

A fertilizer should be as unique as the golf course it nurtures. That's why LESCO



LESCO
manufactures
a complete
line of topquality sulfur-coated
fertilizers
in three
distinct

particle sizes. Elite. Mini. Standard.

LESCO Mini-Particle Fertilizer

Formulated for use on turf main-

tained at one-half inch or higher, the LESCO mini fertilizers provide three times as many particles per given area as the standard LESCO products. The mini particle size offers a uniform distribution pattern that provides even feeding and consistent greening.

Professional Turf Fertilizer MINI 22-0-22

LESCO Elite Fertilizer

Providing 11 times more particles per given area than standard LESCO

fertilizers, the Elite products are formulated for use on turf maintained at a height of less than one-half inch. To enhance plant response and provide a more complete and balanced fertilization, iron and manganese are bonded to every sulfur-coated particle. Both the pri-

mary and the micronutrients are uniformly distributed to the plant because every sulfur-coated particle also contains iron and manganese. And with LESCO Elite fertilizers, the chance of mower pickup is virtually eliminated.

Professiona Turf Fertilizer Professional Turf Fertilizer 13-2-13

LESCO Standard-Particle Fertilizer

Best suited for use on turf mowed

above one inch, the LESCO line of standard products offers all the efficiencies and benefits of quality sulfur-coated fertilizers. Controlled nutrient release for up to 90 days provides consistent feeding and steady greening. Use of LESCO sulfur-coated fertilizers reduces the



risk of burn and decreases the loss of nitrogen through leaching and volatilization.

Not all fertilizers are created equal. Choose the particle size that's right for

your course and talk to your LESCO sales representative about the wide variety of analyses available for



quick shipment and forklift delivery from our Sebring, Florida production facility. And ask, too, about the

new greens-grade soil amendments and fertilizer/control product combinations.

LESCO has a fertilizer for your Florida golf course. Contact your sales representative or call (800) 825-3726 today.



LESCO

LESCO, Inc., 20005 Lake Road, Rocky River, Ohio 44116 • (216) 333-9250

Not all fertilizers are created equal.





Gregg Grenert and the Cushman Custom Applicator™ Samoset Golf Resort Camden, Maine



Gary Dalton and the Cushman Quick Aerator San Diego Country Club San Diego, California



Jim Wyllie, CGCS, and the Cushman Broyhill Sprayer Bayview Golf & Country Club Ltd. Thornhill, Ontario



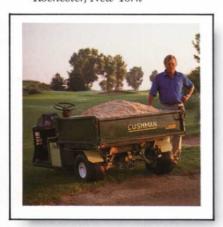
Joe Hahn, CGCS, and the Vicon Spreader Oak Hill Country Club Rochester, New York



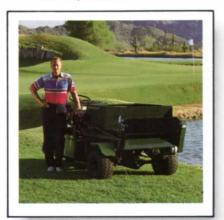
Dean Baker and the Cushman Core Harvester™ Glen Abbey Golf Club Oakville, Ontario



Charles Gardner, CGCS, and the Cushman Carrier Set Oyster Harbors Golf Club Osterville, Massachusetts



Doug Petersan and the Cushman Dump Bed Prairie Dunes Country Club Hutchinson, Kansas



Prentis Knotts and the Cushman Top Dresser Red Mountain Ranch Country Club Mesa, Arizona



Coming Soon. Cushman GA60 Large Area Aerator The first in a new generation of 5th wheel accessories.

We've developed some strong attachments for the Cushman Turf-Truckster.

And so will you.

No wonder golf course superintendents have grown attached to their Cushman Turf-Trucksters.
Nothing even comes close to fulfilling as many functions with such beautiful results. It's state-of-

the-art turf maintenance machinery in a class by itself.

A superior system.

More than a dozen attachments and implements can be interchanged with a minimum amount of sweat, turning a Turf-Truckster into an entire fleet of turf maintenance vehicles. You can spray, aerate fence-to-fence, pick up cores, haul, dump, fertilize, spread, seed and top dress. And you can do them all with greater precision because of our unique ground speed governor control.

With the addition of our exclusive 540 PTO option with heavy-duty hitch, you can also turn your Turf-Truckster into a

rotary cutter, flail cutter, shredder, grinder, sweeper/collector, roller, or

fine-cut reel mower.
Dollar for dollar, function for function, nothing is as versatile or
economical over more
years of heavy use.

Now with 3 engine options.

In addition to the time-tested Cushman 222 air-cooled engine,

the Turf-Truckster is also available in liquid-cooled gas and diesel engines. The Cushman 327 gas and Kubota 950 diesel models now provide a range of options to fill all of your specific needs.

The Cushman Turf-Truckster is simply your best turf maintenance vehicle investment. Ask a superintendent who owns one. Better yet, call the Cushman dealer nearest you for a free demonstration, or call toll free 1-800-228-4444 for more information today.



You're on a mission that could decide the fate of your golf course. A mission against your toughest weeds: goosegrass, crabgrass, sandbur and many other broadleaf weeds.

That's why you need a preemergence herbicide as powerful as Surflan. It puts an end to weeds before they start.

It's a challenge a lot of other herbicides run away from. But not Surflan. It stays put and waits. Three weeks if need be, without water. Then it won't wash out, even in heavy rainfall. And once activated, it forms a solid control zone that lasts up to 20 weeks.

So be in control this year. Take Surflan to the far reaches of your golf course and end the threat of problem weeds. See your Elanco distributor. Or call toll-free: **1-800-352-6776.**

Elanco Products Company A Division of Eli Lilly and Company Lilly Corporate Center Dept. E-455, Indianapolis, IN 46285, U.S.A. Surflan®—(oryzalin, Elanco)





The Central Florida Chapter of the Golf Course Superintendents Association thanks all our sponsors for a successful event. It could never be possible without your very loyal support.

Diamond Sponsors

Ag Resources/Ciba Geigy

AmerAquatic, Inc.

Andy's Plant Aids, Inc.

Aquatic Systems, Inc.

Ball-Zell Sales

Bay Hill Club

Boynton Pump and Irrigation Supply

Carter Burlingham

Central Florida Turf, Inc.

Gub Car

Daytona International Speedway

DeBra Turf

Dow-Elanco

Florida Environmental Consultants

Florida Irrigation Supply

Florida Turfgrass Association

Florida Waterway Management, Inc.

Fore Golf, Inc.

Gold Tee Construction

Golf Ventures, Inc.

Harrell's Inc.

Industries, Inc.

Kaiser/Estech

Kissimmee Electro, Inc.

Lesco, Inc.

Lewis Equipment, Inc.

Liquid Aq, Inc.

Lykes Agri Sales, Inc.

Lyle, Inc.

Mobay Corporation

Neff Machinery, Inc.

Nematode Controllers, Inc.

North Florida P.G.A.

Northrup King Medalist Turf

Nutri-Turf, Inc.

Palmer Course Design

Pennington Seeds, Inc.

Rain Bird Golf

Reliable Peat, Inc.

Rhone-Poulenc Ag. Co.

South Florida Turf Products

Southern Screen and Embroidery

Shern Turf Nurseries

Sunbelt Seeds, Inc.

Sunniland Corporation

Terra International

TNT Golf Cars

Tresca Industries

Turf Merchants, Inc.

Van, Waters and Rogers Inc.

Walt Disney World

Wesco Turf

Wheeler Fertilizer

Gold Sponsors

Alaqua Country Club

BASE

Buckner, Inc.

Douglas Fertilizer and Chemicals Inc.

DuCor Chemicals

Fore-Par Inc.

Gator Pumping Modules

Hector Turf

Home and Commercial Irrigation

Howard Fertilizer

PGA Tour

O.M. Scott and Sons

Trail Saw and Mower

Valent U.S.A. Corporation



Officers

Ray Hansen Del Aire CC

4645 White Cedar Lane Delray Beach, FL 33445 (407) 495-0536

Vice President Thomas Benefield, CGCS

Ballenisles CC of JDM 10600 Ave of PGA Palm Beach Gardens, FL 33418 (407) 622-0177

Secy/Treasurer Mark Jarrell, CGCS

Palm Beach National GC 7500 St. Andrews Road Lake Worth, FL 33467 (407) 965-0046

Past President Joel Jackson, CGCS

Isleworth Country Club Address FGCSA business to: 6780 Tamarind Circle Orlando, FL 32819 (407) 363-4514

Directors

Ridge Buck Buckner

Orange Tree Golf Club (407) 352-0330

Everalades Lou Conzelmann, CGCS

Fiddlesticks (813)768-2332

West Coast Frank Cook

Bardmoor Country Club (813) 392-1234

Palm Beach Paul Crawford Palm Beach Country Club

(407) 845-2395

Big Bend Robert Giehls

Killeam G&CC

(904) 893-2412

South Florida Bill Jeffrey, CGCS

Indian Creek Country Club (305) 866-7224

Sun Coast Larry Livingston, CGCS Gator Creek Golf Club

(813) 922-0833

Central Florida Joe Ondo, CGCS

Winter Pines Golf Club

(407) 671-1651

Treasure Coast Scatt Bell

Bent Pine Golf Club

(407) 567-9422

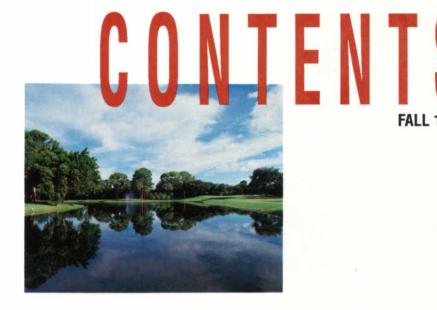
North Florida Eddie Snipes, CGCS

Oak Bridge Club at Sawgrass (904) 285-5552

Staff

Secretary Marie Roberts

1760 NW Pine Lake Dr Stuart, FL 34994 Phone: Days (407) 692-9349



NE	WS	RC	UC	NDUP	INA	UGURAL	FLORIDA	GOLF	SUMMIT	SET	 13
PETT	T71		-	10.0							

The Florida Golf Council, a newly formed trade association, has called for a three-day meeting in Orlando Oct. 11-13 to discuss industry/government relations.

After only four years in Florida, Ray Hansen is president of the largest statewide superintendent association in the country.

Kevin Downing received the Distinguished Service Award and four of the five inaugural recipients of the President's Award for Lifetime Achievement attended the Crowfoot banquet to pick up their hardware.

Golf course superintendents are going to have to turn corners of their golf courses into laboratories if they want to get the data they need.

ARCHITECTS, ETC. GET THE DETAILS RIGHT36

Jan Beljan has parlayed a GCSAA college scolarship and experience as an assistant superintendent into a top job with one of the world's foremost golf architects.

SUPPLY SIDE GOOD IDEA ISN'T ENOUGH......44

Going into business for yourself is a lot tougher than you might think... even if you have the right product at the right time.

AFTERWORDS ENFORCE THE CODE54

The Code of Ethics must be clear and unambiguous... and enforced, says Mark Jarrell, FGCSA secretary/treasurer.

Now that he has turned over the President's Message to his successor, Editor Joel Jackson begins his regular column.

The Florida Green

Official Voice of the Florida Golf Course Superintendents Association Published six times a year beginning in 1991: On the 15th of January, March, May, July, September and November.

> editor Joel D. Jackson, CGCS Isleworth CC, Windermere Address Florida Green business to: 6780 Tamarind Circle, Orlando, FL 32819 (407) 363-4514

publications chairman

assistant editor Tom Benefield, CGCS Rallenisles CC of IDM 10600 Ave of PGA Palm Beach Gardens, FL 33418 (407) 622-0177

Janlark Communications

Janlark Communications, Inc., publishes The Florida Green on behalf of the Florida Golf Course Superintendents Association, which sets all policies.

publisher/executive editor Larry Kieffer capy editor Janetta Kieffer architecture editor Brad Klein research editor Darcy Meeke editorial consultant Dan Jones, CGCS

Resources

photography Brian Everhart 536 Ave. A, NE Winter Haven, FL 33880 (813) 293-2554

layout and graphics 4630 S. Kirkman Orlando, FL 32811 (407) 872-1880

color separations Dimension, Inc. 1507 West Cass St. (813) 251-0244

> printer Phoenix Press, Inc. 11222 Astronaut Blvd. Orlando, FL 32821 (407) 859-9499

COPYRIGHT NOTICE: Copyright 1990, Janlark Communications, Inc. All rights reserved. May not be reproduced in whole or in part without written permission of the publisher. 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.

EXTRA COPIES/POSTERS: Copies of this issue and some back issues and unfolded copies of the poster are available from Janlark Communications. Magazines are \$5 each plus shipping, posters are \$15 each, 2/\$25. Supplies are

SUBSCRIPTIONS: If you would like to receive a copy of each issue, please contact the FGCSA office for price and policies.

ADVERTISING: For rates and information, contact Janlark Communications, Inc. January 1991 issue closes Dec. 1.

EDITORIAL: Opinion columns and letters to the editor should be directed to the superintendent-editor, Joel Jackson, CGCS. News releases and all other inquiries should be directed to Janlark Communications. Unsolicited manuscripts and photographs cannot be returned.

POSTMASTER: Address correction requested. Please send all address corrections to Florida Golf Course Superintendents Association, 1760 NW Pine Lake Drive, Stuart, FL 34994.



1206 Kimberle Court, Auburndale, FL 33823 813-967-1385 Fax 813-965-1734

Advertiser Index

AmerAquatic16 Please See us in Booth 604	Lantana Peat24 Please See us in Booth 651		
Aquatic Systems34 Please See us in Booth 531	Lesco Covers, 1 Please See us in Islands G-J		
Atlantic FEC	Please See us in Booth 302-304 Mike Young Designs 23		
Chemical Containers16 Please See us in Booth 631	Milliken Blazon27 Please See us in Booth 912		
Club Car17 Please See us in Island P	Mobay10 Please See us in Booth 519-521		
Central Florida GCSA5 Cushman2, 40	Nor-AmInsert Please See us in Booth 836		
Please See us in Island B Delray Stake38	Nutri Turf33 Please See us in Booth 752		
DNA Enterprises46 Please See us in Booth 933	Par Aide51 Please See us in Booth 629		
Douglas Products48 Please See us in Booth 422	Pike Creek Turf52 Please See us in Booth 443		
Dow Elanco 4, 18 Please See us in Booth 418-420 Duda Sod 51	Proseed		
Please See us in Booth 534-536 Es-Tech	South Florida Grassing 28 Southern Concrete & Paving .12 Please See us in Booth 941-943		
Excel Industries14 Please See us in Booth 840-844	Spread Rite55 Standard Sand & Silica48 Please See us in Booth 243		
Please See us in Booth 232	Sunniland36 Please See us in Booth 334-336		
Florida Silica Sand49	Terra International55		
Golf Ventures43 Please See us in Island N	Please See us in Booth 952 Tom Burrows Turfgrass Svc 55		
Haverland Blackrock53 Hector TurfInsert Please See us in Island D	Valent39, Ins back cover Please See us in Booth 306		
International Seeds45 Please See us in Booth 218-220	Wesco Turf34 Please See us in Island D		
Jahna Industries52 Lake Doctors38	Woodbury Chemicals8 Please See us in Booth 211-213		
	Zaun48 Please See us in Island D		
Welcome (back)!			

The following companies are advertising in The Florida Green for the first time. . . or, in some cases, have returned to our pages after an absense of a year or more.

Central Florida GCSA	5
Excel Industries	14
Nor-AmIns	ert

Pike	Creek	Turf	·	.52
Terra	Interr	natio	nal	. 55

WANTED



Dick Campbell



Russ Mitchel



Tom Gaines



Bill Lund



Steve de Mello

OUT OF COMPETITIONS HAIR!

These professionals are guilty of:

- Great Service
- Best Pricing
- Maintaining 4 Service Locations
- Top Products

- Expert Knowledge
- 25 Plus Years of Florida Turf Tradition
- Industry Support

BUT YOU CAN FIND THEM AT:

Dick Campbell, North and Central Florida — (407) 422-2337 Ext. 862 Pager, (407) 247-1727 Mobile Russ Mitchell, Southeast Florida — (407) 835-5283 Pager, (407) 346-7078 Mobile Tom Gaines, Dade and Broward Counties — (305) 397-4372 Pager, (800) 432-3411 Bill Lund, Southwest Florida — (813) 883-1724 Pager, (800) 282-2719 Steve de Mello, Tampa Area North — (813) 883-1684 Pager, (800) 282-2719





fter only four short years in Florida, I find myself writing your President's Message. The reason I am in this position so soon is because when I came to Florida, I made the effort to get involved.

Let's all get involved today. We have g

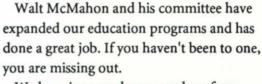
Four years ago, the state budget was one half the amount that it is today. We have gone secretary to a full-time executive secretary.

Thanks to the efforts of Kevin Downing and the FGCSA Research Committee, we have constructed a half-acre research green at the IFAS center in Fort Lauderdale worth \$80,00 and hired Marcus Prevatte as research technician to assist in the necessary daily operations. Already the USGA has given IFAS money to fund two research

projects on this green.

Our newsletter, the Green Sheet, has vastly improved thanks to the efforts of Mike Bailey. The Florida Green, winner of many awards, has just gone through a smooth transition from Dan Iones to Larry Kieffer.

Mark Jarrell, chairman of our public relations committee, continues to spread our word to the golfing public each month with his timely articles in Golfweek.



We have increased our members from 425 in 1985 to 685 today, thanks to Tom Benefield's work on the membership committee.

With all the good things that we are accomplishing, it concerns me that fewer than half of the golf course superintendents in Florida are members of this association.

I don't know how in this day and age anyone can keep up with what's going on in our industry without continuous education. The new SARA III laws alone are enough to boggle one's mind and it's only going to become more complicated. Water usage is going to come under close scrutiny in the future with more people moving to Florida.

I urge each reader to encourage any superintendent he knows who is not a member of the FGCSA to become one. Invite the non-member to a local chapter meeting to see for himself or herself what we have to offer.

The more superintendents we have who are informed, the healthier it is for all. Let's all get involved.



Ray Hansen

Nematode and mole cricket protection that elevates your turf.

Mobay raises the standards for turf by burying the pests.

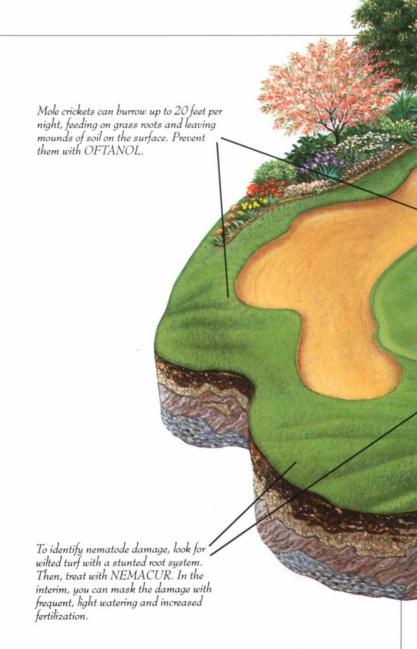
For nematodes, there's NEMACUR® Turf and Ornamental Nematicide. It has a 20-year history of preventing yellow grass by controlling more kinds of nematodes than any product on the market. To top it off, it lasts longer, eliminating costly multiple applications.

For mole crickets, there's OFTANOL® insecticide. It kills mole crickets so fast, they don't have a chance to crawl to the surface. Better yet, treatments cost about 30% less per square foot than the closest competitor.

Treat your tees, greens, and fairways with NEMACUR and OFTANOL. Nothing works better. Nothing works more economically.

For more information, contact your Mobay distributor or Mobay sales representative. They can help you take your turf to new heights.

Nemacur Oftanol





Southern Concrete Pavers, Inc.

Now offers complete service throughout THE SOUTHEAST

Concrete paths for Golf Courses, Sidewalks, Walking/Jogging Trails, Etc...

FLORIDA





GEORGIA

With our concrete PathPaver™ we can install concrete paths in most cases for less than the cost of asphalt construction.



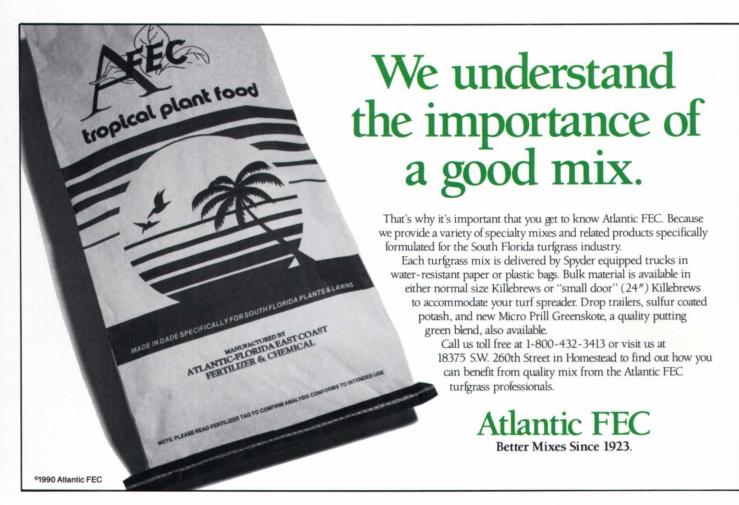
- Custom-built concrete paver designed to place paths and sidewalks.
- Eliminates form work while reducing labor as much as 80%
- Capable of placing and finishing up to 3,000 L.F. per day in paths of 3-12 feet wide.

Call or Fax Today For More Information FREE ESTIMATE (800) 833-3014 (904) 746-3130 (904) 746-4006 Fax

THE SOUTHEAST

- North Carolina
- South Carolina
- Georgia
- Alabama
- Florida

SOUTHERN CONCRETE PAVERS, INC., 1581 W. Gulf to Lake Hwy., Lecanto, FL 32661



Industry gets its act together

In one brief meeting in the middle of July, Florida's golf industry got its act together.

And the show goes on Oct. 11-13.

"You can't afford to miss it," touts the postcard mailed to industry leaders at the end of August. "Please mark your calendar for what may possibly be the most important meeting you'll attend this year."

Despite the hyperbole, the postcard is probably correct.

The inaugural Florida Golf Summit at the Hyatt Regency Grand Cypress in Orlando will offer a solid day-and-a-half of meetings and discussions sandwiched between golf and social events at the beginning and more golf at the end.

The meat is in the middle.

For the first time, the owners, operators, designers, developers and builders of golf courses will meet with government officials and environmental terrorists and everybody is supposed to be on the same side: protecting the environment while nurturing one of the state's largest industries (Florida golf weighs in at \$5.5 billion, according to a year-old study by the National Golf Foundation).

Theme of the meeting is "Government Relations." Major topics include water resources and restrictions, government permitting process, environmental protection, golf course design and developmental financing. A complete schedule and preliminary speakers roster ac-

companies this story.

"Everybody who has a financial interest in golfshould attend this meeting," said golfcourse designer Jan Beljan, one of the organizers of the event.

Perhaps even more significant than the Summit — and certainly more interesting — is the birth of its sponsoring organization: The Florida



Mission Statement

- Provide a clearing house for technical information and research
- Educate members and the public as to the benefits of golf through conferences and research dissemination.
- · Form alliances with special interest groups.
- Develop a public relationship program and communications medium
- Establish an advocacy position with local, regional and state government
- Promote innovative design for environmental protection
- Provide a broad base of services for members of the organization

Golf Council.

Jump-started in Palm Beach July 13-14 at a "Florida Golf Leaders Conference" called by Ron Safford, director of sports promotion for the Florida Department of Commerce, the organization's gestation was so short that it was off and running under its own power before the PGA Tour, golf's major entertainment entity headquartered in Ponte Vedra Beach, could grab control of it.

"The PGA Tour is willing to assist the Florida Sports Foundation in the formation of the above-referenced program," sniffed Deputy Commissioner Tim Finchem a week after the meeting, apologizing for his absence from it because of a prior commitment. "However, we are curious as to the short notice and not having an opportunity to discuss this subject with you prior to the meeting. In our view, such an important program should be developed with PGA Tour involvement."

Florida's golf course superintendents were represented at the leaders conference by FGCSA Public Relations Chairman Mark Jarrell.

Keynote speaker at the conference was Bill Sutton, Florida secretary of commerce.

"We're proud to have a thousand golf courses in Florida and we don't think it's enough," he said. "We think it's a great industry. We certainly don't want to do anything wrong ecologically in Florida, nor do we want to be on the other side like the darter fish a few years back who kept some needed economic development from happening."

Among the facts considered by the leaders:

- Golf is the only industry anywhere near its size without a single lobbyist in Tallahassee. Even state agencies have lobbyists.
- •The 16-mile "Grand Strand" around Myrtle Beach, S.C. outspends the en-

Summit Speakers

Gov. Bob Martinez William Sutton Secretary of Commerce Deane Reman Commissioner, PGA Tour Dr. Joe Beditz CEO. National Golf Foundation Jim Awtrey CEO, PGA of America Cal Korf Executive Director Florida State Golf Association **Bob Yount** Executive Director. Florida Turfgrass Association **Fd Gowan** Executive Director. Arizona Golf Association Steve Melnyk President, Riverside Golf Group **CBS Sports Announcer** Jay Landers Partner, Landers & Parsons Tom Fazio Fazio Golf Course Designers Tim Hiers Golf Course Manager, John's Island Club Dr. Thomas M. Latta President AmerAquatic Inc. Paul Courtnell Leisure & Resort Group Gunster, Yoakley & Stewart Gene Bates President, Gene Bates & Associates John Johnson Partner, Leventhol & Horwath President, Willoughby Golf Club Erling Speer W. Lee Berndt, Ph.D. Director of Environmental Services, Golden Bear Enterprises Allen F Salowe Senior Associate, Fishkind & Associates Rich J. Budell Bureau Chief, Bureau of Pesticides, Department of Agriculture Pete & Alice Dye Pete Dye, Inc. John Wodraska Executive Director. South Florida Water Management District Gary Player Gary Player Design Mark Latch Deputy Division Director, Division of Water Management, Dept. of Environmental Regulation Roy Case President, Case Golf Company Wade Hopping Managing Partner, Hopping, Boyd, Green & Sams Ron Safford Director of Sports Development, Florida Department of Commerce Dennis Wise Fazio Golf Course Design Raymond W. Miller CEO, Wilson, Miller, Barton & Peek, Inc. Henry J. Fishkind, Ph.D. President, Fishkind & Associates President, Golf Plan Group Jack Mathis Raymon A. Finch, Jr. Chairman, Emerald Dunes Dr. Richard Orman Vice President, Public Golf Corp. Richard L. Norton General Manager, NGF Consulting, Inc. Donald E. Rhodes Vice President, Golf Finance. Textron Financial Corp. Howard L. Searcy, P.E. Howard L. Searcy Engineers Mike Dasher Arthur Hills W. Clinton Smallridge Golf Course Superintendent, Royal Poinciana CC Ed Seay Executive Vice President, Palmer Course Design Co. Ron Andrews Grand Harbour Chief, Field Operations Branch, Ronald H. Silver U.S. Army Corps of Engineers Charley Stine Editor, Golfweek Larry Hawkins GeoScience Rick Jacobson Jack Nicklaus Golf Services Doug Winter, P.E. Doug Winter & Companies Bob Cupp Cupp Design Inc. Henry Dean Executive Director. St. Johns River Water Management District Joseph Towry Public Utilities Department, City of St. Petersburg David Pearson Partner, Pearson, McGuire Associates Robert G. Nave Division Director. Resource Planning & Management, Department of Community Affairs

F. Michael Wiles

Senior VP of Marketing,

Hammock Dunes Private Community.

Excel Industries is pleased to be represented in Florida by the following dealers:

DeBra Turf & Industrial Equip., Inc. 1555 Apex Road Sarasota, FL 34240 813-377-5081

DeBra Turf & Industrial Equip., Inc. 3913 S.W. Bruner Terrace Palm City, FL 34990 407-288-4838

DeBra Turf & Industrial Equip., Inc. 901 N.W. 31st Avenue Ft. Lauderdale, FL 33311 305-792-6005

DeBra Turf & Industrial Equip., Inc. 6025 US Highway 301 North Tampa, FL 33610 813-621-3077

DeBra Turf & Industrial Equip., Inc. 12090 Metro Parkway Fort Meyers, FL 33912 813-768-3168

Lewis Equipment Company, Inc. 320 3rd Street S.W. Winter Haven, FL 33880 813-294-5893

Orlando Ford New Holland, Inc. 1500 N. Orange Blossom Trail Orlando, FL 32854 407-422-8448

Pensacola Ford Tractor, Inc. 6802 N. Pensacola Blvd. Pensacola, FL 32505 904-478-3112

Robinson Equipment Company 3030 Cuyler Street Mims, FL 32754 407-267-2023

Contact your local dealer today to arrange for a demonstration on your turf.



"When a friend suggested using Hustler mowers on my golf course, I thought, 'no way.'

I thought, 'no way.'

Boy, was I wrong."

Learning to operate the Hustler is easy. One hand is all it takes to maneuver around bunkers, benches, tees or trees. Twin-lever controls are far less complicated than a steering wheel, gas, clutch, deck and brake pedals, and a gear shift. You can have anyone mowing like a pro in minutes.

Hustler Range Wing™. Hustler Turbo Shredder™. An unbeatable pair on any golf course. The 12-foot wide cut of

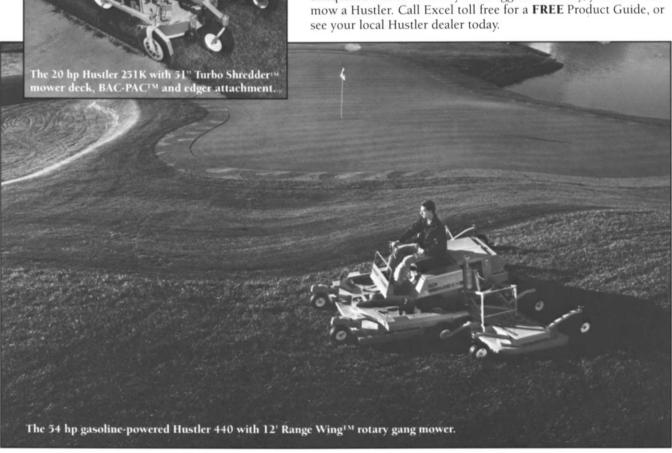
quality finish everytime.

Hustler Range WingTM. Hustler Turbo ShredderTM. An unbeatable pair on any golf course. The 12-foot wide cut of the Hustler Range Wing makes short work of any fair-way or rough. The Hustler Compact with its revolutionary Turbo Shredder deck provides a 51- or 60-inch cut for tight areas, plus shredded clippings that completely vanish into the turf! And you can also add a side-mounted edger to the Hustler Compacts to quickly trim cartpaths, drives and sidewalks.

You're never in the rough for long with a Hustler mower. Hustler mowers may be the most ruggedly built out-front rotary

mower in the industry, but they still give you a smooth, high

Buy Hustler for your golf course. For a superior quality cut, unequaled maneuverability and rugged durability, you can't outmow a Hustler. Call Excel toll free for a **FREE** Product Guide, or see your local Hustler dealer today.



Excel Hustler...Still Out Front!

1-800-835-3260

(In Kansas and Canada 316-327-4911)

Excel Industries, Inc. Hesston, KS 67062-2097



tire State of Florida in attracting golf destination visitors.

 Several pieces of legislation with potential impact on the industry have been considered without substantial input from the golf industry because no centralized organization represents it.

Regarding the latter situation, the leaders virtually unanimously decided that a broadly-based umbrella organization was needed and an organizational committee at the conference later recommended that the organization be a "positive, accurate, factual, unified, environmentally sensitive voice for the entire golf industry."

Its mission statement also accompanies this story.

The original focus of the organization should be "oriented toward promoting better governmental relations, public opinion and preserving the quality of the game and business," says the committee report.

The committee also recommended that the organization be led by a board of 40-60 with operational power vested in a much smaller executive committee. Composition should be one third representatives of associations and government, one third golf course owners, operators and developers, and one third consultants, technical staff, attorneys, etc.

A board meeting is scheduled for the first day of the Summit, although the Florida Golf Council had not announced who the directors are or how they were selected.

The committee foresaw an annual budget of \$250,000 to \$500,000.

Summit Schedule

Hyatt Regency Grand Cypress, Orlando

Thursday, Oct. 11

10:00 a.m. - Noon Florida Golf Council Board of Directors Meeting 1:00 - 5:00 p.m. Inaugural Florida Golf Tournament

3:00 - 8:00 p.m. Registration 6:30 - 7:30 p.m. Cocktail Receptio

Friday, Oct. 12

8:00 - 8:30 a.m. Confinental Breakfast 8:30 - 9:00 a.m. Welcome Keenote Speaker: "The Golf Industry in the 90s"

Keynote Speaker: "The Golf Industry in the 90s"
9:00 - 9:30 a.m. Evolution of the Florida Golf Council
9:30 - 10:45 a.m. Inter-coordination among agencies

10:45 - 11:00 a.m. Break 11:00 - 12:15 p.m. Concurrent Sessions

Water Resources in the 1990s
 Regulations & The Approval Process
 Communications & Marketing
 Section 12:15 - 1:15 p.m.
Buffet Luncheon

1:15 - 1:30 p.m. Keynote Speaker 1:30 - 3:00 p.m. Golf Course Design in the 1990s: Dealing with Government Regulations.

Panel discussion by prominent golf course architects. 3:00 - 3:15 Break

Concurrent Sessions
 Private Ventures - A case study on developing a municipal golf course

- Detailed course design resolving regulatory issues
- 3. Recycled water and its growing importance to me golf industry
- 4. Financing and refinancing of new and existing golf courses.

Golf (optional)

Saturday, Oct. 13

1:00 p.m.

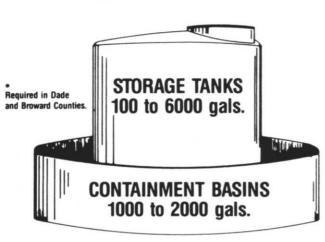
8:00 - 8:30 a.m. Confinental breakfast
8:30 - 9:00 a.m. Keynote Speaker
9:00 - 11:00 a.m. Roundtable Discussions
The Future of Florida Golf in the 1990s.
11:00 - Noon Wrap-up session.

Containment Basins for liquid fertilizer/pesticide storage. Statewide delivery. Order today!

We are your direct source for tanks of all sizes, spray guns, nozzles, hose and more. Send today for your free products flyer!



P.O. Box 1307 Lake Wales, FL 33859 Telephone (813) 638-2117



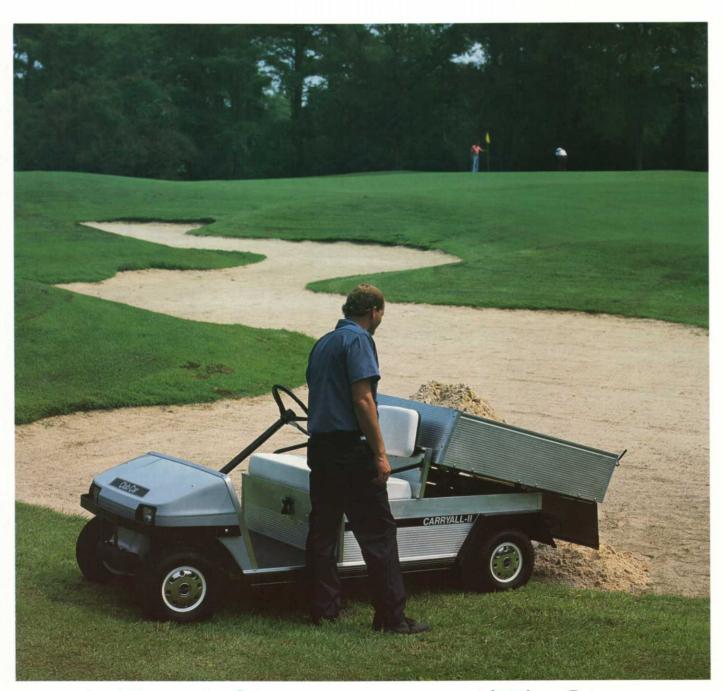
AmerA duatic

TOTAL LAKE CAPABILITY

algae and aquatic weed control fountains, installation & service lake & littoral zone design fish stocking & breeding wetlands establishment floating weed barriers water quality testing silt/turbidity control lakescaping™ free surveys

Serving golf courses and green spaces from Florida to the Carolinas

Your lake's best friend. sm



A Bed Guaranteed To Give Your Back A Rest.

With Carryall by Club Car, you're working smarter instead of harder. And whether you select our exclusive gravity-tilt cargo bed or the hydraulic-powered option, you'll get a durable vehicle that'll save time and money. Not to mention your back.

Call 1-404-863-3000 for details on how Carryall can do it all for you.



Introducing Cutless.

A new kind of turf growth regulator that gives your course a bottom line boost:

More playability.

This is where perfect lies start on your fairway. New Cutless 50W from Elanco.

Unlike other turf growth regulators, new Cutless doesn't stop the development of warm and cool season turfgrass. Instead, it



reduces or slows your turfgrass's growth rate by shortening the internodes of the growth stem with no adverse effects on their roots. The result is improved turf quality and more playable fairways.

With Cutless, your turfgrass appears thicker and stronger for a denser, more consistent playing surface. Golf balls just naturally sit up better.



Cutless also reduces your water use, resulting in less turf wilt. And lower irrigation costs.

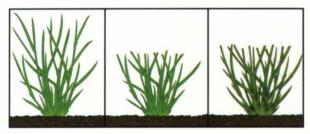
But Cutless does more than that. Much more. It also gives your turf a rich, darker green color.



Because Cutlesstreated grass grows at a slower rate, there's also a dramatic reduction in clippings. Up to 50% less. With less mowing frequency. Also up to 50% less. You not only save time and labor costs, you

can also manage your hard-to-mow areas more efficiently.

Here's another added benefit with Cutless. As it helps your turfgrass grow up thicker and more competitive, there's less room for troublesome broadleaf weeds to grow and spread.



Sprig of grass in normal state.

Seven to 10 days after Cutless application, mowed sprig sometimes exhibits slight discoloration of treated area and leaf

3. Growth reduction peaks between third and eighth weeks, accompanied by darker green coloration and increased tillering.

Don't just take our word for Cutless. Take it from Jim Ellison:



Jim Ellison Superintendent, Bay Hill Club Orlando, Florida

"After a Florida rainfall, an untreated fairway will grow rapidly. Trying to mow is like bailing hay. But by applying Cutless, we reduce the upgrowth and thicken the turf. Mowing is fast and clean without leaving clippings that need to be swept or blown.

"With Cultess, the fairways look incredibly well-kept. The mowers can start earlier in the morning, because they're

not cutting a lot of grass—just tipping it. We mow in 15 percent less time and put a lot less strain on our equipment.

"I've used Cutless for three years now. Golfers often comment about the density, color and cleanness of our fairways. Divots and ball marks recover much quicker. Cutless is like a maintenance program in one product."

Find out more about giving your course more playability with Cutless. See your Elanco distributor. Or for a free brochure, call toll-free: 1-800-352-6776.

DowElanco 4040 Vincennes Circle – Suite 400 Indianapolis, IN 46268 U.S.A. Cutless®—(flurprimidol, Elanco)



He Gets the Job Done

After only four years in Florida, Ray Hansen is the 10th president of the FGCSA. In all his business dealings, he prefers the direct route.

BY LARRY KIEFFER

Ray Hansen doesn't mess around. Four years ago he came to Florida with no job and one lead from architect Joe Lee. Four days later he was hired as the superintendent at the Ocean Reef Club on Key Largo and never did get around to following up on Lee's lead.

Four years later, on Aug. 4, 1990, the 1960 graduate of Penn State University's turfgrass program became the 10th president of the Florida Golf Course Superintendents Association.

"When you see something that needs to be done, you do it," says Hansen, who recently moved to Lee-designed Delaire CC, a 27-hole private club in Delray Beach.

"I got involved with the association because I don't see how any superintendent can stay abreast of developments in the field without it," he says. "Continuous education is the primary function of professional associations and the environmental pressures we face are only going to get worse. If you don't keep up, you're not going to last."

Running a 27-hole golf course and the largest statewide superintendent association in the country would tax most professionals;

for Hansen, who had been general manager of two resort communities in Pennsylvania's Pocono mountains before coming to Florida, it's semi-retirement.

continues on page 21

Ray Hansen Age: 55

Education: A.S. Turfgrass Science, Pennsylvania State University (also two years toward degree in physical education from Panzer College, Montclair, N.J.). **Current Position:** Golf Course Manager, Delaire CC, Delray Beach **Previous Experience:** Ridgewood CC, Fairlawn, N.J. caddie during high school; Essex CC, West Orange, N.J. assistant supt. (summer internship), supt., general manager; Lake Naomi & Timber Trails, Pa. general manager; Ocean Reef Club, Key Largo, supt.
Other Employment: Pierson's Mill, distributor of golf course equipment, sales manager. U.S. Army, clerk/typist. Unusual Job: One year in Iceland with U.S. Army Personal: Married 30 years to Sandy, RN from State College, Pa., Daughter Cheryl (husband Scott Banford, son Timothy), special education teacher; son Kirk, assistant manager of resort hotel in Pocono mountains.







Number Eight/Orange

Delaire Country Club

Delaire Country Club is a typical Joe Lee South Florida golf course. It offers a very fair round of golf for the recreational golfer.

Aire company, the 27-hole facility was sold

percent of the members will test the layout which features 18 ponds and 125 bunkers. Water comes into play on 11 holes. With 27 holes and 250 rounds on the busiest day and 50 in the summer, we don't need tee times.

Built on 250 acres in 1978 by the Palm to its 350 members about five years ago. On a typical winter day, about 60 Ray Hansen

The Orange, Brown and Blue nines measure 3405, 3366 and 3413 yards from the tips, respectively, all playing to par 36. Toughest test is the Orange/Brown combination, which is rated at 72.4 with a Slope of 125.

From the front tees, the courses measure 2657, 2608 and 2667 yards, with the Blue/Orange's 70.6 rating at Slope 119 offering the stiffest test to the ladies. That same combination is rated 65.4/114 for men.

About 200 of the 250 acres are irrigated and we maintain the entire property with a staff of 22, counting two assistants — one for the golf course and one for the grounds — two mechanics, a foreman/irrigation technician, a spray technician and an administrative assistant.

The six acres of greens are Tifdwarf and everything else, including the roughs, is Tifton 419 bermudagrass. We don't overseed. The fairways cover about 60 acres.

By far my favorite view on the golf course is number three on the Brown, a short par three over water with a fountain.



Hansen's crew also is responsible for the grounds



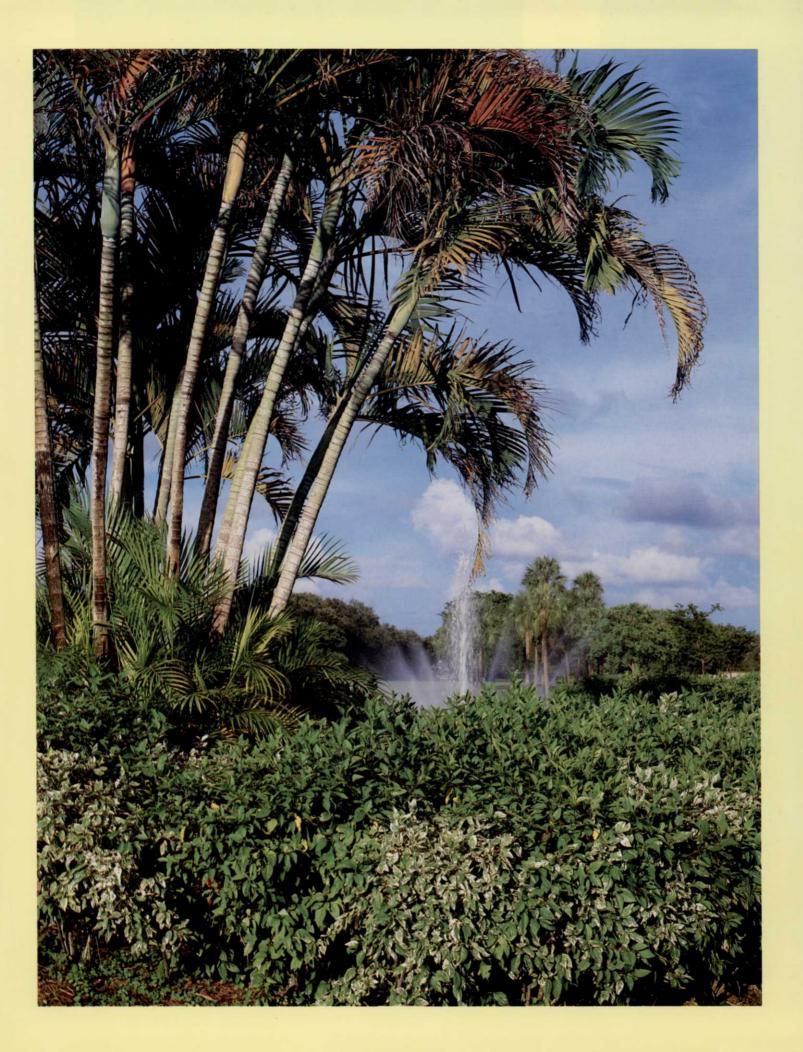
Number Three/Orange



Nunber Four/Orange



Number Three/Brown



from page 20

"I enjoyed the challenges of supervising 160 people with the responsibilities of a city manager, and the job helped me put both my kids through college. But the day after I wrote the last tuition check in January 1986, I resigned."

Hansen arrived in Florida on a Thursday, astonishing his friend and former Penn State classmate Tom Burrows, the former superintendent at the Turtle Creek Club in Tequesta and FGCSA president, now practicing agronomy full time. He had a job Tuesday morning.

"The hardest part of getting the job was convincing the people at Ocean Reefthat I didn't need the challenges of running the whole show," recalls Hansen.

So instead of running the show, Hansen chose to run a series of projects in South Florida, notably the South Florida GCSA's Field Day and help in guiding the planning, funding and construction of the state association's research green at the University of Florida's IFAS Research and Education Center in Fort Lauderdale.

"The Field Day pretty much runs itself now — Marie does most of it," says Hansen, referring to FGCSA Executive Secretary Marie Roberts, who serves the South Florida GCSA in the same capacity.

The day begins with an education session for continuing education credits, then features a two-hour trade show and buffet luncheon inside before moving outside for equipment demonstrations.

The precision of those demonstrations says a lot about Hansen's leadership. Each exhibitor is permitted three minutes with each piece of equipment.

"They can take less time than allotted, but not a second more," says Hansen, bull horn at the ready as he prepares to start the demonstrations.

Less than two hours later, they end. Right on schedule.

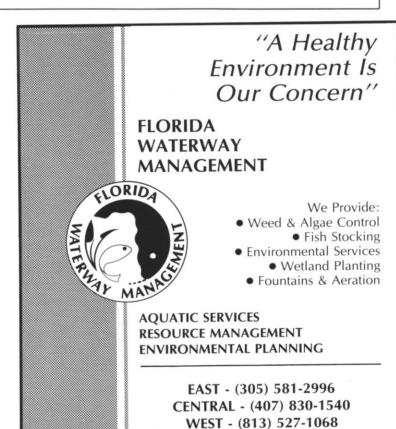
Perhaps it was two years as an Army clerk right after the Korean Conflict that gave Hansen the ability to organize projects.

"There's nothing to it, really," Hansen says. "You just count how many demonstrations you have, make out the schedule and stick to it. What's hard about that?"

Following his discharge from the Army in 1956, Hansen enrolled at Panzer College in Montclair, N.J. — now part of Montclair State College — where he spent two years preparing to be a physical education teacher.

Then he heard about the new turfgrass program for golf course superintendents at Penn State and Hansen decided to transfer. Having spent his high school summers maintaining a driving range and pitch-and-putt course in his native Fairlawn, N.J.,

We work at ground level... so you can play on top! The fact is, Central Florida Turf is working hard to provide you with superior workmanship in construction of new golf facilities, irrigation with all turf installations or renovation of existing golf courses... and all at a competitive price! **Jeff Harstine** President/Vice President **Rodney Davis** Secretary/Treasurer Central Florida Turf, Inc. **Dennis Crews** 4516 East Kinsey Road Sales Manager Avon Park, FL 33825 (813) 452-2215 • 800-422-1187



FGCSA SPOTLIGHT



The new FGCSA officers, from left, Mark Jarrell, CGCS, secretary/treasurer; Joel Jackson, CGCS, immediate past president; Ray Hansen, president; Tom Benefield, CGCS, vice president.



Kevin Downing,
CGCS, left,
received the
FGCSA Distinguished Service
Award from
immediate past
president Joel
Jackson at the
Crowfoot Banquet
Aug. 5.

FGCSA Committee Chairmen

We create dreams, not nightmares.



Golf courses that begin as drafting table dreams too often end as maintenance nightmares.

At Mike Young Designs, we prevent nightmares by designing and building courses based on solid agronomics, total site evaluation and years of practical turfgrass experience. We meet your needs by creating truly superb golf courses that are affordable, playable and manageable.

Mike Young Designs. Knowledgeable turfgrass professionals committed to outstanding golf course design, construction and renovation. Dedicated to creating dreams.



YOUNG

DESIGNS

P.O. Box 289 25 Main Street

Watkinsville, GA 30677 Phone: (404) 769-7415

Fax: (404) 769-8538



from page 21

Hansen didn't take long to decide on a career change.

"I investigated the four-year program, but they told me to take the two-year program if I wanted to be a golf course superintendent.

"So I did."

He graduated in 1960 with an associate of science degree in turfgrass management, married a "townie" RN named Sandy, and took to the road selling golf course supplies for a company named Pierson's Mill. He became sales manager in 1963.

"I probably would have stayed in sales all my life, but in 1966 I got a call from Essex Country Club in West Orange, N.J., where I had spent my last summer internship as assistant superintendent under Alex Edgar, a Rutgers man."

Edgar had left to run his own golf course. Would Hansen like the job?

"It's probably the only golf course job I would have accepted at the time," he says.

Essex CC is a 36-hole equity facility but, when times got tough during the Depression, the club opened 18 holes to the public.

"I had the unique experience of running a private course and a daily fee course at the same time," Hansen said.

In 1970 Hansen was offered the post of general manager with the stipulation

that he retain responsibility for the golf course and that if he did not like "inside" work, he could step down with no hard feelings.

"I was a true general manager," Hansen said. "I hired the golf professional, the club manager and they did away with the greens committee and house committee and so on. I ran the club and reported directly to the executive committee.

"If somebody had a complaint, I was there to fix it.

"We kept the golf committee and the entertainment committee because I didn't care what kind of parties they had or what kind of games they played on the golf course. I stayed out of that end and they stayed out of management.

"That's the way it should be."

In 1974 Hansen left Essex to work for developer Logan Steele in the Pocono mountains. Together, they built the sister resort communities of Lake Naomi and Timber Trails, including an 18-hole golf course at the latter. Hansen was general manager of both communities.

"Of all the people at a golf course, I think the superintendent has the best background to be a general manager—if they make him a true general manager like I was," says Hansen, a 30-year member of the GCSAA and a 16-year member of the Club Managers Asso-

ciation of America. "I hired the other executives, I managed them and I was responsible for their actions to the executive committee or, in the Poconos, to the owner."

Hansen stayed in the Poconos until he wrote that last tuition check.

"I enjoy running a golf course," he says. "I hope to keep on doing this for the next 15 years if my health holds up."

He sees environmental protection and government regulation as the biggest challenges facing the profession.

"We are going to face even more changes in the next 10 years than we did the the past decade. That's scary.

"The environment needs to be protected," he says, "and perhaps a lot of people in our industry were too lax in that area, but the pendulum has swung too far.

"We really needed some of the attention we are getting to weed out the bad apples. The days of using mercuries are over and they should be.

"Butto take Diazinon out of the hands of licensed pesticide applicators on a golf course and leave it in the hands of the homeowner makes no sense. No sense at all!

"All because of one person abusing it. That person should have been prosecuted and, at the very least, had his license taken away. But don't punish

LANTANA PEAT & SOIL

1123 State Road 7
Boynton Beach, Fla.

732-4116

1-800-433-5552

STERILIZED SOILS • TOP DRESSING TOP SOIL • MULCH • POTTING SOIL 'Keeping Golf Courses Green"



Weed Free newly planted turf...also pegging and rooting with safety of RegalStar.

RegalStar DOES THE JOB!

This is why RegalStar™is the preferred product of Turf Managers from California to Miami. If you have problems, even with winter-kill, RegalStar™ is your solution because it does not prune roots! When you row plant, sprig or sod, use it right over the top. No other herbicide can match the weed control while being so gentle on the roots. Truly the worry-free herbicide.

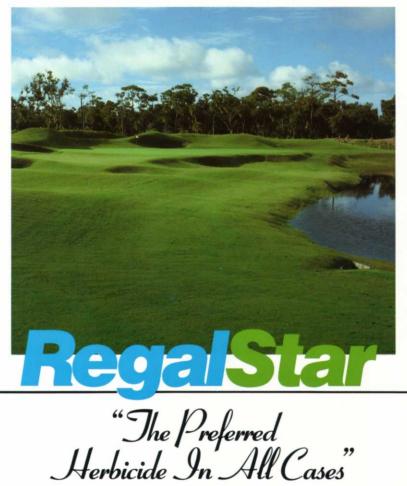
So remember, for unmatched benefits and results that are consistent on grow-in and established turf, use the most preferred herbicide. Use RegalStar.™

CALL US AT 1-800-621-5208



Regal Chemical Company

P.O. Box 900, Alpharetta, GA 30239 404/475-4837 Toll Free: 800/621-5208









Paul Turcotte



Bob Sanderson



Carl McKinney

the rest of us.

"Government regulation like that scares me.

"With rising budgets and regulatory compliance that gets more complex every day, superintendents are becoming managers. That's really what we are now.

"When somebody asks me what I do for a living, I say I manage golf courses. If I said I 'superintend' them, they wouldn't know what that meant."

Hansen has three goals for his presidency. Typically, they are all clearly stated and two of them are easily quantifiable:

- Association Growth. "Right now about half of Florida's superintendents are members. I don't see how a superintendent can survive today without the continuous education provided by our association. A lot of the information isn't available anywhere else."
- Research Green. "We have the PhD's
 who can do the research on pesticide
 and nitrate leaching and do the
 product testing and we gave them the
 facility. We need the information and
 we need it fast."
- Pesticide Awareness. "Every superintendent should critically assess each

proposed use of any pesticide. All it takes is one mistake — as proven by Diazinon — and the product will be taken off the market."

Hansen took office Aug. 4 at the FGCSA annual meeting in conjunction with the 14th annual Crowfoot Open at Grand Cypress Resort in Orlando sponsored by the Central Florida GCSA.

Highlights of the three-day weekend included an education session on the use of computers in golf course management, the annual awards banquet Sunday night, followed by Monday's golf tournament.

Jerry Faubel, CGCS, president of the

Fred Klauk, left, accepts the 1990 Crowfoot trophy from Larry Kamphaus, CGCS, organizer of the golf event.

Crowfoot Open Results

Superintendent Division

Individuals Gross: Fred Klauk 73, Steve Sorrell 73, Mark Henderson 76. Net: Steve Wright 67, Dale Reash 67, Chuck Blankenship 69 Team: Central Florida (Steve Wright, Dale Reash,

Chuck Blankenship, Steve Sorrell)

Commercial Division

Gross: Joe O'Donnell 76, Bill Fowler 77, Fred Tannler 79; Net: Charlie Campbell 66, Jim Sartin 68, Bill Lloyd 69

Closest to Pin

Steve Moskos (4N), Joe Pantaleo (8E), Lou Conzelmann (8N), Tom Trammell (5E)



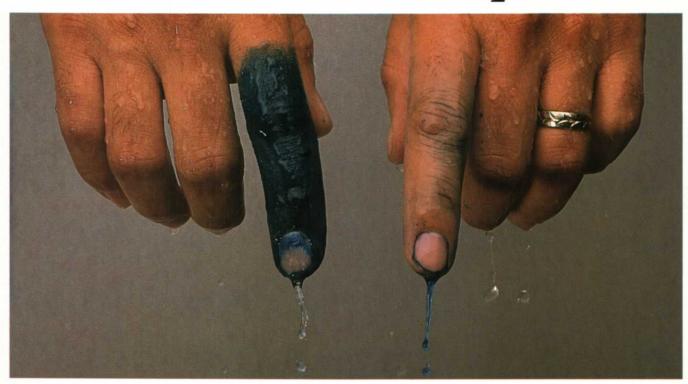
Just because the course at Grand Cypress is "wide open" does not mean you can't lose a lot of golf balls.

LARRY

THE FLORIDA GREEN /FALL 1990



All Spray Pattern Indicators Are Not Created Equal.



"I've just put my finger on the difference between Blazon" and the dyes being sold for spray pattern identification. Can you guess which finger?"

Blazon* is the only **NON-STAINING** and **INERT** spray pattern indicator in the world.

Your spray pattern indicator should be the least of your worries.

- *Blazon* will not stain.
- *Blazon* will not interfere with your pesticides.

There are many imitations, but only one original ... Blazon* by Milliken Chemical.





GCSAA, attended all three days.

Other officers installed at the annual meeting were Tom Benefield, CGCS, vice president, and Mark Jarrell, CGCS, secretary/treasurer. Benefield is superintendent at BallenIsles CC of JDM in Palm Beach Gardens and Jarrell at Palm Beach National GC in Lake Worth. Joel Jackson, CGCS, of Isleworth CC in Windermere, becomes immediate past president.

Presentation of the FGCSA's Distinguished Service Award to Kevin Downing, CGCS, manager of Willoughby GC in Stuart, topped the awards banquet. Also honored were four of the five inaugural recipients of the President's Award for lifetime achievement in golf course management: Bob Sanderson, CGCS, Del Tura CC, North Fort Myers; Carl McKinney, who retired from JDM CC in Palm Beach Gardens in 1988; Paul Turcotte, retired from the City of Miami and second president of the FGCSA; Adam



Jerry Faubel, CGCS, right, president of the GCSAA and John Foy, USGA Green Section regional director, put a laptop computer through its paces during the Crowfoot education seminar on computers.

Yurigan, who helped found the Central Florida GCSA and the Treasure Coast GCSA. Bud Quandt, Pasadena Y&CC in St. Petersburg, was presented the President's Award at a meeting of the Florida West Coast GCSA.

All award recipients will be profiled in upcoming issues of *The Florida Green*.

Fred Klauk's 73 won the golftournament and a repeat spot on the Florida team in the national tournament scheduled early next year. Steve Wright's 67 took low net honors. Steve Wright, Dale Reash, Chuck Blankenship and Steve Sorrell led the Central Florida GCSA to the team title.

419 SOD • 419 SPRIGS

TIFDWARF * 328 * HYDRO-MULCHING * WILDFLOWERS

DIRECT FROM HOBE SOUND, FLORIDA

South of Stuart

Certified 419 & turfgrasses grown on gassed, irrigated land for South Florida Golf Courses and Athletic Fields

DON'T LOSE SPRIGS DUE TO HAUL TIME!



South Florida Grassing, Inc.
"A Leader in the grassing industry since 1964"

Phone:

(407) 746 - 7816

(407) 546 - 4191

The Controlled Release Liquid Fertilizer



IT'S THE BEST FOR BOTH WORLDS!

From the Company that was the Innovator of "Fertigation" on golf courses, comes another Break Through. Now you can have the Confidence of using Controlled release Nitrogen and a unique soil retained potash with the convenience of liquid application. Our Custom blending system allows "ENVIRO-GREEN" to provide not only the Macros, but also the much needed Micros for complete plant nutrition. In addition, controlled release provides nutrition in the soil as the plant requires it. This minimizes leaching losses and run-off that may pollute the Environment.

So...maybe both of your WORLDS will be easier to live in now that there's ENVIRO-GREEN from LIQUID AG.

1010NW. 15th Ave Pompano Beach, FL 33069 (305) 971-0022 1-800-432-2249



3447 Metro Parkway Ft. Myers ,FL 33916 (813)332-5565

RESEARCH

REPORT

Research for the '90s

Superintendents will have to bring the university onto the golf course to get the data they need

BY DAN JONES, CGCS

Banyan Golf Club in the western part of Palm Beach County was carved out of natural pine forest by golf course architect Joe Lee. To lose those pine trees would be devastating to our classic course, so the issue of pine tree decline has haunted me for the past 10 years.

In an effort to save the thousands of slash pine trees at Banyan, we have tried many stopgap measures over the years, such as applying sulfur to the ground under the trees to reduce the pH of the soil. With all our efforts, we still lost to 25 to 50 pines a year.

A few years ago, I came across an article by David Wedge telling about the research being conducted by Dr. Roger Webb on pine tree decline at El Conquistador CC in Bradenton. Webb was reporting a success rate of 98 percent after 10 months.

I literally jumped off the couch. This could be the answer for Banyan.

I called Webb the very next day and explained our problem with the pines. I asked if he would inject our trees in return for help with his research. He needed more data from south Florida, so we signed up.

We will be cooperating in his work for the next few years. During the last 10 months of this experiment, we have lost only one pine tree from the group that was injected.

Welcome to research for the 90s.

We can no longer expect the universities to give us all the answers. We must bring the universities to our golf courses. We are now the laboratories. We are the technicians. We are the caretakers. We are the funders.

Federal dollars are no longer available for turfgrass research and Florida has reduced the dollars for research and technical positions. We must look out for ourselves and for our industry; we must fill in the gap. If we do not, golf course conditions which our members have come to expect cannot continue.

Let me share with your how Banyan GC is becoming a part of research for the 90s.

First we have a greens chairman who shares the vision for research, one who supports our efforts 100 percent. Second, we have management that strives fore the best golf course possible within the budget. Third, management vision includes a commitment to enhance the environment as well as the golf course.

I heard of the breeding program Dr. Milt Engelke was conducting at Texas A&M on zoysiagrasses and heat-tolerant bentgrasses. Our greens chairman, Robert Jacobson, agreed that I should go to Texas and investigate Engelke's work. With the debate over the use of bentgrass in south Florida raging, he said we should be aware of developments on the cutting edge of research.

Want to get involved?

How can you get involved in research? It's easy. Researchers are always looking for people in the field who are willing to cooperate with their projects. Call Bob Yount at the Florida Turfarass Association in Orlando at 407-898-6721. Contact the University of Florida in Gainesville at 904-392-7231 and speak to Dr. Ed Freeman. In Fort Lauderdale, you should contact Dr. Monica Elliott at 305-475-8990. If you are not sure how to get started, call the author at Banyan Golf Club. 407-793-0069 or drop by and

see him.

As a result of the trip, Banyan was chosen as one of 12 sites in the United States, and the southernmost, to hold the bentgrass national trials. The other southern site was the Augusta National Golf Club. We also were selected for the national trials on zoysiagrass.

In April 1989 we received six varieties of zoysiagrass which we planted and replicated three times. Two of the varieties have performed very well: Cashmere and 8502. The latter cut at 1/8-inch looks excellent and survived 25-degree temperature Dec. 23 without going off color. Zoysia holds a lot of promise for tees, shaded areas and non-irrigated areas on golf courses.

In October 1989 we prepared a 4,000-square-foot green with 12 inches of sterilized greens mix. Engelke then came to the club with 24 varieties of hope-

fully heat-tolerant bentgrass seed. Each variety was replicated three times.

He planted the 72 5-by-10-foot plots using a sand/seed mixture and spreading it by hand, a back-breaking chore that took two days. All of the bentgrass germinated and by this past January, it was looking excellent when cut to 9/64-inch.

Engelke told us not to water the bentgrass any differently from the normal routine for our bermudagrass greens. He also asked that we apply no fungicides to the experimental green. We have had some fungus damage from time to time, but all except one variety has survived.

It is really difficult for a superintendent to stand by and watch grass die.

When I called Dr. Engelke to express my concerns, he was elated. "That is

exactly what we want!" he said. "If one variety survives, we will be happy."

Scientists and superintendents sometimes think differently. Working together is the key to successful experiments, each one operating in his own area of expertise.

At Banyan we are also doing tests on hybrid buffalograss (prairie) to see if it will survive in southern Florida. After one year, with no water or fertilizer, it has doubled the original planted area and is surviving quite well.

Buffalograss could be used in Florida in non-irrigated roughs, along roadsides, overpasses and even on home lawns and it could be part of the answer to water restrictions in South Florida. It matures at 4 inches and tolerates no cutting or frequent cutting. I may plant buffalograss in my own lawn because



Planting the 72 plots of bentgrass was a back-breaking chore that took two days.

DAN JONES

of its low maintenance and great looks.

Mole crickets are enemy number one at Banyan. We lose large areas of grass to this pest every summer. Our only hope of controlling the mole cricket in the past was to spray the entire golf course with Nemacur every July at a cost of about \$30,000.

The University of Florida is conducting research on controlling the mole cricket with biological parasites. They are using a nematode and red-eyed fly from South America, both of which are specific to the mole cricket.

By supporting the research of Drs. Howard Frank and Pat Parkman through the Florida Turfgrass Association, we are participating in this important biological research. To date, we have received a million nematodes and 200 red-eyed flies at Banyan. We hope that within two years, we will be able to control 85 percent of our mole cricket population without pesticides.

And finally, Dr. Monica Elliott, pathologist at the UF's Research and Education Center in Fort Lauderdale, is conducting field research on mushroom fairyrings using Benlate and Prostar.

Four major projects on one golf course. And it wasn't very difficult to get involved. And we are on the cutting edge of research for the 90s.

Mole cricket project wins science fair

The University of Florida's drive to unearth natural enemies of mole crickets has uncovered several promising fungi.

Now Donna Jaworsky has won science fairs in Palm Coast, Flagler County and at the state level by demonstrating that a fungus delivered by a bait can kill mole crickets.



Donna Jaworsky

She didn't use the real enemy fungi. They are native to Brazil, just like the pests themselves (mole crickets native to the U.S. are not pests) and you can't be bringing in strange organisms without a lot of careful scientific folderol.

Using a similar fungus, however, Jaworsky demonstrated that a fungus delivered through a bait can kill shortwinged mole crickets. Beauveria bassiana kills a variety of turf pests.

Earlier research at IFAS had demonstrated that one Florida strain of B. bassiana could kill mole crickets in the lab. If it would work in the field, there would be a lot of advantages: for one, a native fungus would already be adapted to Florida's cooler-than-Brazil winters. A fungus-water mixture had been poured on buckets of sand and mole crickets, and the mole crickets hadn't died.

Would a bait work?

Jaworsky set out to find out, with help from Howard Frank at the university and Dan Schrader at the IFAS Flagler County Extension Office.

She used a bait recipe IFAS had used before for delivering malathion to mole crickets. To the mixture of chickenfeed, crude cottonseed oil, sugar and water, she added varying doses of *B. bassiana*.

Her conclusion: The fungus-laced

bait killed one third of the mole crickets.

Jaworsky finished by identifying questions that still need to be addressed:

- Would adding paraffin to the bait help preserve it and make it more effective?
- Will B. bassiana delivered through the bait system also kill other mole cricket pests?
- How do light, temperature, moisture and other environmental conditions affect the effectiveness of this control system?
- Is reproduction affected in mole crickets who eat the bait and don't die?

- Darcy Meeker

Three projects tapped for FGCSA research green

Grass has been planted on the research green, a joint project of the FGCSA and the University of Florida's Institute of Food and Agricultural Sciences at the Fort Lauderdale Research and Education Center.

Planted Aug. 1, it should be grown in by the first of November and the committee is already meeting to set priorities on research projects.

Says Kevin Downing, golf course manager at Willoughby GC in Stuart and chairman of the research committee, "Of 20,000 square feet in the research green, 10,000 are dedicated to IFAS for pure research. The other 10,000 are to be used directly by the FGCSA for product evaluation."

Tifdwarf covers 15,000 square feet and Tifgreen 328 covers the rest.

About 8,000 square feet are built to USGA specifications and another 2,000 square feet substitutes a geotextile fabric for coarse sand in the so-called

"choker" layer. The choker layer was omitted on the other 10,000 square feet.

Dr. Monica Elliott has put forth two proposals to research bermudagrass decline and diseases. In one, she will monitor bermudagrass roots in fumigated and non-fumigated areas for signs of these organisms which she thinks are introduced by sprigs.

Another project will look at what happens when you apply, time and time again, the new fungicides such as Bayleton, Banner and Rubigan. Called EBI fungicides for Ergosterol Biosynthesis Inhibiting, these compounds are used often because they work on bermudagrass decline. On the other hand, they can burn grass in hot weather.

A third project is the first step on the long road to develop biotechnological tools to improve bermudagrass. She will trace root-colonizing bacteria in fumigated and non-fumigated soil.

"The long-term goal is to genetically engineer these bacteria so they would have a beneficial effect on bermudagrass," Elliott said.

- Darcy Meeker

Commercial nematodes lack stamina

Good guy nematodes are starting to look like green pastures to commercial producers, and superintendents are beginning to hear about this or that *Steinernema* nematode that can kill mole crickets.

But not all Steinernema are created equal, say Howard Frank and Grover Smart at IFAS. They offer this scorecard so you can tell the players.

Steinernema scapterisci are the ones that are working so well in the IFAS mole cricket experiment. Not available commercially, they were brought from Uruguay by IFAS researchers and are strictly experimental. Their advantage is that they reproduce in the tawny mole cricket, the southern mole cricket and the short-winged mole cricket. S. scapterisci (say SKAPTter-ISSky) start epidemics with continued killing power in mole cricket populations, Frank says.

By contrast, S. glaseri, S. Bibionis, and S. carpocapsae cannot.

Says Frank, "If these (non-scapterisci) nematodes are alive and healthy, they should be able to kill mole crickets about as effectively as a chemical pesticide, but there would be no lasting effect." Steinernema carpocapsae strains include Breton, Agriotos and all strains. Appropriate dosage would be about 800 million per acre, applied at dusk, and watered in well.

Because these good-guy nematodes cannot reproduce in the bodies of mole cricket pests, their white hat is small. They cannot multiply their killing power through the mole cricket popu-

Premium Quality Sod & Sprigs



This Turf's For You!

- Premium Grade Tifgreen (328)
- Premium Grade Tifdwarf
- Premium Grade Tifway (419)
- Premium Grade Tifway II

16163 Lem Turner Road Jacksonville, FL 32218-1550 (904)764-7100 1-800-329-TURF (In Florida)





Distributors for: Toro Mowers & Turf Equipment Toro Turf Irrigation

Toro Turf Irrigation
Toro String Trimmers
HMC Green Machine
Hahn Sprayers

Rayside Trailers Power Trim Edgers Club Car Carryall II Standard Golf Supplies Olathe Turf Equipment Vicon Spreaders Byho Spreaders Billy Goat Vacuums Foley Grinders Benard Spin Grinder

Wesco Turf. Backs You With The Best.

2101 Cantu Court, Sarasota, FL 33582

Ph. (813) 377-6777

LET Agua

TAKE THE HAZARD OUT OF GOLF COURSE LAKE MANAGEMENT.

LET US SHOW YOU HOW!

Aquatic Systems, Inc. provides:

- Algae & Aquatic Weed Control
- Floating Fountains & Aerators
- Wetland Mitigation & Aquascaping
- State Permitting & Reporting
- · Water Testing & Lab Analysis
- · Grass Carp & Sport Fishing Stocking
- Clarification Treatments

LOCATIONS THROUGHOUT FLORIDA:

St. Petersburg • Ft. Pierce • Ft. Myers • Longwood • Miami Pompano Beach (Corporate Office)

Call 1-800-432-4302 for a free evaluation of your lake management needs.



RESEARCH REPORT



Patents fire ant fungus

IFAS entomology professor Dr. Jerry Stimac, above, recently gained a U.S. patent for a biological control for fire ants: a mixture of Beauveria bassiana fungus and rice. The patent, which is good for 17 years, covers not only its use, but also Stimac's method of isolation, formulation and introduction as a control organism.

Stimac, who has signed over the rights to the patent to the University of Florida, and UF officials have been negotiating with major pesticide firms to develop the fungus for commercial use.

The State of Florida has contributed more than \$500,000 to Stimac's research over the past seven years.

lations.

Some superintendents attract mole crickets with a caller. Then they distribute S. scapteriski from the IFAS project by distributing mole crickets they have infected. It is a good delivery system for these microbe-bearing nematodes.

It has no benefits with the other nematodes.

"If you're using a caller, you might as well just drown the mole crickets you catch as use these commercial nematodes," said Frank.

- Darcy Meeker









Scott's ProTurf

Lebanon Country Club

Par Ex

Down in the analysis area on every fertilizer bag, you'll find the "fine print" that tells you what the big print doesn't. Read all of it. Carefully. But most importantly, look at the percentage of Water Insoluble Nitrogen.

Water Insoluble Nitrogen (WIN)... the key to superior turf.

The higher the WIN percentage, the longer your turf will remain green. And the less often you will have to fertilize. That's because WIN is

the percentage of total Nitrogen that is truly slow release. Freeing small amounts of Nitrogen each time it's touched by water (Par Ex® with IBDU®) or activated by temperature or bacterial action (competitive products).

No competitor can deliver as much usable WIN as Par Ex.

Only Par Ex contains IBDU—a unique Water Insoluble Nitrogen source that is 100% available to your turf in a single growing season. Consider that urea formaldehyde products (bacteria and temperature released) contain about one third of their WIN in the form of plastic polymers. Its long-term Nitrogen

release is so slow, it's almost useless, and will most likely occur during the hottest periods, just when you don't want it.

For Sulfur Coated Urea (SCU), research has shown that by the time it is spread, about 50% is immediately soluble, effectively doubling your cost of controlled-release Nitrogen and cutting the benefit in half!

Be sure to read your bag.

If the percentage of Water Insoluble Nitrogen isn't listed, there isn't any slow-release Nitrogen. If it is listed, chances are it won't be as high as the WIN percentage in Par Ex. Even if it is, we guarantee you that 100% of what we list as WIN is available to your turf every growing season. That means for every six months of growing, you'll receive an additional 46-53% more usable WIN than our competitors can deliver.

So start building your WIN percentage today. Talk to your local Par Ex Representative or call 813/294-2567. And get all the WIN you've been reading about.





Her job is to get the details right

Jan Beljan has parlayed a stint as an assistant superintendent and a GCSAA scholarship into a position with one of the world's foremost architects

BY BRADLEY S. KLEIN

an Beljan's job is to get the details right. She's a design associate with Tom Fazio and spends a lot of time at her drafting table. From her office in Jupiter, she draws up routing plans, specifies the clearing, grading and bulk earth moving, works on irrigation and landscaping, and keeps track of everything from cart paths to environmental regulations.

She also heads off into the field. Whether knee-deep in the mud or back at the office with pen, pencil and paper, Beljan is at home putting together all those things that must work well if a course is to make it from sketch board to playing field.

Today, Beljan shares credit for such achievements as PGA National in Palm Beach Gardens, Pelican's Nest in Naples, and Lake Nona in Orlando. She's also a careful student of her craft, having taken extended visits to Asia and the British Isles, where she explored classical and contemporary architecture.

She grew up on golf courses and now she's

making her life with them. This past spring, her career received a big boost when the American Society of Golf Course Architects, meeting at Spanish Bay in California, voted her in as an associate member, a status she shares with Jay Morrish, Jack Nicklaus and 18 other designers.

In a way, she has been preparing for the job since childhood. Next to the Palmers, the Beljan family is western Pennsylvania's best-known golfing clan. When Jan was born in Pittsburgh in 1953, her father, George, was pro at a driving range. His four brothers — Jan's uncles Willie, Carl, Andy and Joe — were all renowned golf pros. In 1955, Jan's dad left his job to take up a new project — the design and construction of Mannitto Haven golf course in New Alexandria, Pa.

"Nine holes were opened," recalls Beljan, "but the second nine fell through because of a change of ownership. Dad stayed on and ran the whole show and that's were I learned golf."



Jan lent a hand anywhere she could.

"It was a yearround family club, a weekend retreat for Pittsburghers. First I ran the riding stable, then I began my work in golf. Mornings I would mow greens, then I'd shower and make a quick change and spend afternoons and evening in the pro shop, doing the typical routine.

This was before the computer, so I had to figure handicaps."

Beljan says that the experience taught her a lesson that has helped her to this day.

"Golf is not just how the course looks. It's planning, maintenance, employee relations. It's being friendly and customer service. Golf operations are successful when all of these facts are recognized."

After completing high school, she attended West Virginia University in Morgantown. Among the scholarships she had was one from the GCSAA. In 1976 she graduated *cum laude* with a degree in landscape architecture. All through college she worked at Preston CC in Kingwood, W. Va. Initially, Jan worked in the pro shop. She soon moved on to become assistant superintendent.

During summers she was out there seven days a week, 14 hours a day. The only break from this routine was an hour spent in church on Sunday.

The practical skills she developed in the field complemented her formal studies. She was working with grasses, equipment, chemicals and all the other day-to-day matters that golf courses call for. What had been part of her family lore was now part of her everyday routine.

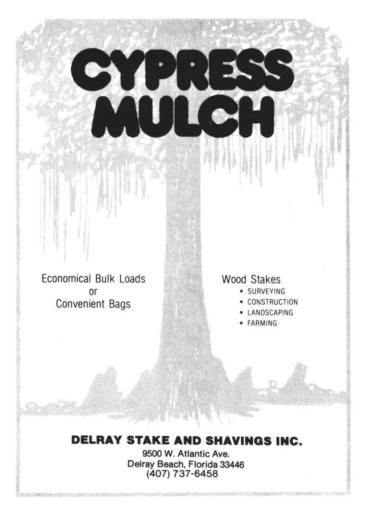
With college behind her and while still working at Preston CC, Beljan took an additional job with a professional lawn care company. Besides working as a sales representative, she was applying pesticides and fertilizers. One of her clients, Jack Mahaffey, turned out to be greens chairman at Oakmont CC, and he introduced Beljan to Tom Fazio during the 1978 PGA champion-

continued on page 39

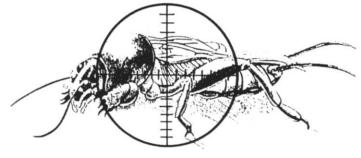
Jan Beljan's been preparing for her job all her life. In Western Pennsylvania, her family name, like Arnold Palmer's, is synonymous with golf.

Photo by: Larry Kieffer





An Un-Welcome Sight!



Take Aim With Sunniland Molecricket Bait



Sunniland

Regional Managers



Dennis Varady (407) 332-9078 Steve Goedereis (407) 964-9478

Wayne Carmichael (904) 272-4891 Joe Kempeneer (813) 743-2643

Post Office Box 1697, Sanford, Florida 32772-1697 Telephone (407) 322-2421 • 1-800-432-1130

ARCHITECTS, ETC.

from page 37 ship. A few weeks later, Fazio called and offered her a job. Beljan has been with him ever since.

From the very beginning, Beljan has been immersed in every aspect of golf course development. Her intimate understanding of what goes on in the maintenance yard serves her well not only at the drafting table but also in the field. Beljan explains that in the Fazio shop, "we spend a lot of time drawing plans and writing specs.

But in design work, you have to be prepared to make changes in the field and work with the land and the client. The only way to do that is to work closely with the contractors and shapers. Ultimately, you have to keep in mind how it's all going to be maintained.

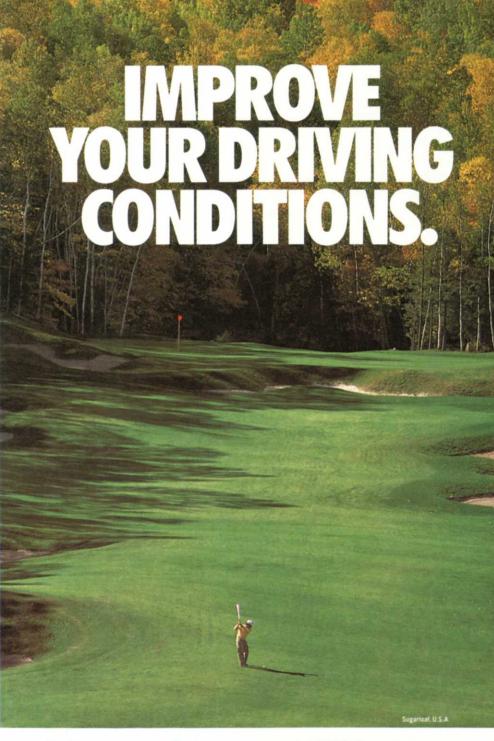
"We couldn't have golf courses without superintendents," she says. "They maintain the integrity of the architect's design. They are responsible for the course appearing in its best light of all times. Without proper mowing and maintenance, you wouldn't see all those beautiful pictures. The ultimate sales person for any development is the superintendent."

Fazio courses have been well-received because they are designed with maintenance in mind. Beljan, like the whole Fazio operation, receives high marks in the industry for a willingness to work carefully at the outset with superintendents. After all, they are the ones who are held responsible for how the course plays.

Frank Cook, superintendent at both the Bardmoor North GC and the Bayou Club in Largo (until this year the home of the LPGA/PGA Tour's mixed championship, the JCPenney Classic) has been working with the Fazio company on a new nine for the Bayou.

"They confer with us on maintenance all the time. Jan is in here every two

continued on page 41



ORTHENE® Turf, Tree & Ornamental Spray keeps pests out of your club.

Stop pests from playing a round on your course with ORTHENE Turf, Tree & Ornamental Spray. One treatment provides a broad spectrum of protection for turf as well as a wide variety of trees and ornamentals.

ORTHENE kills quickly on contact, then by systemic action. So you'll keep hard-to-kill pests like mole crickets, armyworms and leafhoppers under control. ORTHENE supplies longlasting residual action against other insects including tent caterpillars, aphids and thrips.

ORTHENE Turf, Tree & Ornamental Spray. It's more than enough to drive unwanted pests right off your course.

ORTHENE® Turf, Tree & Ornamental Spray

Avoid accidents. For safety, read the entire label including precautions. Use all chemicals only as directed. Copyright © 1990 Valent U.S.A. Corporation. All rights reserved. OR THENE is a registered trademark of Chevron Chemical Co.



We just eliminated your last excuse for buying a converted golf cart.

Introducing the Cushman® GT-1. Suggested retail price: \$3,564.00*.

When you can have Cushman quality at a competitive price, there's no reason to accept second best.

The new Cushman GT-1 utility vehicle will outperform and outlast any converted golf cart on the market. Its frame and chassis are stronger and more durable. You'll find a bed made of 14-gauge steel instead of 16-gauge steel. One-inch axles instead of 3/4-inch axles And a proven Kohler industrial engine that's more reliable and easier to maintain.

When you need a utility vehicle that's been specifically designed for work instead of one that's been converted from play, contact your Cushman dealer for a GT-1 demonstration. Or call toll-free 1-800-228-4444 for more information today.



BUILT TO LAST

Cushman Dealers in Florida

DEBRA TURF & INDUSTRIAL EQUIP. CO.

901 N.W. 31ST Avenue Fort Lauderdale, FL 33311 (305) 792-6005

DEBRA TURF & INDUSTRIAL EQUIP. CO.

12090 Metro Parkway Fort Myers, FL 33912 (813) 768-3188

ZAUN EQUIPMENT, INC.

1741 Hamilton Street P.O. Box 7484 Jacksonville, FL 32210 (904) 387-0516

ZAUN EQUIPMENT, INC.

1140 South Rio Grande Avenue Orlando, FL 32805 (407) 841-8460

TIECO GULF COAST, INC.

540 Michigan Pensacola, FL 32505 (904) 434-5475

DEBRA TURF & INDUSTRIAL EQUIP. CO.

1555 Apex Road Sarasota, FL 34240 (813) 377-5081

DEBRA TURF & INDUSTRIAL EQUIP. CO.

6025 U.S. Highway 301 Tampa, FL 33610 (813) 621-3077 from page 39

weeks or so and works with Fazio's field supervisor, Charles Feeley. They spend a lot of time discussing the specifics of a hole, whether it's going to be a maintenance problem."

For many marquee-name architects, what counts is high-profile publicity, usually on opening day. But it's one thing to have designed a "best new course." It's quite another to have to live with it years afterwards. Florida courses are especially susceptible to criticism because they are open year-round. Snowbirds can be especially demanding of course conditions, though perhaps less concerned with what happens the six or seven months of the year when they are not in town to play.

As a lot of Florida superintendents know, the result of all the demands upon them can be an annual maintenance budget that approaches (and in a few cases, passes) \$1 million. But few facilities can afford such levels of care.

"Fazio and Beljan definitely try to stay away from severe slopes that would require manual labor and expensive handwork like fly-mowing and the use of weed-eaters," says Cook. "They understand initially what causes problems and they plan and adjust so that we'll get it right. I haven't had to change anything at The Bayou."

But Beljan acknowledges that "sometimes extra handwork is required to take best advantage of a natural setting." At the par-three third hole at The Bayou, "only a long bunker with steep, Fly-Mo slopes would accent the green. The bunker is set in a narrow area framed by oaks and palms. The only way to avoid fly-mowing there would be to build a bland hole, and that wouldn't do justice to the golf course."

Learning to work with, rather than against the land is basic to golf architecture. Like many designers, Beljan ... You have to be prepared to make changes in the field and work with the land and the client. The only way to do that is to work closely with the contractors and shapers. Ultimately, you have to keep in mind how it's all going to be maintained.

has sought inspiration from the past in order to confront the future.

She made her first visit to the classic British courses in 1986 and hasn't been the same since. For three weeks she studied, played and photographed over two dozen venues — among them Ballybunion, Muirfield, and Royal St. George's. She came away with an enhanced understanding of classical design features and of the very different conditions governing U.S. architecture.

Beljan saw that golf was made to be played while walking. Players judged distances without markers. Deception, she found, was not so much built in as allowed to reveal itself naturally.

"Despite — or maybe because of — the simplicity of the features there, challenges to depth perception confront every golfer. Architects couldn't move much dirt back then, so they were selective insiting tees, bunkers and greens. Small mounds, large dunes, that's what the player relies upon to aim and judge distances.

But while one can learn from these courses, says Beljan, it would be a mistake to try to copy them outright.

"Those courses are 60 to a hundred years old," she says. "They were built on the best land with the least possible means. By contrast, we build courses on less than the best land with every means possible. In the U.S. we have so much more to work with technically. The question is how to make all the pieces fit."

Of late, Beljan has been sharing that commitment with industry leaders involved in the Florida Golf Summit (page 13). She points to government-industry interaction as part of the plan and is pleased that the Sierra Club and Audubon Society are among those environmental groups that have been asked to participate in developing a long-range plan.

Beljan's work with the Florida Golf Summit is a further step in her emergence as an influential voice in U.S. course design. A growing community of designers and superintendents is finding out about Beljan's experience and her concern for the game.

Jan Beljan's Florida Work

1979	PGA National, The Haig **	Palm Beach Gardens
1980	PGA National, Championship**	Palm Beach Gardens
1981	Mariner Sands, Gold*	Stuart
1981	PGA National, Squire**	Palm Beach Gardens
1981	Eastlakes CC**	
1981	Bluewater Bay**	
1985		
1986		
1986		
1986		
1986	Bayou Club at Bardmoor, New 9***	
1987		
1988	John's Island West* •	Vero Beach
1989	Westinghouse Gateway **	Fort Myers
1989		

Key:

- Preliminary Routings
- ** Design and drafting of construction documents and specifications
- On-site construction supervision

What's Your Net Worth?



Is it worth the aggravation, costs of down time, and repair to mowing equipment?

USE PROSEED PS100 TO IMPROVE YOUR BOTTOM LINE!

PS100 is the only *completely biodegradable* mulch blanket on the market today. **PS100** contains no netting . . . instead, the fibers of the blanket are bonded with a high strength, flexible adhesive, resulting in superior erosion control capabilities.

So whether your final landscape plans call for grasses, legumes, wildflowers or ornamental plants . . .

We've Gotcha Covered!



P.O. Box 1250 San Marcos, Texas 78667 (512) 392-1900

Second annual \$6,000 research grant



Wayne Miller, center, business manager of The John's Island Club in Vero Beach, last summer presented a \$6,000 research donation to Bob Yount, executive vice president of the Florida Turfgrass Association and vice president for development of the Florida Turfgrass Research Foundation. Holding a plaque recognizing the second annual \$6,000 gift is Trevor Wright, club general manager. "We are concerned about protecting the environment and are anxious to support turf research in Florida," said Wright.

The best in the business . . . of Golf



To be a golf course superintendent you need the skill of a brain surgeon, the predictable performance of a weather forecaster, and the product knowledge of Golf Ventures.

If it's golf course related and you need it, we have it.

If not, we'll get it!

We service over 500 of the finest golf courses in Florida and S.E. Georgia.

THE BEST IN THE BUSINESS OF PRESERVING YOUR GOLF COURSE INVESTMENT

FERTILIZERS & SOIL AMENDMENTS

Lykes Agri Sales Ringer Turf Products Liquid Ag Systems Inc. Dakota Reed – Sedge Peat

CHEMICALS

Helena Chemical Co.

SEED

Pickseed West Inc.

EQUIPMENT

Club Car Carryall
Daihatsu Hijet
Florida Sprayers Inc.
Crosley Trailers
Easy Picker Driving Range Vehicles

<u>ACCESSORIES</u>

Cylex Granite Signs
Southern Screen & Embroidery Flags
Standard Golf Co.
Lewisline American Eagle
Par Aide Products
Fox Valley Marking Paints
Rainjet Fountains
Lundrain Drainage Material
Spyker Spreaders
Master of the Links Wood Products
Hole-in-White (Cup Brightener)
Clover Lapping Compound
Motorola Radius Radios
RedMax Reciprocators

2582 OLD COMBEE ROAD • LAKELAND, FL 33805 1-800-330-8874 • [813] 665-5800 • Fax 667-0888



A good idea isn't enough... even if it works

It takes planning, financing, patience and humility to turn a good idea into profits

BY KIT BRADSHAW

om Wait is a man filled with ideas. The ideas pop up everywhere... on airplanes, on golf courses, in the middle of agood night's sleep. Once he gets an idea, he can hardly wait to act on it. It becomes an obsession.

But Wait admits this obsession can sometimes get in the way of good business sense, It can push aside legal advice, wiser counsel. And it can bring about great success. . . but also create costly mistakes.

Wait's company, Donut Trimmer Equipment Inc. in Pompano Beach, is involved with several golf course maintenance products, all invented by Wait: Donut Trimmer, Level-Eez, Aqua-Quick, and a greens encroachment barrier system.

Each of these devices has met with success in the golf industry.

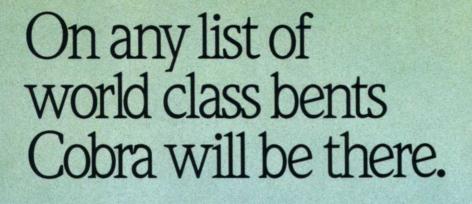
Incredibly, none existed before 1987.

"In 1984, I started a landscaping company, PSU Property Maintenance," Wait recalls. "We received the contract to maintain all the landscaping fore the city of Boca Raton, and also worked at some condominiums on their landscaping maintenance.

"At the condominiums, they had cement donuts for sprinkler heads, and we had to trim them by hand every month as apart of our maintenance routine. After doing this for awhile,, I thought there had to be a better way. I came up with a metal blade which attaches to a Weedeater. You drop the metal blade over the donut, and it trims the sprinkler heads. You can do 200 heads an hour, as opposed to 200 heads a day by hand."

Originally Wait thought the device could be sold to landscapers but a friend told him that golf courses also had sprinkler heads. Lots of sprinkler heads.

"The blade on our Donut Trimmer was only 7 inches in diameter. The golf course sprinkler heads were 8 to 11 inches in diameter. The theory about dropping the blade over the top and trimming around the sprinkler head wasn't going to work. But by tipping the Donut Trimmer at an angle, we found we could trim around any head, from 8 to 80 inches. It didn't matter. With a little further experimentation, we discovered the trimmer could edge anything on the golf course, including the bunkers."



Cobra, the very fine textured creeping bentgrass, which is now considered one of the world's finest, was developed jointly by Rutgers University and International Seeds. Inc.

Cobra thrives when cut at 6/32 inch and normally requires less mowing, verticutting and brushing and produces measurably less thatch.

On a golf green built to USGA specifications at Griffin, Georgia, Cobra's color was rated superior to that of Penncross in March, May, August and October and better than that of Penneagle in March, August and October.

In the matter of color, shoot density and cover Cobra was judged comparable to Penncross and Penneagle.

In a North Carolina State trial Cobra's turf quality was rated superior to that of Penncross and Penneagle.

At the same time Cobra proved to be superior to Penncross in dry root weight and had better resistance to dollar spot.

Cobra is winter-hardy, heat tolerant, disease and droughtresistant and, while vigorous, is not as aggressive as Penncross.



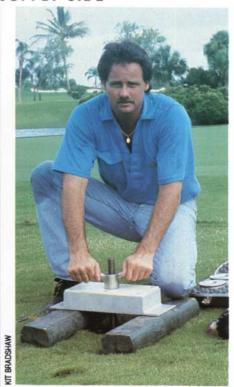
TURF GRASS SUPPLIES

720 KRAFT ROAD • P.O. BOX 807 LAKELAND, FLORIDA 33802 Telephone: (813) 687-2774 - W.A.T.S. 1-800-282-8007 Cobra is a product of

"Seed - the Gift of Life"



Halsey, Oregon USA



Tom Wait with some of his inventions.

Wait went on the road with the Donut Trimmer. He went to the 1988 GCSAA convention and show and talked to golf course superintendents. With their positive response, Wait decided to market the product, putting ads in trade publications. The ads brought tremendous response.

But, he says, "We had to show how the Donut Trimmer really worked under exacting conditions. We decided to contact Eagle Trace, home of the Honda Classic, and volunteered to do all the detail work on the course — sprinkler heads and bunkers — for free, just to show what it could do under tournament circumstances. It was a success, especially with the caddies, who could see the yardage markers more easily."

The Donut Trimmer show moved west. Wait contacted a marketing firm in Fresno, Calif., Growth Marketing, whose owner Nick Dvorack arranged for a demonstration at Hillcrest CC.

"There were several of the best golf coursesuperintendents in the state there for our demonstration, and after seeing it, they too were sold," Wait said.

The young businessman was also able to secure a distributor in California, Pacific Equipment, the first distributor of the Donut Trimmer.

Business was good, but Wait says it was here that he made several mistakes.

He now admits he should have stopped, concentrated on the Donut Trimmer, its manufacturing and its marketing instead of developing more devices in quick succession.

Dvorack tried to develop a a marketing program.

"But I was young, aggressive and egotistical," Wait said. "I wouldn't listen to him. It was one of the biggest mistakes I made."

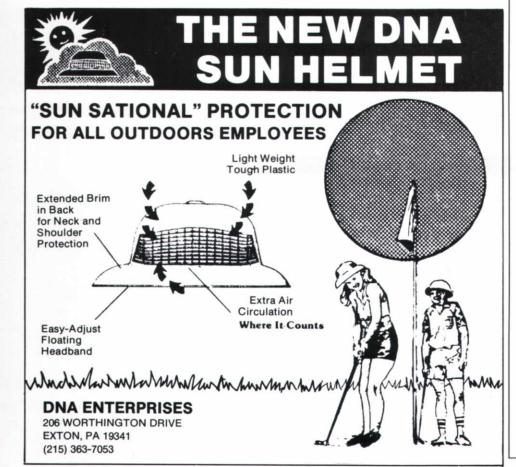
Despite his mistakes, his youthful eagerness and inventiveness did produce several additional devices to help golf course superintendents.

"When I was at Hillcrest, the golf course superintendents were all talking about encroachment of grasses onto the green. There were several methods used to control it, but many courses were edging the greens by hand every day.

"On the plane home, I opened up a pack of gum... and it gave me an idea. If there were a way to design a barrier between the green and fairway grasses, you could then imbed in the barrier 350 pieces of fishing line and each day pull the line, like the string on a pack of gum. Then you could edge the green very simply."

Wait had met Paul Latshaw, former superintendent at Augusta National GC a few months before and Latshaw became a mentor and informal consultant.

"Paul told me there were several problems with the methods being used



to keep the fairway grasses from encroaching on the greens," Wait says. "Even with a barrier, once the turfgrasses hit the barrier, they would grow right over it, and attach themselves to the green. If we could develop a barrier that would eliminate this problem, then it would be a boon to golf course superintendents."

Another problem was minimizing damage during installation.

"After all, you couldn't go to a club and say, 'Well, I need to put this barrier around your greens and we'll have to shut down your corse and disrupt the area to do it."

Wait learned about a company called Line Ward, owned by Gene Ward of Buffalo, N.Y. He and Ward met, discussed the problem, and Ward said that his machine could be adapted to cut the trench and pull the plastic barrier into place at the same time. It was still Wait's concept to have the ground crew pull a steel leader each day to trim the green edge with the fishing line.

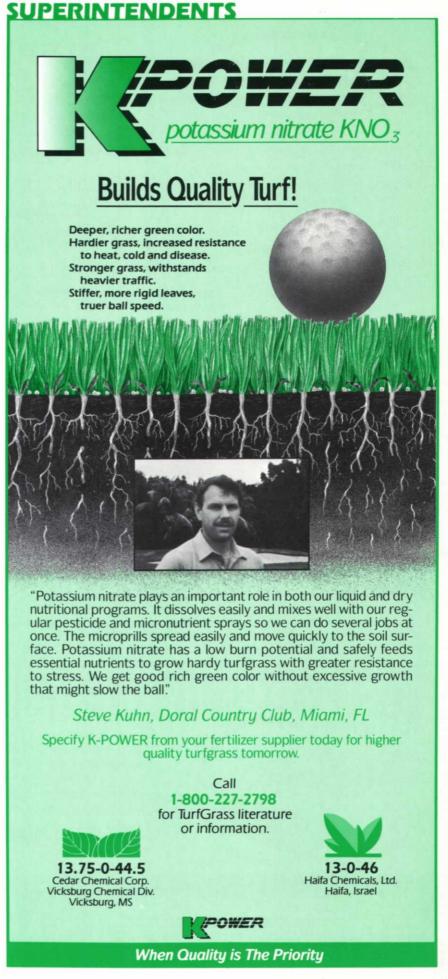
By August 1989, Wait had developed the plastic barrier, and Ward brought his machine to South Carolina for a demonstration at the Carolina CC. The implanting of the plastic worked perfectly.

"We were able to have the machine pull 200 feet of the plastic barrier non-stop around the green," Wait said. "In four hours, we had installed the barrier, rolled it, and were ready to imbed the steel leader into the plastic barrier's center groove.

But there was a problem.

Simply put, Wait's fishing line idea didn't work.

"Gene was watching this disaster. Finally he said that if we gave him a week, he could develop a system that would work. So we continued onto the golf courses that wanted the barrier installed. . . Plantation CC, Loxahatchee, The Falls, and put in the





We are dedicated to helping turf grass managers do their jobs more efficiently by striving to provide the best parts and service available.

DISTRIBUTOR FOR

CUSHMAN/RYAN

TORO IRRIGATION CUSHMAN INDUSTRIAL GREEN MACHINE SARIO RAYSIDE TRAILER **TRENCHMASTER** OTTERBINE VICON BERNHARD EXPRESS DUAL CROSLEY TRAILERS

STANDARD PAR AIDE BROYHILL CYCLONE GANDY WINDMILL DEDOES

OLATHE

SALES MANAGER, Don DeLaney (407) 841-8460

JACKSONVILLE

TORO

BILLY GOAT

FOLEY

MAIBO

OHIO

POWER TRIM

1741 Hamilton St. 32210 (904) 387-0516 TERRITORY MANAGERS Carl Heise John Higgins Bob Ward

ORLANDO 1140 S. Rio Grande Ave. 32805 (407) 841-8460 TERRITORY MANAGERS

Phil Bradburn James Griffin

Standard Sand & Silica Company

FOR YOUR GOLF COURSE NEEDS

- Ideal Greensmix Sand
- Chokersand
- White Trapsand
- Greensmixes
- Under Drain Sand
- Meets USGA Specifications

Standard Sand & Silica Company

Post Office Box 35 Hwy. 17 & 92 North Davenport, FL 33837 Phone (813) 422-1171 Fax (813) 422-8610

JACKSONVILLE BRANCH 600 East 8th Street Jacksonville, FL 32206 (904) 355-0516

MIAMI BRANCH 4101 N.W. 70th Avenue Miami, FL 33166 Dade (305) 593-1430 Broward (305) 524-5322



No other manufacturer, O.E.M. or aftermarket, puts what we do into a roller. Our rollers LAST LONGER AND COST YOU LESS!

O seals are Better than one



Every roller manufactured by Douglas Products comes equipped with a dual seal system; an inner seal for grease retention and an outer seal to keep out dirt. AND they ride on a stainless steel wear sleeve to assure the integrity of the sealing element throughout its life.

THERE IS NO SUBSTITUTE FOR QUALITY!

FOR ORDERS OR INFORMATION DIAL TOLL FREE

1-800-521-8891

1-800-541-2255 WAIT FOR TONE, THEN DIAL 368-4527

Tel: 407/582-6180

1810 HYPOLUXO ROAD SUITE D-9 LANTANA, FLORIDA 33462

plastic barriers. We promised them, that we would be back with a device that worked with the barrier."

Within a week, Ward had come up with a tool with two guide wheels and a blade, dull side up, that slipped into the groove and allowed the superintendent to clip the bermudagrass easily.

Eventually, Wait added a simple chemical control drip system to this tool at the request of superintendents. The problem had been solved. The tool created by Gene Ward worked with Wait's barrier design.

Since developing the Donut Trimmer, Wait also had developed the Aqua-Quick, a device which enables superintendents to bring water anywhere on the course and Level-Eez, which raises the sprinkler heads to grade without digging.

To use the Aqua-Quick, the superintendent pops the drive assembly out of the coupler valves in the sprinkler head, installs the Aqua-Quick, locks it with a snap ring, and puts a hose on the device. This, according to Wait, can be done in less than a minute.

Raising sprinkler heads was another challenge.

"On most golf courses, you have a swing joint connected to the sprinkler head, and you have to probe to locate that swing joint before beginning work. Then you have to dig by hand, and this

Undercapitalization is often the culprit

Undercapitalization is the chief cause of small business failures, according to Randy Cravey, business analyst with the Small Business Development Centerat Florida Atlantic University in Boca Raton.

Cary Lewis, now golf course superintendent at Orlando Country Club, knows firsthand about poor financing. He and John Seid were partners in an infrared photographic service to the golf industry - Remote Sensing, Inc. — that had a brief life in Florida and may now be resurrected in Arizona.

"We could photograph golf courses, lakes, drainage, and could identify subsurface problems through this infraredphotography,"Lewissays. "We could find drainage lines

put in 10 years ago; we could find pine trees in decline from too much water, before their problems were evident to the naked eye. It was a great concept."

But as Seid notes, the business was underfinanced, and that led to its decline.

"After giving it a try for more than a year, we parted company. We'restill close friends." Today, Seid is still promoting the concept, and from his base in Tucson, Ariz., he has teamed up with a new partner who is developing financing sources for the project. He is confident that properfinancing will make his infrared aerial photography business a success.

According to Cravey, Remote Sensing's problems were typical.

"Most people have an idea about their business," says Cravey, "but they don't have a business plan, and they don't have the financial or management expertise to run a com-

"They may not know their market potential or have an adequate cash flow to continue to run the business." Cravey adds that from the early stages of developing the business, the owner needs to establish a relationship with a qualified attorney and an ac-

"These professionals can help you make the decisions that will affect the business throughout its lifetime. They can help you develop the business plan that spells success rather than failure."

can take an hour or more with a skilled irrigation technician doing the work. Once you've raised the sprinkler head, you've created an area what looks like you exploded a land mine. The damage

"As a landscaper, I've installed a few

trees in my lifetime. After you dig a hole, fill it with water and put the tree in, if the tree is too low, you raise it with the help of water and soil. I woke up in the middle of the night and realized that this same principle could be used

is incredible.

continues on page 53 Dade County

Broward County 923-8323

949-3521

Since 1948

Florida Silica SAND CO., INC.

Special GOLF COURSE **MIXES** Sterilization Available

Complete Line of **NURSERY AND** LANDSCAPE

Materials

Turf Industry Roundup

GCSAA report reveals buying habits

The Center for Golf Course Management, a subsidiary of the GCSAA has released its first marketing research report, Buying Habits of Golf Course Superintendents.

The report, scheduled to be published annually in August, was compiled from the results of surveys mailed to more than 11,000 superintendents. It includes information on course demographics, purchasing behaviors, equipment inventories, expenditures, customer satisfaction, and planned improvements.

A second report, Maintenance Trends, studies current and emerging golf course maintenance practices based on the results of a survey sent to 1,200 certified superintendents. This year's report features deep-tine aerification, poa annua control, lightweight fairway mowing, 72-inch rotary mowers for maintaining roughs, and computers.

Buying Habits is \$945. Maintenance Trends is \$100. Both are available from the Center for Golf Course Management, GCSAA 1617 St. Andrews Dr., Lawrence, KS 66047; phone 913-841-2240.

Ciba-Geigy, Greensboro, N.C., and Biosys, a Palo Alto, Calif., biological pest control company, have agreed to jointly evaluate nematode-based product that controls cutworms and armyworms on turf, and black vine weevils, fungus gnats and white grubs on ornamental plants.

Ciba Geigy will gather field data, test-market the product, which is based on the nematode Steinernema carpocapsae (See Research Report, page 33), and conduct market research with turf managers and ornamental growers.

The Biosys formulation, exempt from EPA registration requirements, can be applied with standard spray equipment.

PBI/Gordon Corp., Kansas City, Mo., has acquired amidochlor, the active ingredient in Limit Turf Regulator developed by the Monsanto Co. of St. Louis.

PBI/Gordon has developed a new tank-mix program combining Limit and Embark 2S.

The products work in different ways, according to D o u g Obermann, PGR product supervisor for PBI/Gordon. Limit is taken up through the roots and Embark through



Carl Meermans

the foliage. The tank mixture reduces the amounts used of each product with results that combine the best features of both, according to John Van Haften, PBI/Gordon director of research.

Jacobsen Division of Textron, Racine, Wisc., sponsored a three-day turf seminar in Manchester, England, for 25 students from the United Kingdom and the Netherlands.

Among the featured speakers was John Piersol of Lake City Community College., who discussed the U.S. golf industry.

Lofts Seed Inc. conducted a field day for turf professionals at the company's farm in Martinsville, N.J. in July. Among the speakers was Dr. Virginia Lehman, who recently worked on developing heat-tolerant bentgrasses at Texas A&M University (Florida Green, Spring 1990) and now heads Lofts West Coast Research Center in Oregon.

River, Ohio, has promoted Carl Meermans (PIX) to vice president/ operations. He joined Lesco in 1987 as a systems analyst and was promoted to operations manager a year later. He will add transportation

in Florida are invited to submit their news releases to The Florida Green, c/o Janlark Communications,

Turf Industry

Roundup

course superintendents

Companies doing

business with golf

Communications, 1206 Kimberle Court, Auburndale, FL 33823. We cannot accept items for this section over the

telephone.

to his current responsibilities of fertilizer production and warehousing.

Boynton Pump and Irrigation Supply, Boynton Beach, was named golf distributor of the year by Rain Bird at last spring's GCSAA Convention and Show in Orlando. The award is given annually to "the distributor who demonstrates the highest level of customer service and sales performance," according to David Ragan, one of three Boynton staffers on hand to receive the award from Rain Bird's national golf sales director, Ed Shoemaker. The others were Tim and Jon Kilpatrick.

Southern Turf Nurseries. Atlanta, has named Ron

Gelvin (PIX) general manager of the company's 500-acre production farm in Lake Wales and Bill Carraway (PIX) sales manager for Florida and the Caribbean.



Ron Gelvin

Gelvin had been operations manager of the W.H. Stewart Ranch Bartow: Carraway moves out of comthe pany's Atlanta sales office.



Bill Carraway





Reference Library

Recently released professional literature

Master Planning: The Vital First Steps in Golf Course Construction: 12-page pamphlet. Free (SASE) from American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601. Excel Industries Full Line: Pocketsize brochure describes professional features of rotary mowers. Free from Excel Industries, Box 7000, Hesston, KS 67062; phone 800-835-3260

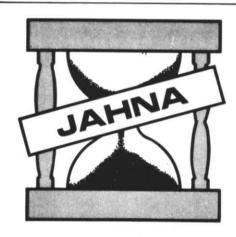
Golf Course Professional's Guide to Turfgrass Selection: Divided into geographical regions. Free from Lofts See Ind., Chimney Rock Rd., Bound Brook, NJ 08805.

Tree, Turf and Ornamental Pesticide Guide: Information from the basic manufacturers' labels and the EPA pesticide summaries. \$15.50 from Thomson Publications.

P.O. Box 9335, Fresno, CA 93791; phone 209-435-2163, fax 209-435-8319.

Evolution of the Modern Green: 24-page brochure by Dr. Michael Hurdzan. \$5 from American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.





Your Sand Man

E. R. JAHNA IND., INC. LAKE WALES, FLA 33859-0840 (813) 676-9431

Sand

Rock

Dolomite

Hi-Cal



Pike Creek Turf Farms, Inc.

Route 2, Box 376-A • Adel, Georgia 31620 1-800-232-7453

Producers of Quality Sod and Sprigs Row Planting

- Tifway 419
- Tifway II

- Meyer Zoysia
- Tifgreen 328
- Tifdwarf
- Centipede

from page 49

with sprinkler heads.

"Right there, I drew the idea on paper."

Wait said he created a system to get water and soil into the ground under the sprinkler head to raise it. First he locates the swing joint by probing it. Then he injects water around the sprinklerhead. After removing the drive assembly, he locks in the Aqua-Quick and a threaded rod. Using a platform puller and two landscape logs for leverage, he turns down on the rod and slowly the sprinkler head is raised. The water and soil slip under the head. There is less damage to the ground and the area can be repaired with topdressing.

Even with a measure of success from his inventions, Wait says that the company was — and to some extent remains — underfinanced.

"The landscape business brought in money which we used to finance the Donut Trimmer," Wait said. "Several personal friends also put money into the business. But this isn't really proper financing."

Wait sees potential for his products, as he regroups and develops a stronger business plan. Precision Small Engines in Pompano Beach is his national distributor and he feels this relationship will help increase his chances for success.

And he is now using good legal advice, something which he ignored in the early days of product development.

"If you talk to a lawyer, and he says it will cost \$1,500 to do the paperwork, it sounds like a lot of money, especially when you are starting out," Wait says. "But it's a matter of pay now or pay later. From my experience, I should have had good legal advice. It would have saved money. It would have saved friendships with those involved with my inventions.

"Now I have a good lawyer. I don't make a move without him. And I usu-

ally do what he says. I don't let my ego get in the way. I guess I was so excited about each invention that I wanted to get them going, and I didn't want to stop and do a business plan or seek proper legal advice.

"At this point, I have to stop, look at my mistakes, and do now what I should have done two years ago," Wait says. "I have to work on the business plan, create strong marketing with good advice, listen to my lawyer when he tells me that a contract is workable or it's not. We are still underfinanced. But I've learned from my mistakes and from the money I've lost in the process of building the company name.

"I'm on the right track now."



GOLF COURSE RENOVATION

EXCAVATING · SHAPING · DRAINAGE

TEE & GREENS

LAKES EXPANDED & CONTOURED

New for 1990 OUR TREE ROOT PRUNING AND PREVENTION SERVICE

We install a root barrier system effective in control of tree root intrusion of cart paths, septic tanks, etc.

ALWAYS OUR SPECIALTY CART PATH PAVING AND REPAIRS

WHY DO BUSINESS LONG DISTANCE?

BLACKROCK is right here serving: Palm Beach, Martin and Broward County

Contact:
DELL HAVERLAND
HAVERLAND BLACKROCK CORPORATION
Boynton Beach, Florida
Since 1979

(407) 369-7994

Superintendents can justifiably take great pride in the prominent stature our profession has attained in the golf industry.

Many consider the superintendent the most important position at the golf club.

Code of Ethics: Spell it out first to meeting and respect it

Regulatory agencies now frequently solicit our input and participation.

We were among the first to be invited to the meetings which led to the

formation of the Florida Golf Council and the Florida Golf Summit.

We are seen as professionals with the technical expertise and training essential to the successful operation of the golf facility. More and more we are also regarded as environmentalists who are part of the solution instead of the problem.

Credit for this positive image could be directed toward the few movers and shakers in our profession, but I feel it more accurate to credit the professionalism of the rank-and-file superintendent. The expertise, dedication, honesty, and concern displayed by the superintendent on a daily basis at his or her own club is the cornerstone of this solid, professional foundation.

Reasons for pride in our profession are substantial, but in my opinion, our professional growth and stature is limited — and at times compromised — by indifference towards our Code of Ethics.

Our association needs to be regarded by the golf industry as an honorable, highlyprincipled organization serving the best interests of our individual clubs and the industry in general. Unethical practices or behavior by any of our members hurts every one of us and erodes the professional progress we have made.

The issue has been ignored for two very good reasons: fear of litigation and ambiguous language.

Officers of an association are unpaid volunteers who have valid fears of personal lawsuits that could realistically result from disciplinary action they may take for violation of the Code.

Damaging a person's professional reputation or employment potential is serious business and our associations are not financially fit for legal battles of this magnitude. Add to this the vague language of the GCSAA's Code of Ethics (adopted by the Florida GCSAA) and its susceptibility to broad interpretation, and a board's reluctance to enforce the code is understandable.

I personally am not aware of other local chapters' efforts, but the Palm Beach GCSA is to be commended for rewriting the Code and giving specific examples of proper conduct so that many of the "gray" areas are eliminated.

Specifically, I suggest:

- Educate the individual members about the Code of Ethics and its significance.
 Just making it available by printing it in the Membership Directory is neither effective nor sufficient. Since many members do not belong to the GCSAA, this task falls to each local chapter. This could be accomplished in several ways:
 - Print the Code of Ethics on applications forms and have prospective members sign a pledge that they will abide by the



Mark Jarrell, CGCS

- principles if accepted for membership.
- Have new members publicly pledge to abide by the Code at their first chapter meetings.
- Read the entire Code to the membership several times each year during chapter meetings.
- Treat violations seriously and bring the suspected violator before the board to discuss the matter. This may be all it takes to discourage further indiscretions. Refrain from disciplinary action to protect the officers from legal problems. We may have the resources in future years to feel secure with such action, but at the present, it is prudent to sidestep legal entanglements.
- Follow Palm Beach's lead and write very clear and specific rules where they are needed. Some of the articles are ambiguous for a reason, and should be left that way, but others need to have clarification and specific examples to guide the membership.

A good example can be found in

Palm Beach's revision to the GCSAA's Article 7: Recognize and observe the highest standards of integrity in my relationships with fellow golf course superintendents and others associated with this profession and industry.

Palm Beach turned this into:

Section 8: When seeking employment:

- I will make certain the position is open before making application.
- B. I will obtain known information concerning the position from the local chapter when applying for a position in that area.
- C. I will, whenever possible, speak to the superintendent who is leaving or has left the position for which I am applying.
- D. I will ascertain and uphold the salary level in that area.

Section 9: At no time will I attempt to hire an employee who is presently employed by an area golf course without first consulting with the applicant's present employer. If the applicant claims to be unemployed, I will verify status with the last employer.

These adaptations make it clear what is expected when seeking employment or hiring new employees, but leave the door open for your own good judgment in those sticky situations, such as when you are recruited for a job and the prospective employer insists that the present superintendent not be told. You can strongly recommend that the superintendent be told, but if you are serious about seeking the position, you cannot disregard the wishes of your prospective employer.

Many other code issues could be examined but the point of this article is to encourage local chapters to take the lead in revising the Code and implementing an effective awareness program. Fear of litigation need not be an issue. Good people respond favorably when challenged to act with honor and integrity, and dishonorable people will feel uncomfortable and may choose to socialize elsewhere.

(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

BROOKSIDE LABORATORIES

- Soil testing/Analytical services
- Irrigation water testing
- Environmental testing

Providing a direct line of communication between the course manager and the lab

TOM BURROWS Turfgrass Analytical Service

•GCSAA certified •Penn State grad •FGCSA Past President •28 yrs as supt. •1989 FGCSA Distinguished Service Award

407-692-1221

1741 San Souci St Stuart, FL 34994

Roy Kimberly Sales Representative Res. (407) 793-6377



Terra International, Inc. Florida State Farmers Market 3503 South U.S. #1 Ft. Pierce, FL 34982 (407) 466-6607 1-800-451-9832

elcome to Green Side Up!

I feel a little bit like the act scheduled to follow Pavarotti, Streisand or Olivier. Dan and Irene have left some mighty large

footprints to follow, and I'll do my best.

Cooperative study with DER, USGS will yield

As we try new ideas and formats, let us hear from you so we can keep the magazine tailored to your needs and yet surprise you from time to

time. We always endeavor to bring you articles and items of interest that will keep you informed about our industry. Letters to the editor will be welcomed for story ideas and to register constructive criticisms.

Our association is taking a pro-active role in cooperating with the Florida Turfgrass Association, the Department of Environmental Regulation, and the U.S. Geological Survey in a groundwater study. The original purpose of the study was to study the effects of effluent irrigation on the mobility of pesticides in the soil. As a condition of our cooperation, we have asked that nutrient levels also be examined in the samples to be taken. Our goal is to refute the unsubstantiated claims that golf course operations are contaminating the groundwater. We see this as an opportunity to gather much-needed data to support our claims that well-managed golf turf is an environmental benefit.

much-needed data

Green



Joel D. Jackson, CGCS

The study will be conducted by the USGS. It will select three pairs of courses from the Orange-Seminole, Hillsborough, and Sarasota-Lee county areas. One course of each pair will use effluent irrigation, and the other will use deep well or surface water irrigation. Each of the six courses will have four test wells installed. Additionally, surface waters on each course will also be sampled to check for run-off contamination.

The initial phase of the study will consist of a questionnaire which we helped design and distribute. If you receive one of these questionnaires, please fill it out as accurately as possible and return it promptly. This information will give the USGS an insight into golf course operations.

We have recently had the good news that the DER wells on the Palm Beach National GC tested negative for contaminants. In fact, all compounds tested for were BDL (Below Detectable Levels). This upcoming study will give us the opportunity to add to the data from the Cape Cod study which also showed that the groundwater under the sandy soils of three golf courses did not contain any significant levels of pesticides. We are confident that this study will produced similar results.

Certainly, if there is a problem we will want to take the necessary steps to correct it. It has always been our mission to be stewards of the environment.

Clear things up completely with DIQUAT Herbicide.

If aquatic weeds are getting you down, we have the perfect prescription. DIQUAT Herbicide.

DIQUAT is a highly active, water soluble contact herbicide that controls a broad spectrum of floating, submerged and marginal aquatic weeds, like hydrilla, salvinia, water hyacinth and cattails.

salvinia, water hyacinth and cattails.

Not only is DIQUAT fast-acting and biologically inactivated when absorbed



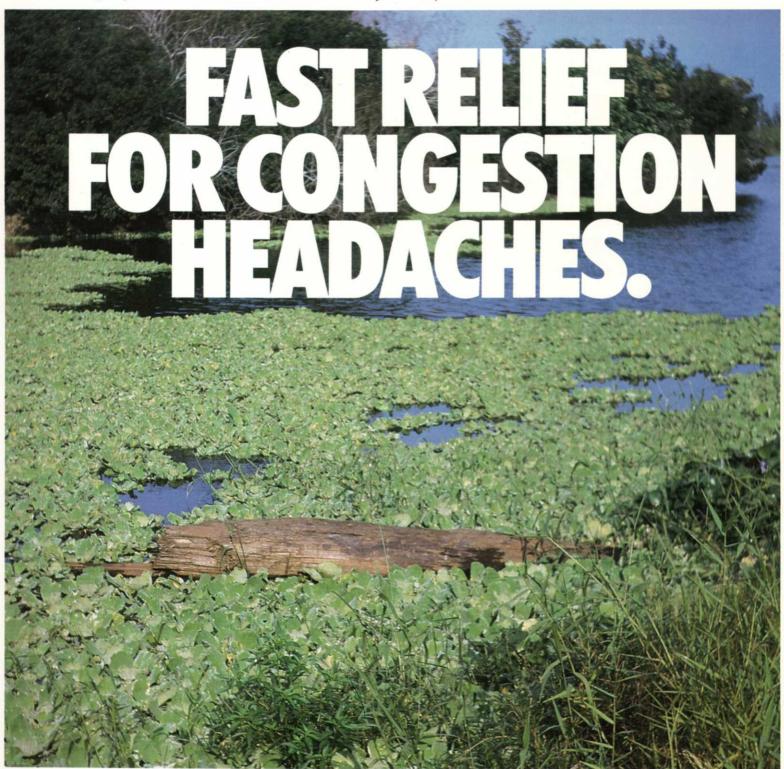
through soil, it has no fishing restrictions. So don't let your weed problems

develop into something serious. Give them a dose of DIQUAT, for really fast, long-lasting relief.

DIQUAT Herbicide H/A

Avoid accidents. For safety, read the entire label including precautions. Use all chemicals only as directed. Copyright © 1990 Valent U.S.A. Corporation. All rights reserved.





The preemergence you want with the fertilizer your turf needs.

The reputation of Ronstar speaks for itself. On golf courses, it's the leading preemergence for

control of goosegrass, crabgrass, *Poa annua* and other weeds.



Introducing LESCO 5-10-17 Mini with 0.95% Ronstar.

But until now, no product combined the effectiveness of Ronstar with a mini-particle-size fertilizer specifically formulated for spring application. LESCO 5-10-17 Mini with 0.95% Ronstar changes all that.

With an analysis that's low on nitrogen and high on phosphorus and potassium, this new mini-particle-size product makes roots, stolons and rhizomes thrive by giving dormant or nondormant turf a complete feeding that's perfect for spring application. This analysis promotes aggressive spring greenup and regrowth that make you and the course look good.

The preemergence you want combined with the fertilizer your turf needs is in stock now. Order today and take

advantage of the generous terms and discounts offered during the LESCO Early-Order Program.

To order, contact your LESCO sales representative or call (800) 825-3726 toll free.



LESCO, Inc., 20005 Lake Road Rocky River, Ohio 44116 (216) 333-9250

Contains Ronstar® Herbicide, a registered trademark of Rhone Poulenc, Inc.
PRE-M® is a registered trademark of LESCO, Inc.
Always read and follow actual label instructions before applying any pesticide product.