WETWELL AND INTAKE CLEANING AND REPAIR.

LICENSED & INSURED ELECTRICAL CONTRACTORS.

PRODUCTS

- SYNCROFLO IRRIGATION PUMPING SYSTEMS
- OTTERBINE AERATORS
- EPS LANDSCAPE PUMP STATIONS.
- EPS HYDRAULIC PUMP STATIONS.
- WESCO FOUNTAINS.
- CLAYTON VALVES & PARTS.
- WESSELS HYDROPNEUMATIC TANKS.
- SELF CLEANING INTAKE SCREENS.
- THOMPSON LIGHTNING PROTECTION EQUIPMENT.
- VERTICAL TURBINE PUMPS.
- CENTRIFUGAL PUMPS.
- REPLACEMENT MOTORS.
- CUSTOM CONTROL PANELS, ETL LISTED

"Servicing South Florida"

Prevention or reduction of algal growth possible with timed application of fungicide...

(i.e., initiation of twice daily irrigation). In both years, these treatments were significantly better than the control treatment (no fungicides). The use of a surfactant with mancozeb and the different mancozeb formulations did not increase or decrease its overall effectiveness.

When these products were used at 28 day application intervals, the fungicide treatments still provided better quality than the control but usually had significantly less quality compared to the 14 day application treatments. As can be seen in the graph, the turfgrass quality would increase after a fungicide application and then slowly decrease over the 28 day period. With the 14 day application interval, the quality was more uniform over time.

When the fungicide applications were initiated after algae had developed (curative treatments), the quality of the treated plots was still better than the control but did not equal the preventative fungicide treatments. This was especially evident in

1994 when the environmental conditions were quite conducive for algal growth.

The 90% WDG formulation of Daconil 2787 was utilized throughout the four year period for consistency during the overall study. When you are working with small plots, dry formulations are much easier to measure than flowable materials. This formulation has since been replaced with an 82.5% SDG formulation. Check the Daconil 2787 labels for the current legal use rates.

Mancozeb fungicides are one of the very few fungicides that have a label stating that use of a surfactant may increase efficacy. There did not appear to be a strong advantage in this particular study. Daconil 2787 should not be mixed with a surfactant as one is already part of the formulation. A minimum of 2 gallons water per 1000 sq. ft. should be used to mix all fungicides. (Yes, the labels do state this!!) I used 3 gallons in this study because I wanted to be sure the fungicides came in contact with the algae. Re-

member, you want to stop algal growth. The algae are not growing on the leaf surface but on the soil surface!

Different mancozeb formulations were evaluated as some superintendents believed they observed better efficacy with mancozeb formulations containing the blue dye. Dithane T/O and Dithane M-45 (which is not labeled for turf) do not contain the blue dye that Fore contains. Dithane M-45 was used because its formulation is more similar to Fore than Dithane T/O. No differences were observed between these formulations.

There has been some concern about using mancozeb products, which contain zinc, due to soil test reports that indicate the soil contains an "excessive" amount of zinc. The word "excessive" is misleading. Usually, soil zinc levels over 20-60 mg/kg soil are considered excessive, especially when you consider that turf normally only needs a few mg to satisfy its nutritional requirements. However, turfgrasses can tolerate much higher soil zinc levels. A study by Spear and Christians (1991) on bentgrass demonstrated that even at zinc soil levels of 4000 mg/kg, there was no consistent plant damage. I am not aware of any reports of zinc toxicity of bermudagrasses used on golf courses.

Quaternary ammonium salts for use on turfgrass sites are sold under the trade names Algaen-X and Consan Triple Action 20. There has been considerable confusion regarding the appropriate use of these products, primarily because the label itself is confusing and information provided by one company was inconsistent with the label. In 1993, two rates



TESTING

- Soils
- Water
- Physical
- Tissue
- Environmental

Tom Burrows
 Certified Agronomist
 Turfgrass Specialist

Phone: 407-692-1221
 1741 San Souci, Stuart, FL 34994

CGCS
 Golf Course Supt. - 29 years
 FGCSA Past President
 Penn State - 1960
 Musser Int'l Turf Foundation - VP

(305) 581-0444

SPREAD-RITE, INC.
 CUSTOM SPREADING
 FERTILIZER • DOLOMITE • ARAGONITE

LAMAR SAPP

6001 S.W. 19th STREET
 PLANTATION, FL 33317
 MOBILE: (407) 479-9417

YOUR "ONE-STOP" SOURCE
 FOR AMERICA'S LEADING
 GOLF SURFACES & SUPPLIES!

PARTAC®
 GOLF COURSE
 TOP-DRESSING



HEAT TREATED
 PLUS CONSTRUCTION,
 CART PATH, SAND TRAP,
 AND DIVOT REPAIR MIXES

TYPAR®
 GEOTEXTILES & TURF BLANKETS

Terra-Green®

SOIL CONDITIONER

NEW **PARTAC®** NEW
GREEN SAND
 DIVOT REPAIR MIX

A UNIQUE SOLUTION TO UNSIGHTLY DIVOTS!
 PARTAC® GREEN SAND BLENDED
 WITH PARTAC® PREMIUM
 TOP-DRESSING FOR EXCELLENT
 GERMINATION AND
 DEEP GREEN COLOR!

THE BEST DIVOT REPAIR MIX AVAILABLE!

AVAILABLE NATIONWIDE
800-247-2326
 IN N.J. 908-637-4191

PARTAC PEAT CORPORATION
 KELSEY PARK, GREAT MEADOWS, N.J. 07838
 ORLANDO (FL) MEMPHIS (TN) RENO (NV)

HIGHLIGHT GOLF HOLES,
 IMPROVE VISIBILITY,
 & MAINTAIN CONSISTENCY

U.S. GOLF HOLE
TARGETS™



TerraFlow™
 Drainage Systems

FLEXIBLE GOLF COURSE MARKERS
 SAND TRAP PUMPS
 RAKES, PLUG PUSHERS, SQUEEGEES
 AND MANY MORE
 GOLF SPECIALTY PRODUCTS



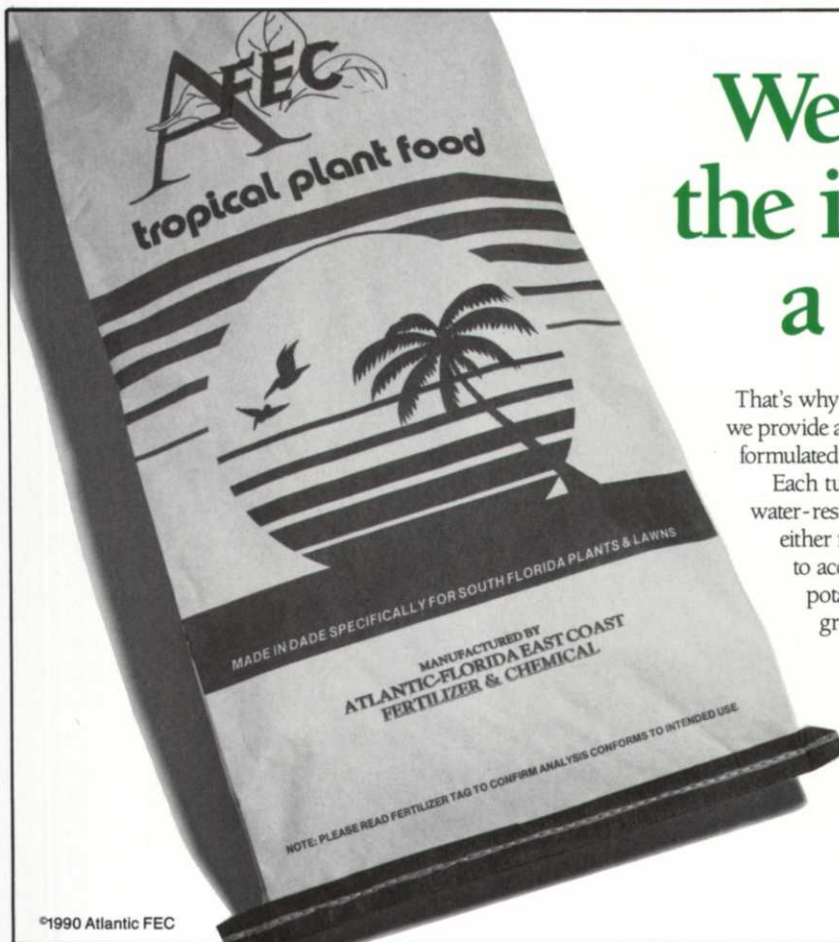
Prevention of blue-green algae with fungicide treatments. Mancozeb fungicide (left) vs. control with no fungicide (right).

were used in the minimum amount of water permissible by the label - 5 gallons per 1000 sq. ft.

The high rate was distinctly phytotoxic to the bermudagrass. The low rate also caused some phytotoxicity but was not consistent in this characteristic. The product did not prevent the development of blue-green algae. This was not expected as it is strictly a curative product. However, even after the blue-green algae developed, there was no observable algal control in either 1993 or 1994.

Summary

1. Both chlorothalonil and mancozeb were effective for controlling blue-green algae on bermudagrass putting greens.
2. The chlorothalonil rate required for control will depend on the level of algae present and environmental conditions.



We understand the importance of a good mix.

That's why it's important that you get to know Atlantic FEC. Because we provide a variety of specialty mixes and related products specifically formulated for the South Florida turfgrass industry.

Each turfgrass mix is delivered by Spyder equipped trucks in water-resistant paper or plastic bags. Bulk material is available in either normal size Killebrews or "small door" (24") Killebrews to accommodate your turf spreader. Drop trailers, sulfur coated potash, and new Micro Prill Greenskote, a quality putting green blend, also available.

Call us toll free at 1-800-432-3413 or visit us at 18375 S.W. 260th Street in Homestead to find out how you can benefit from quality mix from the Atlantic FEC turfgrass professionals.

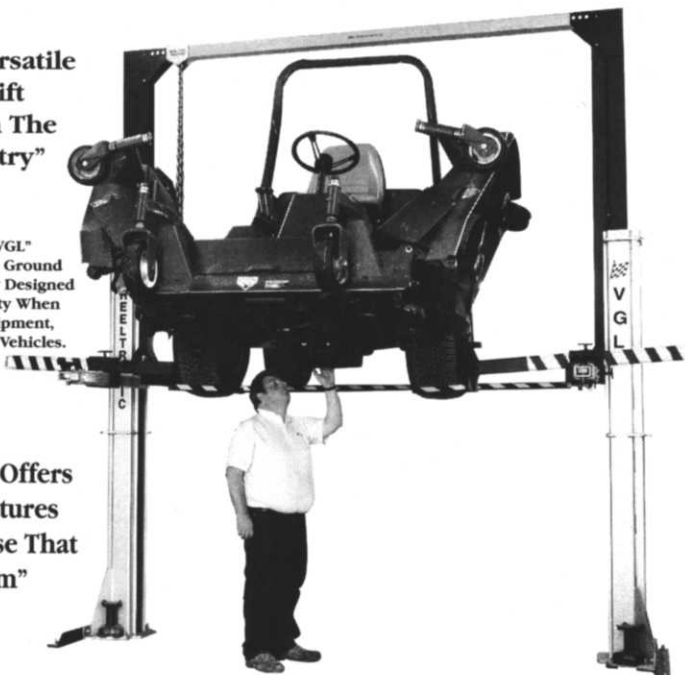
Atlantic FEC
Better Mixes Since 1923.



**"The Most Versatile
Service Lift
Available In The
Turf Industry"**

Wheeltronic's "VGL"
Multipurpose Above Ground
Lifts Were Specifically Designed
To Provide Flexibility When
Servicing Turf Equipment,
Golf Carts And Road Vehicles.

**No Other Lift Offers
So Many Features
"Just Ask Those That
Have Them"**



For More Information Call 1-800-382-6735

Distributed by: Du Cor International • 1011 W. Lancaster Rd., Orlando, FL 32809
Tel: 407/859-4390 • Fax 407/851-8430

ALGAE ON TURFGRASS A PROBLEM?

TRY



TRIPLE ACTION 20

**E.P.A. REGISTERED ALGAEICIDE
AND FUNGICIDE FOR TURFGRASS**

- EFFECTIVE ● ECONOMICAL
- CURATIVE ● BIODEGRADABLE

For a Free Sample Write or Call:



**PARKWAY
RESEARCH**

PARKWAY RESEARCH CORPORATION
1-800-256-FOOT

13802 Chrisman Rd. 713-442-9821
Houston, Texas 77039 FAX 713-590-3353

3. The application intervals used for chlorothalonil and mancozeb will vary with environmental conditions. During periods of high stress, the 14-day interval will probably be most effective.
4. There were no differences in turfgrass quality between different formulations of mancozeb or in the use of a surfactant with mancozeb.
5. Quaternary ammonium salts were not effective under the conditions used for evaluation in this study. Research at Texas A&M indicates these products are only effective when they are used as drenches.
6. Initiate use of the fungicides before or shortly after a weather pattern is established that is conducive for algal development. Do not wait until there is a significant algal population on the turf area to initiate treatments.
7. **Never, ever start a fungicide program without initiating cultural control practices also!** Use good integrated pest management strategies and safe chemical practices for controlling blue-green algae on the golf course.

Literature Cited

- Maddox, V., and J. V. Krans. 1991. The effect of algae and cyanobacterium composition and density on putting greens in Mississippi. Agron. Abstr. p. 179.
- Spear, G. T., and N. E. Christians. 1991. Creeping bentgrass response to zinc in modified soil. Commun. Soil. Sci. Plant Anal. 22:2005-2016.

Acknowledgements

We thank Dr. Carol Bourne for identification of the algae samples and information on maintaining algae in culture. We also thank those suppliers who participate in the South Florida Turfgrass Exposition as the funds raised are used to pay the salary of Marcus Prevatte who maintains the FGCSA research greens.

Storage Tanks from A to Z



Orchid Island G.C.

- * *"Get a good, reputable tank company . . ."*
- * *" . . . Knowledge and guidance ultimately saved me \$30,000."*
Scott Bell, Bent Pine G.C.
- * *"First Rate. Couldn't have asked for more."*
Jack Orr, Orchid Island G.C.

- Underground Tank Removals
- Aboveground Tank Installations
- Remedial Actions
- Statewide Service

Brevard Oil Equipment, Inc.

1557 Cooling Avenue
Melbourne, Florida 32935
800-472-7670 • (407) 259-4181

"The Golf Course Specialists"



THE MASTER BLEND

**HAND-IN-HAND, LIQUID AG AND IT'S VALUED CUSTOMERS
CREATE POWERFUL ALLIANCES**

BY ESTABLISHING PERSONAL PARTNERSHIPS, LIQUID AG SYSTEMS, INC. STRIVES TO DEVELOP UNIQUE, ENVIRONMENTALLY-RESPONSIBLE METHODS FOR DELIVERING PLANT NUTRITION. STAY ON THE LEADING EDGE OF ENVIRO-AGRICULTURAL TECHNOLOGY.

OUR NEW ENVIRO-PRODUCTS:

- ENVIRO-SE
- ENVIRO-ZEST
- ENVIRO-PHOS
- ENVIRO-START
- ENVIRO-RESTORE
- ENVIRO-GREEN PREMIUM FERTILIZER



Liquid Ag Systems, inc.

OTHER VALUABLE SERVICES

- Collaboration for nutritional programs
- Soil, water and tissue sampling/analysis
- Plant nutrition products through your irrigation systems
- Irrigation water treatment
- Environmentally sensitive alternatives for reducing harsh chemical use

1010 N. W. 15th Avenue
Pompano Beach, Florida 33069
(305) 971-0022 • (800) 432-2249 • Fax: (305) 977-0031

3281 Metro Parkway
Fort Myers, Florida 33916
(813) 332-5565 • Fax (813) 332-1319

We Never Heard the Bullet Coming...

Death Lurks in the Sunshine

BY CHERYL JONES

A doctor's examining room. The doctor enters, sits down, foregoing the usual pleasantries, and flatly states, "This is serious. You cannot wait. It's malignant. You'll be seen at Shands Hospital in Gainesville on Monday morning." With these few words, our world changed. The hopes, dreams and plans were all now on hold. There might not be a tomorrow.

It was the usual summer, at least for our family. We've always been mobile, and when my husband Tim got a new job in May, the future looked promising. We needed to move closer to work and scoured the area for rentals. Tim found the perfect house.

Late July saw him working all day at Pine Meadows in Eustis, then unloading the car at the new house after work so I could reload it every evening. Unfinished remodeling of our new home made the big move both prolonged and stressful. Tim noticed that the mole on his stomach was raised, a definite change, but he assumed that it was from toting around heavy boxes in the 99-degree heat.

We survived the big move fairly well and began to settle in at our new house. One evening, out of the blue, Tim announced to me that his mole had changed, and he didn't think it was an infected hair. Right away my red flags went up — this was a major statement from a man who is by nature very quiet and psychologically allergic to doctors.

There was not big scene, no major nagging. He thought that maybe he should get it looked at. Out of three dermatologists in Lake County, the soonest he could be seen was a month away. This brought out a bit of verbal objection from me. I announced that I was going to take him to Orlando, because we weren't going to wait on this thing. He assured me that he was on a waiting list for any cancellation in Leesburg. I planned to wait one week, then haul him to Orange County.

Three days later, the phone rang. Would Tim like an appointment next Tuesday at 9:30? You bet he would. The dermatologist excised the mole and sent it to a lab, a standard procedure for anything that looked at all suspicious. We'd hear back in one week.

The following Monday was Labor Day. We took the kids to a nice park, acting normal on the outside while we both felt uneasy inside, waiting for the report that all was well.

Tuesday morning passed quietly. Tim called at noon — had I heard from the doctor? No. We both relaxed a bit. No news is good news. An hour later, the phone rang. "Dr. Chun wants to see Tim in his office tomorrow." Could it wait until next week? He had an appointment to get his stitches out then. "No. The doctor wants to see him tomorrow to discuss the lab results."

I knew. From the instant she said those words, I knew. The tears, the terrible fear, the pain all forced their way out of my subconscious. What was wrong with my husband?

The next day, Tim came home after his appointment to take us to Tavares. He wore his sunglasses inside the house. I knew, without a terrible doubt, that it was bad news.



Tim Jones

Our outing was quiet. He didn't want to discuss anything in front of the children. I was too petrified to ask — my mind did not want to hear those words. They came, however, when we returned home, settled the children in with a video, and he asked me to go outside and talk.

Tim got right to the point. No warm-up, no sugar-coated break-it-to-her-gently tactics. "The doctor says it's malignant..." The rest of his words were drowned out by the blood

rushing in my ears. I saw tears spill from his terror-filled eyes, and my world — my cozy, settled world — disintegrated.

That evening was the toughest to handle. We took turns retreating to the back of the house to cry, so as not to alarm the children. It was mainly a blur, but one memory stand out in particular. Our little girls were crawling on Tim's lap, happily going about their baby business near Daddy. I saw the look he gave them, one that wondered if he could be there as they grew up — would he be around to walk them down the aisle on their wedding days? He walked out of the room with tears in his eyes. Could this really be happening?

The days that followed were also a blur. I arranged for child care for our two boys, ages 9 and 11, and for the twins, who were 16 months old. Phone calls flew from coast to coast as I enlisted the help of every prayer chain, church, bible study group and Christian prayer warrior we knew. The Lord could provide a miracle, and I needed a miracle now. I could not face the possibility of life without my husband. If the Lord could raise Lazarus from the dead, surely He could get rid of these cancer cells in my husband's body!

Monday morning came. More in control and with the initial shock partially worn off, we drove to Gainesville. Perhaps the surgeon could excise this under local anesthesia and could go home the same day. We clung to each other.

The plan was changed to general anesthesia/let's do it big and get it all. The rest of this day was spent in Shands Hospital, doing the necessary pre-op tests. Tim's Uncle Andy and Aunt Jean, who'd driven over to be with us, left with a promise to return the next morning when surgery was scheduled. We drove home, picked up the twins, and spent another sleepless night. I searched my bible for comfort — reassurance — any word from God to indicate that my most fervent desire would be granted.

Matthew Chapter 21, Verse 22 kept popping up: "And all things, whatsoever ye shall ask in prayer, believing, ye shall receive." This was my message from God. Letting Tim go, in faith, was hard. But I believed...

Tuesday came. We drove to Gainesville. We waited. I cried a river, then an ocean. Would God give me a second chance with this man, this dear, sweet man whom I'd for so long taken for granted? Lord, please give me more time with him. I love him so

Real men do wear sunscreen — at least those who love their wives and children and staying alive.

much. All the hurts and repressed grievances and marital problems of the past dozen years melted into nothingness. They were so petty, so insignificant. All that mattered to me on this earth was having the honor and blessing of having my husband at my side. Priorities straightened out fast.

During the previous week, as I had gone about mechanically doing "normal people" errands, a song had come on in the drugstore. It was John Denver's voice, but eerily it could have been Tim's words. "Lady, are you crying? Do the tears belong to me? Did you think our time together was all gone? Lady, you've been dreaming. I'm as close as I can be, and I swear to you our time has just begun..."

As the song went on to "promise to say right here beside me," I felt a panic well up inside of me and cut my shopping trip short. I wasn't dreaming, although I wished often to wake from this hellish nightmare. As I drove home, though, I wondered in this could possibly be God's way of telling me that Tim would survive this ordeal. I begged — I pleaded — I praised god for the time I had with Tim, and humbly relinquished my husband to God with a heart filled with desperate prayers too deep to voice.

Those same prayers, spoken with the bare emotion of my soul instead of words, flowed upwards to the heavens on the day that would change our lives forever.

Tim went into surgery at 12:30 p.m. The surgeon planned to take one centimeter radiating from each side of the excised mole site, tapering the nine inch incision near the ends in an elongated

football shape, removing all tissue down to the muscle layer. I cried still more, prayed even harder during the time Tim was in the operating room.

Then, suddenly, amidst my inner turmoil and anguish, the peace of God which passes all human understanding descended on me like a warm blanket. I knew Tim was going to be all right. Praise God from whom all blessings flow! The surgeon was the best at Shands, and he specialized in oncology. He was also a Christian. With Tim and Dr. Copeland in that operating room was the Lord, the Great Physician, protecting my husband and guiding the surgeon's hands.

A week later, we returned to Gainesville to have Tim's drainage tube removed and get the report from pathology. What a sweet, wonderful relief to hear that although the melanoma went deeper than they had thought, no cells were found to be straying towards Tim's lymph nodes. The Lord again had heard my plea.

This particular melanoma is gone. Tim will return every three months to be checked. The doctor explained that the skin is one large organ, and the cumulative effects of exposure can pop out anywhere on the body. Then the doctor said three important words: sunscreen, sunscreen and sunscreen. It's amazing how a person will pay attention when his life is on the line. For years I'd nagged, and I suspect for years he'd ignored.

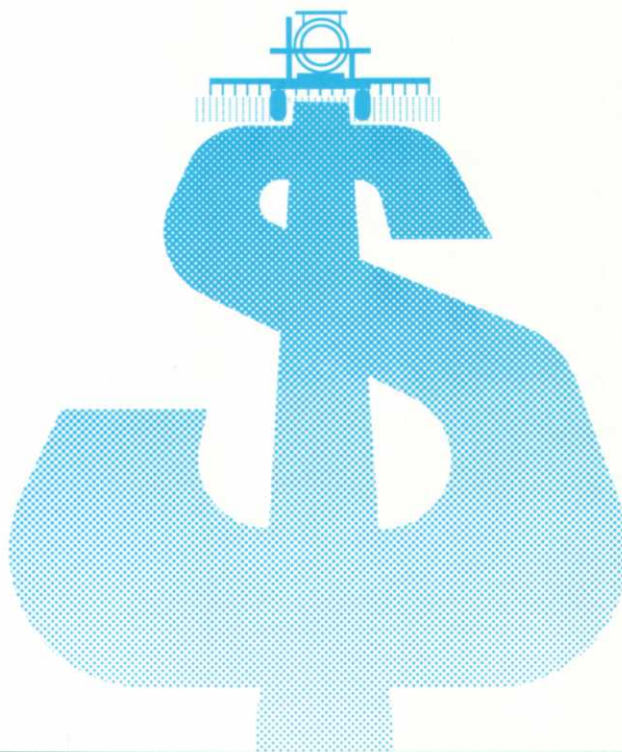
Continued on Page 87

GOLF MAINTENANCE BUDGET BLUES?

Are your Spray
Pattern Indicators
costing too much
money?

Switch to
SIGNAL™ and
\$ave money!!

Get more color
for your Spray
Pattern Indicator
Dollars - use
SIGNAL.



SIGNAL distributors:

GOLD KIST, INC.
Bradenton, Robert Giehls
813-730-2308
Gulf Breeze, Nelson Murdock
904-934-1707
Chuluota, Roger Widrig
407-365-7076
Cairo, Mike Bishop
912-377-8306
HARRELL'S, INC.
Lake Wales, Bill Fowler
813-325-6904
Lakeland, Dick Harrell
813-660-5989
Dunedin, Joe Clay
813-660-5988
W. Palm Beach, Bill Rayside
407-371-2544
Vero Beach, Matt Shook
407-563-7488
Lake Worth, Butch Singo
407-399-2242


PRECISION
LABORATORIES, INCORPORATED
800-323-6280

Reasons to feel optimistic about our industry

About a year ago I was pretty depressed about the state of our industry, what with people like Paul Harvey riding the airwaves and Carol Browner riding herd over EPA. Though I'd be first to warn against too much optimism, since it often leads to complacency, I do think we have plenty of reasons

to feel better about the future of the golf industry, independent of recent political changes.

The most encouraging of the past year's developments include the ongoing changes in GCSAA; the risk assessment legislation; the recent environmental summit in California; significant new developments in organics and biotechnology; the DNA research on bermudagrass soon to be started; the FTGA's turfgrass certification program; the continued growth of the Audubon Cooperative Sanctuary Program; and the continued growth, interest, and professionalism of the superintendent associations around the state.

A good example of the latter was the Spring Turfgrass Seminar put on by the Everglades GCSA this past March 10.

This was a real blockbuster of an educational program, featuring such noted speakers as Dr. Joe Duich, Dr. Jim Watson, Dr. Al Dudeck, Dr. Charles Throssell, Ron Dodson, and Shelly Foy. Recently elected President of GCSAA, Gary Grigg, also was there to give an update on the many good things going on with our national association.

Mike Mongoven has covered the highlights of the seminar in the News Section of this issue. As moderator of the event, I have a few additional comments on the speakers presentations:

◆ **Shelly Foy** - Taking the ACSP message to the schools will help educate our kids who are being brainwashed by Captain Planet, Ranger Rick, and other eco-nonsense. Hats off to the Everglades Chapter for their commitment of seminar funds to help this effort.

◆ **Ron Dodson** - Ron hopes to see golf thought of one day as "the conservation arm of the free enterprise system." He wants golf to lead the way for the involvement of schools, businesses, and local communities in the

ACSP. It doesn't take a genius to figure out that if we grasp this opportunity, it must surely lead to a reversal of our poor environmental image in the minds of the public.

◆ **Dr. Al Dudeck** - He also shared his findings on "FloraDwarf," the selection he brought back from Hawaii a few years ago and has been evaluating ever since as a potential putting green quality turfgrass. FloraDwarf has received its patent and is beginning the process for certification.

Dr. Dudeck hasn't yet published a technical bulletin on this selection, but the grass has a lot of potential based on the data he presented.

"FloraDwarf" retained its color much better than "Tifdwarf" in Gainesville throughout the winter; it produces only about half the top growth; has shorter internodes; and gives a greater ball speed on the stimpmeter. On the negative side, sting nematodes seem to love it; it produces a lot of thatch in a short period of time; and it is difficult to overseed into with perennial rye (*Poa trivialis* was better; bentgrass not yet tested).

Thatch control is better achieved with light frequent topdressings than with verticutting, due to the severe loss of turf quality following verticutting. All of Dr. Dudeck's data is based on plots maintained at 3/16-inch, mowed Monday through Friday.

Some superintendents perceive Dr. Dudeck's refusal to evaluate at lower heights as stubbornness and not responsive to industry's needs. I suggest, however, that you give him credit for trying to help all superintendents.

I think it is up to us to evaluate the limits of cutting heights of this grass on our own plots in Fort Lauderdale and on our own golf courses. I think Dr. Dudeck understands the "real" world better than some of us, realizing the danger of publishing claims that green committee chairmen can use to hang their superintendents.

◆ **Dr. Clark Throssell** - He believes acid injection systems are not helpful for salinity problems, but probably very helpful for high bicarbonate problems. It had also slipped my mind that Dr. Throssell was one of Dr. Duich's students, and had participated in Joe's green speed research as a graduate student.

◆ **Dr. Joe Duich** - Though his green speed talk was similar to one I had heard him give a couple of years ago, it was great to see and hear a man who has given so much to our industry. Of course, the talk was updated and embellished with recent stories of his stimping duties at the Masters, and I must admit, I had forgotten that Wiehle rollers were so much worse than solid rollers on the

Mark My Words



Mark Jarrell

Mark Jarrell, CGCS
Assistant Editor

cleanup pass around greens. I wish I had the space to chronicle Dr. Duich's contributions to our industry for the younger members of our association, because everyone of us has benefited from his work, and owe him our gratitude.

◆ **Dr. James Watson** - Another giant in our industry, and this year's winner of GCSAA's "Old Tom Morris Award." He echoed the need for the golf industry to take their environmental story to the public. He cited GCSAA's superintendent promotional efforts (*Par For The Course* on ESPN), and Ron Dodson's ACSP program as effective ways of doing this.

This was a super program, and the Everglades group did a great job putting it together. My thanks to Wayne Kappauf, Dale Walters, and the rest of the Everglades Chapter for the privilege of serving as moderator, and to Wendy Hamilton for her many courtesies (Wendy is the new Executive Director of the EGSCA).

Returning to the theme of this article, I think we have every right to feel good about the direction our industry is headed, thanks to the talents and dedication of people like those mentioned above. Let's just not get complacent and slack off when there is still so much to do!

Death Lurks in the Sunshine

from Page 85

After all, I was merely a meddlesome wife. Real men don't need sissy sunscreen. They're tough. They're invincible. They're too busy. It's too hot and greasy — a million excuses. But you know what, guys? Real men do wear sunscreen — at least those who love their wives and children and staying alive. Tim is 36 years old. He's young, he's strong, he's incredibly intelligent — and he could have died. But for the grace of God...

Please, if not for yourselves, then for your loved ones, use protection. Wear a panama-style hat and sunblock every day, be it sunny or cloudy. You don't want your wife going through the soul-shattering agony of losing you.

Years ago in *The Florida Green*, I concluded an article about life at Lake City Community College by describing our marriage as "scarred, tested, strong." I didn't know then what those words truly meant. Now I do. I feel closer to my husband than I did on our wedding day. His being here is the greatest gift from God in my life. Every day I will thank God for this precious second chance with my husband.

The sun is not your friend. It may be great for your greens, but if you're not there to tend them, don't fool yourselves — another superintendent will take your place at work. But another husband and father can never fill your shoes at home. Take Dr. Copeland's advice to heart, and may God bless you all with a life free from the terrifying and possibly fatal disease of skin cancer.

Editor's Note: Recently Tim had another scare when he found some swollen lymph glands. Thankfully, examination determined that it was not a return of the cancer. I want to thank Cheryl and Tim for sharing their story of one of the real dangers of being a superintendent and the impact it can have on the lives of our families. Everyone, take care of yourselves out there!



**BREAK
THE
THATCH
BARRIER**

envirogenesis™
**Thatch
Biodigest**

Finally... biological thatch control that really works. In combination with good turf management practices, this product rapidly accelerates the breakdown of thatch. This powerful new formulation penetrates the core of thatch and aggressively converts it into beneficial humus.

Guaranteed CEC Increase

Independent lab testing demonstrated an increase in CEC (Cation Exchange Capacity) at every golf course treated with Thatch Biodigest.

Absolute money back guarantee if treated areas do not show CEC increase.

envirogenesis™
solutions for a cleaner environment

**Call Envirogenesis to place your order today:
1-800-814-1324**

Envirogenesis, Inc. • 5712-K General Washington Drive • Alexandria, VA 22312
703-941-3900 • FAX 703-941-1508

The precise nature of professionalism is sometimes difficult to get a handle

on. So, I set out to find someone who saw things honestly and clearly.

Someone who could put his finger on the very essence of professionalism, because he distilled daily life into its simplest truths. I found such a man at his brand new golf

club that he built from the profits of his seafood company. He called the club, The Forrest. And this is what he had to say:

“My Momma told me professionalism is like a box of chocolate-covered cherries. You should know what you’re going to get just about every time.”

But you know what? Everybody makes mistakes. Sometimes they make a mistake at the candy factory and the candy doesn’t always come out the same. Some have more filling. Or, sometimes the cherry is missing! But mostly if you buy chocolate-covered cherries, that’s what you get.

One time a man calling himself a professional tried to sell me a box of

candy he said was chocolate-covered cherries, but they wasn’t. They was chocolate-covered raisins. He tried to cheat me! Momma said there are people like that. She told me that I should never call those kind of people professionals.

Momma says you can tell a professional by the way he acts. He tells the truth. He admits mistakes and he fixes them. He’s nice to the people he works for and to the people who work for him. And if they’re professional, too, they’ll be nice back. He doesn’t break rules and never tries to steal another man’s job.

I could never trust a person who stole another man’s job. I would wonder what else he would steal from me if he worked for me? And you know what? People shouldn’t ask a man to take another man’s job without telling everybody about it first. That way everybody can help each other make changes.

I could really respect and trust people like that. Maybe they don’t care about me trusting them, but you know what? I bet they end up hiring people like the man who tried to sell me those chocolate-covered raisins.

I guess that’s why Momma always said, “Professionalism is as professionalism does.”

*Professionalism
is as
professionalism
does*

**Green
Side Up**



Joel D. Jackson

Joel D. Jackson, CGCS
Editor

BUILT TO LAST

DEPENDABILITY IS THE
CORNERSTONE OF OUR BUSINESS!



QUALITY. PERMANENCE. TIMELESSNESS.

THE NUCRANE FAMILY IS GRATEFUL TO REPRESENT JOHN DEERE AND OTHER FINE QUALITY PRODUCTS IN FLORIDA AND THE DESERT SOUTHWEST.

OUR SERVICE AND SUPPORT HAS EARNED US A LOYAL FOLLOWING OF THE BEST CUSTOMERS IN THE INDUSTRY.

CALL US. WE'LL BE THERE FOR YOU.

2020 SEABIRD WAY
RIVIERA BEACH, FL 33404
(407) 842-0440

417 CENTRAL PARK DR.
SANFORD, FL 32771
(407) 323-9555

11820 LACY LANE
FT. MYERS, FL 33912
(813) 275-4441

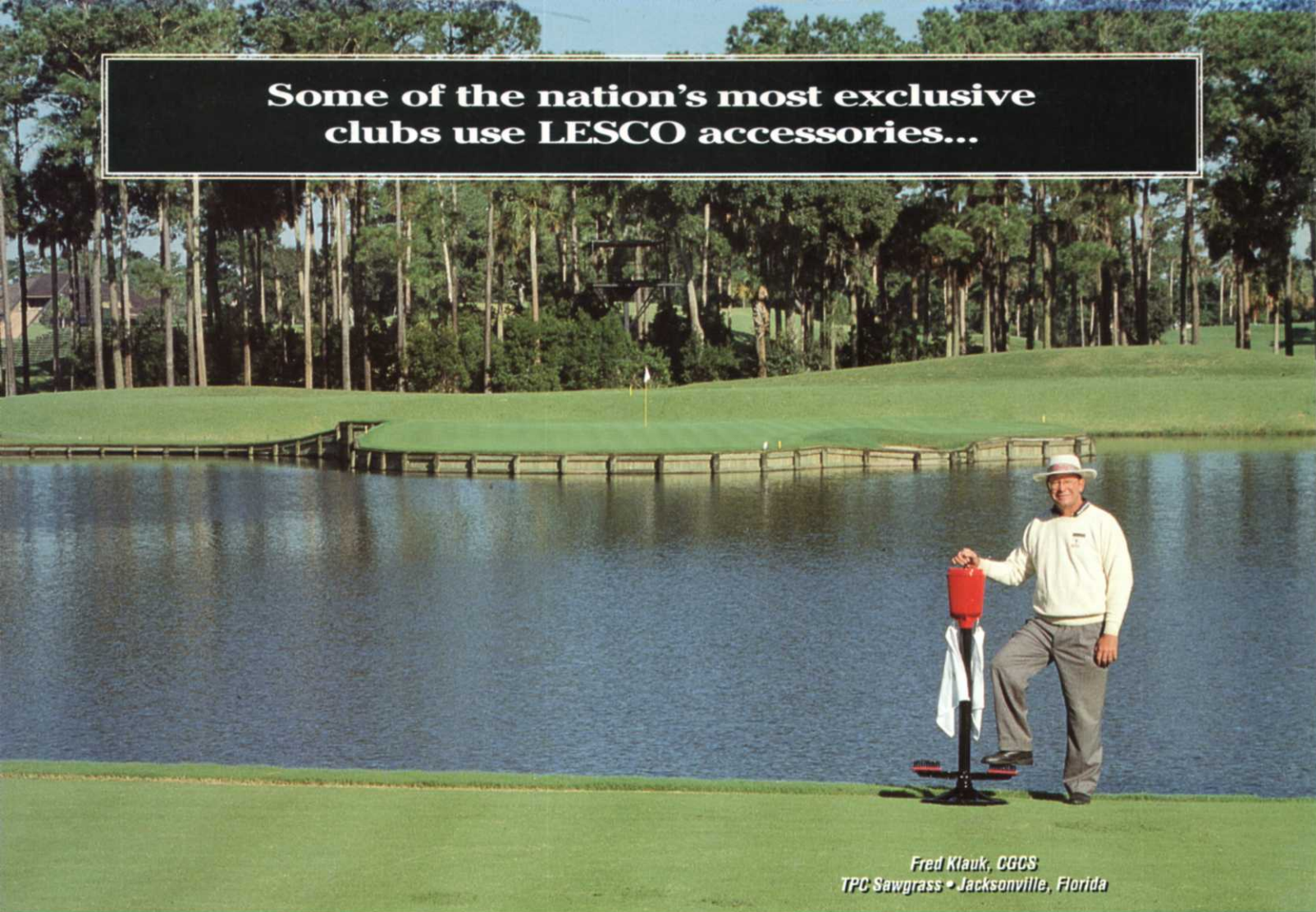
72104 CORPORATE WAY
THOUSAND PALMS, CA 92276
(619) 343-0270

3137 WEST POST RD.
LAS VEGAS, NV 89118
(702) 263-4512



NUCRANE MACHINERY

**Some of the nation's most exclusive
clubs use LESCO accessories...**



*Fred Klauk, CGCS
TPC Sawgrass • Jacksonville, Florida*

Exclusively.

As superintendent of a world famous Tournament Players Club course, Fred Klauk sets the highest standards possible for himself and his crew. At TPC Sawgrass, only the best will do.

That's why the TPC network chose LESCO to be the exclusive supplier of golf course accessories to its 13 courses. LESCO's extensive Tournament Golf Course Accessory line combines durability, ease of maintenance, and the dependability you expect from a company with more than 30 years of service to the golf industry.

LESCO's extensive Tournament line includes a new aluminum ball washer, bunker rakes, personalized flags and flag poles, cups and cup cutters, signs, turf marking paint and much more. Superintendents count on LESCO products to perform season after season. And they do.

When only the best will do, do what TPC did.

Call LESCO at (800) 321-5325.



LESCO
Tournament Golf Course Accessories