

### The Florida Green Winter 1990



Florida GCSA Golf Team prepares to defend its turf while FGCSA President Joel Jackson prepares to host

## The Greatest Show in Turf

### 61st INTERNATIONAL GOLF COURSE CONFERENCE & SHOW

February 19-26, 1990 Orange County Convention/Civic Center Orlando, Florida

### CONFERENCE HIGHLIGHTS

### Saturday, Feb. 17

■ GCSAA Golf Championship Practice Round

### Sunday, Feb. 18

■ GCSAA Golf Championship Practice Round

### Monday - Tuesday, Feb. 19-20

■ GCSAA Golf Championship

### Monday - Thursday, Feb. 19-22

■ Forty Seminars

### Thursday, Feb. 22

Opening Session and Reception
 Dr. Ken Blanchard, author of
 The One Minute Manager

### Friday, Feb. 23

- Six GCSAA Education Sessions
- Distributor Day Preview

### Saturday, Feb. 24

- Trade Show
- Golf Course Builders of America Session
- Two GCSAA Education Sessions

### Sunday, Feb. 25

- Trade Show
- Prayer Breakfast, featuring
   James C. Irwin, Apollo 15 Astronaut
- Major speaker Sessions
- GCSAA Education Session
- American Society of Golf Course Architects Session
- Computer Special Interest Group

### Monday, Feb. 26

- Trade Show
- USGA Green Section Conference
- Annual Membership Meeting & Election
- Old Tom Morris Banquet Sherwood Moore, honoree Tony Orlando, entertainer





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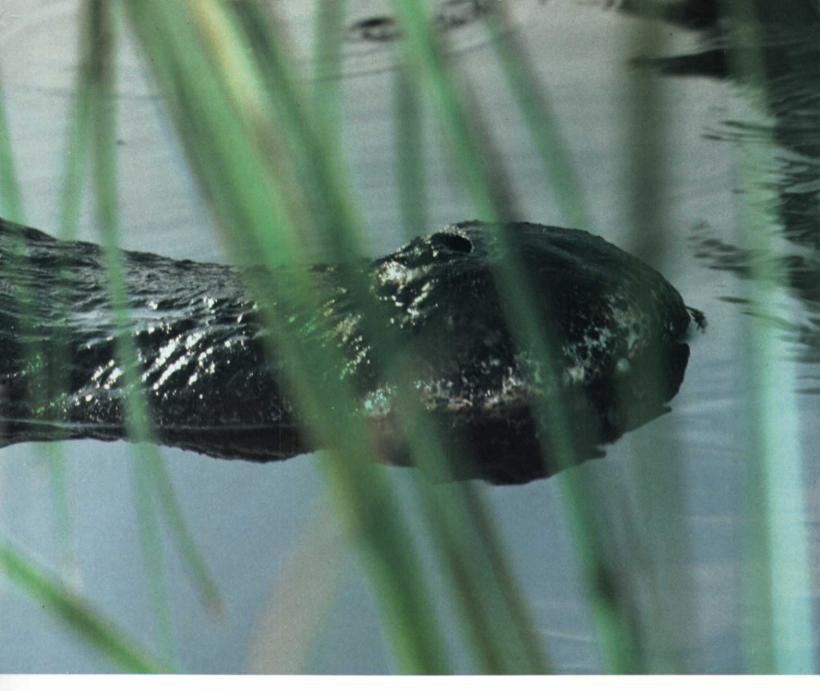
Take our premium fungicides, for example. Chipco\* brand 26019 fungicide provides unsurpassed control of all major turf diseases. And its longlasting protection makes it the perfect foundation for a season-long disease control program.

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gives you unmatched post-emergence control of more than 65 annual broadleaf weeds.

So, for the turf-management problem Chipco<sup>®</sup> products can't solve, keep a pair of sneakers handy. For all the others, turn to the first name in quality turf care: Chipco.



### The Florida Green

Official Bulletin of the Florida Golf Course Superintendents Association

Winter 1990



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Orlando photographer Rummel Wagner caught, from left, Buck Buckner, Joe Ondo, Dave Oliver and Fred Klauk getting out of a Hunters Creek bunker under the watchful eye of FGCSA President Joel Jackson

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Starting with the issue of April 15, 1990, *The Florida Green* will be published quarterly on the 15th of January, April, July and October for the Florida Golf Course Superintendents Association by Janlark Communications, Inc. Closing date for advertising space reservation is 45 days prior to publication. All advertising and editorial matters should be addressed to Larry Kieffer at Janlark Communications.



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# letter



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The GA60's unique 5th wheel configuration also gives you less soil compaction, a zero turning radius while aerating, and quick attachment and detachment - no mechanical

Cushman GA60's have been undergoing rigorous field-testing for nearly a year now, and alterations or gear replacements are required. they'll be demonstrated in many parts of the country this fall. Be watching for a demonstration in your area.

I'm confident that once you see the new Cushman GA60, you'll agree that it was well-worth

the wait.

Sincerely,

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P.S. If you'd like more details on the Cushman GA60 Large Area Aerator, just call toll free 1-800-228-4444.

\*Based on August '89 price survey.

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LD BUSINESS: I want to thank everyone for the cards, calls, and letters of support during my recent heart surgery and recuperation. Most of all, I want to publicly thank and praise my staff for the professional way they carried out their duties and responsibilities during my absence. I am very proud of them, and I am very fortunate to be working with such a fine group of people.

'Greatest Show on Earth' in Orlando marks end of an era provide good training and

In our industry, it is sometimes very difficult to assemble and retain a staff of dedicated, professional, and loyal employees. If a club wants to have a first-class, efficient operation, it must make the commitment to competitive wages and benefits.

Combine those factors with a management style that includes communication, consistency, and caring, and you will create a winning team.

**NEW BUSINESS:** "The Greatest Show on Earth" is coming our way, and it will be in Orlando Feb. 19-26. That's the 61st International Golf Course Conference and Show presented by the Golf Course Superintendents Association of America. There will be 38 seminars and educational sessions, and 337,000 square feet of exhibits showcasing the latest in golf course equipment and products. This show has grown to become a member of the top 100 trade shows in America, and only because of the recent expansion of the Orange County Convention Center is it able to come to Florida.

Because we are hosting the conference this year, Florida superintendents who join the GCSAA before the conference will have their registration fees waived. That's a saving of \$165 at the door.

Certainly all current GCSAA members who have been unable to travel to Phoenix, Houston or Anaheim the last three years should take advantage of this opportunity and attend this year. You can be sure that the rising number of certified superintendents will be on hand to earn continuing education credits to qualify for re-certification.

For those who are not members of either your local superintendent association or the GCSAA, now is the ideal time for you and your club to make a commitment to excellence by becoming a full partner in the golf industry. The education, information, and support you receive by being an active member is well worth the investment. And more importantly, your support is needed to help the golf industry build and maintain environmentally sound golf courses. As partners working together to support turf research, we can achieve that goal.

THIS ISSUE officially marks the retirement of Dan and Irene Jones as editor and assistant editor of The Florida Green. Words become very inadequate when you try to express the admiration and gratitude that over 600 superintendents in this association have for Dan and Irene. The dedication and hard work that they have invested in over 16 years of service to the FGCSA can never be repaid materially. But Dan and Irene, if you can measure the love and respect we have for you and what you have done for us, you will be wealthy for the rest of your lives. Thank you from the bottom of our hearts.

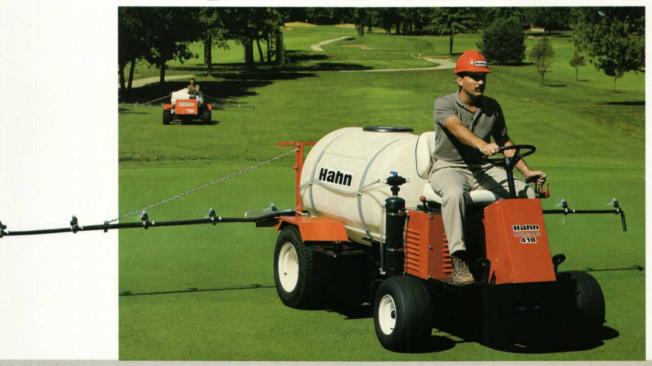
While Dan will shed the responsibility of producing the magazine, he will continue to contribute to The Florida Green as a writer and consultant.



Joel D. Jackson, CGCS

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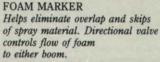


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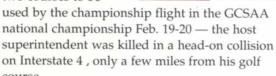
When transporting materials, the cargo bed with optional hydraulic dump will provide another valuable attachment.



### TURF NEWS ROUNDUP

### GCSAA Tournament host killed in crash

On the day before the Florida GCSAA golf team was scheduled to conduct its first practice round over Hunters Creek GC in Orlando — one of two courses to be



John Jankiewicz, 42, died instantly when his car was struck head-on by a tractor-trailer shortly before noon on Dec. 1. The Florida Highway Patrol theorized that the driver of the truck fell asleep and crossed the median. Jankiewicz was on his way to Grand Cypress Resort, where he and Hunters Creek Head Professional Fred Fuhrman were scheduled to play a round of golf with two friends. Traveling in his own car a few seconds ahead of Jankiewicz, Fuhrman was unaware of the accident until late that afternoon.

"John was a bright example of a true professional who took immense pride in his work," said Joel Jackson, FGCSA President.

"He was very dedicated and loyal."

Known for his team leadership, Jankiewicz kept his mechanic and his assistant superintendent, Craig Shelton, with him for more than 12 years. His spray and irrigation technicians had been with him for more than five years.

A native of Utica, N.Y. Jankiewicz was graduated from the University of Minnesota with degrees in business administration and agronomy. He began his career at The Bay Hill Club of Orlando. He was involved with the construction of the Deer Run GC in Casselberry and the Interlachen CC in Winter Park. Before moving to Hunters Creek to supervise its construction in 1984, Jankiewicz had been head superintendent at Errol Estate GC in Apopka for nine years.

In addition to his love for golf, he enjoyed fishing, diving and photography.

He was a member of the First Baptist Church of Orlando, the GCSAA and the Central Florida chapter of the FGCSA.

He is survived by his wife, June; his parents; and two brothers.

### The Scandinavian Connection

In a sense, it's only fitting.

Of all the areas in the world, golf is growing fastest in Florida and in Scandinavia, the countries that form the northern coasts of the Baltic and North Seas — Norway, Sweden, Finland and Denmark.

It shouldn't be surprising, therefore, that an aspiring golf course superintendent from Finland, which has 35 golf courses in operation and 20 more under development, should choose to take his training at Lake City Community College's School of Golf Course Operations.

And this past summer, the Jacobsen Division of Textron, Inc., brought 90 superintendents from the four countries to Florida to observe golf course maintenance practices after



LCCC/PIERSOL

Layout of Vierumaki Golf Course at the Finnish Sports Institute, where two LCCC students — one a Finnish exchange student performed their summer OJT. getting tours of the company's plants in Racine, Wis., and Charlotte, N.C.

That the two exchanges were entirely unrelated only underscores the growing importance of Florida as a world leader in the golf industry.

This past summer, Jarkko Lahdensuo, now a junior in LCCC's three-year program, returned to his homeland for the first of his two required summer OJT programs. And, with the Finnish Sports Institute and the

Finnish national airline — Finnair — picking up the expenses, he brought classmate Bruce Chestnutt with him.

Furthermore, the two national institutions brought John Piersol, chairman of the LCCC golf course operations program, into the country for 12 days to check on the turf management programs at their golf

90 superintendents from Denmark, Finland, Norway and Sweden observed maintenance techniques at Doral CC in Mlami and Grand Cypress Resort in Orlando. The superintendents also toured the Jacobsen plants in Racine, Wis., and Charlotte, N.C.



fields.

While there, he conducted a turf management seminar and field day and, of course, checked up on his students.

"This was an outstanding experience for me," said Piersol. "The people have really taken to the game, which they view as a family activity that provides enjoyable recreation and exercise.

"No one rides golf carts. In fact, they don't even know about carts. The Fins have a great attitude toward the game that I hope they maintain."

Another Finnish attitude Piersol admires is their "green card" system.

"No one can play golf until he has a green card," Piersol reports.

Golfers obtain their green cards by passing written and practical tests on the rules of golf, etiquette and basic skills.

"Since golf is growing so rapidly, many pros spend much of their time giving 'green card' lessons," he says. "It's a great system that assures that everyone has some basic knowledge before getting on to the course."

Agronomically, the Finns have a lot of catching up to do, Piersol says. Greens construction is a particularly vexing problem.

"The concept of the USGA green was just presented to the Finnish golf

## Control boxes for turf irrigation systems

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	Country	Population <sup>1</sup>	Area <sup>1</sup>	Golfers <sup>2</sup>	Courses
te,	Denmark	5,124,000	16,629	29,000	60
,er	Finland	4,788,000	130,120	8,900	18
1	Norway	4,092,000	125,053	6,500	9
1	Sweden	8,320,000	173,775	123,000	156
1	Scandinavia	22,324,000	445,467	167,400	243
K	Florida	12,023,000³	58,560	1,172,0004	808

industry by Jarkko this past summer. He showed the new USGA greens construction tape to a group of Finnish greenkeepers.

"Jarkko's American training at LCCC makes him a highly respected individual in Finland."

Although many native bentgrasses grow wild throughout Scandinavia, the common grasses for Finnish tees and fairways has been bluegrass and fescue. Greens generally are fescue.

The LCCC students introduced the Finns to Penncross, Penneagle and Penway bentgrasses this past summer.

"There is no formal turf management education available in Finland," Piersol says. "That's why they came to LCCC for help."

Coming the other direction were 90 superintendents who were the guests of ORAG Inter AG, the European distributor of Jacobsen equipment.

They spent two weeks in the U.S. for a "learning experience with a little fun mixed in," according to Neils-Erik Brems, ORAG's representative in Denmark.

In addition to their plant tours and visits to Doral CC in Miami and Grand Cypress Resort in Orlando, the supers toured the Minnesota's Department of Horticul-

ture.



Jarkko Lahdensuo examines a soil core University of sample while explaining the concept of USGA green specifications.

The purpose of this trip is to educate the superintendents on

> what's being done here in the United States," Brems said. "They can then go back and educate their boards of directors and greens committees on what can be done to improve their courses."

LCCC student Bruce Chestnutt demonstrates the use of a turf aerator at an equipment field day.

LCCC/PIERSOI



### **Horticultural Society** honors tree author David Wedge, a horticultural consultant whose articles on

David Wedge, right, receives award from William Krome

trees appear frequently in The Florida Green, was honored at the Florida State Horticultural Society's annual meeting in Tampa last fall for his paper describing a West Palm Beach program to re-introduce flowering trees.

He received a silver medal and \$200 honorarium for the best paper in the Garden and Landscape section of Vol. 100, FSHS Proceedings.

### Ross course in Orlando undergoes renovation

The Country Club of Orlando will celebrate its 80th birthday this summer by getting a facelift.

The venerable Donald Ross layout, which was begun in 1910 and opened in 1912, will be completely renovated under the direction of architect Brian Silva, the noted Ross scholar. Silva's business partner is Geoff Cornish, author of the seminal history of golf course history in the United States.

Although Ross himself never visited the Orlando site, Silva said he is "very comfortable" that Ross did the layout and that the course was one of several hundred built by one of his principal construction superintendents, according to CCO Superintendent Cary Lewis.

The greens will be rebuilt to modern

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USGA specifications and will be restored to their original contours.

### Architect revises booklet on greens construction

"More than 70 percent of all greens today have been improperly built, or otherwise fail to meet modern scientific standards conducive to promoting growth while reducing physical and physiological stress," says Dr. Michael Hurdzan, a former superintendent and past president of the American Society of Golf Course Architects.

In his revised version of the 24page pamphlet, "The Evolution of the Modern Green," Hurdzan points out that to further complicate matters, each green has its own requirements involving such factors as orientation to the sun, air, drainage, shade and wind, and swings in temperature and relative humidity.

"The net result," Hurdzan concludes, "is that today's golf course superintendent has 18 different 'babies,' each one having its own strengths and weaknesses, and all of them being susceptible at any given time to devastation resulting from weather, disease, insects, vandals, weeds, equipment failure or operator



Mike Hurdzan

error, miscalculation or player abuse."

The quest for faster greens has resulted in a situation in which more of today's greens are being stressed beyond their genetic capacity to heal themselves.

However, he believes space-age technology will help win the battle.

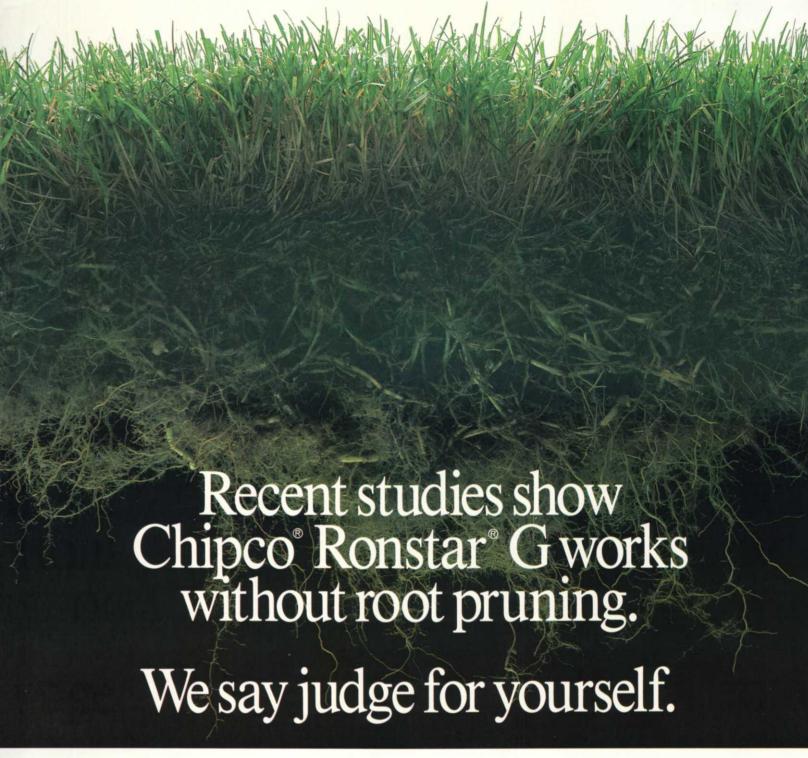
"Today's greens are the product of such disciplines as agronomic chemistry, soil physics, genetics and play physiology — disciplines that were far removed from the art of turfgrass management until the last 30 years or so," Hurdzan says.

Even at world-famous courses, the greens may be perfect only for a very short period, and then only with great expenditures of time, money and manpower, he adds.

"Therefore, greens should not be compared. Good greens are expected... great greens should be appreciated... and perfect greens should be cherished. For they are as fragile and changeable as life itself," he says.

Hurdzan's booklet reviews the historical development of the putting green, including the dominant methods of construction and the carefully prescribed procedures for building them, as well as the proper care and maintenance of both new and mature greens. It is available for \$5 from the American Society of Golf Course Architects, 221 N. LaSalle St., Chicago, IL 60601.





Let's face it, the last thing you need from a turf herbicide is root damage. That's why so many golf course superintendents are making

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est of all, just one pre-emergence application of CHIPCO® RONSTAR® G provides season-long control of 25 tough broadleaf and grassy weeds—including goosegrass and crabgrass. You'll also appreciate the fact that CHIPCO®

RONSTAR® G won't leach out or move laterally through the soil. And it's labeled for use on a wide variety of ornamentals. So you can

apply it to ornamental plantings at the same time you do your turf. You'll get up to 120 days of weed-free control.

Plus CHIPCO® RONSTAR® is also available as a wettable powder and in granular fertilizer formulations under well known brand names.

So judge for yourself. You'll discover why CHIPCO® RONSTAR® is the number one turf herbicide on the course today.

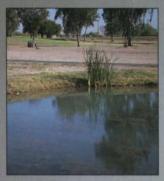




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The clean water aeration system designed specifically for golf courses. It gets your irrigation ponds, lakes and water hazards clean and clear

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Aeration Industries. A world leader in clean water technology with over 15 years of proven expertise. From municipal and industrial wastewater treatment, to clean-up of lakes, rivers and harbors, to high yield aquaculture.

### can win the war.

dollars and man hours... every year.



"THANKS TO AERATION INDUSTRIES AND AIRE-O<sub>2</sub> GOLFWATER, WE'RE WINNING THE WAR.

Dan Jones, C.G.C.S., Manager Banyan Golf Club West Palm Beach, Florida



"We've eliminated our algae problems... without the use of chemicals... and for the first time in the ten years that I've been here, our irrigation system is working the way it was designed to. In fact, we haven't had a clogged Clay valve or a blown irrigation pipe since we installed the AIRE-O2 system.

Now my ponds are clean and clear. And my maintenance crews are free to work on the golf course instead of fighting algae problems... I'm also winning lots of compliments from our members."

> To find out how AIRE-O2 Golfwater can help you win the war, contact your local irrigation distributor, or call Aeration Industries at 1-800-543-4475.

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Florida was first!18	Florida's golf numbers24
Florida dominates supply list 19	29 great golf courses28
Course makes its own water22	FGCSA tops 60032

Exclusive country club real estate usually is advertised by word of mouth and sold in mahogany-paneled offices. In Florida \$200,000 lots are advertised on billboards and sold out of mobile homes.

### Golf in Florida is a \$5 billion business

ventually, everything and everyone in golf comes to Florida.

And if they don't stay, at least they leave their money.

Golf is such a big part of Florida's economic picture that its Department of Commerce commissioned a study by the National Golf Foundation.

The finding: Golf is a \$5 billion industry in Florida, fully 20 percent of the gross national golf product.

Of that \$5 billion, less than \$400,000 is spent on equipment. The rest is on real estate, green fees, golf course construction and golf-related travel.

Nobody knows for sure exactly how many golf courses Florida has because we're building them as fast as they can pass cut the permits, sometimes faster.

As of Jan. 1, 1989, the NGF had counted 932 courses open for play in Florida. The 1990 data, scheduled for release in mid-to-late February, should show about 50 more. Another 89 were under construction or on the drawing boards as of Dec. 15, 1989 (See page 74).

More than 200 touring professionals call Florida home and, now that the LPGA has decided to give new meaning to Daytona Beach's old slogan "Where the girls are," that number is likely to climb significantly.

If Daytona Beach is where the girls are, Palm Beach is where the golf is. This one county of about 2,000 square miles and fewer than 700,000 inhabitants at the northern end of the Gold Coast supports more than 125 golf courses, all but half a dozen of them in the county's 500 square miles that are within 15 miles of the Atlantic Ocean.

If Palm Beach County were a state, it would have ranked 35th in the number of golf courses at the end of 1988, between Maine (116) and Maryland (143). By the time the 1989 data are published, it's entirely

possible for Palm Beach County to have passed Maryland and a few other states.

Palm Beach County is home to the PGA of America (which has located two and a half of its 43 sections, or chapters, in Florida), the National Golf Foundation, the Golf Course Builders Association and a handful of the world's greatest golf course architects, including one of the most prolific (page 65).

It is also home to Florida's oldest famous golf course, Donald Ross's Seminole.

It's not easy to build a great golf course in Florida, but the state has one of the largest and most varied collections of outstanding golf courses in the world (page 28).

The land is flat and generally uninteresting, the sandy soil won't hold water, which is in short supply (page 22), and the delicate ecosystem already is supporting more people than nature intended. In other words, the environmental laws are tough.

The one thing Florida golf developers have in their favor is OPM — Other People's Money or Older People's Money, take your pick. Florida has lots and lots of that.

The state ranks seventh in total number of golfers and 22nd in participation — only 9.9 percent of the residents play golf — but first in senior golfers. And nobody else is in the Top Ten.

By themselves, Florida golfers raise the national average age of golfers by *two years*.

And when some very talented architects go digging after all that OPM buried in Florida's sand, it is amazing what spectacular golf courses are created by the spoils.

In most parts of the world, exclusive country club real estate is advertised by word of mouth and sold in mahogany-paneled offices.

(Continues on page 24)





Pensacola

### Ponte Vedra

Sawgrass Ponte Vedra, FL 32082 904-285-3700

### Headquarters

Staff of 350 directs all PGA Tour operation — including PGA Tour Productions — from the Sawgrass development, which is the site of the original Tournament Players Club, considered the Tour's home course.

### **FLORIDA ACTIVITIES**

### REGULAR TOUR

- 1 Doral Ryder Open, Doral CC, Miami
- Honda Classic, TPC at Eagle Trace, Coral Springs
- 3 Nestle Invitational, Bay Hill Club, Orlando
- The Players Championship, TPC at Sawgrass, Ponte Vedra
- Walt Disney World/Oldsmobile Classic,
- 6 JCPenney Classic, Bardmoor CC, Largo
- Chrysler Team Championship, Palm Beach
  Polo Club, West Palm Beach

### SENIOR TOUR

- Royal Caribbean Classic, Key Biscayne GC, Key Biscayne
- GTE Suncoast Classic, Tampa Palms CC, Tampa
- Aetna Challenge, Club at Pelican Bay, Naples
- Chrysler Cup, TPC at Prestancia, Sarasota
- Fairfield Barnett Spacecoast Classic, Suntree CC, Melbourne

### **BEN HOGAN TOUR**

- Panama City Beach Classic, Hombre CC, Panama City Beach
- Lake City Classic, Lake City CC
- 3 Pensacola Open, Pensacola CC
- Gateway Open, Gateway CC, Fort Myers



Panama City Beach



3 Tallahassee

### Palm Beach Gardens

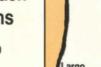
P.O. Box 109601 Palm Beach Gardens, FL 33410 407-624-8400

### Headquarters

Staff of more than 100 directs all operations of the PGA of America from a headquarters building, now undergoing expansion, on the grounds of PGA National Golf Club, considered the PGA of America's home club.

### FLORIDA ACTIVITIES

- PGA Seniors Championship, PGA National GC, Palm Beach Gardens
- Winter Tournament Program, PGA National GC, Palm Beach Gardens
- Oldsmobile National Scramble Championship, Walt Disney World
- M PGA Merchandise Show, Orange County Convention Center, Orlando



Lake City

Ponte Vedra





Melbourne



2 Tampa



Myers

Palm Beach Gardens
West Palm Beach

Lake Worth
Lauderhill 2

Coral Springs







2570 Volusia Ave., Suite B Daytona Beach, FL 32114 904-254-800

### Headquarters

Staff of about 20 administers both the touring and teaching divisions from temporary headquarters at Indigo Lakes CC while a new headquarters building and home golf course is being built "across the road" (I-4).

### FLORIDA ACTIVITIES

- Oldsmobile Classic, Wycliffe G&CC, Lake
- Phar-Mor Inverrary Classic, Inverrary CC,
- 3 Centel Classic, Course TBD, Tallahassee
- JCPenney Classic, Bardmoor CC, Largo





4361 Northlake Blvd Palm Beach Gardens, FL 33410 407-694-2977

The builders retain the executive services of Don Rossi, retired executive director of the National Golf Foundation.





1150 South U.S. One Jupiter, FL 33477 407-744-6006

A staff of about 35 coordinates the NGF's research, consulting and promotional activities from just north of Palm Beach Gardens.

Sarasota not only has the nation's best supply of golf courses, it also had the first! rom scrubby beginnings, golf in Florida has blossomed into a multibillion dollar business.

And isn't it interesting that the place where it all began now is recognized as the best-supplied market in the nation for public golf facilities.

Remarkable!

The man who started it all, a feisty Scot land developer named John Hamilton Gillespie, loved the game and had the vision to play it anywhere. Which explains why, in May 1886, in Sarasota,

Florida — a little fishing village, then part of Manatee County, on the Gulf of Mexico south of

Tampa — Gillespie hacked out the first two golf holes in Florida.

Pristine meadowland, surrounded by native palmetto scrub and pine trees, provided an idyllic setting for the

introduction of the hallowed game to the new Sunshine State.

"Twa holes f'r practice an' they can be extended later," was the way Gillespie described them to friends.

Although well documented as Florida's first golf holes, there always remained the question, "Were they the first in the nation?"

In the annals of the U.S. game, five holes at Yonkers, NY, constructed in February 1888 by John Reid, another Scot, have been officially ranked first because the club has continued in operation since inception.

Reid creatively named his club St. Andrews, which sealed the deal for golf historians. The Yonkers location was a centerpiece of the American Centennial of the game observed during 1988.

On May 8, 1939 — 53 years after Gillespie's holes opened for a short few year's play — the local *Sarasota Herald* newspaper published a special Golf News edition. A bold headline on the front page screamed: "SARASOTA BIRTHPLACE OF U.S. GOLF."

Gillespie, himself, wrote very informative articles about the state of the game for publication in the U.S. and Great Britain. His pieces reminisced about the early days of golf in Edinburgh and St. Andrews in his native Scotland. He went into great detail to explain how the great players of the day employed their special shots for repeated victories, the changes in equipment and social structure which provided women more liberal use of golf courses.

His papers and diaries touched on legendary reports of golf in the 1780s at Harleston Green in Charleston, S.C. There was no hard evidence, however, to prove the golf club was anything but a place for social gatherings. No golf holes ever were documented and certainly women weren't making inroads into the game.

Gillespie's action in Sarasota 103 years ago gave Florida a head start in a game which has developed into the state's major non-polluting industry. According to a recent National Golf Foundation study commissioned by the state's Department of Commerce, golf is very big business, expected to contribute an estimated \$5.2 billion to the state's economy in 1989.

The crowning jewel in the Gillespie legacy, however, as we enter the second century of golf in Florida, is that Sarasota, where the game began, leads the nation in providing public golf courses for residents and visitors. Sarasota County is Number One in the country on a list of the 10 best-supplied metro areas for public golf (See sidebar elsewhere), according to another NGF study. Sarasota is far in the lead offering an 18-hole golf course for every 715 players.

Gillespie the Scot and his golf, like the amber flow of another smooth export of his native land, gain favor with the passage of time.

Bless you, John Hamilton.

Bill Carey was executive director of the Florida State Golf Association for 24 years and a USGA committeeman for about the same period.

## Bless you, Scot land de Hamilton Gilles had the vision to explains why, is

BY BILL CAREY

New York columnist supported Florida's claim in 1935

Speculation was rampant in the national press about who really was first. Joe Williams, a sturdy practitioner of the sportswriter's craft, moved the question center stage on March 21, 1935, in a column he wrote for the New York World-Telegram:

The Yonkers adventure is, of course, completely authentic, but if any historian wishes to wager this club was the first to reecho the piteous cry of, 'Boy, my niblick, please!' he should proceed with great caution and frugality. To come right out and say so, he should keep his money in his pocket.

Yonkers just wasn't the first golf club in America. The Sarasota Golf Club preceded Yonkers by at least two years. For some strange reason, this interesting historical item has just been brought to light. There is indisputable evidence that golf was played here (in Sarasota) in 1886. The widow of the man who built the course is still alive to confirm the facts.

She is Mrs. J. Hamilton Gillespie, a gracious lady who lives here in an attractive home. Her husband — very probably the father of American golf — died on a golf course here 12 years ago.

### **BEST SUPPLIED GOLF MARKETS**

	Golfers Per
Metropolitan Area	18 Public Holes
1. Sarasota	715
2. Fort Myers/Cape Coral	998
3. Naples	1,003
4. Glens Falls, N.Y.	1,183
5. Bellingham, Wash	
6. Fort Walton Beach	1,431
7. Elmira, N.Y	1,446
8. Fort Pierce	
9. Bradenton	
10. Jackson, Mich	1,499

### Florida cities lead nation

Sarasota leads six metropolitan areas in Florida listed among the nation's ten "best-supplied" with public golf courses, according to figures released by the National Golf Foundation Sept. 1.

The west coast city has only 715 resident golfers for each 18 public holes, a ratio that is twice as good as the sixth-best metropolitan area (Fort Walton Beach) and more than five times better than the national average of 3,677 golfers per 18 public holes.

Jersey City, N.J., is the nation's worst-supplied city, with 60,334 golfers for each 18 public golf holes.

Based on annual surveys, the NGF calculates "participation rates" — the percentage of the population which plays golf — for each of the nation's 357 Standard Metropolitan Statistical Areas and applies those rates to population estimates from the U.S. Census Bureau to determine the number of golfers in each metro area.

The folks around Sarasota aren't quite as well off as the figures suggest, however. The study is based on resident population. In winter, the area's population swells to 650,000 and many — if not most — of the nearly 400,000 visitors are golfers.

### WORST SUPPLIED GOLF MARKETS

	Golfers Per
Metropolitan Area	18 Public Holes
1. Jersey City, N.J.	60,334
2. New York City	21,562
3. Texarkana, Tex	
4. Houma/Thibodaux, La	15,387
5. El Paso, Tex	
6. Montgomery, Ala	
7. Los Angeles, Calif	
8. Tuscaloosa, Ala	
9. Houston, Tex	
10. Albuquerque, N.M	11,951

Source: National Golf Foundation, Sept. 1, 1989

# THE POWER IN HALF THE HOURS.

Country Club 19-4-6 with

### RONSTAR

Do two jobs in one operation for maximum efficiency! Country Club premium homogeneous granular fertilizer with 26 percent organic nitrogen (3 units of WIN) combines with Ronstar for a feeding base you can build on, year after year, plus pre-emergence control of crabgrass, goosegrass and other annual grasses. And for areas where soil-potash levels are low, try our homogeneous formulation of Country Club 7-3-22 with Ronstar—all from the source for premium quality turf products—your local Lebanon distributor. In Florida, call Terra International, Inc., at 800-752-6615 or Gulf Shore Turf Supply, Inc., at 904-968-0731.



A division of Lebanon Chemical Corporation 800-233-0628

Ronstar® is the Registered Trademark of Rhone-Poulenc Inc. for oxidiazon.

## Nematode and mole cricket protection that elevates your turf.

Mobay raises the standards for turf by burying the pests.

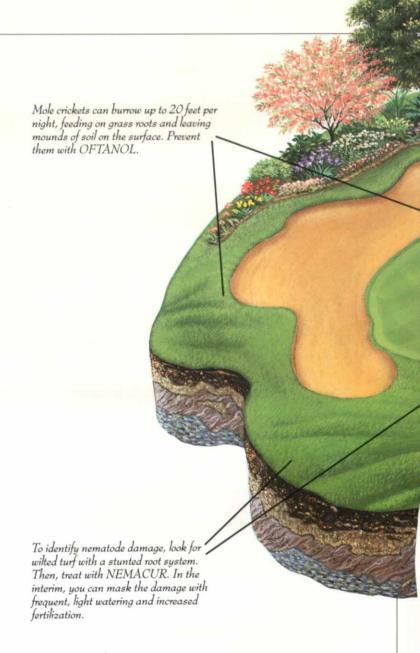
For nematodes, there's NEMACUR® Turf and Ornamental Nematicide. It has a 20-year history of preventing yellow grass by controlling more kinds of nematodes than any product on the market. To top it off, it lasts longer, eliminating costly multiple applications.

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

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

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

### Nemacur Oftanol







### Need more water? Make your own!

If your golf course is in a littoral zone
— or anywhere that salt water intrusion
has become a problem — and fresh water
is in short supply, Ray Hansen has the
solution.

Make your own water.

Hansen, superintendent at the Ocean Reef Club, an exclusive 36-hole layout on the northern tip of Key Largo, most likely is the only golf course manager in the continental U.S. whose responsibilities include overseeing the operation of a reverse osmosis plant capable of transforming nearly a million gallons of brack-

ish water into fresh

water every day.

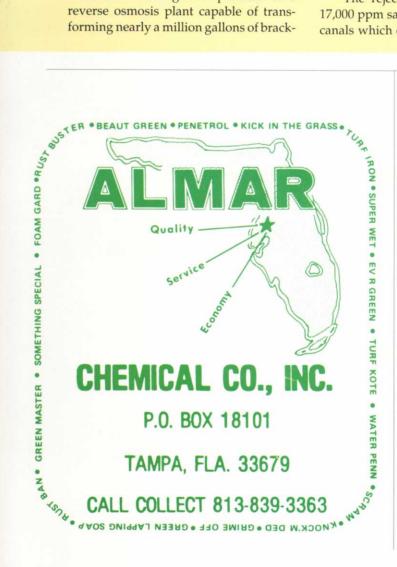
Fed by deep (1,100 feet) wells which supply water with about 3,000 parts per million dissolved salts and solids, the plant produces water at 150 ppm salts and solids. Anything below 1,000 ppm is considered safe for turfgrass; anything below 500 ppm is potable.

The reject water containing about 17,000 ppm salts and solids is piped into canals which empty into the ocean. Sea-

water contains about 35,000 ppm salts and solids.

The plant was built in the 1970s to meet all the community's freshwater needs but, as it grew, running an aqueduct from a wellfield on the mainland became economically feasible.

Still, water from the wellfield costs \$6 per thousand gallons. Water from the "RO" plant costs about half that.





THE FLORIDA GREEN / WINTER 1990



Gunnite-lined reservoir holds about 2 million gallons, or slightly more than two days' supply of irrigation water at peak consumption.

"I figure it costs me about a thousand dollars a day to water my golf courses," Hansen says. "Three hundred thousand a year for the golf course's share of the operating

costs of the plant and another \$60,000 for the irrigation system."

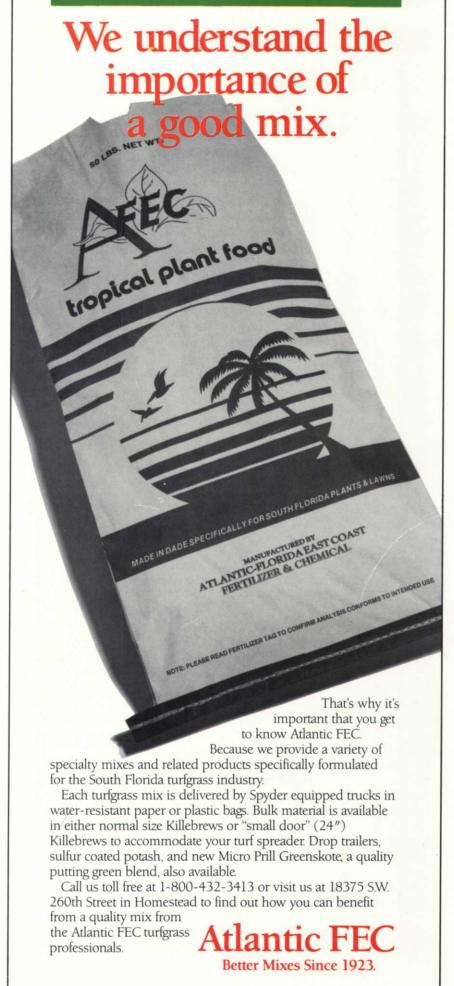
In addition to Hansen's two golf courses, the desalinated water is used to irrigate Card Sound GC, a private course within the ultra-private Ocean Reef community, and other landscaped areas.

Although he knows of no other golf courses using desalinated water on his scale, Hansen says he has had inquiries from Texas and Hawaii.

"Places that learned to get by on less water don't have to with this technology," he said.



Ray Hansen at the controls of one of the reverse osmosis units.



### FLORIDA'S NUMBERS

Category	Number (	Rank)
Number of golfers	.1,171,635	(7)
Participation Rate		(22)
Rounds per year per golfer	36.0	(2)
Golfers who are women	22.1%	(26)
Golfers age 50 and older		(1)
Average age of golfers	45.6	(1)
Total facilities		(1)
Daily Fee	369	(4)
Municipal	76	(6)
Private	320	(2)
Par-Three	43	(3)
Executive	100	(1)
Total Courses	932	(1)
Daily Fee	431	(2)
Municipal	89	(6)
Private	412	(1)
Par-Three	53	(3)
Executive		(1)
Nine-Hole Facilities	105	(17)
Percentage of total	14%	(50)
Daily Fee	63	(14)
Municipal	13	(21)
Private	29	(25)
Total Holes	15,300	(1)
Daily Fee	6,930	(1)
Municipal	1,413	(5)
Private		(1)
Population per 18 Holes	14,300	(6)
Population per 18 Public Holes		(16)
Golfers per 18 holes		(8)
Source: National Golf Foundation	n, Jan. 1, 1989	

### (From page 16)

In Florida \$200,000 *lots* are advertised on billboards and sold out of mobile homes!

But residents aren't the only ones who get a good deal.

Collectively, Florida's golf resorts so completely dominate the industry that half its resort courses could be distributed to all the other resort areas of the world and a case could be made that what was left still comprised the world's best collection.

And we cannot emphasize the word "collection" too strongly. Nobody seriously claims that Florida resort courses surpass all others in quality. It's just that there are so many "world-class" resort courses in the state that they tend to get lost in the shuffle:

What is mundane here would be labeled "spectacular" almost anywhere else.

That's the sunny side: golf is booming. People plan their whole lives around the fact that they can move to Florida and play golf year-around on

outstanding golf courses whose quality somehow seems to improve every year.

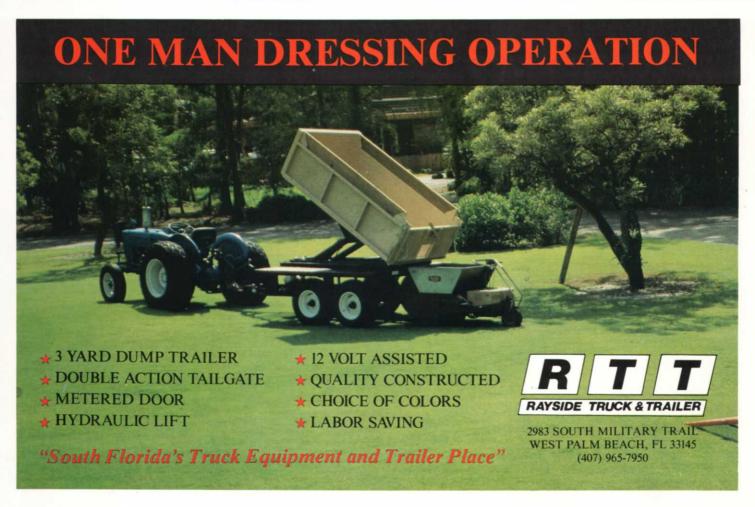
The down side, so far as superintendents are concerned, is that people plan their whole lives around the fact that they can come to Florida and play golf every day of the year on what they expect to be the best golf course in the world.

If you have to, read those last two paragraphs again. The subtle differences between them have led to a profession littered with heart disease and ulcers.

In an unguarded moment, ask a Florida superintendent to name his biggest problems and most likely he'll respond, "Mole crickets, members' egos, the #%@&\* (fill in your regulatory agency of choice) and I need a day off."

Mole crickets are a serious problem in Florida (*page 56*), as are parasitic nematodes, but turf managers all over the world must battle pests with a declining arsenal of chemical weapons.

Nor has Florida cornered the mar-



ket on politically-charged regulatory agencies.

What makes Florida unique is its combination of tropical climate and easy accessibility to hordes of wealthy egos who insist, "I want things as good as they were up North, only better."

Only God has not yet revealed how to grow things "as good as they were up North" in a tropical climate with lots of traffic and no dormant season.

And that's where the tine meets the turf.

The problem is peculiar to private clubs, but nearly half of Florida's courses are private.

In guarded conversations, most golf-playing superintendents will admit that properly maintained bentgrass under optimum conditions provides a better putting surface than the best hybrid bermudagrasses.

The differences are subtle, and should not make a bit of difference to any but the lowest handicapper, but fact has a way of disappearing in the face of ego. Members know that bentgrass is best and, "We want the very best course in Florida, bar none. That's why I come here every winter and that's why you have a job."

End of discussion.

Most superintendents use the strategy of overseeding — planting bentgrass, or various combinations of bentgrass, rye, fescue and poa trivialis in the fall as the bermudagrass goes dormant — but that creates another set of problems: the greens are nearly unplayable during the two transition periods. Furthermore, overseeded greens generally don't reach peak quality until late February.

Most private club members are seasonal residents: they return north in March and April, meaning a lot of work goes into providing only a few weeks of superior putting surface.

So a few clubs are now experimenting with keeping the bentgrass greens year-around.

Bentgrass will stay alive — barely

— in Florida's long, hot, humid summers, but not if it gets any significant traffic.

How much traffic is significant?

"Anything more than two foursomes a day and I've got trouble," said one superintendent.

Furthermore, the amount of care required to keep the grass alive is extraordinary. Frequent syringing, sometimes around the clock, is required to keep the grass cool. And all that water leads to fungus problems and...

The whole world saw what can happen when PGA National GC in Palm Beach Gardens lost its greens the week before it hosted the 1987 PGA Championship.

And the spectre of those brown, lifeless greens on international television, created by relentless pressure to have "the best course in the world, bar none" hangs over every superintendent's head.

Perhaps that's why the typical Florida superintendent rarely stays at one place more than five or six years.



## WATER.

Managing a course today is tougher than ever. Environmental concerns, water restrictions, soil conditions, delicate greens and uncertain weather can make accurate irrigation more than a full time job.

That's why we've introduced a full line of automated water management systems. Sophisticated, economical and reliable under any kind of conditions. Backed by a service network and parts distribution that the competition just can't match.

with all the convenience and dependability of a satellite control system. Plus diaphragm valvein-head rotors for individual head control and precise watering.

With Rain Bird you have so many choices, in electric or hydraulic systems, that you can choose the one that's right for your course.

Then we back those systems with a strong network of distributors, highly trained and fully-stocked to deliver parts whenever you need them. And we support them with the commitment of a company that's specialized in water management for more than fifty years.

### BUDGET. PROOF.

And perhaps most important, you can start managing better today. Because Rain Bird offers a financing program that lets you install right away, so you can realize the benefits immediately.

To see how much easier a Rain Bird water management system can make your job, call your nearest Rain Bird golf distributor. Or call us directly at Rain Bird Sales, Inc., Golf Division, 145 N. Grand Ave., Glendora, CA 91740, (818) 963-9311.



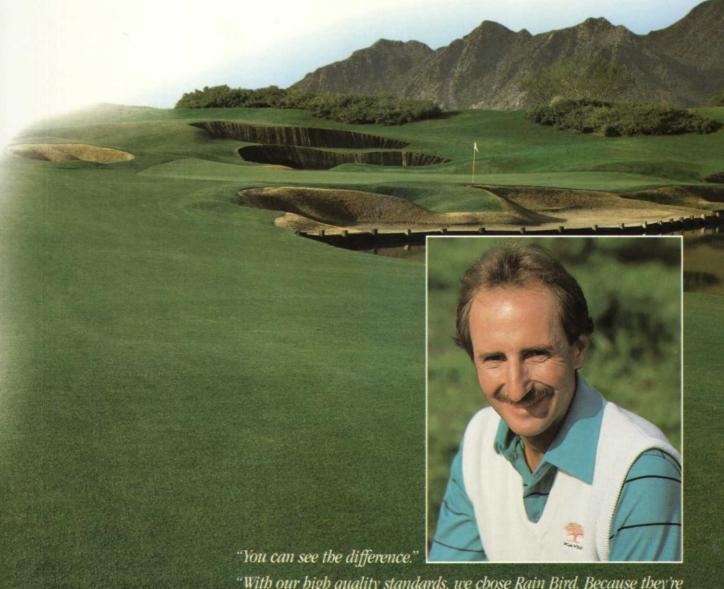
### TROUBLE. PROOF.

We start with the best systems available. The MAXI® System IV Computer Control System with Flo-Manager™ that saves time and energy, exclusive "Cycle+Soak" that prevents overwatering. ETsensitive schedduling and an optional onsite weather station.

Or the economical MC-3S



## PROOF.



"With our high quality standards, we chose Rain Bird. Because they're committed to me personally, with local service and on-time delivery."

JEFF PRITCHARD

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

### **GOLDEN OCALA**

Ocala, 1986, Ron Garl. Development. Golfweek readers 16, Golf Reporter readers 18, Florida Golfer panel 14

### If you don't like these 29 great ones, wait a year

Florida has lots of great golf courses. And if you don't like any of the current crop, just wait a year or two. Within that span, at least a few new courses will make somebody's list of "greats."

Great golf courses can be found all over the world; what distinguishes Florida's collection is its size, variety and, above all, relative youth.

Of the 29 outstanding golf courses depicted on these pages, only 11 were built before 1980, and only three before 1970: the Bay Hill Club and the "Blue Monster" at Doral by Dick Wilson and Seminole, the 60-year-old mystery course which makes everybody's list even though most have never trod its turf or laid eyes upon its classic Donald Ross bunkers.

We chose 29 courses for two reasons:

- That's how many we ended up with after taking the top 20 from three publications which have extensive experience in Florida and adding the nine beauties on Golf *Digest's* list of America's 100 best golf courses.
- We couldn't fit any more around the map.

The latter statement is not entirely facetious. A hundred could have been added with little drop in quality.

Truth be told, the "rank" of a golf course says as much about the quality of its public relations as it does about the quality of the architect, contractor and superintendent.

Two different methods were used by the four publications to select the courses on their lists: *Golfweek*, a national weekly newspaper which began as a Florida publication in 1975, and *The*  Florida Golf Reporter, a monthly magazine, both rely on reader polls. Readers see only a small percentage of the courses they vote on.

Golf Digest and The Florida Golfer, on the other hand, have panels of "experts" walk the courses, study the layouts, pore over the blueprints, test the shot values and consult the stars.

They come up with the same courses as the readers, only in a slightly different order.

So take the particular rankings with a dose of skepticism but trust us: these are great golf courses. They represent some of the very best work of 16 different architects, 12 of whom are still signing contracts.

Most are spectacular to behold, difficult to play, and impossible to get on, particularly at this time of year. Many were built in conjunction with real estate developments that are not yet sold out: qualified prospects can get on, if arrangements are made in advance.

A few are open to the first golfers in line, notably Bloomingdale Golfers Club in Valrico and Coral Oaks in Cape Coral. The latter is municipally owned.

Of the resorts, Mission Inn is probably the least known but its dramatic changes in elevation are matched only at The Ravines, Jupiter Hills and Black Diamond Ranch, all of which are veddy, veddy private.

One thing these 29 golf courses have in common with hundreds of Florida layouts: they are exceptionally well maintained. For that reason, we have given the FGCSA superintendent credit for the ranking, along with the architect.

### **BLACK DIAMOND RANCH**

Lecanto, 1987, Tom Fazio. Carl Jacob, superintendent. Private. Golfweek readers 6, Golf Reporter readers 2, Florida Golfer panel 1

### **LAKE NONA**

Orlando, 1986, Tom Fazio. John Yancey, superintendent. Private. Golfweek readers 19, Golf Reporter readers 1, Florida Golfer panel 3

### **DISNEY MAGNOLIA**

Orlando, 1970, Joe Lee. Larry Kamphaus, CGSC, superintendent. Resort. Golfweek readers 18, Florida Golfer panel 13

### **ISLEWORTH**

Windermere, 1986, Arnold Palmer/Ed Seay. Joel Jackson, CGCS, superintendent. Private. Florida Golfer panel 20

### INNISBROOK COPPERHEAD

Tarpon Springs, 1983, Larry Packard. Resort. Golf Digest Top 100 panel 69, Golfweek readers 1, Golf Reporter readers 12, Florida Golfer panel 8

### FIDDLESTICKS (LONG MEAN)

Fort Myers, 1983, Ron Garl. Dale Conzelmann, CGCS, superintendent. Private. Golfweek readers 17, Golf Reporter readers 13

### **BONITA BAY CLUB**

Bonita Springs, 1985, Arthur Hills. Mark Black, superintendent. Private. Golf Digest Top 100 panel 60, Golfweek readers 8, Golf Reporter readers 9

### **RAVINES**

Middleburg, 1979, Mark McCumber/Ron Garl. Private. Golfweek readers 15, Golf Reporter readers 14, Florida Golfer panel 16

### SAWGRASS (OCEANSIDE)

Ponte Vedra, 1974, Joe Lee. Private. Golfweek readers 20

### TPC AT SAWGRASS

Ponte Vedra Beach, 1980, Pete Dye. Fred Klauk, superintendent. Resort. Golf Digest Top 100 panel 32, Golfweek readers 2, Golf Reporter readers 3, Florida Golfer panel 6

### MISSION INN

Howey in the Hills, 1975, C. Clark/Lloyd Clifton. Resort. Golfweek readers 13, Florida Golfer panel 12

### HAMMOCK DUNES (LINKS)

Palm Coast, 1989, Tom Fazio. Dwight Kummer, superintendent. Private. Golfweek readers 14

### INDIGO LAKES

Daytona Beach, 1976, Lloyd Clifton. David Van Wagner, superintendent. Resort. Golfweek readers 12, Florida Golfer panel 15

### GRENELEFE (WEST)

Haines City, 1972, Robert Trent Jones. Paul Hickman, CGCS, superintendent. Resort. Golfweek readers 7, Golf Reporter readers 10

### **OLD MARSH**

Palm Beach Gardens, 1988, Pete Dye. Private. Golf Reporter readers 8

### **BAY HILL CLUB**

Orlando, 1963, Dick Wilson/ Arnold Palmer. Jim Ellison, CGCS, superintendent. Private. Golf Digest Top 100 panel 56, Golfweek readers 5, Golf Reporter readers 4, Florida Golfer panel 4

### **GRAND CYPRESS**

### North/South Course

Orlando, 1984, Jack Nicklaus. Tom Alex, superintendent. Resort. Golf Digest Top 100 panel 91, Golf Reporter readers 15, Golfweek readers 3

### JUPITER HILLS

Jupiter, 1970, George & Tom Fazio. Richard Herr, CGCS, superintendent. Private. Golf Digest Top 100 panel 46, Golfweek readers 11, Golf Reporter readers 7, Florida Golfer panel

### SEMINOLE

North Palm Beach, 1929, Donald Ross. Hal Hicks, superintendent. Private. Golf Digest Top 100 panel 8, Golfweek readers 10, Golf Reporter readers 6, Florida Golfer panel 2

### LOXAHATCHEE

West Palm Beach, 1986, Jack Nicklaus. Private. Golf Digest Top 100 panel 81

### PINE TREE

Boynton Beach, 1970, Dick Wilson Private. Golf Digest Top 100 panel 57, Golf Reporter readers 20, Florida Golferpanel 5

### TPC AT EAGLE TRACE

Coral Springs, 1983, Arthur Hills. Jeffrey Haley, superintendent. Private. Golf Reporter readers 19, Florida Golfer panel 19

### BLOOMINGDALE

Valrico, 1983, Ron Garl. Daily Fee. Golfweek readers 9, Golf Reporter readers 5, Florida Golfer panel 10

### **CORAL OAKS**

Cape Coral, 1989, Arthur Hills. Don Stewart, superintendent. Municipal. *Golf Reporter* readers 16

### WILDCAT RUN

Estero, 1987, Arnold Palmer/ Ed Seay. Michael Mongoven, superintendent. Private. Florida Golfer panel 18

### **PELICAN'S NEST**

Bonita Springs, 1986, Tom Fazio. Jim Leiseberg, superintendent. Private. Golf Reporter readers 17, Florida Golferpanel

### **CLUB AT PELICAN BAY**

Naples, 1979, Arthur Hills. Private. Florida Golfer panel 17

### DORAL (BLUE)

Miami, 1962, Dick Wilson. Stephen Kuhn, superintendent. Resort. Golfweek readers 4, Golf Reporter readers 11, Florida Golfer panel 9



### Chipco 26019. For turf th

Your high-value turf will never need to withstand the punishment of a cattle drive, but there's another kind of pressure your turfgrasses are facing right now: increased traffic. And it can make even the hardiest varieties more vulnerable to disease damage.

That's why CHIPCO® brand 26019 fungicide is the best investment you can make to ensure the quality and play-ability of all your turfgrasses.

CHIPCO® brand 26019 fungicide delivers

CHIPCO® brand 26019 fungicide delivers unsurpassed control of all the major turf diseases,

including Helminthosporium Leaf Spot and Melting Out, Dollar Spot, Brown Patch, Fusarium Blight, and Red Thread. It even protects against Pink and Gray Snow Mold and Fusarium Patch.

The long-lasting protection of CHIPCO® brand 26019 fungicide makes it the perfect foundation for a season-long disease management program. Just one application protects turf for up to four full weeks.

And, because CHIPCO® 26019 is registered for use on a wide variety of high-value orna-

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at thrives under pressure.

mentals, you can depend on it to keep all the

grounds you care for healthy and disease-free. Add the fact that CHIPCO® brand 26019 fungicide is available in two convenient formulations—wettable powder and smooth-pouring flowable—and it's easy to see why it has become the disease control of choice for quality-conscious superintendents across the country.

This year, invest in the best: CHIPCO® brand 26019 fungicide. For turf that thrives

under pressure.



### THE FLORIDA STORY

### FGCSA: from 0 to 600 in 20

he Florida Golf Course Superintendents Association was founded at the Palm Beach CC in April, 1970, as a confederation of regional associations.

Its original purpose was to open lines of communication, to provide a

broader base for educational seminars and to establish stronger voting power in national affairs. Directors were the presidents of the regional associations.

Stan Clarke was the first president, annual dues

were \$5, and the first statewide meeting was in January, 1971, at the Florida Agricultural Station in Fort Lauderdale.

Succeeding presidents were Paul Turcotte of the South Florida Association and C.R. Pearson of Bradenton.

Following a five-year dormancy, the FGCSA was revived in 1978 as federation, with local chapters retaining complete autonomy in their

internal affairs. The chapters are represented equally on the board of directors, which elects the three statewide officers: president, vice president and secretary/treasurer.

Public relations, government relations and research funding were added to the association's original goals.

Today, more than 600 superintendents and their assistants are affiliated with the FGCSA through 10 regional chapters, representing more than 400 golf courses from the Keys to the state capital in Tallahassee.

Monthly chapter meetings of the autonomous regional associations are the principal membership activities.

Functions of the state association are carried out by 20 different commit-

> tees, whose meeting schedules vary according to their assignments. Their work is coordinated by a part-time executive secretary with a computer, answering machine and fax machine.

The FGCSA officers and directors

meet quarterly - at the GCSAA convention in February, the Florida Turfgrass Association conference and show in October, and at two popular tournaments for superintendents, the Poa Annua Classic at Naples in May,

### **FGCSA COMMITTEES**

Bylaws Long Range Planning Certification Membership Crowfoot Open Nominations Education Poa Annua Classic **Ethics Publications Public Relations** FTGA Fund Raising Research **GCSAA Employment Survey** Golf Voting Delegate Government Relations Conference and the Crowfoot Open at Orlando in August. At the latter two events, the FGCSA education committee sponsors seminars which carry CEU credit for certification.

The FGCSA also helps sponsor the annual day-long USGA Green

Section Conference (which may be expanded to two sessions in different parts of the state), an annual bentgrass seminar in South Florida and two seminars for golf course mechanics at Lake City Community College's School of Golf Course Operations.

The FGCSA's latest project is a 20,000-square-foot research green —

GREEN SHEET

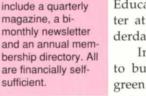
**FGCSA** publications

magazine, a bi-

sufficient.

half of it built to USGA specifications and the other half built with the

> more typical socalled "Florida modification" (no choker laver of coarse sand) - at the University of Florida's Research and Education Center at Fort Lauderdale.



In addition to building the green at its own expense

which topped \$10,000 despite donated materials and labor - the FGCSA has contracted with a technician to maintain the green to playing standards.

Most fundraising for research is conducted at the chapter level, but the state organization does coordinate "Florida Golf Week," which attempts to focus statewide attention on local

### **FGCSA PRESIDENTS**

Stan Clarke	1971
Paul Turcotte	
C.R. Pearson	1973
Tim Hiers	1978-80
Bill Wagner	
Devin Downing	1982-83
Don Delaney	1983-84
Tom Burrows	
Reed LeFebvre	1986-87
Dick Blake	1987-88
Cecil Johnston	1988-89
Joel Jackson	1989-90

CENTRAL FLORIDA GCSA A&B Members ......87 Certified ......6 Rick Walker, President Orange Lake CC Kissimmee 407-239-1057

### **EVERGLADES GCSA**

A&B Members ......85 Certified Mark Atwood, CGCS President Bears Paw CC **Naples** 



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### FTGA RESEARCH FOUNDATION 1989 CONTRIBUTIONS

Central Florida	\$2,000
Everglades	4,500
North Florida	
Palm Beach	
South Florida	3,200
Suncoast	3,000
Treasure Coast	1,000
West Coast	5,000
Florida Golf Week	2.300
Total*	

\* Does not include more than \$30,000 contributed towards construction and maintenance of the research green at the University of Florida's Research and Education Center.

fundraising efforts for turf research.

Public relations efforts are funnelled through a variety of media.

A unique feature of the association's public relations program is its designated feature writer, who writes columns and stories for outside publications and assists reporters from the news media with technical information.

The association's award winning quarterly magazine, which began life

WEST COAST GCSA	TALLAHASSEE GCSA
A&B Members	A&B MembersTBD CertifiedTBD Robert Giehls Organizing Superintendent Killearn CC Tallahassee 904-893-2412

as the newsletter of the South Florida GCSA, is distributed to three persons at every golf course in the state: the superintendent (regardless of FGCSA affiliation), the golf professional and the greens chairman or general manager. The magazine's purpose is to speak *for* the golf course *to* the golf industry.

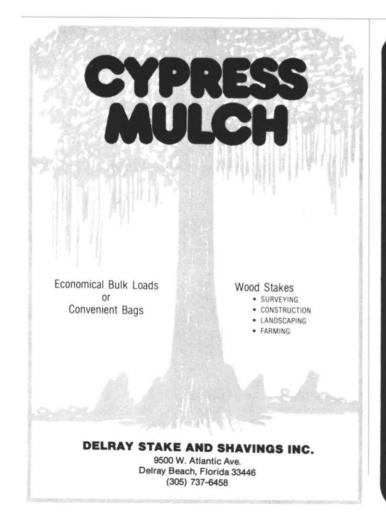
The bimonthly *Green Sheet*, on the other hand, is a newsletter aimed strictly at members and is the primary means of communicating official business

The annual *Membership Directory* contains the rosters of all chapters, plus association history, code of ethics, by-

laws, committee assignments, member services and winners of the FGCSA's two awards.

The association sponsors two awards: the Distinguished Service Award and the President's Award. Both recognize outstanding contribution to the profession of golf course management, but the President's Award is intended to honor "pioneers who were instrumental in state and local affairs but who may no longer be actively involved in the FGCSA."

The FGCSA has a booth which it takes to trade shows such as the Florida Turfgrass Association conference and golf shows for the general public.





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61st INTERNATIONAL GOLF COURSE CONFERENCE & SHOW FEBRUARY 19-26, 1990 The trade show, which occupies less than half the schedule of the International Golf Course Conference and Show, is one of the 150 largest shows in the United States. Until Orlando's Orange County Convention Center was expanded last year, no building in Florida was large enough to hold it.

# It's the Greatest Show in Turf

f the rest of the golf world is in for a treat when it takes a close look at the situation in Florida, the same thing can be said for Floridians getting their first look at the International Golf Course Conference and Show sponsored by the Golf Course Superintendents Association of America.

As many as 20,000 golf course superintendents, owners, operators, architects, builders, agronomists and mechanics from all over the world will pass through the doors of the Orange County Convention/Civic Center during the eight days of the 61st annual conference, which runs Feb. 19-26.

Although the trade show, which is so large that fewer than 20 facilities in the United States can handle it, is the most visible part of the convention, it is not the focal point. The show doesn't even open until the sixth day.

In fact, they don't even get around to holding the opening ceremonies for the conference until late on the fourth day, by which time 40 one-and two-day seminars will have been completed.

Among the most popular seminars is the one-day session on study guidelines for the certification examination.

The seminar is recommended for those who are beginning their program of study for the CGCS designation, not

those slated to take the six-hour examination two days later.

The seminars are available by advance registration and many are sold out months in advance.

Although it is now too late to take advantage of the GCSAA's offer of free registration to all first-year GCSAA members, general registration will be available at the door starting Feb. 22. Basic admission is

\$165 for members and \$215 for nonmembers. For information about lastminute seminar openings or other registration details, call the GCSAA at 800-GSA-SUPT.

Spouses may register for \$60, which includes admission to the Spouse Center Friday-Monday (Feb. 23-26), admission to the trade show Sunday and Monday, continental breakfast Friday, arts and crafts exhibit and major speaker on Sunday and entertainment by Claude the Gator on Monday. Optional escorted tours are available to all major tourist attractions and shopping areas.

Children age 3 and older may be registered for the Spouse Program for an additional \$60.

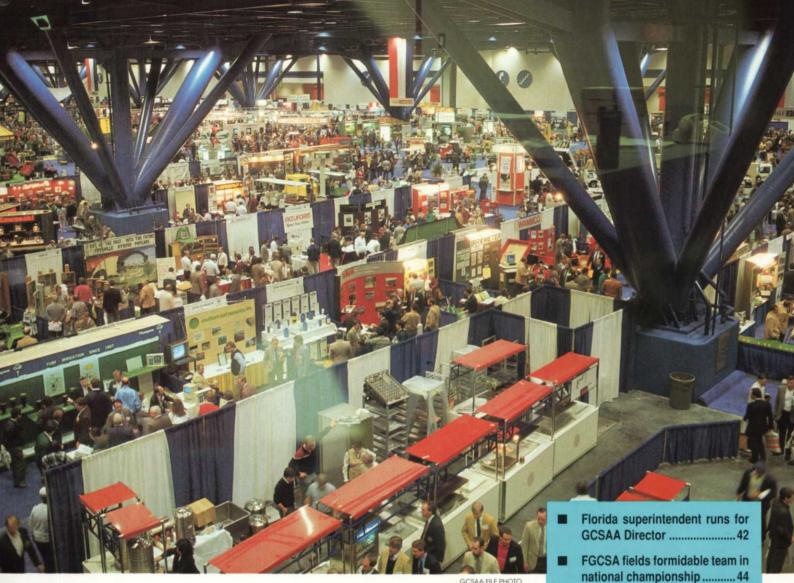
Students may obtain complete conference registration for \$50 (\$45 if a student-member of the GCSAA), as may golf course mechanics.

Mechanics will probably want to take advantage of a new half-day pro-

#### MAJOR CONFERENCE COMPONENTS

- Golf Championship
- 40 Continuing Education Seminars
- 6 GCSAA Education Sessions
- Trade Show
- 2 Symposia
- 3 Major Speakers

- Golf Course Builders of America
- American Society of Golf Course Architects
- USGA Green Section
- Golf Course Mechanics
- GCSAA Annual Meeting
- Old Tom Morris Banquet



gram devoted to their craft on Sunday afternoon, Feb. 25 (See agenda, Page 52).

Florida GCSA members who are registered for the convention also may issue a limited number of free passes to the trade show valid only on Feb. 26, known as Grounds Industry Day, to their own crew members.

Grounds Industry Day was inaugurated by the GCSAA last year to accommodate trade show exhibitors who wished to expose their products to turf maintenance professionals who would not benefit from the golf-oriented education programs of the conference.

Golf course superintendents are not eligible for Grounds Industry Day passes.

Although the annual conference is sponsored by the GCSAA, three other major organizations in the golf course

industry conduct half-day open sessions. The Golf Course Builders of America meet Feb. 24; the American Society of Golf Course Architects meets Feb. 25; and the USGA Green Section's program is on Feb. 26. (See agendas, Page

Florida greens chairman recalls a

young Sherwood Moore ....... 46

Agendas for Architects, Builders,

Mechanics, Green Section ..... 52

Environmental issues probably will be the primary topic of the conference, with a full day devoted to the subject during Friday's concurrent educational sessions. Among the topics to be covered are water quality and conservation, integrated pest management, hazard communication, underground petroleum tanks and the storage, disposal and recycling of chemicals.

#### As many as 2,000 foreigners may attend

The "International" in the conference title is no pretension.

Fully 10 percent of last year's attendees came from more than 30 foreign countries and, according to GCSAA Executive Director John Schilling, there is no reason to expect this year to be any different.

That means as many as 2,000 foreign visitors can be expected.

To take advantage of this unique international gathering, the GCSAA has scheduled an International Golf/Turfgrass Roundtable for Feb. 24.

The Roundtable is in addition to the traditional international reception, scheduled this year for Feb. 22 at 2 p.m.

#### **CELEBRITY SPEAKERS**

- Dr. Ken Blanchard, author of The One-Minute Manager and noted motivational speaker and business consultant. Keynote address, Feb. 22.
- James B. Irwin, Apollo 15 astronaut and eighth man to set foot on the surface of the moon. Prayer breakfast, Feb. 25.
- Dr. Gayle Carson, motivational speaker. "Making Time Work for You." Feb. 25.
- Joe Griffith, humorist and motivational speaker. "Grass Won't Grow if You Won't.," Feb. 25.
- Tony Orlando, singer and actor.

  Featured entertainer at the closing banquet and show, Feb. 26.

Faculty for the environmental session includes Dr. Richard Cooper, University of Massachusetts; Dr. Richard Hull, University of Rhode Island; Dr. Stuart Cohen, Biospherics, Inc.; Dr. Bruce Branham, Michigan State University; Fred Haskett, Haskett/Mc-

Causland & Associates; Judy Heckman, EPA Office of Pesticide Programs; Jeffrey Holmes, Grand Traverse Resort; Mary Knaggs, Westchester CC; Bryan Corsini, American Association of Nurserymen; Vonnie Estes, Agri-Diagnostics; Dr. Charles Peacock, North Carolina State University; Dr. John Cisar, University of Florida; Al Kline, CGCS, University of New Mexico; Les Kennedy, Jr., CGCS, Oak Lane CC, Woodbridge, Conn.; Ross O'Fee, The Springs

Club, Rancho Mirage, Calif.; Dr. Clark Throssell, Purdue University; Rod McWhirter, Rain Bird Sales, Inc.; Dr. Bruce Augustin, Lesco, Inc.; Ed Davis, R&D Sod Farms, Inc.; and Dr. K.A. Langeland, University of Florida.

Those not interested in environmental

issues have their choice of four other half-day sessions, each with similarly star-studded faculties.

Also new this year will be a government relations forum moderated by Robert Ochs, GCSAA legal and legislative counsel. The forum will be held in conjunction with the GCSAA's government relations committee meeting. It's purpose is to give superintendents the tools they need to inform government

(Continues on Page 52)

#### SPECIAL INTEREST FORUMS

#### **Certification Open Forum**

The GCSAA confers the designation, "Certified Golf Course Superintendent," or CGCS, to superintendents who complete a rigorous program of study, peer review and a written examination. The Certification Committee will answer questions about the program at an open forum Feb. 25.

#### **Government Relations Forum**

The GCSAA Government Relations Committee will conduct an open forum in conjunction with its meeting Feb. 25. Purpose is to equip superintendents to inform regulators about the unique nature of the profession.

#### **Computer Users Group Meeting**

Informal exchange of ideas on latest developments in hardware, software, and techniques.

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Club Car has over three decades of innovative engineering experience. As a result, Club Car has a reputation for providing only the highest quality products. Our utility vehicles, known as Carryalls and Touralls, reflect this standard. They are rust proof, lightweight, and economical to own.

**Carryall I**, the "Multipurpose Leader", is available in electric or gasoline models. It is ideal for small space operations since it has the tightest clearance circle in its class -- 17' 6". Self-adjusting rack and

pinion steering provides a "power steering feel".

The "Heavy Duty Leader" is Club Car's Carryall II which has the largest pickup bed (50"x 50"x 11"/15 cubic feet) and biggest gross payload (one-half ton) in its class. Carryall II can tow 1,000 pounds. And its four cycle/341 cc engine, the largest in its class, gives Carryall II the power to haul or tow these oversized loads all day long without refueling. The large, durable aluminum pickup bed and frame are rust proof and virtually maintenance free.

Club Car's most recent introduction is **Tourall**, a versatile personnel carrier. Available in both gasoline and electric models, Tourall's widebench seating accommodates four adult passengers comfortably. Touralls are ideal for any business needing to economically transport personnel and guests.

Club Car utility vehicles and personnel carriers have more exclusive features. A wide assortment of available options means more versatility at a lower price. Add a cab or a tailgate ramp, and instantly increase usage possibilities.

To equal Club Car's superior design, we offer excellent distribution and service. Our dealers provide unparalleled customer service for products sold or leased. These dedicated professionals have made the commitment to uphold Club Car's quality standard to you.

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Introducing CHIPCO® SEVIMOL® brand carbaryl insecticide. CHIPCO® SEVIMOL® is a special formulation of SEVIN® brand carbaryl insecticide which contains an attractant system mole crickets find irresistible.

In fact, CHIPCO® SEVIMOL® is the only turf pesticide that offers this unique attractant property. Plus, it provides the same broad-spectrum control of damaging turf pests as SEVIN® brand carbaryl insecticide, including white grubs, sod webworms, chinch bugs, bluegrass billbugs, cutworms and more than two dozen other turf pests.

You'll also appreciate the fact that CHIPCO®

SEVIMOL® will protect your trees and ornamentals from 86 troublesome insects. And, as effective as CHIPCO® SEVIMOL® brand is, it's one of the most environmentally favorable insecticides you can buy. That's because it contains SEVIN® brand car-

That's because it contains SEVIN® brand carbaryl insecticide; other formulations of which are used to control pests on poultry, pets and even some species of game birds.

This year, give your turf pests a meal they can't resist:

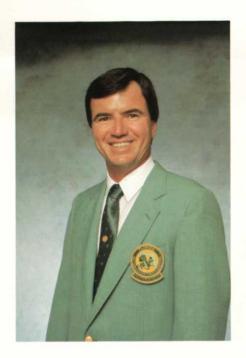
Chipco Sevimol®
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#### FLORIDA'S CANDIDATE



61st INTERNATIONAL GOLF COURSE CONFERENCE & SHOW FEBRUARY 19-26, 1990

#### Cecil C. Johnston, CGCS, will run for director of the GCSAA at the organization's annual meeting in Orlando Feb. 26



# Finally... a Floridian with time for national affairs

The GCSAA plays an important role in our industry and I'm pleased that you are volunteering your time and energy to support them...I am sure that you will make a valuable contribution to the GCSAA Board of Directors.

**Jack Nicklaus** 

or the first time in anyone's memory, a Florida superintendent is running for national office.

"We have had lots of people in Florida who are qualified to be on the board of directors of the GCSAA," said Joel Jackson, FGCSA president, at the state organization's board meeting in August. "The problem has been finding a qualified superintendent who could afford to take the time away from his job. Being a golf course superintendent is a 365-day-a-year proposition down here.

"Serving on the board of directors is not like serving on one of the national committees. There is a lot of responsibility and a lot

> of travel involved in being a director.

"But Florida needs representation on the board. We are too important a part of our industry not to have a voice in the running of our professional association.

"That's why I'm delighted to announce that Cecil has agreed to run if we will endorse his candidacy.

"Do I hear a motion?"

Every eligible voting hand in the Executive Conference Center of the Villas at Grand Cypress shot toward the ceiling.

So Cecil C. Johnston, CGCS, the 39year-old superintendent of Avila G&CC in Tampa, became one of four candidates seeking to fill two vacancies on the board of directors of the 8,000-member Golf Course Superintendents Association of America.

The election will be held during the GCSAA's annual meeting, which begins at 1 p.m. on the final day of the convention. Directors serve two-year terms.

Johnston is immediate past president of the 600-member FGCSA, which is divided into 10 regional chapters.

The award-winning editor of his chapter newsletter for several years, Johnston has been most active in government relations and research funding.

As chairman of the state's government relations committee, he singlehandedly coordinated the successful effort to gain permission to use Hoehlon in Florida to control goosegrass.

He has served on the research foundation funding committee of the Florida Turfgrass Association and was moderator of the 1988 FTGA Conference and Show.

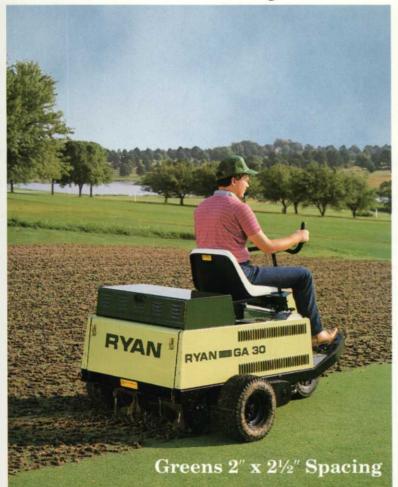
A summa cum laude graduate of Lake City Community College's school of Golf Course Operations, Johnston has designed a wash stand for maintenance vehicles which has drawn favorable comments from the U.S. Environmental Protection Agency.

His candidacy has been endorsed by all interested parties in the state, including the developers of his golf course, Jack Nicklaus and Robert Sierra.

#### Johnston's Platform

- Regulatory compliance is one of the greatest challenges we face.
- We need more support from owners to help us protect their interests.
- The knowledge we require just to do our jobs is exploding at an exponential rate.
- We need more money for research; this job was hard enough when water and chemicals were unlimited.
- Nonmembers need our help and we need the strength of their numbers.
- We must develop our public image as protectors of the environment.

# Full-course aeration made easy.







Now you can deliver "greens-quality" aeration to your entire course with a single piece of equipment. Variable core spacing makes the GA 30™ aerator as good on fairways as it is on greens. Simply move the spacing adjustment control from 1"-5" or anywhere in between, lock it in place, and you're ready to go without leaving your seat.

Spacing 2.50 in. x ( ) in.	Production sq. ft. per hr.	Yield holes/sq.
1.00	5,625	57.6
1.50	8,440	38.4
2.00	11,250	28.8
2.50	14,060	23.0
3.00	16,875	19.2
3.50	19,690	16.5
4.00	22,500	14.4
4.50	25,310	12.8
5.00	28,125	11.5

The GA 30 aerator also helps you get on and off the course more quickly. Its 18 hp engine with a six mph transport speed is two-three times faster than other aerators. So why waste time walking when you can ride to work?

Ryan's crank drive penetrates straight in at a depth of up to 3-3/4 inches. The tine-ram, ground-driven, reversing gear box pulls cores straight out to better protect your turf from damage—no matter what the spacing.

For a feel of the most costefficient aerator money can buy, contact the Ryan dealer nearest you for a free demonstration. Or call toll free: **1-800-228-4444**.



#### **GOLF CHAMPIONSHIP**



61st INTERNATIONAL FEBRUARY 19-26, 1990,

Members of the FGCSA's golf team get their sticks together before a practice round at Hunters Creek GC in Orlando. From left, Buck Bucker, Joe Ondo, Dave Oliver and Fred Klauk.

## **GOLF COURSE CONFERENCE & SHOW** FGCSA's best players to face 600 challengers hree national tournament vet-State, but this may be the year.

erans, including a former champion, and one rookie will lead 20 Florida superintendents against 580 out-of-state challengers in the 40th GCSAA Golf Championship Feb. 19-20.

The tournament, begun in 1938 and held annually since 1968, is the first event of the eight-day International Golf Course Conference and Show.

As host chapter, Florida will have five foursomes vying for the team title that has never come to the Sunshine

The Floridians are led by former GCSAA national champion David Oliver, now superintendent at Martin Downs in Stuart, who won the 1986 individual title at Palm Desert in California.

"Without a doubt, it was the biggest thrill of my golfing career," says the 34-year-old Oliver, who grew up on Forest Lakes GC in Sarasota.

The former University of Florida intramural champion will have an edge in his quest to win a second national title and to stop Dave Powell, superintendent at Myers point CC in Charlotte, N.C., from winning his fourth championship in five years: one of the two courses used for the championship flight in the 36-hole event will be the New Course at Grand Cypress Resort.



#### **Buck Buckner**

Superintendent Orange Tree GC Orlando

Handicap: 3

Basis: 1989 Poa Annua Classic champion

GCSAA Experience: First year Major titles: Runner-up, 1989 National

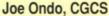
Lefthander Championship

Strength: Irons

Weakness: Driving accuracy

Biggest thrill in golf: Shot 3 under par over

last two days in National Lefty



Superintendent Winter Plnes GC Winter Park

Handicap: 3

Basis: First alternate (Low

Average)

GCSAA Experience: 7 tournaments

Major titles: Florida Publinx, Crowfoot Open (2),

Poa Annua Classic

Strength: Ability to keep the ball in play; can adapt game to "whatever is working today"

Weakness: Long irons

Biggest thrill in golf: Florida Publinx title

GCSAA Experience: 5 tournaments, won championship in 1986

Major titles: University of Florida Intramural championship; Poa Annua Classic, FTGA

Research Tournament (2) Strength: Getting it up and down

Weakness: Driving accuracy

Biggest thrill in golf: 1986 GCSAA champion





# and TORO present...



## GROUNDSMASTER® 345



The Groundsmaster® 345, with a 45 hp FORD industrial engine, is power regulated so it will last longer, be more quiet and use less fuel.

# Toro Proudly Introduces... The Groundsmaster® 345



#### Power To Spare - Long On Service - Less On Servicing

With an industrial sized, 45 horsepower engine, you can count on the Groundsmaster 345 to cut through lush grass, easily climb hills, and power accessories. In fact, there's a reserve of power, and Toro engineers have carefully regulated that reserve to effectively increase torque and power while reducing noise and vibration. This power reserve provides the durability and engine longevity common to diesel performance. The Groundsmaster 345 actually delivers slightly more power than our Groundsmaster 322-Diesel.

Experience less downtime and more productivity. With the Distributorless Ignition System there are no moving parts, no condenser to fail, no moisture concerns, no timing to adjust, and no distributor cap to replace! What service items there are, are easily accessible. Just raise the seat and rear hood to find conveniently serviced items like a removable radiator screen and replaceable oil and fuel filters. There is an

oil pressure warning light-buzzer and coolant temperature gauge with automatic shut-down to prevent overheating and protect your engine.



#### **Traction Unit Features That Maximize Productivity**

There are many other features, common to all Groundsmaster 300 Series, that prove this tractor a forerunner in commercial performance.

#### • Maneuverability/Dependable Traction

Features like front wheel drive, rear wheel power steering, single pedal forward/reverse control, a compact 49" wheelbase, and individual drum wheel brakes offer smooth control and effortless maneuverability whether trimming close or transporting.

Designed for great traction and stability, the 345 is equipped with large turf tread tires and a counterbalance system that automatically transfers weight between the deck and tractor based on performance demands.

#### Operator Comfort and Control

The uncluttered operator's station is easy to mount and offers extra comfort with a deluxe suspension seat that adjusts to individual operator weight and length. The instrumentation offers easy-to-read gauges and the controls are easy-to-reach. All to minimize operator fatigue and increase productivity.

#### **Cutting Unit Features That Maximize Performance**

• The Industry Standard is Now Even Better
Having set the standard for 6 foot riding rotary
mowers, it's only right we raise it once in a while.
And we have! Along with the Groundsmaster
345, we've added new features to the 72" side

discharge cutting deck perfecting its quality of cut, its durability, and its serviceability.

Oversized anti-scalp rollers were added, front and rear, to further minimize scalping. Quick-release deck covers make it convenient to clean and service. Just twist the knobs—no tools required nor loose parts to misplace. Improved castor forks provide the extra durability needed to withstand rugged terrain and hours of commercial use.



### The Choice Is Yours: 72" Side Discharge — 72" Rear Discharge — Triflex® 88"

You have your choice of either 72" SIDE or REAR discharge cutting decks. Each durably built, perfectly balanced and counterbalanced for exceptional ground contour following and each offers no-tool height of cut adjustment of 1" to 4" in ½" increments.

Toro's Triflex® 88" cutting deck can increase your cutting productivity approximately 22%. It's a

perfect match for the mighty Groundsmaster 345. The Triflex lets you choose an 88", 72" or 54" width of cut without stopping. So for large acreage mowing with or without obstacles, the Triflex deck gives you added flexibility in addition to expanded cutting capacity.

All Groundsmaster 300 Series tractors outfit a number of accessories for year 'round use. Please contact your local Toro distributor for these availabilities.

## **Groundsmaster® 345 Specifications\***

GROUNDSMASTER® 345 PRIME MOVER — GAS, MODEL NO. 30789			
ENGINE	Ford, 4 cylinder, 4 cycle overhead valve, liquid cooled gas engine with centrifugal water pump. Ford rates engine @ 45 hp; governed to a maximum speed of 3200 rpm. 67 cu. in. (1100 cc) displacement. Distributorless ignition system. Spark is controlled by a DIS solid state electronic module. 3.5 quart (3.25 liter) oil capacity; replaceable oil filter. Forged connecting rods, cast iron cylinder head and block. Mechanical fuel pump; heavy duty remote mounted air cleaner. Spark arrestor muffler is standard.		
RADIATOR	Mid-mounted industrial radiator with tube and fin contruction; 7 fins per inch. Approx. 6 quarts (5.7 liter) capacity. Formed top and bottom tanks with hydraulic oil cooler in lower tank. Thermally stable water cooled hydrostatic system regulates operating temperature.		
<b>FUEL CAPACITY</b>	8.5 gallons (32 liters) unleaded gasoline.		
MAIN FRAME	Welded, formed steel, reinforced with square and rectangular tubing.		
TIRES/WHEELS/ PRESSURES	Two front traction drive tires: 23 x 8.50-12, tubeless, 4-ply rating. Two rear steering tires: 16 x 6.50-8, tubeless, rib tread, 4-ply rating. Front and rear demountable drop center rims. Tire pressures: 10-15 psi (69-103 kPa). Optional extra wide tire and rim: 23 x 10.5-12, tubeless, 4-ply rating, Part No. 62-7020, (not applicable when using Model 30710).		
BRAKES	Individual 7" x 1.75" (17.8 x 4.4 cm) drum type wheel brakes and parking brakes on front traction wheels. Dynamic braking through traction drive.		
STEERING	Hydraulic power steering with control valve and metering section which regulates pressure and meters flow to steering cylinder. Steering valve features priority flow which automatically goes to steering function. 15" (38 cm) diameter steering wheel.		
TRACTION DRIVE	Sundstrand variable speed, axial piston, hydrostatic in-line transmission; change circuit hydraulics with 25 micron filtration provides hydraulic flow for power and implement lift. Transmission mates to Dana GT20 drive axle; 20.9-1 reduction, approx. 5 quart (4.7 liter) oil lubricant capacity. Single foot pedal control of forward/reverse ground speed. Optional electronic cruise control kit available.		
<b>GROUND SPEED</b>	0-9.5 mph (0-15.3 km/h), infinitely variable. Front ground clearance 7.5" (19 cm).		
CONTROLS	Hand-operated throttle, choke, PTO, hydraulic implement lift and foot-controlled traction pedal.		
GAUGES & DIAGNOSTICS	Ammeter, hour meter, temperature gauge: coolant temperature switch gauge also prevents overheating, oil pressure warning light and buzzer.		
ELECTRICAL FEATURES	Battery: 12 volt, 42 plate, 370 amp, cold cranking performance at 0°F (-18°C). Dash mounted ignition switch, 55 amp alternator with integral regulator. PTO, traction and seat interlock switches.		
SEAT	Optional: High back cushion seat, Model 30770, or deluxe adjustable suspension seat, Model 30772. (Seat Adaptor Kit, Model 30791 required w/30772.)		
IMPLEMENT DRIVE/LIFT	11/6" (2.9 cm) splined PTO shaft driven by a double "A" section, torque team V-belt. An anti-side load system protects the crankshaft output bearings. Lift cylinder (2.5 x 3.25" (6.4 x 8.3 cm)) actuates a T-bar of 2" (5 cm) square structural tubing with convenient attaching chains for implement lift. Two large torsion springs counterbalance implements for greater ground-following ability and traction.		
STORAGE COMPARTMENTS	Tool box with latch down cover located in fender. Operator's manual storage tube furnished for attachment to seat frame.		
DIMENSIONS	Width         46" (117 cm)         Height         50" (127 cm)           Length         91" (231 cm)         Wheelbase         49" (124 cm)		
WEIGHT	Approx. 1300 lbs. (590 kg) dry weight, prime mover only.		
WARRANTY	Two years or 1500 operational hours, whichever comes first.		
CERTIFICATION	Groundsmaster 345 prime movers and applicable cutting units are certified to meet the American National Standard Institute's (ANSI) specifications, B71.4-1984 and applicable Federal and State regulations based thereon.		

72" SIDE DISCHARGE CUTTING UNIT — MODEL NO. 30722		
TYPE	72" (183 cm) width of cut, three blade, front mounted rotary.	
MOWING RATE	Mows up to 3.8 acres/hr (1.5 hectares/hr) at 5.5 mph (8.9 km/hr) depending upon conditions.	
TRIMMING ABILITY	Deck offset to the right from centerline: 18" (46 cm). Deck trim width from outside of standard traction tire to right trim side: 23" (58 cm). Uncut circle right: 15" (38 cm); uncut circle with use of wheel brakes: 0".	
HEIGHT OF CUT	1-4" (2.5-10 cm) adjustable front and rear in .5" (13 mm) increments.	
CONSTRUCTION	11 gauge steel, 6" (15 cm) deep with 2" (5 cm) step. Reinforced with 3.5" (8.9 cm) x 7 gauge channel.	
CUTTER DRIVE	Isolation mounted PTO driven gearbox with 1.26:1 spiral bevel gears. "B" section belts to spindles. 1.25" (3.2 cm) diameter spindle shafts, protected by rugged conical spindle housing, turn on two greaseable tapered roller bearings. A positive splined connection attaches pulleys to spindle shafts for high torque capacity.	
BLADES	Three 25" (64 cm) long, 25" (6 mm) thick, heat-treated steel, high lift blades.	
SUSPENSION & CASTER WHEELS	Two front and rear caster tires consist of hard rubber and roller bearings. Front tires: 10.25" x 3.25" (26 x 8.3 cm). Rear tires: 6.25" x 3" (16 x 7.6 cm). Deck counterbalanced by two torsion springs and equipped with three antiscalp rollers. Optional Pneumatic Wheel & Tire assembly, Part No. 12-1509, (two required).	
DECK COVERS	Quick-release covers. No tools required.	
WEIGHT	400 lbs. (181 kg).	

For further information on Toro Groundsmaster 300 Series, their deck options and accessories, refer to the Groundsmaster 300 Series sales literature.

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#### COMMERCIAL PRODUCTS





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Oliver qualified for Florida's "A Team" (whose entry fees are paid by the state organization) by winning the Crowfoot Open over the same Jack Nicklaus layout... in the middle of the summer.

Other members of the first team

#### Fred Klauk

TPC at Sawgrass Ponte Vedra Beach

Basis: Low Average

tournaments

Major titles: Crowfoot Open, FTGA Research Tournament, Runner-up, Palm Beach

Strength: Middle irons, putting

Palm Beach County Amateur against most

of the best players in the state

#### **New Course**

**Grand Cypress Resort** Architect: Jack Nicklaus Date Opened: 1988 Length: 6773-5314 yards

USGA Rating: 72.1

Slope: 126

Superintendent: Tom Alex

#### **Hunters Creek GC**

Architect: Lloyd Clifton Date Opened: 1986 Length: 7432-5755 vards **USGA Rating: 77.8** 

Slope: 127

Superintendent: Craig Shelton

#### Magnolia GC

Walt Disney World Resort

Architect: Joe Lee Date Opened: 1970 Length: 7150-5485 yards **USGA Rating: 73.9** 

Slope: 133

Superintendent: Larry Kamphaus, CGCS

#### Palm GC

Walt Disney World Resort

Architect: Joe Lee Date Opened: 1970 Length: 6917-5398 yards

USGA Rating: 73.0

Slope: 133

Superintendent: Larry Kamphaus, CGCS

#### Lake Buena Vista GC

Walt Disney World Resort

Architect: Joe Lee Date Opened: 1972 Length: 6655-5359 yards

**USGA Rating:** 71.7 (change pending)

Slope:127 (change pending) Superintendent: Scott Welder

are all tournament tested.

Even GCSAA rookie Buck Buckner, who qualified by winning the Poa Annua Classic at the Naples Beach Club, has seen national combat.

The 37-year-old Orlando superintendent (Orange Tree CC), who picked up the game while stationed at Lackland AFB in San Antonio, Tex., scrambled to 3-under the last two days to place second in the National Left-Handed Golfers Championship at Bay Tree Plantation in Myrtle Beach, S.C.

Fred Klauk, 39-year-old superintendent of the Tournament Players Club at Sawgrass in Ponte Vedra - the PGA Tour's home course — made the team by accumulating the lowest total score in the Florida GCSA's three official qualifying events: Poa Annua, Crowfoot and FTGA Research Scholarship tournament.

Also a Gator intramural champ, Klauk was introduced to the game by his father and he played for his high school team in Riviera Beach.

Rounding out the top foursome is Joe Ondo, Florida GCSA's golf chairman and multiple titleholder from previous years who made this year's team through the back door.

With the second-lowest average for the season, Ondo moved up when FTGA champ Hal Hicks learned he could not play in the national event.

Competitors in the championship flight will be tested by two entirely different types of golf courses.

Nicklaus' links-style New Course has nary a tree and very little water, with ball-eating lovegrass everywhere off the beaten path.

Hunters Creek, the other venue for the low handicappers, features wall-towall turf with more than 5,000 trees. Water comes into play on 13 holes.

Designed by Lloyd Clifton and opened in February, 1986, Hunters Creek has been host to the Florida Open, the Florida State Amateur, a U.S. Open qualifier and a PGA Tour Qualifying School sectional tournament.

The rest of the field, competing on a modified point-quota system, will test the three courses at Walt Disney World Resort, all designed by Joe Lee (See profile, page 64).

Superintendent

Handicap: 4

**GCSAA Experience:** 6

County amateur

Weakness: Driving

Biggest thrill in golf: Second place in the

#### **OLD TOM MORRIS AWARD**



61st INTERNATIONAL
GOLF COURSE CONFERENCE & SHOW
FEBRUARY 19-26, 1990

Sherwood Moore, right, and his greens chairman in the 1950s, Bob Jacobson, renewed old times at Jacobson's "winter" club, Banyan GC in West Palm Beach, in 1988.



SHERWOOD MOORE COLLECTION

# Hey, Sherwood! Do you remember the time we...?

Old Tom Morris
Arward Winners
Arnold Palmer
Bob Hope
Gerald Ford
Patty Berg
Robert Trent Jones Sr.
Gene Sarazen
Chi Chi Rodriguez
Sherwood Moore

t's about time they gave that thing to a superintendent, but I'm not sure they picked the right guy," said Sherwood Moore, the golf course superintendent who built his reputation as the maestro of Winged Foot, the monstrosity at Mamaroneck, N.Y., that has humbled the world's greatest golfers in some of the world's greatest golf tournaments.

Moore was reacting to the news that he had been selected to receive the Old Tom Morris Award, the GCSAA's tribute for lifetime contribution to the game.

Named for Tom Morris, Sr., greenkeeper and golf professional at the Royal and Ancient Golf Club of St. Andrews, Scotland, presentation of the award is the highlight of the banquet that ends the annual international golf course conference. Morris also won the British Open four times and was a noted ballmaker, clubmaker and golf course architect.

"They got the right guy, make no mistake about that," says Bob Jacobson, New York stockbroker and greens chairman at Banyan GC in West Palm Beach.

Jacobson was Moore's greens chairman when Moore came to Hollywood GC in Deal, N.J., in 1955. The former had just retired from competitive golf after 20 consecutive club championships and the latter was just entering the world of private golf clubs.

"Sherwood taught me to respect a golf course as a natural thing and you can't always control Mother Nature," says Jacobson. "I taught him public relations with members. It's really tough when you have 150 bosses and each one of them thinks he knows how to do your job better than you do."

"Bobby Jacobson is the finest greens chairman that I have ever had the pleasure to work with," responds Moore. He always went to bat for me and was one of my greatest supporters.

As for his former boss's knowledge of nature, Moore says, "I remember when we were touring the course one spring and he remarked that the poa annua seemed more prominent than usual.

" 'Not really, Mr. Jacobson,' I said. 'It's (Continues on Page 54)

Sherwood Moore aboard his homemade bunker rake at Hollywood GC in Deal, N.J., in September, 1955. "We should have had it patented," he says.



THE FLORIDA GREEN / WINTER 1990



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Chipco Mocap 5G



# 'I enjoy getting back to the roots of the job'

#### Distinguished Service Award

Every year, the FGCSA shall recognize a deserving FGCSA Superintendent who has performed outstanding achievements as a golf course superintendent and who has given his time unselfishly in promoting golf course management and unification of the Florida Golf Course Superintendent.

1985.....William Wagner 1986......Tim Hiers 1987......Dan Jones 1988......Mark Jarrell 1989....Tom Burrows

KIEFFED/ JANI ADK

hen 90 golf pros applied to fill the vacancy at Mount Hawley CC in Peoria, Ill., in the 1950s, young Tom Burrows decided to find some other way to make a living out of the game he loved.

"Obviously, the world didn't need any more golf pros," he recalls. "So I became a superintendent."

Three and a half decades later, Tom Burrows, CGCS, received the Florida GCSA's highest award for service to his profession at the Florida Turfgrass Association's annual awards luncheon in Tampa last October.

"I was very surprised," said Burrows, now a consulting agronomist with the Brookside soil testing laboratories. "I mean I worked very hard for the organization for 10 years, but so did a lot of other fellows. I think several were more deserving than I.

"There are so many that I would probably forget to mention somebody," he said, declining to name any deserving colleagues.

Burrows' personal career mirrors the evolution of golf course management as a profession.

He began during golf's second great boom which, according to the National Golf Foundation, was fueled by a golfplaying president (Dwight Eisenhower), dominance of the game by a plain-spoken, hard-charging son of a superintendent (Arnold Palmer), and the growing importance of television.

"When Elvy Miller (superintendent . at Mount Hawley) offered me a job in 1958, there was a real crying need for superintendents," Burrows says.

He stayed with Miller for a year and then, at his urging, applied for the year-old two-year program in turfgrass management at Penn State University.

"It was a wonderful experience," says Burrows. "I studied under Dr. Burton Musser, who had written the only modern textbook for golf course superintendents in existence at that time, and under Dr. Joe Duich."

Duich, who was instrumental in

FLORIDA
GORT CAMPA

CONTENSATION

CONTENSATI

Tom Burrows, left, who served two terms as president of the Florida GCSA, received the Distinguished Service Award from Cecil Johnston, immediate past president, at the Florida Turfgrass Association's Awards Luncheon in Tampa last October.



the development of several of the "Penn" varieties of bentgrass, is recognized today as one of the world's foremost turfgrass authorities.

"Joe and I stay in touch," Burrows says. "I have had him down here five times—three FTGA shows and the two South Florida bentgrass conferences."

Burrows also is a director of the Musser International Turfgrass Foundation, whose sole purpose is to fund scholarships for turfgrass researchers to complete their graduate degrees.

While attending Penn State, Burrows spent three summer OJTs under former GCSAA President Robert Williams at Bob O' Link GC on Chicago's North Shore.

Following graduation with an A.S. in turfgrass management, Burrows went to Glencoe (Ill.) GC as superintendent of grounds, greens and buildings, where he oversaw the complete redevelopment of the semi-private golf course.

In 1967, he became director of properties for the Playboy Club Hotel and Resort, building and maintaining four golf courses at Lake Geneva, Wis., and Great Gorge, N.J.

"One of the great things about being a superintendent is that, if you are diligent, you can work anywhere in the world that you want," Burrows said. "By 1970, I had become tired of the northern climate."

In 1972, he landed the job of building, growing in and maintaining Mariner Sands GC in Stuart. Two years later, he moved to the Turtle Creek Club in Tequesta, where he stayed as golf course superintendent for 16 years.

"It used to be that an ambitious young man could start out on the crew at a golf course and retire there as super-intendent 50 years later," Burrows said. "But when I left Turtle Creek after 16 years, I knew of only one or two other superintendents who had been at the same place that long."

"It really is tough these days," says Bill Sterling, who was greens chairman at Turtle Creek from 1986 through 1988.

"Tom worked very hard — I mean VERY hard — to please all the members, but it's an impossible situation when you have to work with a bunch of retirees who think they know everything and have enough time on their hands to try to prove it."

"For the last five or six years," Burrows says, "I have been telling myself that if I worked as hard for myself as I did for the club, I would have to be a success."

So when the opportunity arose, instead of accepting any of the job offers that came his way once news of his availability leaked out, Burrows decided to go into business for himself.

"I miss being a superintendent," he says, "but I certainly enjoy what I am doing right now.

"I am still involved in golf. I am able to go around and see other superintendents — which I wasn't able to do before — and I am getting to see some of the most beautiful golf courses in

"And I am back to the roots of the job as a soils consultant, helping to make the superintendent's job easier."

Making the superintendent's job easier has become a habit with Tom Burrows. He served two terms as president of the FGCSA (1984-86) and four as education chairman.

"It's hard to judge one leader over another," says Mark Jarrell, CGCS, superintendent at Palm Beach National

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16163 Lem Turner Road Jacksonville, FL 32218-1550 (904)764-7100 1-800-329-TURF (In Florida) GC and national columnist on golf course management, "but Tom Burrows certainly was the right man at the time he was president of the FGCSA.

"He was the first president to really delegate a lot of work and it just so happened that the organization had become big enough to get a lot of things done. He's the only reason I am writing articles for *Golfweek*.

"They asked him if he could find somebody and he immediately saw that it was a great public relations opportunity for the profession. So he told me that it needed to be done and he asked me to do it."

Public relations and continuing education are the two subjects that Burrows brings up whenever asked to comment on the skills needed to become a successful superintendent.

"Having trained more than 90 OJT students, I think I have the experience to comment on turf education programs," Burrows said. "The one area in which students could use more training is in public relations.

"I am not sure how much of it they can teach in the classroom, but it doesn't make a bit of difference how good you are on the technical side if you don't know how to deal with the public.

"You can be the best turf manager in the world, but if you can't work with golfers, you aren't going to make it as a superintendent. And I don't see too many trainees today who really understand that."

He also advises trainees to "work for as many different superintendents as you can. If you have the chance to work with five different ones, do it. That way, when you are on your own, you will have been exposed to a broad range of problem-solving techniques."

As for continuing education, Burrows, who has seen golf course management grow into a high-tech profession, says it is the second key to success.

"I can't say enough about the GCSAA certification program," he adds. "Twenty years from now, if you are not certified, you are not even going to be considered for any of the top jobs.

"The important thing to learn in school is principles, because one thing you can be sure of: the technology will change.

"And keeping up with the technology is one of the greatest challenges we

face. For me, it's the most fun."

The greatest challenge facing technology today, Burrows says, is finding a better putting surface for the South.

"I don't know whether it will be a bentgrass or a bermudagrass, but what we have today is not acceptable," says Burrows, who plays about once a week and breaks 80 when his game is on.

"The bentgrass we overseed with is fine for four months out of the year, but just about the time it's really established, the members are going back north.

"It's possible to grow bentgrass year-around down here, but it is very, very expensive and it can't stand up to traffic during the summer."

Burrows says he does not miss the political battles of trying to convince willful members of scientific facts they don't want to hear. But some things he does miss.

"When I was a superintendent, my favorite time was early in the morning, when I toured the golf course. You can actually see what you have accomplished and, in Florida, you can do that 12 months out of the year.

"I miss that."

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Why USGA Green Specifications?
William Bengeyfield, USGA Green
Section

Quality Control of Growing Media: Troy McNeil, Transamerican Soil Blenders

Getting Water on the Golf Course: Ed Shoemaker, Rain Bird Golf Division

Getting Water off the Golf Course: Dwight Johnson, Advanced Drainage Systems

Forward Tees and Modern Golf Course Design: Alice Dye, golf course architect

Relationship between Architect/
Builder and Developer and
Superintendent: Perry Dye, Golf
Course Builders of America

#### **GOLF COURSE ARCHITECTS**

Introduction & Overview: Robert Trent Jones, Jr. ASGCA

Historical Perspective of Theory: Brian Silva

Case Histories of Western Projects: Robert Muir Graves

Case Histories of Southeastern
United States: Charles Ankrom

Incorporating the Natural Look into Remodeling Projects: Jeff Brauer

#### **USGA GREEN SECTION**

New Research Projects: F. Morgan Tayler, Green Section Committee

Turf Tips: Green Section Staff

Professionalization of Superintendents: Stanley Metzger, CGCS

Misdirected Good Intentions: James F. Moore, USGA Green Section

The Coming of Public Golf: B.P. Russell, USGA Executive Committee

Mother Nature and Government Regulation: Mark Kienert, CGCS

It's the Little Things That Count: Dennis Lyon, CGCS

#### **GOLF COURSE MECHANICS**

Overview: Pat Ryan, Chicagoland Golf Course Mechanics Association

Keeping up with the Times: John Maguire, Chicagoland GCMA

Birth of an Organization: Tino Martinez, Royal Poinciana GC, Naples

A Superintendent's Viewpoint: Bruce Williams, CGCS

Professionalism: Ed Combest, Lake City Community College

Relative Height of Cut: Rich Smith, The Toro Company (Continued from Page 38)

regulators about the unique situations faced by golf course managers.

The convention is not all work, however.

In fact, the unofficial beginning of the conference is the annual GCSAA Golf Championship, this year being contested by 600 golfers over five courses in the Orlando area (*See story*, *Page 44*) Feb. 19-20.

Keynote speaker at the opening session, scheduled Feb. 22 at 5:15 p.m., will be Dr. Ken Blanchard, author of *The One-Minute Manager*. A cash bar reception will follow with music for listening and dancing until 8 p.m.

Featured speaker at Sunday morning's prayer breakfast will be Apollo 15 astronaut James B. Irwin, who was the eighth human to set foot on the moon.

Monday afternoon is set aside for politics as the GCSAA conducts its annual meeting, featuring the election of officers. For the first time in anyone's memory, a Florida superintendent is running for GCSAA director. (See story, Page 42).

The 61st International Golf Course Conference and Show concludes Monday evening with the annual awards banquet, featuring presentation of the Old Tom Morris Award to Sherwood Moore (See story, Page 46) followed by entertainment by Tony Orlando.

Banquet tickets are not included in the registration. If space is available, they may be purchased for \$45 each at the time of registration.

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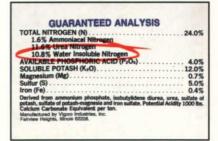
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(Continued from Page 46)
just that now you know what poa annua

Both men point to the growing dominance of science and technology as the biggest change to the art of golf course management in the past four decades.

Moore was an early advocate of using technology wherever possible. In fact, Jacobson recalled, he invented what may have been the world's first powered bunker rake.

"Hollywood was a Dick Wilson course," said Moore, chuckling at the memory prodded by Jacobson. "We had something like 250 bunkers.

"So we put together this contraption that consisted of three components lifting and lowering off the hydraulic system of the tractor. The rake worked like a charm and we used

it extensively.

"Should have had it patented."

The two men were last together in 1988, when Moore toured Jacobson's winter course, Banyan.

They'll be reunited on the dais at the Old Tom Morris banquet.

"I think it's great for Sherwood," said Jacobson. "I am really looking forward to it. They certainly picked the right guy."

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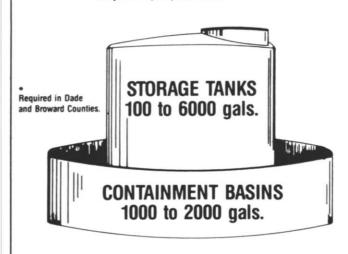
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25 golf course managers stepped right up and contributed \$8,000 each to test the treatment. Eight grand sounds reasonable to people who are already spending \$30,000 to \$60,000 a year to spray mole crickets. The "Mole crickets are probably the biggest pest problem we have," said Bob Yount, who directs the Florida Turf Grass Association Research Foundation. The

foundation has invested early birds \$101,500 in the mole cricket

That's nearly half of its total research dollars.

fight so far.

hen word went out that the

University of Florida had a new way to fight mole crickets,

The state of Florida has also

got the kicked in funds. Florida's 900golf some

courses aren't the only places worms where

mole crickets'

By Darcy Meeker endless munching and burrowing turn valuable green to brown. Counting pastures, lawns and the vegetable industry - and golf courses exotic mole crickets cost Floridians at least \$47 million a year. So estimates Dr. Howard Frank, director of the mole cricket biocontrol project at UF's Institute of Food and Agricultural Sciences (IFAS) in

Gainesville.

The pests have spread to Georgia, Alabama, and South Carolina.

Yount is enthusiastic about Frank's

latest project to use one of nature's own tools to kill mole crickets.

Enter the "friendly" nematodes. The microscopic worms attack nothing but mole crickets, and they carry bacteria that help do the pests in. The naturally-occurring bacteria are never found anywhere except in mole crickets and the nematodes, so the U.S. Environmental Protection Agency has no problem with using them as a living pesticide.

Chemical pesticides are not faring so well against the ungainly brown insects on golf courses.

Yount says, "Chemicals are not controlling mole crickets as they should. They're growing immune to existing products, and every year we lose one or two of them." The EPA is not registering new mole cricket chemicals.

> "Besides," Yount said, "everybody wants to avoid using chemicals anyway."

Mole crickets are exotics. They probably came from South America in the sand ballast of ships, and their natural enemies didn't take hold in their new home. Brazil was the original source of several Florida pests: fire ants, water

hyacinth, several weevils, Brazilian pepper, coffeeweed, bristly starbur, cocklebur and milkweed vine. IFAS and the Universidade de Sao Paulo have a biocontrol research agreement that includes work on mole crickets.

Frank has already tested the nematode in pastures and golf courses in Florida. It's called Neoaplectana or Steinernema (for classification details see the April 1990 issue of the Journal of Nematology). The first releases used worms from Brazil reared in a commercial fermentation vessel. They worked, but now researchers think they have a better bug-battler in a batch of nematodes

A 'friendly' nematode may become the first line of defense against the mole cricket, backed up by a redeyed fly, a pair of fungi and the bombardier beetle.

from Uruguay.

"It's more virulent against mole crickets," said Frank's co-researcher IFAS nematologist Grover Smart .

Smart is growing the new worms in his lab on dog food and mole crickets.

"We have decided that we would prefer to produce the nematodes ourselves because we feel that the ones we produce are a little better quality. They live longer and are more infective than commercial ones."

Smart explains that the nematodes enter the crickets through their mouths or breathing tubes (spiracles) in their abdomens.

"As the nematode grows, it releases the bacteria. The nematode goes through two complete life cycles, and then the third generation exit as infective juveniles." The mole cricket is dead by then. Smart said nematodes will kill the mole crickets on their own, but it takes longer without the bacteria to give the mole cricket blood poisoning.

How long will the nematodes keep killing mole crickets? Smart says researchers don't have any reason to think they will stop.

"We put nematodes on an experimental plot four years ago. In one year, mole cricket populations fell by 90 percent. We still find a few mole crickets



Howard Frank /IFAS

out there, and about 10 percent of them are infected with the nematodes. We don't know how much longer this will take place."

Smart said the nematodes have now spread 10 miles from the release site.

"We don't know how much effect it's having on mole cricket populations there. We're continuing to monitor those populations, however, and next spring we'll have a better idea what it's doing."

Meanwhile, he is gearing up to deliver 3 million nematodes to each participating golf course, coinciding with mole cricket

flight periods, starting in South Florida.

"We wouldn't want the nematodes to starve to death waiting for mole crickets to come along," he said.

Frank said earlier nematode treatments were wall-to-wall and required billions and billions of nematodes. This time, though, a solid state emitter will imitate the mating call of the mole cricket. Those that respond to the siren call will get more than they bargained for.... a dose of nematodes.

On some golf courses, the nematodes will be poured on the ground under the emitters.

"The mole crickets will land on the ground and tunnel in," the IFAS entomologist said. "Some will die there and maintain the inoculum, and some will spread out to other areas. The idea is to start an epidemic among the mole crickets."

In a second test method, a five-gallon bucket is packed with

Mole crickets arrived in Florida from South America — probably Brazil — and have now spread to Alabama, Georgia, and South Carolina.

Using solid state electronics, researchers from the University of Florida's Institute of Food and Agricultural Sciences call mole crickets to their fate: to be a tasty meal for nematodes. Calling/collecting stations are placed in the rough.



Susan Winewriter developed the process for raising the Brazilian fly in the laboratory.

foam sponge, soaked with a nematode solution, and stashed under the emitter.

"The point is that the nematodes will be more concentrated than those poured on the ground," Frank explained. Golf course workers will store the bucket in the fridge during the day to keep the tiny worms from cooking in Florida sunshine.

A third method also uses a bucket. This time it's filled with sand impregnated with nematodes.

"After the mole crickets have had time to infect themselves, they can be scooped out of the bucket by golf course personnel and distributed in problem areas." An infected mole cricket will serve as a Typhoid Mary wherever it is placed.

Clients and neighbors shouldn't notice the sounds the emitters make because they'll just blend in with natural mole cricket mating calls, he said.

"Next fall and in the fall of the following year, we'll convert the inoculating stations into sampling traps," he said. "The trapped mole crickets will be shipped to us in Gainesville and we will see what proportion is infected with nematodes."

Frank and friends will supply nematodes and regional training sessions. The golf courses will run the releases themselves and monitor their progress.

Among the golf courses involved are the Royal Poinciana Golf Course in Naples, Sun City Center in Sun City, Bay Hill Club in Orlando, Fiddlesticks Country Club in Ft. Myers, Waterford GC in Venice, Riviera GC in Ormond Beach, Cypress Creek CC in Orlando, Quail Ridge GC in Spring Hill, Interlachen CC in Winter Park, Cypress Run in Tarpon Springs, Countryside CC in Clearwater and Woodfield CC in Boca Raton.

The Gainesville G&CC is participating in wall-to-wall nematode experiments. Two other golf clubs and three pastures will also receive the treatment and be monitored for mole cricket populations and grass cover.

A question to be answered by





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## And the bent goes on...

Dan Jones, CGCS, photographs some newly germinated bentgrass on his test plots at Banyan GC in West Palm Beach.

Jones is one of 12 superintendents taking part in the national trials of some strains developed by Dr. Milton Ingleke at the Texas A&M research center in Dallas.

"We're not supposed to do anything special with it," says Jones,

mindful of the effort required to keep the current strains of the cool-season grass alive in Florida's long, hot, humid summers.

"If it requires special treatment, it won't be suited for



KIEFFER/JANLARK

Florida. That's the point of the trial."

Looking on is Jones's assistant, Tim Echols. A full description of the test will be reported in the Spring issue.

further research: How can golf courses control for nematodes that hurt grass without upsetting the usefulness of the nematodes that attack mole crickets? During the course of the two-year test of the nematodes, participating golf courses will receive a bonus: another biological control agent for the mole

cricket. This one is a red-eyed fly from Brazil that answers the mole cricket's mating call. Its young, laid on or near mole crickets, burrow into the cricket.

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Ten days later the mole cricket is dead, the grubs then pupate and emerge as adult flies to chase after more mole crickets.

About the size of a house fly, Euphasiopterx depleta is also targeted to mole crickets and will harm nothing else in Florida.

Releases usually use fly pupae in damp sand, in a system developed by Susan Winewriter, an IFAS technician. She is the first person in the world to lab rear the Brazilian fly, or any of its cousins that parasitize crickets and katydids.

The fly is established near Gainesville and has spread over a mile on its own accord, Frank said.

"We plan another release site for the fly funded by FTGA at the Doral Golf and Country Club in Miami. Doral will run a monitoring station for us and send a portion of trapped flies to us, releasing the rest," he said.

Two fungi that kill mole crickets are research targets in Dr. Drion Boucias' IFAS lab at UF.

Frank says, "Preliminary attempts

to infect mole crickets by pouring buckets of the fungi in water onto the soil did not work. But we do know that mole crickets will take the bait Rod Kepner developed. We'll try that same bait to incorporate the fungal pathogens and do trials to find out whether that works. If it does, that will give us another non-chemical method to control mole crickets."

Frank said the research is three to four years away from proving itself.

Meanwhile other pathogens — protozoa and viruses — are being investigated for IFAS by Dr. Sergio Alves in Piricicaba near Sao Paulo in Brazil.

Then there's the wasp that another member of the mole cricket research team, Dr. Jim Castner, researched for his Ph.D. at Florida. It was only a partial success.

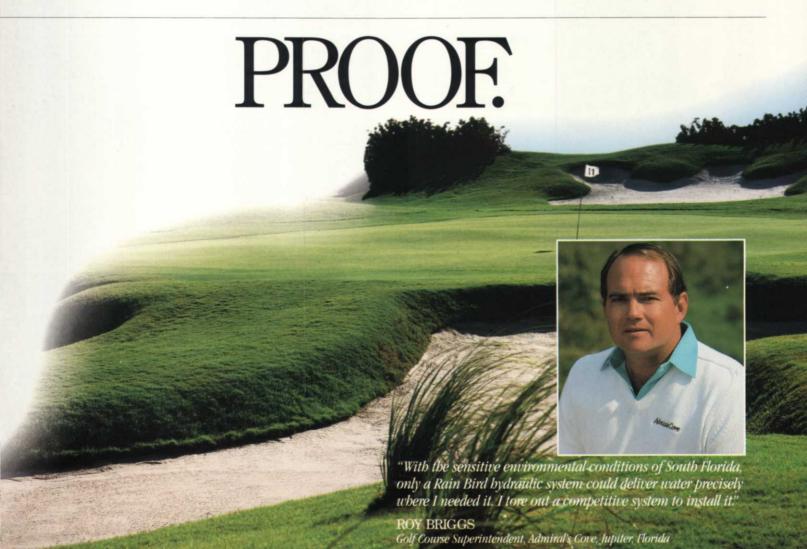
"The population still exists at Ft. Lauderdale on the IFAS research center there and on land nearby," Frank explained. "Castner's dissertation showed that it was taking only the short-

winged mole cricket, not the tawny and Southern mole crickets. In the lab, it had attacked all three. It surprised us."

Frank said researchers are looking at related wasps that parasitize mole crickets in Bolivia at slightly higher altitudes. The hope is they'll tolerate cooler temperatures and be able to survive winters farther north.

One of Frank's favorites in nature's arsenal against armies of mole crickets is the bombardier beetle. So called because it sprays a brown "defensive secretion" when disturbed, it eats a smorgasbord of small insects as an adult. However, its larvae are specialist predators of mole cricket eggs. Without mole crickets, it can't survive because it has nothing to eat.

There are a lot of questions left to ask in mole cricket research: What happens when you introduce more than one natural enemy? What conditions favor which biological control agent? What's the best way to raise and deliver the biocontrols? Research continues. We'll keep you posted.



#### FGCSA research green to grow green real soon

University of Florida plant pathologist Dr. Monica Elliott is looking forward to studying bermudagrass decline and rhizoctonia on this large green under construction at the Institute of Food and Agricultural Sciences Research and Education Center in Ft. Lauderdale.

Begun in July, the green was built mostly with donated materials and funds from golf course superintendents, she said. Seeding will begin in the spring now that a part-time technician has been found to take care of it.

The real story lies underneath the graded earth.

The research green is half built according to modified U.S. Golf



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Association standards, like most of the greens in Florida," Elliott explained. Missing is the choker layer, a layer of medium grade sand, coarser than the fine sand on top, but much finer than the gravel that forms the base.

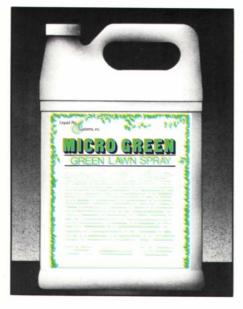
One fourth exactly meets USGA specs, and another quarter

has a geo-textile material substituted for the choke layer.

"Eventually we can collect drainage water and compare different methods of construction," said Elliott.

Also to use the research green: Drs. John Cisar and Robin Giblin-Davis.

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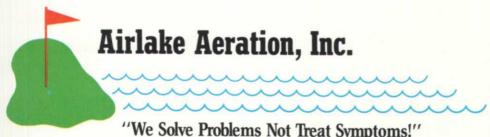


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# ARCHITECTS, ETC.

hen talking to him, his name, is Joe; when talking about him, most superintendents refer to him as Mister Lee.

Whenever architect Joe Lee is asked about himself, the answer always begins with "We," as in "We try to design golf holes that are visible from the tee, so that

guests have an equal chance at par with the regular member."

par with the regular member."

The "we" is not an imperial pronoun, however. The only vestige of Joe Lee's aristocratic heritage (he's descended from Robert E. Lee's older brother, John) is his incredibly courtly manner.

Actually, the "we" refers to Betty Peter, the one-woman staff whom Lee credits with design, drafting, land planning, public

> relations, and office management, as an integral part of everything he has created. She's been with him for

26 years, joining the Dick Wilson/Joe Lee partnership a few years before Wilson passed away in 1965.

With Peter's support, Lee has designed or renovated more than 200 golf courses. At age 70, he has another 20 or so projects in various stages of completion.

About a third of his courses are in Florida (*See list, page 67*). Half of his Florida courses are concentrated in South Florida, his home territory.

He is immensely popular with golf course superintendents there, not only because of the extraordinary attention he gives "his" courses, but because of his promotion of our profession.

He was one of the first architects to encourage the hiring of a superintendent during the early stages of construction.

And he supports superintendents in their work.

"I'll always remember him going before the membership at Quail Ridge on my behalf during a particularly difficult period," says Tim Hiers, former president of the Florida GCSA, now golf course manager at the John's Island Club in Vero Beach.

Most of all, superintendents who know Lee admire his respect for the land and his understanding of the difficulties faced by superintendents as they try to balance the needs of nature with the demands of golf.

Like most world-famous architects, Lee has a trademark, but it's not an architectural feature such as Jack Nicklaus' mounds or Pete Dye's railroad ties.

Joe Lee's trademark is commitment and dedication to a project.

"We have always taken the position that our job is never done," he says. "As a golf course moves through time, conditions change. It's our responsibility to adapt the golf course to the evolving conditions."

The extraordinary number of visits he makes to a project during construction assures his client — his "regulars" include heavyweight developers Arvida and Marriott — that the job will be done right without costly alterations.

Each course is special to him and is not forgotten after it opens for play.

"Joe is never too busy to answer any questions about the golf course or to help

An early champion of golf course superintendents lets his courses do the talking

is really a

good ol' Joe

By

MARK JARRELL, CGCS

# 'A gentleman and a fine human being...'

It has been nearly 20 years since the day I first saw Joe Lee.

I was standing in a sand trap at Sugar Mill CC, shovel in hand, trying my best to please the old fellow directing my shaping efforts. Joe was passing by on an inspection tour with the project superintendent and paused to survey our work and suggest some minor adjustments.

At the time, this first encounter had little significance for me. I was fresh out of high school with no idea that I would ever go into the golf course business. All I really remember is having an impression of Mr. Lee as a true gentleman and fine human being.

Six years later, I knew — among other things — that the correct term was "bunker" instead of "sand trap" and I

officially met Joe Lee when I returned to Sugar Mill as its first trained golf course superintendent.

My first impression not only proved to be accurate; it has come to define the true essence of this remarkable man. As I mature and begin to realize how few people achieve greatness in their fields while retaining their greatness as human beings, my respect and admiration for Joe grows.



Mark Jarrell

He is a real-life hero to many of us who have come to know him. His contributions to golf and especially to the golf course superintendent rival his incredible accomplishments as an architect. with course improvements," says Ken Anderson, former superintendent of Broken Sound G&CC in Delray Beach.

"When we rebuilt our greens, Joe volunteered to help in any way he could, even though we weren't paying him. He has given me advice on contouring fairways, reshaping sand traps, planting trees and rebuilding tees. He always showed a strong personal interest in whatever we were doing."

One reason Lee makes so many visits to his courses is that he does much of the work for which other architects hire engineers, consulting specialists and subcontractors.

"He got his foundation in dirt," says Peter, explaining Lee's thorough education in earth moving under Wilson. "'You can't build a golf course if you don't understand about moving dirt,' was how Dick used to put it."

It was Lee's interest in earth moving that got him started with Wilson.

After his release from the U.S. Navy following World War II, the 25-yearold Lee enrolled in night classes at the University of Miami, from which he subsequently received a degree in education while pursuing a daytime education in golf at the old Biltmore GC.

Lee landed his first teaching job in Boynton Beach, where he continued to pursue his passion at nearby Delray Beach Municipal GC. That's where he met Wilson, already an established golf course architect at a time when the profession had very few practitioners. The two became friends and frequent playing partners.

After a year in the classroom, Lee turned professional and took an assistant's job at the Moraine CC in Dayton, Ohio. Not too long after he started his new career, Lee's interest was piqued by the construction of the National Cash Register Club right next to Moraine.

While Lee was peering over the fence, who should appear but his friend and former golfing buddy Wilson, who designed the course. He offered Lee a job overseeing the construction.

Ioe took it and has never looked back.

Playing the game, however, remains a passion for Joe Lee.

When he comes to Palm Beach National GC for his almost weekly round with course owner and close friend Bob Rich, a drama unfolds at the lunch table as teams are chosen and strokes awarded. The focus of the conversation is always golf: who shot what last week, what new equipment has been tested or purchased to carry into battle, how some recently-learned technique to correct a putting flaw may provide the edge for victory.

His approach to the game as a player mirrors his design philosophy.

"The game provides challenge enough without tricking up a golf course," he is fond of saying. "The golf course must provide a challenge, but it must be a fair challenge."

A Joe Lee course challenges players at every skill level. He starts with the premise that a round of golf should be enjoyable. He tries to create safe,





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River Ranch	Yeenaw Junction
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Tuscawilla CC	Winter Springs
Walt Disney World (54 holes	Orlando
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interesting routes while giving the player an opportunity to use every club in his bag.

He is not offended when a wellplayed round on one of his courses produces a low score.

He designs courses for the "love of the sport and the opportunity to use many different skills including, above all, unlimited use of the imagination."

Lee stands on the principle that the land dictates the golf course. His penchant for tailoring the course to the property explains his disdain for "trademark" or "signature" features.

He won't compromise his principles just to get a job.

Bill Wright, director of golf course and landscape operations at the Boca West Club, relates a story about the construction of the club's fourth course that illustrates Lee's principles.

"The project manager, a young Harvard MBA, approached Joe about moving a tee to accommodate one more housing unit in a parcel bordering the seventh hole.

"Lee tried to explain the reasons for not moving the tee, but the young turk persisted, going so far as to walk over to his BMW and pull out his plan for redesigning the hole.

"In a very low, unruffled tone, Joe explained that he had told the developer when he started that he was strong enough to tell them when they were making a mistake. And at this point, he said, they were making a mistake.

"He then told the project manager that if he insisted on moving the tee, he should go on down to Walgreen's to find himself another architect."

Lee is not inflexible, however.

He stands his ground on functional matters relating to proper engineering, safety, practical maintenance, and preserving the integrity of the game, but he always does his best to help his clients achieve their goals and realize their dreams.

He listens to his clients. . . even to those who don't realize that water cannot drain uphill.

"Often a different opinion will give

new ideas for improvements which make us all look good," he says.

Nor does he disparage architects who differ with his philosophy.

"Golfers should have the choice of many styles," he says. He fears, however, that some new trends in golfcourse design may increase the cost of maintenance to a point that will put the game beyond the reach of some.

Golf is not his only sport. As a young baseball pitcher, he was fast enough to earn a tryout by the Washington Senators, but, as Lee puts it, "Other golfers are safer when I putt than the batters were when I pitched."

He would like to be remembered "as a golf architect who helped perpetuate the conventional style of golf."

"If I were rich," said Gene Sarazen, "and wanted a golf course that everyone could enjoy, I would hire Joe Lee. His traps are good to look at and his courses don't have too many water holes, which I deplore. All in all, Joe Lee is my number-one choice. He is the modern-day Donald Ross."





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# Just because it's green doesn't mean you want it!

or years, great mats of floating and submerged algae frequently turned the nearly three-acre irrigation lake at Banyan GC in West Palm Beach into an eyesore and source of complaints from club members. At times, the algae was so thick it clogged clay valves on the irrigation system, requiring the valves to be cleaned every two or three days.

Golf course manager Dan Jones, like most superintendents in Florida, looked for a solution to the problem. He

DAVE REAGAN

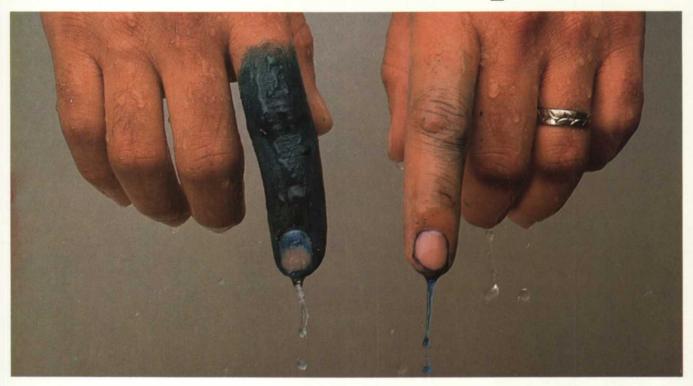
An aerator can turn an ugly, algae-infested pond into a scene for a photographer's scrapbook in less time than one might imagine. Photo at right was taken on this three-acre pond just two weeks after photo above.





By Milliken Chemical

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'Our lake went from an eyesore to a beautiful waterway in two short weeks... Our irrigation system now operates normally for the first time in 17 years.'

tried copper sulfate and the white amur Jones installed two 3-hp

fish, sometimes called the grass carp.

Although these chemicals and biological treatments worked well on other aquatic weeds in the lake, they barely affected the algae. Then Jones saw an ad for an algae- and odor-control aeration system and contacted an irrigation supply in Boynton Beach. Jones installed two 3-hp units last April and he didn't have to wait long to see the results.

They were dramatic.

"Our lake went from an eyesore to a beautiful waterway in two short weeks!" he reports. "The water is crystal clear and the algae is 98 percent eliminated. Our irrigation system now operates normally for the first time in 17 years."

Banyan's aerators, installed by Boynton Pump, were manufactured by Aeration Industries of Minneapolis. They are variations of the firm's patented surface-mounted aspirator aerators used in wastewater treatment and aquaculture production.







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### COURSES UNDER CONSTRUCTION

City	Course	Holes	Architect	Type
Beverly Hills	Beverly Hills GC	18	Karl Litton	Daily Fee
Bonita Springs	Bonita Bay Club	18	Arthur Hills	Private
Clermont	Palisades	18	Joe Lee	Unknown
Dade City	The Cedars	18	N/A	Daily Fee
Delray Beach	Polo Trace	18	Karl Litten	Private
Delray Beach	Polo West	18	Karl Litten	Private
Fisher Island	Fisher Island Club	9	P.B. Dye	Private
Jacksonville Bch	Queens Harbor Y&CC	18	Mark McCumber	Private
Jacksonville	Glen Kernan	18	Jack Nicklaus	Private
Jacksonville	Windsor Parks GC	18	N/A	Daily Fee
Jupiter	Old Trail	18	Arthur Hills	Private
Lakeland	Big Cypress Lakes	9	Ron Garl	Daily Fee
Lakeland	Bramble Ridge	18	Holloway & Assoc.	Daily Fee
Lakeland	Grasslands @ Oakbridge	18	Jerry Pate	Daily Fee
Lakeland	Oakbridge CC	18	Robert Cupp	Private
N. Fort Myers	Sabal Springs	9	Gordon Lewis	Private
Naples	Bretonne Park	18	Mark McCumber	Private
Naples	Club at Pelican Bay	9	Arthur Hills	Private
Naples	Lely Estates	18	Robert Trent Jones Sr	Private
North Merritt Island	The Savannahs	18	Gordon Lewis	Municipal
Orlando	Debary Plantation	18	Lloyd Clifton	Daily Fee
Palm City	Cutter Sound	18	Gary Player	Private
Palm Coast	Cypress Knolls	18	Player/Litten	Private
Palm Harbor	Crescent Oaks	18	Steve Smyers	Private
Palm Valley	Palm Valley CC	9	N/A	Daily Fee
Port St. Lucie	The Enclave	18	N/A	Private
Sarasota	Laurel Oaks	36	Gary Player	Private
Sarasota	Oak Ford	27	Ron Garl	Daily Fee
Sebring	Highland Ridge CC	18	Steve Smyers	Daily Fee
Sebring	Spring Lake	9	N/A	Daily Fee
Sun City Center	Sun City Center GC	9	N/A	Private
Tarpon Springs	Wentworth	18	Steve Smyers	Private
Vero Beach	Orchid Island	18	Palmer/Seay	Private
Volusia County	Halifax Plantation	18	Bill Amick	Private
West Palm Beach	Binks Forest GC	18	Johnny Miller	Private
West Palm Beach	Emerald Dunes	18	G. & J. Fazio	Daily Fee
West Palm Beach	Ibis/Seminole	18	Jack Nicklaus	Private
West Palm Beach	Ironhorse CC	18	Arthur Hills	Private

### COURSES PLANNED

City	Course	Holes	Architect	Type
Bradenton	Cypress Banks	54	N/A	Daily Fee
Brevard County	Valkaria GC	18	Charles Ankrom	Municipal
Cape Coral	Royal Tee CC	9	Gordon Lewis	Daily Fee
Coconut Creek	N/A	9	N/A	Daily Fee
Daytona Beach	LPGA Headquarters	36	N/A	Unknown
Delray Beach	Polo Trace	18	Karl Litten	Private
Delray Beach	Polo West	18	Karl Litten	Private
Destin	Tidewater Beach	18	Charles Ankrom	Private
Eastpointe	Green Point	18	Lloyd Clifton	Daily Fee
Fort Lauderdale	Ravinia	18	Jack Nicklaus	Private
Goldenrod	Monterey	18	Ward Northrup	Private
Haines City	Pine Oaks	18	Joe Lee	Private
Hawthorne	Oak Tree Sports Club	18	Ward Northrup	Private
Homosassa	Plantation Club	18	Hale Irwin	Daily Fee
Howey in the Hills	Bella Vista	18	Lloyd Clifton	Daily Fee
Jacksonville	Julington Creek	9	N/A	Daily Fee
Jacksonville	N/A	18	N/A	Unknown
Jacksonville	Silver Sands	18	N/A	Daily Fee
Lake Worth	Wycliffe G&CC	18	Karl Litten	Private
Marco Island	Marriott Resort	18	Joe Lee	Daily Fee
Melbourne	Washington Lakes GC	18	P.B. Dye	Private
Melbourne	Waterford	18	Ron Garl	Private
Miami	Cutler Bay	18	Jack Nicklaus	Private
Miami	Terraverde	18	N/A	Private
Mount Dora	Mount Dora CC	18	C.L. Deming	Private
Naples	Naples Golf Estates	18	Gordon Lewis	Private
Naples	Royal Wood G&CC	18	N/A	Private
Naples	Shamrock G&CC	18	Ward Northrup	Private
Naples	Southhampton	18	Gordon Lewis	Private
Northport	Northport CC	9	Charles Ankrom	Daily Fee
	(Continued	on Page 7	76)	-

# 89 new courses in Florida's immediate future

As the National Golf Foundation heralded the final decade of the millenium with the battle cry, "A new golf course for every day until the year 2000," Florida was doing its part.

According to the NGF and *The Florida Green*'s own research, a total of 1,602 new golf holes — the equivalent of 89 18-hole golf courses — was either planned or under construction in the Sunshine State as of Dec. 31, 1989.

That's as many *new* golf courses as there were *total* in the state of New Hampshire at the end of 1988. (The NGF's survey of facilities for 1989 had not been released as *The Florida Green* went to press.)

The news, however, is not all good. While the nation's pressing need is for public golf facilities, 963 of Florida's new holes — 60 percent — will be located on private facilities.

Only 36 holes — 18 under construction in North Merritt Island and 18 planned for Valkaria Airport, also in Brevard County — will be municipal facilities.

The type of access has not been identified for 90 holes.

Karl Litten of Delray Beach is far and away the busiest architect in Florida right now with 54 holes under construction and another 126 in the planning stages.

Second-busiest architect in the state is Steve Smyers of Lakeland, with 54 holes under way and another 45 on the boards. Joe Lee of Boynton Beach is third with 36 and 45.

Tied for fourth are Gary Player (54-18), Gordon Lewis (27-45), and Jack Nicklaus (36-36)

Arthur Hills of Toledo, Ohio, has the most Florida holes under construction with 63, but he had no other contracts pending construction as of Dec. 31.

The architects for 81 holes under construction and 225 in the planning stages had not been announced at presstime.

West Palm Beach has the most holes under construction with 72, followed

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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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by Lakeland with 63.

Only two facilities now under construction have more than 18 holes, both in Sarasota: Laurel Oaks, a 36-hole private club by Gary Player and Oak Ford, a 27-hole daily-fee facility by Ron Garl.

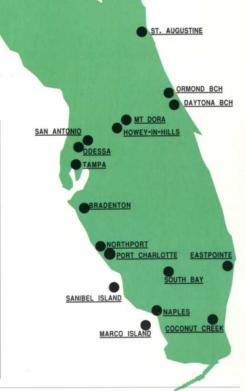
Largest facility under consideration is a 54-hole daily-fee project in Bradenton called Cypress Banks. The architect has not been announced.

A total of 16 planned projects came

# Golf Courses Announced in Final Quarter of 1989

to *The Florida Green*'s attention
in the final quarter of
the year. They are depicted on the map
accompanying this story.

City	Course	Holes	Architect	Type
Odessa	The Eagles	9	Ron Garl	Private
Ormond Beach	Riverbend	18	N/A	Daily Fee
Port Charlotte	Mariners Properties	18	Gene Bates	Private
Port St. Lucie	Westport	18	Robert Walker	Daily Fee
Punta Gorda	Fairway Woodlands	18	Gordon Lewis	Private
San Antonio	Cannon Ranch	27	Steve Smyers	Daily Fee
Sanibel Island	Beachview GC	9	N/A	Daily Fee
Sarasota	Florida Palm Aire	18	Player/Litton	Private
Sarasota	Sorrento Valley CC	18	Bill Amick	Private
South Bay	Eagle Heath	18	N/A	Unknown
Spring Hill	Silver Thorn	18	Joe Lee	Private
St. Augustine	Ponce deLeon Resort	9	Joe Lee	Daily Fee
St. Augustine	The Fountains	18	Gary Player	Private
Stuart	Glen Eden	36	Karl Litten	Private
Tampa	Lakeview Crossings	18	Steve Smyers	Daily Fee
Tampa	Westchase GC	18	Lloyd Clifton	Daily Fee
West Palm Beach	Ibis/Seminole	36	Jack Nicklaus II	Private
West Palm Beach	Lion Country Safari GC	18	Gene Bates	Daily Fee
West Palm Beach	Royal Palms Bch	36	Karl Litten	Private
Windermere	Glen Muir	18	Desmond Muirhead	Private





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Attending dedication ceremonies for the Shrine Gardens at the PGA/World Golf Hall of Fame were, from left, Peter Stillwell, Hall of Fame director; John Szafranski and Mike Hoffman, Toro executives; and Randy Nichols, board member of the GCSAA.

# Toro honors superintendents with garden in Hall of Fame

Shrine Gardens, the area of the PGA/World Golf Hall of Fame recognizing the service and contributions of golf course superintendents, were formally dedicated Nov. 2 in ceremonies at the facility in Pinehurst, N.C.

The Toro Co. of Bloomington, Minn., is founding sponsor of the four-acre, \$160,000 project begun in April, 1988, to replace a moat that had encircled the shrine area.

"Golf course superintendents are key members of the golfing industry," said Mike Hoffman, Toro's director of marketing for commercial products. "They have made and continue to make major contributions to the game. We hope they will receive the recognition in this special hall of fame that they have earned through hard work, expertise and dedication to the game."

The garden features two two large topiaries — a putterboy and a golf ball — plus the flowered logotypes of the GCSAA and PGA of America. Nearly 500 truckloads of earth were required to complete the project, which will involved thousands of seasonal plantings.

The World Golf Hall of Fame was

established in 1974 and, after a nineyear financial struggle for survival, was taken over by the PGA of America, which administers the 17-acre facility and its priceless collection of golf memorabilia.

Two golf course superintendents
— Old Tom Morris and Young Tom
Morris—and two architects—Donald
Ross and Robert Trent Jones— are
among the Hall's 55 enshrinees.

Modern-era inductees are nominated by members of the Golf Writers Association of America. Pre-modern era inductees are nominated by a special committee appointed by the president of the PGA of America and the GWAA. To be inducted, a nominee must receive 75 percent of the ballots cast by the senior members of the GWAA.





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GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA

# LETTERS TO THE EDITOR

# Zelazek's covers make it easy to compile wish list of Florida courses to visit

Dear Mr. Jones:

Each time I receive my latest copy of The Florida Green, I plan to write and commend you on the fine job you have done over the years in developing this unique magazine. Well, better late than never.

I have particularly enjoyed the outstanding cover photographs by Daniel Zelazek. Saving the covers of each issue has been an easy way for us to compile a wish list of golf courses for our next Florida vacation.

I certainly hope all future plans are to continue with this long practice of excellence in cover photography. Perhaps you should also consider a second large photo as a golf course centerfold. We would certainly enjoy seeing twice as many of these quality photographs by Mr. Zelazek.

The development of the type and depth of the articles over the years and the more recent addition of the credits for the inside photographs have been excellent steps in the development of this fine magazine.

The best to you all in the future.

K. Mitchell San Francisco

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# Wedge article on pine tree decline prompts follow-up study by forest pathologist

Dear Mr. Jones:

The article by David Wedge concerning the pine tree decline syndrome which appeared in the summer edition of The Florida Green was an important review of this problem. Mr. Wedge described the two major causes of decline in golf course construction shock and alkaline water irrigation, which allow this problem to persist.

Since the publication of the early research which Mr. Wedge mentioned, I have continued to test chemical solutions for low-pressure, microinjection into declining pines.

One series of injections into chlorotic pines at a golf course in Bradenton has shown very encouraging results. Injections performed early last March into 120 trees allowed almost all trees to improve in foliar color andto demonstrate production of new foliage. Three trees in an advanced state of decline had died by early August, but the remaining trees maintained the improved color.

I'll continue to monitor these trees through March, 1990, when a one-year evaluation will be made.

If there are additional golf course superintendents who may want to sponsor additional research trials at their courses, I would be pleased to hear from them.

Roger S. Webb Extension Forest Pathologist University of Florida Gainesville

# Thanks for your years of service

Dear Dan & Irene:

It's unfortunate that in all the time I've known you, I've never had the pleasure of meeting you. Both Don and I have enjoyed working with you on The Florida Green and are sad to know you are leaving it.

You have done a fabulous job and should leave knowing you are appreciated by everyone!

I marvel at your ability to get everything accomplished. You must love high pressure! Good luck in the future.

Maureen & Don Kooyer Jacksonville

# Letters always welcome

Letters to the editor are welcome on all topics related to the art of golf course management in Florida. Preference will be given to those dealing with golf course superintendents. Letters will be edited for grammar, style, brevity and clarity. Address letters to The Florida Green, Janlark Communications, Inc., P.O. Box 336, Auburndale, FL 33823.

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# Perhaps it's time to look back across the Pond, where superintendents have been nurturing the game of golf for centuries. Maybe they have been ahead of the game all along while we have been digging our own graves.

Mike Bailey
Golf Course Superintendent
The Falls CC
Lake Worth

an you remember watching the British Open on television this year? Can you remember how brown the golf course appeared?

I remember asking my green committee chairman the next day what he thought about the conditions and he quickly responded, "Deplorable!"

That adjective sounds a little harsh, but let's face it: courses in America are commonly wall-to-wall green and kept in impeccable condition.

Perhaps a little too impeccable.

Maybe our Scottish forefathers are ahead of the game, while we are out there digging our own graves. Just how long can we continue to overproduce?

Let's be honest. American golf courses are maintained too well and everyone's at fault. We as superintendents strive to make our golf courses better every year. When will we reach our limit? What about American golfers? Are they getting spoiled? We hear them complain about those things we do for our own good like aerifying, top dressing, verticutting and so on.

Those Scotsmen do far less and are far better off. And I mean no disrespect: they've got this business figured out far better than we do.

Many American golfers travel from place to place, playing each golf course at its peak level of maintenance. Our members travel from north to south, expecting perfection at each stop along the way. Memberguest tournaments compound the problem.

If the course down the road has something special, you can sure bet that your members will have you doing the same thing in the very near future.

And what about touring pros?

Is there such a thing as a silver spoon? Is the American touring pro spoiled? We hear of foreign pros playing more competitively because they are more familiar with normal world conditions. Again, are we spoiling our pros with fast greens, tight fairways and so on.

It's got so bad that now we hear TV commentators discussing "roll of the fair-ways!"

Where is it going to end? Even the commentators are spoiled. Sure, they give us a lot of respect and credit when they compliment the golf courses, but the point is, they are calling attention to the very best-conditioned courses in the world.

Is this whole golf business heading in the right direction? Have you ever really thought about what golf will be like in the year 2010? I'm not talking about laser golf with high-tech clubs; I'm talking about the green stuff we play on. We dream of drought-tolerant, heat-resistant, special grasses that we haven't even seen yet. In reality, things might be completely different from what we now envision.

First, let's assume money always will be available to support the top-level clubs. Twenty years from now, money might not even be an issue anywhere.

Instead, the issues might be water

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availability and banned chemicals. Golfers may have to adapt to brown, dry turf, weeds, and insect damage.

In 20 years, we might be irrigating greens and tees just three times a week and fairways only once a week. Perhaps by then man will have consumed or polluted so much of his fresh water sources that the precious remainder will not be available for golf courses at any price.

Lush, wall-to-wall green may be a

distant memory.

You've heard of organic gardening. What would it be like to manage a golf course the organic way? That's right; no pesticides of any sort! Environmentalists and government regulations will have virtually eliminated all the current pesticides except those which are so safe as to be ineffective.

If for no reason other than political reality, the current restricted pesticides that combat nematodes and mole crickets will be long gone and these insect pests will abound in numbers we have not yet seen. (The Rules of Golf may even permit a golfer to knock down mole cricket mounds in his line.)

And as for weeds, they will be prevalent everywhere. The current herbicides on the market will be long gone. We could contemplate pulling weeds by hand, but labor costs make clean golf courses prohibitively expensive. It will be easier just to let the weeds grow because, after all, everybody will have them.

As a matter of fact, we might even play winter rules and roll the ball onto a clump of weeds because at least they offer a better lie than sand.

What about these new so-called low-maintenance golf courses that architects currently are creating with abrupt mounds, huge bunkers, and excessive fields of love grass? Somebody out there is going to get rich modifying all these modern monuments to the way they should have been constructed in the first place.

On the other hand, maybe we can prepare for the future now, since the change is inevitable and superintendents will be virtually powerless in its wake. Pesticides will be banned no matter how many lobbyists we employ. Golfers are going to have to accept that fact.

Those Scottish chaps have not nurtured the game of golf for centuries by accident. They have something to teach us. Perhaps the way back to the future lies on the other side of the Big Pond.

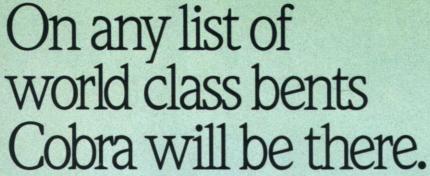


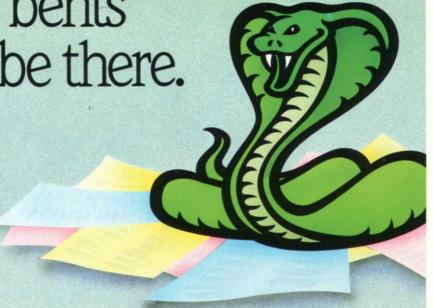
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On a golf green built to USGA specifications at Griffin, Georgia, Cobra's color was rated superior to that of Penncross in March, May, August and October and better than that of Penneagle in March, August and October.

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

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

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

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



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# REFLECTIONS : KRINDONS :

Editing the chapter magazine gives a superintendent something to do in his spare time

om Mascaro and I sat at the table in his office, deciding how to fill up the 16 pages of *The South Florida Green*. Tom said we would use a two-column format with 62-pica columns and 6-point letters with 36-point titles. It all sounded Greek to me. Then Tom asked me if I would consider being the editor.

Wow! Me?

Ignorance is bliss. It was December 1975.

The telephone rings. It is 8 p.m., Sunday evening, Dec. 3, 1989, and Larry Kieffer wants to know if we should hold *The Florida Green* to 86 pages or increase it to 94. We have received 47.5 pages of advertising for the Winter issue, and our policy is 50 percent editorial and 50 percent advertising.

On Monday evening, I call Daniel Zelazek at work (he works the night shift at Pratt Whitney Aircraft) to inform him that we are ready to take the cover picture of our golf team in Orlando.

"Didn't I tell you my wife is having a baby any day now and I can't go anywhere?" says Daniel.

I assure him he forgot to tell me as my heart flutters. I hurriedly call Larry and inform him of the situation. "You'll have to find a photographer in Orlando," I say.

Tuesday, Irene calls Ralph Baxter at Hector Turf and tells him we will need Cheshire labels for the mailing house used by our new printer. Ralph says he has never heard of Cheshire labels and will have to talk to his computer department.

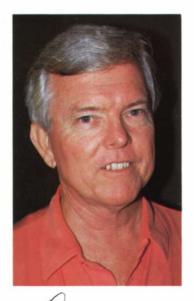
Wednesday, our largest advertising client calls three days after our ad deadline and wants to run an additional two-page ad. We reluctantly accept the ad.

We call Larry, who says he has just spent three hours on the flow chart (the diagram that shows where each ad and story will go) and is almost halfway finished. We tell him about the ad and he mutters something about deadlines.

Thursday, Dick Long — our printer for 12 years — calls and says he needs some money. (Sixty days after printing the Fall issue, our bill is only half paid.) I quickly look in the checkbook, but I already know what I will see. Too many receivables. I tell him I will bring it to him the following week. All the way to South Miami!

Larry calls back and says that his cover photographer has backed out. I tell him to keep looking.

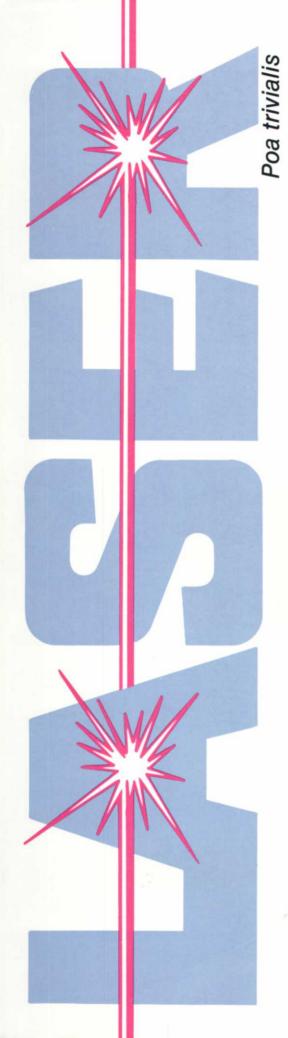
Yes, Tom, I will accept the editorship. It will be exciting and give me something to do in my spare time. Now if I can get Max Brown to write a quarterly column. And maybe Irene to type the articles. I can probably get Harry McCartha to do the...



Dan Jones, CGCS

Editor

The Florida Green



# **Get Another Benefit** From Poa trivialis

# DARKER COLOR

More and more professionals are using *Poa trivialis* for its many benefits. With Laser you can also get the darker color you've been looking for.

# **LASER** Keeps Greens in Play

Overseeding with Laser Poa trivialis has a big advantage over ryegrass. You won't hear golfers complain about poor putting greens during the fall grow-in period like you do with ryegrass. Laser can be cut close immediately after germination, unlike perennial ryes that need to become established first. With Laser there's no waiting. That means uninterrupted play on your greens after fall overseeding.

# **Advantages of Winter Overseeding** with LASER Poa trivialis

- Darker color
- Germinates quickly
- Can be cut close immediately after overseeding
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- Retains dark green color in winter
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- Provides a smooth spring transition
- · Performs well in damp soil
- Tolerates shade

### Use LASER

Use Laser alone. Or blend it with perennial rye and chewings fescue for a smooth putting turf. Either way, you'll get all the benefits of Poa trivialis...and a much darker color.

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