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Dear Reader,

This Fall 1983 issue of "The Florida Green", (formerly "The South Florida Green"), is special because it is our 10th Anniversary Issue. In it we are featuring some of our most popular articles from over the years. The successful growth of our publication is possible because people in our industry have gotten involved by writing articles such as the ones we have selected for this issue. They have been willing to share their knowledge in a way that has been of benefit to us all.

These past years our publication has been dedicated to improving turf by recognizing and promoting excellence in Golf Course Management. We pledge to continue to be honest above all and to give responsible coverage while maintaining our high standards when reporting on the issues facing Golf Course Superintendents in Florida.

We hope you will enjoy reading this anniversary issue as much as we enjoyed putting it together for you.

The Editorial Staff
"The Florida Green"

ABOUT OUR COVER
Hole No. 16 at Banyan Golf Club, West Palm Beach. Dan Jones, C.G.C.S. is Golf Course Manager. Shown addressing the ball is David Fermon, Club President as Bob Brown looks on. See article page 15.

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Howard Kaerwer, Director of Turf Research at Northrup King's Research Center

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DEDICATION

To the men who work “behind the scene” in all areas of research, we gratefully dedicate the first issue of The South Florida Green.

These men devote most of their time to solving all aspects of turf problems. For their dedicated devotion in making numerous contributions (for which they receive little public credit) The South Florida Superintendents Association members say, “Thank you, gentlemen.”

Editor
Vice President

Mike Barger
Bay Shore Golf Course
2301 Alton Rd., Miami Beach, Fla. 33139

Paul Turcotte
LeJeune Golf Course
1802 N. W. 37th Avenue
Miami, Fla. 33125

Director

Tom Mascaro
2210 N. E. 124th Street
North Miami, Fla. 33161

Henry St. John
Golf Course Division
City of Miami

Associate Editor

Director

Lou Oxnevad
Riviera C. C.
1155 Blue Road
Coral Gables, Fla. 33146

Billy Wright
Villa Delray, Inc.
P. O. Box KK
Delray Beach, Fla. 33444

President

Director

George W. Cavanaugh
President C. C.
West Palm Beach, Fla.

Carl McKinney
P.G.A. Country Club
Palm Beach Gardens, Fla. 33403

Secretary/Treasurer

Past President

President’s Message

The South Florida Green is the first publication of The South Florida Golf Course Superintendents Association. This Association was organized in July of 1939. Jimmy Blackledge was elected the first President and is still one of the 152 active members.

This newsletter will attempt to bring an exchange of ideas, of old and new methods of turf care. Members are encouraged to submit suggestions and articles that will be of particular interest. Everyone is urged to participate so that we can all work together for the betterment of turf in Florida.

It is an honor for me to be President at the time of this first publication, which is the culmination of past efforts and interest of many officers and members. Hopefully The South Florida Green will be a successful venture and a benefit to all interested in the challenge of growing and maintaining fine quality turf.

Lou Oxnevad
President’s Message

It is a great privilege to congratulate our magazine staff on the publication of our Tenth Anniversary Issue. Many thanks have to be extended to the South Florida G.C.S.A. which was the association that was instrumental in the original formation of the magazine. Under the direction of Lou Oxnevad, G.C.S.A. (President) and Mike Burger (Editor), the “South Florida Green” was founded to serve as a means of communication for the superintendents located on the lower East Coast. The magazine continued to grow with respect to the expanded scope of the superintendent, eventually becoming a nationally recognized publication.

In the late 1970’s the Florida G.C.S.A. emerged as a group that would collectively represent the various local chapters throughout the State. Recognizing the fact that the “South Florida Green” would become a more prominent and useful periodical if it could represent the interests of the golf turf industry state wide, the South Florida G.C.S.A. and Florida G.C.S.A. worked out an agreement that included a name change and a variation in format. Under the direction of Dan Jones and Dave Bailey the “Florida Green” has risen to standards that are unmatched concerning quality of information and production, and it truly acts as a means of promoting the professional image of a golf superintendent.

My term as President has come to a close and I feel that we have continued to improve the status of our association through the gracious volunteer efforts of our executive committee and board. These individuals lend themselves to the development of their profession by donating time and effort to goals that will enable us to seek improved methods of golf course management through education and communication. In the ten years that I have been involved with the golf business I have been able to associate and gain friendships with many suppliers, golfers, professionals and educators that are dedicated to the improvement of the game. The importance of the golf superintendent will never be overlooked in the golf industry, so be proud that you have the ability to add to the name of golf by providing a piece of nature to be enjoyed by many.

Thank you for the opportunity to serve you.
On behalf of the Membership and Executive Committee of GCSAA, please allow me to extend our most heartfelt congratulations on achieving the Tenth Anniversary of THE FLORIDA GREEN.

In the brief span of ten years, THE FLORIDA GREEN has become clearly recognized as an award winning magazine throughout the entire golf community. Its high quality appearance, editorial scope and representation of the golf course superintendent in Florida presents an image of today's golf course managers that can only be described as professional.

Having been the editor of Connecticut Clippings, I am personally aware of how much work it takes to plan and execute a small newsletter. The work that goes into the production of THE FLORIDA GREEN (in four color yet!) is considerably beyond the call of duty for any bunch of volunteers.

Both the staff of the magazine and the members of the Florida GCSA are to be commended. You've set a proud standard for your colleagues throughout the profession.

If your goals and objectives of the next ten years are aimed at matching your progress of the past ten, you have a formidable challenge ahead and the rest of the Association will have to have determination to keep up with the pace.

Once again, congratulations to each of you!

President, GCSAA

Golf Course Superintendents Association of America
During the winter of 1938-39, Joe Ryan, Superintendent of Rolling Green Golf Club in Media, Pennsylvania and then President of the National Association, was visiting his daughter in Miami. Elwood Poore, the assistant Pro at Indian Creek Country Club, was the assistant Pro at Joe's Club in the summer and a mutual friend. For this reason, Joe spent some time with Elwood and me at Indian Creek. Joe urged me to consider the idea of organizing a local Golf Course Superintendents Association in South Florida, and we discussed this with Mark Mahannah, Superintendent of Miami Biltmore Country Club, and Mike Schuyler, Superintendent of Miami Beach Golf Club.

As a result of these discussions, we held an informal meeting at the Indian Creek Country Club on April 22nd, 1939 to formulate plans for such an organization. Attending this meeting were: R. F. Lawrence, Boca Raton Hotel & Country Club; C. C. Kelly, Florida East Coast Hotel Company; Mark Mahannah, Miami Biltmore Country Club; Stanley Kendust, Miami Shores Country Club; Fred Hoerger, La Gorce and Bayshore Golf Clubs; Hans Schmeisser, Hollywood Country Club; and myself.

This group decided to call an organizational meeting for Saturday, May 13th, 1939 at the Hollywood Country Club. Hans Schmeisser and I drafted and co-signed a letter inviting all the known Golf Course Superintendents in the area to this meeting. Through the courtesy of Mr. Oscar Johnson, then General Manager of the Hollywood Beach Hotel Properties, this letter was mimeographed and mailed on May 6th, 1939.

We failed to record the names of those attending the Hollywood Country Club meeting; however, the following officers were selected: Jimmie Blackledge, President; Clyde Smith (Gulfstream Club), Vice-President; and Mike Schuyler, Secretary-Treasurer. A committee was appointed to draft proposed by-laws for the organization, and annual dues of $5 were agreed upon.

On June 12th, 1939, the organization got underway at the Miami Country Club with Bill Barton as host. At this meeting, the by-laws were presented and approved with some minor changes, and Mr. C. C. Shaw of Hectar Supply Company was made an Honorary Member in recognition of his help in getting the word around to the Superintendents in the area. Attending this meeting were: Clyde Smith, Mike Schuyler, R. F. Lawrence, B. A. Yoder, Art Gleason, Bill Barton, Ward Wood, Norman Summers, Walter Weeks, Mark Mahannah, Stanley Kendust, C. C. Shaw, and myself.

On July 10th, 1939, we met at the Orange Brook Golf Club with Harry Moore as host. At this meeting, three Directors were elected to serve on the Board of Directors with the three officers. These Directors were: R. F. Lawrence, B. A. Yoder, and Mark Mahannah.

The new Association continued to have regular meetings each month at clubs from Miami to Palm Beach, picking up a few new members. The format of the meetings varied somewhat, but generally the business meeting was followed by a “round table” discussion and then lunch and golf.

At the meeting on December 11th, 1939 at the Palm Beach Country Club with Ward Wood as host the idea of extending the scope of the Association to a state wide organization was discussed. Details of how this might be accomplished was a matter of considerable concern at several subsequent meetings. The objectives of this effort were to spread the benefits we felt such an organization could provide, to others in the field of golf course maintenance and to develop sufficient numerical strength to influence the establishment of some badly needed research in Turf at the University of Florida Experiment Station System which at that time was heavily, farm oriented.

In February 1940 a letter was sent to all the known Golf Clubs in the state with the proposal that a meeting be held in Orlando sometime in June for the purpose of establishing a state wide Golf Course Superintendents Association. The response to this letter was too meager to justify continuing the plans.

At our meeting of April 22nd, 1940 at Indian Creek Country Club with Jimmie Blackledge as host, the failure of this approach was discussed and it was decided to have a few of our members visit the Tampa and Orlando areas, contacting Superintendents to promote the state organization concept. Mr. Yoder, Bill Barton and C. C. Shaw were selected to make this trip.

There was also some discussion about the possibility of our organization becoming affiliated with the Florida State Florist's Association. This organization had become a forum for all ornamental horticultural interests in the state. It consisted of the Florists, Nurserymen, Fern Growers, Bulb Growers, and Gardeners Associations, each group retaining their identity with separate business and educational sessions, but with combined social activities and legislative efforts. We met at the Orange Brook Golf Club on May 20th with Harry Moore as host. At this meeting I was authorized to make application for affiliation with the Florida State Florist’s Association at their annual meeting being held in Gainesville the following week. This was accomplished successfully and reported at our meeting of June 17th, 1940 at the West Palm Beach Golf & Country Club with Clyde Usina, Sr. as host. At this meeting C. C. Shaw reported that he had found little interest in organization in the Orlando area, however, there was some interest in the Tampa-St. Petersburg area in establishing a local organization such as ours. It was decided to invite those interested to our meeting at Miami Shores Country Club on July 8th to be of any assistance possible in the establishment of such an association.

Election of officers was held at our meeting of July 8th, 1940 at the Miami Shores County Club with Stanley Kendust as host. Elected were:

(Continued on Page 18)
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RECOGNIZING EXCELLENCE

By PAUL R. MacDONALD

Just as in the movies, golf too, has its stars, its glamorous figures. But it also has its anti-heroes as well. Who are these enigmatic characters? They are the men too busy for public relations! Instead of polishing the apple in the public eye, they are tending the apple and its blossoms. The golf course superintendent is finally emerging from the bushes. Today's golf course superintendent must literally be a man for all seasons — Botanist, chemist, engineer, accountant — these are but a few of his roles. At some courses he is also owner, manager, and professional and all that that entails. By the way, don't be surprised if the superintendent turns out to be a female.

The golf course superintendent must also be a man of disappearances. In a sense he ghost writes the entire course. He may arrive at daybreak or long after midnight for watering or some unforeseen crisis. He is on call with his patient twenty-four hours a day. Tour professionals are the egotists of the game; superintendents tend to remain invisible. Their rewards are not trophies or prize monies but rather the satisfaction of controlling the major asset of a golf club - the golf course itself. He is the linchpin between the appreciation of the members and the dreams of the green committee. His joy is in the craftsmanship of his art.

Viewed from a financial perspective, we notice that the maintenance and turf equipment side of golf annually expands more that one billion dollars as compared to other market expenditures: golf balls - ninety million; golf clubs - two hundred ten million; golf clothes and shoes - three hundred million; or even food and beverages that reaches nine hundred-seventy million. So, not only does the superintendent manage the major asset, the golf course itself, but revenues to maintain this asset are the highest in the game.

In this age of scarcity and of regulation the golf course superintendent qualifies as golf's most highly educated person. Over fifty percent are college educated, while many have advanced degrees. As in other professions, he may become certified by passing a six-hour examination after becoming a member of the Golf Course Superintendent's Association of America, but he is also required to be licensed by his state as a certified pesticide applicator. Amongst other things, he must understand turfgrasses, chemicals that control turfgrasses, machinery, fertilization and new sophisticated irrigation systems as well. Despite such proficiency and scientific knowledge, and technical training notwithstanding, it may be many golfing seasons before the custodial image that has stereotyped the superintendent in golf can hold par with the concept of the professional.

How ironic then that the golf course superintendent's most awesome opponent eludes all of this scientific knowledge, i.e. the forces of nature herself. As far as landscaping, his insight must encompass knowledge of different grasses, trees, shrubs, soils, soil compositions, plant diseases such as nematodes and dollar spot and their cures; when it comes to wind patterns, humidity, rainfall and snowfalls, the golf course superintendent must be more alchemist than chemist.

How would you program maintenance chores at the world's highest championship golf course — The Ranch at Keystone, Colorado — over 9,000 feet high in the Rockies? Lou Haines, the new Director of Grounds, has this problem and hopefully the solutions. His father, Jim Haines, Superintendent for many years at Denver Country Club is noted for his invention of a tree root cutter and a leaf raker. Haines Sr., incidentally, was one of the first superintendents to be the recipient of the USGA Green Section Award.

Malcolm R. McLaren, a GCSAA Past President, developed a turf slicer at his club, Canterbury, in Cleveland in preparation for the 1946 USGA Open. This was one of the first attempts at aeration and no mean accomplishment.

Green committee chairmen, eager to leave their imprint on their golf courses, may also be called anti-heroes, but many get a good education in the process. They seldom appreciate the value of the superintendent. David C. Holler, Superintendent of the prestigious Gulph Mills Golf Club in King of Prussia, Pennsylvania, has aptly expressed a superintendent's lament: "...a green chairman is proficient in his own field, but he seldom has experience in agronomy; yet he assumes responsibility to club members for the condition of the golf course. The golf superintendent knows his business - he is a professional - so let him run it, just as you allow a department manager to run his operation."

This is not to say, however, that superintendents represent an amorphous mass of nameless men. The name Joe Valentine, may someday be as popular as Arnold Palmer's for his contribution to the game in his discovery of Merion bluegrass. Without a public relations firm or press corps to accelerate his fame, the Valentine accomplishment has meaning for every golfer and will be looked upon as one of the major achievements of this era.

Incidentally, do you know or would you recognize the superintendent of your golf club? It is more than likely that you are acquainted with your club professional, having had lessons or bought equipment and you may even know your board-of-directors, and, of course, your favorite caddy. Yet, your golf course superintendent is probably known to you only through his artistry. The next time someone mentions the word professional you might consider asking which professional.

Like other professions, women are becoming interested in this challenging field. The Golf Course Superintendents Association lists four who are superintendent members - up one-hundred percent from the previous year. A relatively new trend emerging too, is the addition of ladies to maintenance crews at some golf courses. It is not uncom-
Imagine being aroused from a deep sleep and finding yourself in the middle of a dense, lush, tropical forest. Abundant trees and vegetation spring out around you. The limbs and leaves rustle as if to exclaim your presence to the native inhabitants. You begin to walk. As your eyes focus you realize that there is an absence of any other humans. A variety of wildlife; exotic birds, alligators, rabbits, raccoons and squirrels peer at you with relentless curiosity. Finally you realize that you are holding an object in your hand. Maybe it is a weapon for defense. Now you are fully awake because your ill-fated golf shot has disappeared into the ominous woods. You had plotted your strategy on the tee, but unfortunately your strategy and execution didn’t see eye to eye and as a result of that less than perfect golf shot suddenly you are brought close to nature.

Normally this would upset the average golfer but you are playing Banyan, a Joe Lee designed golf course. It’s a work of art, located west of the turnpike near West Palm Beach, Banyan is a unique and fascinating private golf club. The only things surrounding this golf course are trees, water and myriad number of lost golf balls. This, according to world famous golf course architect Joe Lee, is one of the unique qualities of Banyan. But there are others. Banyan began construction in 1970 and opened for play in 1972. The course was created from 200 acres of uninhabited property, 120 of these acres were comprised of dense natural Florida vegetation. The other 80 acres were owned and operated by a shell pit mining company. Through coordinated efforts the mining lakes were designed to fit the needs of the golf course, beautiful cypress trees were preserved and finally the 80 acres were obtained by the club. The new purchase was deficient in tree numbers as compared to the original 120 acres but Banyan had the solution. Clearing for construction of I-95 was in process at this time and Banyan was quick to recognize the opportunity. A variety of trees including Ficus, Mahogany, Sabal Palms and fruit trees were planted in numbers exceeding 2,000. Most of these were obtained from the I-95 right of way.

The golf course veneration of architects would be described as a “String of Pearls” design. Very few holes are parallel or even close to each other. As Joe Lee explains it, “each hole is its own entity and has its own character.” Because of the lush vegetation and “The String of Pearls” you see other golfers infrequently, even if there is considerable play on the course. Ask Joe Lee and he will proudly tell you that Banyan is among his favorite masterpieces. He will also tell you that playing the golf course is like a stroll in the country, the peaceful kind of native Florida terrain that years ago people could easily find. This terrain is a rarity today. Another rarity is the design of the driving range tees. The main section is divided into three separate tee surfaces and screened by dense trees. This in effect produces three very secluded and private practice tees. On the other end of the driving range is another open tee.

The topography at Banyan is also unusual in light of the elevated tees, especially one par three with an elevation of 36 feet. The design of the golf course was beautifully blended with the indigenous plants and terrain. The total property itself was divided into three main drainage areas, each with its own pump to maintain the desired water levels. The pumps have a float device to shut them on and off automatically according to the water level. they also have P.T.O. capabilities in case of power failure.

From a pro’s standpoint head golf professional Bill Simmons can’t say enough good things about Banyan. Using superlatives such as great, unique, beautiful, favorite, etc. you get the feeling Bill is a campaign manager and the course is running for president. His favorite attraction at Banyan is its beautiful and strategically placed sand traps. “they really bring out the beauty of the golf course,” he echoes much of what Joe Lee had said about each hole having its own character. Bill has been employed at Banyan for ten years and has seen everything from monsoons to one member who has made five aces in six years (playing only six months per year). He will also explain the good working relationship with Golf Course Superin-
(Continued from Page 15)

tendent Dan Jones and Club Manager Gerry Marlatt. At least one day every week during the season they meet early in the morning for coffee and communication. Bill is a dedicated and loyal professional who loves his club and is proud to show it.

The men’s course record at Banyan is 69 from the blue tees. The course has a rating of 72.7 and 73.0 from the whites. The average green size at Banyan is six thousand square feet. They consist of TifDwarf Bermudagrass. Due to contamination in the original greens all 18 greens were replanted the last two years. Tees, fairways and rough are comprised of TifWay 419 Bermudagrass. One hundred of Banyan’s total 200 acres are maintained as fine turf and another 34 acres are deep sparkling lakes.

The soil profile consists mainly of sugar sand and huge deposits of clay. With all its intrinsic beauty Banyan does have a few problems. The lush tropical overgrowth that provides so much landscape also excludes much needed sunlight. To combat this problem Golf Course Superintendent Dan Jones has a program of trimming where necessary and even replacing plant species if trimming is not effective. Poor drainage and excessive rain don’t exactly compliment each other so drainage is an ongoing project. Rain is one thing that Dan cannot control. To date Banyan has spent over $20,000 on drainage and plans to do much more. The results have been of significant benefit to the club. In addition to improving turf quality of poorly drained areas there has been a reduction in the number of days the course was closed due to wet conditions.

Dan Jones has been employed at Banyan since March 25, 1980. Prior to that he was Golf Course Superintendent at Turnberry Isle Country Club, Miami, Florida for five years. At Turnberry he introduced the use of the White Amur for weed control in lakes. He spent another five years at The Dorado Beach Hotel in Puerto Rico before going to Turnberry. In 1965 Dan was a hotel engineer at Estate Good Hope Hotel and Fountain Valley Golf Course on St. Croix, U.S. Virgin Islands. The golf club on St. Croix had gone through three Golf Course Superintendents and as a result of this Dan if he would be interested in assuming the responsibility. Dan’s first thought was “I don’t even know a golf ball from a cue ball.” Through encouragement from consultant Dr. Max Brown like, “Desire is the greatest factor,” Dan accepted his first Golf Course Superintendent’s position. And now most of you probably know the rest of the story, Dan has become one of the most popular, innovative and successful Superintendents in America. He is respected by his peers and employers alike. Through his efforts with others The Florida Green has become the standout magazine in its class across the nation. The condition of his golf course? Superb!

Mr. David Fermon, is Club President. He is a man who appreciates the condition of his golf course and the capabilities of his staff. Mr. Fermon informed me that Banyan members are proud of their beautiful club. During our conversation he closely paralleled much of what Joe Lee had said about the course’s character. In closing Mr. Fermon’s thoughts and objectives were very clear. He emphasized that Banyan was a golf course you could enjoy playing every day and Mr. Fermon is dedicated to preserving its top condition.

And so... another day comes to a close at Banyan. As daylight gives way to darkness “Banyan Golf Club” becomes “Banyan Nature’s Playground.” Owls, rabbits and raccoons act out their daily lives in harmony with man and nature. The wind and the crickets join together to serenade sleepy squirrels to bed. And, if you should be aroused from a deep sleep with a club in your hand, Well... be nice to the animals.

(Continued from Page 14)

RECOGNIZING EXCELLENCE

(Continued from Page 14)

George W. Cleaver, the new President of the Golf Course Superintendents’ Association and himself superintendent at Chestnut Ridge Country Club, Lutherville, Maryland - a suburb of Baltimore - for more than eighteen years, said recently “...being a golf course superintendent is a tricky, tough business. It is not something that can be standardized as is a certified public accountant or a certified life underwriter. There are just too many variables, and many of the major factors, such as weather, budgets, golfers’ desires are out of the individual superintendent’s hands. Golf courses are like living things and no two courses are alike.”

Besides keeping the grass green and mowed, superintendents must conform to many new stipulations and regulations that have evolved from recent environmental studies. While custodial images are hard to eradicate, the sophistication of the golf course superintendent’s role is gradually bringing him not only the position, but the recognition he deserves. Perhaps that bumper sticker that reads “Have you hugged your dog lately” should have an addendum, “Have you hugged your superintendent lately?”

EDITOR'S NOTE:

Paul R. MacDonald is marketing manager, AG-TURF Department, Johns-Manville Sales Corp., Fresno, Calif. Mr. MacDonald is Past President of the National Golf Foundation and Past President of the Golf Ball Manufacturers Association.
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STATEMENT OF SECONDARY NUTRIENTS:
- Total Magnesium (Mg) 4.00%
- Water Soluble Magnesium (Mg) 4.00%
- Sulphur (combined) (S) 10.00%
- Iron (Fe) 0.40%
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- 6.3% Water Insoluble Nitrogen

AVAILABLE PHOSPHORIC ACID (P₂O₅) 1.00%

SOLUBLE POTASH (K₂O) 8.00%

Chlorine, not more than 2.00%

Derived from sludge, sulphate of ammonia, isobutylidene diurea, and sulphate of potash-magnesia.

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SOLUBLE POTASH (K₂O) 10.00%

Chlorine, not more than 2.00%

Derived from activated sludge, sulphate of ammonia, isobutylidene diurea, and sulphate of potash-magnesia.

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Jimmie Blackledge, President, B. A. Yoder, Vice-President, Mark Mahannah, Secretary-Treasurer. Gus Thomas of St. Petersburg attended this meeting and reported that a number of Clubs in the Tampa-St. Petersburg area had indicated interest in forming a West Coast Association and progress was being made in this direction.

Our Association continued to hold meetings each month with nothing spectacular happening. We had trouble getting a quorum in attendance particularly at some of the winter meetings, however, we still managed to have informal discussions of our mutual problems.

On May 12th, 1941 we held our first annual tournament at the Miami Country Club with Bill Barton as host. C. C. Shaw and R. F. Lawrence won top honors and Ward Wood carried off the prize for high gross. A short business meeting followed the tournament and then fourteen of our members and their wives enjoyed a Dinner Dance in the Club Ballroom. Everybody had a “ball” and all agreed that this should be an annual affair.

Later in the month of May about ten of our members went to Jacksonville to attend the first meeting with the Florida State Florist’s Association. Attendance at this meeting from other parts of the state was limited to Pat Deavy and Charley Zaun of the Jacksonville area.

On July 14th, 1941 our regular meeting and election of officers was held at the Miami Shores Country Club with Stanley Kendust as host. Elected were: Jimmie Blackledge, President, Mike Schuyler, Vice-President, Mark Mahannah, Secretary-Treasurer, B. A. Yoder and R. F. Lawrence, Directors. Luther Voltz, Golf Editor for the Miami Herald attended this meeting giving us a start on establishing some publicity.

At our meeting on October 13th, 1941 at the Gulfstream Club, Frank Swanson of the Florida East Coast Hotel Company made a rather elaborate presentation to the President of a “Trouble Club Gavel” — this gavel was designed and contributed to the Association by Red Lawrence of the Boca Raton Hotel & Country Club.

For the rest of 1941 and into early 1942 our meetings continued with somewhat better attendance and during the winter months we had a number of out of state visitors at these meetings. There was a growing concern expressed about the effect of the war in Europe on our activities and the future of the Association.

On May 11th, 1942 we had a re-run of our annual Tournament and Dinner Dance at the Miami Country Club. However, we were on an economy kick and no prizes were purchased for the Tournament and a “juke box” was used for the Dinner Dance instead of an orchestra. In spite of this everyone seemed to have a big time.

On May 17, 18 and 19, 1942 a number of our members attended our second meeting with the Florida State Florist’s Association in Orlando. At this meeting Dr. O. J. Noer conducted a short course on soils and soil management. Three men from the Corps of Engineers attended this meeting—Ed Cale, Norman Johnson and Jack Bellows. At the combined meeting of the Florida State Florist’s Association the decision was made to suspend further meetings for the duration of the War.

At our meeting on July 27th, 1942 at the Fort Lauderdale Country Club with Walter Weeks as host it was announced that our Secretary-Treasurer, Mark Mahannah, was leaving the Miami Biltmore Country Club to work with the Army Engineers as Supervisor of Grounds Maintenance for the Air Force installations in the St. Petersburg area and that I was leaving the Indian Creek Country Club to become part of the Erosion Control Section for the Army Engineers at the Fourth Service Command Headquarters in Atlanta. It was decided to elect new officers with the understanding that they would serve for the “duration”. Elected were: R. F. Lawrence, President, B. A. Yoder, Vice-President, Mike Schuyler, Secretary-Treasurer, and Harry Moore and Ward Wood, Directors.

Under Red Lawrence’s guidance the Association held together very well thru the War years. Meetings were not held on a regular monthly schedule but several meetings were held each year and those members still on the golf courses in the area were able to get together and discuss their mutual problems so the Association survived.

In July 1945, a meeting was held at the Orange Brook Golf Club with Harry Moore as host—new officers were elected and dues were re-instated. Elected were: Fred Heoger, President, Harry Moore, Vice-President, and Walter Weeks, Secretary-Treasurer. From this point on the Association has made a steady growth over the years with many changes in the structure of the organization and the membership.
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1) Lay out shrub beds so corners are round rather than square. This will cut mowing time by eliminating unnecessary maneuvering of mowers.

2) Paved roads should be level with the lawn to eliminate hand trimming or scalped areas.

3) Construct mowing strips next to all structures and around all shrub and flower beds. These can be composed of stone, bark or bare earth and maintained with non-selective herbicide.

4) Use ground covers or shrubs in high maintenance areas such as steep slopes; areas where grass is difficult to grow or excessive hand mowing is required.

5) Mulch all beds with bark, hay, pine needles, etc. to preserve moisture and control weeds. The use of non-selective herbicides can almost eliminate hand weeding in conjunction with mulch.

6) Try to plant large masses of the same varieties for easier care. A small bed with too many varieties looks busy or hodge podge. Also try to personalize your design and avoid using straight lines unless necessary. Trees or shrubs in stiff rows serve a purpose only when they are planted for privacy.

7) It is best to select plants that require very little pruning. If a variety is desired because of a flower but the shrub is a rampant grower leave it in the container and plant the container in the ground. The restricted root system will keep the shoot growth in check.

8) Do not try to grow plants where they are not adapted such as acid vs. alkaline soils, sun vs. shade, or wet vs. dry. Check requirements in plant manuals or with the County Agent before planting.

9) Plant only in good soil, or amend poor soils to improve fertility or structure. Otherwise, plants will look sickly, grow erratically, or fail to flower.

10) Always try to rely on power to cut labor costs, so construct beds so that power equipment can be used in and around the beds.

11) Do not buy plants unless they are hardy in your climate and only buy quality stock. If bargain stock is purchased, make sure it is guaranteed quality stock. Always know precisely what species you are getting and what the height and spread will be at maturity so as not to end up with a maintenance "headache" or small jungle.

12) Most important is to draw up a plan. Poor planning or failure to draw a plan usually results in poor utilization of plants and property.

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UNITY IN SOUTH FLORIDA

The golf industry had tremendous growth in the past decade. No area in the nation can match the growth of the southern three counties of Florida’s east coast. Dade, Broward and Palm Beach counties are now nearing the three hundred mark for number of courses. For decades South Florida GCSA was the only local association. But as the area grew, needs and desires changed. In 1976 the Tri-County GCSA was founded. Both associations are now affiliated chapters of the national GCSAA. The national GCSAA does not establish defined areas for a local organization. The overlapping of territory between the two local associations was a matter that needed to be resolved. Both groups were functioning in Palm Beach, Martin, and St. Lucie counties. Thus diluting the effectiveness of both associations.

A review of events in recent months is in order. South Florida GCSA suggested to its members in November 1978 that a decision was needed about a defined boundary line. South Florida GCSA would be located in Monroe, Dade, and Broward counties. Tri-County changed its board of directors in January to comply with national standards. Now all officers are golf course superintendents. February saw Tri-County become an affiliated chapter of the national GCSAA. In May Tri-County voted to change its name. The new name is Palm Beach Chapter GCSA. The word “chapter” was included to show support and affiliation with the state association. Also defined was a territory of Palm Beach, Martin, St. Lucie, and Indian River counties. In June South Florida GCSA officially approved their territory as the three southern counties previously mentioned. This becomes effective January 1980 for South Florida GCSA, the end of their fiscal year.

Now that you understand what happened let’s evaluate it for you individually. You as a golf course superintendent have been assigned a local association to be a member of. Which one depends upon where your club is located. Your home residence has no bearing. You can vote and hold office only in your local association. Anyone can always attend any meeting no matter where it is located. Commercial members can join any association they desire with no voting privilege. Any superintendent that joins either local association automatically becomes a member of the state association.

The decade of the 80’s will see the golf course superintendent continue to be a proud profession. Management assignments will continue to broaden beyond our previous duties. The leadership displayed of a smooth mutual division of local territory by the two associations will be a successful kickoff for the future. Now we all know where the term “grassroots politics” comes from. We are all ready to move forward together and concentrate on just the “grassroots”.

As your President, I must admit I've always had difficulty trying to write a quarterly message for *The South Florida Green*. I would usually procrastinate and hope for divine providence. When this failed, I would read other publications with President's messages for inspiration. So naturally one would think I would be ecstatic, this being my final message. No, I am not resigning as President, nor have I found another job and am moving, but *The South Florida Green* is.

As was discussed at our last meeting, *The South Florida Green* will become the new state magazine effective with the July issue. At our State Meeting on April 7, 1980, I made the motion *The South Florida Green* become the state magazine. This motion was unanimously approved. It was then followed by another motion that the same guidelines used to run *The South Florida Green* be continued. It was generally agreed upon that income generated by the magazine's first several issues would be set aside to insure the magazine's solvency as well as its quality.

We in South Florida have seen *The South Florida Green* grow from a simple six-page magazine to its present national status. This transformation was not achieved overnight, nor was it solely the work of one person. So it is only natural for those of us who have been associated with this magazine to feel a little melancholy with it leaving South Florida. I guess one could compare the growth of the magazine to the growth of a child. Now the time has come for the child to leave home and though we hate to see it go, we know if it is to continue to grow and be successful, it will need the support of more than just the superintendents in South Florida.

I do want to thank all of the members of the South Florida Superintendents Association for the unselfish stand they have taken on this issue as well as other issues this past year. I know it is not always easy to make a sacrifice or change in the name of a greater cause. The Board and I have mixed emotions about some decisions we have had to make this past year. They have not been easy. I do hope, however, they have been the right ones.

Farewell *South Florida Green*, we will miss you, but we wish you continued success in your new role as a communications tool for all the superintendents throughout the state of Florida.
President's Message

The transition of The South Florida Green into The Florida Green marks the beginning of a new era for golf course superintendents in the state of Florida. As professionals in the golf course industry our objectives and activities must be coordinated on a state wide basis in order to properly keep pace with today's technology and varied crises. We should continually seek to improve our professional image not only with upper management but with the general public. This can be demonstrated through work we do by continuing to upgrade our professional capabilities and through skilled communication such as this magazine. Only by making people aware of the skills, management, technology and immense responsibility required to operate a golf course facility, can the golf course superintendent receive the recognition for his accomplishments.

This magazine is a valuable communication tool which if used properly will create a multitude of benefits. It’s up to the individuals to promote themselves. The golf course superintendent is a great salesperson at budget time, why not promote his or herself with these same skills?

The re-organization of the Florida Golf Course Supt. Assoc. occurred nearly two years ago. From the beginning the officers of your local chapters have devoted many hours to carefully nurture and construct a solid foundation for our state association. Seven organized and unified chapters working toward a common goal and speaking with one voice can be more productive than a fragmented organization. This does not mean a loss of identity, functions or uniqueness for your local chapter. In fact, the accomplishments of each chapter will be magnified because of increased communication across the state.

As a state association our number one priority is to focus on Florida issues and meet the demands of our members and their chapters (an example would be registering a complaint on the ban of DBCP in Florida). The number two objective is to gain support and membership for the GCSAA. This is our national organization that needs our backing and input. The benefits will be many and the recognition that comes from unification of our efforts will be readily available to us.

But, there are many other benefits. Just recently, one of our fellow golf course superintendents Dan Meyers (CGCS) of the West Coast chapter had his story concerning golf course employees featured in the National Magazine, Golf Course Management. The article was pertinent to our problems, beneficial and educational.

The golf course superintendents in the state of Florida have been thrust into an enviable position. Because of geographical location, climate, tourist attractions, and expansion, Florida has the fastest growing golf industry in the country. We should take advantage of these opportunities and assume a leadership role in the nation’s turf industry.

Possibly, even with all our collaboration and hard work, government agencies will continue to tie our hands and people will still refer to us as “Greenskeepers”. It’s unfortunate that the work of qualified professionals can be affected or altered by the misuse of others less qualified and thousands of miles away. Let’s join together and try the positive approach. Support your local chapter, the state association and the GCSAA. Hopefully, we can continue to endeavor in the field we love for ourselves and the game of golf.
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Late one afternoon while sitting at my desk reflecting on the events that had taken place that day on the golf course, the door to my office opened and in walked a man with a briefcase. This is what transpired.

Salesman — I am looking for Mr. Smith.
Smith — I am John Smith.

Salesman — I am John Doe from the ABC Chemical Company. I have some products that can really help you (he hands me a lucite paperweight with 5 coins embedded in it and starts opening his briefcase).

Smith — I am not interested (I hand the paperweight back to the salesman).

Salesman — May I ask why?
Smith — Because your products are over priced for what you get.

Salesman — I am a new salesman with the company. The old salesman didn’t treat you right. Let me prove that I can save you money. What products do you need?

Smith — I am just starting my weed program. How much is 2,4-D?

Salesman — 30 gallon drum.

Smith — How much is 2,4-D?

Salesman — These prices are not for you. No sir. You get a real special price (he starts writing a lot of figures on a piece of paper). How does $6.48 a gallon sound.

Smith — Good, I am paying $7.15 a gallon from XYZ Company.

I am going to stop the conversation here to illustrate a point. Which company would you buy from? ABC? Sounds logical doesn’t it. The cost per gallon is 10% less. That will really help you control your budget (the manager has been on your tail lately about costs) which is running considerably over. Should a superintendent place an order at this point? Let’s listen to the rest of the conversation to find out.

Salesman — How many drums should I send out?
Smith — How many pounds of 2,4-D are in a gallon?
Salesman — Ah — Let’s see — It will cover 10,000 square feet.

Smith — I don’t care about your recommended rate. How many pounds of active ingredient per gallon?
Salesman — (Looking at sample label) 10,000 square feet sure is a lot for one gallon.

Smith — There it is at the bottom of the label: 1/4 pound of 2,4-D per gallon. The product I am buying from XYZ Company has 4 pounds per gallon. That means your product costs 16 times more. (See figure I.)

Salesman — How about liquid fertilizer. I can let you have it in 55 gallon lots for $6.50 a gallon.

Smith — I use liquid fertilizer on my golf course and I’m paying 50c a gallon for it. Now if you will excuse me I am very busy.

Salesman — But my product covers 25,000 square feet.

Smith — I said I am very busy. Good day.

Has this ever happened to you? Sure it has, we have all experienced this situation. How do you stand up to these salesmen? How can you be sure which salesman to buy from?

First, do not accept “free” gifts from salesmen. Do not deal with any company that will not give you a catalog. Do know how to read a label (both chemical and fertilizer) and insist on seeing the label before purchasing. Do not purchase if the concentration of active ingredient is not listed on the label. Compare prices of 2 or 3 companies before purchasing.

Lastly, always consider service and reputation of the supplier. Deal with good reputable companies that belong to the South Florida Golf Course Superintendents Association. They support our organization financially, we should support them with our business.

During these troubled times, management is looking to the golf course superintendent to give him the best golf course for least dollar. Can we fill the role?

I would like to leave you with this one thought. Are you ashamed to have other superintendents look in your chemical room?

### ANALYSIS OF CHEMICAL PRODUCTS

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Evaluating Golf Course Equipment for South Florida

by DAVID L. DeBRA

The uniqueness of golf course operations in South Florida is often misunderstood when evaluating turf maintenance equipment. It is a fact that no other part of the United States places the severe demands on turf equipment like the golf course operations in South Florida. The following considerations are often overlooked in evaluating the initial purchase, replacement and maintenance of turf equipment in the area South of Orlando.

First, the required time of usage of daily operated machines such as mowers, utility vehicles and tractors. These units will be used in South Florida 1,000 to 1,600 hours per year as compared to 750 to 1,200 hours in Georgia and Texas, 400 to 650 hours in Ohio and Illinois, 300 to 500 hours in Michigan, New York and Canada. The element of usage alone illustrates the drastic reduced life expectancy of equipment in South Florida as compared to other parts of the country.

The second consideration is the elements of sand, heat and corrosion. The Florida sand is a problem that does considerable damage to engines, bearings, chains, sprockets blades and other vulnerable areas of equipment. Compounding the problem is the extreme heat and humidity machines are exposed to during the summer causing special difficulty in air-cooled engines. The humid, salt air causes extensive corrosion damage on exposed metal components.

Another consideration that places demands on equipment is the Bermuda grass used almost exclusively on South Florida golf courses. The Bermuda grass, requiring constant de-thatching and aerating for best playing conditions and appearance, places a burden on specialized equipment designed for these procedures.

A final consideration that is often overlooked is the time available for preventative maintenance. In the Northern States, the winter season allows time for complete inspection and rebuilding of equipment, preventing damage to major components. The winter simply does not allow time for the South Florida courses for major rebuilding because of the continued demand for attention by the golf course.

I have observed that the courses that receive maximum life and efficiency from their equipment have a conscientious and detailed preventative maintenance program for replacing filters and oil, cleaning, lubricating and adjusting equipment. The superintendent has correctly found time to implement these daily procedures to assure maximum benefit and life from the equipment.

If all of the above are properly considered the realistic expected life of equipment in South Florida is as follows:
- Greens, tees, apron mowers, 3 to 4 years.
- Fairway mowers, 4 to 5 years.
- Tractors, 4 to 6 years.
- Utility vehicles, 4 to 5 years.
- Specialty equipment (aerators, de-thatchers, sprayers and sweepers) 5 to 6 years.

Several variables are involved in life span but the above scheduled has proven to be the proper time element before expecting major extensive repairs to equipment.

It is recommended that a realistic depreciation schedule of equipment would incorporate the lower yearly figure of the above schedule. The unique and demanding elements of a South Florida golf course operation requires a thorough evaluation of turf equipment and a proper comparison to operations in other parts of the United States. Budgets, depreciation schedules, and time of equipment replacement should reflect these considerations.

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A good supervisor, someone once said, is a guy who can step on your toes without messing up your shine.

I have yet to be bored by someone paying me a compliment.

If you wish to make a man your enemy, tell him simply, "You are wrong." This method works every-time.

If life hands you a lemon, make lemonade.

Nothing great was ever achieved without enthusiasm.
Replacement of golf course equipment can be one of the most difficult expenditures to be understood by Board and committee members. Being geared mainly to business and financial matters, justifying the need to replace equipment to such a group can be very effectively explained by the following article, which has proven successful to both my club and other area superintendents:

WEAR FACTOR — THE REASON WHY

Wear on equipment (mowers, tractors, loaders, and our own personal automobiles) is best defined in terms of miles.

Most modern day auto enthusiasts know and understand that when your car reaches 100,000 miles, it is about worn out. Keeping that in mind one can readily see the parallels in the following illustration:

Most American cars are driven on the highway at approximately 60 miles per hour using high gear. The engine r.p.m. (revolutions per minute) is about 2,100. In this example, if you were to drive for three hours, you would cover 180 miles.

Using this wear factor, we can convert hours of use on a mower, or any other piece of golf course equipment, to miles. Although golf course equipment customarily operates at only five to six miles per hour, and sometimes less, our engine r.p.m. is still at 2,100 and higher on one and two cylinder engines. The slow forward speeds are achieved by using a lower gear ratio.

With this in mind, the following comparison will be made using our triplex mowers as an example. They mow greens every day, seven days per week, 365 days per year. It takes an average of three hours per day. This means that the wear factor is equal to 180 miles per day — multiplied by seven days to equal 1,260 miles per week — multiplied by 52 weeks in a year, equaling 65,520 miles — multiplied by five years, which totals 327,600 miles.

In checking with engineers to confirm my theory on wear, I learned many other interesting facts about our business. Some of these engineers will tell you that stop-and-go driving and turning increases the wear factor greatly. With this in mind, consider the back-and-forth operation of most of our golf course equipment every day.

Another interesting point to be considered is that a car going down the highway at 60 miles per hour causes a cooling wind created by the velocity. We don't have that velocity for cooling an engine when operating at only five to six miles per hour. In addition, our radiators often get clogged with grass clippings and other debris common to golf courses, resulting in temperatures running even higher which further increases the wear factor.

There are other factors that contribute to the wear and tear, such as the early morning activity in the dew and frequent running through and over chemical and fertilizer applications, all of which are corrosive elements. Preventative maintenance and level of training of the operator can contribute greatly to the success and life of a piece of equipment.
How To Succeed As A Greens Chairman
By C. MICHAEL DUNN
Commodore Royal Palm Yacht and Country Club
Boca Raton, Florida

Next to being a major league umpire I can think of no job as thankless as a Greens Chairman's. A Greens Chairman needs a thick skin, a green thumb, a soft heart, a hard head, a refillable prescription for sleeping pills and an unlisted telephone number. In a club with 400 golfing members he has 400 assistant chairmen, not including the wives, some of whom should count double.

The Greens Chairman must produce greens that will stop a flyer out of the rough within two feet of the hole. He must engineer the fairway grass long enough to make the ball stand up as if it were teed and yet roll 50 yards after it lands. It's his responsibility to limit the rainfall between the hours of 9:00 p.m. and 5:00 a.m. and never let it rain hard enough to close the course. He's expected to make a greens mower last indefinitely and a fairway mower even longer. Gadgets such as trucksters, weed eaters, sod cutters and roto-tillers are looked upon by the Board of Governors as unnecessary frills.

Now I hate yard work. I have always hated yard work. I don't see eye to eye with things that grow. When I look at flowers they wilt. Born on a farm in Northern Michigan, I've always been grateful to my father for having the good sense to move to Chicago where most of the land is covered with concrete. So, when the Commodore of our club tapped me for the Greens Chairmanship I rebelled.

"Look, Mr. Commodore," I said with all the persuasiveness I could muster, "I couldn't make a petunia grow in the Garden of Eden."

"That's O.K." he said, "we don't need petunias. All we want is some nice green grass on the fairways and some even nicer and shorter grass on the greens."

"But," I pleaded, "I don't really know a . . . ."

"You'll learn," he said, and so, I became the Greens Chairman.

Feeling sorry for myself, I took a walk around the course. It made me feel worse. Robust beds of weeds nodded defiantly in the afternoon breeze. The grass looked tired, except for the vigorous growth that was taking over the cart paths and the shapeless bunkers stared at me like so many craters on the moon. "I must need a Greens Superintendent," I mused.

Unlike plumbers or doctors, Greens Superintendents don't list themselves in the yellow pages, so I decided a good place to look would be on someone else's golf course. All Greens Superintendents are nocturnal; just why they can't sleep like normal humans escapes me at the moment, but armed with this bit of insight I arrived at a nearby country club at dawn. The place was a beehive of activity. "How the hell did I get involved in this slave labor business," I wondered just as a tractor whizzed by.

"Watch yourself there, Buddy," the driver yelled over the roar of the engine. He was pulling what looked like a heavy farm disc cutting deep slits in the soil. In places it tore up big chunks of turf making the fairways look like great green noodles laid side by side. I caught him the next time around. He turned off the engine and swung around on the metal seat. "I'm the Greens Chairman of the club down the road. You the Superintendent here?"

"You'll find him over on the next fairway," he said. "Tell me," I said, my curiosity getting the best of me, "How come you're tearing up the course? Are they gonna make a subdivision here?"

"Nothing like that," he said, "I'm wiping out the nematodes."

"What are nematodes?"

"Did you say you're a Greens Chairman?" He looked at me and sighed, cranked up the tractor and continued his ripping operation.

I found the Superintendent studying a break in the main sprinkler line. He told me he had an outstanding assistant who was overdue for a top job. "I'd hate to lose him but it's not fair to hold him back any longer. His father is a Greenskeeper, his grandfather was a Greenskeeper and so was his great grandfather."

(Continued on Page 31)
“Sounds like the whole family is demented,” I said.
“Probably so,” he answered, “but you don’t have to to get into this business because it’ll drive you there soon enough. You’ll find out. Lot’s o’ luck.”

The new Superintendent arrived two weeks later, on the first of the month. We toured the course together. “Do you think we have any nematodes?” I asked.

“Well,” he said, “I don’t want to hurt your feelings the first day on the job but it looks to me like this is the international headquarters for nematodes and I’d say right now they’re holding their annual convention.”

“We have some weeds, too,” I said, weakly.

“Yeah, and bermuda mites.”

“Let’s go back to the barn,” I said. “Maybe we can contrive a plan to deal with the whole problem.”

We poured ourselves some black coffee from a pot that simmers all day on the far corner of a workbench. Then we sat down to drink coffee, argue, make notes, and draw sketches until late into the afternoon. I knew what the members wanted, or at least I thought I knew. To translate that into a golf course that would make them happy we decided to retain a recognized golf course architectural firm. This would assure us the needed course changes would be done professionally. Fairway bunkers, from years of raking and maintenance work, had become uninteresting, round, cavities, and the shape of the greens had lost their character. The lethal yellow epidemic had taken a toll of over 700 coconut palms, so there was plenty for an architect to do.

Then we decided to retain one of the leading agronomists in the Southeast to make monthly visits of inspection. Our abundant crop of goosegrass and other assorted irritants added to the nematode and bermuda mite population gave him plenty to do, too.

My assignment was to hold the membership at bay and to persuade the Board of Governors to supply the funds we needed to do the job. Being Vice Commodore and a member of the Board helped some, but it’s not easy to explain to an owner of a super market chain a criminal lawyer, a C.P.A. from Detroit, an industrial architect, a business consultant turned college president, and a vice president of marketing for an international oil company, why it costs so damned much to mow the lawn!

“Ye GODS!” they’d cried in unison, “All you gotta do is mow some grass, rake some sand and kill a bunch of weeds! How in hell can that cost a quarter of a million dollars?” So I, too, had plenty to do. When I asked for (and finally got) $50 an acre to kill the nematodes they almost accused me of personally infesting the course.

“We never heard of nematodes before you took this job.”

My first victory over the Board came when I pried a Triplex greens mower, and 100-gallon sprayer out of them in spite of their claim that I already had more equipment than the Florida State Highway Department. Sand to refurbish all the fairway bunkers, $6,500 worth, came a little easier. I delayed my request for $10,000 to install a liquid fertilizer system until the House Committee Chairman planned a request for new chairs for the country club dining room. We formed a coalition and maneuvered both through successfully.

But the big problem still lay ahead. Golf course beautification doesn’t come cheap, especially when an extensive tree planting program is a part of it. Using reverse strategy, when it came my turn to make the Greens Committee report at the November meeting I stated, simply, “The Greens and Grounds Committee makes no request for funds.” I received a standing ovation.

Meanwhile, thanks to my Greens Superintendent, the nematodes were gone along with the bermuda mites. The crowfoot was dead and so was creeping charlie and there was a thick carpet of bright green grass on the fairways. The greens were smooth, putted true and were newly shaped. Some of the bunkers had been rebuilt and there was fresh sand in them and in all the bunkers around the greens.

So, in the December meeting I hit them for $40,000 to beautify the course. There was hardly a whimper.

I’m the Commodore now, so I appointed myself to the job for another year. I know goosegrass when I see it; in fact it haunts my dreams at night. I can distinguish between dollarweed and dichondra. And I know what MSMA will do and why, sometimes, we add a little 2,4-D. After we spike the greens, if I see a little brown grass around the hole I know there is a tiny worm down in there just awaiting evening so he can come up and feast on those tender leaves of Tiftdwarf. So I’m gonna apply for the job again next year. After all, I wouldn’t want all that hard earned knowledge to go to waste. Besides, it’s easy . . . when you’ve got a top quality Greens Superintendent calling all the shots.

But I still hate yard work.
Riviera Country Club was the place and the occasion was awarding Past President "Blazers" to Tom Burton, Lou Oxnevad (shown shaking hands with Leroy Phillips) and Mike Barger. Congratulations fellows from our association.

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IRRIGATION SYSTEM INSTALLATION
AT GULFSTREAM GOLF CLUB
by STANLEY A. CARR

This article is similar to a talk given at the 1977 South Florida Golf Course Superintendent Meeting. The information that I shall give is not totally my own. Moreover, we would not have the fine system that we have today had our general manager, Jim Briggs, not done a lot of research and worked closely with me. These comments and recommendations generally refer to an installation on an existing golf course.

Gulfstream was built in 1921 on approximately 140 acres, of which one hundred acres are irrigated.

It is of utmost importance that a superintendent employ or have on his staff a representative to work with the irrigation contractor. It is virtually impossible for the superintendent to closely monitor the installation of the system and run the course operations at the same time. This representative should have a basic understanding of plumbing, pumps, electric controls, etc., with the prospect of being the irrigation specialist after installation of the system has been completed. Many clubs are reluctant to employ such a representative just to oversee the work done but when you think of buying a quarter million dollar system, it is very inexpensive insurance indeed. This representative should see that no pipe is placed into the ground without his inspection and that no deviations from the blue prints or specifications are made without direct consultation and approval from the superintendent. As our club president once said, “the superintendent has to marry the girl.” Basically, this is what we did at Gulfstream Golf Club, and I feel we have one of the finest systems available.

Listed below are some suggestions and recommendations that might prove helpful to anyone installing an automatic irrigation system:

1.) Determine the amount of acreage to be irrigated.
2.) Have a topographical map made of entire area to be irrigated.
3.) Check and select the source of water to be used.
   a.) pond
   b.) well fields
   The water supply is of extreme importance and should be studied thoroughly.
4.) Have a colored aerial photograph of the course taken and keep in the superintendents office to be used for reference work between the superintendent and the contractor.
5.) Take soil samples of the types of soil and or rock to determine possible problems on installation by the contractor.
6.) Check for prevailing wind directions and favor location of sprinkler heads toward wind.
7.) Determine the number of hours the course is available to irrigate.
8.) Can any part of existing manual system be used in order to reduce costs. At Gulfstream I decided to abandon the old system completely.
9.) Determine spacing of the heads, whether they are to be installed in triangular or square spacing, a more even distribution of water will usually be accomplished with a triangular placement.
10.) Decide upon an electric control system or a hydraulic system. Electric usually has more problems in this area due to electrical storms and will cost more to install.
11.) If your course has a course architect on a retaining basis it will probably pay to seek his advice.
12.) Specify electric wiring for control clocks to be installed on right hand side of the irrigation pipe and the hydraulic tubing to be installed on the left side of the irrigation pipe. This will help in locating tubes and wires in case of repairs.
13.) Specify depths of all installations
   a.) consider pipe size.
14.) Specify color coating for electric wiring.
15.) Identify locations for all field satellites being sure to have the ability to see the heads operating and if possible to be kept from the sight of golfers.
16.) Future expansions should always be considered at the time of installation.
17.) Specify poured concrete thrust blocks at all dead ends and tee-joints.
   Generally speaking some contractors place CBS blocks at these connections, however, I personally feel that poured concrete should be insisted upon.
18.) Divide your course into sufficient zonal areas so that certain areas can be taken out of service for repairs without interruption of main irrigation system.
19.) Include a rock clause for both the contractor and the club.
20.) Provide lightning arrestors on all satellites.
21.) Consider the installation of the rain gauge coupled with a shut off relay to cancel the central control.
22.) Be sure to specify types of satellite
   a.) Zero to 30, or zero to 60 minute timings.
   b.) Automatic and manual operation.
23.) Establish sequence of clocks to operate from greens back to tees.

(Continued on Page 35)
24. Specify that no wiring, tubing, or piping shall cross over one another.

25. Have contractor install snap valves at the back of each green and at the back of each tee.

26. Use clay valves to regulate pressure in lines.

27. Specify to speed heads in problem areas and have circle heads for perimeter irrigation.

28. Do not allow any splicing between controllers and be sure to use scotch-locks for electrical connections in satellites.

29. When gluing, specify all joints be glued one day before installing.

30. Make sure that all piping is installed with slight curves to allow for expansion and contractions.

31. All swing joints and risers should be prefabricated in a clean working area and not on the field.

32. Specify that no more excavation or trenching is to be done in a day that cannot be restored.

33. Specify electric wiring feeding satellites be in conduit for a minimum distance of six feet from satellites (this will protect wiring entering controllers from mechanical damage).

34. Specify twelve (12) inch concrete pads for satellites.

35. Determine the need for a filter system to ensure clear water from source of supply.

36. Decide on sprinkler head types — gear or impulse drive.

37. Establish work commencement and completion dates of installation and decide upon penalty of performance (bond posted).

38. If applicable check into the cost of hook up to city water.

39. Request contractor to specialize his crew so that the same man is responsible for the same function throughout the installation.

40. Demand a performance bond.

41. Demand insureability and certification of contractor.

42. Set up reasonable progress payment schedule retaining 10 percent for performance insurance.

43. Designate responsibility for restoration of underground utilities damaged by installation.

44. Require an “as built” drawing showing all locations of heads, controllers, valves, wiring, piping, drains, etc., to be brought up to date each week. This “as built” should be precise using bench marks for ease for identification and location. This is extremely important and vital and in many cases a failure of some installers.

45. Require a one-year warranty and guarantee on all parts, equipment and workmanship.

46. Demand balancing and adjustment of the system in the field to yield the greatest uniformity of irrigation. This is to be done by contractors in the presence of the course superintendent.

47. Specify location for central control — suggest superintendent’s office (in some cases under superintendent’s bed).

48. Specify adequate instructions of golf course personnel and use of new system.

I hope that this information will be helpful to those contemplating installing a new irrigation system.

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Technical Representative
ProTurf Division
O.M. Scott & Sons
1261 S.W. 27th Place
Boynton Beach, Florida 33435
Telephone: 305/734-2277

Dan McCoy
Technical Representative
ProTurf Division
O.M. Scott & Sons
9719 Winder Trail
Orlando, Florida 32817
Telephone: 305/677-4211
Role of the Golf Course Consultant

By MAX A. BROWN, Ph.D.

This article presents to you what I feel to be the present and future role of the golf course consultant. These thoughts are based on my experience as a consulting agronomist in all parts of this country and around the world for the past fourteen years.

An effective "cop-out" for me would be to present one picture to you — a group of golf course superintendents and another picture to golf course owners, managers and greens committee members. I won't do that; what I say here is my objective appraisal that I would tell to golf course superintendents, owners, managers and greens committee members alike.

DEFINITIONS

Let's begin our discussion by defining a few terms so that we all are talking about the same things:

First of all:  
1) Consultant: one who gives professional advice or services,
2) Consult: a) to ask advice or opinion, b) to deliberate together: confer. Therefore, a golf course consultant is one who is asked to give advice or opinion on golf course maintenance. Also, he must deliberate together or confer with a person. This person should be the golf course superintendent; too often it is with the golf course owner or manager, at the exclusion of the superintendent.

Many times I have been called upon by people other than the golf course superintendent to review a maintenance program. It is obvious that their purpose is to call in a hatchet-man to side against the superintendent. I don't do it. It works out better if management requests the superintendent to seek the help or guidance to solve the problem. If requested by the superintendent much more good can be done, simply through the cooperation which will result.

THE SUPERINTENDENT

What makes a good superintendent? How do you judge and say this guy is a better superintendent than the other guy? Simply by the day-in, day-out condition and playability of his golf course, for the money spent. He can only be judged by the quality of his product in view of the resources available to him. He may be stuck with a "dog" of a golf course and no amount of money or skill can make it look good — but he is still judged by it.

If we study this man that we judge to be a good superintendent, we invariably find him to have the three following qualities:

1) Well organized.
2) Technically, well founded in a) turf requirements, b) equipment, c) irrigation, etc.
3) Dedicated man, continually studying and learning.

The man in charge of operations like this finds it necessary to hire people to work for him who are in actual fact the superintendents on the individual golf courses. He no longer has the time to study each blade of grass on a daily basis. He finds himself conferring with his superintendents, giving advice and opinion. He finds himself to be almost a (shudder) consultant.

CONSULTANTS

A good superintendent has many sources of information at his disposal. With a legal problem he can call his lawyer, a medical problem his doctor, a financial problem his banker or accountant. For technical information on his golf course he can consult text books, or periodicals. He can ask a respected superintendent, call the county agent, one of the state turf extension men, or a USGA Green Section agronomist. Irrigation equipment manufacturers strongly recommend using a qualified irrigation consultant for irrigation problems. A professional golf course consultant is simply another source of information. Used properly, all of these sources of information are good forms of insurance against a small problem becoming a major calamity.

All of the above listed sources of information are technically consultants. Some you pay for by tax funds, others you pay for by private funds.

The important factor is that you know your sources of information and use them to your best advantages.

The role of the private golf course consultant has varied over the years in this country. In Florida, with its tremendous number of golf courses, the need for technical information has been particularly acute. Florida has had one of the strongest turf research and extension programs of any of the states and it's had a wealth of the best superintendents and best conditioned golf courses in the country. But the demand for perfection has been greater in Florida than in any other region of the country.

Private golf course consultants have come and gone over the years in Florida. Often, they have created bad impressions with the industry. We could blame several things for this: personality reasons, spreading too thin, too little knowledge, and various and sundry poor approaches to the business. But we cannot deny that a tremendous demand for turf consultants has existed, and the demand in the industry is obviously increasing.

What does an individual need, or what should you expect in a turf consultant?

1) Must be independent with no binding ties or axes to grind.
2) Must keep constantly abreast of latest technical information (pest control), equipment, managements, irrigation, etc. a) read literature, b) attend meetings and conferences c) visit courses and superintendents over a wide area.
3) Must know golf, and the relationship of turf to the game. (Grain, moving heights, footing, body, etc.)
4) Must be aware of maintenance practices and requirements of all types of golf courses over as broad an

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area as possible. Although conditions are different we can sometimes benefit by procedures used in Maine or California. Innovations are made by individual superintendents all around the world and he must be aware of these.

5) Must be able to work recommendations into the maintenance program, not simply make the recommendations. Anyone can tell a man what chemicals to use to control weeds in a green, in a lake or around trees, but how can he work it into the program if the crew is short and equipment is old?

TRENDS OF GOLF TURF INDUSTRY

1) Greater demand for perfection. Very little tolerance of imperfection.
2) Better men are increasingly becoming responsible for multiple golf course complexes, and for more than one independent course.
3) Top superintendents are increasingly budgeting funds each year for obtaining emergency help when and if necessary, and for a periodic review of their total operation. The funds are considered an investment in better golf turf and insurance against major problems. The greatest problem is finding the man or organization who is qualified, whose judgment you can trust and respect. If a problem arises it is better for the superintendent to solve it himself than to have management go outside for help. When management goes outside for help it seldom works. Complete acceptance and cooperation is required between the superintendent and the consultant or the time and money is wasted.

Schmeisser Scholarship Awarded

At a recent meeting of the Florida Turf-Grass Association Scholarship and Research Foundation Board of Directors, action was taken to create a scholarship at the Lake City Community College in memory of the late Hans C. Schmeisser, the "Grand Dean" of golf course superintendents.

This scholarship, named The Hans Schmeisser Memorial Award, will be made annually to the Lake City Community College student, enrolled in the Golf Course Operations School, that most exemplifies the qualities that Mr. Schmeisser possessed during his long, and most honored, turf career. This award carries a $1,000.00 cash compensation.

Mr. Schmeisser, who passed away in October, 1980, had been superintendent of Forest Hill Golf Course, West Palm Beach, for the past 15 years. He was a consultant, golf course designer and builder and superintendent for nearly all of his 88 years. He was made an honorary member of the FT-GA in 1976 and a posthumous confinement of the Golf Course Superintendent's Association of America "Distinguished Service Award" was made at their 1981 Annual Convention.

One of his sons, Otto, is a member of the FT-GA and is superintendent of the Everglades Club in Palm Beach. His other son, John, is associated with Robert Trent Jones, the noted golf course architect. ■
In 1958 the FTGA membership committee had a meeting at the "Famous" Restaurant in Lake Worth. The six member committee agreed to have a reunion twenty years later to discuss changes in the industry. September 8, 1978 they were reunited and used the opportunity for a surprise birthday party for Jimmie Blackledge.

The reunion location was different since the Broz family moved their restaurant to the Bohemian Garden in Lake Worth. Also two new guests were invited. Those attending were Ralph White, Joe Konwinski, Al Witherspoon, Jim Ousley Sr., Dr. Gene Nutter, and guests Dr. G. C. Horn and Dr. Roy Bear.

The eight member group has a composite total of 249 years turf experience. Because of the vast experience, a background of each person will help new members to our association. The group is lead by Jimmie Blackledge. Jimmie started in 1930 as the Superintendent at the Indian Creek Country Club in Miami. He is past president of our association and served on the board of directors for twenty years. Jimmie is currently a turf consultant for Southern Turf Nursery. Dr. Jean Nutter started in 1948. Gene is a past professor at the University of Florida and Lake City Community College. In both instances he started the turf programs at each school. Gene now is a Vice President with Chem Lawn Inc. Gene flew in from Atlanta just for the reunion. Ralph White started his turf career in 1953. He has been a professor at the University of Florida and is now working as the Vice President of Southern Turf Nursery, Tifton, Georgia. He also came to town just for the gathering. Al Witherspoon has been working with turf since 1954. A University of Florida graduate Al has been superintendent of numerous south Florida golf courses. Al is now in charge of the Wellington Polo Fields. Jim Ousley Sr. is the founder of Ousley Sod Company. His turf experience dates to 1946. He is the leader in the development of certified turf in Florida. Joe Konwinski started working with turf in 1945. Joe is a past president of our association and served as the Secretary-Treasurer for fourteen years. He was the Superintendent of the Lake Worth Country Club for thirteen years. Joe is currently a turf consultant and instructor of turf classes at Palm Beach Junior College. Dr. G. C. Horn is a past professor at the University of Florida and is now a statewide turf consultant. Dr. Roy Bear started his turf career in 1945. Before the current University of Florida Plantation Research Station was established the research was done by Dr. Bear in Belle Glade. He is now a turf consultant.

In 1958 there were 125 golf courses in the state. Now there is more than that total just in Palm Beach county. The growth of the turf industry has exceeded even these leaders. Now the state total of golf courses nears the 700 mark.

The party night was closed at the Polish Club in Lake Worth. While Ralph White was dancing alone the other seven members were planning for 1998.
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The superintendent stood at the golden gate. His head was bent low. He merely asked the man of fate which way he ought to go. "What have you done," St. Peter said, "to seek admittance here?" "I maintained a Country Club on earth for many and many a year," St. Peter opened wide the gate and gently pressed the bell. "Come in," he said, "and choose your harp — you've had your share of hell."

And now we are talking about having to use "dirty water", "once used water", "effluent water", or "reclaimed water". How many of you today use reclaimed water? How many would like to use effluent water? There may come a time when we, as superintendents will have no choice. Recycling appears to be our key to survival. Recycling of many of our resources is here to stay. And it is correct!

There is absolutely no reason we have to have fresh water pumped out of the ground to water our turf while millions of gallons of "once used" water is wasted and allowed to run down dry washes, into rivers or into our lakes. First we must recycle in order not to use up our water resources. Second, federal laws will soon make it more and more difficult to simply waste effluent. And third, public opinion as to ground water pumping may cause the use of effluent and this could happen to you.

In early 1976 the city of Tucson, had plans to construct a Robert Trent Jones course. The drawings were complete, land was purchased and the construction contract was signed. Public opinion caused the mayor and council to stop construction the day it started. The reason was water — the use of one million gallons per day of fresh pumped ground water and it cost the city of Tucson $250,000 not to build the course.

To my knowledge, golf courses are the only legal use of effluent at this time. All this talk about effluent and we have not determined exactly what effluent really is. Effluent is the liquid that comes out of a sewage treatment plant after completion of the treatment process. A sewage treatment plant is basically a big water cleaning machine. It consists of a series of tanks, screens, filters and other devices to separate out the wastes in sewor water.

As raw sewage enters a plant for treatment, it flows through screens which remove large objects such as rags, rocks and sticks. Then the sewage passes through a huge grinder. Next it passes through a grit chamber where sand, grit and small objects are allowed to settle to the bottom. Some suspended solids also settle out here. After the grit and etc. are removed, the sewage still contains large amounts of dissolved organic and inorganic matter as well as suspended matter. At this point the speed of flow is reduced and more suspended solids sink to the bottom of the tank. This mass of solids is called raw sludge. Now remember raw sludge and how we got it because we are coming back to it later. This sludge is removed from the tank for further treatment (as with milorganite) or disposal. This is as far as some plants treat sewage and the liquid remaining is pumped for turf.

If secondary treatment is to be, there are two main methods of treatment: 1. the trickling filter process and, 2. the activated sludge process. The trickling filter is a bed of stones from three to ten feet deep over which sewage is sprayed so it can trickle down through the layers of rock. Bacteria from the sewage collects on the rocks and consumes most of the organic matter in the sewage. The cleaned water flows out through pipes at the bottom of the filter and is treated with chlorine to kill the remaining bacteria. This water is now discharged from the plant and can be utilized for plants. The activated sludge speeds up the work of the bacteria in sewage by mixing sewage, recycled sludge (full of bacteria) and huge amounts of air. The sludge with its load of bacteria is mixed with the sewage and air. The bacteria then consumes the organic matter in the mixture as it sits for several hours. Then the mixture flows to another tank where the solids are allowed to settle to the bottom. The cleaned water is chlorinated and discharged. Some sludge is activated with additional

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bacteria and returned to be mixed with more air and more sewage. Proper chlorination of this treated waste water will kill more than 99% of the harmful bacteria in the effluent. — Remember I said bacteria. The secret to this process is a super saturation of bacteria and air.

Lets discuss the terms associated with waste water. **Sludge** — the solid matter that settles to the bottom, floats or becomes suspended in the sedimentation tanks and must be disposed of by filtration and incineration or by transport to appropriate disposal sites. **Primary Treatment** — the stage in basic treatment that removes the material that floats or will settle in sewage. It is accomplished by using screens to catch the floating objects and tanks for heavy matter to settle in. **Secondary Treatment** — second step in which bacteria consumes the organic part of the wastes. It is accomplished by bringing the sewage and bacteria together in the trickling filters or in the activated sludge process. **Suspended Solids** — small particles of solid pollutants which are present in sewage and which resists separation from the water by conventional means.

Now lets get down to the “brass tacks” or basics. What is the effluent or “once used” water really like? First it is an excellent media for growth — a beautiful liquid fertilizer. The water I was working with contained 7.3 pounds of actual N per 1000 sq. ft. per year. This N was 8.1 ppm organic or slow release and 17.5 ppm inorganic or that N that may be taken up faster. Phosphate equals 30 ppm. Potassium equals 104 ppm. Also the water contains sodium, calcium, magnesium, iron, zinc, sulfur, boron, copper and molybdenum. Ph is 7.7. Great stuff — all required elements. Good Ph — Perfect! However there are a few problems:

**Salts** — May be high — as much as 1000 - 2000 ppm. — be careful — test your water — test your soil — know what is going on. Remember: less than 650 ppm salt useful, 650 -2000 ppm must use periodic leaching, more than 2000 ppm limited usefulness. Also remember least tolerant grasses: Highland, Colonial Bent, Kentucky Bluegrass. Of seven creeping Bents — top growth slowed as salt increased. Arlington, Seaside, Pennlu, Old Orchard — most tolerant. Congressional and Cohansey intermediate. Penncross least tolerant. Also having medium tolerance is perennial rye, tall fescue and orchard grass. Most tolerant are all the bermudas. **Sodium** — may be high — ours was 104 ppm — continuous use of effluent may allow Na to clog clay particles — decrease drainage and could be fatal to some soils. Seaside found to be most tolerant to alkali conditions. **Heavy Metals** — these cannot as yet be removed in tertiary treated water. These may collect in some soils and cause problems. However, this is more a problem in highly industrial areas. Also our calcareous soils precipitate out some of these therefore causing us a small problem, however, these metals end up somewhere in our world.

Last and by far the most apparent and troublesome is algae growth. Our water fresh out of the plant looked like tap water. Of course if you drink it, you are going to be very busy for awhile for it actually would be a “dose of salts”. As
soon as this water is exposed to sunlight we have a tremendous bloom of algae. I have seen it 6-8 inches thick floating on the surface. It clogs valves and sprinklers. It smells and feels greasy. It dies and floats to the surface as a dark brown heavy froth and it was mine, and it will be your job to convince your employees and players that it is algae and not something else. However everything is not what it might appear to be and that reminds me of a story. — Chicken hawk story - Lark, Dove, Duck (Drake).

This brings up another problem and that is people. People and their opinions. Many feel effluent is dirty. Course employees don't like to work in it. Players are very sensitive to getting water on their clothes. There may also be problems with uninformed people drinking out of sprinklers and we already know where he is going to spend some time. Seriously, those working with effluent should keep up on all immunizations because as we said before, chlorine kills bacteria, it does not to my knowledge kill virus. Nothing that is available today kills all virus. If we could discover this procedure, I am sure we would have the cure for the common cold.

Effluent is here to stay; It should be used!

California law AB 1784 (papain regulation) Section 13550 of California's western code makes it illegal to use fresh water on a golf course if effluent is reasonably available. Now convince me, we as superintendents are not going to have to live with it and learn about it. Some solutions to our problems have been: Dual water systems may be necessary for greens — one system effluent and one system fresh water to be used to leach out salts, sodium (after calcium applications) and heavy metals. Leaching rule: 6 inches water to remove ½ salts in 1 foot soil — 24 inches water to remove 9/10 salts in 1 foot soil.

Algae — Do not allow the effluent to stand in the sun. Allow no exposure to the sun. Take the water out of the plant straight into the irrigation system or into a closed tank. Also add strainers or sand separators to the system as insurance. Use "dirty water" irrigation parts. There are some available on the market.

Another aspect is education. The people associated with the course must be educated. They must be convinced on the use of effluent. Remind them that grass purifies. 60% of the water used returns to the environment pure. An 18-hole golf course, if watered 1 inch can absorb four million gallons of water. Remind them that grass produces oxygen. One acre produces enough pure O2 for four people for one year. And 18-hole golf course produces enough for the life support of 1,000,000 people and it is clean and pure.

Then after all this you might want to write a letter to Santa Claus expressing your desires. Maybe it should go something like this:

Dear Santa Claus:

Please leave me 18 greens that will be proof against wear and tear, disease, bugs, unreasonable players and other pests. Please leave at Tom Smith's house: one durable soft rubber putter which may be cast violently on the ground without injuring the turf on my greens. Please leave at Ed Jones's house one digging fork and a spade in order that he may have something to dig with in his back yard to satisfy his craving for digging and thus relieve the strain on our tees. Please leave some message of inspiration with the Royal and Ancient and the USGA which will encourage them to adopt a new cup with a diameter of at least ten feet so that in the future it may be feasible, if there are any missed putts, to blame them on the player rather than on the superintendent. Please leave your message of good will firmly fixed in the haughty hearts of our members and make it last at least for many months and make it possible for the superintendent to actually enjoy his work within a month after he found it necessary to close the course for a single day.

If you will do all this dear Santa, you need not visit my house. We'll take care of the kids this year.

Humbly yours,
The Superintendent

Editor's Note:
Bob Sanders, CGCS is the Golf Course Superintendent at the Skyline Country Club, Tucson, Arizona.
Our thanks to Bob and the other fine people who keep sending us first rate articles to keep "The South Florida Green" No. 1 in Turf Publications.
We try to print only first run articles and we welcome any topic that a turf related person would like to share with our readers.

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TEE TO GREEN

By DAVE BAILEY

The following is an interview with B. J. Johnson. He is an associate professor of agronomy with the University of Georgia. He was the education guest speaker at the July meeting of our association.

Question: Where has your research been done?
Johnson: On test plots and at seven golf courses over a three year period of time. The location is about forty miles south of Atlanta.

Question: Upon what weed is Sencor most effective?
Johnson: Your greatest problem weed, goosegrass and crowfoot.

Question: What application rate is giving the best results?
Johnson: Remember the best rates mean weed killing with as small amount of damage as possible. To achieve this goal the best test results are as follows. Mix MSMA (monosodium acid methanearsonate) and Sencor. On a one acre basis use 2.0 pounds active ingredient MSMA and 1/8 pound active ingredient Sencor. Remember this means ACTIVE ingredient. That will become a tank mix of 1-2/3 quart per acre of MSMA if you use 6.0 active MSMA. The total ingredient of Sencor product from the bag would be 1/4 pound or 4 ounces per acre. Higher rates of Sencor have been used in the past when not mixed with MSMA. If EPA takes MSMA off the market we may be left with Sencor as our base material.

Question: What area is your research work?
Johnson: I deal primarily in herbicide treatment.

Question: What is the best new herbicide chemical in the last ten years?
Johnson: The best product researched and now on the market in recent years is Metribuzin. (4-Amino-6-(1,1-dimethyl-ethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one)

Question: This active ingredient translates into what product trade name?
Johnson: Mobay Chemical Corporation calls their product SENOR. Dupont Chemical Corporation calls their product LEON.

Since only Mobay is actively selling their product from this point on in the discussion only Sencor will be referred to. Sencor is a 50% wettable powder herbicide.

Question: When did you first start working with Sencor?
Johnson: In 1973, it was labeled in Florida and Georgia in 1978.

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(Continued on Page 45)
on bermuda grass and is very selective. It is a product of Rohm and Haas, the active ingredient is 3, 5-dichloro-N-(1,1-dimethyl-2-propynyl)-benzamide.

Question: We often criticize researchers for working only on test plots what is your comment?
Johnson: We do hear that often, that is why I worked with Sencor for three years on seven golf courses.

Question: What is your main message to us?
Johnson: Often chemical salesmen are too influential on rates and not on purpose. Always use test plots yourself. Do not spray the entire golf course and then be sorry. It is very important to keep good records on all your spraying. Local people need a good current education on weed killing. Always understand your rates and keep good calibration of application. Our work is only as good as your application.

HOOKS AND SLICES

The salesman mentioned that he'd got three orders so far that day: “Get out. Stay out. And don’t come back.”

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Jimmy Blackledge
Motivated Turfgrass Research in Florida

By DR. ROY A. BAIR

Jimmy first visited the Everglades Experiment Station branch of the University of Florida at Belle Glade in 1946. At that time we had some 1700 grasses and legumes from all over the world planted in 10 X 5 ft plots. Although these had been acquired primarily to find plant species which would put South Florida in the cattle business, Blackledge pointed out that many of the grasses were low growing types which ought to be mowed and evaluated for lawn and golf course usefulness.

When he then donated a greens mower and a park mower we replanted a hundred or so grasses in a separate turfgrass nursery and began to mow some of them daily, others once a week.

Dr. Fred V. Grau of the USGA Greens Section then entered the picture by extending a modest grant of money and by sending us all the bentgrass varieties then available.

By 1950 we had a total of 408 grasses in our plots under a regular mowing schedule. These included 120 bermudagrass strains, 60 bents, 20 zoysias, 17 St. Augustine grasses, and 11 bahias. The large number of bermudagrasses was the result of our spending many self-financed weekends visiting golf courses to look for volunteer strains of the seeded grass which appeared to be "different".

By this time we had also accomplished our primary mission of finding grasses for South Florida cattle. There were now 40,000 head in Palm Beach County, as contrasted with fewer than 1000 ten years earlier, mostly because of the usefulness of the new Pangolaggrass and Roselawn St. Augustine.

As a direct spin-off of the grass testing program for cattle, and Jimmy Blackledge's encouragement, we were able in 1950 to release several new turfgrasses which for a time

(Continued on Page 49)
were improvements on the old Arizona seeded bermudas:

For lawns
Roselawn St. Augustine
Paraguay Bahia

For golf courses, bermudas
Greens
Everglades 1
Everglades 3
Bayshore
Fairways
Ormond

Several years later Gainesville released one of the St. Augustine bitter blue accessions from our Belle Glade nurseries, giving it the name “FLORATINE”. We obtained this in the mid-forties from the Blossom Estate in Palm Beach.

Several “Firsts” may be of historical interest:

1946. The first ANNUAL TURFGRASS FIELD DAY was held in Belle Glade at the experimental grass nurseries in October.

1946. Before 2,4-D was given this abbreviated name we reported killing creeping charlie (matchweeds) and water hyacinths with it — the first use of this herbicide in Florida.

1947. TROPICAL TURF TIPS, probably the first monthly turfgrass publication in the U.S., was instituted in March. An amazing 89 of 100 golf course superintendents who got this first edition wrote to request their names be put on a mailing list. Three months later this list had grown to 300.

1947. The First Annual Turfgrass Management Conference was held in Miami Beach in May. Subsequently these yearly meetings were held at St. Petersburg, Jacksonville, and Palm Beach.

1947. At the Indian Creek Country Club, Miami Beach, 206 grasses were planted in observational plots. Several bentgrass varieties lived over two years here.

1948. Before ALDRIN insecticide production was assumed by Shell Chemical, and even before it was named, we reported that on a tee infested with mole crickets at the Belle Glade 9-hole golf course, crickets were killed daily for 30 days following treatment.

1949. At Johnny Schabinger’s Palm Beach Golf Club, we reported that TERSAN fungicide gave us more protection against Rhizoctonia fungus on ryegrass winter greens than did four other chemicals tested. We got the same results on the golf course at Belle Glade.

1950. Ammonium sulphate trials on greens at Belle Glade gave slightly better growth responses than did sodium nitrate, uramon or ureaform nitrogen.

Soluble fertilizer applied through greens irrigation proved fully as satisfactory as solid fertilizer applications.

1950. Test plots of up to 100 of the more promising turfgrasses had by now been established also at Ponte Vedra, a cemetery in West Palm Beach, and at branch experiment stations of the U of F at Homestead, Sanford and Leesburg.

ONE REGRET

We released ORMOND bermudagrass because of its immense vitality. If we had known how it would invade greens after planting only on fairways, we would probably have suppressed it.

Possibly 100 superintendents will attend the funeral of this investigator for the purpose of standing in line for the opportunity of planting Ormond on his grave.
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Three Distinguished Service Awards were presented at the 52nd International Turfgrass Conference and Show by the GCSAA. This is our profession’s highest honor. The awards were given to Dr. Ralph Engel, research professor in Turfgrass management at Rutgers University; Geoffrey Cornish, golf course architect of more than 170 courses; and Hans Schmeisser, Florida golf course superintendent for over 50 years. He died October 26, 1980, age 88.

The nomination of Schmeisser was a joint movement of South Florida and the Palm Beach chapters. He was the superintendent of Forest Hills Golf Course, West Palm Beach. Even at his advanced age he was still very active in both his local chapters.

To review Schmeisser’s career is a journey back into Florida golfing history. Born and educated in his native Germany, he trained in horticulture, after serving in World War I. Upon moving here he worked with Baron Collier to landscape Everglades City. The year was 1929. Several years later he built a resort golf course there. Remember this was 50 years ago! At the time there was less than a dozen courses in the entire state. During the years from 1948 through 1980 he was involved with design, building or rebuilding of over 25 courses with many famous architects. He had been a turf consultant for many clubs throughout the south. People that knew him will remember his high professional standards which are guidelines for all of us today. He was always experimenting with new ideas, grasses, and equipment. He used 2,4-D in experiments six years before it was marketed. In 1951 he was the first to use hybrid turf Bermuda on a golf course. Ray Jensen, noted past president of Southern Turf Nursery, credits Schmeisser with the invention of the fairway sprig planter. Jensen says, “In 1957 he invited us to plant a par three golf course in Lakeland. He had designed the course. This job opened up the opportunity to spread vegetative hybrids to the far corners of the world. Prior to the Lakeland experience our method of planting sprigs was by hand or with a one row tobacco planter. When I told him I had doubts about getting that much grass into the ground, he said not to worry, he would show me how to get it done. When we arrived on the scene, Schmeisser introduced me to the first straight disc planter. When we finished the job, he told me to go home and build my own machine”. Dr. Glenn Burton, 1958 Distinguished Service Award recipient said, “I can think of no one who would have a better total record than his.” Tom Mascaro, 1976 Distinguished Service Award recipient, said, “I took my first greens aerator to Schmeisser because he would immediately tell me if it was good or not.” Jor Konwinski, FTGA president, says, “The integrity, success and professionalism of the golf course superintendents way of life is a result of men like Hans Schmeisser.” Bill Wagner, state association president, said, “Pioneers in exploration are often remembered by a body of water or a
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 the Florida Green.
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-year-old 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.

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.

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.

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.
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 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 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 gofer, 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."

"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 aggressive actions to find them."
When you speak of taking care of greens top dressing rates among the top priorities. But along with everything else, the cost of performing this necessary function has gone way up! Supers who have top dressed with a top-dress mix, on a regular basis, are having a hard time justifying the cost of this material.

Our costs for equipment, labor, and materials have far out-paced our income, consequently we have to find newer and more economical ways of accomplishing the same ends. One way many are now using is the substituting of regular white or trap sand for top-dressing. With its cost at about half of what a mix would run, it seems to be the logical answer. There are those circumstances when you have to use a mix, either for the organics, or to have amendments such as charcoal etc. in an easy to apply form. Conversations I have had with Superintendents who use one or both, found the majority felt very good about the results of straight sand as a top-dressing.

John Luper at Countryside Country Club prefers a mix but uses sand in his top-dressing every three weeks program. He used top-dressing along with light verticuting, and has been on this program for three years.

At Clearwater Country Club, Joe Clay uses an 80/20 mix when he top-dresses lightly each month.

Sugar Mill Woods where Richard Mann is Superintendent, was using builders sand but found it to be a little too fine. Now he is using a 90/10 mix just when aerifying.

Lee Todd at Dunedin Country Club uses a 90/10 mix four times a year. He uses the 90/10 very lightly. Lee likes to use his core processor for top-dressing material when he aerates.

At Plant City Golf and Country Club we have been using trap sand with good results. The only drawback are the occasional pea sized chunks in the sand. We are planning to screen our sand or perhaps look into D.O.T. spec sand which I understand is pretty well screened when you get it. We are now using a vicon spreader to top-dress, and as long as there are small rocks in the mix we have to drag it in to remove them, where we had no chunks, dragging was unnecessary, as about five minutes of irrigation settles the sand right down in.

"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."

**STRAIGHT SHOTS**

Death and taxes may always be with us but death doesn't get any worse.

- No matter what happens there's always somebody who knew it would.
- If you think nobody cares if you are alive, try missing a couple of car payments.
- Speak when you are angry and you will make the best speech you will ever regret.
- Few things help an individual more than to place responsibility upon him and to let him know that you trust him.

West Coast Buccaneers

By REED LeFEBVRE
Pines & Palms Management Corp.

Lee Todd at Dunedin Country Club uses a 90/10 mix four times a year. He uses the 90/10 very lightly. Lee likes to use his core processor for top-dressing material when he aerates.
FLORIDA GOLF TEAM REPEATS AS NATIONAL CHAMPIONS

One of the most difficult things to do in any sport, at any level of competition, is for a defending champion to successfully retain the title. The Florida GCSA golf team did just that as they again won the GCSAA national team championship. Since the two day event was held at Disney World, Orlando, we were also the tournament host.

It was the third straight tournament in which a team from Florida came away with top honors. The 1980 champs were the Florida West Coast chapter. This year’s foursome won their place on the team in three regional qualifying tournaments, and their names will be engraved on an antique silver trophy donated by the Scottish Golf Greenskeepers Association in 1972. The chapter championship, in which teams combine their three best scores, have been a GCSAA tradition since 1946. The winning team consisted of Bill Whitaker, CGCS, Palm Beach chapter; Ron Hill, CGCS, North Florida chapter; Fred Klauk, Palm Beach chapter; and Dan Meyers, CGCS, West Coast chapter.

Bill Whitaker was the first day tournament leader as his 71 paced the team to a six-stroke lead. The second day scores of Ron Hill and Fred Klauk with 74's and Dan Meyers 76 enabled the team to win by eight strokes over runnerup Carolina GCSA. The third place honors went to the local Central Florida chapter. Their team consisted of Joe Ondo, Dennis Parker, and Jim Ellison who fired a 71 on the closing day.

In the net handicap division Palm Beach chapter placed second. They lost to the New Jersey GCSA because the Palm Beachers had to give away 52 strokes per day! The Palm Beach team consisted of Kevin Downing, Jack Cunningham, Mark Henderson, and Jim Watson.

Individual honors were won by Mike Apodaca, Horizon Country Club, Belen, New Mexico. His great second round of 69 left the runnerup six strokes back, and our own Ron Hill seven off the pace. Apodaca, who had been among the top finishers in the past four GCSAA tournaments, finally claimed the top prize, a silver replica of the U.S. Open Championship Cup donated in 1954 by the USGA.

Next year the tournament will be held in North Carolina during February. We will be back to defend our two consecutive titles. But if the 14th club in the bag needs to be a snow shovel we may not be the pretournament favorite.

(Continued on Page 58)
Individual tourney winner Mike Apodaca coasted to victory with final round 69.

Ron Hill drew the attention of GCSAA headquarters staffers Diana Green and Larry Goldsmith.

Jim Ellison had the hottest putter on the final day. His 71 paced the Central Florida chapter to third place.

Fred Klauk used high finish and so did the team!

**Training Assistants Demands Skill**

Developing an assistant is one of the challenging jobs an administrator can have. When the trainee takes over a top-level position he probably will adhere to the good business practices learned on the job.

Developing an assistant is hard work, requiring careful attention to details and explanations while yielding an enormous amount of confidence in and responsibility to the trainee. Here are a few items that may help in attempting to develop an assistant:

**GIVE HIM THE FACTS:** Only by being informed about his responsibilities and authorities can an assistant get a clear picture of what he is to do and how he should do it. A job description should be developed to give a trainee some guidelines. Personally introduce the assistant to those with whom he will be working.

**SMOOTH HIS PATH:** Request employees who work with your assistant to cooperate with him. Inform everyone of the duties he will be performing — then impress upon him the importance of earning the respect and confidence of these employees.

**SHARE KNOWLEDGE:** You must keep the assistant informed of your plans, your progress and your reasons for making each move. If you expect him to do a good job, you must share your knowledge with your assistant. Warn him of problem areas and see that he learns the ins and outs of working for you. Neglecting to provide background information keeps the assistant in the dark and prevents him from performing to the best of his ability as well as makes him look bad in the eyes of those with whom he must work.

**ADD RESPONSIBILITY GRADUALLY:** Let the assistant get a feel for his job. Then gradually give him additional small doses of responsibility. By working in this fashion he will gradually absorb additional knowledge and pick up those qualities that make a manager competent.

**HOLD A LOOSE REIN:** An assistant who is constantly being checked on gets the feeling he is not trusted and this retards his growth as a manager. Let loose and give your assistant a free rein — let him make decisions and learn by his mistakes. You don't want a trainee to lose his initiative; but keeping him under your finger can snuff out any spark or flame of initiative.

Reprinted in part from *A Patch of Green.*
Goosegrass (Elusine indica) can be found throughout the United States with the exception of the mountainous regions and northern plains. Persisting on compacted soils, it is most often visible on areas of heavy traffic, such as along foot paths, and golf cart trails. Due to its prostrate growth habit, goosegrass will tolerate closely mowed putting green heights, and can be most difficult to control under these low mowing conditions.

An annual grass reproduced by seeds, a single mature plant can produce between 20,000 to 50,000 seeds on 3 to 7 fingerlike racemes per spike. Seeds germinate when daily average soil temperatures at or near the surface are 65 to 67 degrees F. This means that goosegrass can germinate throughout the summer growing season, and starts in February in Florida. In South Florida, goosegrass often acts like a perennial, and is present year round.

Long seasonal growth means that herbicide control of goosegrass needs critical timing, for best results. Pre-emergence herbicide controls used at present need either a long residual during a single application, or two safely applied applications between early and late spring. Some herbicides used at present for goosegrass control are benefin (Balan), oxadiazon (Ronstar), or a combination of oxadiazon plus bensulide (Betasan).

Post emergence control of goosegrass with MSMA plus metribuzin (Sencor) or Asulam (Asulox) is usually applied in late spring/early summer. Often mature plants are difficult to control and have to be spot treated by hand with a non-selective herbicide such as glyphosate (Roundup). Because goosegrass has a fibrous root system, one control often used is to cut out the crown of the plant with a sharp tool. New herbicides are being evaluated constantly for safer, more selective control.
Watching Your Tees & Q's

by Steve Batten and Bud White
United States Golf Association—Green Section
Southeastern Region

MONTY MONCRIEF RETIRES

As of June 30, 1982, James B. (Monty) Moncrief, Director of the USGA Green Section, Southeastern Region, will officially retire. For more than 25 years, Monty through the Green Section, has served over 100 golf courses in Florida. Monty always said he was in the "information sharing business" as he talked about growing turfgrass with his colleagues.

During this time, he was responsible for bringing the first Tifdwarf bermudagrass plug to Dr. Glen Burton in 1961 for field evaluation. Since then, he has continued bringing plugs of natural mutations from golf courses to Tifton, Georgia, hoping to help further improve the section of fine bladed bermudagrasses.

Monty is a member of the American Society of Agronomy and is a certified profession agronomist. He has always supported superintendents association efforts, which is reflected by his membership in 13 of these organizations. Monty has consulted in 19 states and 6 countries outside the U.S. He has just received the A.W. Crain Diamond Award, the highest turfgrass award given in Texas. Other honors include the indoctrination into the Oklahoma Turfgrass Research Foundation Hall of Fame Award in 1977.

When asked what he will do after retirement, Monty said he's going to join the big league and play all those golf courses he visited. That should keep him busy for the next 25 years. If you see Monty playing golf, be sure to remind him of a few simple rules he often spoke of. That is, play the course as you find it, and the ball where it lies.

Monty will remain very active in the Green Section and the turf industry after his retirement. He is part of the new USGA Turfgrass Research Foundation Committee which will fund hundreds of thousands of dollars for turf research over the next year. He will also frequent superintendent association meetings and accept speaking engagements.

Monty Moncrief may get a chance to catch his breath, but he will never retire...we won't let him!

Charles "Bud" White, Southeastern Senior Agronomist, will become the Southeastern Regional Director for the USGA following Monty's (semi-) retirement. The office will still be housed on the University of Georgia campus in Athens, Georgia. Since last fall's football season, Bud is the only Clemson grad allowed near the University of Georgia campus.

NEW USGA OFFICE IN FLORIDA

The Southeastern Region of the Green Section now has a new sub-regional office in Florida. This office will be headed by Steve Batten and located in Lake Worth. Steve joined the USGA on February 16, 1982—25 years to the day after Monty began his USGA career. Steve is originally from Okalhoma City, Oklahoma and has a BS and MS in agronomy from Oklahoma State University. During the past four years he has been the research associate for Dr. James Beard at Texas A&M University.

The new office in Florida is the product of over ten years of promotion by Monty Moncrief. Florida has over 30% of the total USGA Green Section Membership in the Southeastern Region alone, and boasts of more than 700 golf courses. The new sub-regional office is unique in being one of only two sub-regional offices in the United States. This means that Florida golf course superintendents can take advantage of having local USGA benefits.

Both Bud and Steve are looking forward to sharing their information and talents with the Florida golf course superintendents.
VICTORY DANCE

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Florida Golf
Team Wins
National Title

We always knew our state had great golfing superintendents but now it is a proven fact. In its initial attempt, our state team won the national championship of the Golf Course Superintendents Association of America. The tournament site was Industry Hills, California. The event was prior to the 52nd International Conference at Anaheim, California.

Our four man team won by a four-stroke margin over runnerup Rocky Mountain GCSA. Our victorious team was led by Dan Meyers, CGCS, Temple Terrace G&CC of the West Coast Chapter. His pace of 70, 77 also won individual medalist honors. Other teammates were Kevin Downing, CGCS, Atlantis Golf Club, Palm Beach Chapter; Fred Klauk, Pine Tree Golf Club, Palm Beach Chapter; and Robby Robbins, Gainesville G&CC, North Palm Beach Chapter. The team was selected from the three statewide golf tournaments: Poa Annua Classic, Crowfoot Open, and FTGA. Winners and best finishers that are going to the tournament represent the state chapter.

In the individual classes, a 15-20 handicap flight, we also had another winner: Bill Jeffrey, Woodmont Country Club, South Florida Chapter.

The eight low individual scores were challenged by the visiting Scotland team. In a match play format the American team won 7-1

HOOKS AND SLICES

Two guys were walking down Collins Ave. on Miami Beach when a Seagull swooped down and made a deposit on one of the guy’s hat. “Don’t move,” said his friend, “I’ll get some toilet paper.” The guy with the hat says, “Don’t bother. He’s miles away by now.”

STRAIGHT SHOTS

Fifty-six men signed the Declaration of Independence. Five were captured or imprisoned in the war that followed. Nine died of wounds or hardships. Twelve lost their homes. Seventeen lost everything they owned. Everyone of them were hunted. Most were driven into hiding. They were offered immunity, rewards, the return of their property or freedom of their loved ones to desert the cause. Not one did. Not one broke their pledge.

Choking to death on food is the sixth largest cause of accidental death in the nation. Victims of potentially fatal choking can’t breathe. They can’t talk. Generally they turn gray-blue from lack of oxygen after a moment or two and they collapse. Until now, remedies for choking on food have not been reliable: pounding the victim on the back, reaching into the throat to dislodge the food, etc.

Here’s how the “Heimlich Maneuver” works:

Grab the victim and stand behind him or her. Wrap your arms around the waist, allowing the choking victim’s upper torso to hang forward.

Make a fist with one hand and grasp it with the other, placing both hands against the victim’s abdomen with a quick upward thrust, expelling the air in the lungs.

Repeat several times if necessary, but it usually works the first time.

If the victim is prone or unconscious, turn him on his back and kneel astride the torso and place both hands on the victim’s abdomen slightly above the naval and below the rib cage - and again, press with a quick upward thrust.
Eb Steiniger, Superintendent of the world famous Pine Valley Golf Club, Pine Valley, New Jersey, was presented with an Honorary Membership of the South Florida Golf Course Superintendents Association.

President Lou Oxnevad made the formal presentation at the conclusion of a Slide presentation at Doral Country Club.

Eb Steiniger, who has held the position of Superintendent of Pine Valley for over 43 years, presented a color slide game of golf at this world famous course. A hole by hole description evoked gasps and cheers from the audience. Rugged and terrible, beautiful and tranquil, all describe Pine Valley. Started in 1912 and built in the sand wastes of southern New Jersey, the evolution of the character of the trees, shrubs and plant life proved the adage, "The Golf Course Architect may design and build a golf course, but it takes a good Golf Course Superintendent to make it into one."

Eb Steiniger's efforts in Landscaping and subtle changes proved this old adage. He had the pictures, and pictures are proof positive of what one man can do through the years. Eb claims that he has been blessed with many nice things in his lifetime. His blessing at Pine Valley has been that he has had only one President to work with in all those years. John Arthur Brown, who it seemed had a burning desire to make Pine Valley the greatest course in the world, has truly achieved this goal. But, in the opinion of many, know that it would never have happened without Eb Steiniger. In achieving these goals, Eb has greatly enhanced the profession of Golf Course Supt. To acknowledge this fact, the Plaque presented to him by the South Florida Golf Course Superintendents Association reads as follows:

To honor a Golf Course Superintendent
who has greatly enhanced our
professional image.
The Golf Course at San Jose Country Club located in Jacksonville, Florida has a very long and rich history. The present 18 hole course was completed in 1927 by golf course architect Donald B. Ross. The semi-private course was used by guests that stayed at the San Jose Hotel. The hotel was situated one-half mile away from the clubhouse and set on a bluff overlooking the St. Johns River. The hotel now houses Bolles High School. The club was officially chartered in 1947 and went to private membership status.

What in the blue blazes does this have to do with top dressing greens one may ask? The 55 year growth of San Jose Country Club find the practice of top dressing run on the same continuum. Top dressing did not begin to blossom as a potential maintenance practice until the 40's. During this time at San Jose, top dressing was carried out with shovels and several men to distribute the top dressing material. This mode of operation was costly and time consuming. Top dressing procedures and San Jose Country Club at this time were in their infancy. One might speculate that in the 40's superintendents did not realize the full benefits of top dressing.

Top dressing used to be "homemade" at San Jose in a giant mixer. This mixer is now an artifact of days gone by. Today we buy treated (disease and weed free) material for our top dressing. The cost is far less to San Jose this way, in quality of material and in the man power it would take doing the operation ourselves.

Today Dr. James Beard tells us that top dressing is utilized for (a) thatch control, (b) smoothing or leveling a turfgrass surface, (c) modification of the surface soil, (d) covering stolons or springs of vegetative plantings, (e) winter protection of turfs (Beard 73).

Today it is recommended that top dressing material be of the same consistency as the greens. This will help to prevent layering in the soil which allows for poor water and air distribution in the soil.
The Bay Hill Club and Lodge Maintenance Facility has experienced many improvements because of the continuing need for more efficient and modern storage and operating conditions. Each year we will take a particular area of our maintenance facility and update it to meet our growing needs.

**DAILY SERVICE AND CREW QUARTERS BUILDING**

The daily service building is primarily used for parking equipment that is used on a day to day basis, such as greens mowers, tee mowers, transportation vehicles, and a large variety of small spreaders and hand tools. Sectioned out within this building is a men’s locker room, shower and restroom facility. A female restroom facility, a designated lunch area and a private miscellaneous course supply room. An additional wing has been added to the far left side of the building for storage of all fertilizer and chemicals. Other additional wings include a complete irrigation parts and repair room, and a complete mechanical shop for service and maintenance of all equipment.

**OFFICE AREA AND EQUIPMENT STORAGE**

The recent addition to the maintenance area includes a new office complex with a large private office for the superintendent, a large office area for the assistant superintendent and the office secretary, plus a small foyer waiting area for visitors. On the right hand wall as you enter the office is a large master irrigation plan of all twenty-seven holes. This plan is laminated on a large sheet of plexi-glass mounted in a wooden frame. The plexi-glass allows us to write on job locations and descriptions, then afterwards, can be easily cleaned off. Down to the far end of the master plan we have a master control system for all irrigation controllers on the course, and control switches for all irrigation pumps, and a main line pressure gauge.

The first rolling door down from the office is used for storing small miscellaneous tournament items. The second rolling door area is used for a painting room. For signs, tee markers, putting cups, ball washers, etc. The third rolling door area is used for tournament storage for ropes, stakes, and metal trash racks. Next down we have drive-under equipment storage — not shown in picture is (Continued on Page 66)
Progress in the practice of top dressing at San Jose has now reached the state of the art. A maintenance practice that once took several men two to three days to accomplish can now be achieved in three hours by one man. The motorized riding top dresser with a 1,000 pound spreader attachment has brought greater speed, quality and efficiency to our top dressing program that will now increase in occurrence.

The present literature on top dressing points to many benefits that will help cut maintenance costs. Less disease, faster renewal of growth, less aerifying and better percolation are benefits that will save chemical, man power, and water expenses.

Top dressing practices at San Jose Country Club over the last 55 years have gone through different phases of development along with overall club development. It is progress made in our profession as in the practice of top dressing that helps us to do a better job for the members we work for and to enhance our professional capabilities.

THE TURFGRASS INDUSTRY IN FLORIDA

The Turfgrass Industry in Florida, totaling 523 million dollars is equivalent to 24 per cent of the 1974 cash receipts from the sale of ALL farm commodities in this state.

This survey did not take into consideration the total cash receipts from Golf fees (Greens fees and golf car rentals). If these figures were added to the total effect upon the economy of the state, the Turfgrass Industry would unquestionably surpass all agricultural crops in Florida.

The Florida Turfgrass Survey reveals that our industry is only 11% smaller than the 1974 cash receipts from all citrus, which has always been considered Florida’s most important farm commodity group.

Turfgrass is 21% larger than farm income from oranges. It is 27% larger than cash receipts from all vegetables. Here is a condensation of the first Florida Turfgrass Survey.

A complete report can be obtained from:
Florida Crop Reporting Service
1222 Woodward Street
Orlando, Florida 32803

A SIGN FOR EMPLOYEES TO OBSERVE

The above illustrates a sign as a reminder to all maintenance personal as they leave the maintenance facility in route to their responsibilities on the course. The sign reads: BE PROUD OF YOUR COURSE—SHOW COURTESY TO GOLFERS—POLICE FOR TRASH—SHOW PRIDE IN YOUR WORK AT ALL TIMES.

Regardless of the size of any maintenance facility, the most important factor is that it be neat, clean and organized as possible at all times, and from that you will see better attitudes and work habits throughout your entire staff.
There are three words in the golf course language that are often poorly stated and downgrade a professionally oriented turf industry. They are: “Greenskeeper,” “Dirt,” and “The Barn.” The “Golf Course Superintendent,” “Soil,” and “The Golf Course Maintenance Building Complex” are far more appropriate and specifically define their true definitions.

When was the last time you went down to “the barn” and found some cows and chickens roaming around? Instead, one finds a building that often has been designed by an architect with much thought and input also designed by the course superintendent. Buildings nowadays are encompassing clean organized offices with secretarial quarters, employee lounges complete with microwaves, mens and ladies restroom facilities with showers and locker rooms, not to mention the aspects of the function of maintaining and storing of golf course maintenance equipment. The shop areas are usually wide open with high rising garage doors to allow easy access and good cross air ventilation. Interior floors are designed with concave slopes with drains to allow thorough hosing down of the shop floor. Shop repair areas are much reminiscent of an auto dealership, complete with hydraulic lifts and parts inventory to self sufficiently operate nearly all major repairs. Irrigation rooms are ever so increasing, with the storage of all the needed parts and tools for repairs and they are kept within a designated work bench area. Storage of much respected and restricted chemicals are contained behind metal, locked doors. Fertilizer storage rooms are common sights with designed soil bins to accommodate various sands and soils. A central location of the building from throughout the project allows more efficient travel time. Buildings should be well marked for easy service and deliveries, and yes, since the maintenance building is what supports the great looking golf course — why not make “the barn” look great too!

(Continued on Page 68)
Boca Greens interior reveals office, lunch room, time clock area along with unique practice putting green.

Boca Greens soil bins individually partitioned with roof overhand and high rising garage doors for easy entry.

Atlantis C.C. Supt. Office with golf pictures and golf artifacts that depicts a clean organized office.

Jim Watkins of C.C. of FL. possesses an elaborate inhouse soil laboratory capable of many useful tests.

Boca Groves Lunch Room: everything from the kitchen sink to microwave oven, magazine rack, and full length window.

Boca Groves shop repair area utilizes a hydraulic lift to the max, as fairway unit access is greatly increased.

Del Aire's parts room is stocked for major repairs and organized with labeled bins and good inventory control.

Del Aire's organized shop area. Note elaborate preventative maint. program on wall revealing pertinent info.
Fertilization during the fall and winter months probably has as great of an effect on the success of our golf course during the season as any other single maintenance program. At this time of the year there may not be a chance to "catch up" once behind on a fertilization program. Due to the distinct possibility of several heavy frosts between December 15 & March 1, the turf must enter this period in top nutritional condition. For this reason most superintendents in this area consider September, October and November as key months in preparation for the winter season.

In general, fertilization of fairways is increased to 1 lb/1000 or more of N during the months of September, October and November. Some sample programs include:

1) Larry Weber, Palm Aire Country Club — 1 1/2 lb. N/1000 from 16-4-16 with 4 units IBDU & minors in September and six weeks later 1 lb. N from 16-4-8 containing minors.

2) Hugh Bebout, Sara Bay Country Club — one or more applications of a chemical fertilizer followed by one or more applications of an organic fertilizer. Hugh feels that an organic fertilizer will tend to stay in the root zone enabling the roots to stay warmer during the middle of winter or dormant period.

3) Mac Bough, Longboat Key Club — one application of 8-1-3/kerb at 1 lb N/1000 during September followed in October by application of 5-10-15 at 1 lb N/1000. 4) Allen Hanchey, Meadows Country Club — September application of granular 16-4-8/minors if a specific need to bring nutrition back into balance as a result of soil test or use liquid injection system 12-0-6. In general apply 1 lb/N/1000 per month thru season. In general, potassium levels are obviously increased.

For greens, fertilization is also at a rate of 1 lb. N/1000 per month. Weber alternates application of 9-3-6 containing sulfur coated urea and 8-1-8 containing IBDU approximately every two weeks, whereas Bough uses straight IBDU once per month supplemented by foliar applications of ferrous ammonium sulphate and potassium nitrate.

Although methods and materials used certainly will differ from course to course, the objective of fall fertilization is certainly to have the turf in top nutritional condition for the season.
EMPLOYEE RETENTION

Our employees are the working strength of the golf course industry. They are the individuals who have the task of physically accomplishing the work assignments. Their efforts give the owners, managers, golfers, golf pros and golf course superintendents the course conditions they desire.

Employees needs and desires are the motivations that usually compel them to remain or to leave a particular job. I believe that most employees would rather remain at their job rather than search out and find another. It is more often than not, corporate policies, improper management practices or poor supervision that cause an employee to leave his job.

In the majority of cases, if people are treated fairly, they will respond with productivity and longevity of employment. This results not only in a happier employee who has a willingness to work, but who will wish to remain working for the same company for a longer period of time. There will be less employee turnover, and ultimately, less employee retraining. It is difficult to estimate the cost of retraining a worker in the golf course maintenance industry. However, because of the vast variety of jobs that a good maintenance employee must perform, the retraining time is great.

The overall cost is even more amplified because the man doing the retraining is generally a higher paid supervisor. The supervisor has to spend a great deal of time with a new worker, and is robbing time from the daily scheduling and monitoring of other employee activities.

The attention paid to all employees is crucial to the overall operation. Surveys have been conducted that show the main area of job-related workers concern is recognition. People want to know that they are appreciated in their work and how they as an individual are performing. Good performance justifies compliments or merit pay increases and possible promotions. In adequate performance certainly justifies acknowledgment that there was poor performance and may possibly reprimand.

Employees need to know where they stand and that their work is appreciated. A group of employees was asked what their needs were in order of importance. “Appreciation of work” was most important in the opinion of the employees taking the survey, with “feeling in on things” rated second. Wages rated fifth.

In the same survey, a group of supervisors rated that they felt to be their employees greatest needs. In the majority of cases, the supervisors chose wages as number one. The actual and perceived statistics were notably different.

This should stress an important fact. We all want to be recognized for our efforts.

Inadequate performance, needs also to be discussed, because we do not wish to suggest that only compliments should be passed out. On the contrary, if we do not criticize as well as compliment, most employees will think that their supervisors are not really paying attention. They may tend to surmise “Well, the boss doesn’t care, why should I?” Or, they may see a bad employee get away with poor job performance, tardiness, absenteeism or other policy violations without being reprimanded. Then, they may figure if other employees can get away with it then they can as well. A negative work attitude develops and before you realize it, there is a real morale problem and you as a supervisor have lost control and respect of your employees.

Meetings are also a good time to educate your people how their performance affects overall club operation and how it affects a golfer’s round. They should be aware of proper cup cutting methods, and how this affects the golfers’ playing performance. Also, how a golfer will appreciate a neat and tidy golf course. The list can go on and on from proper tee placement to the raking of a sand bunker.

There are many ways to retain good employees. Involvement, awareness, and a genuine concern on the part of management are the keys to motivation and employee retention. It is important to build a foundation and a nucleus of people who are working toward the same goals: A successful and profitable operation being staffed by a work force that feels they have a vested interest in their future.

1 Supervisors Handbook on Maintaining Non-Union Status - Alfred T. Demaria

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Guest Editorial
Open letter to Florida Golf Course Superintendents

By TIM HIERS

Florida has the second largest golf course industry in the nation, ranking only behind California. Recent growth and construction statistics indicate that within five years Florida may surpass California in total number of golf courses.

Yet when it comes to representation within the GCSAA the Sunshine state hovers near the bottom of the totem pole. Only one president of the GCSAA in the last 51 years has been from Florida and the board of directors representation fits in the same category. As a result of this past poor representation a great majority of research funds and national programs have not been directed toward problems concerning Florida's golf courses and their respective superintendents.

The state of Florida is not out to gain control of the GCSAA but merely to obtain equal representation and recognition. This situation cannot be fully corrected by Florida superintendents joining the GCSAA individually. In order for a meaningful and productive change to come about it is necessary for us to unify and support the GCSAA in the form of a strong and well-organized statewide association.

This can be accomplished without effecting the operation or identity of the individual local superintendents associations.

In essence the purpose of the Florida Golf Course Superintendents Association is to improve communications among the local associations and to form a strong unified group of associations that have common goals in mind. This will directly benefit the individual superintendent who is shackled with such imposing problems as the possible energy crisis, precious chemicals being taken off the market by the EPA, lack of communications and service between superintendents and their suppliers.

In October of 1978 the four presidents of the original Florida State Golf Course Superintendents Association met in Orlando to nominate and elect me as your statewide president. Since that time we have had two meetings. An attorney, Bob Hoffman, was hired to lay the groundwork for articles of incorporation and by-laws. At our first meeting on Dec. 8, 1978, in Orlando, several amendments were made to the original articles of incorporation. Included in these were Amendment 1, to change the name from Florida State Golf Course Superintendents Association to Florida Golf Course Superintendent's Association and Amendment 3, to include all existing associations and future associations in the FGCSA. The president of your association has a copy of the articles and amendments.

Due to the organization becoming inactive in 1973, we had to re-file through the state to become an active corporation. When these proceedings have been accomplished, the new articles of incorporation will be printed and distributed. At the December meeting we asked the presidents of the local associations to collect $2 from each superintendent. Dr. Harry Meyers, professor from the University of Florida, was the first to contribute his $2.

These limited funds have assisted in the reorganization of our association. In our last meeting at the Holiday Inn Central in Tampa March 8 we reviewed the amendments and laid groundwork for the future. Bill Wager was appointed head of the by-laws committee and hopefully they will be submitted and approved in our August 26 meeting in Melbourne.

On Monday Aug. 27 the third annual Crowfoot Open will be held at Suntree CC in Melbourne. Consult your local association and plan to attend this tournament as we hope to use this as our annual state meeting. We also hope for the possibility in the future of changing the South Florida Green to the Florida Golf Course Superintendents Ass'n magazine. In the eventual formulation of membership fees we hope to include a weekly subscription to Florida Golfweek to each superintendent as a tool for ongoing communication across the state. This could include articles on a weekly basis from local associations.

Some people may be quick to point out previous failures of the state association even though competent and hard-working people were involved. Unfortunately support they received, if any at all, from across the state was not unified. We believe that because of the growth of Florida, a better means of communication and more concerned individuals the Florida Golf Course Superintendents Association will be a useful tool and an outstanding success.

In closing I would like to emphasize that our association is not affiliated with Florida Turfgrass Association. The FTGA is simply interested in our future success and is willing to lend a helping hand. It is my hope that each superintendent across the state will extend his cooperation to his local association in their support of the statewide organization.

I want to personally thank Charley Stine, publisher of Golfweek, for contributing his time and interest in the progress of our association. He has agreed to provide a free subscription to each individual member until such time as the Florida Golf Superintendent's Association can incorporate a subscription into the membership fees. I request the president or secretary of each association to send Golfweek a mailing list of their respective members.
Editorial

Over the past ten years Golf Course Superintendents have evolved from grass growers to professional turf managers. They are asked to grow grass under the worst possible conditions, and are required to maintain it at tournament condition on a daily basis. Golf Course Superintendents are managers entrusted with dispensing over a third of a million dollars annually.

Let's look at the facts. A golf course generates a lot of revenue. Often a course is the selling fact for housing units, it provides jobs for restaurant workers, pro shop employees, office workers, club managers and any number of grounds and golf course maintenance employees. The golf course is the necessary factor in this chain. Without "the great green golf course" this whole cycle of enterprise would not exist...this very fact makes the professional Golf Course Superintendent's position one that earns a high degree of financial compensation. Unfortunately some clubs still look at their superintendents as only grass growers and not as total managers.

People management requires superintendents to motivate employees to perform any number of labor positions in a day when generally people are no longer willing to do these type of jobs. They must help to instill a sense of pride in the way their employees view the course. We can not simply hand out tools and demand that workers rake traps, edge cart paths, trim trees, etc....without appreciating them and educating them in such a way that they develop a sense of pride in the "over all success of the total operation."

Golf Course Superintendents are true professionals dedicated to the betterment of golf. Salaries of $45,000. to $55,000. are becoming common in Florida. Benefits for good superintendents include $2,000. a year for IRA, one months vacation, a car for business and personal use, meals at the club, golf privileges for peers and so on.

Golf is a game which should be enjoyed. So... when was the last time you hugged you Golf Course Superintendent?
HAPPY TENTH

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Join in congratulating THE FLORIDA GREEN on its 10th Anniversary.
This month we show you answers to some water problems... "TOO MUCH" at Inverrary Country Club and "TOO LITTLE" at Coral Ridge Country Club.

1. Brad Kocher and Rick Hammond are shown with inexpensive "Catch Basins" their crew made from concrete pipe "cullets." In picture 2. we see Brad inspecting drainage ditches dug by his workmen. Even the paved parking lots collect water... in picture 3. you can see drainage swales installed by Inverrary's crew. Picture 4. is "mosquito control rig" made by Brad's mechanics. These shots show graphically that our members do more than GROW GRASS!

At Coral Ridge the problem was low water pressure as 3 turbine pumps drew water from small lake. Inefficient system had evolved from many add-ons over the past years. In picture 5. you can see the workmen starting to "untangle" the pipes. In picture 6. you see the 14" "header-pipe" being tailor-made to couple the pumps. In picture 7. you can see the finished product looking much better and working great!

If you or your crew have any ideas to share with others give us a call and well be glad to photograph your "super ideas."

— Harry McCartha
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