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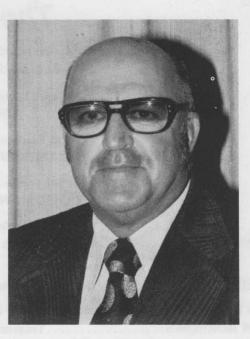
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#### President's Message

Even though redundancy breeds boredom, I feel compelled to again expound on the pertinent subject of water and its use. Water — The colorless, transparent liquid occurring on earth as rivers, lakes, oceans, etc. and falling as rain; the life sustaining element which in useful form is in great demand and, unfortunately, in short supply especially in South Florida.

Restriction - Keeping within certain limits, confining, holding down, regulating.

Like it or not, the words water and restriction have become synonymous and it will be necessary to learn to live within the constraints of legislation.

When one surveys Florida, that relatively narrow land mass skirted with water and dotted profusely with wet regions, it hardly seems possible that we could be short of this absolutely vital, precious commodity. And yet the impact of years of what outwardly appears to be poorly regulated, accelerated growth and the whimsical behaviour of Mother Nature have produced the knock-down (but not out) punch which has brought us to our knees. Now it is up to ALL OF US, and ALL OF US are water users to some degree, to regroup and fight back in a manner which will continue to accentuate the wonderous life available here in Florida while still providing a future for existence. This most certainly does not admit defeat nor indicate victory for either side, it is simply recognizing the necessity to cooperate with survival as the ultimate goal.

Future development *MUST* recognize the need for restraint and politically oriented decisions *MUST* reflect the best ecological and economical interest of all. Unnecessary bureaucratic overlap and internal, interagency jurisdictional strife *MUST* be eliminated so sensible, workable progress can continue while current existence persists. The present cannot stop the future — neither can the future destroy the present.

The homeowner *MUST* become familiar with the water requirements of his landscaped domicile and the proper operation of an irrigation system. Setting an automatic timer to function regardless of conditions is certainly not water management.

Condominium Associations MUST govern their water use as judiciously as they do their operational procedures.

Industry MUST seriously examine the use of waste water and water recycling.

Our golf course industry has come to a pivotable posture with education and communication the probable keys to subsistence. Even though we are bonded more closely to "growth" than the average concept of agriculture simply because we produce our crop continuously, unfortunately we are classified recreation by statutes which overlook the favorable environmental benefits we bestow on our society. We MUST educate our neighbors as to the wealth of good derived from our green belt. Yes, it is a playground but it is also an urban oasis.

On the other hand, we *MUST* become ever better water use mangers and indoctrinate ourselves and the golfing world to the beauty of natural growth areas and the possible need for a regression from "wall to wall green" to contrasting brown and green zones. Brown may become beautiful!

Let us push for more research in the field of water requirements for plant life. Let us push for more efficient water pumping and distribution systems. Let us also rejoice in the fact that we are free to attack these challenging battles of life — we can *ALL* survive thru education, communication, and unselfish cooperation.

Bill Wigne

#### The Florida Green The Official Bulletin of the Florida Golf Course Superintendents Association Florida Green Phone: Days - (305) 793-0069 or 793-2497 Officers and External Vice Presidents for Florida G.C.S.A. BILL WAGNER..... President Tequesta Country Club 22 Pine Tree Circle, Tequesta, FL 33458 • (305) 746-4408 KEVIN DOWNING, C.G.C.S. .....Vice President Atlantis Golf Club 301 Orange Tree Dr., Atlantis, FL 33426 • (305) 965-6316 DON DELANEY, C.G.C.S. ..... Secretary-Treasurer Isle Del Sol Country Club 6025 Sun Blvd., St. Petersburg, FL 33715 • (813) 866-0313 JOHN HAYDEN, C.G.C.S. .....North Florida ALAN WEITZEL.... .....South Florida San Jose Country Club 607 Bowles Court, Neptune Beach, FL 32233 • (904) 733-3464 Metro Dade County Golf Courses 15810 S.W. 99 Ave., Miami, FL 33157 FRED KLAUK. .Palm Beach CHARLES RETTEW, C.G.C.S. ..... Gulf Coast Pine Tree Golf Chub - R.R. #1 **US NAS Recreation Department** Pine Tree Box 200, Boynton Beach, FL 33436 • (305) 732-6404 Route 8 Box 695, Pensacola, FL 32506 • (904) 455-2555 TOM BURROWS... ..... Treasure Coast REED LeFEBVRE......West Coast **Turtle Creek Club** Pines & Palms Management Corp. Club Circle Drive, Tequesta, FL 33458 • (305) 746-8911 3820 Cason Road, Plant City, FL 33566 ROYCE STEWART..... JAMES ELLISON.....Central Florida ... Suncoast Bay Hill Club and Lodge Conquistador Bay C.C. 6200 Bay Hill Blvd., Orlando, FL 32811 • (305) 876-2402 4400 Conquistador Pkwy., Bradenton, FL 33507 • (813) 756-9555 BOB SANDERSON, C.G.C.S. .. .....Everglades Port Charlotte Golf Course 425 Oneida, Port Charlotte, FL 33952 • (813) 625-7192 TABLE OF CONTENTS President's Message..... 3 John P. Havden Dan Jones, C.G.C.S., Editor Candidate for GCSAA Board...... 7 **Banyan Golf Club** North Florida Divots.....17 Golf Course Rating......20 Twenty Minutes in the Life **David Bailev** Atlantis Country Club **Associate Editor**

**Daniel Zelazek** 



**Cover Photography** 

#### **Florida Green Reporters**

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Meeting Not For Supers......43 ABOUT OUR COVER Beautiful setting of the ninth green at the Amelia Island Plantation near Jacksonville. Pictured is Ron Hill, C.G.C.S., a member of the Florida GCSA Golf

**GCSAA Forum Takes Unique Approach** To Nation's Water Problems .....

Lonnie Stubbs - Course Superintendent

Funny . . .

Team. See page 20.

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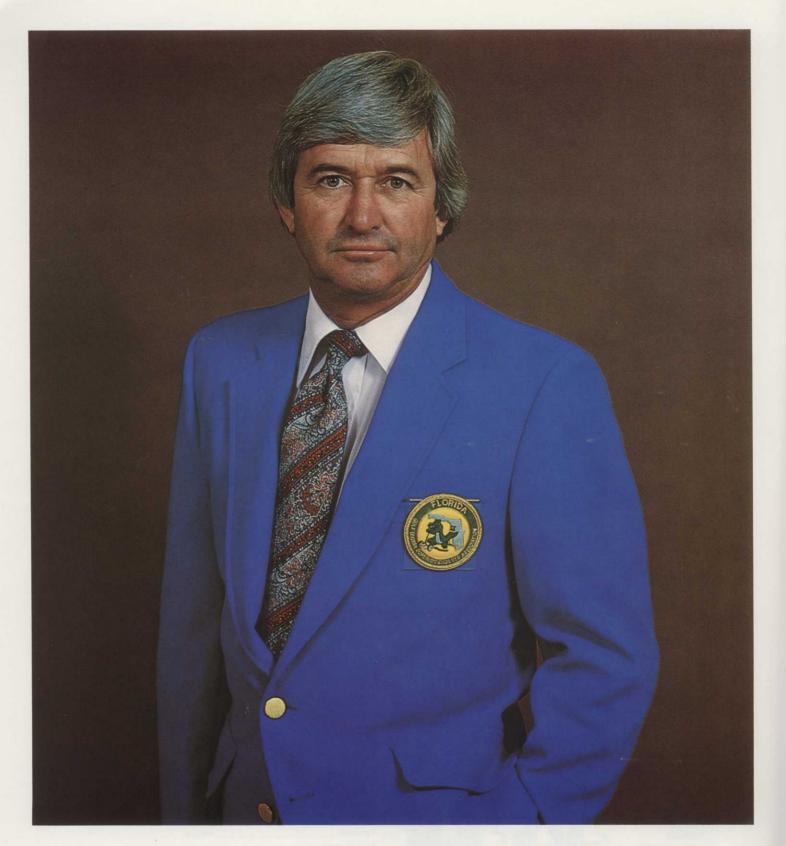
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## JOHN P.HAYDEN, CGCS SAN JOSE COUNTRY CLUB JACKSONVILLE, FLORIDA

## JOHN P. HAYDEN CANDIDATE FOR GCSAA BOARD

John P. Hayden, CGCS, the superintendent at San Jose Country Club, is Florida's nominee to the executive board of The Golf Course Superintendent's Association of America and he's ready to apply his experience and expertise to that position.

"I feel strongly that the GCSAA has come a long way, but it has yet to realize its full potential," says Hayden, a 53-yearold father of four. "I see tremendous opportunities for advancement in the area of membership — we'll have solid clout if we can get more clubs represented.



George Sparks, Greens Chairman, San Jose Country Club.

"We must do a better job with our public relations, promoting not only the superintendent and his importance to the game, but promotion of the game itself."

Hayden's career appears to make him uniquely qualified to help guide the national organization. He has worked in the family business, managed a golf course and worked at some of the nation's most prestigious clubs. A Navy veteran, he entered his family's hardware business in Cassopolis, Michigan, and ran the farm machinery division for eight years. During this time he also ran for – and was elected to – the local school board and the voters found his work worthy enough to send him back nine years.

Then golf lured him; he had the chance to lease a Cassopolis club and things worked well. So well, in fact, that the owners wouldn't renew the lease in 1968 after Hayden had run the club for 10 years. Business was good, so why split the profits with someone else?

"My family and I decided to see what Florida was all about," says Hayden. "We had vacationed there and liked it. An opportunity arose and we took the jump."

Where he jumped was to Coral Springs, a subdivision west of Fort Lauderdale then under construction. He took over the superintendent's job in mid-1970, five months before a PGA Tour event was scheduled, and compliments flowed after the tournament.

The club changed hands in 1971 and Hayden moved on, this time to Jackie Gleason's Inverrary Club just down the road. There he supervised three courses and got the main track ready for the club's inaugural PGA event.



Eddie Snipes, Assistant Superintendent, San Jose Country Club.

By this time, he was recognized as a person who knew how to get a course ready for a major tournament. In 1972, he made another move: he became superintendent at the Augusta National Golf Club, home of the Masters. That was the same year George Fazio was hired by the club to make some changes on the course, and the two worked together to make things click.

#### (Continued from Page 7)

And now private industry winked in his direction. Southern Turf Nurseries in Tifton, Georgia, came calling and off he went as a construction superintendent in their golf course construction division. Among his credits with Southern is the Holly Tree Golf Club in Greenville, South Carolina, where he worked with architect George Cobb.

But he missed Florida, and once again opportunity came calling. And this time it was in Jacksonville.

Jacksonville Beach is a suburb of Jacksonville and had a city-owned course which wasn't reaching its potential. The city fathers were looking for a new management team and Hayden's name came up. Out went the proverbial offer which couldn't be refused, and he took over as superintendent.

Success? A moribund operation suddenly became a hot number, and play was soon over 50,000 rounds a year.

"Betty and I loved it," he said, "and we decided that we weren't going to leave Jacksonville. We loved the beach and the people. The job was good and we really didn't see making another move."

#### Wrong.

But it wasn't much of a move as far as miles are concerned, just across town to the plush San Jose Country Club. He



Nick Clark, Pro, San Jose Country Club.

took over as superintendent in 1977 and added the responsibilities of assistant chairman of course preparation for the Tournament Players Championship, then at Sawgrass and now at The Players Club.

His association with GCSAA goes back to 1972 and he's been actively involved since then. He's worked hard to strengthen his local chapter — The North Florida — and has served a term in every elective position, including two (Continued on Page 9)



#### (Continued from Page 8)

years as president. He's presently the chapter's External Vice President and sits on the board of the state organization.

He's a Certified Golf Course Superintendent and says he wants to work in strengthening this program as well.

"The program needs to be constantly upgraded," says Hayden. "We need to give the club industry the assurance that they are getting a true professional when they hire a CGCS."

And he's on the board of directors of the Florida Turfgrass Association, serving as chairman of membership, education and golf tournament committees, and being a member of the finance and conference/show committees.

"Betty says sometimes she thinks I'm married to my profession instead of her," says Hayden with a smile, "but I tell her that I'm just making sure my profession is a great one."

She understands — in fact, she's the North Florida chapter's gofor, handling such mundane chores as putting out monthly mailings and making sure the dues are coming in.

And that isn't all the family involvement — son Jeff is superintendent at Turkey Creek Golf and Racquet Club in Gainesville and soon will step up to the chapter presidency.



Jeff Hayden (son), Supt. Turkey Creek Golf and Racquet Club, Gainesville, Florida.

Daughter Janice and her husband Gregg now operate the very same club, Diamond Lake, where John first became interested in golf. His two grandsons, Kary and Colin, and his granddaughter, Holly, help run the operation.

What will he bring to the GCSAA board?

"Experience, that's my strong point," he says. "I guess I've done a little of everything in my profession. Most of all, I really enjoy it. It's fun, and it's satisfying.



Grounds crew at San Jose Country Club.

"Our profession is a complex one. And it gets more complex all the time. We have a serious water problem, for instance. Shouldn't superintendents get educated about the problem? We need to build funds for research, to impress our members that we have to keep up with the times."

Hayden sees the coming years as a big challenge.

"We'll have the usual pressure to maintain profitability, but we better take a long look and make sure we survive," he says. "I am optimistic that the answers to our problem are there, but our industry must take much more agressive actions to find them.

"GCSAA offers the golf industry a powerful tool to work with to find these answers. I'm committed to work towards making GCSAA fulfill its potential."



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#### GOLF TRIP BECOMES EDUCATION

#### By DAVID BAILEY Atlantis Country Club

Have you ever wanted to play seven famous golf courses in as many days? If so, this story will equal your fantasy.

Two neighboring golf course superintendents from Palm Beach Chapter were involved, Kevin Downing, C.G.C.S., and this writer. The *Golf Digest* top 100 list was the main criteria of club selections. The objective was to play and drive to the next site daily. Thus the selections had to be the proper mileage apart. Seven clubs were picked. Letters were written to the host superintendent and phone calls confirmed all courses before the departure.

The first course selected was Moss Creek Plantation at Hilton Head, South Carolina, site of an LPGA Tour event. The host was Gerald Beaman, C.G.C.S. The huge live oak trees and savanna lowlands made a beautiful setting. This was the only all bermuda turfgrass course played on the trip. The Tifway 419 bermuda turfgrass fairways were the finest of the entire outing.

The second day we were the guests of Bernard Greene at the Country Club of North Carolina at Pinehurst. The exclusive private 36-hole club was the site of the 1980 U.S. Amateur Championship. The tournament course was opened in 1962 and is rated in the top 40. The tall Carolina pines and rolling hills were a pleasant change for the Palm Beachers. The back nine was exceptionally splendid as it played around a forty acre lake. The turfgrass types were the best of both worlds. The greens were Penncross Bent, with the remainder of the course grassed in Tifway 419 bermuda. Because of the heat and humidity of this southern location the green height was 1/4 inch. This superior turf type putts at that height as well as bermuda greens maintained at 3/16 inch.

A trip to the Pinehurst area would not be complete without a visit to the World Golf Hall of Fame. The complete history of the game is well documented. All forms of golfing equipment are on display and the great players are honored. One sad note that must be mentioned is the 100% complete lack of recognition of our profession. It is impossible to play golf without the work we do. Our national professional organization is to blame for this oversite. Effective that day plans were made to change the situation.

Monday we went to the Congressional Country Club in the suburbs of Washinton D.C. We were the guests of Bill Black, C.G.C.S. Rated in the top 50, this club is where the nation's political leaders meet, golf, and decide our national interest. This was the site of the 1964 U.S. Open and 1976 PGA Championship. Remember the heat when Ken Venturi won the Open? This course is located in the very

difficult to manage turfgrass transition zone. All types of turfgrass persist: bluegrass, rye, zoysia, bermuda, fescue, and bent. The bent greens had just been extremely lightly topdressed and putted excellently. Fairways were being aerifyied, seeded in a rye blend and fertilized. The clubhouse at this course must be noted. It is huge, has an indoor pool, and a massive formal dinning room. The last two holes are designed around the best vista of the clubhouse. In fact the 18th hole is a par 3, high on a hill looking down over water to the green with the clubhouse as backdrop.

Tuesday gave us the opportunity to play the 1981 U.S. Open site, Merion Golf Club just west of Philadelphia. The 36 hole club has hosted five U.S. Open titles. The tournament-famous east course is rated in the top 10. Our host was Richard Valentine, C.G.C.S. The Valentine history is legendary at Merion. His father, Joseph, helped to build the club in 1912, discovered Merion Bluegrass, and was one of the true giants of our industry. The greens and fairways are bent grass with bluegrass rough. The rough was tournament height and was an extreme challenge. The Colonial Bent greens were the finest of our trip. Our 80-year-old caddy had some real stories and I am sure some were true, but my memory of the depression era is rather vague. Merion is a short course by today's standards but a classic in its own way, especially the final three holes. We had the pleasure of talking with Richard Valentine for over three hours and had dinner with the assistant superintendent, Armond Sequi. The inside stories they told us of a major tournament was the highlight.

(Continued on Page 13)



Seldom does a club have a par 3 18th hole. Congressional C.C. gets maximum use of its clubhouse view.

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#### (Continued from Page 10)

Wednesday was the only day we were not able to play because of rain. What makes this a true disaster is that we were at my alltime favorite golf course, Pine Valley. Always rated in the top 10, Pine Valley is located in the Philadelphia suburbs of New Jersey. Craig Reinhardt was our host and gave us an all day tour in the rain. Eb Steiniger, C.G.C.S., is now retired and was not there the day of our visit. Having been to Pine Valley before, I knew what to expect. Pine Valley stories are many and can only be told and appreciated when you have been there. I always ask people what is the greatest golf course and when they do not mention Pine Valley I immediately know one thing: they never been there! There is no club that is as pure golf as Pine Valley.



Bill Black, CGCS, at Congressional C.C. wears a tie at all times.

Thursday our host was Sherwood Moore, C.G.C.S., at Winged Foot Golf Club. This top 10 course will host the 1984 U.S. Open for the fourth time. This is the club of the Wall Street tycoons, located 30 miles north of Manhattan. The 36-hole club is also highlighted by its splendid formal clubhouse, definitely a blue blood club. Our host took great pride in both courses, its quality turfgrass, and especially its speciman trees. He also arranged a visit for us to the nearby Westchester Country Club, site of a PGA Tour event. Our host was Ted Horton, C.G.C.S. This was the hilly terrain we had yet to see. Ted Horton told of his water shortage problems this past year. The course was shut off from its city water supply for four days. Why four days? It took that long to get through successfully to city hall. The day we were there pumps were being installed for future use from existing lakes on the course.

Friday we went out to the tip of Long Island to Shinnecock Hills Golf Club. This top 20 club hosted the 1896 U.S. Open. That date is not a misprint. The club claims to be the oldest in the nation, 1891, but the course was changed 50 years ago so that leaves the issue open for discussion. The 1986 U.S. Open will be held there. Seldom is this great course in the limelight but the Open exposure will change that. This is the summer home of many Palm Beach club members from Seminole and the Everglades Golf Clubs. Our host was Pete Smith, the only superintendent that played golf with us. He is a great story in his own right. Some history is in order. The Shinnecock Indians once controlled the land and still have a large population in the area. Smith is a Shinnecock Indian. The maintenance staff are all Shinnecock Indians. Pete is an Ivy League graduate of Dartmouth. He was not in the turf business. His grandfather had worked the course, his father was the superintendent for 35 years. When Pete's father became ill the club asked if he would like to continue the family tradition and work with his father. Pete accepted the offer, leaving a government position in Indian affairs. Several months later his father died of a heart attack. The club sends Pete to Rutgers University in the winter to advance his turfgrass education.

Now back to the course. Ten years from now this is the one course I will remember most from the trip. This is more like a true Scottish links golf course than any in the nation. The fairway rough color contrast is the most distinct I have ever seen. The two foot fescue rough placed a premium on a good tee shot. When the wind blows off the bay and ocean, scores will skyrocket. This very private club is a real hidden jewel. Several years from now when this course becomes rated in the top 10 remember where you first heard about its greatness.

There are many reflections on such a trip. Number one, without question, is the warm reception we received from each host. To say they rolled out the red carpet is not enough. I knew we were in for a good week when the entrance guard at the Country Club of North Carolina said, "Mr. Bailey we are expecting you." At each club we were treated like royalty and that was because we were the guests of the most respected person at the club, their golf course superintendent. Members of their crew knew we were fellow superintendents and always spoke to us. It was the most educationsl golf week of my life. I learned more about different turfgrass, management, chemicals, crew conditions, etc. than in 10 years of seminars. I realize how we over manicure courses in our state, especially the big



Richard Valentine, CGCS, (center) discusses the 1981 U.S. Open with his assistant and guest.

money clubs along the southeast coast. Our roughs are cleaner of weeds than northern courses fairways. We edge cart paths and they do not even have them. One famous course had not edged traps in 10 years, two others never, but bermuda is entirely different. Equipment conditions are very different. I saw tees being mowed by machines we would have worn out seven years ago. The long winters give (Continued on Page 16)

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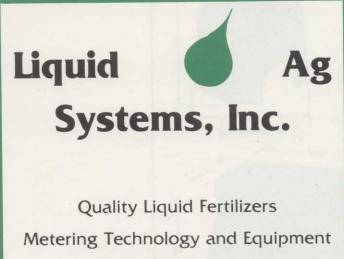
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#### (Continued from Page 13)

them an opportunity to rebuild everything. Only one superintendent even thought a hydraulic fairway unit was worth looking at. Two clubs aerify fairways with Ryan greensaires. No northern course ever verticuts a fairway. Almost everwhere the main fertilizer was Milorganite. Rates of two or three pounds of N per year were common, less than we apply in January alone. Budgets vary from 40-75% of what we spend. There are more contour breaks in putts than we are accustomed to playing.

The texture of bent grass and its density makes bermuda greens putt like wire brushes.



At Merion G.C. no flags are used. Wicker baskets are placed atop the pole. They are handmade by the staff.

Golf courses are such a common item in Florida we forget to put things in a proper perspective. We build communities around our courses. In the metropolitian areas of the industrial east, courses are a real oasis from everyday reality. A drive through the concrete jungle of downtown New York City will make you appreciate your job and where you live.

Never mentioned in this article are any golf scores and, after all, this was a golfing trip. Well one thing was learned for sure. The great golf courses are truly great and we did nothing to lower their rating.

P.S. I must thank my wife for giving me a week to myself to complete my golfing trip. But do not tell her we are making plans for our next trip to the midwest.

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#### NORTH FLORIDA

By EDDIE SNIPES Assistant Superintendent San Jose Country Club

0

Did you know that when Ole Man Winter blows his breath on North Florida that the superintendents do not go into dormancy like their bermuda, but start preparing for temperatures that in recent winters have set record lows?

With heavy frost occuring in North Florida and temperatures that have remained below freezing for 10 to 15 hours, preventive cold weather maintenance should not be taken lightly. Monitoring weather forecasts closely enables one to cover those certain plants around the clubhouse or grounds that need protection from heavy frost or severe cold temperatures. Replacing burned out light bulbs in irrigation controller boxes helps keep hydraulic tubing lines from freezing. Some superintendents have proposed the idea of heat lamps in pump houses to prevent freezing damage to pipes and valves. The practice of wrapping exposed pipes or even clay valves with some form of insulation has also been suggested and used by superintendents in the North Florida area. These ideas may seem drastic to some people but better safe than sorry!

During these cold snaps, good rapport with the golf pro can be beneficial. Keeping players off the course until the temperature rises above freezing or when the sun has burned off heavy frost or until one has syringed frost off the greens and tees will prevent damage to the turf.

Equipment maintenance during cold weather requires a little common sense. Adding anti-freeze to radiators is a good common sense practice. Keeping as much of your equipment under shelters in cold or any weather conditions will prolong equipment life. Switching to 30 weight engine oil in cold weather is a practice area mechanics advise. Since engines run in cooler winter temperatures, 10W-40 weight oil is not needed so this can be a savings cost practice. Allowing engines on equipment to warm up during cold weather before putting them in full operation is also a good cold weather practice. This will allow hydraulic seals to come back into shape and prevent leaks.

Special maintenance practices occur in relation to the coming of Ole Man Winter. These practices are the removal of pine straw, pine cones, and dead leaves from over the course. This can become a headache and at the same time a useful natural resource. Pine straw can be used to create cart paths that are both pleasing to the eye and functional. An extra large pine cone dipped in varnish or lacquer with a nail in the bottom with the head removed makes a very attractive and inexpensive tee marker.

During this time, Kerb treatment for Poa Annua comes into play and some preemergent weed controls.

Other special projects are good for this time of year such as removal of dead trees, general clearing of rough areas, and special irrigation projects can take place without worrying about interferring with heavy course play.

With cold weather preventive maintenance activities and special winter projects, North Florida superintendents do not have a chance to hibernate as it would seem, but face a professional challenge extended to them by a change of season.





By JAMES P. CALLAGHAN Riomar Country Club

After the headaches of the past summer, superintendents along the Treasure Coast are welcoming the cooler weather with open arms. Many supers are going to execute measures to insure that their courses will pull through the upcoming cool season.

At Riomar Country Club, greens are not overseeded. Because of our proximity to the Atlantic (you can't get any closer) and average daily play of only 130 rounds during the season, the 328 greens at Riomar survive fairly well during the winter months. Cost vs. benefit really doesn't justify overseeding. If our greens were Tifdwarf, there would be no question that overseeding would be a necessity.

In order to keep the bermudagrass greens in peak and appealing condition during cool weather, I carry out the following maintenance procedures that have worked with excellent results in the past:

- 1. Avoid excess verticutting after September. If you let your greens go into the winter with just a little thatch layer, that layer will act as a blanket resulting in a slightly higher soil temperature needed for roots to continue their functions.
- 2. Make sure that potassium levels are adequate in the soil. This will help to provide for a healthy root system.
- 3. Use nitrogen sources such as IBDU, Ammonium Sulfate, etc.. that fix nitrogen in the soil at low temperatures.
- 4. Keep soil moisture adequate. Moist soil will not cool as rapidly as dry soil.
- 5. Use of chelated iron and micronutrients will aid in retention of green color during cool periods.



- 6. If frost is in the forecast, spray greens with a wetting agent. This will prevent dew formation that subsequently freezes on the turf blade. When the air temperature remains above freezing, this procedure will prevent frost damage to the grassplant. (Remember, the cooling effect of dew evaporation even when the air temperature is slightly above 32°F will lower the temperature at the ground, resulting in frost.)
- 7. Light topdressing every second or third week will encourage the bermudagrass as well as mask (cover) any cold damage prevailing in the crown area.

At the John's Island Club, Lee Van Valkenburg, reports that foliar applications of fertilizers in the winter months have aided in keeping the bermuda vigorous. He said that whenever colder weather is on the horizion, Ferrous Ammonium Sulfate or Potassium Nitrate is sprayed on greens, green/slopes, trap banks, and tees. He continued, "when soil temperatures become low (under 55°F) foliar application of fertilizer provides an effective means of nutrient absorption by the grassplant."

Lonnie Stubbs, superintendent of the Sandpiper Bay Resort, is well known for his unique way of sprucing up the golf course during the cool months. This winter, Lonnie will spend almost \$5,000.00 on annual flowering plants such as chrysanthimums and marigolds to catch the eye of the golfer. "If a cold snap zaps your bermuda, scattered flowering landscaping will move the eye away from the brown grass," stated Lonnie.

Further to the south, Joe Snook reports that at Riverbend, much time is spent in the winter sprucing up the entrance area and the natural undergrowth scattered throughout the golf course. He commented, "If we can provide an entrance area that's in tip-top shape, we've made a good first impression." Out on the golf course, Joe goes as far as "grooming the palmettoes" to make everything look appealing.

The Treasure Coast Chapter Florida Golf Course Superintendents Association takes this opportunity to wish everyone a joyous holiday season and a healthy, prosperous New Year!

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## FLORIDA LEADS 100 GREATEST **GOLF COURSE RATING**

America's 100 greatest golf courses as ranked by Golf Golf Digest also recently rated the top 50 public golf Digest for 1981 include 11 Florida courses. The total makes the state the leader ahead of California with nine. New York, Ohio, Illinois rated.

First Ten

Third Ten

Fifth Ten

courses. Florida had four courses in this listing.

nois and Pennsylvania all had eight courses	First Ten	West Palm Beach Country Club, West Palm Beach	
		Hal Porcher, GCS	
Seminole Golf Club, North Palm Beach			
Bill Whitaker, CGCS	Other Forty	Mangrove Bay Golf Course,	
		St. Petersburg	
Pine Tree Golf Club, Boynton Beach		George Pickel, GCS	
Fred Klauk, GCS		The second s	
		Perdido Bay Country Club, Pensacola	
Jupiter Hills Club, Jupiter			
noisoast in et		Pompano Beach Golf Course,	
Bay Hill Club, Orlando		Pompano Beach	
James Ellison, GCS			
Gentrifussi pumix 100 PSI minu	As golf cours	e superintendents we are entrusted with a	
J.D.M. Country Club (East), Palm Beach	great national treasure. We are responsible on a daily basis for the management of these great courses. The task is		
Gardens			
Carl McKinney, GCS		the challenge makes our position the	

Doral Country Club (Blue), Miami Dick Lemmel, GCS

Second Fifty Disney World Golf Club (Palm), Lake Beuna Vista Larry Kamphaus, GCS

Grenelefe Country Club (West), Haines City Paul Hickman, GCS

Mayacoo Lakes Country Club. West Palm Beach Mark Henderson, GCS

Sawgrass Golf Club, Ponte Vedra Beach James Shine, GCS

Innisbrook Country Club (Copperhead), **Tarpon Springs** Arlin Grant, CGCS



rewarding profession we enjoy. As of January 1, 1981 there were 12,849 United States golf courses. To be listed above in either ranking is a distinct honor.

#### Florida GCSA Defends National Title

This month Walt Disney World Golf Courses will host the annual GCSAA golf tournament. Our outstanding four man state team is the pretournament favorite. A victory will give a Florida team its third straight title. The team will consist of the following:

Dan Meyers, CGCS, Carrollwood Village Country Club, Tampa.

Winner: 1980 GCSAA Team Championship 1981 GCSAA Team Championship 1980 GCSAA Individual Champion 1981 GCSAA Individual Champion

Bill Whitaker, CGCS, Seminole Golf Club, North Palm Beach.

Winner: 1981 Poa Annua Classic 1981 Palm Beach County Senior Former National Lefthand Champion

Fred Klauk, Pine Tree Golf Club, Boynton Beach. 1981 FTGA Winner: 1981 GCSAA Team Championship 1980 Crowfoot Open Runnerup: 1981 Poa Annua Classic

Ron Hill, CGCS, Amelia Island Plantation, Amelia Island. Winner: 1980 Poa Annua Classic Runnerup: 1980 Crowfoot Open

1981 Crowfoot Open

GO TEAM! GO TEAM! GO TEAM!

#### TWENTY MINUTES IN THE LIFE OF A GREENS CHAIRMAN

By MELVIN WEINSTEIN Greens Committee Chairman Banyan Golf Club

(The following is a fictional account and any resemblance to Banyan Golf Club Members is purely coincidental)

As I opened my car door in the parking lot of the club, a car pulled in right beside me. "Hey, Mel," Bill yelled, "I must tell you the greens are much too fast. You'll have to do something." "O.K.," I muttered, still half asleep. Al jumped out of the car. "Mel," he started, "those greens are much too slow, you've got to get them down," "I'll take care of it," I retorted.

By the time I reached the circle, Eddie accosted me. "Mel, those tee placements yesterday were much too easy. What are we playing, an executive course?" "I'll take care of it," I said. Two steps later, Dave came over. "Mel, those tee placements yesterday were too far back, have a little pity on the older members." "Play the golds," I retorted.

As I approached the walkway, Alan came to me. "Mel," he said, "I've got something very important to tell you. The fairways are cut much too low, can't get a three wood underneath the ball." "I'll take care of it." But Herb, right beside him said, "Mel, those fairways are much too high, the ball doesn't roll at all." "Don't worry," I said, "I'll take care of it."

Halfway down to the pro shop, Gerry came up. "Mel, those pin placements were terrible yesterday, I couldn't make a straight putt. Who are those idiots putting in the cups!" "I'll look into it," I said. Harry, right beside him said, "Don't listen, I thought they were too easy, what are we playing, a Pitch and Putt course." I shook my head.

Two steps into the pro shop, George grabbed my arm. "Mel, the trap sand is horrible. It's so soft my club goes right underneath, you better buy better sand." "I'll take care of it, George," I said. As I turned around, Max tapped my shoulder. "Mel, that lousy sand you're using is too hard. I can't blast out of the traps." "I'll take care of it," I said.

I signed for my golf cart and turned around, looking forward to my trip to the locker room. "Mel," a booming voice beckoned, "those fairways are too narrow. Couldn't hit a fairway all day. You'll have to widen them." "Sure," I said. I was almost out of the shop, when Harold said, "Mel, those fairways are too wide, all you have to do is flail away and not worry. I wish you'd bring them in." "Don't worry," I said.

I managed to reach the locker room safely. As I opened my

locker, Lester arrived and spoke, "Mel, I've got to tell you, those greens are much too hard. The ball bounces and I can't hold them." "Need more top dressing," I muttered. As I pulled my shoes out, Nat spoke, "Those greens are too soft, can't get any run, the ball just holds up. Isn't there anything you can do?" "Too much top dressing," I answered.

One shoe was on when Stan came up. "Mel, the flowers are horrible. I like last years better.' "I'll change them," was my answer. Twenty seconds later as I put on the other shoe, Tom said, "Mel, I love the new flowers. I'm glad you got rid of that mess we had last year." "I'm thrilled," I said.

As I got up to leave, Art grabbed my arm. "Mel, we're spending too much time cutting grass. You've got to get rid of the grass around the pond edges. Can't find a ball. Don't you know." "I'll start tomorrow," I said. Lee then approached. 'Why are you wasting money around the ponds. A bad shot shouldn't be rewarded, and besides, if you cut it good, I won't be able to find any balls." "You're right," I said.

I looked at the exit door. Maybe I could get to the first tee in a round about way.

As I approached the tee, Steve yelled, "Where have you been! I've got to tell you about the lips on the traps. We must have higher lips. My opponent yesterday putted out three times, closer to the pin. Lips are very important." "Absolutely," I said. As I reached for my driver, Burt came up. "Mel, those lips are too high in the traps, they're totally unfair. Can't get a decent trap shot." "I'll eliminate them tomorrow," I said, as I limped to the tee.

I hit the ball nicely down the fairway. My partner said, "Beautiful swing." My opponent said, "How could you hit the ball with such a lousy swing?"

Oh well, I could hardly wait for lunch, which is traditionally suggestion time.

Editors Note: Mel Weinstein is well grounded in the art of Greenkeeping. He holds the unique position of wearing two hats. Mel is Greens Committee Chairman of Banyan Golf Club in West Palm Beach, FLorida and Spring Valley Country Club in Boston, Massachusetts. Because of his close relationship with golf course superintendents, Mr. Weinstein will be writing more articles for future issues of theFlorida Green.

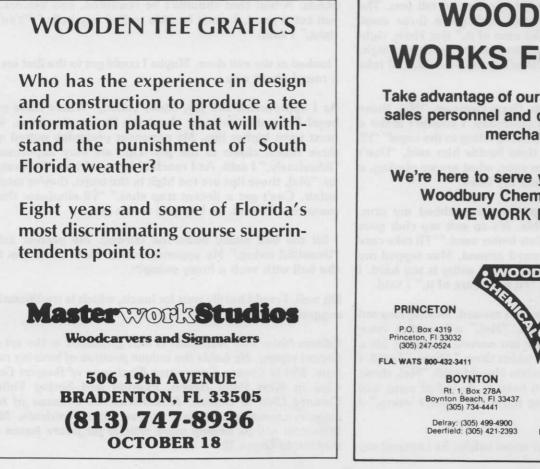
## **West Coast Buccaneers**

**By REED LeFEBVRE** Pines & Palms Management Corp.



Very little in regard to winter golf course preparation (excluding overseeding) is done here on the west coast of Florida. Dan Morgan, Sun City G.C. stated that other than poa Annua control and traffic control nothing else out of the ordinary is done. Isla Del Sol uses IBUD rather than organic nitrogen sources. The amount of nitrogen per month is also reduced, according to Superintendent Don Delaney. Countryside raises the height of cut somewhat. Superintendent John Luper also uses potash and lots of wetting agent on greens, tees and fairways. He also puts out traffic controls. Lakewoods' Dick Grill does not overseed: he concentrates on poa annua control and also raises his height of cut to 1/4''. He increases the fertilization by about 1/3 and mows greens every other day. Lake Region works on just getting good healthy turf. Rick Wise, superintendent there lets his roughs get up a little which allows something to mow off when we get our freeze. He also puts out traffic controls. Bud Quandt, Pasadena G.C. puts out heavy amounts of fertilization in the fall and prays.

It looks like traffic controls along with an increase in fertilization is the general practice along our coast. Talking with the various supers I found very little disease problems, especially like those which the East and Southern coasts of Florida have been experiencing. Almost everybody who



22

does overseed expects to have his seed in the ground by the first of December. Some of us who don't want to experience the germination problems of last winter already have our seed in and germinating. My feeling is that as long as I have plenty of water to cool it down on hot days, and can get fungicides to control and keep out fungus, I'm ahead of the game as far as last year was concerned.

New Officers for The Florida West Coast Superintendents Association are:

John Luper CGCS President Don Delaney, CGCS Sec. Treas. **Reed LeFebvre**, External Vice President

**Board of Directors:** Marshall Edgrem, Rick Wise, Joe Reilly, Jack Harrell Fr., Lee Todd

Schedule of meetings for the West Coast are as follows: November Pasadena

**December Timber Oaks** January Beacon Woods February Seminole Lakes March Imperial Lakes

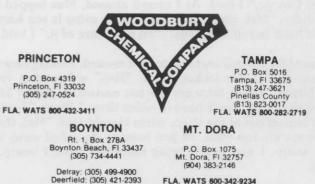
April May June July

Valle Oaks Sun City Sugar Mill Woods Countryside

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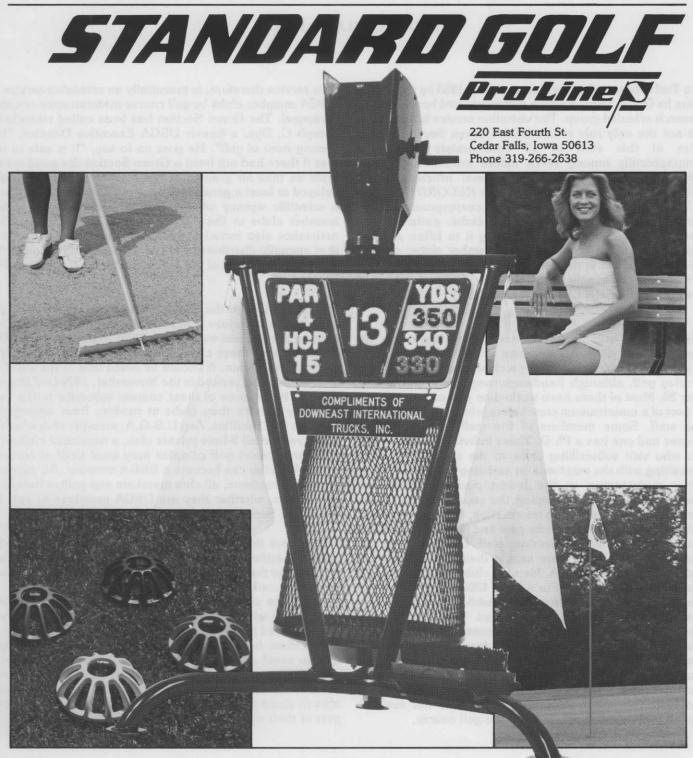
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## THE USGA SECTION

## AS I SEE IT

By Dr. DOUGLAS T. HAWES

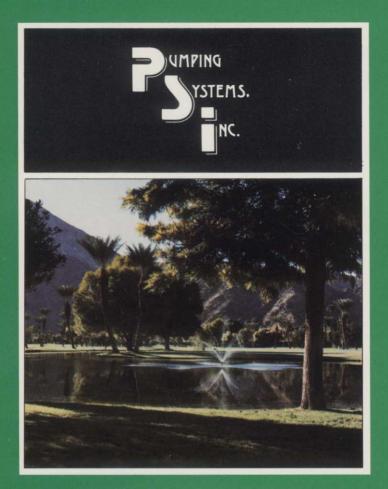
The Turf Advisory Service was started in 1953 by the USGA using its Green Section which previously had been mostly a research oriented group. The visitation service is the major, but not the only role of the USGA Green Section. Other roles of this staff of 13 agronomists distributed geographically among seven offices around the United States include: producing professional articles for the USGA Green Section's magazine, the *RECORD*; speaking at turf conferences; answering correspondence on agronomic problems from member clubs; gathering turf research information and distributing it to fellow agronomists and making it available to member clubs; encouraging researchers in the field to do more turf research that golf courses can benefit by; and insuring Championship turf conditions at USGA Championship sites.

The staff has over 50 total years of experience with the Green Section itself. All members of the staff have a B.S. Degree, usually in agronomy or a closely related field. They all play golf, although handicaps range from under 10 to over 20. Most of them have worked on golf course grounds as part of a maintenance crew before joining the Green Section staff. Some members of the staff have a Masters Degree and one has a Ph.D. These individuals are specialists who visit subscribing clubs to the specialized job of consulting with the emphasis on assisting the clubs to have better maintenance at the lowest possible cost. Their function is to assist in keeping the superintendent up-todate on the latest research information, to act as a neutral unbiased source or opinion for past and future maintenance practices. The Green Section staff has no particular product to sell - they are selling their service which is underwritten by the USGA. Member clubs are the only ones that receive this service. For a fee of \$200, the club receives a half-day visit and a written report with recommendations geared for their particular golf course. The Green Section agronomist's visit is a time to ask questions. We feel that you will benefit most by having at least one annual visit from our agronomist. It is the author's intent to visit clubs that he is servicing at different times of the year so as to see what turf conditions are like at that club in Spring, Summer and Fall. This information enables me to better evaluate overall maintenance practices at the golf course.

This service therefore, is essentially an extension service to USGA member clubs by golf course maintainance-oriented personnel. The Green Section has been called recently by Joseph C. Dye, a former USGA Executive Director, "the unsung hero of golf". He goes on to say, "It is safe to say that if there had not been a Green Section the good conditions we take for granted at our courses would have been delayed at least a generation or two." The Green Section is a scientific agency whose mission it is to assist USGA member clubs in the upkeep of their golf courses. This assistance also includes a Research and Education Fund that annually distributes \$50,000 to researchers around the country. The motto of the Green Section is Better Turf For Better Golf.

Who subscribes to the Green Section Visiting Service? We have over 1,000 clubs that subscribe to the Green Section Visiting Service and we expect in 1981 to go over 1,300. The center core of these clubs consists of the leading country clubs in the Nation. It should be noted that of the 100 Top Golf Courses, as ranked in the November, 1979 Golf Digest, over six times more of these courses subscribe to the Turf Advisory Service than clubs at random from among the Nation's golf facilities. Any U.S.G.A. member club whether it is a very small 9-hole private club, a municipal club, or a very large resort golf complex may avail itself of our services. Any club can become a USGA member. All courses, all superintendents, all club members and golfers benefit in some ways, whether they are USGA members or not, by the Green Section Turf Advisory Service.

We assume that any club receiving our service wants an unbiased estimate of their existing and potential problems. We assume they want to know what corrective actions may be taken rather than to remain blissfully ignorant of troublesome situations that may be developing. We have many clubs which never give us a call until the conditions have reached the crisis point. Although we can be of help in telling them how best to recover from their problems and how to avoid problems in the future, it seems to us that a mere \$200 a year every year pays for itself — like regular visits to the dentist. In many cases clubs would have been able to avoid their present crisis if annual visits had been part of their overall maintenance budget.



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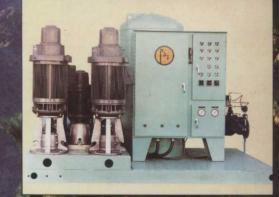




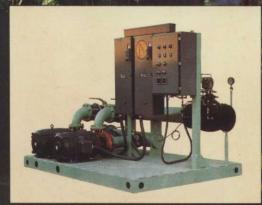
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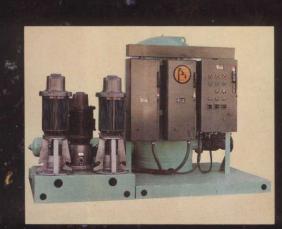
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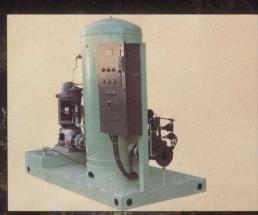
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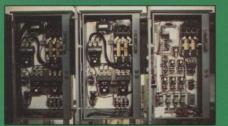
Photograph of Eldorado Country Club, Indian Wells, California



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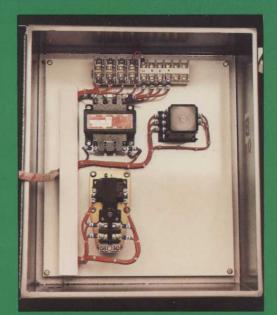


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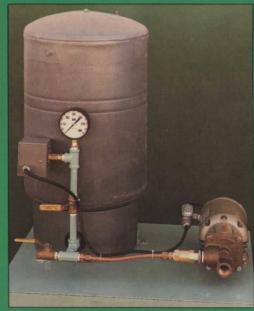
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#### FINE TUNING YOUR FERTILIZER PROGRAM

#### By KEVIN DOWNING Atlantis Golf Club

Healthy turf makes your job easier. When maintaining turfgrass that possesses good color and density you fight off an endless list of problems. Unfortunately a good healthy turf can only be achieved by a fertilizer program that is planned and implemented with great care. When formulating a fertilizer program you must first evaluate your own particular needs. After this important step is completed, you must analyse all the fertilizer sources plus decide on a method to apply the material accurately.

Fertilizer requirements will depend a great deal on the variety of the turfgrass, the soil and the timing of special events. Each turfgrass variety has its nutritional needs in respect to the amounts of different elements needed to maintain optimum growth and visual qualities. Research your turfgrass needs thoroughly so that you have a complete understanding of the amounts and types of elements to apply. Your sources of information should combine the knowledge of extension data, personal knowledge, research from turf textbooks, plus the invaluable information from experienced superintendents. After the turfgrass element needs have been established we need to determine how to fulfill these requirements. Common sense tells you that the soil contains some of these needed elements, but how much is there and its availability can only be determined by accurate soil testing.

Whoever you choose to do your soil testing, make sure that they are a reputable firm with a good background in soil analysis. I strongly recommend that you choose one company and stay with them, so that the sampling and testing procedures remain as constant as possible. This type of consistency will begin to eliminate erroneous readings plus you will become familiar in comprehending the test results. Remember to have samples run at least once a year over the same tested area in order to monitor the results of the fertilizer program. The physical analysis of a soil is also extremely important so that you can review the exchange capacity of the soil particles. Information such as this will enable the turf manager to determine leaching qualities of fertilizers and help to determine application intervals needed to maintain consistent healthy turf. Certain laboratories perform leaf tissue sampling which is a beneficial aid to compare soil test results to the actual amount of material that is taken up by the plant.

Whether to use liquid or dry fertilizer always seems to raise a good question. I personally like some properties of the two types of fertilizer and incorporate both of them in our fertilizer prgram. Approximately 65 per cent of our total program is liquid fertilizer injected through the irrigation system, while the remaining 35 per cent is dry material. Injected liquid fertilizer has many advantages but the two key items are the fact that the amount of material applied can be regulated with ease and it can be effectively utilized through the winter. The flexibility of the injection pump allows you to increase or decrease the amount of fertilizer you wish to apply. Your fertilizer needs will vary quite a bit depending upon temperature, amount of rainfall, condition of the turf, etc., so the adjustment on the pump will let you program in those needs. Because of the "busy" winter season, plus the non-growth conditions, liquid fertilizer becomes essential during this time of year. When you are playing 200-300 rounds of golf a day it doesn't seem feasible to shut down your golf course to fertilize. Optimum fertilizer levels during this time of heavy play and colder temperatures are critical in order to maintain the turf in best possible condition. Applying light, frequent amounts of fertilizer in a physical state that can be quickly taken up by the plant, proves that injected liquid fertilizer is the answer during this time of year.

Dry fertilizers play an important role in the total fertilizer program. The proper timing and types of materials applied must be considered when planning a dry fertilizer application. Certain types of dry fertilizer will be better utilized during warm conditions, other types of materials will perform well when the soil moisture is at a higher level. When you decide to feed your turf take these items into consideration before selecting a fertilizer:

- 1. How guick a response I need?
- 2. How long must the fertilizer last?
- 3. What will the normal environmental conditions be like when I apply?
- 4. What are the micro-nutrient needs?
- 5. What is the condition of the turf?

With the answers to these questions you can make selections from the various types of fertilizers available on the market today. You, as a superintendent, should evaluate your fertilizer needs and percentages when formulating a mix. The sources of materials should be studied and chosen with great detail in order to insure proper effectiveness of the fertilizer. Inorganic and organic (synthetic and natural) sources of nitrogen, should be put in proper ratio so that you can receive what you want out of the fertilizer mix. Applying these dry fertilizer mixes at predetermined amounts should be as accurate as possible. Fertilizer spreaders should be calibrated so that you are spreading the actual amount that you think you are. Special care must be taken when applying with bulk spreaders because a mistake can appear after three or four fairways are already completed. Dry fertilizers serve their purpose at different times of the year by forcing the roots to act out their plant function of taking up nutrients that were applied to the soil.

Whatever type of fertilizer you decide to use, make sure that the material is tested by the State Fertilizer Inspector. On every ton of fertilizer purchased you pay a \$.25 tax to the State for this inspection service, so, for your protection, you should use this service. In order to insure that consumers are receiving the proper quality and quantity of fertilizers, have the material tested before it leaves the vendors plant.

Accurate record keeping that involves all the particulars about your fertilizer applications are very helpful. Make sure all the settings and amounts used are recorded along with helpful data concerning the environmental conditions. Keep copies of all your fertilizer tags on file for reference materials if any questions arise. You spent a lot of time reviewing the turf on a day to day business, but don't neglect to study your fertilizer program to evaluate its strong and weak points.■

#### GCSAA FORUM TAKES UNIQUE APPROACH TO NATION'S WATER PROBLEMS

GCSAA's 53rd International Turfgrass Conference in New Orleans Jan. 28-Feb. 5 will provide what may be the year's most complete and comprehensive discussion of the nation's water problems. Two conference water symposiums will bring together 12 of the nation's leading experts on water and golf for a look at the future of the game in a water-short world.

According to Dr. Joseph P. Rossillon, executive director of the Freshwater Biological Research Foundation in Navarre, Minn., the United States may be headed for a water crisis rivaling the energy crunch which hit in 1973. The only difference, according to Rossillon, is that we may not have eight years to adjust to it.

For golf courses in several parts of the country, the situation already is critical. Courses have been forced to ration or completely cease using water as government agencies debate the best use of available supplies. The situation may become even more critical, according to Rossillon.

Besides Rossillon, participants in the first symposium Feb. 1 include Dr. Calvin Alexander Jr., associate professor of geology and geophysics at the University of Minnesota in Minneapolis; Dr. William A. Thomas, a Chicago attorney who specializes in water and energy law; and Walter Wilkie, president of Wilkie Turf Equipment, Pontiac, Mich.

The second water symposium Feb. 2 will begin with a panel discussion by four golf course superintendents who recently have been forced to deal with restricted water supplies at their courses. They are Jack Martin, Shackamaxon Country Club, Westfield, N.J.; David. M. Bailey, Atlantis Country Club, Lake Worth, Fla.; Peter Pedrazzi, CGCS, Crestmont Country Club, Florham Park, N.J., and James G. Prusa, Pasatiempo Golf Club, Scotts Valley, Calif.

Panelists will focus on their experiences with government regulations, alternative water sources and water-conscious turf management techniques.

Also speaking in the second session are former United States Golf Association President Frank "Sandy" Tatum, Ed Seay, director of design for Arnold Palmer's golf course operations, and Dr. James B. Beard, professor of turf and crop physiology at Texas A&M University. Speakers will discuss ways a water shortage will affect turf management practices, golf course design and the game of golf itself.

The session will conclude with a discussion by GCSAA Executive Director James E. McLoughlin of efforts by golf's allied associations to position the game to cope with the problems it faces in this and other areas.

The water symposiums are two of nine education sessions scheduled during GCSAA's New Orleans Conference. Other sessions will deal with personal financial planning, golf course drainage, putting green speed, communications, tree management programs and cart management.

Conference activities also include the world's largest trade show devoted exclusively to golf course and fine turf management, a behind-the-scenes tour of the Louisiana Superdome, a full schedule of social activities and the Association's annual membership meeting.

#### **Diagnostic Quiz: Bermudagrass**

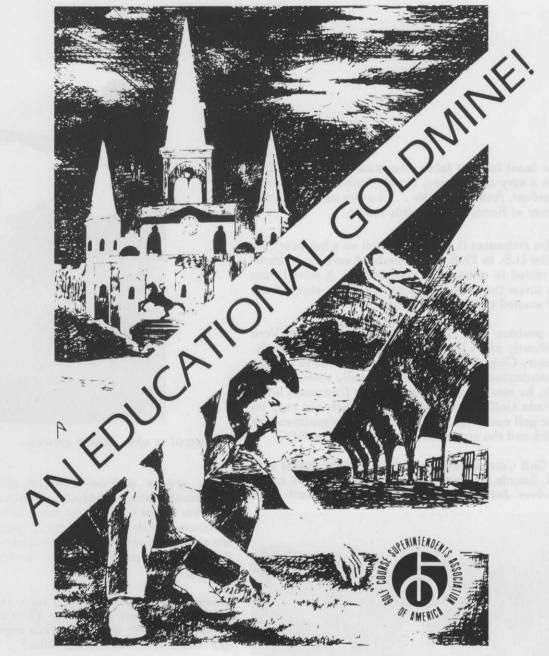
By DR. ROBERT DARST and DR. W.R. THOMPSON, JR.

#### Answer:

**Clues:** Producers of hybrid bermudagrass often experience moderate to severe stand losses in both hay meadows and pastures. The problem has been around about as long as the hybrid bermudas have. Close observation of affected areas reveals that older leaves develop small tan to purplish-brown spots. Young plant tops appear lemon yellow or wilted. In severe cases, leaves (and sometimes the entire plant) may die. In research plots, consistent differences have been seen in earliness of spring growth, rhizome numbers (in early spring and in late summer) and ground cover plots receiving a balanced fertilizer versus without. Soil types can influence the time required to develop this condition and the degree of severity. What is the problem? For answer, see below. This is a coastal bermudagrass that is deficient in potash. In some cases, the deficiency becomes so severe that heavy stand loss occurs. Helminthosporium leaf spot often invades the affected pasture or meadow. Winter hardiness drops and rhizome production can be reduced drastically. Hybrid bermudagrass grown on some soils shows the condition sooner than on others. Those soils containing K-bearing minerals in the lower soil profile sometimes provide reserve K nutrition for a while. Even on these soils, however, the condition ultimately shows itself. Heavy K2O applications (up to 300-400 lbs./A) will help bring back stands and return pastures and meadows to normal production levels. The condition can be prevented by balancing N and P2O5 applications with adequate K2O.

### EVERYBODY'S GOING TO BE THERE:

## New Orleans - 1982



## GCSAA's 53rd International Turfgrass Conference & Show

## LONNIE STUBBS – COURSE SUPERINTENDENT HE MAKES EVERYTHING GO – AND GROW

**By JAN SHELLEY** 

One of the most familiar faces seen around Sandpiper Bay belongs to a very special guy, Lonnie Stubbs, Golf Course Superintendent. And no wonder . . . Lonnie will be starting his 21st year at Sandpiper Bay this month.

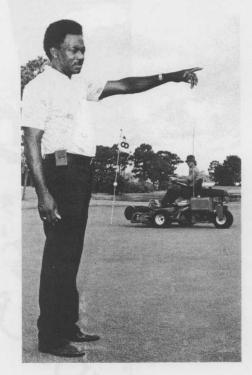
Born in the Bahamas (Lonnie won't tell us what year), he came to the U.S. in 1948, where he held various positions . . . all related to plants and landscaping. It wasn't long before he knew that this was what he really enjoyed the most and wanted to make his career.

His first position with GDC was landscaping in Vero Shores. Shortly after, Sandpiper Bay (then called the St. Lucie Country Club and Villas) persuaded Lonnie to join the ground maintenance crew, where, after only three months on the job, he was promoted to foreman. Five years later, he was made Golf Course Supervisor, which not only included the golf course grounds but also lawn maintenance at the hotel and the surrounding homes built by GDC.

Now, as Golf Course Superintendent, Lonnie boasts of a staff of 31. Lonnie, his men and their achievements speak for themselves. Just take a look around at the beautiful fair-



Lonnie Stubbs with Craig Baker (center) and Tom Burrows at recent Treasure Coast golf outing.



Underfoot or afar, Lonnie notices.

ways, greens and tees at the golf courses and the manicured lawns and plantings surrounding the hotel. As a member of the Golf Course Superintendent Association of America, Lonnie is constantly attending seminars all over the state (and sometimes out of state), to keep informed on the latest in new chemicals, insect control, fertilizer, seeding, etc.

Lonnie is married to a lovely lady, Daisy, who has given him six handsome sons, ages 17 to 29. He said that was planned since he didn't want the expense of marrying off any daughters! Is that true, Daisy?

Lonnie was recently elected President of the newly formed Treasure Coast Chapter, Florida Golf Course Superintendents Association.

Sandpiper Bay is proud of Lonnie and his achievements and sincerely hopes he'll be around for another 21 years.

Editors note: Jan Shelly is the Public Relations Director of the Sandpiper Bay Resort. The above article appeared in the Souvenir Program of the 1981 Florida Open.

## WATER PROBLEMS

Mr. Bruce Adams So. Fla. Water Management District P O Box V West Palm Beach, Fla. 33402

#### **Dear Bruce:**

Thank you for your invitation to meet with you regarding the turf industry's water use needs.

As a follow up to that meeting held in the So. Fla. Water Management District headquarters on Wednesday, Oct. 28, 1981, at 10 A.M. and which was attended by S.F.W.M.D. staff personnel and representatives of the turf industry, I wish to submit the following position paper.

We, the Florida Golf Course Superintendents Association, are in tune with the critical water situation which has developed and become so much a part of our daily existence. We pledge our cooperation in assisting your efforts to provide equitable, reasonable amounts of water for all required consumption. More specifically we, the superintendents of golf courses situated in your water management district, offer these facts and figures for your information and consideration.

Located in your area of administration are approximately 350 golf courses with an average acreage of 125. This constitutes an urban life supporting factor by providing oxygen for 2,920,000 people each year.

A conservative estimate of the economic value of these courses is a yearly dollar volume of 350 million. This does not include the consideration of variables such as the dollar volume of business generated by supporting and allied industries.

Although somewhat difficult to ascertain in a dollar volume, the negative impact on future development and tax dollar revenue without the involvement of a golf course is immeasurable and, in the eyes of revenue seeking government entities, unthinkable.

Recognizing the fact that we are large users of water and also being cognizant of the inordinate energy costs involved in our irrigation process, demands on our application systems for more sensitive control and monitoring have been met. We have the ability to place water in specific areas. The ability to automatically shut off during a measurable rainfall is incorporated. Rainfall amounts are the key factor of consideration in our irrigation programs and the period following a rain is carefully observed as to atmospheric conditions, previous and future weather conditions, temperature, wind velocity, and the condition of the turf before further irrigation is applied.

We also offer our support in regulation assistance through

our association communication tools and by personal surveillance and contact.

The detailed water requirement schedule which follows divides the average golf course into five basic areas which are listed in an importance priority.

#1 -	Greens
#2 -	Tees
#3 -	Fairways
#4 -	Roughs
#5 -	Non-Playing and Common

Greens, Tees, and Fairways are self explanatory. Roughs are in two forms — short or controlled and deep. Non playing areas are basically clubhouse grounds and practice areas. Common areas refer primarily to entrances and approach boulevards.

	Maximum	Minimum
Greens	2" - 21/2" per wk.	
Tees	$2'' - 2^{1/2}''$ per wk.	$1'' - 1^{1/4}''$ per wk.
Fairways	11/2" - 2" per wk.	
Roughs	$1^{1/2}'' - 2''$ per wk.	$\frac{1}{4}'' - \frac{1}{2}''$ per wk.
Non-Playing and common	1" - 2" per wk.	

The maximum amounts are for ideal playing conditions. The mnimum amounts are for grass survival in a semi dormant stage with further play being determined by each individual. Please note that survival of greens is an absolute and this is at a playable state — they survive in a playable condition or they don't survive.

Please keep in mind the time required to accomplish a complete irrigation cycle on the average golf course is a minimum of 12 hours.

An average golf course of 125 acres generally will have the following area breakdown:

9 acres	=	7.2%
9 acres	=	7.2%
65 acres	=	52%
32 acres	=	25.6%
10 acres	=	8%
	9 acres 65 acres 32 acres	9 acres = 9 acres = 65 acres = 32 acres = 10 acres =

and common

Bruce, I wish to again thank you for the opportunity to present this information to you. The situation is difficult but it can only be enhanced by your efforts and our cooperation. We would appreciate meeting with you in the near future to discuss final determination of our situation.

> Respectfully, Bill Wagner



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## The Gator Growls



#### By CLINT SMALLRIDGE, C.G.C.S. Everglades Chapter Royal Poinciana G.C.

Preparing for winter on Southwest Florida golf courses is carried out in many different ways. In fact, as many different ways as there are superintendents. The difference is not as much in the superintendent, or in the technology that is available to him, but rather it is in the property which they manage.

Within a 20 square mile radius around Naples there are aproximately 30 golf courses and each has its own maintenance programs designed to solve its own particular problems. Many of these maintenance differences are created by Mother Nature herself. I will not try to list every one, but here are a few:

- 1) Location in respect to the Gulf of Mexico
- 2) Elevation
- 3) Predominate winds and weather patterns

Another set of obstacles that make maintenance practices vary from course to course are physical in nature, a few of them are:

- 1) The kind of soil used during construction
- 2) Adequate or inadequate drainage
- 3) A well maintained and efficient irrigation system
- 4) The type of grass being maintained.

Budgets are a very important factor. A superintendent must work within the financial limitations placed on him.

Within the three major groups that are listed, some subgrouping does occur, and they deserve a closer look. Location: Here on the Gulf coast night-time temperatures vary as much as 10°, and in this sub-tropical climate 10° can make a world of difference. These differences can occur within the same 20 square mile area mentioned ealier. Example:  $32^\circ$  = freezing and frost, where  $42^\circ$  = no frost. When a superintendent is fortunate to have a course within a mile or so of the beach, his night-time termperatures are more moderate and ocean breezes help keep frost from forming. More inland courses can vary in night temperature also, but for a different reason. Elevation plays an important role as colder air tends to settle in lower swamplands, while the Pine and Palmetto ridges stay a few degrees warmer. Natural vegetation can contribute to cold pockets as trees tend to create a windbreak and let cooler air settle around green, tee and fairways carved out of heavy wooded areas.

Techniques used during construction and types of soil used account for difference in maintenance practices also. Two courses within this 20 sq. mi. area were built on solid rock, using the small amount of sand and soil found on-site to cover huge amounts or rock blasted out of lakes and canal systems needed for water storage. Courses built on and out of rock have a different set of problems to solve than their neighbor maybe just a mile or two away. Other courses constructed in a Cypress swamp or on Pine and Palmetto ridges have a different set of problems. Financial budgets account for major differences between maintenance programs and a superintendent should realize that a budget reflects the desires of the membership or managing entity involved. All too often good members with good budgets and a capable superintendent are saddled with bad property in a poor location, with inadequate irrigation, little or no drainage, and are expected to make a first class A#1 silk purse out of 18 or 36 sows ears.

Many courses differ in their winter programs because of the type of Bermuda grass now on the greens. Example: One older club in the Naples area still has Everglades #1 Bermuda for putting surface, while three of the newer clubs have used dwarf grass. However, most clubs elect to use 328 Bermuda. Each one of these varieties react differently to cold weather.

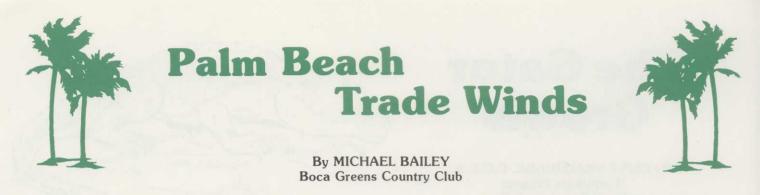
Here at Royal Poinciana we do not overseed for winter greens but we do make a lot of preparations for cold weather.

We start early in the fall taking soil samples for nematodes, PH and fertility levels. Based on these reports we make sure the stress factor is as low as possible going into cold weather by correcting any problem the samples might reveal.

We aerify at least twice using the Ryan greenair with 5/8 inch tines. We topdress heavy each time the greens are aerified, using sharp sand, and working the sand into the extra large holes. These sand filled holes punched through the thatch layer into the native soil encourage roots to grow into the warmer depth of the soil.

We order in wetting agents to be sprayed on greens and tees to prevent dew from forming when temperatures dip down to 40° or below. We spray greens with liquid fertilizer and mirco nutrients formulated to be absorbed through the plant leaves.

We change our fertilizer ratio to allow more potassium to stimulate root and stem growth. When everything has been done that can be done to lower the stress factor and make the turf as healthy as possible — we pray!!!



The turf industry will soon be finding a cold and dreary winter ahead, as old man winter will be sweeping through the south. It is not enough for golf course superintendents to endure rainfall shortages, irrigation cutbacks and an overall scrutinizing for the budget, but now we must prepare for winter hardiness in the most economically, feasible way possible.

Cold winter hardiness preparation is not simply a procedure that a superintendent begins to consider in the fall as the snowbird migration begins southward. Preparation actually begins in the spring, immediately following the end of the season, as the amount of play tapers off and good turf growth begins. Cultural practices of aerification, verticutting, topdressing and the application of pesticides during the summer are used to prepare the golf course for a healthier stand of turf to endure the combat of excessive play and cart traffic and compaction during the winter.

Certified golf course superintendent Scott Sincerbeau of Royal Palm Yacht and Country Club begins his winter hardiness preparation during the month of May. Sincerbeau believes, "Get the turf as healthy as possible as soon as you can for the winter. You have to have it there by November 1st. There is no way you can get the turf much stronger through the winter".

One of the major problems of winter is the decrease of light duration, decreasing the ability of the plant to overcome stress. Producing turf buildup of quality levels off to simply trying to combat the hardships from play during the season.

Sincerbeau's first cultural practice is to aerify wall-to-wall. That's right, aerify the rough, fairways, tees, green slopes, collars and greens. With aerifying finished by July, a nematicide is injected wall-to-wall at an approximate cost of \$100/A over 100 acres of the course. Nemacure is then applied, accounting for 20 acres of either greens, collars or slopes. Within four weeks, scalping is performed on the fairways, tees and slopes, while a slightly less thinning is performed on the rough. Within three weeks, during the month of August, a 15-0-15 fertilizer at 375 lbs/A is applied, followed by a lesser application again in mid October. A fertigation system based on an analysis of a 12-0-6 is applied through the season. The greens receive supplemental fertilizing of Milorganite or a 15-0-15 blend until late November, whereupon the blend is changed to a 18-4-10 UF of 3 to 4 lbs of N/1000/month. His changing of fertilizer material reduces the possibility of burn or the invitation of host organisms during moist weather conditions.

can impede mother nature's natural process". This is why Sincerbeau's basic concept of summer preparation for a warm season turf is to prepare the plant to as durable as possible.

We like to think of south Florida as being within the subtropical region and dream of warm, frost-free mornings. Waking up to reality, the warm season grass optimal temperatures do not fall below 80°. This causes a difficult comparison to make for the northern golfer who ventures to the south. They often do not honestly consider the difference of the optimal growing temperature for their homeland cool season grasses of optimally withstanding 65°. In other words, they can boast of northern cool season color, but let's be fair in regard to climate and conditions.

Even though we work extra long and hard during the summer to ready ourselves for the winter battle, we still must use reserve powers to overcome the winter hardships.

Mowing pratices are generally the most acceptable means of cold temperature tolerance. Glen Klauk of Delray Dunes Country Club often finds his change of height "much like a yo-yo. Not to sound humorous, but you must mow to the conditions." His green height of cut can vary from 1/4" to 9/64", depending upon the turf grass species. An important consideration is to often skip a day's mowing. Klauk feels "there is no sense in abusing the machine and turf, if the yield is not there". The perimeter path can be eliminated or taken inward to reduce the wear and compaction.

At Boca Greens, it has so far been my personal choice not to own walk mowers, but rather make the operator adjustments for the triplex greenmowers. I train the greenmower operators never to turn around between the green and the green traps. The mowers are driven all the way off the collar and actually make a wide sweeping turn on the green slope banks which are maintained at rough height. This can account for as much as 25% more mowing time. I feel the labor time cost compared to the wear damage which would result from the tight turning, is more beneficial.

Other practices of wear adjustment can be through the directions of traffic flow by stakes, ropes, signs, and even lines painted to mark directions of travel. Cups can be changed more often while ball marks should always be repaired.

Of everything the golf course superintendent asks from the golfer, there are still practices the superintendent can regulate. A reduction in the amount of water applied to the course by the process of heavier applications less often can (Continued on Page 33)

Sincerbeau believes, "too much winter cultural practices

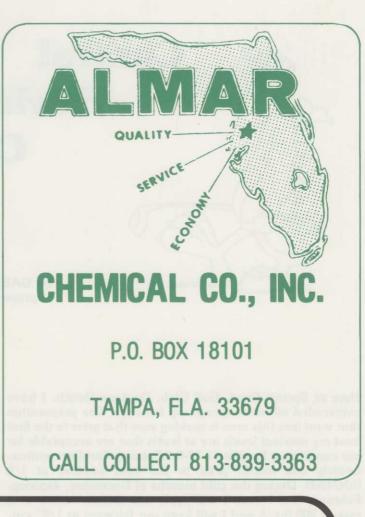
#### (Continued from Page 32)

permit deeper perculation, thereby inducing a deeper root system. Bill Kreigel, C.G.C.S., of Delray Beach Country Club believes this practice can support a healthier plant for the cold winter stresses. Tests have concluded for him that he is producing deeper, heartier roots that are less dependent upon water while nutrient availability has improved. Another beneficial practice in relation to irrigation can be the use of wetting agent penetrants. Kreigel has found the alcohol base wetting agents more beneficial to irrigation efficiency. Kreigel has been using less fertilizer, less electrical needs for irrigation while producing a turf of better color and increased durability.

Another important aspect of the wetting agent's surface is during the threat of frosts. By reducing the quantity of leaf exudation and retaining moisture within the colloidal material, frost occurrance can be greatly reduced.

The agronomic situation becomes more specific when Kreigel applies his micronutrients. The concept is not so much retaining color and growth during the severest times, but to allow the turf to have greater recovery potential. Agronomically, this boils down to achieving an equally balanced nutrient available soil.

The whole general concept of cold winter hardiness preparation never ends, but is always beginning with more new concepts to contend with an unnatural situation. The next time one asks you why the greens are off color in the dead of winter, you can always be glad to remember that dead translates to totally no growth forever, and after all, you probably will only skip mowing for a day.



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## Florida Crowfoots

By GARY MORGAN Spruce Creek C.C.

Here at Spruce Creek Golf Club, Daytona Beach, I have overseeded all areas except my fairways. The preparation that went into this area is making sure that prior to the first frost my nutrient levels are at levels that are acceptable for our conditions. I applied a 31-0-0 Fairway Fertilizer approximately one month prior to the cold weather at 1/2 IbN/1000. During the cold months of December, January, February and March I will apply ammonium sulfate at a rate of 200 lbs/A and I will keep our fairways at 1/2" cut. Hopefully we will be able to hold our color longer with these practices.

For my ornamentals I will have to make sure that we use only "Cold" hardy plants in all our landscape plans. Even these will have to have their nutrient levels correctly planned so they are very healthy even throughout the coldest times.

At Sugar Mill Golf Course, New Smyrna Beach, Mike Beard has to make sure that the proper pH is holding in the soil. Since Mike has a normally high pH he applies sulfur to his turf to keep his nutrient levels where they should be. After a few frosts he will cut out his brownish leaf tissue (Dormant Bermuda) to let his fairways and roughs have a neater appearance.

Sugar Mills ornamentals are treated constantly with Elemental Sulfur. Again, his soil requires it. Also Mike is on a spray adjuvant program to build up the hardiness of his ornamentals. Last winter they went through six frosts before they had to cut off any damaged leaves. Mike attributes this to his adjuvant spray applications.

At Indigo Golf Club, Bob Williams, superintendent, Daytona Beach, will make sure that his nutrient levels in his soil are also where they should be. Bob applied a 13-2-5 granular fertilizer to his roughs and fairways at 450 lbs/A prior to the predicted cold weather. His Dolomite application of 1 ton/A prior to the cold weather should, according to Bob, help his release of nutrients to the plant tissue.

Indigo's only trouble with ornamentals is their potted crotons. The crotons will have to be taken in each time a frost or freeze is predicted for the area.

At Walt Disney World, Larry Kamphaus, superintendent, applied a liquid fertilizer (Fertigation) 10-0-10 ratio on the fairways and roughs at a total rate of  $1\frac{1}{2}$  lb/1000 since August. The fertigation practice will be continued throughout the winter months.

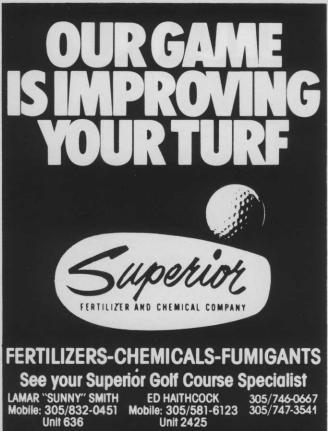
Walt Disney's ornamentals are of no concern. All of their plants are "Cold" hardy. Any damage they receive will be trimmed where possible.

At Rosemont Country Club, Orlando, Drew Costellio has raised his height of cut in his roughs to  $1\frac{1}{2}$ " and will be keeping his fairways at 3/8". Drew fertilized his fairways and roughs with a 15-0-15 slow release fertilizer at 250 lbs/A.

Rosemont's ornamentals are of no concern since they are "Cold" hardy plants. Drew has planted countless numbers of petunias which should make for a showy, flowery appearance throughout the course.

In summary it seems that in our area your nutrient level was the one item that everyone made sure was were it should be. We need to make sure that the Bermudagrass is as healthy as can be going into the "cold" weather so when the "warm" weather hits it will come out with flying colors.

The ornamentals should be planned for the seasons. There should be no "tropical" plants that are not adapted to our cold winter freezes. If you have some, when a frost hits they become brownish and unsightly. It is a general opinion that you use only "Cold" hardy plants that can withstand temperatures as low as 15°F.



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3. Funny how laborious it is to read a chapter in the Bible and how easy it is to read 2 or 3 hundred pages in a best selling novel.

4. Funny how we can't think of anything to say when we pray and don't have any difficulty thinking of things to talk about on the phone with a friend or over the back fence with a neighbor.

5. Funny how we seem to have difficulty learning to worship God and find it easy to learn so many other things.

6. Funny isn't it! Or maybe it merely reflects the way we are living these days with our priorities mixed up and a "shoulder shrug" for God and His church. Really it isn't funny, it is sad. We need to look up and listen to God more. No, it isn't funny ... really ... for in this changing world we find the one and only unchanging certainty, is God and His unchanging love.

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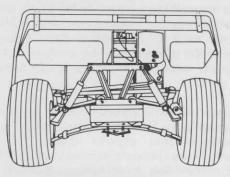
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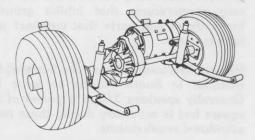


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e market without the loss of stability and safety.

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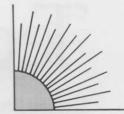
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By BRAD KOCHER Inverrary Country Club

#### Bundling Up Turf For Cold Weather

It seems like every year we hear new and better methods of making our Bermudagrass turf more capable of handling the cold winter temperatures. The turf has to withstand not only temperatures that inhibit growth, it must face hundreds of golf carts that compact and put upon it a further stress.

Heavier fertilization during the September to May period is essential in South Florida to force bermuda growth. Generally speaking 3/4 to 1 pound of nitrogen per 1000 square feet is necessary during these months to meet the nutritional requirements.

Potash levels have been increased by many South Florida superintendents, as a result of soil tests and by recommendations of leading turf specialists. A greater emphasis is also being placed on a one to one nitrogen potash level to increase plant hardness without a great deal of lush growth. Potash created hardness will also increase root growth and hopefully enable the bermudagrass to withstand drought stress that will no doubt occur this winter.

Cold weather preparedness of greens is undoubtedly the main area of concern. By far the majority of golf courses overseed their greens. However the ones who do not overseed are faced with greater challenges.

Both Tifgreen 328 and Tifdwarf bermudagrass must be treated in a variety of ways to enable the grass to cope with the wide diversity of winter temperatures and climatic conditions. There are temperature ranges from the low 30's to 80 degrees. There are wet and dry conditions, wind conditions, and reduced amounts of daylight hours.

Earl Grey, at Indian Creek in Miami Beach, generally fertilizes at one pound of nitrogen every two weeks during the winter season, as compared to approximately one pound of nitrogen per month during the growing season. He is also a strong advocate of at least monthly topdressings. Mowing heights are generally raised in conjunction with temperature changes.

Many superintendents find it necessary to mow above 3/16''during cold weather conditions. Heights of 7/32'' to 1/4''are frequently used when temperatures drop into the low 40's and 30's. The height is then brought back down to normal levels when temperatures increase.

On many mornings greens are not mowed and periods of four to six days without mowing are not uncommon. It is also beneficial to use walking mowers during winter months to reduce compaction and tire marks from riding mowers. If riding mowers are used an every-other-day cleanup lap around the edge of the green should be used, and at least one clean-up-lap per week should be made one foot from the edge of the green.

Superintendents who do not overseed, must be very flexible and weather conscious to be able to cope with the vast variety of conditons that present themselves from November to April. Many club members do not like the four to six weeks of overseeding establishment and feel they would rather cope with less than ideal conditions for a few weeks.

Overseeding is desirable and necessary at the majority of the courses. Heavy play considerations, soil conditions, member appeal and just plain aesthetic appearance of lush (Continued on Page 41)

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#### (Continued from Page 40)

green growth is a necessity at most establishments. A four to six week establishment period insures a consistent dense stand of bentgrass or ryegrass. Probably 95% of the overseeded courses use a perennial ryegrass. It establishes quickly and provides a dense uniform turf.

During periods of 30's and 40's the growth reduces. However, the putting surfaces remain consistent and mostly traffic tolerant. Ryegrass easily withstands the 300-350 golfers, ball marks and scuff marks that are characteristic of many of our courses.

Overseeding or non-overseeding is first a golfers decision. Those who do not usually swear by the results, and those who do swear by their results. Some just swear! Hope we have a mild winter, regardless.



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## **USGA Meets** In Ft. Lauderdale

March 1 will be the date of the USGA Green Section Southeastern Region Conference. The meeting will be held at the Holiday Inn, Airport, located at I-95 and State Road 84, Ft. Lauderdale. Registration is prior to the 8:55 a.m. start. The seminar will adjourn at 4:00 p.m.

The morning session subjects and speakers are: Water Uses During Drought Conditions by Dr. Bruce Augustin, Plantation Research Center; How to Prepare a Budget During High Inflation by Tim Heir, Quail Ridge Country Club; Update of Golf Facilities in the Sunbelt by Don Rossi, National Golf Foundation: Promotion of Golf by Earl Collings, PGA. A panel discussion, Is Overseeding Necessary, will be chaired by Tom Burrows, Turtle Creek Club; The Green Section by Charles White, USGA.

The afternoon session will start with a film on the rules of golf by Eric Shiel, USGA, followed by Our Dving Greens by Mark Hampton, Wyndemere Country Club: Equipment Cost Versus Service by Clint Smallridge, CGCS, Royal Ponciana Golf Club. A panel discussion, Tifdwarf, will be chaired by Dr. Phil Busey, Plantation Research Center, followed by a question and answer review chaired by James Moncrief, Director USGA, Southeastern Region.



Last year the attendance was over 170. Plan now to attend this successful, well organized meeting.

## **USGA SEMINARS**

During 1982, The USGA Green Section will conduct several Regional Turf Conferences throughout the country, the dates and locations are listed below.

- Feb. 16 - Sheraton Tera Farmington, (Boston) Mass.
  - 18 Westchester Country Club Rve. New York
  - 23 Oak Hill Country Club Rochester, New York
- Mar. 1 - Holiday Inn (I-95 Airport) Ft. Lauderdale, Florida
  - 9 -Hilton Inn Wichita, Kansas
  - 15 Holiday Inn (I-77 South Woodlawn) Charlotte, North Carolina
  - 16 Minnehaha Country Club Sioux Falls, South Dakota
  - 18 Congressional Country Club Bethesda, Maryland

Holiday Inn - North Cincinnati, Ohio

- 25 Fox Chapel Country Club Fox Chapel, (Pittsburgh) Pa.
- Apr. 6 - North Ridge Country Club Fair Oaks, (Sacramento) California

7 -Red Lion/Jantzen Beach Portland, Oregon



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#### **Meeting Not For Supers**

Palm Beach Chapter will sponsor their third annual "No Superintendent Seminar" on January 21. This unique concept is for assistants, foremen, equipment mechanics, irrigation technicians, and other key staff members. Golf course superintendents are NOT welcome.

Joe Konwinski, retired area superintendent, will be the moderator. The all day seminar will be held at Palm Beach Junior College, Lake worth. The site will be the Allied Health Building, room 100. Easy excess from I-95 makes the location good for clubs from Vero Beach to Miami. A \$2 registration fee will be charged to cover administrative cost. A continuing education certificate will be presented to each student. Registration time will begin at 8:30 a.m. Classes are from 9 a.m.-3 p.m.

Subjects to be discussed are turfgrass types, fertilizer, chemicals, irrigation, equipment repair, and golf course construction.

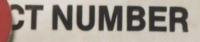
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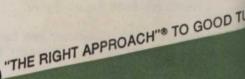


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#### **Guest Editorial**

Golf course superintendents, along with key officials in other outdoor industries such as commercial nurseries, swimming pool builders and suppliers, landscapers and agriculturists, have a keen interest in South Florida's water supply since their industries depend so heavily upon it.

The South Florida Water Management District, the agency charged by the state legislature with managing our invaluable freshwater supply in South Florida, is aware of this interest and understands the concerns of this multi-million dollar industry as we face what may be a severe water shortage this winter and spring.

In response to that concern, staff members of the Water Management District have met with representatives of the Florida Golf Course Superintendents Association over the past several months. The result of those meetings is a better understanding by the District of the special problems and needs of the golf course industry, as well as a better understanding by industry people of how the District operates and how it will deal with various water users during a water shortage.

Following this cooperation between industry and government, officials at the Water Management District are confident water intensive industries, such as golf courses, will not have to shoulder more than their fair share of the economic hardships that may be unavoidable during a water shortage. At the same time, it is vital that golf course interests cooperate completely during this critical period. One of the first ways that cooperation can begin is by having all golf courses establish their legal right to water use by becoming permitted water users under the guidelines established by the District. Examining watering techniques to insure that waste is not encouraged, adjusting the timing of irrigation to water during the early morning or late afternoon, and setting sprinkler heads so that they can be targeted to water greens, tees and fairways separately, can all be part of a program to condition your course to withstand the harsh winter and spring we must anticipate.

With these efforts and continuation of good, open communication, we can meet this serious situation with as little real difficulty as possible.



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