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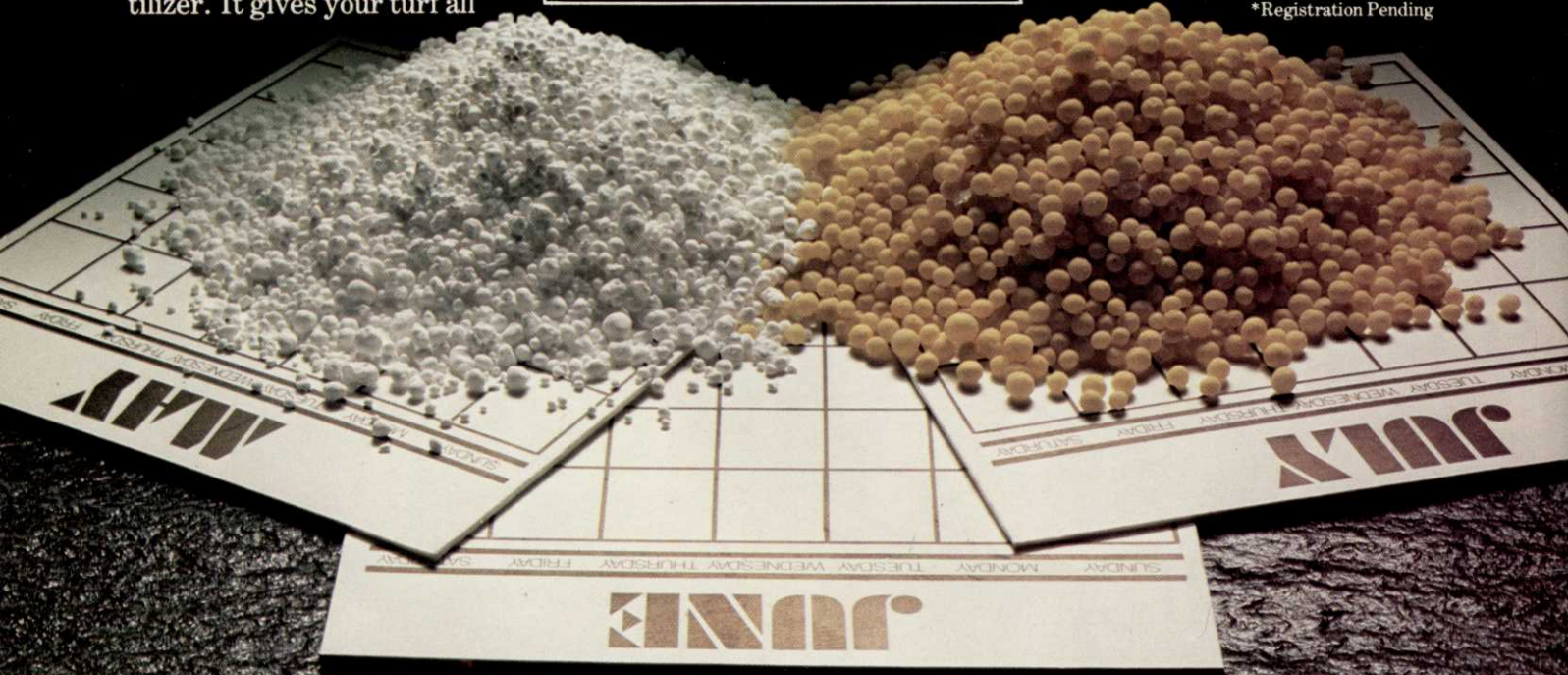
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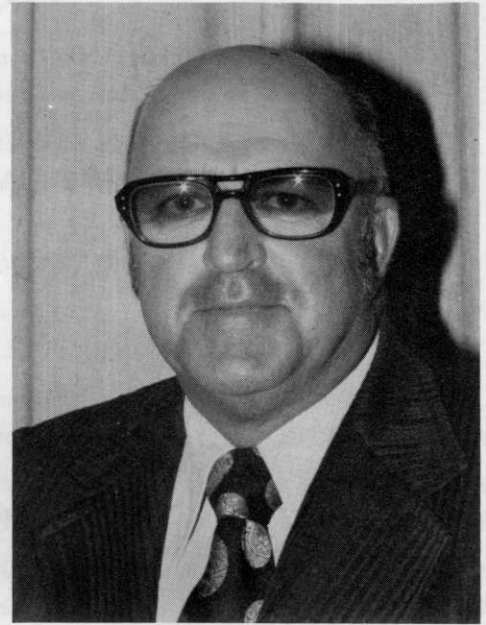
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## President's Message



Congratulations to our golf team, Dan Meyers, Robby Robbins, Fred Klauk, and Kevin Downing, for winning the G.C.S.A.A. tournament recently held in California. Dan must also be recognized for his individual win. Even more rewarding to me were the many complimentary remarks I received concerning not only the win, but the overall appearance and conduct of the quality young men who represented us so well. It is indeed a pleasure to proudly say I'm a golf course superintendent from Florida.

Our blue blazers and crests were so well received — almost to a point of envy among some groups. Certainly they created an atmosphere of recognition and validation. Which leads me into "Dress Code", the simple rule of appearance which, when not adhered to, tends to regulate individuals into a category unfitting of their worth. A judge or minister without the cloth of their profession certainly would detract from their mission. The President of the United States in a sport shirt and wind breaker at a U.N. Conference certainly would diminish his authority. Inappropriate comparisons — maybe so. But, like it or not, appearance is a judgement factor contributing to one's stature. Coats and ties will not make a professional but they help to identify those that are.

*Bill Wagner*

# The Florida Green

The Official Bulletin of the Florida Golf Course Superintendents Association

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Florida Golf Team Wins National Title. See article Page 23. Cover Photo by Larry Goldsmith.

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**Dan Jones, C.G.C.S., Editor**  
*Banyan Golf Club*



**David Bailey**  
*Atlantis Country Club*  
Associate Editor



## Contributing Editors:

**Hubert E. (Al) Frenette**  
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# ROW PLANTING

By DR. TIM BOWYER and GERRY MILLHOLEN<sup>1</sup>  
Southern Turf Nurseries

For years golf course superintendents have asked for the impossible from sod producers and golf course planters — the ability to renovate or revegetate fairways with a minimum amount of lost playing time. That question has been more than adequately answered by the process known as rowplanting.

Rowplanting is simply the use of automated equipment to open a small furrow, insert live sprigs, seal the furrow and then roll the furrow smooth (fig. 1). This process when carried out with the proper equipment, trained personnel and soil conditions, can result in little, if any, loss of play and improved fairway grass surfaces (fig. 2).

## When Is Rowplanting a Variable Alternative?

Repair of extensive turf injury to fairways can be accomplished by rowplanting. In the winters of 1976, 1977, extremes in winter temperatures caused a tremendous amount of winter kill of turf on golf course fairways. The answer to this problem in many locations was row planting.

From time to time misapplications of chemicals have caused extensive plant injury with no hope of recovery. In those situations, rowplanting can be the answer.

On golf courses with high traffic, where mechanical injury (golf carts, heavy foot traffic, etc.) is a common and everyday occurrence, periodic rowplanting can allow for resurfacing of these areas and improved playing conditions.

Finally, injury brought on by low maintenance — either because of budgeting problems of the golf course in the past or just inadequate soil management can be rectified by rowplanting with a minimum reduction in play.

In an effort to improve fairway turf quality, many clubs wish to smoothly transition from a common bermudagrass or multi-cultivar bermudagrass sod to an improved bermudagrass sod (i.e., Tifton 419, Tifton 328, Midiron x Tifton 419 blend). Automatic rowplanting when managed properly provides a smooth transition.

## Additional Considerations

There are additional considerations which need to be made if one has decided that fairway conditions necessitate rowplanting.

1. First, without an adequate irrigation system, planting live sprigs is completely impractical. The time span between placing the sprig in the ground and the first water application has to be minimal and uniform.

2. Another consideration is making certain that problems such as soil fertility imbalances, pH, salinity problems or nematodes have been corrected before the rowplanting begins. Rowplanting will not successfully mask these problems.
3. If the club is considering rowplanting, it is important that they understand the need for increased fertilizer and lime applications and increased applications of weed control chemicals during grow-in.
4. Finally, the superintendent and the club must be committed to the followthrough of the grow-in program. Except in those areas which are completely bare at the time of rowplanting, complete transition of vegetated areas may take as much as 2 to 4 years. However, with a modified maintenance program — fertility and mowing practices — this commitment will pay off.

## The process

Although the process will vary from golf course to golf course, depending upon the various circumstances which surround the necessity for rowplanting, the general process will be similar to the following.

1. First should be the notification of all players that the rowplanting process is about to begin. Nothing upsets golfers more than to be up at 7 o'clock in the morning teeing up and find an automatic rowplanter busily moving up and down their intended fairway. It is true that a minimum amount of play will be lost by replanting in comparison to other planting techniques, however, there is some minor inconvenience during the actual time of planting and in all fairness to the golfer he should be alerted. In addition to being alerted, it is important that the superintendent and the pro coordinate planting and play so that there is a minimum of inconvenience.



(Continued on Page 7)

2. Approximately 2 days before rowplanting, most golf courses apply a growth retardant. Commonly applied growth retardants include MH30, Paraquat and in exceptional cases, Roundup. (It should be noted that the greatest success in rowplanting is obtained when as much competition from weeds or fairway grasses as possible is eliminated.) It is obvious in golf courses which have been planted that areas which are free of existing grass or sod cover more quickly with the cultivar being rowplanted than those areas with a healthy sod. Those areas require as much as 2 to 4 years for the rowplanted grass to predominate. It may be necessary to mow the fairways to 3/4 inch just before applying the growth retardant if this is not the normal cutting height.
3. The evening before planting, water should be applied. This insures a smoother finish and a minimum amount of damage to the fairway surface at planting. It is also a good time to find all the irrigation heads and flag them so that the rowplanter can avoid them.
4. The most important of the entire process is the planting itself. There are a number of criteria which must be met if planting is to be successful.

#### The Right Equipment

The equipment to rowplant has evolved from the use of a tobacco planter or vegetable plant planter to the modern day automated rowplanter. This rowplanter is engineered to plant the largest volume of viable sprigs in the furrows as possible and at the same time cause the least amount of damage to the playing surface.

Recent improvements on equipment which have enhanced the success of rowplanting include the use of injectors to place liquid fertilizers in the furrow just ahead of the sprigs. The use of a scientifically balanced fertilizer in the furrow accelerates growth of the grass without feeding the competing grasses between the furrow. This one to two week jump in growth many times spells the difference between success and failure.

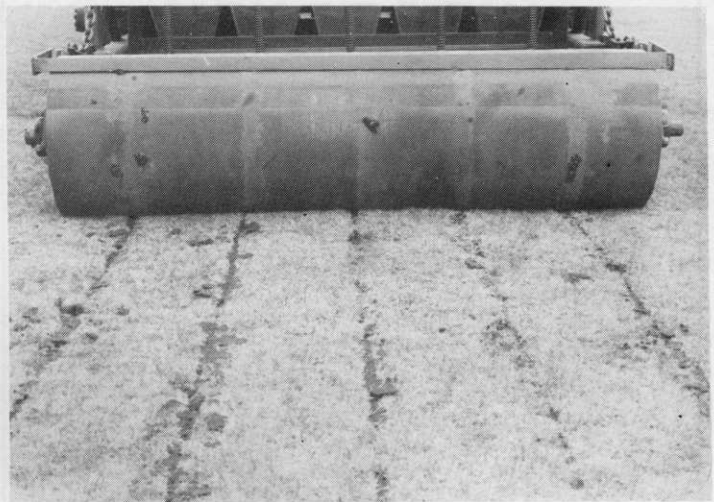
#### The Right Operator

Of course the key to any piece of equipment is the experienced equipment operator. The more experience behind the man driving the tractor the more successful the planting job will be and the less immediate damage will be observed.

#### The Best Grass

In addition to the right equipment and the right person, fresh, viable certified sprigs must be furnished to the job for planting.

5. Once the area is planted irrigation must be applied. For each portion of an hour that irrigation is not applied there is a significant reduction in plant survival.
6. Finally, before the normal maintenance program begins and just after the first irrigation — rolling the fairways with a conventional fairway roller can increase the surface smoothness.



Once planted, the grow-in or transition process begins.

It is most important that the first 4 weeks after the planting process that golf cart traffic be kept off the playing surface. Carts should be used primarily on golf cart paths and roughs. Foot traffic from normal play is not a problem.

Fertilization to grow-in the rowplanting is site specific. Before any of the planting occurs the golf course would have already corrected any soil pH or fertility problem. To insure rapid and uniform growth from the furrows, an application of a 1-1-1 fertilizer is applied 2 weeks after planting. Then at 2 week intervals ammonium nitrate is applied. As the growth becomes adequate the fertilizer rates can be reduced to fit the management scheme of the golf course.

Mowing should begin on the rowplanted fairways approximately 2 weeks after planting. Avoid scalping but gradually bring the mowing height to approximately 5/8-3/4 inch.

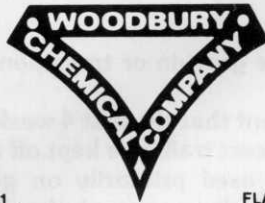
Weed control is particularly important in determining how successful the rowplanting transition will be. First, of course, be certain that the sprayer is properly calibrated and the soil is moist. The first herbicide application is usually recommended 3 weeks after rowplanting. This application should include a broadleaf herbicide such as 2,4-D and grass weed herbicide such as MSMA or DSMA. Five to seven days later an additional application of arsenic is applied. Five to seven days after that, a third application is made. If there is no damage or discoloration of the rowplanted grass after the third application and there are still some weeds the procedure can be repeated. Because of the high weed seed population just below the soil surface, any process which opens the soil will bring up seed. Weeds such as goosegrass, crabgrass, and others can be found in the furrow along with the growing bermudagrass. These grasses are competing with the bermuda and should be taken out through the proper use of the appropriate herbicides. To neglect applying these herbicides for fear of hurting the rowplanted bermudagrass can result in failure or at best a longer transition because of competition. The rowplanted bermudagrasses, although retarded by herbicide applications, can survive and become the predominant grass.

(Continued on Page 8)

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## Row Planting

(Continued from Page 7)

### Results and Comments

It is often difficult to measure how successful the row-planting has been especially into sods. However, close inspection generally indicates that complete cover from row-planting at 12-inch centers can take as few as 2 and as many as 4 or 5 years.

Rowplanting is not the answer to all problems on all golf courses. But it is an essential tool to the golf course superintendent or club which is attempting to keep its course at its peak in appearance and condition and is definitely an asset to the golfer.

1. Dr. Bowyer is Vice President, Southern Turf Nurseries, Tifton, Georgia. Mr. Millholen is Technical Representative, Southern Turf Nurseries. ■

## 195 ATTEND GCSAA PRAYER BREAKFAST

The week of January 25th, 1981 was a busy week for GCSAA members in Anaheim. Conferences, seminars, golf tournaments, business meetings, elections, equipment show, cocktail parties, tours, banquets and for good measure Disneyland just across the street.

While all of this was going on our nation received word that our ex-hostages had returned safe to American soil! What a busy time, and a time to be thankful. Thankful for what a Blessing it is to live in America and to be Americans.

Even with all of this going on plus the Super Bowl, 195 men, women and kids did find time to attend the Monday morning Prayer Breakfast. This is almost a 74% increase over last year! Not bad. We were treated to and participated in some fine music led by Demie Moore and Bert Fedor.

Our main speaker, Richard Minasian, brought a special guest, Keith Ericksen. He was an all American basketball player for UCLA and also played pro ball for the Los Angeles Lakers. Keith shared some of past life with us, pointing out that material gain and fame do not necessarily bring peace and happiness to our lives.

Richard Minasian shared with us some of his experiences as a youngster when he caddied for some of golf's greats like Bobby Jones, Gene Sarazan, and Francis Quimet among others. Even having the opportunity to play with Jones as a Jr. Champ. These great golfers inspired Minasian to take up the game and he still enjoys it today. Serving God however, supersedes even his love of golf.

If you have been too busy in the past try to take time for our Prayer Breakfast in New Orleans next year. We think you'll find it time well spent, as you share with others of our profession the Living God and experience the Power of Prayer.

John C. Ebel, Golf Course Supt.  
Barrington Hills Country Club

THE BULL SHEET, official publication of the MID-  
WEST ASSOCIATION OF GOLF COURSE SUPER-  
INTENDENTS.





# Palm Beach Trade Winds



Activated charcoal has received much attention in recent years.

The varied benefits of carbon on turfgrass is not the main issue in this article. The method of application is. Did you ever apply activated charcoal via an airplane crop duster?

Michael Bailey, superintendent of Boca Greens Country Club, Boca Raton, uses this method. A 1977 agronomy graduate of Eastern Kentucky University in his native state of Kentucky, Michael Bailey says, "It's the only way to fly." Let's go back, step by step, and learn how he reached this level of application. First some test plots were done around newly planted trees in early November and tremendous growth was noted to trees and adjoining turfgrass. Areas were under a normal fertilizer program for their area and the temperatures were still warm, 80° to 68°. The material was applied in its straight dry form with a hand cyclone spreader. Rates were two pounds per 1,000 square feet. Michael Bailey noticed the wheel mark patterns between the trees showed up a lush turfgrass. This made him think about all the talk of activated charcoal benefits coming from "raising the soil temperature" as not being the total answer. He concluded the 4 inch width of the wheel patterns would not raise the temperature enough for this response. So seeing his classroom lectures come to life he went to his textbook.

*THE NATURE AND PROPERTIES OF SOILS* by Nyle Bracly shed some light. "The ratio of carbon to nitrogen in the organic matter of arable soils commonly ranges from 8:1 to 15:1, the median being about 11:1. The carbon/nitrogen ratio in plant material is variable, ranging from 20:1 to 30:1 for legumes to as high as 100:1 in certain strawy residues." Because this ratio is relatively constant in soils, Michael Bailey feels charcoal application lowered his ratio and gave better breakdown of the nitrogen already there. The text also concludes "as decay occurs the carbon/nitrogen ratio of the plant material decreases since carbon is being lost and nitrogen conserved." Previous studies prove seed germination is increased with activated charcoal. The text states, "new growth is better because mature residues, legumes or nonlegumes, have a much higher carbon/nitrogen ratio."

Now Michael Bailey was ready to do a larger area. His next application was with a 300 gallon spray tank using the spray boom on the Tifway 419 rough. To make the material "very flexible" only one pound per 1,000 square feet was

applied. The results were so dramatic he said, "I wanted to continue but was afraid of a paint brush effect if I continued with the spray boom. That is when I concluded that to get the consistant look I wanted, the ultimate spray method was needed, an airplane crop duster." Being located in the truck farming area, west of the turnpike from Boca Raton, this method of application is common. Bob King, Southern Crop Service, in nearby Delray Beach was selected. He was familiar with the area and saw no problem with the airplane. The golf course is ideal for such a method. Bob King needed to know, since he had never sprayed the product, would the material stay in solution to apply properly. A 24-hour suspension test showed all systems were still go.



Because such a large acreage would be done in such a short time, late afternoon when there are no golfers on the front nine holes was ideal as long as sunny, clear, and low wind conditions prevailed. An entire par 5 hole was done. The rate was again back up to the two pounds per 1,000 square feet. The entire hole was done in ten minutes. What efficient labor! Michael Bailey says, "With that test we both knew it could be done with good results."

Mid January saw the real test. Temperatures had been below ideal growing conditions for three weeks. Weather bureau data concluded the past January was the coldest on their records. Behind only the 1977 legendary freeze. The time was right to see any response. All nine green putting surfaces and complete green slopes were done on one side of the course. The rate was still two pounds per 1,000 square feet. Several days later Bob Stanley, club manager, questioned why the contrast between the different nines.

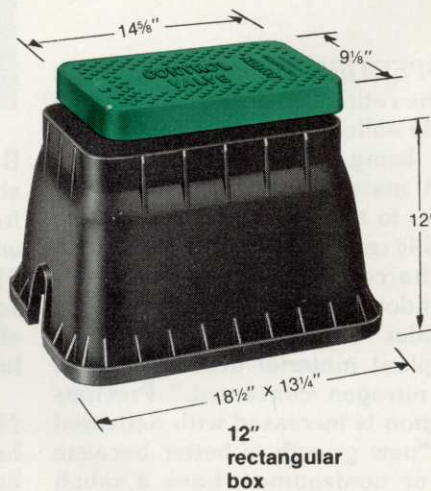
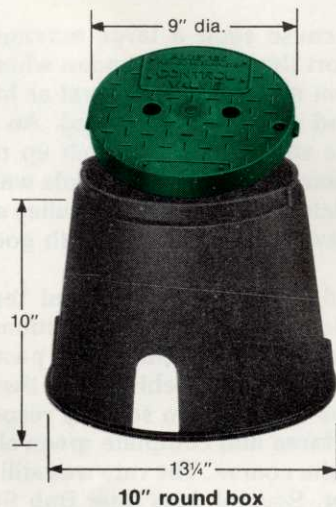
*(Continued on Page 15)*

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## Palm Beach Tradewinds

(Continued from Page 9)

Michael Bailey also had golfers tell him that those nine greens were different and wanted to know why? Michael Bailey says, "It's not that the color is so much better but the density and wear factors had improved. The dusted greens also outgrew a previously checked disease problem faster than the nondusted greens."

The cost of application is about \$250 per plane hour. When just greens and slopes are being done the normal \$6.50 per acre rate cannot be used. Many variables will affect the cost. Your distance from the crop service airport, concentration of material (more water hauled = more time), design of course for flight patterns. Material cost is 39-60¢ per pound.

In conclusion Michael Bailey is pleased with the experiment. He says, "Next year I am going to do the whole golf course from tee to green. Because of excellent cold weather response I will skip one of my dry fertilizer applications in the winter and use activated charcoal. The cost will be about 1/3 less and give a better visual result. Soil test will determine what dry fertilizer is applied prior to the cold season. A high nitrogen liquid fertigation program will be used all winter."

Next time you hear an airplane while you are putting, look out! You better hope it's not Michael Bailey and Bob King doing another experiment. ■

## 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 confirmant 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. ■

## A New St. Augustine Grass

Something new and exciting has happened on Florida's west coast. It is a new St. Augustine grass "Seville". Seville is flourishing beautifully on Pursley's Sod Farm located on Florida's suncoast approximately 25 miles south of Tampa.

Seville is a semi-dwarf, vigorously growing perennial turf-grass with several outstanding attributes. It has a uniform texture, short internodes, shorter and narrower leaf blades as compared to other St. Augustine varieties like Floratine and Floratam, a tendency to grow horizontal, a rich dark green color, excellent tolerance to shade and cold, moderate seed head production ability and resistance to St. Augustine Decline Virus (SAD). It is not resistant to chinch-bugs but has shown strong tolerance to gray leafspot disease. Seville is somewhat easy to maintain and requires less frequent mowings than other cultivars, an obvious advantage from the standpoint of energy conservation. Moreover, because of shorter and narrower leaf blade, it does not produce excessive thatch. Color retention and spring green up rate are good under moderate fertilizer and cultural management. It has responded well to nitrogen fertilization and supplemental iron.

Seville was developed in 1968 by Dr. Terry Riordan, former Turfgrass breeder at O.M. Scott & Sons Company in Marysville, Ohio. Parent lines used for this cross were originally grown at O.M. Scott's Research Station in Apopka, Florida. Dr. Riordan is currently employed at the University of Nebraska in Lincoln, Nebraska. Soon after the development of Seville, a plant patent was obtained by Dr. Terry Riordan and Jake T. Gruis of O.M. Scott & Co., but now the patent and the exclusive propagation and marketing rights have been acquired by Pursley Sod Farms.

Over the last eight years, Seville's performance has been tested in field at various locations in Florida, Texas and California. Pursley Sod Farm has established several test plots at various locations in Florida and Georgia. Among them are Walt Disney World Tree Farm in Orlando, University of Florida Campus in Gainesville, Maclay Garden State Park in Tallahassee, Deerwood Country Club in Jacksonville and University of Georgia Campus in Athens. Seville is also being grown on a few home lawns in Apopka. ■

## Cost of Federal Regulations

OMB now estimates that the annual cost of federal regulations affecting U.S. industry costs \$135 billion. These regulations add 10% across the board to business expenditures. EPA is responsible for 77% of these costs while the Equal Opportunity Administration ranks second with 7% and the Department of Energy at 5%. Federal regulatory costs are now equivalent to 5% of the entire gross national product and costs every American \$500 a year, personally, or \$2,000 per family. (Burt Bohmont, CSU) ■

# ATLANTIC

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## Superintendents Aid Turf Fund

By VINCE SMITH

The Everglades Chapter of the Florida Golf Course Superintendents Association is one of the most active and intense organizations of its kind in the nation.

The Everglades Chapter contains, as its members, the men who are in charge of maintaining the playing surfaces of all golf courses in Southwest Florida.

The association meets monthly and during these sessions, a wide variety of subjects are discussed, the superintendents listen to talks from key figures in the turf management field and then they get to play a round of golf themselves.

Last month's meeting at Myerlee Country Club produced a good cross-sample of the activities members become involved in and foremost, the continuing new problems each of them face in their daily efforts to keep Southwest Florida's golf courses green.

At the Myerlee gathering a research donation of \$400 was presented to Dan Jones, vice president of the Florida Turf-Grass Association.

To the casual golf club member, this small grant does not reflect the full impact of the reason for the gift. But for golf course superintendents, the \$400 was a gesture of intense purpose which is a portion of a head-to-head confrontation with the increasing crises facing these professional workers.

The money chipped in by the Everglades Chapter will be pooled with donations from the state's seven other chapters. The total fund will be used for specific golf turf research at the University of Florida.

The almost frightening problems golf course superintendents are facing today because of environmental regulations, possible water shortages and the banning of proven pesticides are forcing research into new areas of turf management.

Some of these new territories include biological control of pests and grasses more resistant to wear with less water and fertilizer.

To maintain the quality playing surface that today's golfer demands research is going to play a vital role in the future.

And no one is more aware of this than the members of the Everglades Chapter of the Florida Golf Course Superintendents Association.

Although the superintendents' prime concern right now is research, the Everglades Chapter also concerns itself with the continuing education of young people seeking careers in the turf management field. ■

(Continued on Page 17)



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Two scholarships were presented by the Everglades Chapter during its meeting at Myerlee.

Dick McCandless received the Jesse Medhurst Memorial Scholarship. He will be graduating from Lake City Community College in May with an A.S. degree in Golf Course Operations.

McCandless' on-the-job training experiences came at Jekyll Island, Ga., and Arnold Palmer's Bay Hill Club near Orlando. He worked at Lely County Club in Naples under Superintendent Chuck Belyea before attending Lake City.

Brad Walters was recipient of the Ken Willis Memorial Scholarship. He is currently in his second year of the turf management curriculum at Lake City.

A graduate of Cypress Lake High School, Walters has worked at several Lee County courses including Myerlee and last summer took on-the-job training at Palmetto-Pine Country Club in Cape Coral under Superintendent Mark Selby.

Both McCandless and Walters received checks of \$250 from the Everglades Chapter to help in their schooling.

Meanwhile, the chapter is looking forward to its seventh annual Poa Annuu Classic, its No. 1 golf outing each year.

Strictly a fun-type day, the Poa Annuu Classic will be held at Mirror Lakes Country Club in Lehigh Acres, April 28. Rick Cook is host superintendent and expects his fellow maintenance technicians and turf suppliers to quickly fill the 144 openings for the 11 a.m. shotgun start.

But up until that one-day, 18-hole picnic, members of the Everglades Chapter will be hard at work, applying all their knowledge and skill to further combat the daily annoyances that constantly disrupt the tee-boxes, fairways and greens of the golf courses we all love to play. ■

*Reprinted from Fort Myers News-Press, Wednesday, March 11, 1981.*

## ***Everybody, Somebody, Anybody, Nobody***

By CLINT SMALLRIDGE, C.G.C.S.  
Royal Ponciana Golf Club

This is a story about four people:

Everybody, Somebody, Anybody and Nobody. There was an important job to be done and Everybody was asked to do it. Everybody was sure Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that because it was Everybody's job. Everybody though Anybody could do it, but Nobody realized that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when actually Nobody asked Anybody.

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KEEPING GOLF COURSES GREEN

# EDB Poses Fire Hazard

By D. S. ADAMS  
Plant Pest Regulator Service  
Clemson, South Carolina

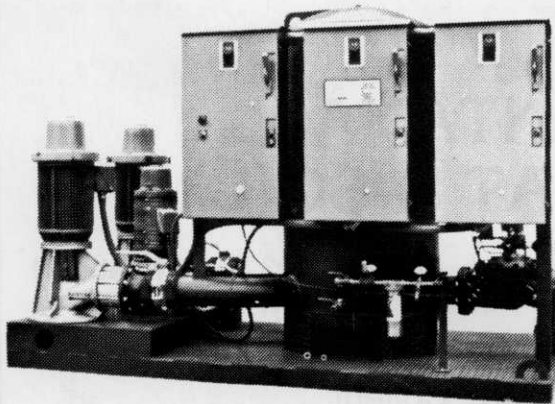
Ethylene Dibromide (also known as Soilbrom 90, Dowfune W-85 and Royal Fume 85) presents a hazard when used with aluminum and the heat from the reaction can result in explosion and fire. There has been one report of a fire when the applicator used a pump with aluminum parts and an aluminum suction pipe which extended into the pesticide.

This compound also reacts vigorously with other metals such as magnesium, sodium and potassium, strong alkalis and oxidizing agents.

If a fire should occur, use water spray, dry chemical, foam or carbon dioxide in areas where ethylene dibromide is stored. Use water to keep fire-exposed containers cool.

When using any of the products containing ethylene dibromide, avoid using any aluminum equipment for storage, application or transfer.

*Peach Update, June, 1980*



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## Plaque for Sale

The official Florida Golf Course Superintendents Association plaque is now for sale. The plaque has the state logo, your name, your chapter. The location of your chapter is marked on a 3-D wood carving which is the shape of Florida.

The plaque can be purchased by mail. The delivered price is \$17.50 plus \$.70 tax, \$18.20 total. The address is Manhattan Trophies, 13 South Dixie Highway, P.O. Box 1169, Lake Worth, Florida 33460. On your request please PRINT your name and chapter.

**Make your office a showplace! Have a state plaque showing your local chapter hanging next to your national plaque! ■**



# If your pumping station has left you high and dry, call AquaTurf.



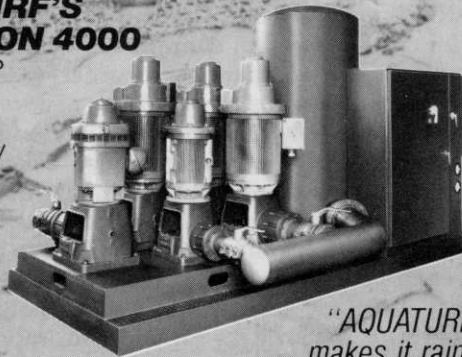
AquaTurf irrigation and pumping systems are custom designed to keep golf courses green, from the sun-baked fairways of the South and Southwest to tees and greens from Maine to Washington.

AquaTurf's unique "brain" tells you exactly what your system is doing at all times. You set the program. It waters your course, exactly the way you want it watered.

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*"AQUATURF  
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- Please send complete information about AquaTurf's pumping system with a brain.
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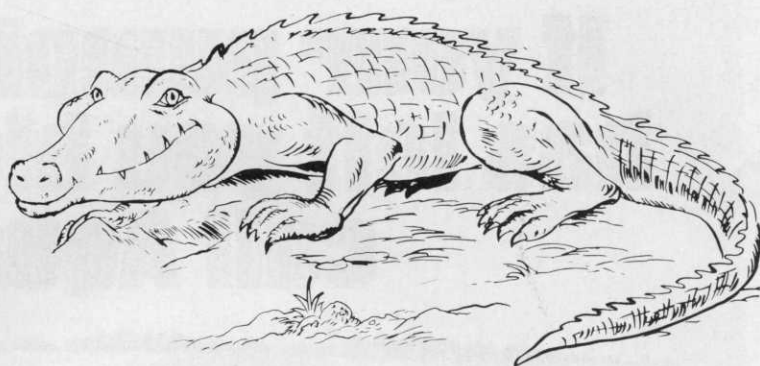
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# The Gator Growls



By BOB SANDERSON, C.G.C.S  
Port Charlotte C.C.

This year, even though the financial outlook nationwide is unsteady, many superintendents in Southwest Florida are planning some extensive renovation for their golf courses. Most of the work will center around new golf cart paths, rebuilding tees and adding to existing irrigation.

Randy Vaughn (Jacaranda West) has a work order made up to build 3000 feet of cart path around the greens and tees of his new nine holes. The work is scheduled for June and will cost about \$8,500. Also, he is planning to put in about 500 feet of drainage tile which will run more than \$2500. Jim Lindsay (The Plantation Golf Course), though his course only opened March 14, still plans to spend much of the summer filling and sodding washouts, adding more drainage tile, and possibly adding a few more sand traps. Bob Shaffer (Count Club of North Port) is going to add a little length to two tees during June, and in the meantime he will be reshaping many of his sand traps and continuing the use of asphalt coverings for the swale bottoms already built into the golf course design. His black top cost has more than doubled in the past two years. During this time, he has spent about 400 hours preparing and laying the black top and has covered about 27,000 square feet of drainage area. He used about a ton of material per thousand square feet. In the Port Charlotte area, Bob Sanderson (Port Charlotte Golf Course) will be black topping five or six thousand feet of cart path on the first nine holes during March. He plans to spend under \$10,000. During May, he will be installing TORO automatic heads and controllers on the first nine fairways. The control tubing is already in place having been put there when the first twelve greens and tees were automated two years ago. Meanwhile, Ken Shakeshaft (Rotunda-Oakland Hills Golf Course) hopes to put in cart paths around all 18 greens and tees. His estimate for this work runs close to \$75,000. Dick Bessire (Burnt Store Golf Course) has already started using rip-rap around head walls and bad washout areas in his lakes and swales. Since the entire perimeter area of his golf course has been cleared for new homes, there is an unlimited amount of small rock which can be used for this purpose. Just down the road a few miles, Marc Tallmadge (The Mariner Golf Course) plans to finish the construction of the second nine of his executive course in order to open 18 completed holes by next fall.

Mark Selby (Palmetto Pines Golf Course) will be building a practice area with a green for his members to practice their wedge shots and/or chipping. Also, he is planning to strip the sod off several tees, then level that area and replace the sod. During the rainy season, his plans also call for the course to be closed one day, so Mike Cook can come in and inject all his fairways with EDB at a cost of more than \$7000. Buddy Carmouche (Cypress Lake Golf Course) will be spending \$34,000 to patch and cover his existing cart path which circles the entire course. He also plans to build a new tee for the 18th hole during the early summer. Rick Cook (Mirror Lakes Golf Course) also will be leveling several existing tees on his golf course just after the "Poa Annuu Tournament". Rick will aerify the tees first and then pull a heavy roller across the tees several times to achieve a more level surface. Ten miles to the east, Dennis Weaver (Oxbow Golf Course) is watching a three to four million dollar clubhouse take shape. This building will include a pro shop, cart storage area, meeting rooms, restaurant and will have about 25 motel rooms close by with expansion for more in the future. The completion date is set for early next fall.

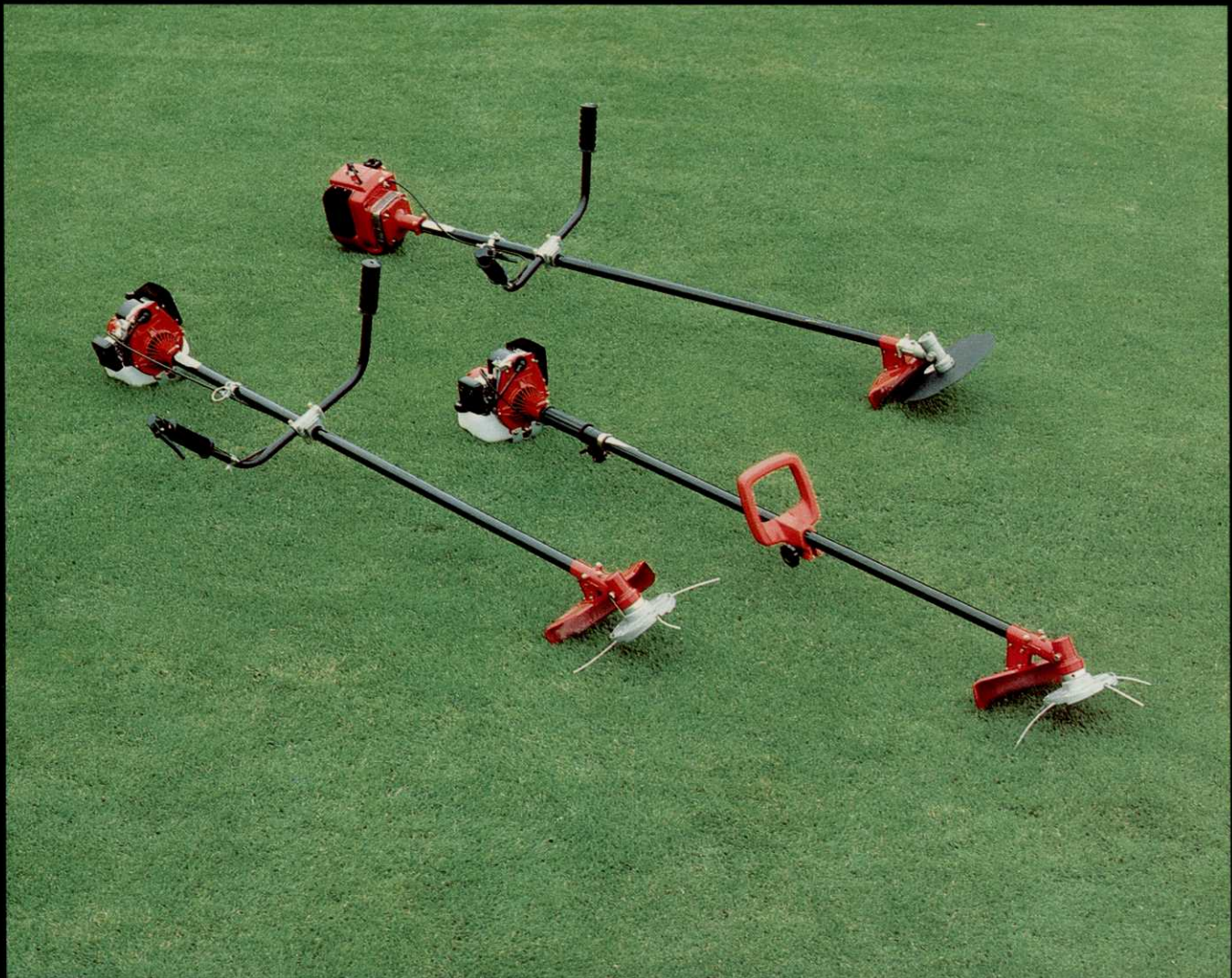
Stan Norton (Naples Beach and Golf Club) after extensive greens rebuilding the past two years, now plans to rebuild several tees to complete the reconstruction of one of the oldest golf courses on the west coast of Florida. Architect Ron Garl redesigned all the greens.

Paul Nevers (The Country Club of Naples) is undertaking an ambitious program of reshaping 75% of his sand traps. He will be cutting away in some areas and adding sod to new tongues in other locations in order to achieve the new appearance. He will also be adding new sand to these traps to finish off the program. Meanwhile, Rodger Whitford (The Pelican Bay Golf Course) has been asked to add several sand traps to his new facility and hopes at the same time to add a few ladies tees. Bill Flippen (The Hole-in-the-Wall Golf Course) will be starting a program to build a few ladies tees each year for the next couple of years. He is going to replace his four ice cooled water coolers with electric coolers that have filters on them to improve the taste of local water. Bill's largest project is the replacement of all his Griswald Controllers with Toro Controllers and at the

(Continued on Page 21)

**TORO®**

# **GAS POWERED TRIMMERS AND CUTTERS**



**A complete line of Professionals  
built to do an honest day's work.  
From the professionals  
in turf care products.**

# Trim time and effort with these rugged line

Kioritz air cooled, 2 cycle, single cylinder gasoline engine with 21.2cc displacement



Shaft mounted fingertip control with switch for engine shutdown

Shoulder strap with quick release coupling

"D" type hand grip



Debris guard standard

Automatic feed head with .095 nylon line

## 21cc Trimmer (model 30900)

Our highly popular flexible line trimmer ideal for those quick grass and weed trimming chores. Easy to carry and handle at just 11.9 lbs., and built Toro tough to earn its keep everyday.

**Optional accessories:**  
 10" weed cutter blade  
 10" circular saw blade  
 Fixed nylon line head  
 Deluxe operator harness with quick release coupling

Kioritz air cooled, 2 cycle, single cylinder gasoline engine with 21.2 cc displacement



Fingertip control with switch for engine shutdown

Deluxe operator harness with quick release coupling

Adjustable U-handle control with shock absorbing rubber hand grips



Debris guard standard

Fixed head with heavy duty nylon line

## 21cc Deluxe Trimmer (model 30910)

Our 21cc Trimmer specially equipped for longer stretches of work as well as heavier weed and brush cutting jobs. For easy portability and maneuverability, it has a U-handle control and deluxe operator harness as standard features.

**Optional Accessories:**  
 10" weed cutter blade  
 10" circular saw blade  
 Automatic feed head with .095 nylon line

# Power off every job Professionals from Toro®

Kioritz air cooled, 2 cycle, single cylinder gasoline engine with 30.1 cc displacement

Fingertip control with switch for engine shutdown

Vibration dampening engine mount

Adjustable U-handle control with shock absorbing rubber hand grips

Deluxe operator harness with quick release coupling

Debris guard standard

Fixed head with heavy duty nylon line and 10" weed cutter blade are standard (shown with 10" weed cutter)

## 30cc Trimmer/Cutter (model 30920)

Our heftier and more powerful model for sustained, heavy-duty trimming or cutting of everything from grass to light brush. Ruggedly engineered for hour after hour of dependable performance, day after day.

### Optional accessories:

10" circular saw blade  
Automatic feed head with .095 nylon line

## Toro trimmers offer these features:



**Straight drive shaft** is stronger. **Bevel gears** provide positive power transmission; a definite plus over flexible drive connections on many other trimmers. **Debris guard** is standard on all Toro models.



**Heavy nylon-flocked cover** protects operator from direct contact with hot muffler.



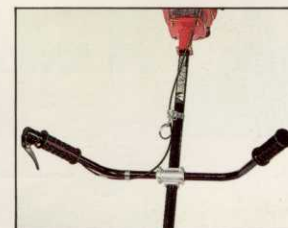
**Fuel tank** is located for easy access beneath the engine.



Reliably powered by the world famous **Kioritz air cooled, two cycle gasoline engine**.



**Sturdy D-type control handle**, standard on the 21cc trimmer, is adjustable to suit operator.



**Wide U-type control handle**, standard on the 21cc deluxe and 30cc models, features a spring loaded throttle and shock absorbing rubber hand grips.

# Add versatility with these accessories.



**Automatic line feed.** Just tap the head on the ground and nylon line advances one inch, only when trimmer is at full throttle. (Standard on 21cc, optional on other models.)



**Four-line fixed head.** Heavy duty nylon line is easily changeable. (Standard on 30910, 30920, optional on 30900.)



**10" weed cutter blade.** For tall grass, weeds and brush. (Standard on 30920, optional on other models.)



**10" circular saw blade.** For various heavy cutting chores, including brush. (Optional on all models.)



**Deluxe operator harness.** Features Toro's 2" wide nylon straps. Gives operator more comfort, better trimmer control. Also has a handy pouch for extra fixed head line. (Standard on 30910, 30920, optional on 30900.)

## Specifications\*

### 21cc TRIMMER (Model 30900)

**ENGINE:** Kioritz, air cooled, 2 cycle, single cylinder, 6500 R.P.M., flywheel magneto ignition, automatic rewind starter, nylon flock shielded muffler

**CARBURETOR:** All position Walbro — diaphragm type

**TYPE OF CUTTING SYSTEM:** Automatic line feed head standard. Debris guard standard.

**CUTTING SWATH:** 15" with automatic line feed head

**DIAMETER OF CUTTING LINE:** .095 with automatic line feed head

**CONTROL HANDLES:** D-type adjustable lower handle

**WEIGHT:** 11.9 lbs. without strap and cutting head

**LENGTH:** 68.9 inches

**DRIVE TRAIN:** Bevel gear, solid steel drive shaft

**GAS MIXTURE:** 20:1 Regular gasoline mixed with approved 2 cycle engine oil.

**FUEL TANK CAPACITY:** 16.9 fluid ounces (.5 quart)

**CARRYING STRAP:** Adjustable shoulder carrying strap with quick release hardware

**OPTIONS:**

P/N 33-6400 Fixed line head w/o line (14" cutting swath)

P/N 40-3180 (24) 14" sections of .130 line for fixed line head

P/N 40-3190 (100) 14" sections of .130 line for fixed line head

P/N 40-3170 10" circular saw (brush) blade

P/N 40-3160 10" weed cutter blade

P/N 33-7630 Deluxe harness straps with quick release hardware

P/N 41-4440 Blade adapter kit (required to mount blades)

P/N 41-6810 Deluxe tool kit

P/N 41-6400 4 Prewound spools of .095 line for automatic line feed head

P/N 41-6820 1 lb. spool of .095 line for automatic line feed head

P/N 41-6830 3 lb. spool of .095 line for automatic line feed head

### 21cc DELUXE TRIMMER (Model 30910)

**ENGINE:** Kioritz, air cooled, 2 cycle, single cylinder, 6500 R.P.M., flywheel magneto ignition, automatic rewind starter, nylon flock shielded muffler

**CARBURETOR:** All position Walbro — diaphragm type

**TYPE OF CUTTING SYSTEM:** Fixed nylon line head standard. Debris guard standard

**CUTTING SWATH:** 14" with fixed line head

**DIAMETER OF CUTTING LINE:** .130 with fixed line head

**CONTROL HANDLES:** U-type with spring loaded throttle and shock absorbing rubber hand grips

**WEIGHT:** 13.2 lbs. without straps and cutting head

**LENGTH:** 68.9 inches

**DRIVE TRAIN:** Bevel gear, solid steel drive shaft

**GAS MIXTURE:** 20:1 Regular gasoline mixed with approved 2 cycle engine oil

**FUEL TANK CAPACITY:** 16.9 fluid ounces (.5 quart)

**CARRYING STRAP:** Deluxe harness straps with quick release hardware

**OPTIONS:**

P/N 41-6220 Automatic line feed head

P/N 41-6400 4 prewound spools of .095 line for automatic line feed head

P/N 40-3170 10" circular saw (brush) blade

P/N 40-3160 10" weed cutter blade

P/N 40-3180 (24) 14" sections of .130 line for fixed line head

P/N 40-3190 (100) 14" sections of .130 line for fixed line head

P/N 41-6810 Deluxe tool kit

P/N 41-6820 1 lb. spool of .095 line for automatic line feed head

P/N 41-6830 3 lb. spool of .095 line for automatic line feed head

P/N 41-4440 Blade adapter kit (required to mount blades)

### 30cc TRIMMER/CUTTER (Model 30920)

**ENGINE:** Kioritz, air cooled, 2 cycle, single cylinder, 8000 R.P.M., flywheel magneto ignition, automatic rewind starter, nylon flock shielded muffler, vibration dampening rubber mounts

**CARBURETOR:** All position Walbro — diaphragm type

**TYPE OF CUTTING SYSTEM:** Fixed nylon line head and 10" weed cutter blade standard. Debris guard standard

**CUTTING SWATH:** 14" with fixed line head 10" with weed cutter blade

**DIAMETER OF CUTTING LINE:** .130 with fixed line head

**CONTROL HANDLES:** U-type with spring loaded throttle and shock absorbing rubber hand grips

**WEIGHT:** 15 lbs. without straps and cutting head

**LENGTH:** 66.5 inches

**DRIVE TRAIN:** Bevel gear, solid steel drive shaft

**GAS MIXTURE:** 20:1 Regular gasoline mixed with approved 2 cycle engine oil.

**FUEL TANK CAPACITY:** 15.2 fluid ounces (.5 quart)

**CARRYING STRAP:** Deluxe harness straps with quick release hardware

**OPTIONS:**

P/N 41-6220 Automatic line feed head

P/N 41-6400 4 prewound spools of .095 line for automatic line feed head

P/N 40-3170 10" circular saw (brush) blade

P/N 40-3160 10" weed cutter blade

P/N 40-3180 (24) 14" sections of .130 line for fixed line head

P/N 40-3190 (100) 14" sections of .130 line for fixed line head

P/N 41-6810 Deluxe tool kit

P/N 41-6820 1 lb. spool of .095 line for automatic line feed head

P/N 41-6830 3 lb. spool of .095 line for automatic line feed head

Commercial Products Division





## The Gator Grows

(Continued from Page 21)

same time the installation of hydraulic control tubing to all the heads. He figures to spend more than \$100,000 to complete this irrigation switchover. Next door, Clint Smallridge is planning to spend approximately \$20,000 for new drainage. The reason for this is the property around his course has been elevated for new homes and this has caused the water that used to run off to back up now onto the golf course. Clint also plans additional cart path renovation in selected areas and a complete regrassing of at least four putting surfaces. One other project will be to level several tee tops that have become hump backed due to excessive top dressing where most of the wear appears.

Apparently, many Southwest Florida golf courses are undertaking major renovation programs this year, either because they feel that the funds may not be available next year, or that by doing it now, the golf course will get more value out of the dollar than might be possible a year from now. ■

## New Drag Brush Introduced

Standard Golf Co. has introduced a drag brush for topdressing greens that will eliminate the stress caused by metal drags. The "Brush-Easy" will also do a more efficient job of putting topdressing into aeration holes when light dressing is applied.

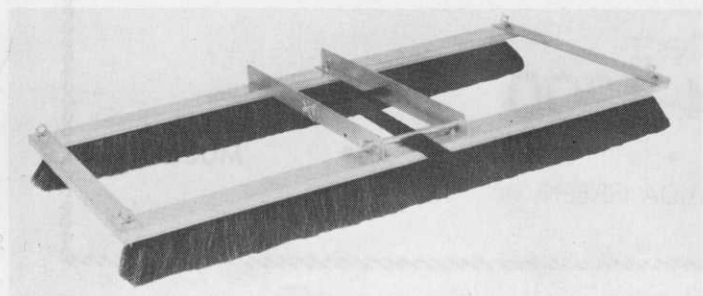
The Pro-Line Brush-Easy mounts six heavy-duty brushes in an aluminum frame that has a total weight of only 22 pounds. The tow bar is designed so that the Brush-Easy may be towed in either direction for longer brush life.

The brushes vibrate topdressing material into the aeration holes, rather than drag the material around, and the brushes stand the grass blades up, putting material around the blades.

According to superintendents, the Brush-Easy doesn't tear up the grass around the aeration holes, doesn't snag the greens, and doesn't pull topdressing off the greens into the low areas.

Greens recover faster. Players are back on the greens faster. And the Brush-Easy makes it possible to do light topdressings — a practice recommended over infrequent heavy dressing.

Complete information is available in the 1981 Standard Pro-Line catalog. Write for your free copy. Standard Golf Co., 220 East Fourth Street, Cedar Falls, Iowa 50613 ■



## Which Soil or Water Test Should I Ask For?

The services offered by the Extension Soil Testing Laboratory of the University of Florida are meant to serve a wide range of analytical needs. Since each test offered by the lab was developed for a specific purpose, it is generally inappropriate to use the test results in situations not anticipated when the test was established.

### SOIL TESTS AVAILABLE

**ROUTINE SOIL TEST.** Provides basic soil fertility information for field and forest crops. Includes pH and lime requirements so *DO NOT* request that test if you ask for the Routine test.

**pH and LIME REQUIREMENT ONLY.** Saves testing for P, K, Ca, and Mg when that information is either not needed or is uninterpretable for the crop or situation in question. *NOTE:* Do not request this test if you have requested the Routine Soil Test. It is included in the Routine Soil Test Option.

**MICRONUTRIENTS.** Diagnosis of suspected deficiencies or toxicities. Interpretation of results are very tentative for most crops at present.

**SOLUBLE SALTS.** Primarily for intensively fertilized commercial vegetable crops.

**INTENSITY AND BALANCE.** Developed exclusively for intensively cropped vegetable soil. Generally interpretable only where sub-surface or seepage irrigation is used under field conditions, and in some greenhouse situations. Specialized interpretation necessary.

**GREENHOUSE AND POTTING MIXES.** Developed for monitoring fertility status of non-soil potting media used in commercial nurseries. Specialized interpretation necessary.

**COPPER TOXICITY.** A semi-quantitative test meaningful only for soil from citrus groves.

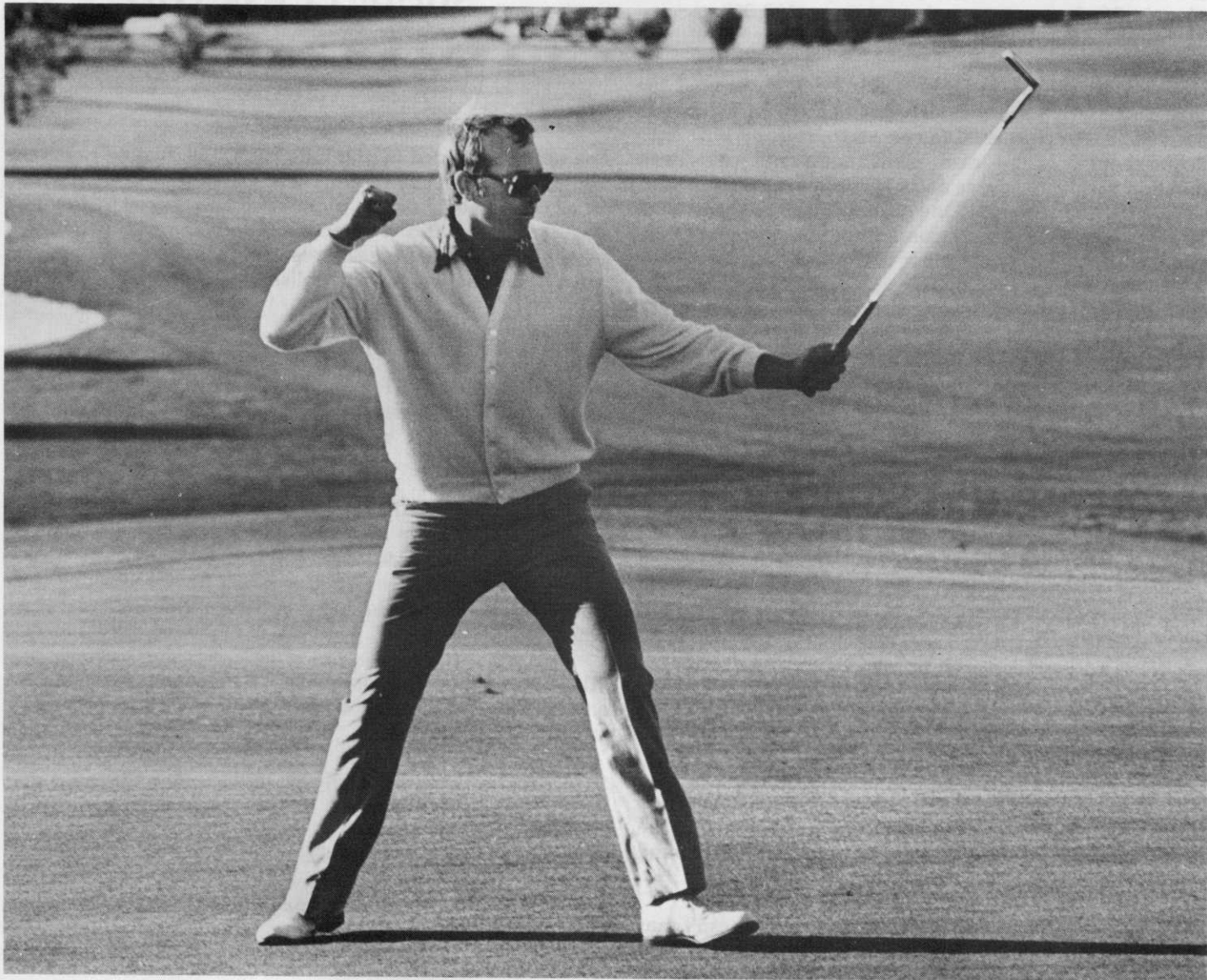
**ORGANIC MATTER.** Quantative measurement of soil organic matter content where needed to guide herbicide applications.

### WATER TESTS AVAILABLE

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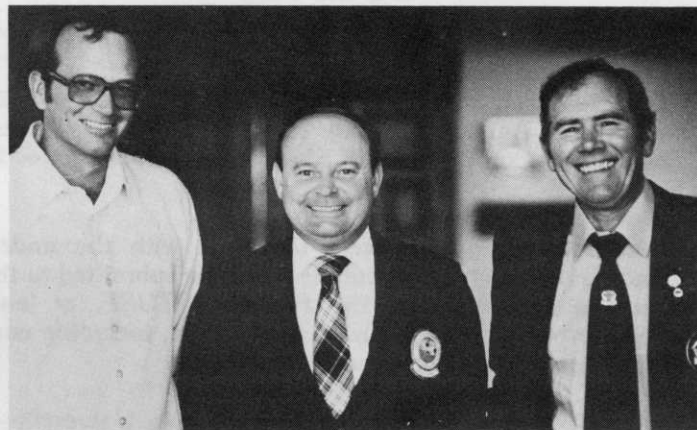
# Florida Golf Team Wins National Title

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



Dan Meyers, Melvin B. Lucas Jr., Walter Woods.

## Regulatory Actions

Chlordane can still be used in Florida for subsurface termite control, fire ant control in non-crop areas and for any other use which appears on the label of any chlordane you still have in your possession. The best way to dispose of a pesticide that has either been cancelled or suspended, is to use it according to label directions until existing stocks are depleted. No pesticide has ever been banned in the U.S. A ban is a total cancellation and suspension of all manufacturing and use. Only 3 pesticides have had emergency suspensions issued: 2,4,5-T, Silvex and DBCP. In these cases, it was illegal to use these products for suspended uses, however, they can still be used for some uses. If EPA bans a pesticide, they would probably have to pick up all existing stock, pay invoice price plus 10%, and then safely dispose of the material. This is not likely. Remember, the new regulations allow the "user" to use a pesticide for any pest as long as the site or crop is on the label in the possession of the applicator. The use of chlordane for non-crop fire ant control expires December 31, 1980 and the use of this product for fire ant control in nursery stock in the quarantine program expired December 31, 1979. ■

*Chemically Speaking, April, 1980*

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# Research Grants Awarded

Three research grants totaling \$6,892.00 were awarded during the Annual Meeting of the Florida Turf-Grass Association Conference and Show held October 19 - 22 here.

These research grants were bestowed with the understanding that a research outline would be submitted to the Association publication, the *FLORIDA TURF*, at least annual progress reports and a final report, including conclusions gained from the research projects.

Dr. A. C. Tarjan, Professor of Nematology, University of Florida (Gainesville) was awarded a \$1,000.00 grant to investigate the effectiveness of certain emulsifiers, wetting agents, and surface active agents in the suppression of populations of nematodes attacking turfgrass roots.

The efficiency of such materials has been reported in the past. These materials are not harmful to humans and it is improbable that they will be restricted by regulatory agencies.

Turf plots will be established on nematode-infected areas, treatments initiated and nematode counts taken at various time intervals. Dr. Tarjan will be supervising student help throughout the course of this eight-month study.

Drs. Philip Busey and Bruce Augustin, Turfgrass Breeder and Turfgrass Extension Specialist respectively, University of Florida Agricultural Research Center (Fort Lauderdale), were awarded a \$3,892.00 grant which will enable the two scientists to conduct a survey of the turf species and varieties grown in established urban areas of Jacksonville, Orlando, Tampa and southeast Florida. The main emphasis will be on the identification of St. Augustine varieties grown in residential lawns.

The information gathered will allow the analysis of market penetration of new varieties and will further allow scientists

to tailor their pest control research to the grasses actually grown in the field. Additionally, St. Augustine sod from nurseries and other retail outlets will be collected and identified. This information will hopefully be used to reduce the confusion about St. Augustine sod varieties being sold and to provide consumer protection information.

This project could produce more efficient and reliable methods of vegetative identification and comparisons which could then be enlisted by agencies involved in enforcing certification and standard guidelines. The research will have an additional spin-off benefit in that it will increase the germplasm pool for future St. Augustine variety breeding programs.

The final project sponsored was to Dr. James A. Reinert, Professor of Entomology, University of Florida Agricultural Research Center (Fort Lauderdale). A \$2,000.00 grant was made which will help support research being conducted on the two species of mole crickets which are serious pests of turfgrass in Florida and throughout the southeast United States. In the two year period from 1976 to 1978, it is estimated that mole crickets caused in excess of \$100 million of damage in Florida alone.

Funds will be used to establish two additional mole cricket trapping stations, one in Jacksonville and the other in the Naples area. These additional traps will complete a trap line across the state which has already been implemented by Dr. Reinert in cooperation with Dr. Tom Walker, Department of Entomology, University of Florida (Gainesville). Other traps are currently located in Gainesville, Bradenton, Orlando and Fort Lauderdale.

This study will provide information on the flight behavior and dispersion of mole crickets throughout Florida. Information gained should be useful in predicting when mole crickets might become damaging in a region of the state. Knowledge of their flight and dispersion will also help in developing and timing control strategies for these destructive turf pests.

With questionable chemical availability and efficiency, such a study could prove useful in determining points in the life cycle where mole crickets would be increasingly susceptible to chemical control. ■



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# What's Happening In Golf Facility Development

By HARRY C. ECKHOFF

Director Information Services, National Golf Foundation

## Golf Course Development 1980

Golf course openings across the country during 1980 show a slight improvement over 1979 with 132 and 125 openings respectively.

The leading states among the 132 courses reported open in 1980 were Florida, 26; California, 12; Arizona, 11; South Carolina, 9; Texas, 8; Michigan, 7; and Illinois, Indiana and Minnesota, each with 5.

Leading states in 1979 were Florida, 15; California, 14; Michigan, 10; Ohio, 8; Illinois and Texas each with 6; North Carolina and Pennsylvania each with 4.

New golf course construction starts reported for 1980 were 115; there were 147 in 1979. Of the 115 new courses reported under construction, 55 were additions to existing facilities. New golf course prospects decreased from 130 in 1979 to 83 in 1980. NGF records reveal that on January 1, 1981 there were 391 courses in some state of construction.

The decrease cited above can be attributed in part to the increasing development costs due to high inflation and continuing high interest rates. Like other business enterprises, golf facilities will not, and should not, be built when it is not economically feasible to do so.

The leading states with new golf course starts in 1980 were Florida (24), Michigan (15), California (7), New York (6), Arkansas and South Carolina (5 each), and Arizona, Indiana, Missouri, Montana, Ohio, Texas and Wisconsin (4 each).

An analysis of golf facility activity in the nation for 1980 reveals that Florida is the big leader with 76 projects when combining courses openings, construction starts and prospects. ■

## Florida Turf-Grass Association Elects New Officers and Directors

New Officer and Directors were elected recently at the 28th Annual Conference and Show of the Florida Turf-Grass Association. Serving as President will be James D. Carter, President of Bingham Seed Company, Inc., Jacksonville; Vice President is Dan Jones, Superintendent at Banyan Golf Club, West Palm Beach. Serving his second term as Secretary-Treasurer is Paul L. Deets, Marketing Manager for Woodbury Chemical Company, Mount Dora. Harvey E. Phillips is the Immediate Past President.

New Board Members include: Stephen E. Baeumel, Director of Golf Course Operations for the City of Pompano Beach; Max A. Brown, Ph. D., turfgrass consultant, Plantation; and Michael J. McLaughlin, Sales Manager of DeBra Turf and Industrial Equipment Company, Tampa. Re-elected were: E. E. "Mack" Baugh, superintendent of Longboat Key Golf & Tennis Club and Gerald Millholen, Agronomist/Sales, Southern Turf Nurseries, Brandon. Returning Board Members are: Michael T. Ayer, Quandt, Ayer & Associates, Tampa, Jim Hamilton, Zuan Equipment, Inc., St. Petersburg; John P. Hayden, San Jose Country Club, Jacksonville; W. Timothy Hiers, Suntree Country Club, Melbourne; Thomas M. Latta, Ph.D., Florida Aquatic Weed Control, Inc., Fort Lauderdale; Leroy Phillips, Green Glove Corporation, Fort Pierce; Lloyd D. Purdy, Jr., A. Duda & Sons, Oviedo; Michael Swanson, Pursley Turf Farms, Palmetto; and William G. Wagner, Tequesta Country Club, Tequesta.

The turf industry in Florida has been valued in excess of \$534 million. The Florida Turf-Grass Association was founded in 1953 and is dedicated to education and research.

The 29th Annual Conference and Show will be held at the Sheraton Towers Hotel, Orlando, October 18-21, 1981. ■

## No Superintendents Meeting

The second annual Palm Beach "no superintendent" meeting was a huge success. At this unique meeting sponsored by the Palm Beach Chapter, no golf course superintendents were allowed to attend. The meeting is an all day education session for golf course assistants, foremen, irrigation technicians, mechanics, and other leading staff members. Also attending were several golf pros and a greens committee member. Attendance was 82, with over 40 clubs represented. Attendance figures showed neighboring South Florida and Treasure Coast Chapters were represented. The most amazing statistic is that attendance was still 82 at the end of the all day session. That figure would not be achieved at a "regular superintendent meeting." Match that gentlemen!!!! (Continued on Page 26)



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# Mole Cricket Alert

Information compiled  
By UDAY K. YADAV  
Florida Cooperative Extension Service

It is that time of year when you folks are hassled with those cute little critters called mole crickets. Estimates indicate mole cricket population is once again on the rise in Central Florida. The presence of mole crickets is indicated by burrows in soil, loose soil, uprooted seedlings, and damaged roots.

The major mole crickets found in Florida on bahia grass, zoysia grass, and bermuda grass are the southern mole cricket (*scapteriscus acletus* R.) and the Puertorican mole cricket (*scapteriscus vicinus* scudd). Mole crickets are odd, velvety, greenish-brownish creatures, 1½" long. Has short forelegs and shovel-like feet with large beady eyes. They live in the soil and even one cricket can cause severe damage on a lawn in a short time by loosening the soil and feeding on grass roots. They are active nocturnally, prefer humid conditions, and a temperature above 70°F. During warm humid conditions especially after a rain or irrigation, they can be found on the soil surface gathering bits of food. They lay eggs in the spring, usually in underground cells which hatch in about two weeks during April or May. The nymphs become adults by fall. The mole crickets have only one generation per year.

## Control

Under proper temperature (above 65°N) and moisture conditions mole crickets can be controlled by sprays, granules or baits. Proper timing, proper frequency (two applications 10 days to 2 weeks apart) and proper application are important. Several golf courses have been very successful in controlling mole crickets during late May or early June when nymphs are still very small. A mole cricket bait (0.5% to 2%) containing Baygon, Dursban or Toxaphene applied during July and August has provided satisfactory control. Recently, best results have been obtained with 5% granules of Mocap. As far as we know, Scott's brand is the only formulation of Mocap that has mole crickets included on the label. More information on the availability of this product can be obtained through O.M. Scott's representative, Mr. Keith Webster. His telephone number is (813) 644-1606. Mocap is a restricted pesticide and is recommended for commercial use only. ■

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# No Superintendents Meeting

(Continued from Page 25)

Joe Konwinski, retired area superintendent and Palm Beach Junior College turf instructor, moderated the program. The session was held at the Palm Beach Junior College, Lake Worth campus. Otis Harvey, Dean of Continued Education, and Fred Hollings, Coordinator of Continued Education, supplied the superb facility.

A variety of subjects were covered. Dr. Max Brown, Liquid Ag Systems; spoke on all types of fertilizer and the turfgrass nutritional need. Bob Fretz, head sales representative, and Tom Peyton, service manager, from Trail Ford Tractor Company discussed diesel and gas engine repairs and maintenance. Bob Lewis, service manager for Mity Mite Motors, reviewed small engine trouble shooting and repair. Cliff Quinn, Rainbird Irrigation, explained irrigation design, installation and repair. Chuck Ankrom, golf course architect, discussed golf course design and construction. He also reviewed his recent trip to Scotland with excellent slides of their courses. Many whispers of disbelief were heard in the audience about the contrast between "true golf" and the American version.

Next year's program is already being planned. Next year make sure your staff is part of this success story. ■

## Let's Tip Our Hats to the Areas's Golf Course Superintendents

By VINCE SMITH

The year 1980 has been a spectacular period for golf growth in Southwest Florida and the bulk of the game's incredible expansion has come in the area of development-type facilities.

The architects of these fine new lower Gulf Coast playing facilities and the club professionals who will oversee the actual golfing operations have been duly acknowledged from time to time.

There is, however, one segment of the technicians whose work in making these new outdoor playing arenas an instrumental part of our lifestyle who still do not receive adequate recognition.

The body of men so integral to a successful golf course program is the golf course superintendents who supply such vital input into bringing these new facilities up to good playing standards.

Bob Sanderson, golf course superintendent at Port Charlotte Country Club and the prime moving factor behind the increasing ascendancy of the Everglades Golf Course Superintendents Association, dropped a gentle reminder several weeks ago that the superintendents at these new clubs should not go unnoticed.

(Continued on Page 31)

# GCSAA Award Honors Hans Schmeisser Memory

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

land mass; pioneers in science are made famous thru a medicine or chemical; pioneers in space will always be recognized for their daring exploits; but pioneers in a slow developing industry such as ours are most often forgotten. As gradual improvements unfold and cultivate the evolution of a profession which starts out as a relatively obscure job and builds into a position of endless responsibility." ■



*Otto Schmeisser accepts award for father Hans.*

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<b>Texture</b>	Fine	Medium to Coarse	Fine to Medium
<b>Seedling Disease Resistance</b>	Excellent	Very Good	→
<b>Spring Transition</b>	Very Good	Excellent	Very Good

Characteristics



## Let's Tip Our Hats to the Area's Golf Course Superintendents

(Continued from Page 26)

One gent who has been particularly overlooked by this department is Wayne Lippold, golf course superintendent of The Forest, the fine 18-hole development course which opened up just off U.S. 41, south of Gladiolus Drive two weeks ago.

Lippold has done an incredible job in gradually bringing the entire playing area of The Forest into superior condition. The Forest could well have opened for play several months before the gates actually swung open on Dec. 13 — that's the kind of job Lippold accomplished.

"Wayne has been working for several months along with the construction crew on irrigation installation, grass planting and attending to the 1,001 details of a new crew and maintenance procedures," Sanderson said. "His experience bringing in new courses, not only in this area, but also up north, should make the The Forest a super layout by opening day."

It did.

"Another superintendent who has been equally hard at work bringing in a new golf course is Mark Tallmadge at Burnt Store Marina," Sanderson says. "This course may be ready for play in February, depending on the germination of the overseeded grasses. It will be a very exciting, demanding short course with 18 holes initially and plans for 27 soon."

Sanderson reports that Toby Strahan, course superintendent at Bear's Paw, "spent all of the past year bringing that course to its peak for the opening day a few weeks ago. From what has been said about Bear's Paw by those lucky enough to play there, it is a real test of any golfer's ability. It features several grass covered fairway traps and water placed in very strategic areas and conditions are excellent."

They certainly are.

"Mark Hampton, superintendent at the new Wyndemere course and vice president of the Everglades Golf Course Superintendents Association, is also approaching opening day," Sanderson said. "And he's been spending many months worrying whether everything would come together at the right time to make his 27-hole golf course look its best after the ribbon cutting."

Hampton has not only been worrying and sweating the opening of the magnificent Arthur Hills-designed Wyndemere layout, he has been practically sleeping with it. But Hampton and his crew's dedicated works will come to at least partial fruition this Friday when 18 of the Naples' course's 27 holes are opened for play.

And if the year 1980 was a satisfactory period for the golf course superintendents of Southwest Florida, 1981 is looming every bit as challenging since more new development courses will be in various phases of construction.

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To name a few: Quail Creek, Fiddlesticks, Alden Pines, Wildcat Run and Sandhill Pines. These will be comparable to The Forest, Burnt Store Marina and Wyndemere and one of the most vital roles played in their building processes will be the dedication of the golf course superintendents.

And the Everglades Golf Course Superintendents Association has an abundance of this commodity on hand. ■

Reprinted from Fort Myers News-Press.

## Growing Turf-Grass Under Shade

By UDAY K. YADAV

In most landscapes, turfgrasses are grown in association with trees, shrubs or buildings. This association involves shading which reduces the light intensity and alters the quality of the light reaching under a canopy of trees, shrubs and other structures. Grasses differ in their ability to endure shade. The relative shade adaptation is as follows:

Excellent  
St. Augustine grass

Good  
Zoysia grass

(Continued on Page 32)

## Growing Turf-Grass Under Shade

(Continued from Page 31)

Medium  
Centipede grass  
Bahia grass

Poor  
Bermuda grass

In spite of these limitations, shade tolerant grasses or plants can be established and maintained under shaded conditions. Following practices are likely to improve turf-grass performance under these conditions:

1. Use shade tolerant grass. The shade adaptation of St. Augustine grass is excellent in Florida. In northwest Florida, zoysia grass has shown good shade adaptation.
2. Light intensity can be improved by pruning the tree limbs below 10 ft. or through selective pruning of branches in the crown of the tree. Undesirable trees may be eliminated from the landscape.
3. Remove grass clippings, pine needles and other debris to encourage turf establishment. Fallen tree leaves may smother the grass or provide a home for insect and disease organisms.
4. Air circulation can be enhanced by the elimination of thick underbrush and judicious pruning of overgrown shrubs. This would create drying conditions, lowering relative humidity and retarding disease development.
5. Prune shallow tree roots to reduce competition for water and nutrients.
6. Deep and infrequent irrigation to increase deeper root system.
7. Raise the cutting height to increase the leaf area index.
8. Control application of nitrogen fertilizers to avoid depletion of carbohydrates and to produce tougher tissues.
9. Redirect or control traffic in shaded areas to protect turf from wear injury.
10. Fertilize established trees by drilling or punching holes 12" deep to soil 2 to 3 feet apart from trunk to drip line.
11. Maintain a favorable soil reaction for the grass.
12. Maintain a regular weed control program to reduce plant competition and to improve the appearance of overall landscape.
13. In hard to mow or hard to establish situations, use a suitable ground cover. Monkey grass (*Liriope Muscari*) and Mondo grass (*Ophiopogon Japonicus*) excel as a ground cover in heavy shade and beneath trees (such as live oaks) which have shallow, competitive root systems. Plants such as English Ivy, Algerian Ivy, and Periwinkle are also suitable ground covers. ■

## Pesticide Ban Stirs Controversy

By LOUIS RUKEYSER

Are all well-meaning U.S. environmentalists contributing to a coming global food catastrophe?

Many objective observers have come to think so and, if they're right, an early test of Ronald Reagan's resolve to curb governmental overregulation may hit him directly in the breadbasket.

Right now, Americans are being spared any serious effects from this problem. Indeed, it has helped swell the demand for U.S. farm exports, which in turn has contributed to a strengthening dollar.

But as with the energy crisis — which most Americans refused to believe, even when it was staring them right in the gas pump — the food crisis that is taking shape is entirely authentic and is likely, in the end, to hurt us, too. And not just with rising prices.

The millions facing famine, social disruption and political instability today in lands of exploding populations and squandered resources in Africa, Asia and Latin America will need no convincing. A Presidential Commission on World Hunger, appointed by Jimmy Carter but ignored by him, termed the frustrated desire of the poor for food and other basics "the most potentially explosive force" on earth today — and a growing threat to U.S. security.

One experienced journalistic analyst of foreign affairs, Stanley Karnow, concludes bleakly that "it may already be too late for effective measures against this coming catastrophe.

So what does all this have to do with environmentalists? More than you might think. The fragile ability of many nations to feed their people has been set back by the growing list of restrictions placed on the use and sale of certain agriculture chemicals produced mainly in the U.S. Moreover, pending proposals by the Environmental Protection Agency (EPA) would ban still more farm chemicals.

Clearly, it would be a grotesque exaggeration to focus solely on this aspect of the world food crisis, which is exacerbated by factors as diverse as the rising cost of oil, the cutback in agricultural acreage and an addiction to discredited economic policies. But the contribution of environmental extremism increasingly is being recognized, too; as one shrewd Washington observer put it to me, "the more unreasonable restrictions are placed on the use of pesticides and other farm chemicals, the closer we inch to disaster."

(Continued on Page 33)

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## Pesticide Ban Stirs Controversy

(Continued from Page 33)

Or listen to another expert, Dr. Jack D. Early, president of the National Agricultural Chemicals Association, who says: "Reality would have us face the fact that without pesticides, preservatives and fertilizers, crop losses would likely double. And if we continue to unreasonably restrict their use, we will have to accept at least some of the responsibility for the problems that will likely result."

As with so many problems that were presented in the 1960s as clear moral choices — but were not — the agricultural chemicals issue is a complex equation requiring judgment and balance.

Only an idiot would disregard all potential damage to the world we will be presenting our grandchildren. But too many Americans have never passed beyond the one-sided (and factually dubious) fervor of Rachel Carson's best-selling "Silent Spring," which warned against interfering with nature. The rush to ban pesticides, old and new, became a religious crusade.

Perhaps the most striking example was the most effective pesticide of all — DDT. One authority, Dr. Robert M. Devlin of the University of Massachusetts, describes it as "the safest and most efficient chemical for its purpose ever produced by man," adding that DDT alone has been responsible for saving more human lives than all the wonder drugs combined. Indeed, as far back as 1972, an EPA hearing examiner acknowledged that DDT was harmless to humans and that, properly used, it posed no threat to animal, bird or marine life. Yet it remains outlawed. ■



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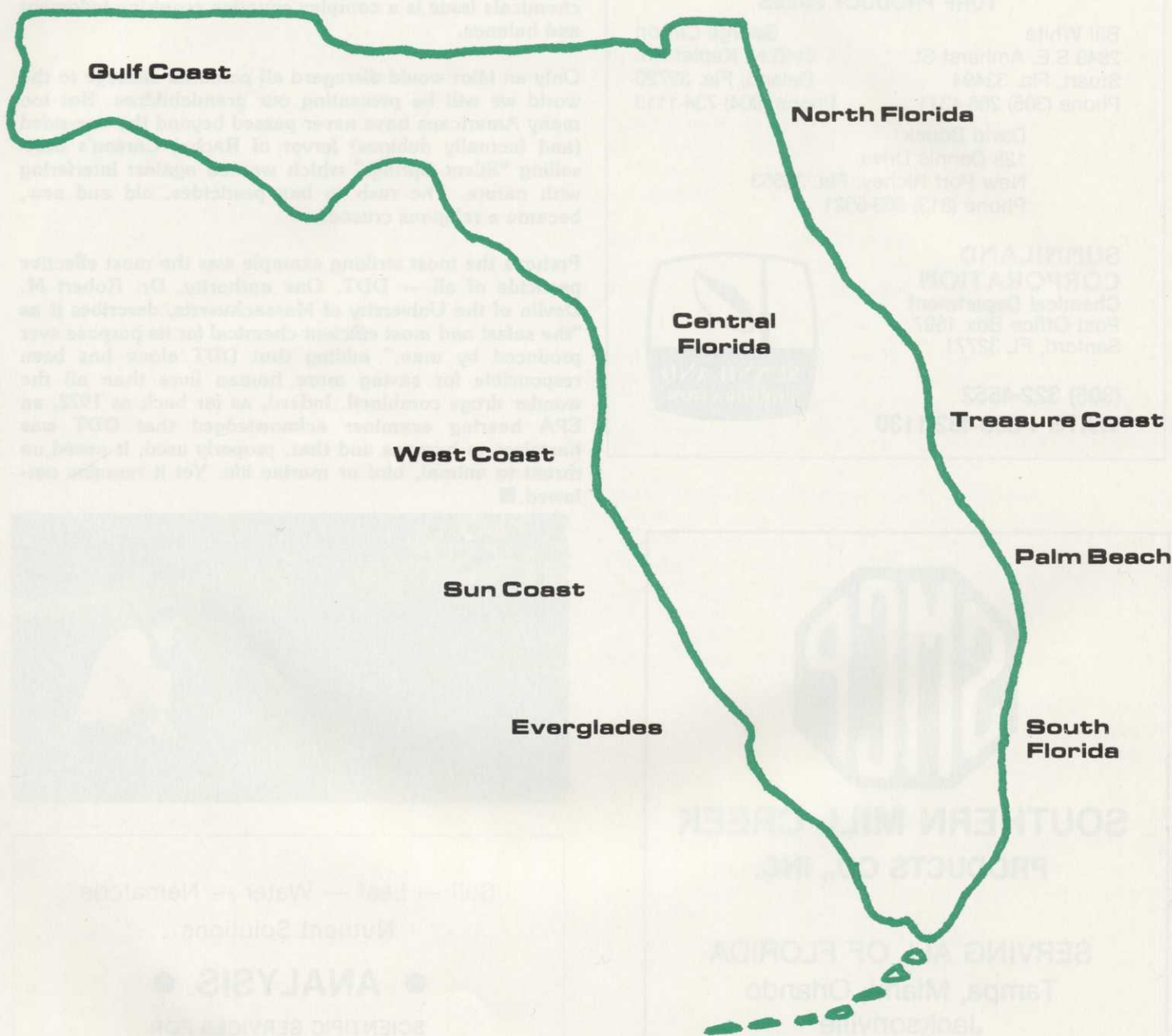
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# Down the Golf Car Path

Construction, placement of the mini-roads require careful planning

By David B. Hueber

**C**onstruction and placement of golf car paths represent a substantial investment for a club. About 80 per cent of the paths constructed are built after the golf courses already have been in operation.

The decisions for the construction and placement of these paths often rest with individuals who are facing this problem for the first time. This decision should be made with a thorough appreciation of the needs of both the golf course and the golfers.

## Why Golf Car Paths?

The benefits of having golf car paths are many. Complete tee-to-green paths permit play by golf car after severe rains without damage to the turf—and without the loss of rental fees. Golf car paths direct golfers onto a surface designed for volume traffic. This “herding” of the golfers moves the traffic away from the playing areas, thereby making golf course maintenance easier.

In addition to increasing the rounds played by golf car, paved paths can mean lower maintenance costs on golf cars. Even though golf cars are designed to traverse rolling terrain, severe jolts to the suspension system can cause damage and the golf car can go out of alignment. Poor alignment leads to inefficient tire wear and unsafe maneuverability of the vehicle.

Mud and other debris from dirt paths also can clog up the mechanical systems. Frequent breakdowns mean fewer rental dollars and fewer golf cars available when the golfers probably want them the most.

Owners of electric golf car fleets should note that complete paths will probably increase the range of their cars. (However, there will be a slight increase in tire wear.) The exact amount of electric car range will depend upon the climate of the area, the terrain of the golf course, and the age and make of the golf cars. An easy

experiment that demonstrates the difference between asphalt pavement and grass is to drive a golf car on both surfaces, noting the difference in speed and handling.

It also would be worthwhile to check with other local electric fleet operators who have complete paths. If they have good maintenance programs, they probably are getting good range from their cars and experiencing fewer breakdowns.

Another factor favoring the extensive use of golf car paths is safety. Golf car paths not only protect the turf, they also protect the golfer. Not all golf car drivers are created equal, unfortunately, and you can expect that some drivers will not use good judgment in operating their vehicles. They might try to climb too steep of a hill when the grass is wet and slippery, or they might go down a hill too quickly and lose control after hitting a bump or dip in the ground. Golf car paths can minimize some of these risks. It also is a good idea to place curbs in those areas where golfers might want to tempt fate and take a dangerous shortcut.

## How Extensive?

Golf car path installation is expensive. Like any investment, a good return for the money is desired. Several factors should be considered when determining the extent of path construction.

Two questions should be asked initially. How can the placement of paths help certain problem maintenance areas? Does the size of the golf car fleet and/or its use justify the installation of complete or partial paths? The former question can be answered by the golf course superintendent. The latter question requires careful consideration because the cost of installing complete paths will continue to increase. All of the benefits of having complete or partial paths must be weighed against the cost of current versus future installation.



*David Hueber wrote this article while he was director of golf facility development for the National Golf Foundation. He recently joined the headquarters staff of the PGA Tour, where he will be involved in the development of Wee Links golf courses (for beginners and youngsters). The PGA Tour's outreach program to bring golf to youngsters will be the subject of a future article by Hueber.*

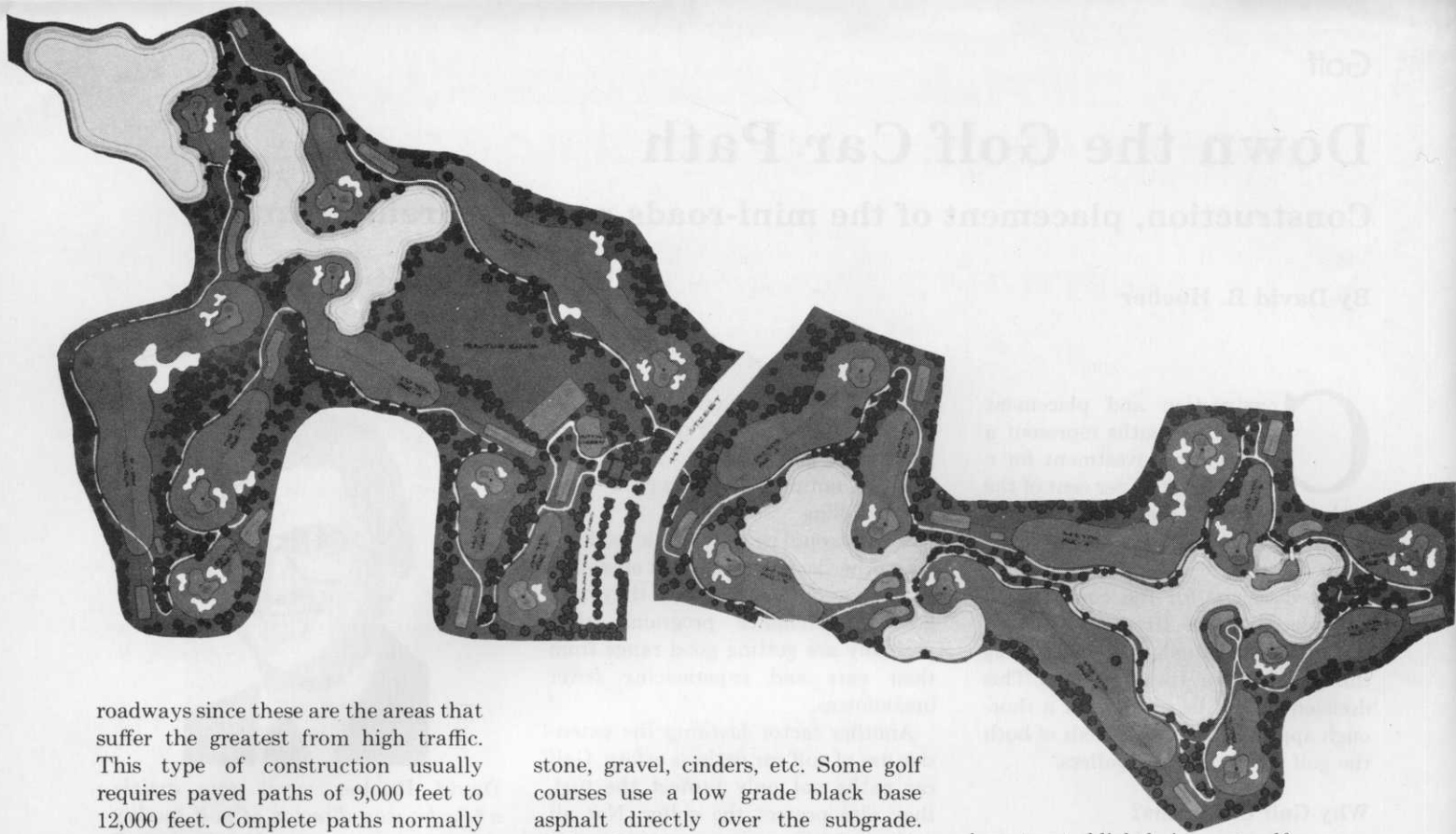
There is no set formula for determining the exact number of golf car rounds to justify either complete or partial paths. The factors in this decision vary in importance from region to region. The type of golf course, its length, the climate, the turf, the terrain and the number of golf car rounds all must be considered.

For example, turf damage is not only made in wet weather; it may be that drought conditions and water shortages make the turf particularly sensitive to heavy traffic.

Any rule of thumb as to the number of golf car rounds that would justify complete path installation would be inappropriate for general use. An initial guideline would be that if a golf course (18 holes regulation length) has a busy fleet of about 40 golf cars, some consideration should be given to installing complete paths.

Most golf courses have paths that just go around the tees and greens. This is an efficient utilization of the

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roadways since these are the areas that suffer the greatest from high traffic. This type of construction usually requires paved paths of 9,000 feet to 12,000 feet. Complete paths normally will range from 18,000 to 25,000, depending upon the course length.

#### How To Construct

Golf car paths can be constructed of either concrete or asphalt. Concrete is a more desirable material because of its durability. Some golf courses in the southwest have concrete paths because asphalt softens with extreme heat. Many municipal and other government-supported courses also have concrete paths. Most golf courses have asphalt paths, however, because it is considerably less expensive.

The Urban Land Institute, in its *Technical Bulletin 70*, recommends that golf car paths have "a base course and a paving course placed on a finished subgrade. The base course usually consists of crushed stone, slag gravel, sand or cinders. The paving course may consist of asphalt concrete, plant mix, or macadam. The more asphalt cement, the higher the quality and more durable the surface. Generally, a four-inch base course and a two- to four-inch paving course is recommended."

A four-inch base course is recommended to promote good drainage and to provide a stable foundation during the expansion and contraction caused by temperature changes. The type of material used as a base course is dictated by what is more economical and locally available. It could be lime-

stone, gravel, cinders, etc. Some golf courses use a low grade black base asphalt directly over the subgrade. Although it is not recommended, this surface is laid about four inches thick and also serves as the paving course.

Golf car path construction costs usually are broken down by the linear foot. The paths are typically six feet wide, and those paths that also accommodate maintenance vehicles are typically eight feet wide. Eight-foot wide paths should be considered for extensive use because the installation cost increment between six- and eight-foot paths is not substantial. The machinery that applies the asphalt is designed to install eight-foot strips and is adjusted to lay six-foot paths. The golf course superintendent will know where the eight-foot paths can be optimally placed.

The price per linear foot will vary by region due to the costs of materials and labor. One note of caution: Decide first upon the asphalt grade that is needed. Often, one of the members of a club can get the work done cheaper. This may or may not be a bargain. It is important to set the construction standards because it makes the selection of contractors easier. It can become very confusing when competitors might be bidding various prices for various grades of asphalt and construction work.

#### Where To Place

The placement of golf car paths has

been treated lightly in most golf course design literature. A good master plan will route the paths throughout the entire golf course even though only partial paths are constructed initially. This advance planning saves money in the long-run because you avoid the expensive pitfalls of poor planning.

The easiest way to design a master plan is from an aerial photograph or a scaled drawing of the golf course. Once the route is plotted on paper it should be checked out on the golf course for unforeseen problem areas.

Some guidelines should be followed when developing a master plan. The placement of the paths will either encourage or discourage golfers from using them. Regardless of any rules or regulations that are made concerning golf car operation, the location of the paths will either make it easy or difficult for the golfers to abide by the rules.

The typical golfer likely will not appreciate why it is important to keep the golf car on the path. If the path is in the left rough and the golfer's slice is in the right rough, more than likely the golf car also will end up in the right rough.

The logical approach to this problem provides the best solution. Most golfers are right-handed and most golfers slice. When it is possible, the path should be placed on the right side

(Continued)



## Golf Car Paths

(Continued)

where most golfers typically hit their shots. The guideline is to place the paths in those areas where most golfers will find it convenient.

There are instances when it would not be appropriate to have the path on the right side. There might be a lake, a creek, or an out of bounds, etc., along the right side of the fairway, and in this case it would be desirable to have the path on the left side. A path next to a hazard could unfairly come into play by exaggerating the consequences of a misdirected shot. The paths are not intended to come into play.

As a general rule the paths should be placed in the right rough about twenty-five feet from the fairway edge. The idea is to keep the path far enough from the fairway to keep it out of play and yet close enough to the areas where most golfers might play their shots. Common sense within the scope of these guidelines is the best placement determinant.

There always will be exceptions to

the rule. The design of the hole might encourage golfers to keep it on the left side; in this instance, the path should be placed where it is convenient for the golfers.

Another guideline is that the path should not cross the fairway if possible. If a path must cross the fairway, it should cross in front of the tee and never in front of the green. Placement of the path in front of the green detracts from the beauty and playability of the hole. Usually this problem can be circumvented by good planning.

Paths should always go in the rough around behind the green or alongside the green; and, whenever possible, go along the right-hand side of the tee and down the right rough. Again, there are exceptions. For example, if the tee is quite large, the golf car path can be used to divide the tee. This division will reduce wear by keeping the traffic off one tee while the other is in use. When a fairway must be crossed, it

should be crossed away from the usual shot-landing areas.

Even if a club is only planning partial paths, the development of a master plan will help avoid such problems as the crossing of fairways. Problems often arise when "unplanned" partial paths are extended to the full length of the course. If the original partial paths are not placed with their future extension in mind, the costs of extending these paths will be significantly higher. It is not unusual to see a golf course completely tear up the old paths because the old paths could not be adapted to a full-course routing.

The use of one common path for two adjacent holes is not recommended. In the short-run common paths are cheaper; however, in the long-run these savings may not be worth the risk and inconvenience. Common paths are not as safe and they concentrate activity onto a single roadway. Collisions are always possible. Play is

slowed because the path will be convenient to most players on only one out of two holes. Only in rare situations will a common path serve two holes equally well.

### A Sample Master Plan

A master plan will facilitate the successful routing of complete paths throughout the golf course. The illustration on the second page of this article is a master plan. The routing of the path is indicated by a white line. It is always easier to design the master plan on some type of scaled drawing of the golf course.

After the routing plan is designed, it is a good idea to double-check the plan with a first-hand review of the course by golf car. This exercise might stimulate new ideas and help you avoid mistakes.

Not all of the guidelines suggested could be strictly followed on this master plan because of the unique characteristics of the golf course layout. The

front nine of Ahwatukee Lakes Golf Course in Phoenix presented some unique path-routing problems for the architect, Gary Panks.

Ahwatukee Lakes is a middle (executive)-length golf course. Although the routing of the paths generally follow the established guidelines, some changes were made to accommodate expected traffic patterns.

In summation, plotting the route of any complete path requires a thorough appreciation of the needs of the golf course and the golfers. It requires a practical understanding of some planning fundamentals and a lot of common sense in applying the principles. The suggested guidelines for construction and placement of golf car paths should be utilized, but they should be suited to the unique needs of each golf course.

Finally, the development of a master plan is the key to having car paths that are functionally located and convenient to use. □

## Editorial

**Are you a certified golf course superintendent? If not, why not? Being certified must be a goal of every national member. Personal pride in yourself, profession, and club will lead you to obtain this level of distinguished excellence.**

Florida had 26 certified superintendents at the beginning of the year. Illinois leads the nation with 35, and Ohio is runnerup with 28. Following our state is California 18, Michigan 16, New York 14, Maryland 14, and New Jersey 12. The importance of these numbers shows that still only a small number of serious superintendents achieve this level. An early criticism of the program "that everyone will become certified" has not materialized.

Many young well-qualified superintendents are counting the days until they are eligible to earn this rating. After class A status has been achieved the waiting period of two years has been established. This may be holding the numbers down. The route to a certified level will average 10 years. Four years college, two years field experience, three years to earn an A rating and then the two-year waiting period. You can be a practicing medical surgeon in less time.

**Lets push for Florida to be the nation's leader in certified superintendents. Which local state chapter will be the leader?**

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