



# The Florida Green

Fall 1989



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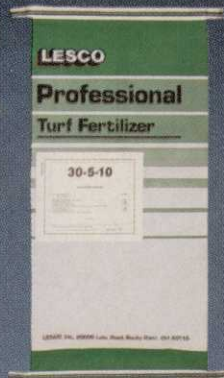
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equal.**



# The Florida Green

Official Bulletin of the Florida Golf Course Superintendents Association



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The 11th hole at Isleworth G&CC just west of Orlando, at about 8:30 on a summer morning. Photographer Daniel Zelazek was struck by the reflection on the water and the way the sun spotlighted the bed of impatiens under the overhanging tree branches.

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NOTICE: All correspondence concerning business matters, circulation, editorial and advertising should be addressed to the Editor, P.O. Box 5958, Lake Worth, FL 33466. Opinions expressed by writers in by-lined editorials are not necessarily those of this publication. "The Florida Green" is published quarterly Jan., April, July., Oct. Closing date for advertising and copy is 45 days prior to publication. Not copyrighted. Please credit the author and "The Florida Green." All advertising and circulation matters should be addressed to Irene Jones, Assistant to the Editor, at the above address or (407) 793-2497

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3.5% Urea Nitrogen	
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Soluble Potash (K <sub>2</sub> O)	9%
Magnesium (Mg)	1.0%
Sulfur (S)	8.0%
Iron (Fe)	1.0%
Manganese (Mn)	0.5%

Nutrient Sources: Urea, Methylene Urea, Ammonium Phosphate, Ammonium Sulfate, Ammoniated Superphosphate, Sulfate of Potash, Oxides, Ferrous Sulfate, Sulfates.  
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Lebanon Country Club

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SOLUBLE POTASH (K <sub>2</sub> O)	12.0%
Magnesium (Mg)	0.7%
Sulfur (S)	5.0%
Iron (Fe)	0.4%

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*Be proud of what you do... and help all of us do it better*



As I contemplated what I would say to you in this inaugural message, two thoughts dominated my feelings: One is pride in our profession and the other is service to our association.

I am very proud to be a superintendent. We are the key people in the golf industry. The diversity of talent displayed by superintendents across the nation and around the world is a credit to our profession. I am constantly inspired by — and grateful for — the leadership, ingenuity, dedication, perseverance, organization, and fellowship demonstrated by superintendents.

I now find myself the presiding officer of one of the finest associations in our industry. I am pleased to be able to serve the FGCSA to repay in some small measure for the benefits that I have received from the efforts of those who have so unselfishly helped to develop the FGCSA and promote our profession.

I want to congratulate all the superintendents who are serving the various chapters and the state association. Thank you for giving your time to help all of us.

The changing world about us, and the pursuit of excellence in our profession, will provide us with many challenges in the days and years ahead. We

have been addressing the areas of education, government relations, and research most vigorously. These issues and the improvement of our own internal communications will dominate our energies in the near future.

Let me close with this very personal thought about participation in associations. I was never much of a joiner, and like many of us, I was petrified at the thought of speaking before large groups. But as I began to enjoy the fruits of the labors of others who served my chapter, I felt obliged to become involved, to help out!

I finally volunteered to serve as a director of the Central Florida chapter. As I sowed the seeds of time and effort, I reaped a harvest of self-confidence, knowledge, and friendship.

I don't know who has benefitted the most, but it has been a personally and professionally rewarding experience that I urge all of you to try.

Joel D. Jackson, CGCS

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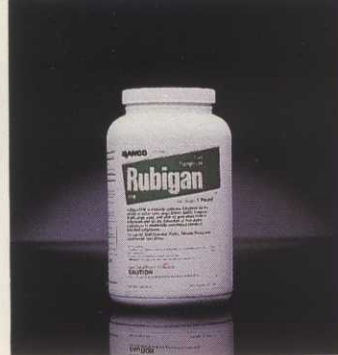
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**JEFF PRITCHARD**

*Director Golf Course Operations, PGA West, La Quinta, California*

## Former FGCSA president to seek national office

LAKE BUENA VISTA — At the urging of the FGCSA board of directors, Cecil Johnston, immediate past president, has agreed to run for director of the GCSAA.

Johnston, superintendent of Avila CC in Tampa since 1987, and about half a dozen other superintendents from around the country will vie for three seats on the national organization's board of directors when it meets Feb. 19-26 in Orlando.

"Because golf is a year-around proposition in Florida, it is difficult for superintendents down here to take the kind of time away from their jobs that's necessary in order to be effective at the national level," said Dick Blake, who preceded Johnston as FGCSA president.

"Florida has more golf courses — and therefore more superintendents — than any other state. We deserve representation on the national board and I think Cecil will represent us very well."

Blake, superintendent of Bocaire CC in Boca Raton, himself served on the GCSAA board from 1966 to 1971, the last year as president. He was superintendent of the Mt. Pleasant CC in Boyleston, Mass., at the time.

"With the GCSAA holding its meeting right here in Florida, we'll never have a better opportunity to get one of our own elected," said Joel Jackson, newly elected FGCSA president.

The FGCSA board unanimously voted to nominate Johnston for the office at its



KIEFFER/JANLARK

Cecil Johnston, left, gets his crest for FGCSA Immediate Past President from Dick Blake, a former GCSAA president who urged Johnston to run for a seat on the national organization's board of directors.

annual meeting during the Poa Annua weekend at Grand Cypress Resort here.

Johnston, 39, is a *summa cum laude* graduate of Lake City Community College with an Associate of Science degree in golf course operations.

Before returning to Avila as head superintendent, where he had been assistant superintendent from 1983 to 1984, Johnston was head superintendent at Feather Sound CC in Clearwater.

"I enjoy the challenge of working on projects that help satisfy our common needs," he said in response to the nomination. "I feel we can find creative ways to grow as professionals and as an organization, and I would sincerely like to participate in the process. I feel that serving as a director of the GCSAA is the best possible way for me to contribute to our profession.

"My employers encourage my

participation in all professional association activities and I have a fine staff. I will have the time to serve."

Johnston has served on the GCSAA scholarship and research committee since 1988 and is also on this year's conference and show committee. He was president of the West Coast GCSA in 1987-88 and was editor of its newsletter from 1984 to 1987. In 1984, his newsletter won the GCSAA award as the "Best Limited-Resources Product."

Johnston also has served the Florida Turfgrass Association on the scholarship and research tournament committee in 1987-88, the Florida Turfgrass Research Foundation funding committee in 1987-88, as a speaker at the 1987 FTGA conference and show and as moderator of the 1988 conference and show.

## IFAS gets research green despite technician problem

FORT LAUDERDALE — There won't be anybody to maintain it, but by mid-October, the 20,000-square-foot research green at the University of Florida's Research and Education Center here should be completed except for grassing.

"We don't want to grass it until we have the technician on board to take care of it," said Kevin Downing, CGCS, director of golf and landscape operations at Willoughby GC in Stuart, and chairman of the FGCSA Research Committee.

Most of the labor and materials for the

(Please See PANEL, page 16)

## AUTUMN SPOTLIGHT ..... Superintendents who will test the champions

Oct. 13-16 — **Larry Kamphaus**, Walt Disney World, Lake Buena Vista. Oldsmobile Scramble Finals.

Oct. 18-21 — **Larry Kamphaus**, Walt Disney World, Lake Buena Vista. PGA Tour Disney/Olds Classic.

Oct. 20-22 — **Thomas Crawford**, The Plantation, Venice. FSGA Life Begins at 40 Championship.

Nov. 3-5 — **Winfield Yount**, Suntree CC, Melbourne. Senior PGA Tour Fairfield Barnett Senior Classic.

Nov. 30-Dec. 3 — **Frank Cook**, Bardmoor CC, Largo. LPGA/PGA Tour JCPenney Classic.

Dec. 7-10 — **Jim Branstrom**, Palm Beach Polo & CC, West Palm Beach. PGA Tour Chrysler Team Championship.

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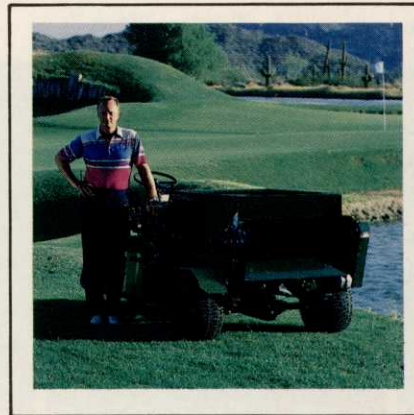
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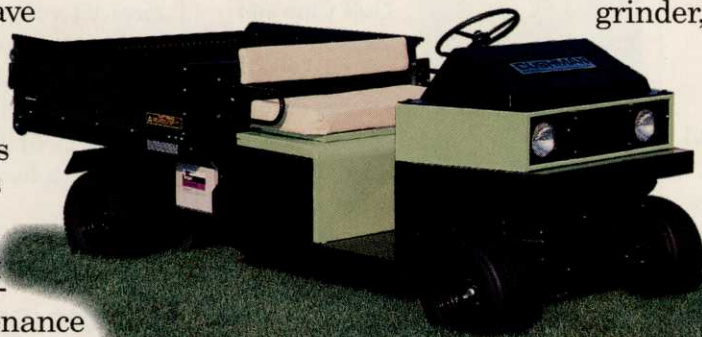
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## Panel urges FGCSA to hire technician as subcontractor

(Continued from page 12)

green have been donated and the South Florida GCSA will pick up the tab for the balance.

Clearing will be done by Lee Billberry & Associates of Lakeland; coarse sand for the choker layer was donated by Central Florida Turf of Avon Park; American Peat of Oxford is mixing the soil, while Rain Bird and Toro irrigation components have been donated by, respectively, Boynton Pump and Hector Turf.

Labor and supervision have been donated by High Ridge CC in Lantana, Willoughby GC and Palm Beach National GC.

Downing said a technician will be hired "as soon as we can work out the details."

The details that must be worked out involve the mechanism for paying the technician.

The University's Institute of Food and Agricultural Sciences, which operates the Fort Lauderdale REC, does not have money in its budget to pay for a technician to maintain the research plot at normal putting conditions. IFAS personnel estimated the cost at \$30,000 per year, counting supplies, equipment, administrative costs, and insurance as well as salary and fringe benefits.

At their May meeting, FGCSA board members voted to ask the Florida Turfgrass Association's Research Foundation to fund the technician through its Arnold Palmer Endowment Program, using \$13,000 which had been donated specifically for that purpose by the South Florida GCSA plus another \$14,000 which South Florida superintendents had raised for the project and had not yet turned over to the FTGA.

The FTGA demurred, however, citing the stringent legal constraints of its 501-C(3) tax status, which prohibit it from spending money on equipment, labor or personnel.

"We're going to ask the FGCSA Board to fund the technician directly on

a sub-contract basis — the same way we pay our executive secretary," Downing said.

"The FTGA (research grant) Awards Committee seems perfectly willing to fund proper research on the green. They just have to stay within their legal boundaries. They can't pay for labor; they have to pay for research."

The FGCSA board will consider the matter at its October meeting during the FTGA Conference and Show in Tampa.

## Longtime Poa Annuia host dies at Beach Club home



Henry Watkins

NAPLES — Henry Watkins Jr., 64, operator of the Naples Beach Hotel and Golf Club and longtime host of the Poa Annuia Classic each May, died June 30 in his penthouse apartment overlooking the club.

The Watkins name is synonymous with the development of modern Naples.

He was instrumental in adding the Granny Horn Memorial Scramble to the Poa weekend to raise money for graduate scholarships for turfgrass students in honor of the famed University of Florida turf educator. The event raised more than \$5,000 earlier this year.

Watkins is survived by his wife, Mary; two sons, Henry of Bronxville, N.Y. and Michael, now manager of the Beach Club; two grandchildren; and a sister, Sally Fitzgerald of Richmond, Va.

## Architect Edmund Ault dies; Famed for public courses

Edmund B. Ault, 81, one of the pioneers in designing economical municipal and public golf courses, died Aug. 13 after suffering a heart attack. He



Edmund Ault

was 81.

The Maryland architect, president of Ault, Clark & Associates of Wheaton, placed a premium on visibility and challenge.

"When a golfer makes a par, he should feel he has accomplished something," Ault

was fond of saying.

Among his designs are the Country Club of Las Vegas; Palmetto at Myrtlewood GC, Myrtle Beach, S.C.; Carrollwood Village, Tampa, Fla.; TPC at Avenel, Potomac, Md.; and Toftrees GC, State College, Pa.

A native of Washington, D.C., Ault received a degree in construction engineering from Columbia Technical Institute in Arlington, Va. He was elected a member of the American Society of Golf Course Architects in 1973 and a fellow in 1984.

## Poster illustrates Dye's two-tee system for women

CHICAGO — The American Society of Golf Course Architects is offering an illustrated poster explaining the two-tee system for women.

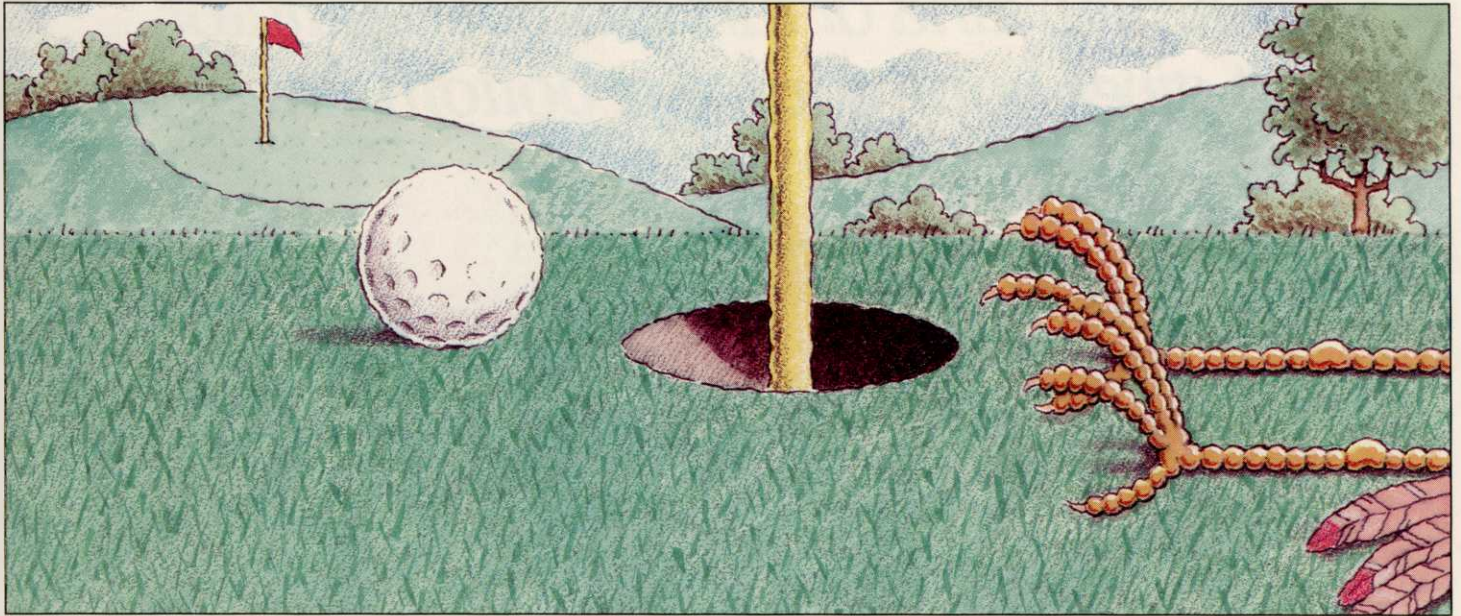
Text for the poster was written by Alice Dye, the two-time USGA Senior Women's Amateur champion and the only female member of the ASGCA. She explains the current research, why the system is gaining momentum, how to create new forward tees, and the cost of construction.

Illustrations show exactly how the two-tee system should be implemented, both on existing courses and new courses.

"Men have a choice of playing from different teeing grounds to accommodate their various abilities," Dye points out.

(Please see WOMEN, page 22)

# Your fairway shouldn't be the scene of fowl play.



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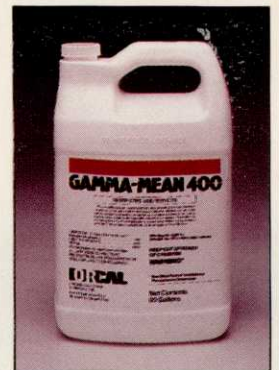
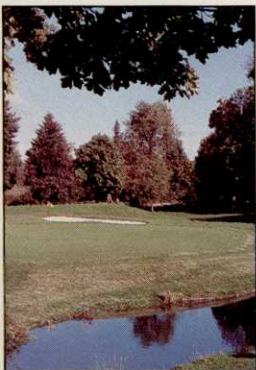
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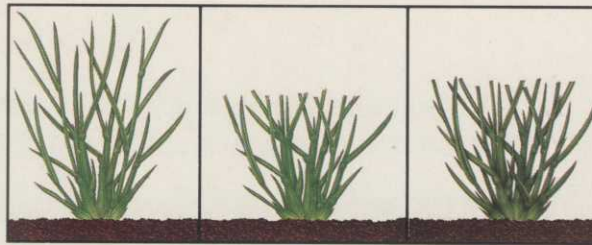
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can also manage your hard-to-mow areas more efficiently.

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2. Seven to 10 days after Cutless application, mowed sprig sometimes exhibits slight discoloration of treated area and leaf tip browning.
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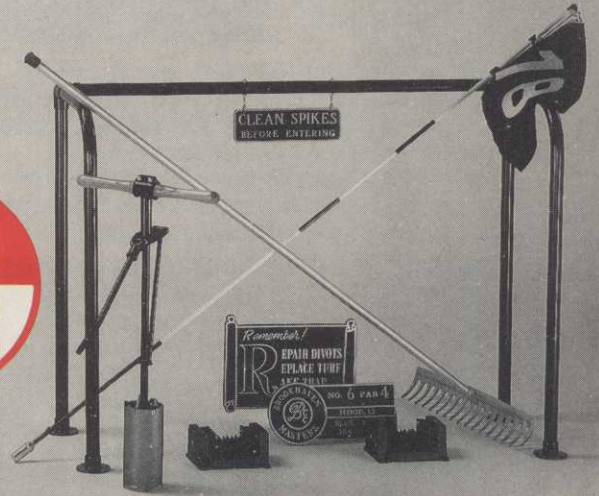
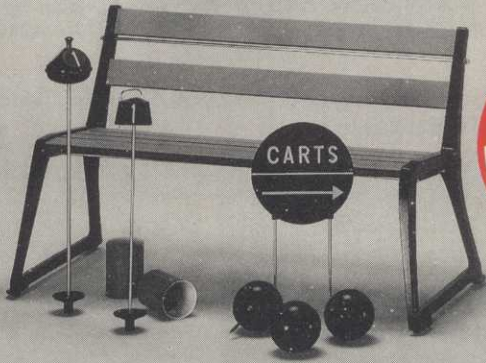
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## Women have no choice with current system of tees

(Continued from page 16)

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For more information, contact the ALCA at 405 N. Washington St., Suite 104, Falls Church, Va. 22046; phone 703-241-4004.

## GCSAA gives \$25,000 for research

LAWRENCE, Kan. — The GCSAA has donated \$25,000 to the USGA/GCSAA Turfgrass Research Committee to support work on new turfgrass varieties that require less water.

## Florida Development Report

(National Golf Foundation report, June 13, 1989)

### GOLF COURSES UNDER CONSTRUCTION

City	Course	Holes	Architect
Beverly Hills	Beverly Hills GC	18	Karl Litton
Bradenton	Tara G&CC	18	Ted McAnlis
Cape Coral	Sabal Springs	9	Gordon Lewis
Clearwater	Chi Chi Rodriguez Youth Foundation	18	Denis Griffiths
Clearwater	Wentworth G&CC	18	Steve Smyers
Clearwater	Crescent Oaks GC	18	Steve Smyers
Cocoa Beach	Links at Lake Poinsett	18	N/A
Dade City	The Cedars	18	N/A
Destin	Sandestin GC	9	Tom Jackson
Homestead	Keys Gate GC	18	N/A
Hudson	Beacon Woods G&CC	18	Steve Smyers
Jacksonville	Windsor Parks GC	18	N/A
Lake Worth	Wycliffe G&CC	18	Karl Litten
Lakeland	Bramble Ridge	18	Holloway & Assoc.
Leesburg	Plantation CC	18	J. Sanford
North Merritt Island	The Savannahs	18	Gordon Lewis
Oviedo	Ekana G&CC	18	Joe Lee
Palm Valley	Palm Valley CC	9	N/A
Rotonda	Pebble Beach @ Rotonda G&CC	18	DeVictor Langham
Sarasota	Laurel Oaks	36	Gary Player
Spring Hill	Timber Pines	9	Ron Garl
Stuart	Cutter Sound	18	Gary Player
Sun City Center	Sun City Center GC	9	N/A
Tampa	Cannon Ranch	27	Steve Smyers
Vero Beach	Grand Harbor GC	18	Joe Lee
Volusia County	Halifax Plantation	18	Bill Amick
Wellington	Binks Forest GC	18	Johnny Miller
West Palm Beach	Golf Club of Palm Beach	18	G. & J. Fazio
West Palm Beach	Ironwood CC	18	Arthur Hills

### GOLF COURSES PLANNED

Brevard County	Valkaria GC	18	Charles Ankrom
Cape Coral	Royal Tee CC	9	Gordon Lewis
Cape Coral	Sabal Springs	18	Gordon Lewis
Deland	Ranches at Daytona	18	N/A
Delray Beach	Polo West	54	Karl Litten
Delray Beach	Polo Trace	36	Karl Litten
Destin	Tidewater Beach & Golf Resort	18	Charles Ankrom
Fort Lauderdale	Ravinia	18	Jack Nicklaus
Goldenrod	Monterey	18	Ward Northrup
Haines City	Pine Oaks	18	Joe Lee
Hawthorne	Oak Tree Sports Club	18	Ward Northrup
Homosassa	Plantation Club at Sugarmill Woods	18	Hale Irwin
Jacksonville	Royal GC	18	Mark McCumber
Jacksonville	Glen Kernan	18	Jack Nicklaus
Jacksonville	Julington Creek	9	N/A
Jacksonville	Mill Cove GC	18	Robert Walker
Lake Worth	Wycliffe G&CC	18	Karl Litten
Melbourne	Washington Lakes GC	18	P.B. Dye
Miami	Fisher Island	9	P.B. Dye
Miami	Somerset	18	Jack Nicklaus
Naples	Lely Estates	54	Robert Trent Jones Sr.
Naples	Shamrock G&CC	18	Ward Northrup
Naples	Bretonne Park	18	Mark McCumber
Naples	Royal Wood G&CC	18	N/A
Palm Coast	Cypress Knolls	18	Player/Litten
Port St. Lucie	Southwest Port St. Lucie	18	Robert Walker
Punta Gorda	Marina South	27	Mark McCumber
Punta Gorda	Fairway Woodlands	18	Gordon Lewis
Ruskin	Golf Club at Cypress Creek	18	N/A
Sarasota	Sorrento Valley CC	18	Bill Amick
Sarasota	Florida Palm Aire	18	Player/Litton
Sebring	Highland Ridge GC	18	Steve Smyers
Spring Hill	N/A	18	Joe Lee
Stuart	Glen Eden	36	Karl Litten
Vero Beach	Orchid Island	18	Palmer/Seay
West Palm Beach	Lion Country Safari GC	18	N/A
West Palm Beach	Ibis/Seminole	36	Jack Nicklaus
Windermere	Glen Muir	18	Desmond Muirhead

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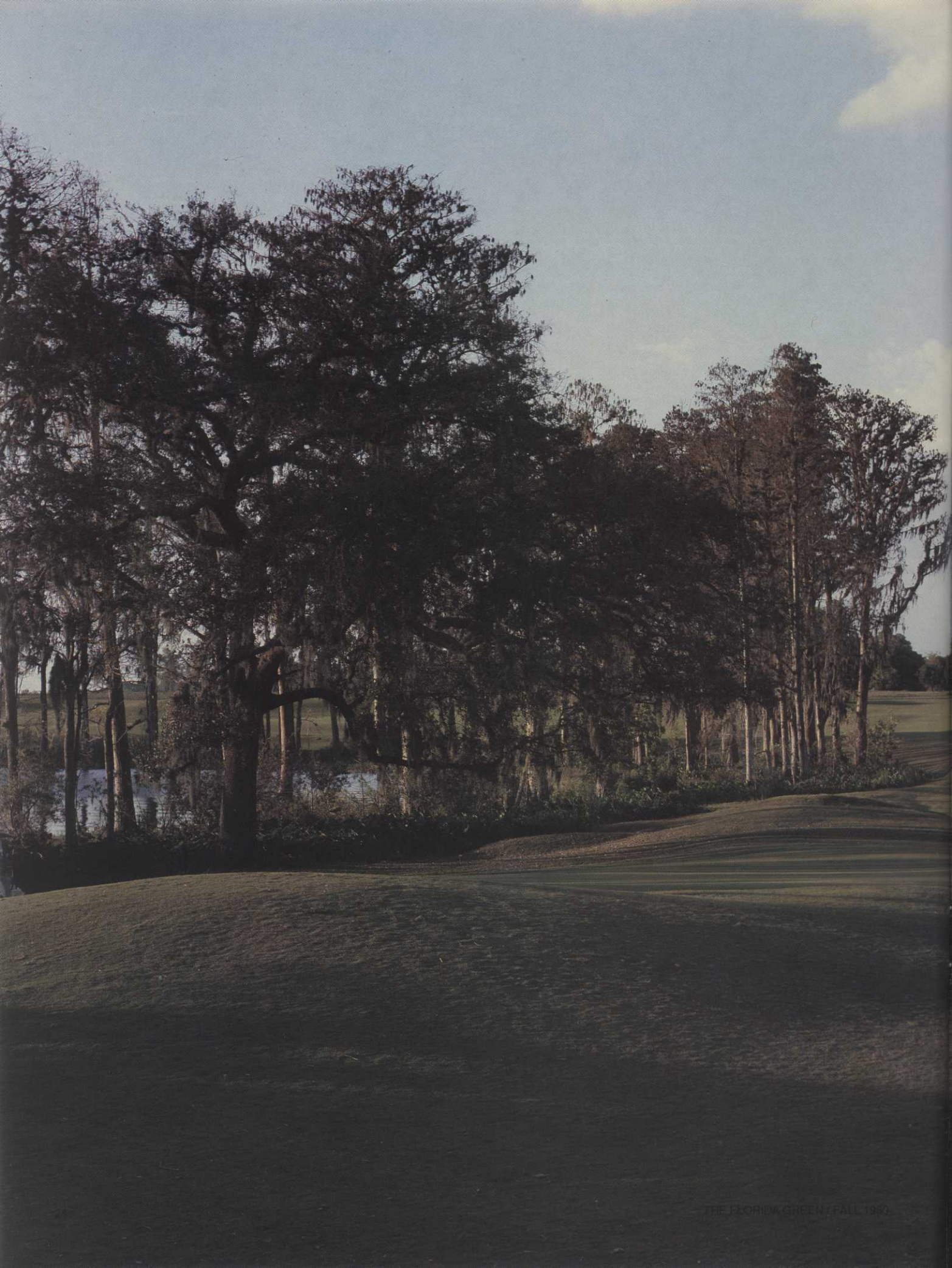
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**15 years ago, he was wielding a shovel on a crew at Walt Disney World. Now he's president of the FGCSA and responsible for growing bentgrass year-around at Arnold Palmer's private playground in Florida. He says...**

# 'It's a joy to maintain'

**BY LARRY KIEFFER**

WINDERMERE — Most people begin their careers at the bottom of the ladder.

But if you don't count a brief stint as a golf course construction laborer during the summer between high school and college, Joel Jackson started on the golf course management ladder in the middle, and then deliberately stepped *down* to the bottom before working his way up.

To the top.

In the spring of 1988, the former Coast Guard officer, geologist, junior high school teacher, construction supervisor, maintenance crew foreman and ditch digger —

and he held those jobs in that order between 1965 and 1974 — was selected personally by Arnold Palmer to be head superintendent at Palmer's home course, Isleworth G&CC.

A year later, Joel D. Jackson, CGCS, became the ninth man to preside over the Florida Golf Course Superintendents Association.

He will be president this February when the Golf Course Superintendents Association of America brings its annual International Golf Course Conference and Show to Orlando for the organization's first Florida visit since 1969.

And in January, he will become the third superintendent to edit this publication, succeeding Dan Jones, who is retiring after 15 years.

"It's going to be an interesting year," says the taciturn Tampa native, a grin indicating he's aware of the understatement.

"But it's not going to be nearly as hairy as it might sound.

"In the first place, I have been through a full one-year cycle at Isleworth and I've got a very capable assistant. So I don't have to be there 24 hours a day. I no longer feel guilty about locking up and going home.

*(Continued on next page)*







DAN JONES/FGCSA

Among the tricks Jackson must use to keep bentgrass alive during Florida's hot summers is to shade certain hot spots. Surface temperature is a good 10 degrees cooler under the screen.

(From page 25)

"The FGCSA is pretty well organized now and a lot of things happen more or less automatically. I hope to have an impact on unifying the state, on improving communication among superintendents and with the general public, and I'd like to see more superintendents organize and become involved in our activities — particularly in the Panhandle and the north central area.

"But if I don't do any of those things,

the FGCSA will still be here a year from now, strong as ever. I'm not a politician.

"As for the show, I don't really have all that much to do except welcome my fellow superintendents to Florida. It's the GCSAA's show. We have several state officers on various GCSAA committees connected with the show. They're doing

*During Florida Green interview, Jackson interrupted a telephone conversation with GCSAA President Dennis Lyon to coordinate a helicopter landing for a television crew.*

the work, not me.

"And *The Florida Green*? Well, you can't call me an editor in the sense of Dan Jones. It's an entirely different job now. I agreed to take it because I was chairman of our publications committee last year when Dan announced his retirement and we decided to contract a professional company to produce the magazine for us.

"Since I do know something about publications (he founded and edited the Central Florida GCSA newsletter for eight years), I thought I could contribute to the transition. I decided to accept the job if the board followed Dan's suggestion and offered it to me."

Jackson reels off the analyses of his leadership positions with the same precise logic that led him through his series of unusual career moves.

In his own mind, he's only ever had two career ambitions.

"Up through my second year of graduate school, all I ever wanted to do was get

(Continued on page 28)

## JOEL D. JACKSON, CGCS

**AGE:** 47

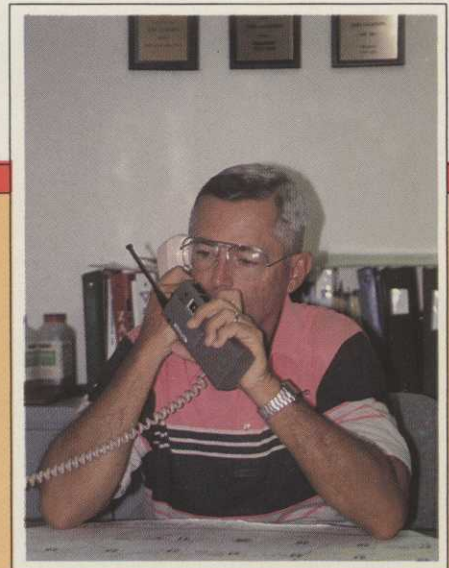
**EXPERIENCE:** Apollo Beach GC, Apollo Beach, 1960-61 construction laborer on summers and weekends during high school and college; Golf Course Architect William Dietsch, 1971-73 construction supervisor; Pembroke Lake GC, Pembroke Pines, foreman 1974; Lake Buena Vista GC, Walt Disney World, began as laborer (1974), promoted to foreman (1974), assistant superintendent (1976), superintendent 1980-88; Isleworth G&CC, Windermere, superintendent since June, 1988.

**OTHER JOBS:** U.S. Coast Guard officer 1965-68; University of South Florida, Tampa, graduate teaching assistant in geology 1968-70; Apopka Junior High School, science teacher 1970-71.

**EDUCATION:** Plant High School, Tampa; B.A. geology, University of South Florida, Tampa

**PROFESSIONAL:** Certified 1988; president FGCSA 1989-90; editor *Florida Green* effective Jan. 1, 1990; president Central Florida GCSA and editor of chapter newsletter.

**PERSONAL:** Married (Susan 1965) with one daughter (Jennifer 15).



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## COVER STORY

*A fate worse than sand awaits the unlucky golfer whose approach to the 18th green is short. Mounding is typical of Isleworth, which lists six Fly-Mos on its equipment inventory.*

*(From page 26)*

my Ph.D. and become a geology professor," said Jackson, who served three years in the U.S. Coast Guard after graduating from the University of South Florida in Tampa with a B.A. in geology. On his final tour, he commanded a LORAN (Long Range Navigation) station on South Caicos in the British West Indies.

"It was an isolated post — no dependents — and it was time to go to grad school. That was my goal." So he left the Coast Guard.

He returned to USF but, after two years of study, Jackson's major professor was unable to help him complete his thesis.

"You only get an assistantship for two years. I had my two years and didn't have a thesis. It was time to move on," he says,



DANIEL ZELAZEK

dismissing the dissipation of a lifelong dream without so much as a philosophical sigh.

He taught general science in junior high school for one year and then, in 1971, he climbed onto the golf-course-management

ladder — at the middle.

He went to work with architect Bill Dietsch, helping to supervise construction of new golf courses. Jackson had worked for Dietsch on the construction of Apollo Beach GC during the summer between

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high school and college and on weekends during his first year in college.

During the next two years, Jackson worked on a variety of projects, including the construction of Mariner Sands GC in Stuart (with architect Frank Duane) and the remodeling of Pasadena GC in St. Petersburg, site of one of the oldest events on the LPGA Tour.

"When the gas crunch hit in 1973, construction slowed, but I got a job at Pembroke Lakes (in Pembroke Pines) during the final phases of construction. I grew it in and stayed on as foreman."

A year later, Jackson heard that Walt Disney World had openings on the maintenance crew at Lake Buena Vista G.C.

"I had to go through 'Casting' and they told me that I was overqualified to start where nearly everybody starts at Disney — at the bottom. But they offered me a job and I took it. I had confidence in my ability and I thought Disney would be a good employer.

"I started as a crew laborer with a shovel in my hand. I left 14 years later as a certified golf course superintendent and, with their blessings and encouragement, an officer of the FGCSA."

For the record, Jackson made foreman in six months and assistant superintendent two years later. Four years after that, in 1980, he was named superintendent.

Then in June of 1988, six months after gaining certification, Jackson started over again. Only this time he started at the top.

After an extensive series of interviews, Arnold Palmer selected Jackson to succeed Dick Verbeten as superintendent at Isleworth, the posh playground behind the Bay Hill Club on Lake Butler, where the homes are easy to mistake for clubhouses.

Isleworth is not just any run-of-the-mill, first-class joint.

Palmer is building his home here. So is his Isleworth partner, Mark McCormack, the brilliant Brit who invented the profession of sports agent.

Verbeten, who had grown the course in and kept its bentgrass greens alive through an exceptionally hot, muggy Florida summer, had become so worn out from the effort that Palmer decided the struggle wasn't worth it. He decided to pull the the cool-season bentgrass out and replace it with turf more suited to Florida's climate — Tifdwarf bermudagrass.

Jackson was hired for his experience with bermudagrass and Verbeten moved over to maintaining the grounds and common areas.

Then, two days before the bentgrass was to come out, Palmer had a change of heart.

"Basically, the greens looked a lot better in May of 1988 than they had the first year and Mr. Palmer had promised the members bentgrass greens for at least three years, so he said, 'Let's give it another try,'" says Jackson, recalling

*(Continued on page 30)*

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(From page 29)

his first week on the job.

"So I suddenly found myself in the bentgrass business and I didn't know a thing about it.

"Dick Verbeten gave me a crash course in bentgrass and has been a tremendous resource ever since. I talked to a lot of other fellows, too. David Lowe at The Plantation at Ponte Vedra was particularly helpful.

"David gave me one piece of advice that has really stuck with me: 'You've got to learn how to manage bentgrass,' he said. 'You can't let it manage you.'"

Jackson did and Isleworth's greens have survived two more summers now. They were playable even in late August. Bentgrass is probably a permanent fixture.

"It's a year-to-year thing. If we have another summer like the first one, we may pull it out. Or if we start getting a lot of traffic in the summer, we will have to pull it out.

"But there is no doubt in my mind that bentgrass is a superior putting surface," says Jackson, an 18-handicapper who says he had seen bentgrass only once (at Pebble Beach) before being asked to grow it.

"It yields to the ball. With bermudagrass, the ball must yield to the turf."

In addition to weather, Jackson has had several other factors in his favor this past summer.

"We can start with my assistant and two OJT students (from Lake City Community College's School of Golf Course Operations).

"You have to have an adequate staff to keep this grass alive," he says. "From 10 a.m. until you put the course to bed, you have to be checking the greens constantly — at least one person for each nine holes and I heard that one place in Texas has two for each nine."

And Jackson is especially proud of his assistant, Bob Perez, who did his OJT under Paul Lattshaw at golfdom's national shrine, Augusta National GC.

"I was looking for somebody with supervisory experience and experience with bentgrass. I couldn't have done any better."

Pressures of maintaining the temperamental turf on his greens aside, Jackson is delighted with the layout routed by Palmer and designed by his architect-partner, Ed

Seay. It occupies 170 acres of the 850 which comprise the development.

"It's a real joy to maintain," he says. "We can do 98 percent of the maintenance with five-gang mowers. There are no gimmicks, no tricks... just an honest-to-goodness good golf course with outstanding vistas."

On a clear day, eight large lakes can be seen from various parts of the former orange grove. All are on the Butler chain (Lake Butler itself abuts the property), which has been designated a "Pristine Waterway."

Also enjoyable, according to Jackson, is the Palmer aura that covers the project.

"Everybody has a lot of affection for the man because of the way he conducts himself," Jackson says. "He is a very hard worker and nothing was ever given to him — he earned it all.

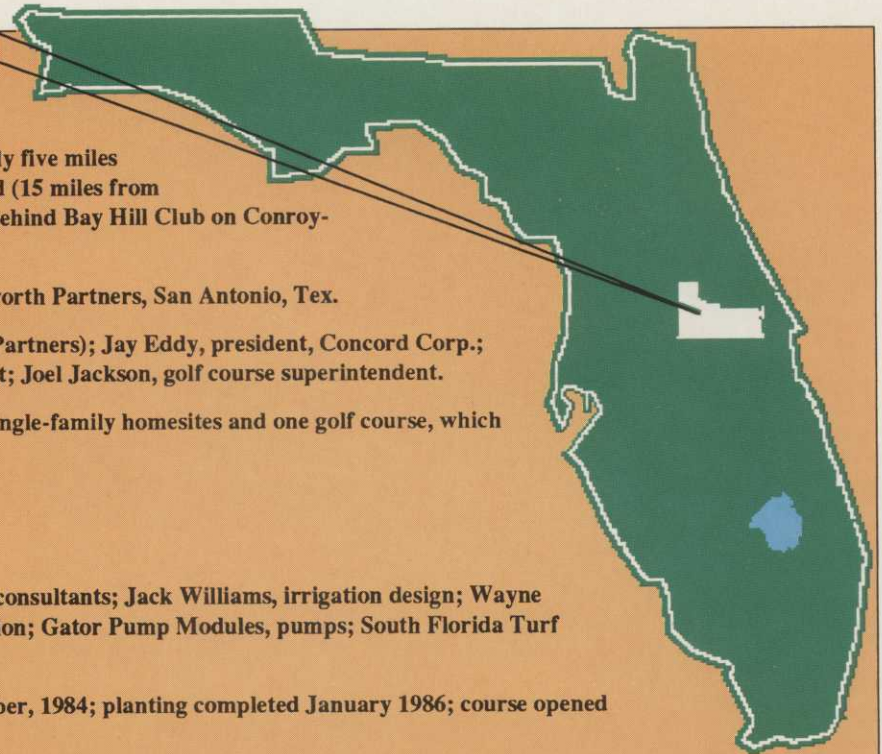
"For that reason he gets a lot of respect and loyalty from all of us. Loyalty is very big with him.

"If we hold him in awe, it's for what he has been able to do, not because he happens to be famous.

(Continued on page 32)

## ISLEWORTH G&CC

- LOCATION:** Windermere. Approximately five miles north of Walt Disney World (15 miles from entrance to theme parks) behind Bay Hill Club on Conroy-Windermere Road.
- DEVELOPER:** Concord Corporation/Isleworth Partners, San Antonio, Tex.
- MANAGEMENT:** Arnold Palmer (Isleworth Partners); Jay Eddy, president, Concord Corp.; Carter Speer, vice president; Joel Jackson, golf course superintendent.
- SIZE & SCOPE:** 850 acres comprising 391 single-family homesites and one golf course, which uses 170 acres.
- POLICY:** Members and guests only.
- ARCHITECT:** Ed Seay/Arnold Palmer
- CONTRACTORS:** Dave Harmon, golf course consultants; Jack Williams, irrigation design; Wayne DuBois, irrigation installation; Gator Pump Modules, pumps; South Florida Turf Nurseries, grassing.
- CHRONOLOGY:** First dirt moved in November, 1984; planting completed January 1986; course opened in October, 1986.



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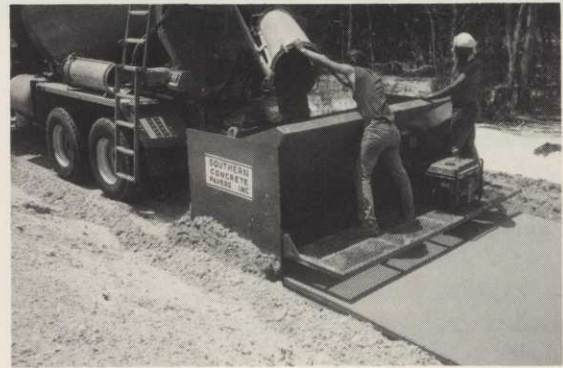
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DANIEL ZELAZEK

The approach to No. 12 is one of only four shots on the course guaranteed to bring water into play.

(From page 30)

"If for no other reason than that, Arnold Palmer deserves a 'squared-away' crew," says Jackson, applying a naval term for well-disciplined to employees of the man known worldwide as "the general."

Although Jackson says his leadership values include a sense of humor, fairness, respect and dignity, he says he expects his staff to behave professionally at all times.

"Some of the people may be here only temporarily, but while they are here, this is what they do for a living and they ought to behave like it," he says. "Don't waste my time getting your act together."

## COVER STORY

### FACTS & FIGURES

**LENGTH:** 5,291 yards (rating 69.9) to 7,097 yards (rating 73.7)

**TEES:** Three or four on each hole. Turf: Tifway II cut to 3/8 inch; overseeded with Palmer ryegrass November through April.

**FAIRWAYS:** Rolling and undulated comprising about 50 acres. Turf: Tifway II cut to 1/2 inch. Not overseeded.

**GREENS:** Average 7,000 square feet. Stimpmeter goal in cool season: 9.5. Turf: bentgrass cut to 1/4 inch in summer, 5/32 in cool season, 3/16 in late spring.

**ROUGHS:** 120 acres. Turf: Tifway II cut 7/8 inch to 1-1/4 inch.

**WATER:** Two retention/irrigation ponds totaling 17.5 acres contained on property, which also abuts Lake Butler, one of Florida's larger lakes. Water comes into play on 10 holes, although six of them require bad tee shots to bring it into play.

**BUNKERS:** 25 bunkers filled with native sand which has been screened. Lips are Tifway II.

**VEGETATION:** Oak, raintree, cedar, crepe myrtle, oleander, azalea, iris, day lillies, juniper, dwarf oleander, heather; more than 10,000 annuals are planted in 150 beds around golf course, clubhouse and tennis clubhouse.

**IRRIGATION:** Toro Varitime II hydraulic 80 controllers, two 100-hp pumps, one 25 hp jockey. More than 2,000 sprinkler heads.

#### EQUIPMENT:

5 triplex greensmowers, 4 Toro 350D 5-gang hydraulic mowers, one Toro 450D 5-gang mower, 6 walking greensmowers, 1 power trap rake, 2 100-gal. spray rig, 1 300-gal. spray rig, 1 Toro vacuum sweeper, 1 blower, 2 Kubota utility tractors, 1 Kubota front-end loader, 8 Club Car CarryAll IIs, 3 Daihatsu utility vehicles, 1 3-wheel Cushman with Vicon spreader, 1 Ryan fairway aerifier, 1 Ryan greens aerifier, 1 bucket truck (not licensed for highway), 1 dump truck, 2 Toro 322D rotary mowers, 6 Flymos.

#### STAFF:

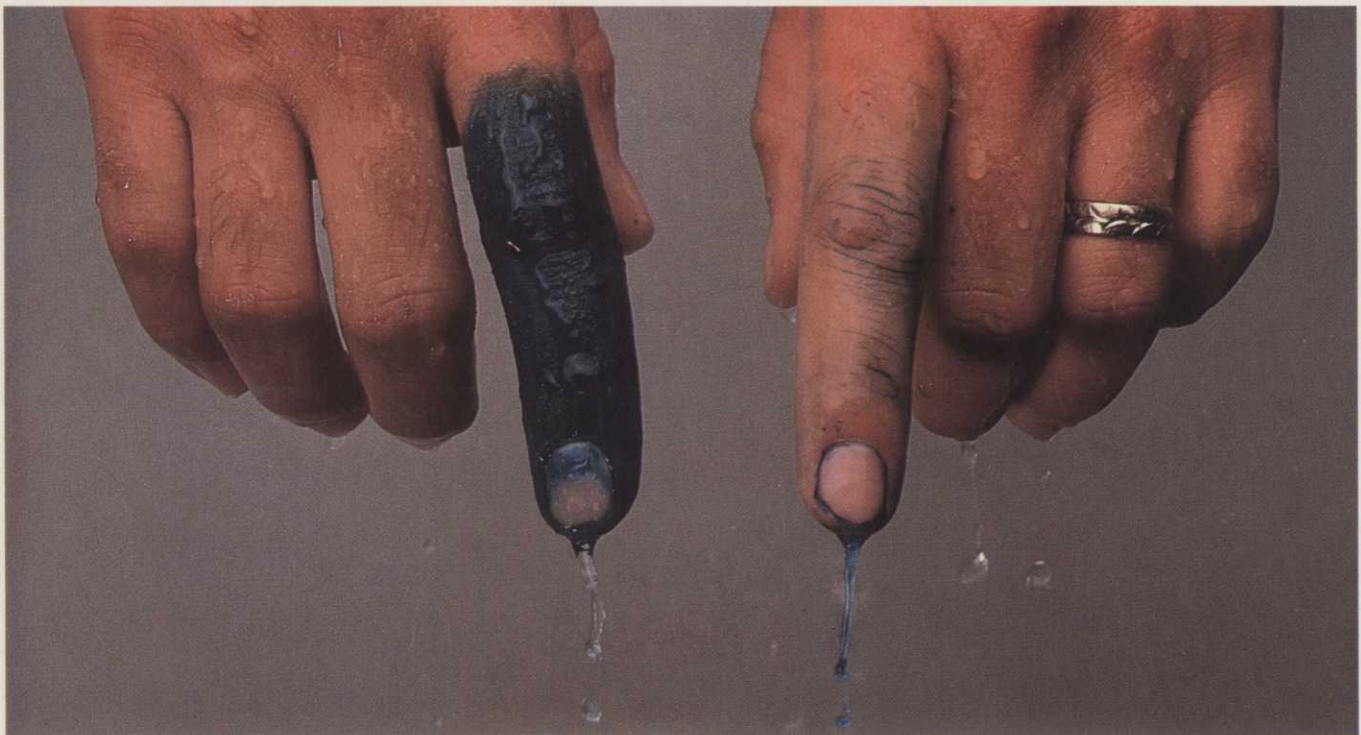
Total of 31 to maintain golf course and landscape, not counting entrances and common areas: 1 assistant for golf course, 1 assistant for landscape; 1 secretary, 2 mechanics, 1 irrigation technician, 1 spray technician, 1 greenhouse technician, 9 landscape crew and 13 golf course crew.



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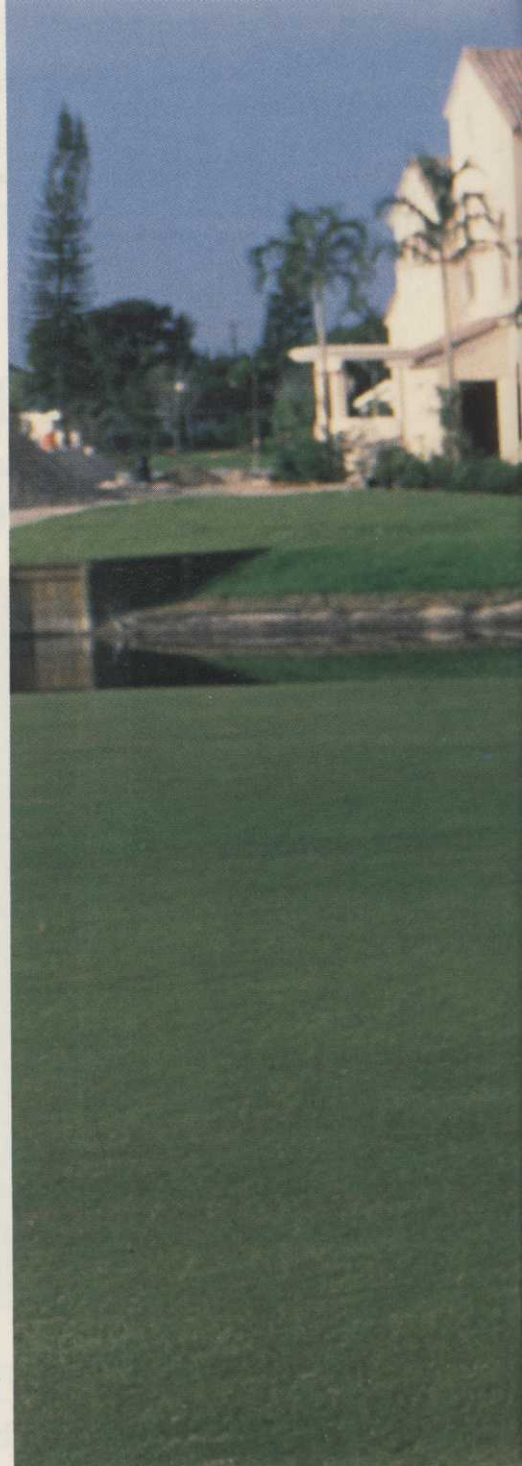


# *Distinguished Service Award*

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1985 ..... William Wagner  
1986 ..... Tim Hiers  
1987 ..... Dan Jones  
1988 ..... Mark Jarrell

*'I believe in giving back  
that which has been so  
freely given to me'*



**BY JIM FALLON**

Two days after graduating from the University of Florida with a bachelor of science degree in ornamental horticulture, Mark Jarrell landed his first job. He became the head superintendent at the University of Florida GC, perhaps the only 22-year-old head superintendent in America.

That was in 1973, the onset of a professional career which has seen the continuous personal pursuit of excellence. It



MIKE BAILEY/FGCSA

reached its zenith last autumn when the FGCSA honored Mark Jarrell, CGCS, with its Fourth Annual Distinguished Service Award.

Choked with emotion, the West Virginia native accepted the commendation "in the name of all superintendents. . .the greatest bunch of hardest working guys ... all of you here made this day possible," he said.

Later he was to admit, "That moment was the highlight of my professional life.

No doubt about it, nothing else is even in the same league."

And Jarrell plays in the big leagues. He is head superintendent at Palm Beach National GC and is very active in the affairs of his profession.

"I believe in giving back that which has been so freely given to me," he said.

Locally, he is a past president of the Palm Beach Chapter and has held every other office in that organization except

secretary. No committee has escaped his membership since 1980.

Statewide, Jarrell has been chairman of the public relations committee and a member of the publications, research and FTGA committees.

"He's a pure thoroughbred," said Dick Blake, past president not only of the Florida GCSA, but also of the Golf Course Superintendents Association of America.

*(Continued on page 36)*

(From page 35)

"He's out to win every race and, best of all, he's successful."

Nationally, Jarrell's efforts on behalf of the GCSAA as a two-year member of the public relations committee have not gone unnoticed.

"His work has been a great asset to GCSAA and his support is valued tremendously," said John Schilling, executive director.

"Mark's among the most articulate and thoughtful spokesmen for the profession in this country," adds Pat Jones, GCSAA communications director.

Jarrell is a director of the Florida Turfgrass Association, where he sits on the awards, funding-endowment and superintendent affairs committees

Although he holds a four-year degree, Jarrell says continuing education is the key to success as a superintendent.

He became certified in 1980, despite some difficulty with the financial management section of the six-hour test.

"If I had it to do over again, I would have taken more business management courses in college," says Jarrell. He also says he probably would recommend the three-year associate-degree program at Lake City College over the four-year program at Gainesville to any youngster aspiring to become a superintendent.

"They have an outstanding program up there and they don't have anybody at Gainesville who's really doing anything in golf right now," says Jarrell, who also finds time to write a regular column for *Golfweek*, the nation's weekly golf newspaper.

"Even though he claims no training as a writer other than paying attention in English class, Mark was one of the best writers on my staff — and I'm including the full-time writers and editors," says Larry Kiefer, former executive editor of *Golfweek* and soon to become publisher of *The Florida Green*.

"He gave us immediate credibility with superintendents and, even more importantly, he was single-handedly responsible for raising the consciousness of our readers on what it takes to maintain the golf courses they tear up."

Doing those routine chores of maintain-



MIKE BAILEY/FGCSA

*'If I had it to do over again, I would have taken more business management courses in college...I like being able to use my own creative abilities. I love getting involved in construction projects.'*

Mark Jarrell

ing a golf course are "to me, the most difficult part of the job," says Jarrell. "Normal routine maintenance is boring. I like being able to use my own creative abilities. I love getting involved in construction projects."

Jarrell, who likes nothing better than climbing aboard a cat and shaping some dirt himself, hopes someday to focus his creative abilities as a golf course architect.

"It's just a dream," he says. "It will be very difficult to achieve.

"Everybody who has made a few thousand dollars on the Tour hangs out a shingle as an architect, even if he doesn't know the first thing about what it takes to build and maintain a golf course. They lend their names to the real architects and then collect 70 percent of the fees. It's not fair."

His interest in architecture goes way back.

After graduating from high school in New Smyrna Beach, where he lettered in baseball, basketball and cross-country, Jarrell's father — the local city manager — suggested Mark take a part-time job at nearby Sugar Mill GC, then being constructed under the supervision of golf course architect Lloyd Clifton, a family friend.

"That's when I made up my mind about my future," said Jarrell. He says Clifton and his turfgrass professor at Gainesville, the late Dr. G.C. "Granny" Horn, have had the greatest influence on his professional life.

Jarrell worked at Sugar Mill on vaca-

tions and holidays. In 1975, he left the University of Florida course to take the top job at Sugar Mill, where he remained until he went to Palm Beach National in 1979.

Despite his heavy professional involvement, Jarrell, the father of three — Robert, 18, Steve, 16 and daughter, Jamie, 5 — says his family is the center of his existence.

"Everything begins and ends there."

His most trying moments came in 1987 when Jamie became ill but, for months, doctors could find nothing wrong. Finally they discovered a brain tumor.

Three operations later, Jamie has reached 95 percent recovery.

"We're expecting full recovery in due time," he said. "Words can't describe my gratitude. . . I've had tough days, but that was the most trying time of my life," he added.

When he needs relief from pressure, Jarrell packs SCUBA gear and heads for places like Cozumel on Mexico's Yucatan Peninsula.

"I've always loved the water, especially exploring the ocean's floor. That's exciting," he said.

He holds membership in the Cousteau Society (underwater exploration), Wilderness Society (environmental affairs) and the American Space Foundation (outer space exploration). He also collects coins and Civil War Memorabilia.

"Balance seems to be the key to a full life," he says.



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KIEFFER/JANLARK

The FGCSA executive team for 1989-90, from left: Tom Benefield, Beacon Woods GC, secretary/treasurer; Ray Hansen, Ocean Reef Club, vice president; Joel Jackson, Isleworth G&CC, president; Cecil Johnston, Avila CC, immediate past president.

## If you take something out, give it back



KIEFFER/JANLARK

Joel Jackson addresses a largely home audience at the Crowfoot Open banquet at Grand Cypress Resort just minutes from his own course.

LAKE BUENA VISTA — “If you get anything out of our organization, then you should put something back in,” said Joel Jackson, CGCS, newly elected FGCSA president, in his inaugural address Aug. 5.

“That’s why I’m here today,” he continued before a “hometown” crowd of about 200 superintendents and guests at the annual Crowfoot Open Banquet at the Grand Cypress Resort Conference Center.

The Crowfoot is sponsored by the new president’s home chapter, Central Florida GCSA, which he also served as president. His own course, Isleworth G&CC, is less than 5 minutes from Grand Cypress’ back gate.

Jackson succeeded Cecil Johnston of

Avila CC in Tampa. He was succeeded as vice president by Ray Hansen of Ocean Reef Club on Key Largo who was succeeded as secretary/treasurer by Thomas Benefield of Beacon Woods GC in Hudson.

Directors for 1989-90, and the chapters they represent: Joe Ondo, CGCS, Winter Pines GC, Winter Park, Central; Lou Conzelmann, Fiddlesticks, Fort Myers, Everglades; Paul Crawford, Palm Beach CC, Palm Beach; Buck Buckner, Orange Tree CC, Orlando; Bill Jeffrey, CGCS, Indian Creek CC, Miami Beach, South Florida; Larry Livingston, CGCS, Gator Creek GC, Sarasota, Sun Coast; Mike Perham, CGCS, The Moorings Club, Vero Beach, Treasure Coast; Frank Cook, Bardmoor CC, Largo, West Coast. 🇺🇸

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*Two clubs in South Florida have been sued for not protecting their members from the painful — and sometimes fatal — bite of this unwelcome immigrant.*

# FIRE ANTS

**BY ROBIN GOODELL**

DELRAY BEACH — Recently, two country clubs in South Florida have been sued by golfers and tennis players after being stung by fire ants.

In one case, the victim has sued for damages due to pain and suffering. In the second case, the victim's *survivors* have sued, claiming their relative's death might have been prevented if the club had controlled the fire ants or posted a warning about them.

The toxic venom produced by the ants induces an allergic reaction in all people, ranging from mild itching to burning to death.

Fire ants have the potential to become a far greater insect pest to golf courses, recreation and lawn areas than mole crickets or grubs have ever become.

Legal liability for fire-ant bites is becoming an ever-increasingly important factor as the exotic pest becomes more difficult to eradicate.

The extent to which a property owner can be held liable for the sting of a transient, venomous insect has yet to be established in the courts, but it soon will be. And no matter what precedent is set, undoubtedly it will continue to be litigated.

And, in the meantime, fire ants are here to stay. Our best defense as recreational area managers is the education of the users and our staffs. We must be sure to imple-

ment (and document!) aggressive control programs, using measures recommended by state and federal agricultural agencies.

Here are six things a golf course manager can do:

1. Keep records of pesticides purchased and how they are used to show the intent to control the pest.

2. Key personnel should always carry a pound or two of a fire-ant killer such as Amdro so mounds can be treated as soon as spotted.

3. The manager of the facility should set up an information station in a conspicuous place to educate users of the facility on what to do in case of an attack by fire ants.

4. First aid kits should be readily available. These kits should contain a plentiful supply of over-the-counter insect sting treatments.

5. Any person known to have a history of allergic reactions to insects should be advised to consult his physician about carrying a sting bite kit.

6. The pro shop, main office and information center all should have the addresses and telephone numbers of the nearest emergency room, the nearest doctor's office or clinic, and the nearest paramedic station.

**EDITOR'S NOTE:** *Robin Goodell is superintendent of Hamlet CC in Delray Beach and a member of the Palm Beach GCSA.*



**... and the bad news just got a lot worse. Turn the page.**

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*And the bad news about fire ants is...*

# New mounds producing 200 queens

**GAINESVILLE** — Fire ants have always been bad news, but the news just got worse.

A new form of fire ant colony, with thousands of queens, is spreading through the Southeast.

"It means four times as many ants and almost one solid ant nest," said Phil Koehler, an entomologist with the University of Florida's Institute of Food and Agricultural Sciences.

An IFAS-USDA study near Paddock Mall in Ocala found 30 to 40 fire-ant mounds per acre back in the days of single queens. Now, there are 5,000 mounds per acre — about every 5 feet — with 200 queens per mound.

"When a queen dies in a single-queen nest, the whole nest dies," said Mike Glancy

of the USDA's Agricultural Research Service in Gainesville.

"With multiple queen mounds, they just scatter. The workers do not have loyalty to a single queen, and will accept any queen. The more the merrier."

Multiple-queen fire ants live in greater concentrations and are more aggressive in hunting for food than single-queen fire ants. They have been known to attack sick people in hospital beds and the nipples of nursing goats.

Queens from multiple queen nests fly 8 to 10 miles on their mating flights, compared to half a mile for queens from single-queen nests.

"This is a more aggressive insect, which means more human contact, which means more health problems," Glancy said.

Bill Becker, IFAS safety expert, says that about one person a year dies of allergic reaction to fire ant stings in Florida.

Fire ants also cause trouble by eating foam expansion joints in highways and shorting out air conditioners.

Multiple queen fire ants were discovered in 1973 in Mississippi and then were discovered in Ocala and Texas in 1983. Since then, multiple queen colonies have spread throughout Florida and are found all over the Southeastern United States.

Fire ants were accidentally imported from Brazil and Argentina in the 1920s and 1940s in the ballast of ships.

Koehler said multiple-queen colonies are reported in Brazil, too, and as man kills off single-queen nests, it clears the way for multiple-queen nests.

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*A poorly designed irrigation system can send a superintendent's...*

# Six-figure budget down the drain

MADISON HEIGHTS, Wis. —Golf course superintendents who spend six figures on sprinkler irrigation systems have learned — some the hard way — that the quality of the system's design can save them hefty sums over what appear to be less expensive systems.

That's the conclusion of Rick Manley, a certified irrigation designer for Century Rain Aid, which operates four outlets in the Great Lakes region and seven in Florida.

"Many superintendents have learned that a 'lowball' system they thought was a bargain turned out to be a bad deal that ended up costing them a lot more in the long run," said Manley. "That's particularly evident since the drought of 1988 put huge demands on poorly designed systems that couldn't stand up to the strain."

The result: yellow fairways, faded greens, parched roughs — and unhappy greens chairmen, club members, golf course owners and players. And you can add high repair bills, inefficient and wasteful operation and early replacement of major components.

Some sprinkler irrigation distributors include design as a service to golf course superintendents at no charge. However, Manley warns against the temptation to bypass professional design and rush to buy less expensive, inadequate components

some companies sell to make a quick deal.

Manly says that golf course superintendents should educate golf course owners and executives that good design is a cost-saving feature over time. It creates a system that delivers optimum operating efficiency, reduced maintenance, repair and replacement expenses and assures greater longevity of components, says Manley.

"Sometimes irrigation salespeople want to close the sale by offering the lowest price," says Manley. "Golf course superintendents should develop a healthy skepticism of quick-and-cheap sales tactics. Buying that way hurts in the long run because it doesn't give the superintendent the insurance he should be getting."

By "insurance," Manley means margins that take into account greater-than-average water demand and strain on a sprinkler irrigation system.

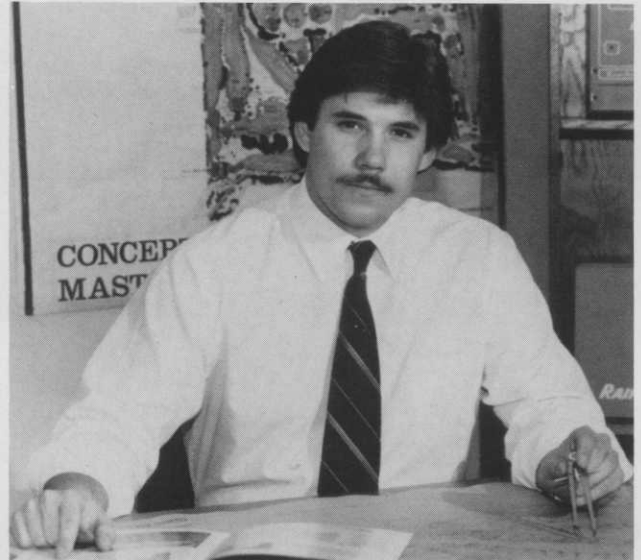
Last year's drought — the worst in 100 years — has proven his point many times over, says Manley, an ex-Marine and sec-

ond-generation irrigation designer with 10 years of experience.

Superintendents who bought sprinkler irrigation designs calling for the least capital cost learned the hard way that buying *value* is more important than buying *price* only.

Overloaded pipe wears out easily, overloaded pumps burn out early or consume unusually high amounts of electricity. Burst pipe, fittings and valves also add to the

*(Continued on page 46)*



*Rick Manley is director of technical design for Century Rain Aid*



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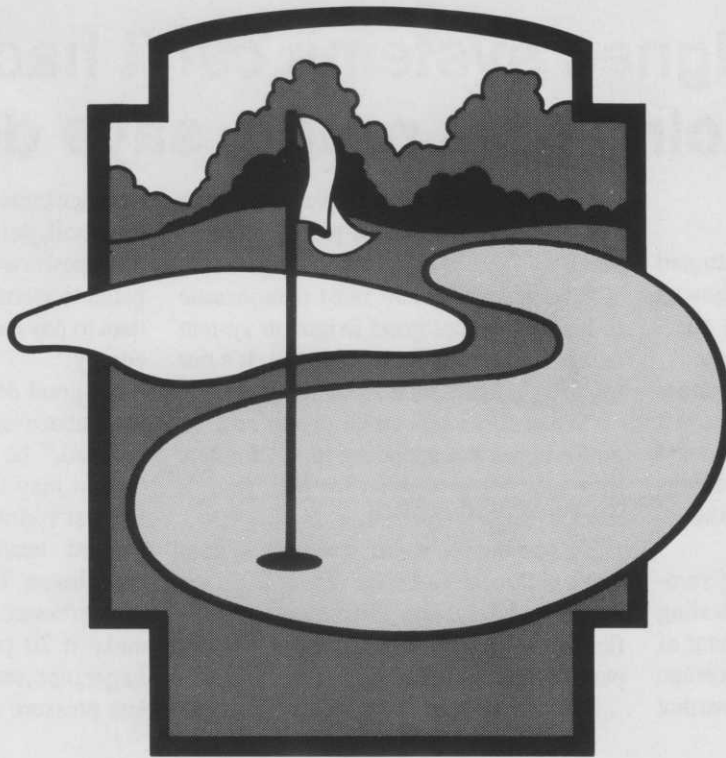
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# Poorly designed systems can't hack it when the going gets rough, says designer

(From page 44)

headaches.

"If the drought of '88 demonstrated anything," says Manley, "it showed that a poorly designed system can't hack it when the going gets rough.

"And in the end, the golf course superintendent who was happy to save a few bucks up front was disappointed and angry that he has lost all his savings and more — plus he has inherited headaches he can do without.

"With golf courses, everything's amplified," says Manley. "You're dealing with 10, 15 to 20 times the amount of water you deal with in the average commercial installation. It becomes that

much more important to make sure the job is properly designed and properly calculated.

"The superintendent must demonstrate to his bosses that good irrigation system design is worth its weight in gold. It's our job to help him demonstrate the point.

"When customers on large jobs such as golf courses are spending in six figures, they look for protection for their investment.

If a pump is too small, it works too hard and it will break under the strain. If it's too large, it's fat and lazy, delivering a low efficiency of 50 to 60 percent, versus 70 to 80 percent, which is ideal."

Adds Ben Taliaferro, Century's execu-

tive vice president, "If you use a pipe that's too small, you have to pay for it with more horsepower over the life of the system. It's better to spend more on pipe diameter once than to pay more on a continuing basis for energy.

"A good design loses no more than 20 percent of available pressure under highest demand," he adds. "A poorly designed system may lose 30 to 40 percent to the farthest sprinkler head. So we start at the farthest head and work back to the pumphouse. If we lose more than 20 percent pressure, we change the system to make it 20 percent or less. We can use larger pipe, smaller nozzles or loop lines so less pressure is lost."

## Some things to consider when designing a system

Understanding factors such as soil type, water velocity and pressure are key to convincing those paying the bills of the cost-effectiveness of professional sprinkler irrigation design.

The factors to consider when designing a sprinkler irrigation system, according to Manley:

- **Auto CAD** — The most advanced computer-aided design for sprinkler irrigation systems. Computers with auto CAD digitize elements of sprinkler irrigation designs for quick turn-around and accuracy.
- **Coverage** — uniform coverage is vital to turf health. Close-in coverage of gear-driven heads can be spotty; Impact rotors can be placed farther apart and still get uniform coverage.
- **Distance** — How far water must be moved through the system. Maintaining pressure over distance is crucial to efficient design, particularly on lower-pressure systems.
- **Electricity** — Location of electrical power and how much is available is important in larger installations because it dictates pumphouse location.
- **Looping** — Running a circuit of piping instead of a straight line from the source reduces pressure loss and allows the use of smaller pipe.
- **Pressure** — Force of the water through the system.

- **Soil type** — Sandy soil accepts water quickly but loses it fast so that more frequent watering is needed. Loam, or decayed organic matter, receives and holds water most evenly. It is usually found in the topsoil.
- **Surge** — the rush of pressure when a pump-driven system is first activated. This rush can raise pressure by up to 300 percent and threaten piping, heads and connections if the system is under-designed.
- **Throw** — the distance a sprinkler head propels water. For large installations, impact sprinkler heads are recommended because they lose less pressure through the sprinkler body and give longer throw than gear-driven heads. Their lower trajectory minimizes loss of throw due to wind drift and delivers more uniform distribution.
- **Velocity** — The speed of water through pipes. It is regulated so as not to exceed five feet per second.
- **Water location and quality** — The location of the water source in relation to the farthest sprinkler head often dictates design parameters such as diameter of pipe, openings of sprinkler orifices and horsepower of pumps. Poor water quality may require heavy duty pumps, aerator fountains to clean up algae in ponds or filters to remove potentially harmful mineral elements from water before it enters the system.

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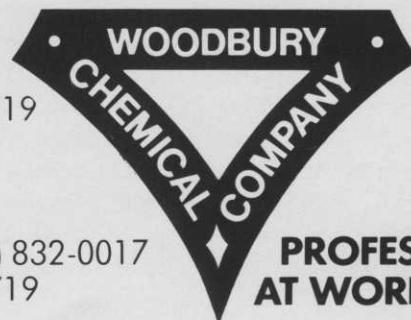
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# Florida superintendents lead U.S. in environmental audit program

BY LARRY KIEFFER

LAWRENCE, Kan. — The GCSAA's Environmental Compliance Assistance program introduced at the 1989 show is progressing "about as we had expected," according to Steve Wharton, project manager for Hall-Kimbrell Environmental Services Inc. which developed the program.

The self-audit kits are intended to give superintendents a means to identify areas of operations affected by environmental regulations and identify changes that should be implemented to achieve compliance.

As of Aug. 31, seven Florida superintendents — more than any other state — had bought the kits, which sell for \$725, Wharton said.

"This is an important program for every golf course in America because no course can afford not to assess every area of its operations," said Dennis Lyon, CGCS, GCSAA president. "Our main goal is for superintendents to develop a high degree of industry involvement — but there's also a very real payoff in dollars that superintendents will realize in improved management efficiency and reduced liability ex-

posure."

Lyon added that one fine or incident would vastly overshadow the cost of the self audit, which he termed "nominal."

The Hall-Kimbrell package does not provide any legal protection — audits in which the consultant assumes some liability for compliance can cost \$10,000 or more — but it does give superintendents an opportunity to evaluate their own practices.

"It all comes down to integrity and credibility," said the manager of one Florida facility taking part in the GCSAA program. He asked not to be identified.

"We view the self-audit as the first step. We want to be squeaky clean so we'll probably follow up the self-audit with an on-site audit."

Hall-Kimbrell will conduct on-site audits, generally for less than other consultants "because our analysis of the self-audit enables us to focus on some of the problems immediately," Wharton said. He estimated the price range at \$4,000 to \$8,500.

The company also will train employees on site for \$1,500 to \$2,500 per session, depending on the number of employees,

and subject matter.

The self-audit is a book containing more than 500 questions that allow the superintendent to report easily and concisely his practices in an answer booklet which is forwarded to Hall-Kimbrell, where it is scanned by computer.

Also included is a 30-minute video tape which outlines eight common areas of regulation and explains the audit.

Completion of the self-audit generally requires about eight hours, according to Hall-Kimbrell. Most superintendents have found it better to split the time over a week or so rather than complete the whole process in one session.

Once the computer has tabulated the data from the answer booklet, Hall-Kimbrell scientists and environmental experts prepare a detailed report on the course's practices in relation to applicable regulations. The report also contains concise overviews of regulations, phone numbers and addresses for federal and state agencies that issue and enforce the regulations and information on state programs that vary significantly from federal requirements.

The report not only tells superintendents if they are in compliance, it also helps them evaluate procedures and management practices.

The audit is not a fault-finding tool, but rather a fact-finding tool, explains Wharton.

"People may have a natural tendency to provide what they expect are the 'desired responses' rather than the honest answers. The value of the package is in the superintendent's review of the resulting reports based on actual situations."

The audit serves as a prerequisite for follow-up services that include annual update procedures. By periodically updating the audit, it becomes a management tool for continual evaluation of practices, taking into account new products, regulations and training requirements.

## Hall-Kimbrell offers seminar in Orlando

Hall-Kimbrell will conduct its second annual conference in Orlando Nov. 7-9, including a trade show for environmental protection and hazardous materials industries.

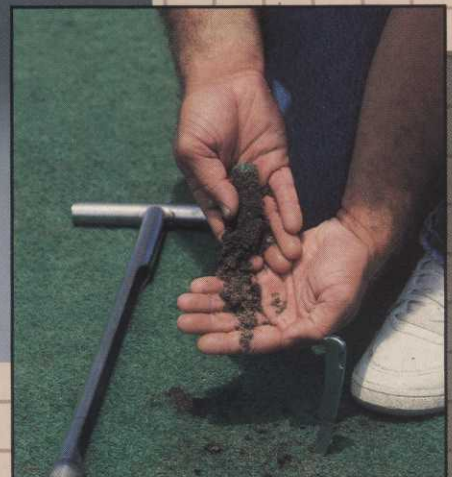
Although the conference is aimed at seven different industries, Nov. 8 will include a full day of sessions designed specifically for the golf industry, including safe pesticide handling, water quality assurance, respiratory protection program and environmental protection through self auditing.

Among the speakers will be Cecil Johnston, FGCSA immediate past president, and Steven Dwinell of the Florida Department of Environmental Regulation.

Registration fee of \$195 includes a three-hour general session Nov. 7, admission to all seminars all three days, including the golf sessions Nov. 8, lunch all three days, a cocktail party Nov. 8 and breakfast Nov. 9 and admission to the trade show.

To pre-register, contact Hall-Kimbrell in Lawrence, Kan., at 800-346-2860 or 913-841-8034. Walk-in registration will be accepted on a space-available basis for \$245.

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*Disaster Scenario Number 1: On the week before the PGA Tour makes its annual visit, first you get your 100-year flood... and then it REALLY begins to rain!*

# Just when you thought it was safe to go back into the water!



**BY LARRY KIEFFER**

LAKE BUENA VISTA — Are you prepared for disaster?

If half your course were under water — up to 8 feet in places — how quickly could you get it ready for play?

Could you do it in five days?

Oscar Miles did.

Miles, golf course manager of Butler National GC in Oak Brook, Ill., watched the rain fall and the creek rise one August weekend in 1987 until seven holes of his golf course surrendered to the torrent.

Three days before the suburban Chicago golf club was to begin hosting the Western

Open — second-oldest tournament on the PGA Tour — half the course lay beneath waters that had reached a height attained only once every hundred years.

Five days later, the course had been drained, scrubbed, rinsed, squeegeed and blow-dried by helicopters to the point that a credible, albeit abbreviated, PGA Tour event could tee off two days behind schedule.

And as soon as D.A. Weibring cleared the 18th green with his \$144,000 check, Miles and his crew immediately launched a nine-month reconstruction and recovery program that left several holes more flood-

resistant than before and the whole course much improved.

“We used the situation to make all the improvements we had been talking about for years,” Miles told 30 superintendents attending the seminar at the 13th annual Crowfoot Open at Grand Cypress Resort Aug. 6.

While it is unlikely that the peculiar meteorological, geological and hydrological conditions that created the Butler Na-



BUTLER NATIONAL GC

*This was the scene at Butler National Golf Club on the Monday of tournament week at the PGA Tour's Western Open. The course was ready for play by Friday and, even though more rains came on Saturday, it held up for 36 holes on Sunday.*

tional flood could ever be duplicated in Florida, the lessons to be drawn from Miles' miraculous recovery could be applied to any disaster.

We have hurricanes and tornados in Florida, to say nothing of brushfires and sinkholes.

Planning, preparedness, humility, foresight and prayer was Miles' prescription. . . along with a lot of friends and a knack for taking advantage of modern technology.

- Be prepared. On the basis of a less severe flood in 1982, Miles was able to learn generally what would happen to his course when his creek overflowed its banks. He wrote a disaster-preparedness plan and filed it away on his computer. Included in the plan was a list of equipment that possibly would be needed to clean up afterwards.

He also created a chart which enabled him to forecast the eventual height of

floodwaters based on the amount of rainfall.

- Make a lot of friends. Since he knew he would need a lot of help if disaster should strike, Miles made a point of cultivating friendships with the local Civil Defense personnel and other officials in charge of disaster control. He made sure they understood his needs. . . and got to play his

*(Continued on page 52)*



**'He was waiting for my call, hoping I would be big enough to admit that I needed help'**

(From page 51)

course occasionally.

• Cultivate the press. He took the initia-

tive in establishing good relations with local sports reporters. When disaster struck, they already understood the problems he

was facing. They became his allies instead of his enemies during the dreary days of around-the-clock cleanup.

• Ask for help. Don't try to handle a problem that is bigger than your resources. As soon as Miles realized the amount of equipment he would need for the massive cleanup effort, he called on one of his most influential members who owns a major construction company.

"He was waiting for me to call, hoping I would be big enough to admit I needed help," Miles recalls. "By morning, we had pumps and generators coming in from as far away as Omaha.

• Call on your peers. Superintendents at 12 neighboring courses sent their entire crews for several hours every day. Miles gave one of his senior assistants the full-time task as coordinator of the volunteer labor.

• Don't underestimate the damage. The people who pay the bills won't object if you finish the reconstruction project under

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budget; they'll find it difficult to forget if you come in over budget.

- Document everything. Within three days after the Western Open was completed, Miles had several consultants, including representatives from the USGA Green Section, come in and survey the damage. He videotaped their comments, often asking them pointed questions as they explained why certain areas should be re-grassed or, in some cases, completely rebuilt.

"I got the idea for the videotape kind of at the last minute," Miles said. "But I thought it would help me explain to the board why we had to do certain things. So I asked the pro shop if I could borrow the camera they use to give lessons."

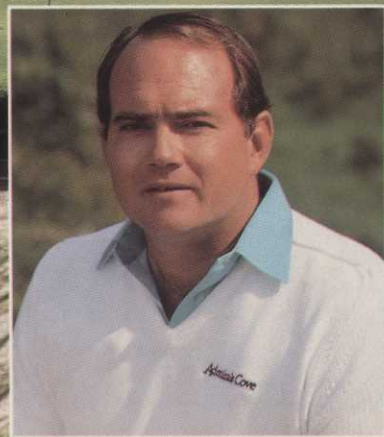
- Take advantage of computers. "I couldn't have drawn up my action plan or reconstruction plans if I hadn't had most of the data on the computer waiting to be used. I don't know how we ever got along without them."



Oscar Miles, golf course manager at Butler National GC, says superintendents should take advantage of modern technology — particularly computers and video cameras.

KIEFFER/JANLARK

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DAVID MEDA

*The force of the wind not only bent the flag pole, it shredded the flag. It took four thousand manhours of labor to repair the damage to the golf course.*

*Disaster Scenario No. 2: You leave a beautiful, tranquil golf course at 3 p.m. Friday. An hour later, you get a phone call...*

## 'We've just had a tornado!'

BY DAVID MEDA

BOCARATON — It was May 27, 1988; the Boca Woods CC maintenance facility closed, gates locked, the evening yet to begin.

I was at home when I received a telephone call from the assistant general manager of the club. She said that they had had a bad storm and, from what she could see from the clubhouse, there had been quite a bit of damage. She mentioned trees down and a bent flagpole at the clubhouse with nothing but a shredded flag hanging from the top.

Since she was unable to contact Craig Foley, Boca Woods superintendent and my boss, she suggested that I might want to come down to check things out.

It was close to 4:30 p.m. and by this time the storm was passing through Boynton Beach. I thought nothing of it. It seemed like just another Florida afternoon rain shower. I then thought back to the phone conversation ("a shredded flag") and thought, "Maybe it's old."

I drove to the club. Everything on State Road 7 looked fine, until I entered Boca Woods CC.

It was a startling sight! Just picture leaving the club at 3 p.m. on Friday, the two picturesque golf holes facing the main entrance are manicured to perfection. Now imagine... in your worst nightmare... the two beautiful golf courses that you felt so proud of as you left earlier that evening were now destroyed by a tornado.

I could not believe my eyes. Flooded roads, blown-over trees, screened-in porches torn from homes, roofing tiles missing from housetops, and debris scattered over the entire project.

At the clubhouse, the manager showed me to the back of the dining room where I could view the golf courses. We both stood silently in awe.

My next stop was to evaluate the pumping stations; both systems checked out in operating condition.

During my travels, I met with my boss, and we decided to meet back at the maintenance building and try to get some of our employees to come in. Clogged storm drains had to be cleaned out.

After assessing damages, Craig concluded that there was nothing else we could do until dawn.

Saturday was decision-making day. Course closings, contracting cleanup services, and insurance evaluations were the main issues discussed by department representatives.

By mid morning, landscaping contractors were on the job, standing and chipping fallen trees in prime locations at the clubhouse and front entrance. The maintenance crews were out in full force, raking and blowing debris off greens — we were offering unlimited overtime to any employee willing to work.

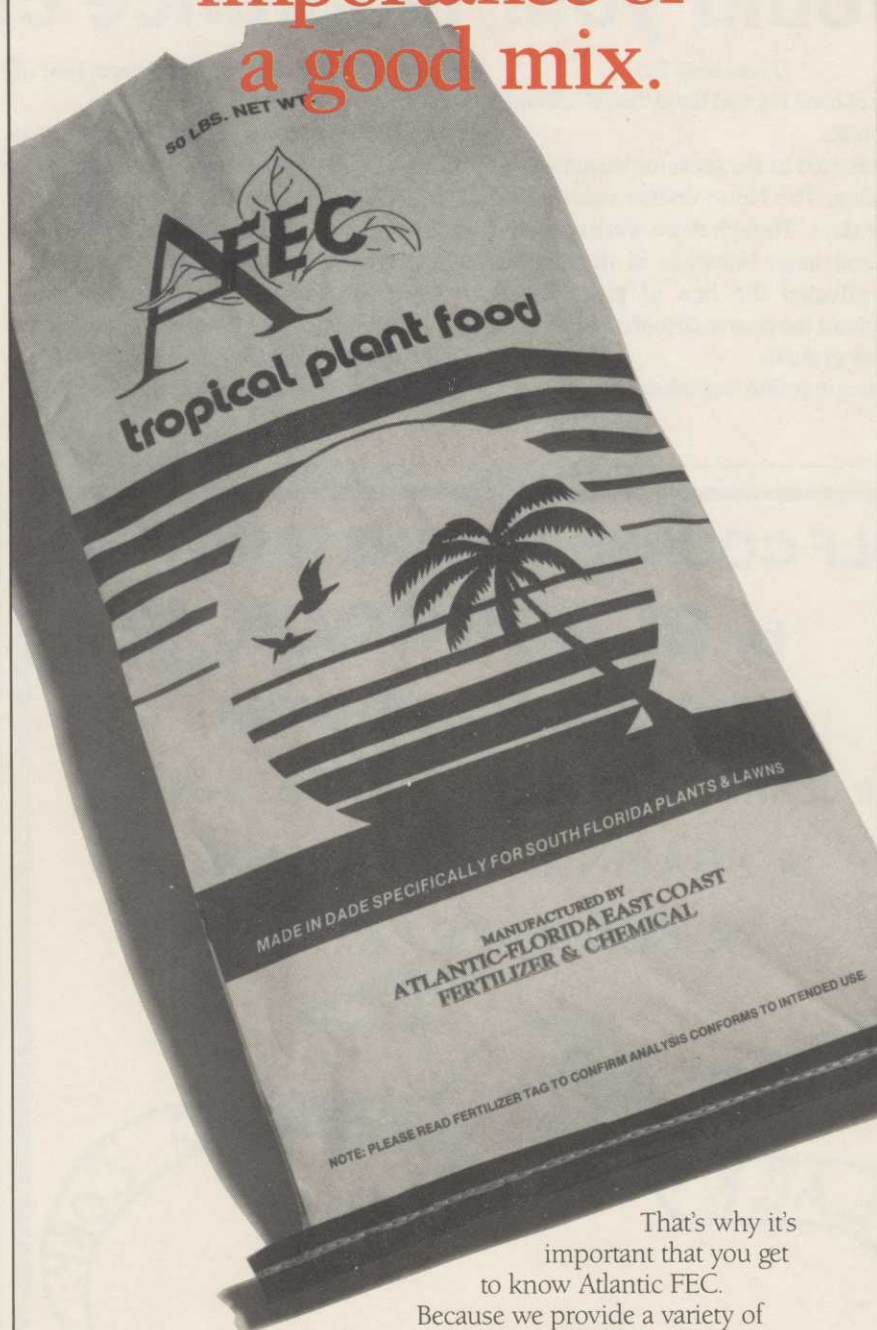
Boca Woods CC is a private, 36-hole development separated into North and South golf courses. Since the North course was not so severely damaged, we concentrated on making it playable as quickly as possible.

Maintenance practices were on schedule on the North course, but as far as the South course, maintenance was in direct correlation with the cleanup process. Greens were mowed Tuesday for the first time. Mowing heights were raised for the first two days and then dropped accordingly. Some fairways were so wet that they could not be mowed with a triplex mower for a week.

By midweek, the landscaping companies were working in concert on their designated areas as scheduled by Craig. A crew of 10 laborers, hired for the week,

*(Continued on page 56)*

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# Would your insurance cover this?

(From page 55)

began at each tee and hand-raked debris to the green.

We started to see great improvement by Thursday. The North course was opened in five days. Though there were uprooted trees and large branches in the roughs, none affected the line of play. Ropes throughout the course detoured cart traffic to dryer ground.

Strategic action was taken in the mainte-

nance of the courses with an exception of the roughs.

Debris was stockpiled in segregated areas of the course until we had time to pick it up. Meanwhile, rough units and out-front mowers worked around the debris and mowed everything in sight.

As if the tornado damage were not enough to keep us busy, the landscape companies made things worse by running over satellite boxes, breaking hydraulic lines and

driving too close to a green, leaving four-inch tire tracks from a loaded truck of mulch.

On Friday, June 10, two weeks later, after 11.5 inches of rain, both courses were officially opened. Golfers, anxiously waiting, covered the courses by 9 a.m.

By 2 p.m., the courses were looking better, but with a lot of clearing still ahead.

The damage consisted of approximately 170 blown-over and snapped-off free-standing specimen trees, ranging from 30-foot ficus trees to 60-foot pines. We didn't count damaged trees in cypress hammocks and wooded areas.

It took about four thousand manhours to recover. Of that total, a thousand was contributed by the golf course maintenance department, 400 by contract labor and 2600 by landscape companies. The equipment included four chippers, one bobcat, one crane, two bucket trucks, one tree stump chipper and a trash-loading dump truck.

Not counting tree replacement, total damage has been estimated at \$100,000.

Would your insurance policy cover that kind of damage? Better check... because it could happen to you.

## GOLF COURSE RECONSTRUCTION

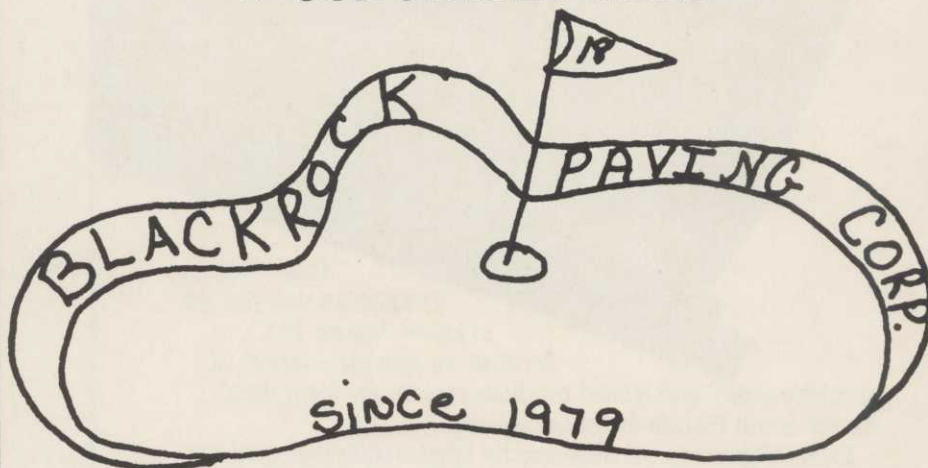
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**EDITOR'S NOTE:** David Meda is assistant superintendent at Boca Woods CC in Boca Raton. His most recent previous contribution to *The Florida Green* was on the role of an assistant superintendent.

*The brand new clubhouse at Palm Beach Country Club, set off with tall, majestic Malayan palms, blends right in with its environment, some of which had been planted 30 years previously.*

# Bet you never thought you'd have to build one of these!

*Most superintendents tend to shy away from clubhouse construction projects, but the experience can be rewarding*

**BY MIKE BAILEY**

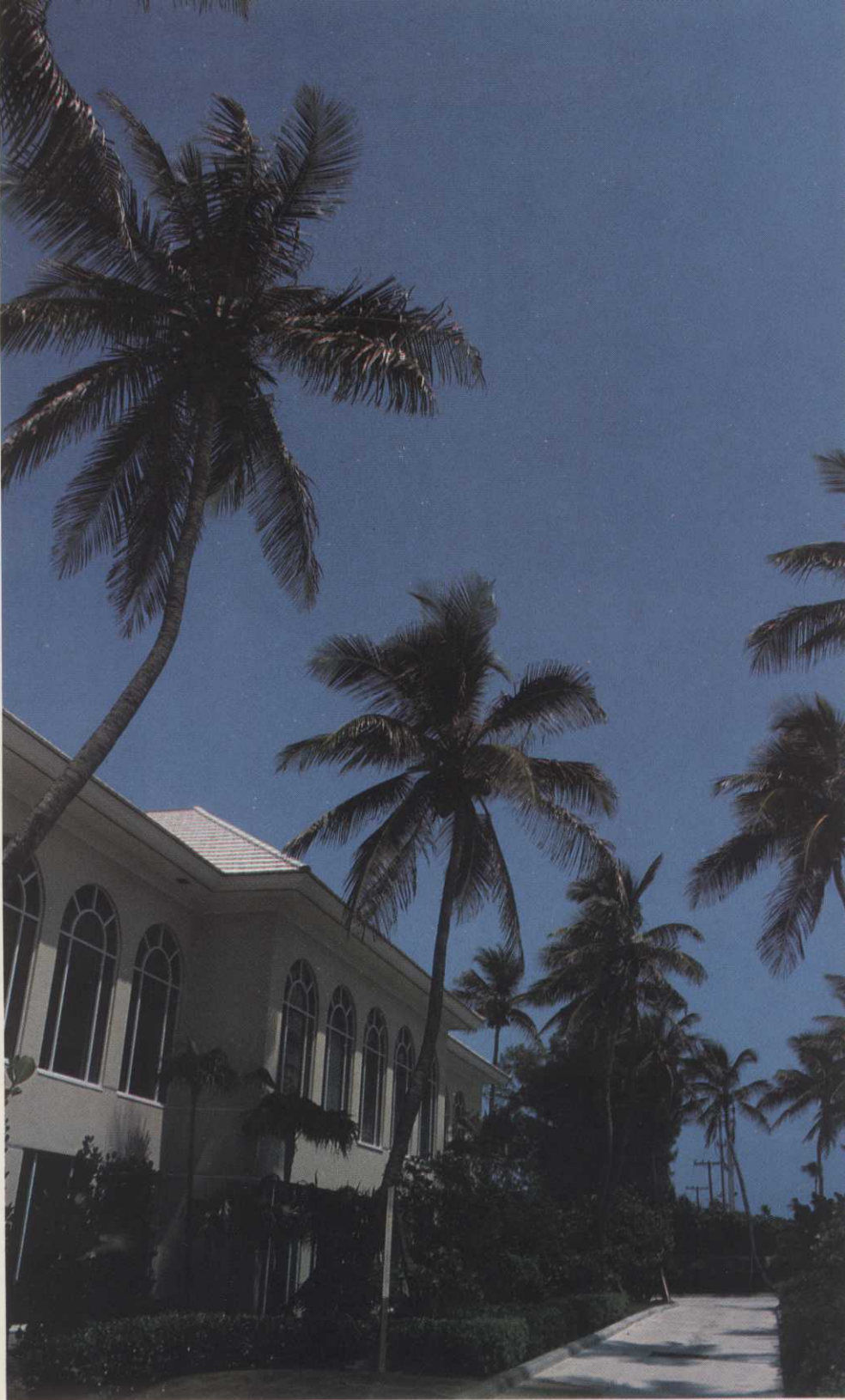
LAKE WORTH — Have you ever been involved with the construction of a clubhouse? It's the type of experience most superintendents try to avoid, particularly if they've been through it once.

But it can be a rewarding experience, as members of the Palm Beach chapter discovered this past June when four panelists discussed their clubhouse-construction experiences as part of the education program for our monthly meeting. The topic

was especially appropriate since we were meeting in the brand-new clubhouse at my club, The Falls CC.

My topic was constructing a new clubhouse at a new site. Joining me on the panel

*(Continued on page 59)*



FGCSA/MIKE BAILEY

# IN MEMORIAL TO MR. BILL WAGNER



Seldom in a person's life do we have the privilege of meeting and being associated with a man of the caliber and character of Mr. Bill Wagner. Having known Bill for 20 years, I found him always to be the example of professionalism that our industry is seeking and requiring. A gentle man of honesty and integrity who was always willing to give more than he took as demonstrated by his unselfish associational work, his golf course responsibility and his personal life.

The people who make up the Florida Turf Industry need to remember the example of courage, integrity and professionalism left for us by the life of Mr. Bill Wagner.

This space donated by an Anonymous Advertiser.

***It was relatively easy to build a two-story, 45,000-square-foot building overlooking a par-five which circles around a 15-acre lake with an island green and waterfall in the background and make it look as if it had always been there. All it took was \$7 million***

*(From page 57)*

were Paul Crawford, Palm Beach CC, demolition of old building and construction of new clubhouse; Dave Bailey, CGCS, High Ridge CC, complete renovation of old clubhouse; Dan Jones, CGCS, modification of an existing structure.

### **Scope of the projects**

**The Falls:** Starting with a clean slate made it relatively easy to build a two-story, 45,000-square-foot structure overlooking a par-five circling around a 15-acre lake with an island par-three and waterfall in the background... and make it look as if it had always belonged there. All it took was \$7 million.

**Palm Beach:** Because they bulldozed a 30-year-old structure and put a new building on the same site, the major concern was to blend the building to its environment. Using a temporary pro shop over the summer created some inconveniences, but no

major problems.

**High Ridge:** The structure has been gutted and is still being renovated. When completed, the members will have a completely new clubhouse for about \$6 million.

**Banyan GC:** Expanding or modifying a clubhouse presents a unique set of problems which can be every bit as vexing as those presented by more ambitious projects.

### **Irrigation and Landscape Design**

**The Falls:** Art Helm, assistant superintendent, explained how he and I worked with Ken Kedinato, the Toro irrigation architect from the very beginning — two years before construction began. The clubhouse's landscape irrigation system was planned into the golf course system, complete with the proper size stub outs, satellite clocks, tubes and wires.

*(Continued on page 60)*

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## Before and after

*Photos at right were taken from identical spot on the seventh tee at The Falls CC. In the top photo, a surveyor sets the grade stakes with the clubhouse under construction in the background.*

*In the bottom photo, the tee is grown in, the clubhouse is finished and the landscaping is well on its way to being established.*

Our crew  
was  
involved  
with the  
contractor  
much more  
than I had  
expected



FGCSA/MIKE BAILEY

*(From page 59)*

Landscaping remained consistent with golf course architect Joe Lee's tropical palm tree theme from the waterfall up to the "canary islands" at the front door.

**Palm Beach:** Since the clubhouse site was surrounded by majestic, mature landscaping, big stuff had to be brought in. Jamaican tall palms were trucked in from other portions of the golf course and planted by a crane. The keys were using plants that can withstand salt spray and placing them in natural settings so they blended with the rest of the landscape.

**High Ridge:** All too often, big dollars are spent on the construction of buildings,

leaving the landscaping as an afterthought. Too often, the landscaping becomes a rushed job. David is preparing himself for that eventuality.

**Banyan:** Glenda Hall, the full-time horticulturist on Dan's staff (and she has an assistant!) attended a seminar on design and use of materials at Walt Disney World before starting the project. She also obtained swatches of cloth and other materials being used by the interior decorators so she could blend the interior with the exterior view.

The Banyan staff also handled the design and installation of the irrigation sys-

tem.

### Unique Problems

**The Falls:** Our crew was involved with the contractors much more than I had expected. We helped locate lines, grade elevations, get them water, and store materials like marble tile in the center of the maintenance complex. Our task was to serve the members' needs. It's difficult not to get used in the process.

**Palm Beach:** Because of the restriction on working hours within the Town of Palm Beach, the problems were magnified. Contractors were running into each other

— and Paul's crew — asking for help while Paul was in the midst of a major renovation project on the golf course.

The 10th tee had to be relocated because of a change in the clubhouse. Because the construction had fallen three months behind schedule, the landscaping was installed during the winter salt spray.

**High Ridge:** Dave got caught in a jurisdictional dispute between permitting authorities.

City building inspectors shut down renovation of the 10th tee, claiming the work was tied into the clubhouse permit. They also halted dredging of a nearby lake.

It took weeks before officials from the South Florida Water Management District and the Lake Worth Drainage District could convince city officials that they had no jurisdiction over the lakes.

**Banyan:** To help contain trash and control traffic, Dan and Glenda put up a fence around the construction area and enforced the traffic patterns very strictly.

### What would you do differently?

**The Falls:** We took on the responsibility of irrigation installation, earthwork and landscape installation. Many of our workers exceeded 70 hours a week for more than two months and I ended up in the hospital over the holidays. I'm not sure I'd do that again.

I remember the morning we were applying Nematicure to the greens only to find that the electricity for the irrigation pumphouse had been shut off manually the night before because the finish contractor said his cement was getting wet and he couldn't find us.

Yeah. . . we left at a quarter 'til six — earlier than usual — and he couldn't find us during the day!

**Palm Beach:** Paul was in the process of wrapping up the finish cement work with a local paving contractor when an inspector casually asked if he had had a nuclear

density test performed on the cement.

It took some time to convince the inspector that the cement was for cart paths, not walls of the building.

**Banyan:** A few weeks before expansion was to begin, the members voted to delay the project for a year. "Dan, can you put back all those plants you ripped out, replace the irrigation system and throw down some seed that'll get us by until next year?"

**High Ridge:** Last year, Dave installed a practice green what he thought was far enough from the construction. Now the green just skirts the latest expansion and he may be redesigning the redesigned practice green.

**EDITOR'S NOTE:** Mike Bailey, superintendent of The Falls CC, Lake Worth, is editor of The Green Sheet, the FGCSA bimonthly newsletter, and a member of the FGCSA Publications Committee. He is active in the Palm Beach chapter.

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# Personality clashes can be prevented

*The trick is to identify the different personality types on your staff and learn which combinations work well together... and which ones are deadly*

BY LARRY KIEFFER

LAKE BUENA VISTA — The manager who attributes a personnel problem to a “personality clash” just may know exactly what he is talking about, according to management trainer Jerry Travers.

## DOMINANT



Drives a Cadillac, Mercedes or Jaguar sedan in conservative colors very fast with both hands on the wheel. He's impatient and talks to himself. Whether it's a corporation or a two-person office, he's likely to be the boss. . . or want to be.

Dresses in stylish, conservative clothes, conservative hairstyle, wears a wedding ring and an expensive watch.

Walks briskly, takes control wherever he goes, is goal-oriented and is well-prepared. His desk is cluttered but organized.

Wants power, prestige, money, opportunity for advancement, challenge, results, to find out why things happen, wide scope of operation, direct answers, freedom from controls, efficiency and varied activities.

## INDUCTIVE



Drives a Porsche or other sporty convertible very fast, usually with one finger on the wheel. Talks a lot and pays scant attention to the road. He's a politician, advertising director, or vice president of marketing.

Overdresses in the latest fashions with the brightest colors, has monogrammed shirts, fashionable hairstyle with lots of jewelry, but no wedding ring.

Struts with one hand in his pocket and one eye on his reflection in a mirror or window. He flirts, takes risks, is ostentatious and keeps his large, fancy desk very neat.

Wants popularity, money to cover his expensive lifestyle, public recognition, freedom of speech, group activities outside the job, democratic relationships, freedom from control and identification with the company.

And the successful manager will know how to deal with a clash of personalities in such a way that he won't lose a valuable, skilled employee. That was the point of Travers' three-hour seminar on personality impact given to about 30 superintendents attending the Crowfoot Open at Grand Cypress Resort Aug. 6.

The seminar is one module of a large unit on stress that Travers has taught to major corporations around the world, including superintendents attending the 59th annual International Golf Course Conference and Show in Houston two years ago.

Healthy personalities break down into four basic types — Dominant, Inductive, Steady and Compliant — Travers said, "and none of them is any 'better' than any other. Ideally, you should have at least one

of each on your team."

- **Dominant** personalities are aggressive, decisive, competitive, assertive, vigorous, resourceful, venturesome, opinionated, restless and direct.

- **Inductive** personalities are outgoing, gregarious, confident, enthusiastic, persuasive, neighborly, talkative, optimistic, charming and imaginative.

Dominators and inducers frequently go together. That is, persons who score highest on one of those two traits often score second-highest on the other. Together, persons with these two prevailing traits comprise about 30 percent of the American population.

"The dominant personality is the boss. He makes decisions easily," said Travers. Dominant persons start a lot of projects but

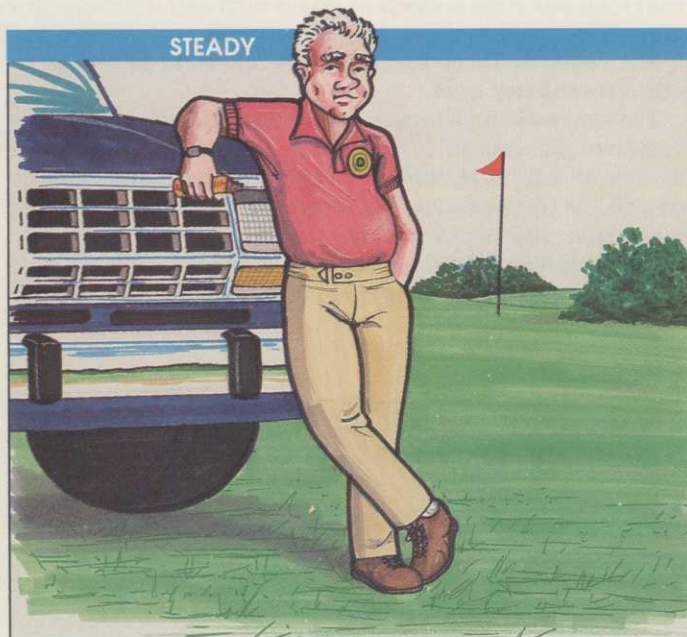
rarely complete them themselves, choosing to delegate the "mopping up" to others. "They do make sure the projects get completed," Travers said, "they just get bored with details. They don't have particularly long attention spans. Arnold Palmer and Gen. George Patton are dominant personalities."

The inductive person is the ideal salesman who does great in a social setting, Travers said. Jacqueline Onassis and Rich Little are inductive personalities.

- **Steady** personalities are calm, sincere, deliberate, willing, conservative, amiable, dependable, dedicated, contented.

- **Compliant** personalities are cautious, respectful, thorough, tense, precise, sensitive, strict, serious, controlled, perfection-

*(Continued on page 65)*



Drives a 4x4 truck, station wagon or Toyota with one hand while eating with the other. Rarely gets tickets. He's a coordinator, middle-level manager or government employee.

Dresses casually and wears neckties only when absolutely necessary, hair is casual, frizzy and perhaps unruly, watch and wedding ring are unpretentious.

Slouches when he walks slowly with both hands in his pockets, gets along with everyone, is indecisive, dependable and likes structure. His inexpensive metal desk is somewhat messy.

Wants status quo, security, references, happy home life, historical procedures, sincerity, limited territory, constant appreciation, identification with the company, recognition for long service, special products and takes a long time to adjust to change.



Drives a mini-truck, Toyota, Volvo or Saab with both hands on the wheel and stops at all yellow signals.

Leisure dress is worn-out office attire, which tends to be very conservative and old-fashioned, probably purchased at a bargain store. Hair is very short or very long, carries a digital watch, wears a tie clasp, wedding ring and little other jewelry.

Takes short, precise steps or trots. Works methodically and is detail-oriented and demands structure. His practical desk is over-organized and can appear messy.

Wants standard operating procedure, limited exposure, security, sheltered environment, references, reassurance, personal attention, little responsibility and someone else to open the door for him on sales calls. Cannot tolerate sudden change.

## They'll never get anything done...

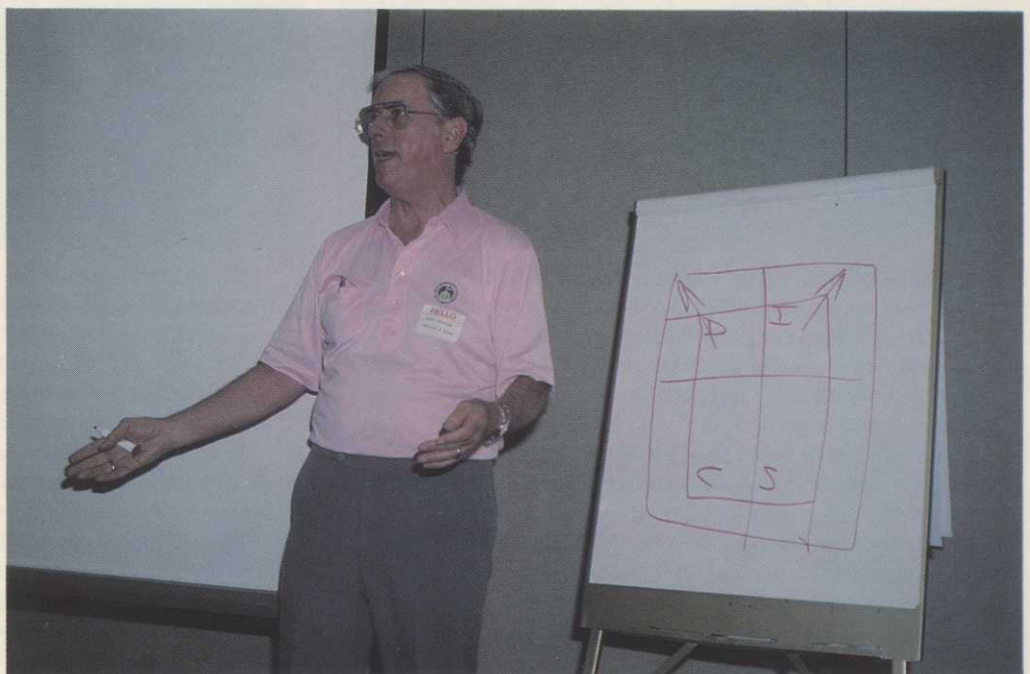
In the workplace, the best personality combination generally is Steady-Inductive. In fact, Steadies are very productive with just about everybody, as the chart below — 1 is best and 8 is worst — shows. However their symbiotic relationship with Inductives is the only one to get "full marks." The Steady keeps the Inductive's creative juices focused on task while the Inductive constantly encourages the Steady to break out of his structured mold and seek new approaches.

The second-best combination is Steady-Dominant. The latter makes decisions easily and the former is happy to do the detail work when the Dominant goes charging off in search of new windmills. Dominants also work fairly well with Compliant.

On the other hand, Dominants do not work well together or with Inductives. The difficulties in the first relationship are rather obvious — there can be only one boss — while those in the second are a little more subtle. The absolute worst working combination, however, is a pair of Inductives. "They have such a good time feeding off each other's creativity that they never get anything done," says Travers.

WORK ENVIRONMENT				
Combination	Dom	Induct	Steady	Comp
Dominant	5	5	2	4
Inductive		7	1	3
Steady			3	3
Compliant				3

*Jerry Travers has taught his seminar on personalities and stress to the world's major corporations. He conducted a session at the 59th annual Golf Course Conference and Show in Houston in 1988.*



KIEFFER/JANLARK

SOCIAL ENVIRONMENT				
Combination	Dom	Induct	Steady	Comp
Dominant	4	3	6	8
Inductive		1	4	8
Steady			1	2
Compliant				2

## Nothing beats this pair at playtime

For the very same reason that makes them unproductive workmates, two Inductives by themselves can make the world's biggest party. . . anytime, anywhere. Two Steadies also make an excellent social combination as do a pair of Compliant. The Steady-Compliant combination is nearly as good.

Dominants get along best in the social world with Inductives, who don't really care who's in charge so long as everybody is having a good time.

The Dominant-Steady combination, which works so well at the office, is a dud after hours.

The worst social combinations, however, are Compliant with either Inductives or Dominants. In the first case, one really gets caught up in the flow while the other can't help being distracted by the ripples on the current. The Dominant-Compliant clash often centers on the former's penchant for following his own whims and the latter's need for structure and predictability. If a pair of Inductives constitute a walking party, a Dominant-Compliant couple make up a moving war zone.

(Continued from page 63)

istic.

Compliance and steadiness can be companion traits — persons who score high in one often score second-highest on the other. Together, they comprise 70 percent of the American population, with compliant types outnumbering the steadies, Travers said.

The steady person is loyal, possessive, service-oriented, low-key and persistent. "He becomes an old friend and will stick with you to the end," Travers said.

The compliant person, above all, is a perfectionist, Travers said. He is thorough, organized, systematic and seldom caught off guard. "Jack Nicklaus is a perfect example of the compliant personality," he said.

Everybody has at least a little bit of each trait but one almost always prevails. Each person's mix will vary slightly, depending on whether he is in a business setting or a social one, but the principal characteristic

(dominant, inductive, steady or compliant) should remain the same regardless of the situation. A person's perception of his own personality rarely matches exactly the personalities others see.

The key for managers is to learn the work habits and emotional needs associated with the various personality traits and assign tasks and responsibilities accordingly.

It also is especially helpful to know which personalities work well together and which ones clash. As the accompanying charts show, certain traits mesh differently, depending on whether the situation is task-oriented or social.

For instance, two inductive personalities make a great combination socially, but a terrible one at work. "They're so busy having a good time, feeding off each other's creativity that they'll never get anything done!" Travers said.

On the other hand, the inductive-steady

combination makes the best work combination, but only a fair matchup in social situations.

While everyday behavior can give the perceptive supervisor several clues to an employee's personality, those assessments should not be used for critical action unless they have been validated by tests, Travers said.

On the other hand, if a superintendent has two gregarious employees whose work generally is satisfactory except when they're assigned to work together, he might be wise to split them up: they could be inductive personality types having too good a time.

All seminar students completed a personality profile test to learn their own traits. Superintendents who wish to have themselves and their employees profiled can contact Travers at 5438 Ralston Court, Atlanta, GA 30338; phone 404-394-2331.

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*Max Brown followed up on Robert Trent Jones's 'crazy' idea to apply fertilizer through the irrigation system*

# It's a crazy idea... and it worked!

BY LARRY KIEFFER

POMPANO BEACH — Max Brown, Ph.D., knew he had a winner very shortly after he opened a business that launched an industry.

"I'm a very analytical person," says Brown, who founded Liquid Ag Systems Inc. nearly 16 years ago. "But once I see the numbers, I'm easy to convince."

The "numbers" that convinced Brown his business had a good chance of success were the results of a study which showed

that liquid fertilizer could be applied to turfgrass through an irrigation system at least as uniformly as granular fertilizer could be applied by mechanical spreaders.

"That was my big doubt," says Brown. "I knew there were some solid advantages to using liquid fertilizer — that's why I started the business — but I was worried about uniformity. I was sure we would get some patterns — big circles of green surrounded by undernourished turf — but the opposite turned out to be true.

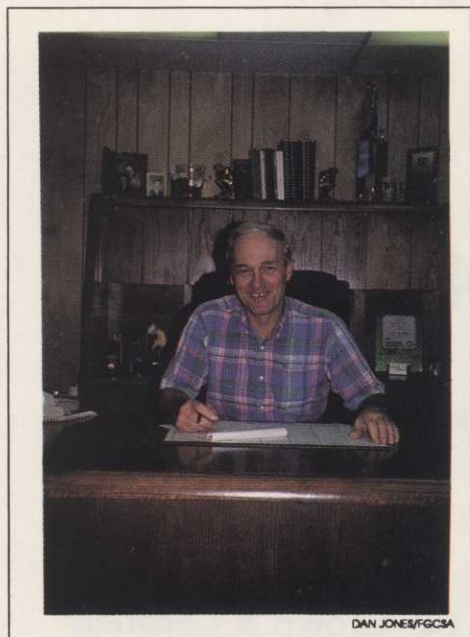
"The frequent, light applications of liquid fertilizer minimize the effect of sprin-

kler patterns and turn out to be at least as uniform as dry fertilizer applied by a broadcast spreader, which is what most golf courses used at the time."

Although the uniformity study was completed in May, 1973, only two months after Brown had hung out Liquid Ag's shingle, it would be another four years before the agronomist-turned-turfgrass consultant could put himself on the payroll.

"We started very modestly," he said.

Brown got the idea for his business while working as a staff agronomist for golf course architect Robert Trent Jones.



DAN JONES/FGCSA

*Dr. Max Brown, founder of Liquid Ag*

## What's the big deal, anyway?

What are the advantages to using liquid fertilizer, or "fertigation" as it's called?

"The plant can't tell and doesn't care what form it gets its nutrition in, but there are several advantages," Brown said.

Robert Trent Jones originally investigated the process for two reasons:

- **Eliminate** fertilizer burn.
- **Avoid** closing course to apply fertilizer, since fertigation is done at night.

Brown's customers have given him some more:

- **Control** — it allows the manager to be completely in control of his nutrition program rather than putting

it in the hands of a technician.

- **Greater efficiency** — frequent light applications minimize loss from leaching or washout and also provide a steady supply of nutrition, eliminating the cycles of growth and starvation.
- **Application cost** is less. Once equipment is paid for (payback is less than a year and it lasts for at least 10), there is no application cost.
- **Materials cost less** — frequent light applications of liquid fertilizer give all the advantages of "timed release" dry formulations at a fraction of the cost.



DANIEL ZEJAZEK

Liquid Ag's 7,000-square-foot plant in Pompano Beach is now one of three facilities the company operates in Florida

“The Jones organization owned an irrigation company and Mr. Jones was always looking for new possibilities,” Brown recalls. “He asked me to look into the feasibility of applying fertilizer with the water in the sprinkler system.

“We looked at it and talked to engineers and other people that had been doing some of it and found that, under certain controlled conditions, it might be possible to fertilize golf courses through the irrigation system, especially in Florida where irrigation is used extensively.”

Jones didn't pursue the idea but Brown, who had grown weary after eight years of trotting the globe for the indomitable architect, became a golf course turf consultant and devoted his spare time to working on the “fertilization” concept.

“It's interesting now, looking back,”

Brown says. “We talked to some of the big names in the turf industry — the people who wrote the textbooks and other well-known professors.

“Most of them said, ‘Well, it's an interesting concept but it's not a very good idea and it probably won't work.’

“People in the golf industry said the same thing.”

But Brown wouldn't let go of the idea.

Perhaps he picked up his tenacity from Dr. Gene Nutter, who had recruited Brown off the campus of Iowa State University for a University of Florida research assistantship.

“I would hate to be any person standing between Dr. Nutter and a goal he has set,” Brown relates.

Ironically, although he worked with Nutter on some projects over the years,

- **Current VP remembers when he was the only employee in the plant .....68**
- **Company has model containment program .....71**

Brown never took a class from him.

“When I arrived, I learned he had left to start the superintendent training program at Lake City Community College,” Brown recalls, “so I ended up getting assigned to some new fella' named Horn.”

The “new fella',” of course, was the late Dr. Granville C. “Granny” Horn,  
*(Continued on page 70)*



Firm's vice president recalls the 'good old days' when he was the only employee at the plant

## *He never knew why I had such a smile on my face!*

BY GEORGE JONES  
& CHARLOTTE JONES

POMPANO BEACH — Ben Pittman, vice president of operations at Liquid Ag, was the third person hired by the new company. He started as the truck driver.

"Back in 1974, Ed Darlington (a former colleague of founder Dr. Max Brown and the firm's first employee) hired me. We were a small company.

"Max was busy doing a lot of consulting at that time and was not around very much. It was primarily Ed and myself. Sally, Max's wife, came in three times a week and did all the office work. We also had Howard, a retired bookkeeper accountant who worked half a day on the days Sally wasn't there.

"Business was real slow. But we needed a telephone answering service because there would be times when Ed would be out in the field and I would be making deliveries.

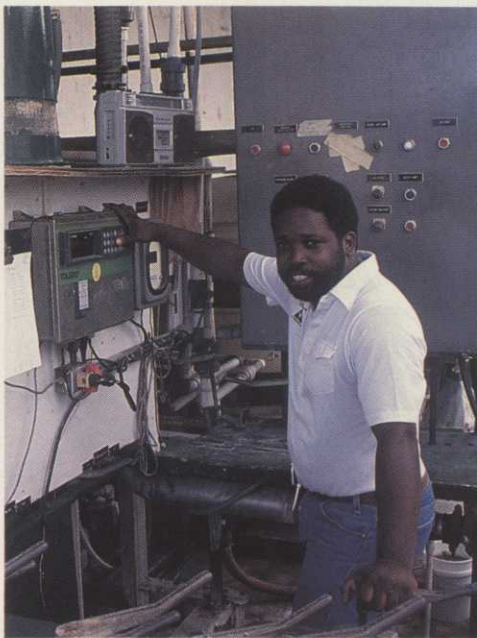
"Sometimes I'd be the only person there. I'd have to load the trucks, unload products coming in, batch and load outgoing product. When I had everything ready to make a delivery, I'd just lock up and the answering service would take over.

"I remember one time a customer asked for his order 'today.' So I hung up the phone, batched all the material, loaded the truck, typed up the paperwork, then I washed up, got in the truck and went straight out to the customer.

"When I got there, he said, 'The guy I talked with on the phone said that he could get it out here pretty soon, but I didn't know it would be this fast!'

"The customer never knew why I had such a friendly smile on my face."

In his first two years, Pittman eventually learned all the procedures at the plant, leaving Darlington free to spend all his time out in the field.



DAN JONES/FGCSA

Ben Pittman, Liquid Ag's vice president of operations

"The biggest problem we had in the early days was finding equipment that would be compatible with the fertilizers we made. The polypropylene we use today wasn't available in 1975. Our first systems were made from PVC and we had to use cast iron pumps.

"A lot of people laughed at us back then, but we knew we had a better way to get fertilizer to the plant so we just kept on going."

Liquid Ag depended on nursery business at first, but a small public course across the street from the firm's tiny plant welcomed the company to experiment in exchange for the fertilizer.

"Our first big successful golf application was Inverrary CC in Fort Lauderdale. We did a lot of research work out there and put in systems on each of the golf courses that are still

operating.

"This was all so new to everyone. What we were guaranteeing was hard even for the fertilizer administrators to strive for.

"At first we offered relatively simple mixes but now we can develop any type of liquid fertilizer. In the early days, we could not put phosphorus in the irrigation water but now we have injection systems that can handle it. And we can put out whatever levels of micronutrients are needed.

"We have grown very fast, but I think appreciating our customers has contributed the most to that growth. In the beginning, we had such a new concept that it was necessary to spend a lot of time with the customers — if a customer had a problem, we were there to help, regardless of the time.

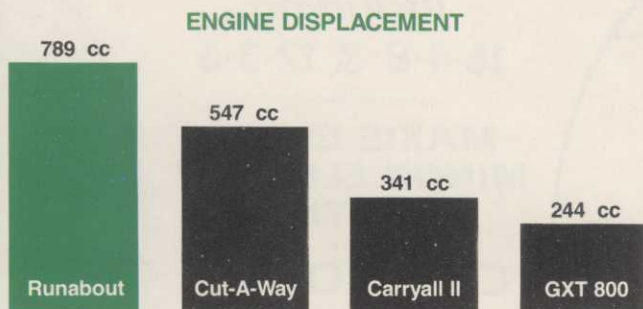
"Max still makes a point to tell us to spend enough time with our customers, just as we did back then. Although we are established now, we must always stay conscious of our product quality and the quality of our service."



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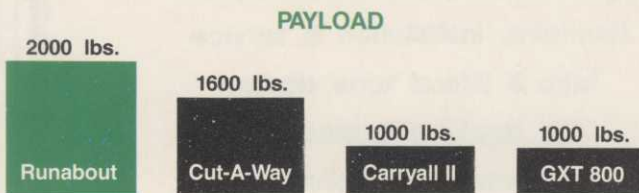
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(From page 67)

who led the UF's golf turf program into a period of national prominence.

So Brown decided to apply the analytical skills he honed under the legendary Horn to the idea spawned by Jones, one of the most creative men in golf.

Technically, he knew "fertigation" was feasible and he knew the process had two major advantages over dry fertilizer:

- No possibility of fertilizer burn.
- No need to close the course for fertilization, since it's applied at night.

So in March, 1973, Brown took the plunge.

He leased a 1600-square-foot building on a quarter of an acre in southwestern Broward County and hired a former student, who had helped investigate the concept for the Jones organization, as general manager, technician and custodian. Brown's wife, Sally, kept the books three

days a week.

"I want to make it clear that we didn't invent this process," Brown says. "Other companies were selling liquid fertilizer and the equipment to apply it. But we were the first to base our business on the concept of fertilizing turf through the irrigation system."

From those early beginnings, Liquid Ag Systems Inc. has grown to 25 employees working in facilities in Pompano Beach, Fort Myers and Tampa.

The Pompano Beach plant was moved to a bigger site — 7,000 square feet on two acres — two years after Liquid Ag was born.

"We needed to be on a rail siding and of course the building was nowhere near big enough," Brown said. The Fort Myers plant, which has 11,000 square feet of production and office space, opened in 1984. The Tampa facility, which has no administra-

tive offices, opened in 1987.

The fledgling company had only two technological problems to overcome, Brown says, one mechanical and one chemical.

"It was very hard to work out the chemistry for some of the micronutrients, particularly iron and manganese," he said. "Getting them into a clear liquid form was not easy."

The Iowa native says he cannot remember how many glass jars were filled with sample formulations before they solved the problem.

"Until we got it right, they all had reddish-brown sediment at the bottom within a couple of hours after we filled them," he said. No superintendent is going to water his turf with a liquid that will stain the sand in his bunkers.

Solving the manganese problem paid an unexpected dividend a few years after the

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company started. South Florida was experiencing a mysterious, severe turfgrass decline that had agronomists, pathologists and all the chemical companies stumped.

"It was brutal," Brown recalls. "I could name half a dozen top-notch superintendents who lost their jobs when they lost their turf and nobody could tell them what had happened.

"We began to work on it and so did some of the major chemical companies and we finally figured out that it was a manganese deficiency.

"We adjusted our formulas and in a matter of days, courses that were using Liquid Ag were looking a lot greener and healthier than those that weren't. The turf responded amazingly quickly. It sure didn't hurt business."

The mechanical problem had to do with the method of injecting the liquid fertilizer

*(Continued on page 72)*

## 'We're all responsible for the future'

POMPANO BEACH — Two years ago, Liquid Ag founder and president Max Brown decided to install complete containment and protection programs at all three plants.

"Our goal was not to allow any foreign materials other than rainwater to hit the ground," he said.

"It's for our own benefit to do it the best way we can," he added. "We are going to be looked at pretty closely in the industry. Regulatory agencies will be inspecting what we are doing.

"We want to be a model operation.

"I expect in a short time, regulation of all agricultural chemical interests will be very tight. This will sort out the companies that haven't been complying with the regulations: it's going to be so costly (to change their ways) that they may not be able to afford to do it.

"The companies that have complied with regulations and budgeted to get the job done are the ones that will survive and still be in the business."

"We have never had any major problems, but anything can happen. There are possibilities of a spill or some kind of mistake that might endanger the aquifer.

"It should concern us because we all drink the water. We have families, children and our grandchildren's future to think about. Whatever we are doing — or others are doing - to the groundwater and the environment has an effect on all of us.

"We are all responsible for the future."



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(From page 71)

into the irrigation system.

"The early systems were not flow-sensing," Brown says. "Fertilizer was metered in at a set rate regardless of how much water was flowing. Later we learned that it is very important to maintain precisely the proportion of fertilizer to water.

"Whether one sprinkler is running or 30, the proper amount of fertilizer must be used.

"The flow-sensing injection system has evolved through several generations. We try to take advantage of the latest technology," says Brown, who does not patent any of the equipment he designs or the formulations he uses.

"The technology evolves so fast. The key thing is to be at the leading edge. Why spend a lot of money to patent or copyright something that might be obsolete by the time you get it done?"

Although Liquid Ag is in the business of selling fertilizer, Brown says hardware accounts for about 10 percent of his golf course business.

"Well, you have to make it easy for a prospect to become a customer," he says. "So we handle the storage tanks, meters, control boxes and injection pumps. We sell them and we install them."

Golf courses — Liquid Ag has "something less than 350" of them on its client list — account for about 60 percent of the company's business. Lawn care, nurseries, vegetable farms and citrus are the other industries it serves.

Nurseries, Brown notes, have been using fertigation for some time, but, until he founded Liquid Ag, most were using home-made systems.

Although he has a few clients in North Florida, nearly all his business is in the central and southern regions of the state.

"It's very expensive to move this stuff around," Brown says. "The freight is not cheap."

Expansion is a possibility, he says, but no firm plans are in the works.

"Originally my thought was to work the company personally only to help get it started and get the concept established. My real love and interest was in golf course consulting.

"But with the company growing so rapidly, it now demands so much of my time that I sometimes think it controls my time more than I control it.

"Still... looking back after 15 years at what was pretty much a crazy idea at the time and seeing something you helped start develop into an accepted standard in the industry..."

It's hard to top.

**EDITOR'S NOTE:** *George and Charlotte Jones contributed to this story.*

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*Enterprising used equipment broker proves that one superintendent's pile of junk is another's latent treasure*

# Old mowers never die...

BY EARL COLLINGS

HOBE SOUND — You've heard of the "people-to-people" program where travelers exchange their experiences with people from other countries on a planned face-to-face basis?

Bill Barnette has started something like that in the turf business that might be called the "superintendent-to-superintendent" program to buy and sell used turf equipment as is.

And it is almost face-to-face. Barnette finds excess used equipment, lists it, photographs it as is and, when a buyer wants it, Barnette picks the unit up from the seller and delivers it. The selling price listed includes his brokerage fee.

Barnette's business is called UTEC — Used Turf Equipment Co. Simple enough. He started the business in behalf of the overworked superintendent who doesn't have time to go out and look for buyers of equipment he no longer needs, or who doesn't have time to go out and find used pieces to fit his needs and his budget.



UTEC

*Bill Barnette, left, with David Paul, service manager at the Loxahatchee Club in Jupiter*

UTEC is really a used equipment clearing house.

The company started a little more than a year ago when Barnette, who had been selling new turf equipment in south Florida, suddenly realized that every course he called on had several pieces of used — sometimes almost new — equipment sitting idle in the yard.

He would hear his prospects say, "I would like to get that new unit but I can't get rid of some of this extra stuff I have around here now." Or "I sure need one but my budget won't handle one. Do you have a good used unit?"

The light went on, and Barnette set up shop.

"Shop," that is, with a truck, a trailer, a mobile phone and a camera. Plus the conviction that he could fill a real need. He knew that all the unused equipment he had

seen for a couple of years was useful and saleable. He knew the area. He knew the business. And he knew machines. (He had been division director of maintenance for the South Florida Water Management District and, before that, had been in construction, an authority on welding.)

His plan was simple. Find the turf equipment superintendents want to sell. Take a picture of it in color. Get an honest listing of it and its condition. Publish a flyer to all courses offering the equipment for sale. When he has a buyer, pick it up, deliver it and get the check.

It worked. In fact, he has already worn out one truck.

When asked why so much extra used equipment is available, Barnette suggests several reasons. A superintendent might

*(Continued on page 74)*

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## SUPPLY SIDE

### Joint venture paves way for expansion

(From page 73)

find equipment he is not familiar with at his new course. He phases out his inherited equipment as soon as possible, and gets his old favorites.

Or the superintendent at a more affluent course might feel it is more economical in the long run to have a good routine maintenance program and replace equipment every two to four years on a rotating schedule rather than do major repairs.

Or since major turf equipment is so specialized, a superintendent at one time might have bought a unit for a special use and it is now rarely if ever used.

Barnette points out that all such cases offer the opportunity for clubs with smaller budgets to get that needed unit at great savings. And from experience, he knows

that a good mechanic can spruce up almost any unit. Many times the used equipment needs only the clean-up-tune-up-grease-or-sharpen treatment. Barnette, however, does not repair or rebuild equipment himself. But he does have a list of qualified turf mechanics he can refer the buyer to.

UTEC serves southeast-central Florida, roughly the area covered by the Palm Beach, Treasure Coast, Ridge and Central Florida chapters. Shipping is free for transactions between superintendents in the same chapter; otherwise it's \$1.50 a mile.

The most common equipment available? Greensmowers, sand rakes and trim mowers. However, UTEC has sold everything from an almost-new fairway mower in excellent condition for \$22,500 to golf cars in fair condition for \$480 to a \$300 sod cutter. Barnette will list any piece for sale, but his minimum brokerage fee is \$100. The selling price includes brokerage on a sliding scale of 20 percent or less.



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Currently UTEC offers a couple of major units available from the Chicago area. In those cases, the sellers have arranged for commercial carrier delivery and included that in the price.

The color photos Barnette takes are in his working catalog he personally shows to customers. He urges them to call the seller or his mechanic. He also mails a black-and-white flyer showing equipment on a regular basis.

Where does UTEC go from here?

Barnette is expanding slowly. In August, he entered into a joint venture with Lakeland-based Golf Ventures to represent UTEC in the Bahamas and much of the rest of the state. David Miller and Jim Sartain will represent the company in Central Florida, Bob Schroter in North Florida and David Cheesman in South Florida and the Bahamas.

**EDITOR'S NOTE:** Earl Collings is a free-lance publicist based in South Florida. Advertisers may submit feature stories about their companies, which will be edited to meet Florida Green standards and will be used when space is available. Priority will be given to stories about new products and services.

## Ransomes buys Cushman, Ryan

JOHNSON CREEK, WIS. — Ransomes America has acquired three major names

in turf equipment with the purchase of Cushman, Ryan and Brouwer Turf Equipment Ltd. from the Outboard Marine Corporation.

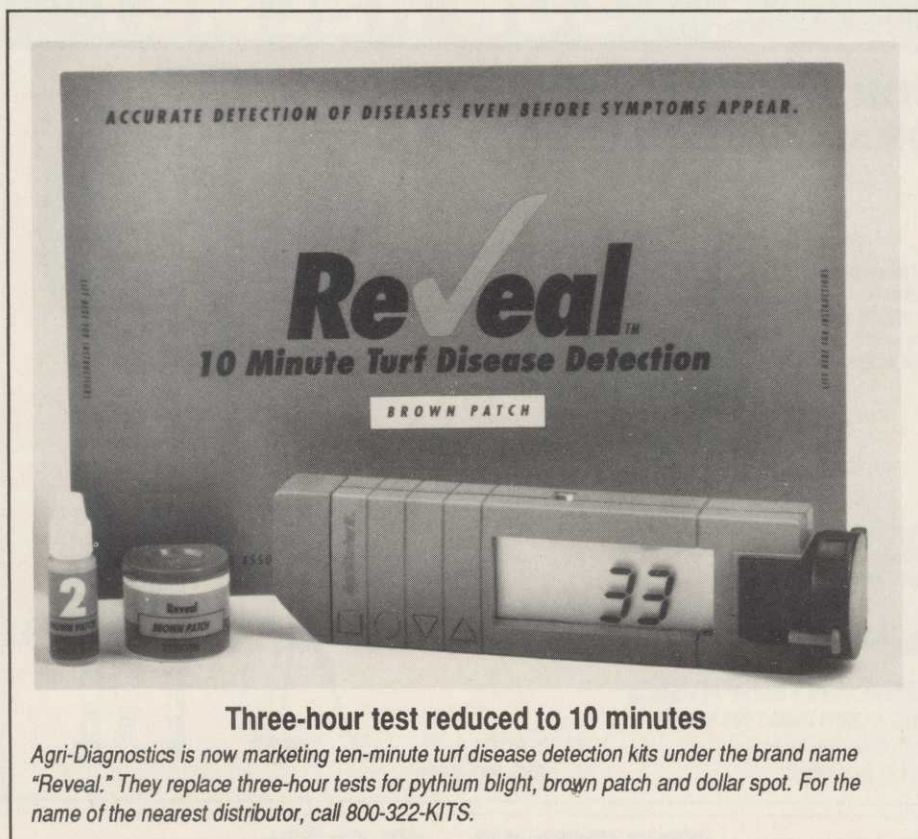
According to Helmut Adam, president of Ransomes America — a division of Ransomes plc (sic) of Ipswich, England — the price was \$150 million.

The Cushman group, based in Lincoln,

Neb., includes Cushman turf vehicles and mowers, Ryan aerators and sod cutters and Brouwer mowers, vacuums and sod harvesting equipment.

"It is a well-run company with a good name," said Adam. "We are not going to change something that runs as well as

(Please see RANSOMES, page 78)



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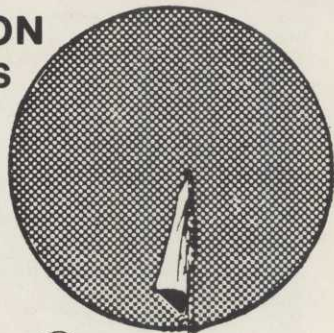
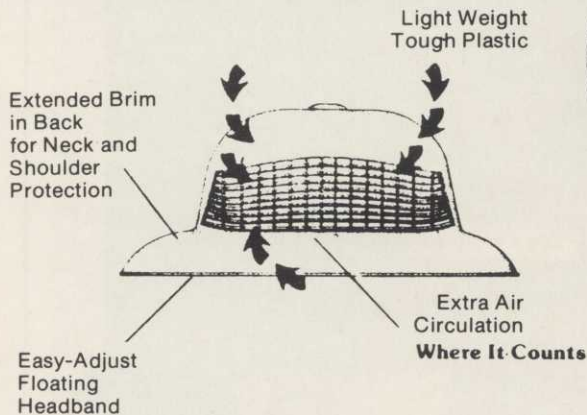
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*for the superintendent*



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*Chuck Rogers, Saddlebrook, Tampa, FL*



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"Potassium nitrate is a large part of our fertilizer program on bentgrass greens. Its high potassium to low nitrogen ratio lets us grow **healthier, greener greens** without excessive top growth. KNO<sub>3</sub> provides an excellent source of chlorine-free potassium that is essential to **grow strong hardy plants with increased resistance to stresses** like heat and drought. The prills are easy to apply and their high solubility and round shape allows them to **move to the soil surface** so mowers don't pick them up. Potassium nitrate **works fast** to give us the deepest, richest greens."

*David Lowe, The Plantation at Ponte Vedra, Jacksonville, FL*



## SAVES TIME & LABOR, DISSOLVES EASILY, GOOD BALL SPEED.

"Potassium nitrate plays an important role in our nutritional program on greens and tees. It **dissolves easily in water** and **mixes well with our regular** pesticide and micronutrient **sprays** so we can do several jobs at once, **saving application and labor costs**. Potassium nitrate has the ideal ratio of potassium to nitrogen for **good green color with no excessive growth** that might slow the ball."

*Steve Kuhn, Doral Country Club, Miami, FL*

Add K-POWER to your golf course fertilization program. Apply as a dry blend, straight or dissolve in water for spray application or fertigation. Specify K-POWER from your fertilizer supplier.

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Haifa Chemicals, LTD.  
Haifa, Israel



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## Southern Turf opens facility in Spain

TIFTON, Ga. — Southern Turf Nurseries has opened a production facility in Spain, the first international facility of an American-based turfgrass producing company.

With the expanding golf course market worldwide and the exporting of the American golf course architect expertise, demand has been created for the high quality hybrid bermudagrasses in the tropical and subtropical regions of Europe and Asia.

Southern Turf Nurseries has established a farm near Malaga, Spain, where hybrid Tifway 419 and Tifgreen 328 are being produced to standards of greens-quality, certified grass.

Partners in the venture are Larry and David Cooper. The latter is a member of the Royal & Ancient at St. Andrews.

## Ransomes takes over Cushman, two others

(From page 75)

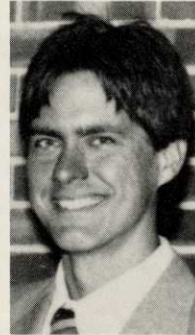
Cushman.

"I am excited about working with Stuart Rafos (Cushman president) and the rest of the management team at Cushman. Its product line complements the Ransomes line of commercial turf equipment extremely well."

Ransomes America, which manufactures and markets commercial turf equipment in



Duane Guettler



Mark Myhre



Scott Spara

## Nor-Am awards 3 scholarships

Nor-Am Chemical Company of Wilmington, Del., awarded scholarships to three Florida turf students: Scott Spara at Lake City Community College and Duane Guettler and Mark Myhre at the University of Florida

North and South America, also acquired a line of turf renovation equipment from Salsco of Cheshire, Conn., in August. The line includes aerators, seeders, spreaders, loaders, blowers and dethatchers.

Last year the company bought Steiner Turf Equipment of Orrville, Ohio, which it operates as an independent manufacturer of mowing tractors and attachments.

Ransomes plc (*sic*) has ceased production of agricultural equipment to concentrate on turf machinery worldwide.

Its other three divisions are Ransomes Commercial, which manufactures and distributes professional turf equipment outside the Western Hemisphere, Ransomes Consumer, which manufactures garden machinery and Ransomes Property, its development and investment arm.

Ransomes Consumer recently purchased Westwood, a producer of garden tractors in the United Kingdom.

## Duda opens 7th branch

OVIEDO — Duda Sod opened a Clewiston branch in August, the company's seventh Florida location.

"The demand for Duda sod has grown so much in recent years that we felt it was necessary to move closer to our buyers," said Betty Miller, Duda marketing representative.

Established in 1972, Duda Sod specializes in Floratam St. Augustine, 419 bermudagrass and other grasses.

Duda has locations in Zellwood, Oviedo, Cocoa, Fort Lonesome, LaBelle and Fort Pierce.

Duda Sod is a division of A. Duda & Sons, which was founded in 1926 as a five-acre celery farm. Headquartered in Oviedo, the company also has offices in California and Texas. Its Florida land holdings exceed 115,000 acres.

# THE PARTS STORE

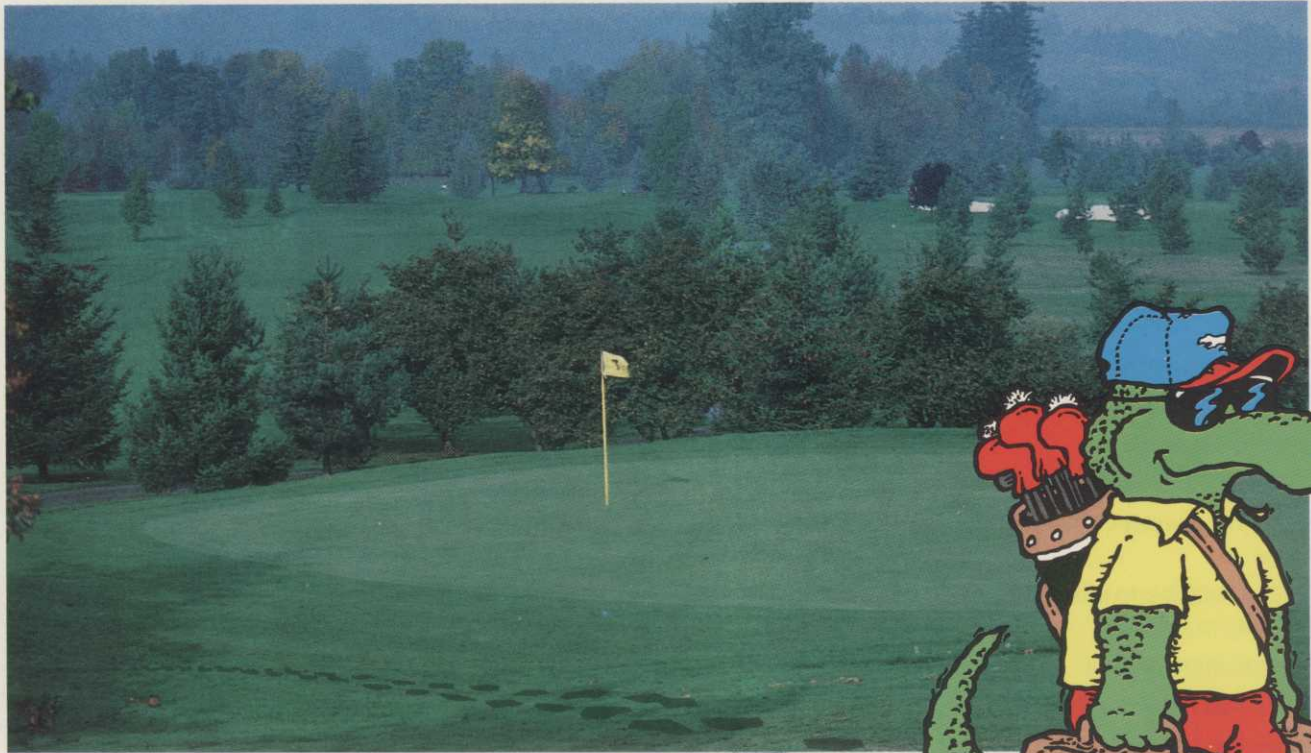
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Gator turf-type perennial ryegrass is a seasoned traveler that is comfortable in any situation, virtually anywhere.

While handsome and tough enough to be in the ryegrass blend that creates Super Bowl turf, Gator is also at home on golf course fairways in the North.

But, that's not all versatile Gator can do.

It goes South every winter where it is a top choice of golf superintendents for winter overseeding of fairways.

Gator really is different.

It's a hybrid of dark green, heat and

humidity tolerant  
American varieties with  
dense, lower-growing European  
ryegrasses.

The result is a fine-bladed ryegrass that germinates in 7-10 days, mows cleanly at any height from 1/8 to 1-1/2 inches, is disease-resistant and heat and cold tolerant.



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## What good is a golf course?

What good is a golf course?

As a recent attendee of the GCSAA seminar on *Environmental Considerations in Golf Management*, I would like to share some of the topics of discussion.

"What good is a golf course, anyway? Only the rich are able to use it."

This is part of the image problem we in the golf business face when dealing with the general public who do not play golf. Well, here is a list of some of the things that a golf course does for the community.

- Recharge the ground water
- Filter that water through turfgrass
- Rainwater runoff slowed in turf
- Provides a greenbelt
- Provides a wildlife habitat
- Enhances the oxygen-carbon dioxide exchange
- Provides a heatsink to moderate the temperature in the area
- Aids in soil conservation
- Uses less water than a subdivision
- Pays more taxes in relation to services used
- Raises property values
- Provides employment for a number of people

This is just a partial listing but it is important for those of us in this business

to think of all the good that a golf course does for the whole community, for non-golfers and golfers alike.

We must not fail to acknowledge that, yes, we do apply pesticides and fertilizers, but only as needed and in correct rates. Turfgrass is an excellent filter and biodegrader, thus the products that we use are confined to the surface and are consumed on site. They do not pose a leaching problem when applied properly.

Each of us in the golf business has an obligation to see that we do apply all of the materials that we use in the proper manner. One of the best ways to demonstrate our training is to become a certified applicator.

In the water-use area, we are responsible consumers. What water we use either aids the turf growth, cools the climate, or recharges the groundwater.

Do not forget that a golf course is an asset to the community.

-Lee A Webb, CGCS  
*Northwest Turfgrass Topics*  
Spring 1989

## Victory for truth and reason

For the past couple of years, Daconil — a fungicide — has been under indictment for the death of a golfer from "licking his golf balls."

The case has been covered on several television talk shows, including ABC's "Good Morning America" and "20/20."

After more than five years of sensational reporting, Daconil finally had its day in court.

Daconil, a product of Diamond Shamrock Co. Inc., has been held out by environmental hysterics as proof that lawn chemicals pose a danger to the general public. As recently as May, 1989, *Newsweek* cited the fungicide as cause for concern about lawn pesticides.

The story began in 1982 when Navy Lt. George Prior died of toxic epidermal necrolysis (TEN) 14 days after playing golf on the Army-Navy CC golf course. Prior's widow alleged via Navy pathologist Dr. Jonathan Lord that Daconil was the cause of death.

It took only one day in court for Judge Paul Sheridan to rule in favor of Diamond Shamrock Co., dismissing the \$16 million in damages sought by the Prior estate. Testimony in the case showed that Prior had, in truth, died of TEN caused by the flu and the use of aspirin and tetracycline.

Unfortunately, what was crystal clear to the judge in this case somehow escaped the attention of the media. As usual, a reporter's search for the truth was overshadowed by his zest for a story and it will be years (if ever) before the chemical industry recovers from this all-too-common example of public misinformation.

-Oregon GCSA Newsletter  
May, 1989

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That's why you need a pre-emergence 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**.

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**Its 20-week mission:**  
**seek out problem weeds**  
**and prevent their germination.**

Indian Hills Country Club, Marietta, GA.

**Black Diamond must be great**

Dear Dan & Irene:

I truly enjoy receiving and reading *The Florida Green* for two reasons:

a) Excellently written, well-timed articles illustrated with good photographs.

b) It keeps me up to date with my superintendent friends in Florida.

Your magazine, containing light humorous articles as well as meaty turf stuff offers the reader a mix that makes for a good, enjoyable publication. A wealth of information and top-drawer pictures.

As you might guess, I am way behind with my reading. More so than usual. Fact is, I just completed the Fall 1988 issue — which prompts me to write. The article and photos on Black Diamond Ranch was a masterpiece! Reading it makes you want to play it! Must be great! And different from most courses in Florida. But simply stated, all your publications contain interesting articles and topnotch pictures — both very high quality.

My best to you and all my friends in Florida. I am really looking forward to being in Orlando again next February and to see you all again (surely would love to play Black Diamond Ranch).

Sincerely,  
Robert V. Mitchell  
The Greenbrier  
White Sulphur Springs, W. Va.

**Pleased to recommend**

I recently saw a copy of *The Florida Green* and I must tell you that I found it an impressive publication.

As regional sales manager for BioTurf, Inc., it is part of my duties to recommend publications for our product line and I would certainly welcome an advertising rate schedule.

- Dick Campbell

**Drooling in Arkansas**

I appreciate receiving your fine magazine. The golfing people at UALR and in Little Rock that I show it to drool over the beautiful greens. Everyone says you do a fine job in publishing the magazine.

Have a fine year.

-Jerry Crittenden  
U of Arkansas at Little Rock

**Student takes us to Ohio**

My name is Rob Kloska and I am interested in receiving *The Florida Green* while I am at superintendents school. I recently spent approximately six months at the Polo Club in Boca Raton under the direction of Rich Brogan, the superintendent and my brother. I am presently attending Nova University in Fort Lauderdale and I plan to transfer to Ohio State Agricultural and Technical Institute after Christmas.

Your magazine has taught me much valuable information.

-Rob Kloska  
Steubenville, Ohio

**Drying out some old joints**

Just a quick note to touch base with you — I am moving from my old hometown, Ark City, Kan., to Scottsdale, Ariz. I have got to get out of the snowballs and freezing weather. The year-around sunshine is for me. I have passed the 80-year-old mark and the old joints and body have got to be among the sunshine areas.

I certainly enjoy and look forward to each issue of your publication. It stands alone in this field. I must say that I read it from cover to cover when I receive it. My hat is off to you, Dan. You are a true master of your profession.

My son Craig has been working with Tom Fazio these past five years and I told him to touch base with you when he gets down your way.

Sincerely,  
Dick Metz  
Scottsdale, Ariz.

# U T E C

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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.



**CUSHMAN**  
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\*Does not include sales tax, freight or dealer prep.  
Prices may vary with dealer.

5451 Cushman, P.O. Box 82400, Lincoln, NE 68501  
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## *And just what is it you do for a living, anyway?*



What do you do for a living?

How about the people who work for you?

When your new employee is asked about his job by Aunt Minerva, will she get a meaningful response? Or will she have to ask, “And what is that?”

As I was scanning the obituary pages this morning — too many of my acquaintances and contemporaries have taken up the nasty habit of appearing in them — I ran across the notice for a 71-year-old man who was described as “a golf course maintenance person.”

How sad, I thought, that this human being had devoted perhaps half a century to maintaining a facility which, during his working lifetime, brought enjoyment and innumerable lessons in humility literally to millions of people... and his legacy is the sterile designation, “maintenance person.”

What did he do?

Was he a mechanic? Irrigation technician? Spray technician? Equipment operator? Turf groomer? Tree trimmer? Ditch digger? Cup cutter?

Or was he a member of a crew that did all of those things? If that’s the case, he worked very hard. The least they could have done is call him a “maintenance worker.” There’s some honor in that.

But it still doesn’t answer Aunt Minerva’s

question, “What do you do?”

I don’t have the answer, but I suggest it’s an important question for at least two reasons:

The first, obviously, is motivation.

When greenkeepers began seeing themselves more as managers than as grass farmers, they changed their job title to superintendent. Their employers went along with the change because they got better golf courses out of the deal.

The same lesson could be applied to your “maintenance persons.”

The second has to do with survival of the industry.

A golf course “maintenance person” helps nurture a complicated ecosystem that returns fresh water to our aquifers and oxygen to our atmosphere. He protects more wildlife than any zookeeper and he preserves parklands that are not just pretty to look at, but actually serve a useful, healthful purpose for more than 20 million Americans.

Give a “maintenance person” a job title that reflects those contributions and maybe the toxo-terrorists, as Tim Hiers has dubbed them, will go pick on the real enemies of the environment.

What do you think?

*Larry Kieffer*

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