



# The Florida Green

July/August 1992

Number 18  
Tampa Palms  
Golf and Country Club





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# The Florida Green

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# TURFGRASS QUIZ

OMASCARO



**Problem:**  
 Turf severely burned.

**Location:**  
 Golf green.

**Clue:**  
 Grass injured in streaks.

Please See Page 40



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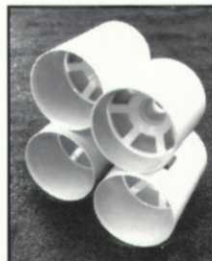
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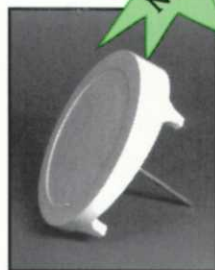
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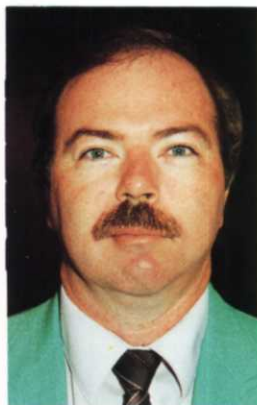


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## Update on the Florida Golf Council



Tom Benefield, CGCSA  
FGCSA President

There is significant news to report today. The last two months have been extremely eventful on several fronts. I will be sharing them with you for the next few moments.

First, there is the news on the Florida Golf Council. Effective June 1, 1992, Bobby Brantley will not be serving the Florida Golf Council as its executive director in Tallahassee. He has resigned to pursue business opportunities in Colorado.

He will be back in Florida in November and has told the council he would like to continue representing their interest in the state capitol upon his return.

I feel that this is a very appropriate move on his part and also to our benefit as well. During the summer and fall months there is no need to fund a lobbyist. The legislature is not in and we could more wisely spend our money during this period.

I still feel as strongly today as I did yesterday that Mr. Brantley is the man for us. His little hiatus from Florida will do much to give this servant of ours a needed rest and when he returns he will be ready and able once again to defend our industry for us. In the interim, President Jack Mathis will be serving in the role of executive director for the council.

At the board meeting of the Florida Golf Council in June we got another shock. Mr. Ray Finch resigned as chairman of the board effective immediately. It was the wisdom and foresight of Mr. Finch which created the Florida Golf Council. He has been our most ardent supporter and much is owed to this man who was willing to put his money where his convictions were.

The good news here is that Mr. Finch has stated he will continue to do whatever he can to see that the Florida Golf Council remains the productive force it has become.

It is only proper to note that the council in its first two years of operation has won some major victories for the golf industry and it has become evident that this association must be kept strong.

There have been discussions about the next chairman should be. There are several candidates at this time but no one has

been selected or has accepted. This is a very demanding job. The next chairman should be able to communicate effectively within the membership and also relate well to the media and our industry's critics.

One of the major stumbling blocks with the Florida Golf Council is funding. There is talk on the FGC board to merge the council with another association. The FGCSA has been mentioned in this regard, as have the Florida Turfgrass Association, the National Golf Foundation, the Golf Course Owners of America and others.

It really does not matter as to what association the council is merged with as long it is on the state level. All of the above mentioned associations would serve as excellent avenues for the council to operate from. The important thing is to keep the Florida Golf Council a viable entity to represent all golf industry interests.

The Florida Golf Council has become well-known in state political circles. We have gained the respect and attention of the lawmakers and regulators. To move in any direction other than forward with our agenda could be disastrous for the industry. We must make all efforts to ensure this association continues to grow and prosper, to do otherwise would be neglecting our duty to our industry.

The make-up of the new board should be similar to the present one in that all major support groups would be involved. All decisions on the direction and activities of the council would be handled through this board. This is going to occur whether we are the base support or some other entity is.

We have talked for many years of what we need. We have been given this opportunity by Mr. Finch through his visionary efforts. It is time to do what should be done. We have come too far to give up this fight. Our future and our industry's future is in our hands. Let's not rest it while we hold it, but massage and knead and mold it into something that people many years from now can say was a job well done.

This will not be an easy task, but then anything easy to do is never worth much.



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Tied after regulation play, Joe Ondo(left), Mark Henderson(center) and Glenn Klauk(right), warm up for the sudden death playoff in the Poa Classic.

Photo by Joel Jackson

## Rest, relaxation and reorganization in Naples

### Everglades chapter hosts FGCSA for Horn Memorial, Poa Annua Classic tournaments

Kicking back for a weekend at a beach-side resort is a novel way of conducting business and undergoing training, but that's what the Everglades Chapter invites the members of the FGCSA to do every spring. This year was no exception and the FGCSA members converged on the Naples Beach Club this past May 16-18.

On Saturday morning the FGCSA Officers and Board of Directors met to discuss the needs, goals, and challenges facing the association, and determine appropriate courses of action. Pro-active environmental strategies, turfgrass research project funding, professional education programs, and public and political awareness issues commanded the most attention.

Later that day, pens, pads, and briefcases were replaced by putters, score cards



Photo by Joel Jackson

Mickey Lovett of CIBA-Geigy outlines innovative, cooperative rebate program between CIBA-Geigy and FGCSA members to the Board of Directors.





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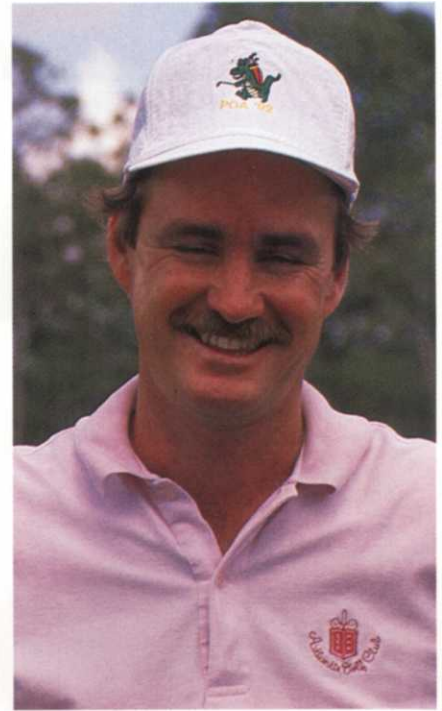


Photo by Joel Jackson

## Poa champion

Mark Henderson, superintendent of the Atlantis G. C. in West Palm Beach, pars two playoff holes to defeat his fellow competitors.

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and golf bags as the annual G.C. Horn Memorial Tournament held at the Beach Club golf course earned much-needed dollars for the FTGA Endowment Fund bearing Dr. Horn's name.

The two-man scramble event has become the traditional way we honor the man who pioneered the so highly-successful turfgrass industry in our state. Many of us were educated formally and informally by "Granny Horn" at the University Of Florida or in numerous turf seminars throughout the years.

Sunday morning, those seeking GCSAA continuing education credits for certification and/or Florida DACS Restricted Pesticide License credits, attended a two-part program.

**Part 1:** Pesticide Waste and Mixing/Loading Site Management by Steven Dwinell of the Florida DER. **Part 2:** Government Regulations and the Superintendent by John Hinkle of the Employers Association of Florida. Two topics that are so timely and time consuming for today's turf manager.

Monday arrived and the 1992 Poa Annua Classic was contested at the Fla-



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# THROW A KILLER LAWN PARTY.





mingo Island Golf Club. Offering individual as well as chapter team competition, this year's tournament was spared from the rainouts that had come to mar the event the past several years.

This year also saw a rare playoff for the individual low gross champion. After regulation play, Glenn Klauk, Mark Henderson, and Joe Ondo were tied with 73s. Glen and Joe made long par-saving putts on the first playoff hole to tie Mark's tap in par putt and force a second hole. Unable to duplicate that feat again on the next hole, Glenn and Joe relinquished the title to Mark as he once again tapped in for the winning par. The Palm Beach Chapter continued its dominance by repeating as Team Champions.

As always it was nice to spend some time with family, friends, and peers in a relaxed atmosphere that allowed us to share personal and professional experiences, sunshine, sea breezes, and sun-downs.

## **International Turfgrass Research Conference will convene in 1993 in Palm Beach at Breakers**

The world's leading researchers in the turfgrass industry will be coming together at the seventh International Turfgrass Research Conference, July 18-24, 1993 at the Breakers Resort in Palm Beach.

They'll be sharing the latest in turfgrass environmental, chemical, biological, management and breeding developments.

This will be the first conference held in the United States in 20 years; past conferences have been held every four years in such locations as Canada, Germany, France, Great Britain and Japan.

Possibly 1,000 international turfgrass industry leaders and scientists will attend the event, sponsored by the International Turfgrass Society.

The conference will showcase presen-

tations from more than 200 participants and feature symposia and plenary sessions on selected, far-ranging topics. Session titles include *Water Conservation*, *The Environmental Fate of Pesticides*, *Breeding of New Varieties of Turf*, *Pest Management* and *Soil Fertility*.

ITRC offers complete registration packages to all members. Local turfgrass professionals are encouraged to attend the event.

The ITRC will also be offering 7-10 day-length, pre- and post-conference tours of the nation's southeastern and west coast turf industry.

Additionally, tours of several of Florida's local turf industry sites are being offered for those who are interested, including the newest environmental research facility: Envirotron.

Jointly funded by the Florida Turfgrass Association and the State of Florida, the Envirotron is currently under construction and located at the University of Florida campus.



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# Natural beauty, diverse

BY LARRY KIEFFER

Greg Plotner, CGCS, has worked at only two golf courses in his 11-year professional career — and he built one and grew in the other.

The 35-year-old environmentalist and superintendent at Tampa Palms CC began digging drainage ditches for Wadsworth Construction Co. at Sweetwater CC near Houston immediately after graduating from Southern Illinois University in 1981 with a B.S. degree in plant and soil science. Five years later, he was on his way to Tampa to supervise the construction and maintenance of Tampa Palms.

“I had a good background and training, but I just happened to get a few very good breaks,” says Plotner, who took up golf at age 5 and landscape maintenance not much later, both under the tutelage of his father, an elementary school superintendent.

“I started by taking care of the grounds at my Dad’s school and that worked into a summer job with a landscape company through high school and college,” he recalls.

The 14 months of construction experience with Wadsworth at Sweetwater gave Plotner a taste to manage a golf course so, when the contractor pulled up stakes in Houston and headed to Phoenix, Plotner stayed on as an irrigation technician at the course built specifically as the centerpiece for LPGA headquarters.

“I had no idea that one of the assistant superintendents would be leaving in a few months and that I would get his job,” says Plotner with just a touch of wonder. “And a little later, the senior assistant left and I moved up.”

During his stint at Sweetwater, which was managed by Kindred &



**Number 3**



# habitat, golfing pleasure



Co., Plotner helped set up and maintain the course for several LPGA qualifying schools and two tour events. In the summer of 1986, Kindred offered Plotner the superintendent's post at a new course that was to be built by the Deltona corporation on a 1,000-acre tract in the floodplain of the Hillsborough River.

Fortunately, Deltona also had a set of plans by Art Hills, an architect well known for sensitively and sensibly transforming southwest Florida wetlands into wonderful golf courses.

"Art did a great job keeping the natural beauty of the property intact while creating lots of eye appeal," says Plotner.

"Most of the surrounding land is designated a nature preserve, adding a lot of pressure to be extremely careful when applying pesticides.

"We have a tremendous amount of wetlands and upland forest areas that leads to a diverse habitat for a wide variety of plant and animal communities, which allows the golfer not only to enjoy a round of golf, but also to enjoy nature and all of its wonderful inhabitants.

"This is a great place to exemplify that golf courses and nature can coexist to their mutual benefit."

To bolster that assertion, Plotner signed up Tampa Palms for the USGA/Audubon Cooperative Sanctuary Program (*See story page 36*) in March of 1991 and it was accepted last October.

"We hope to be certified as a sanctuary soon," says Plotner, pointing out that the Audubon Society must approve plans in seven different areas before Tampa Palms can be certified: public



involvement, environmental plan, wildlife cover projects, wildlife food enhancement projects, water conservation, and water enhancement.

The same features that give Tampa Palms its beauty also create maintenance problems. For instance the high water table on the floodplain of the Hillsborough River — a major source of drinking water for much of the Tampa Bay area — keeps Plotner and his crew on the chemical edge.

“Water quality is very important. We have to be very careful about pollutants,” he says. “We do an extensive soil sampling program to monitor what’s going on as best we can. We even have a small kit to do some testing ourselves.”

Plotner uses the soil testing services provided by his various suppliers but would like some day to have a complete lab of his own right in his maintenance complex.

“I’ve heard that somebody is coming out with a small self-contained lab that

**“Water quality is very important. We have to be very careful about pollutants.”**

might cost about \$20,000, but I think it would pay for itself in the long run,” he says.

Another problem is created by the dense uplands forest from which many of the holes were carved.

Air circulation is far from ideal. Combined with heavy rains and the high water table, the poor circulation continually challenges the Tampa Palms crew’s ability to keep the Tifdwarf greens alive — let alone playable — in summer’s high tem-

perature and humidity.

“But it’s all part of our job,” says Plotner, who is responsible for the clubhouse grounds and common areas as well as the golf course. He has a staff of 15 fulltime employees and five part-time laborers.

That’s a good-sized staff for an 18-hole golf course that plays 28,000 rounds a year, but Tampa Palms members get their money’s worth.

It’s not a hacker-friendly facility.

From the red tees, the course measures 4883 yards with a rating of 69.7 and a slope of 118. From the tips, it measures 7004 with a rating of 74.2 and a slope of 137.

The Senior PGA Tour, whose players contributed 230± rounds to the annual total during the GTE Suncoast Classic from 1988-91, played it at 6631 yards and par 72. Nine of 78 entrants in last year’s fourth annual Classic managed par or better through 54 holes.

Please See Page 18

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## Tampa Palms Golf and Country Club

**Property:** 7500 acres (originally 10,000) on floodplain of Hillsborough River near Tampa.

**Ownership:** Originally developed by Deltona Corp.; then Gulfstream Homes and Tampa Palms Development Co.

**Management:** Simanco Management Co., Tampa. John Vest, general manager; Ron McCormick, golf chairman; Jim Jones, greens chairman.

**Golf Course:** Opened 1987; Arthur Hills, architect. 18 holes; par 36-36-72; 4883-7004 yards; rating 69.7-74.2; slope 118-137.

**Playing Policy:** Private, 28,000 rounds annually; hosted Senior PGA Tour GTE Suncoast Classic annually 1988-91.

**Terrain:** Wetlands and dense uplands forest. Certification pending as USGA/Audubon Cooperative Sanctuary.

**Maintenance Staff:** Greg Plotner, CGCS, superintendent; 2 assistants, 2 mechanics, 2 spray technicians, irrigation technician, landscape technician, 2 club groundskeepers, 5 fulltime laborers, 5 parttime laborers.

**Greens:** Tifdwarf bermudagrass overseeded with 50/50 Pennlinks bentgrass and poa trivialis; 5500 square feet cut to  $\frac{5}{32}$ .

**Tees:** Tifton 328 bermudagrass overseeded with perennial ryegrass; total 4 acres cut to  $\frac{7}{16}$ .

**Fairways:** Tifton 419 bermudagrass not overseeded; total 25 acres under high maintenance cut to  $\frac{7}{16}$  to  $\frac{1}{2}$ .

**Roughs:** Tifton 419 bermudagrass overseeded with ryegrass at 350 pounds/acre and highly maintained. Cut to  $1\frac{1}{4}$  to  $1\frac{1}{2}$ .

**Hazards:** 13 lakes comprising 40 acres come into play on 12 holes; 42 white sand bunkers.

**Water:** Groundwater pumped to controller by VTII and distributed by 530 heads.

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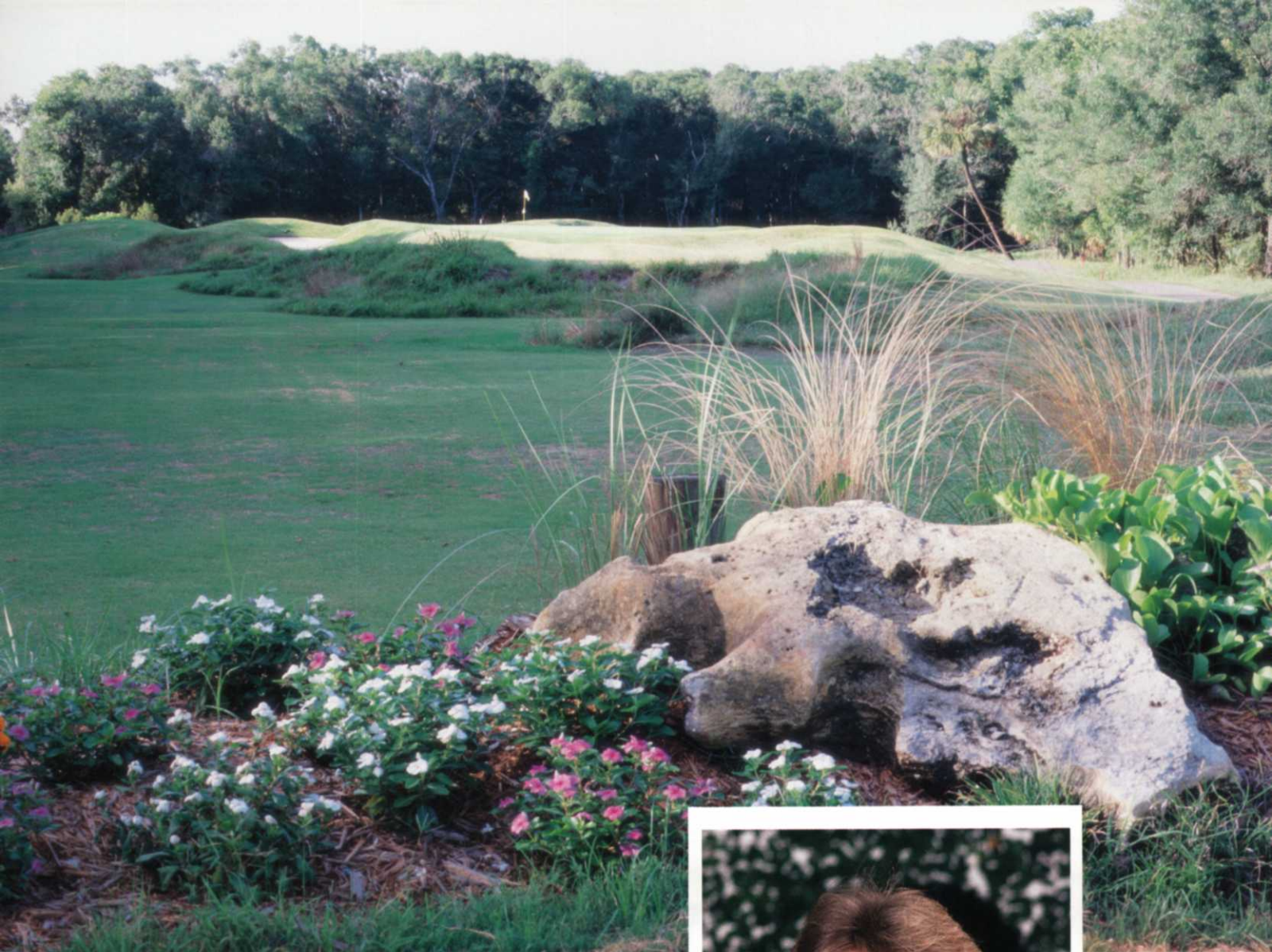
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## Number 9

### Greg A. Plotner, CGCS

**Age:** 35

**Education:** B.S., Plant & Soil Science, Southern Illinois University, 1981.

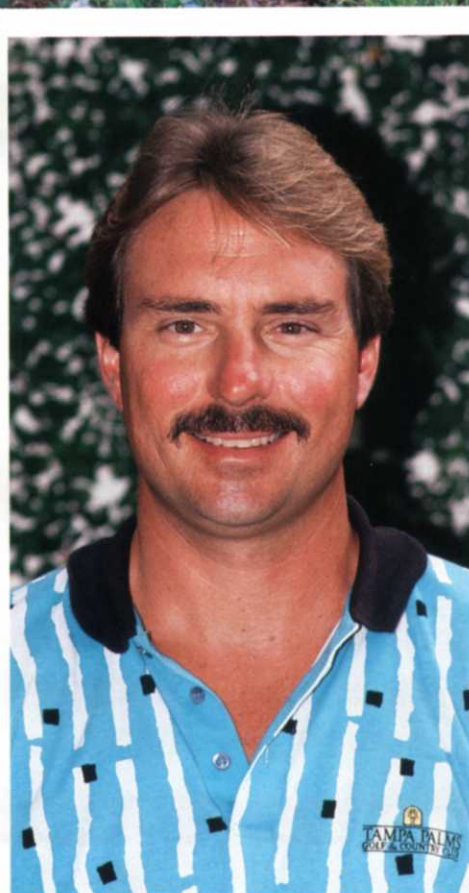
**Professional Affiliations:** Florida West Coast GCSA (president and external vice president), FTGA, GCSAA, Southwest Florida Water Management District (vice chairman, Green Industry Advisory Committee).

**Previous Employment:** Wadsworth Golf Construction Co., irrigation technician 1981-82; Sweetwater CC, Sugar Land, Tex., assistant superintendent, 1982-1986; Tampa Palms G&CC, Tampa, superintendent.

**Hobbies:** Fishing, softball, golf.

**Family:** Wife, Nadene; son David, 10.

**Career Goal:** "I've maintained a course for the LPGA and the Senior PGA Tour; I'd like to do a PGA Tour event sometime in my career."





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From Page 14

"It's very demanding, with little or no room for error," says Plotner, who plays to a 12 handicap. "You've got to think your way around and put each shot where it belongs. Complicating matters are the tall trees which shield or swirl the wind unpredictably, making club selection confusing."

If the wind doesn't get you, the water will. Or the sand. Thirteen lakes comprising 40 acres come into play on 12 holes and the 5500-square-foot greens are buttressed by 42 bunkers.

"This is an extremely difficult course for the high-handicap golfer," says Plotner, who is president and external vice president of the Florida West Coast GCSA and is a member of the FTGA. He also has one of 11 seats on the Southwest Florida Water Management District's Green Industry Advisory Committee, which he serves as vice chairman. (Chuck Rogers at Saddlebrook Resort in Wesley

**"This is an extremely difficult course for the high-handicap golfer."**

Chapel, representing the FTGA, is the only other golf course superintendent on the committee.)

He draws a parallel between the difficulty of his golf course and the complexity of his profession: the margin for error is slim... and diminishing.

"This is no longer a career for greenskeepers and grass cutters," he says. "A few people are capable of picking up the scientific background on their own or through continuing education, but I

strongly recommend that young people entering the field earn at least a B.S. degree before taking on this kind of responsibility.

"There are endless opportunities in golf course management, but tomorrow's manager is going to have to be smarter, faster and tougher to survive under the increasing weight of regulation and tightening noose of restrictions."

He sees water as the greatest challenge facing the industry.

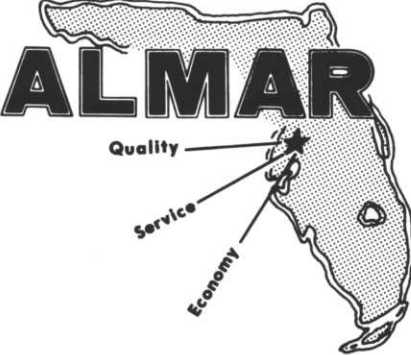
"We need to learn how to use less of it and use it smarter. For those who rely on groundwater (as does Tampa Palms), the regulators must put them on water budgets, not restrictions."

If the job is getting so tough, why stay in it?

"Look at this place," he says. "It's beautiful. And every day brings a new obstacle — a fresh challenge to overcome. How many people have an office like this?"

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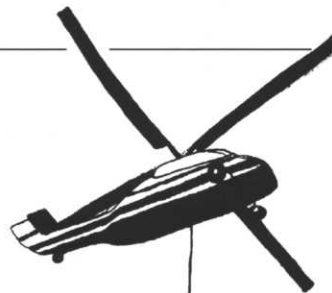
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# Dealing With Golf's Environmental Issues

BY JAMES T. SNOW  
NATIONAL DIRECTOR, USGA GREEN SECTION

The 1990s might well be called *the decade of the environment* for golf in the United States. Officials at all levels in golf have been thrust together to deal with the attacks of people outside the game who contend that golf courses are harming our environment.

The cost of building and maintaining golf courses has risen dramatically, and many proposed golf courses have never gotten past the initial planning stages because of the objections raised about environmental concerns. Organizations in golf including the USGA and the Golf Course Superintendents Association of America are spending millions to investigate golf's environmental impacts and to educate golf course superintendents and others about the issues.

It seems hard to believe, given the high profile status of the environment in golf today, that just a decade ago no one in golf thought much about terms like Integrated Pest Management (IPM), underground storage tanks, surface and groundwater protection, pesticide impacts on wildlife, and many more.

What happened during that time to bring environmental issues to the forefront of golf? For one thing, environmental awareness became prevalent throughout society in the United States and the world. For another, golf enjoyed a worldwide boom, and the construction of many hundreds of golf courses caught the eye of environmentalists who are concerned about the effects of development on the environment.

Just what are environmentalists and regulatory agencies concerned about when it comes to the construction and maintenance of golf courses? In a nutshell:

- ◆ Potential for pesticide and nutrient pollution of our water resources
- ◆ Use of scarce water resources for irrigation of golf courses
- ◆ Loss of "natural" areas
- ◆ Potential impact of pesticides on people, wildlife and other organisms

The United States Golf Association is involved in a number of environmental-oriented programs that address these concerns. Let's take a closer look at each one.

## Potential pollution of ground, surface waters

Given the importance of potable water resources to all facets of our lives, and that fresh water is scarce and expensive in many parts of the United States, it is understandable that people are concerned about activities that have the potential for polluting our precious water resources. Agricultural use of pesticides and fertilizers has caused problems for water supplies in the past, and people are naturally skeptical about claims that golf course activities don't pollute the streams that run through golf courses or the groundwater beneath the property. With groundwater, too, there is no second chance: once the aquifer is polluted, there usually is no way to clean it up.

A summary of peoples' concerns about the pollution effects of golf course activities on water resources follows:

**Use of pesticides and other potential contaminants** — Contamination of groundwater with pesticides or other materials (e.g.

gasoline) could render it unusable for drinking and other purposes. Contamination of surface waters could kill aquatic organisms and affect the biology of the waterways.

**Fertilizer Use** — Nitrate contamination of groundwater is a potential health hazard. Pollution of surface waters with phosphorus and nitrogen are associated with the process of eutrophication.

**Erosion and sedimentation** — Sedimentation caused by erosion is primarily a concern during construction, and can cause damage to streams and lakes. Pesticides, phosphorus and other nutrients can be carried to waterways by this process.

**Thermal pollution** — The removal of vegetation along stream banks and the discharge of warm water into streams from on-course ponds can change stream ecology to the detriment of desirable fish populations and other organisms.

For its part, the USGA is in the midst of a major research program to determine the effects of golf course activities on the environment and, where problems appear, to investigate alternatives to current practices.

As part of a three-year, \$3.2 million research program, the USGA is supporting 17 university research projects involved in the following topic categories:

- ◆ What happens to pesticides and fertilizers applied to golf courses;
- ◆ The development of alternative (non-chemical) methods of pest control;
- ◆ The effects of golf courses on people and wildlife.

In the first category, there are eight projects looking at the loss of pesticides and nutrients through leaching, runoff, volatilization, and other means. Our understanding of how these products move in turfgrass systems, and what effects they might have on our water supplies, should be much more clear at the conclusion of this study in 1993.

In a separate research program, the USGA has been and will continue to spend approximately \$750,000 per year on turfgrass improvement, including a series of turfgrass breeding projects to develop better grasses for golf. A major thrust has been to develop low-water-use grasses, but today much emphasis also is being placed on disease and insect resistance. Such grasses could significantly reduce pesticide use and help protect water supplies.

The USGA also is trying to educate golf course superintendents and course officials about these concerns, so that proper measures can be taken during construction and maintenance to minimize pollution potential. Through the Green Section's Turf Advisory Service, USGA agronomists work with superintendents and officials to reduce pesticide use through the establishment of Integrated Pest Management programs and other means.

A major educational resource has recently been introduced by the USGA in the form of a 950-page book entitled *Golf Course Management and Construction: Environmental Issues*. The book contains more than 1,000 references from the scientific literature and takes a factual look at the issues and what can be done to minimize potential problems. A superintendent who spends time reading this book can develop a much clearer understanding of the principles behind golf's environmental issues and the practices that can mitigate golf's potentially negative effects on the environment. ➤



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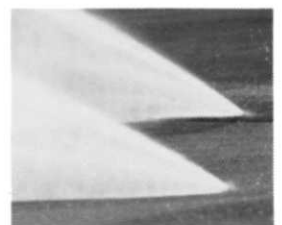
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## USGA has provided a grant to the Audubon Society of New York State

### Use of water resources irrigation

A growing population and an already limited water supply in many of the arid and semi-arid parts of the United States has made water use for golf course irrigation a sore subject for many residents of these areas. Even in the higher rainfall areas of the East and North, periodic droughts combined with large populations and high water demands have made golf course irrigation an issue in these areas from time to time. However, whereas an 18-hole golf course in the East might use 15 to 20 million gallons of water per year on average, golf facilities in the West can use 500 million gallons or more. With water and electricity (pumping) costs exceeding \$700,000 per year in some cases, it is not surprising then that golf courses in these areas are seeking ways to reduce their use of potable water.

In response, a growing number of golf courses are turning to the use of effluent (recycled water) for their irrigation needs. In some areas, new golf courses can't be built unless they agree to use effluent water for irrigation. Though effluent systems generally work very well, concerns about high salt levels, heavy metal contamination, disease organisms and other issues make this a controversial alternative in the eyes of some.

**T**o take a closer look at the issues surrounding the use of effluent on golf courses, the USGA is spearheading a symposium on this topic in March 1993 from which a comprehensive proceedings will be published.

As mentioned earlier, a major effort of the USGA Turfgrass Research Program is the development of new grasses for golf that use less water. Improved salt tolerance also is a goal, since groundwater (and effluent water) in many of the more arid parts of the country tends to be quite salty.

There are several angles to this work:

1) Taking native, drought- or salt-tolerant rangeland grass species and attempting to improve (or improve further) their turf characteristics for golf course use (e.g. blue gramma - *Bouteloua gracilis*; fairway crested wheatgrass - *Agropyron cristatum*; alkaligrass - *Puccinellia spp*; curly mesquitegrass - *Hilaria belangeri*; buffalograss - *Buchloe dactyloides*); 2) Taking existing low-water-use turfgrasses and improving certain characteristics to expand their range of adaptation so they can be used to replace high-water-use cool season grasses (e.g. bermudagrass - increase cold hardiness; zoysiagrass - improve establishment rate and length of growing season); 3) Taking vegetatively propagated low-water-use warm season grasses and developing improved seeded types to obtain wider use (bermudagrass, zoysiagrass); 4) Taking existing turfgrasses and reducing their water use rates (bentgrass, zoysiagrass). The work is going quite well, and there will be a number of lower-water-use grasses on the market during the next few years.

Finally, water conservation is being achieved by encouraging golf courses to take advantage of existing irrigation technology. Savings of up to 50% or more could be realized at many courses if they upgraded their systems and educated themselves about how to use these systems effectively.

### Loss of "natural" areas

It is estimated that there are about 14,000 golf courses in the United States, representing approximately 1.3 million acres (533,000 hectares) in golf course turf and a total of up to 2.3 million acres (940,000 hectares) dedicated to golf course facilities, including

clubhouses, parking lots and other areas. New golf course facilities today can easily require 150 to 250 acres of land, and much more if located in or near wetland areas or other properties with difficult terrain or environmentally sensitive areas. Housing developments featuring a golf course can mean the development of thousands of acres, of course.

**S**ome people believe that the construction of a golf course and the development of surrounding lands represents the loss of a significant amount of natural lands, habitat for important wildlife, plant species and other organisms. This is particularly a concern to them when the course is located in or near wetlands, forests, and other environmentally sensitive areas, where course activities could also affect remaining natural areas. It is true that the land developed as a golf course is often severely disrupted during construction from the standpoint of its value as wildlife habitat. But it is also true that many existing golf courses are outstanding examples of wildlife sanctuaries, particularly in urban and suburban areas. Nevertheless, many courses could do a much better job of managing their property for the benefit of wildlife, and it wouldn't have to cost much to accomplish or affect the playability of the course to a great degree.

To assist golf courses in enhancing their properties for the benefit of wildlife and other natural resources, the USGA has provided a grant to the Audubon Society of New York State to expand a program called the Audubon Cooperative Sanctuary Program for Golf Courses.

The program is an attempt to involve golf course superintendents, course officials and golfers in habitat enhancement projects and other resource conservation measures. The environment benefits from the programs carried out by golf courses, and golf benefits from receiving recognition for its conservation efforts. After just a year since its official start, more than 460 golf courses are participating in the program. As a further sign of its commitment to the environment, the USGA has sponsored the writing of a book tentatively titled *On Course With Nature*. It will be several hundred pages long and all contain information about how to protect or restore natural ecological communities on golf courses and other managed properties. Specifically, it will encourage superintendents, course officials and architects to consider naturalization as an alternative to our more traditionally manicured landscapes on golf courses. The book should be available by early to mid-1993.

### Potential effects on people and wildlife

In many instances, wildlife benefits from the presence of golf courses in urban and suburban communities, where green space often is limited. But sometimes wildlife falls victim to golf course activities as well, particularly when certain pesticides are used. Bird-kills and fish-kills are the most visible forms of pesticide impacts, but many other types of wildlife can be lethally and sublethally affected when pesticides are used. Reproduction, behavior, physiology and overall health can be compromised, eventually causing death, susceptibility to predation, or other problems.

**M**ost golf course superintendents enjoy the many forms of wildlife on their courses and would do nothing intentionally to hurt them. However, most sublethal effects of pesticides on wildlife are not at all apparent, and it's fair to say that most people simply would be unaware of the negative effects of their pest control activities. Also, very little



# “Best overseeded grasses on the putting green were Sabre and Cypress cultivars of *Poa trivialis*”

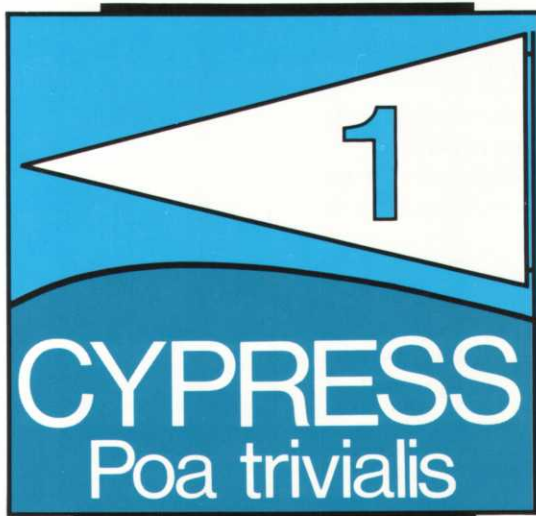
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As the weather turns hot in the spring, Cypress will die out naturally as your Bermudagrass begins to grow. Cypress will not choke out your Bermudagrass in the spring as some heat tolerant perennial ryegrasses do.

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Cypress is available alone, or blended with Creeping Bentgrass and Streaker Redtop Bentgrass depending on customer preference.

Table 2. Monthly and seasonal months for turf quality of winter overseeded grasses 'Tidwarf' bermudagrass putting green from December 1991 to April 1992 at Gainesville, FL.

Turfgrass	Month				Mean
	Dec.	Jan.	Feb.	Apr.	
Sabre	7.8	8.2	8.4	8.0	7.8
Cypress	7.2	7.4	7.3	6.8	7.1
Pinnacle	7.5	7.8	7.4	6.8	7.1
Premier	7.8	7.7	7.5	6.8	7.1
Blend #1	7.4	7.4	7.3	6.8	7.1
Mix #2	7.2	7.8	7.3	6.8	7.1
GR-89	7.1	7.7	7.3	6.8	7.1
Southern Select	7.4	7.4	7.3	6.8	7.1
Leader Board	7.8	7.6	7.3	6.8	7.1
Medalist	7.5	7.7	7.3	6.8	7.1
Repell II	7.4	7.4	7.3	6.8	7.1
Essence	7.2	7.2	7.3	6.8	7.1
Cowboy II	7.2	7.2	7.3	6.8	7.1
Evening Shade	7.2	7.2	7.3	6.8	7.1
CBS II	7.2	7.2	7.3	6.8	7.1
Pennant	7.2	7.2	7.3	6.8	7.1
Mulligan	7.2	7.2	7.3	6.8	7.1
PhD	7.2	7.2	7.3	6.8	7.1
Pebble Beach	7.2	7.2	7.3	6.8	7.1
Sunrise Primo	7.2	7.2	7.3	6.8	7.1
Prelude II	7.2	7.2	7.3	6.8	7.1
Alliance	7.2	7.2	7.3	6.8	7.1
Patriot II	7.2	7.2	7.3	6.8	7.1
Turf Seed Blend #1	7.2	7.2	7.3	6.8	7.1
Competitor	7.2	7.2	7.3	6.8	7.1
WYS-1	7.2	7.2	7.3	6.8	7.1
WX9-115	7.2	7.2	7.3	6.8	7.1
WYP-83	7.2	7.2	7.3	6.8	7.1
Turf Seed Blend #2	7.2	7.2	7.3	6.8	7.1
Palmer II	7.2	7.2	7.3	6.8	7.1
Essence	7.2	7.2	7.3	6.8	7.1
Enneagle	7.2	7.2	7.3	6.8	7.1
Blend	7.2	7.2	7.3	6.8	7.1



# Development of new golf courses threatened

research has been done to document these effects on golf courses.

In response to the need for research, the USGA is funding a three-year study at The Institute of Wildlife and Environmental Toxicology at Clemson University concerning the effects of golf course activities on wildlife. An attempt will be made to identify the products and management practices which reduce non-target wildlife exposure to pesticides. The investigation is focusing on two areas: 1) developing a thorough water sampling program to measure the quantity of pesticides reaching adjacent marshes, and 2) assessing the potential for exposure of wildlife to pesticides on the golf course and adjacent areas.

Some people claim that golf courses are of interest or value only to people who play golf and that use of recreational land for golf course development serves the needs of a limited segment of the population. This argument may sound plausible on the surface, yet it is clear that many non-golfers chose to pay a premium to live adjacent to golf courses, for example. To gain a better understanding of the human benefits of golf course views, the USGA is funding a study at Texas A&M University to identify and measure the physiological and emotional effects of off-site views of golf courses, and compare these effects with those resulting from viewing other common types of urban land uses.

Also, the study will identify and measure the effects of viewing golf courses (from a workplace window, for example) on the performance of cognitive tasks relevant to the productivity of administrators and other employees. If positive benefits of golf courses can be scientifically validated for off-site users, this information can be put in the hands of people involved in land use decisions, to the benefit of golf.

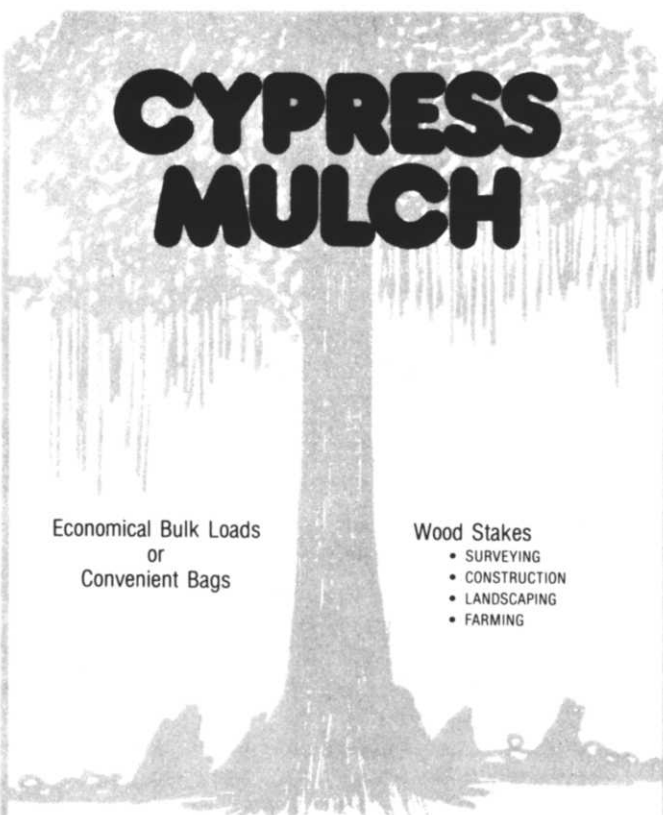
## Summary

Current maintenance standards and the development of new golf courses in the United States is threatened today by concerns about the detrimental effects of golf courses on the environment. The task facing the game of golf involves the following:

- ◆ Develop a greater scientific understanding of the impact of golf courses on the environment.
- ◆ Where potential problems exist, develop alternative practices or programs that minimize the negative effects of golf courses.
- ◆ Educate golf course superintendents, course officials and golfers about golf's environmental issues and what they must do to help protect the environment and the game of golf.

◆ Educate regulatory officials, environmentalists and the public about the environmental benefits of golf courses and what is being done within the game to protect the environment.

The United States Golf Association is spending millions for research and educational programs to address golf's environmental issues. As information becomes available through these programs, it will be shared with interested parties throughout the world for the benefit of golf and the environment.



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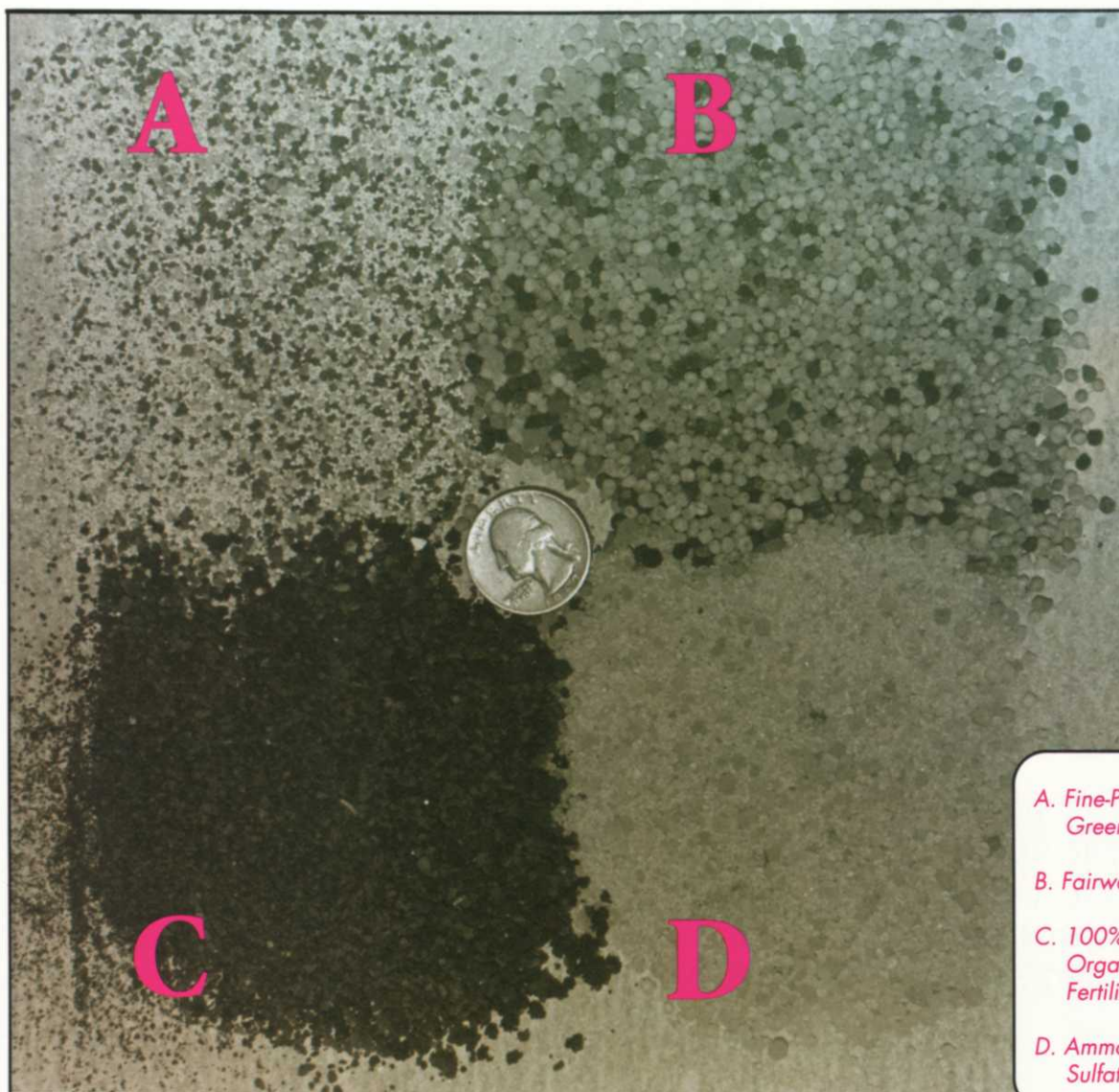
**HANDS ON**



By Steve Kuhn,  
Golf Course Superintendent,  
Doral Country Club

# Fertilizer

## Trends, blends, and programs



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**O**f all the concerns of turf management, South Florida superintendents are overwhelmingly most confident in their decision-making about fertilization. Yet, in compiling results of shop talk discussions, I found a wide disparity in fertilizer ratios, nutrient sources, application rates and frequencies.

While insecticides and fungicides are applied according to label rates, we are usually not as confident in the selection or the expected results as we are with fertilizer decisions. Call it ironic, a paradox, whatever, but these are the traits of our profession that keep us focused to the job at hand and make every new day a challenge. ➔



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## FERTILIZER RATIOS

When the results were tabulated, an overall Nitrogen(N)-Phosphorus(P)-Potassium(K) ratio of (7-1-7) was found to be the average used in South Florida on greens and tees. Superintendents with newer USGA-type spec greens tend to use higher P and K ratios in their fertilizers, while those with specific phosphorus deficiencies are having additional phosphorus blended directly into their top-dressing mix. Supers with older, slower draining greens are using lower P ratios. Higher K analysis fertilizers are a definite trend.

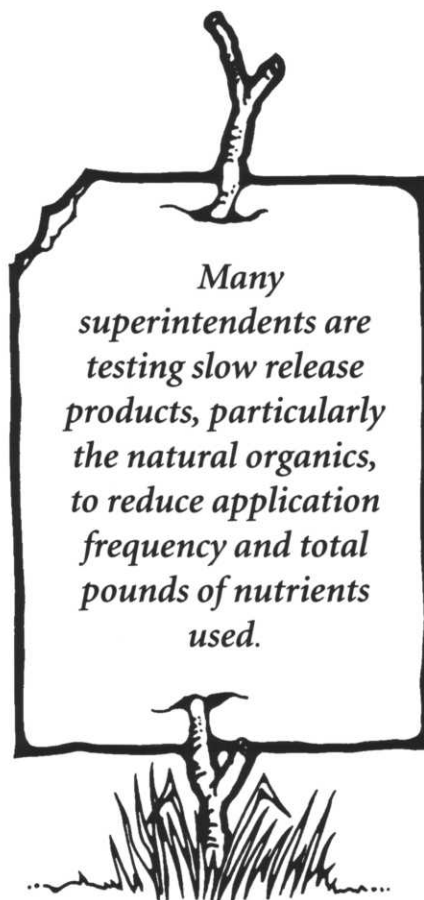
The average fairway ratio was found to be (5-1-5). When compared to the greens blends, most supers felt that less N and K are needed due to less leaching, higher heights of cut, and the return of grass clippings to the soil.

**Mark Richard of Greynolds Golf Course**, a public facility which plays over 100,000 rounds per year, likes to apply higher N and K ratio fertilizers during the winter when play is heavy to get as much growth as possible and to harden the turf off to wear and cold spells. In the summer, he will totally back off the nitrogen.

## SOURCES OF NITROGEN

On both greens and fairway mixes, sulfur-coated urea was the leading source of nitrogen. SCU was found to be used by 30% of the superintendents on greens and by 55% on fairways. IBDU was preferred by 25% on greens and 20% on fairways respectively. A popular choice in fairway mixes by 20% of the supers was ammonium sulfate, due mainly to low prices and quick availability to the plant.

Although most superintendents on high pH soils using SCU or ammonium sulfate agreed that these sources failed to lower soil pH, they felt that using sulfur-coated or sulfate forms of nitrogen was effective in their overall programs. **Bill McKee at Oak Tree Country Club** says he uses the sulfate form of nutrients whenever possible on his pH 7.8 soils. He believes it allows him to get the fullest availability of all the elements, especially



*Many superintendents are testing slow release products, particularly the natural organics, to reduce application frequency and total pounds of nutrients used.*

iron and manganese.

Nutrient leaching, particularly N and K is of major concern in selecting the source. While SCU and IBDU are the slow release leaders, natural organics and resin-coated fertilizers are quickly gaining popularity. Homogenous blends with slow-release coatings are seen by many to be the environmentally sound approach to nutrition for the future.

The importance placed in choosing a greens mix is evident when an overwhelming number of supers agreed that, "if budget was not an overriding factor in purchasing a fertilizer product for greens," they would not change their current source of N. In terms of pricing, quality, and results, they were already using what they felt was the best greens mix available.

## APPLICATION METHODS

Walking rotary spreaders are used on greens by 70% of the supers in South

Florida, while 25% have their fairway mixes applied by contract services. Citing quick, accurate, and trouble-free applications, superintendents are increasingly choosing contractors to apply bulk loads. Many courses close the first tee at noon and the operator follows the last group of golfers so as to not disturb play. In season, to avoid any loss of revenue, some courses have resorted to night applications.

## APPLICATION RATES

Most superintendents apply their greens fertilizers at 1.0 pound of nitrogen biweekly. However, 35% apply at .75 pound of N rate on a slightly more frequent basis in order to avoid growth spurts. Nearly all superintendents indicated a 1.0 pound of N per month rate on tees. Fairways were evenly divided between 1.0 pound of N 4-6 times per year or 1.5 pounds of N 3-5 times per year. The average yearly rates of nitrogen were 21 pounds on greens, 12 pounds on tees and 6 pounds on fairways.

Many superintendents are testing slow release products, particularly the natural organics, to reduce application frequency and total pounds of nutrients used. USGA spec greens are causing many area superintendents to rethink their approach to greens fertilization. They are backing off from rigid application schedules of the past and are instead monitoring the color and clipping yields to determine when to fertilize — a much more objective approach. They believe they can reduce overall fertilizer usage, have more consistent color, reduce growth spurts, and adapt to changing conditions by using this approach.

## SUMMARY

South Florida superintendents believe their goal of producing the best product for the dollar has always remained the same. It is the latest challenges of new fertilizer technology, a shift towards USGA spec greens and golfers demanding higher levels of quality which keeps them searching for that ideal program.



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By Tim Murphy, Daniel L. Colvin,  
Ray Dickens, John W. Everest, David Hall  
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**Weeds of Southern Turfgrasses** is an easy-to-use practical weed identification guide that contains 437 color photographs of 193 weed species that are found in southern turfgrasses. The book was developed specifically for turfgrass managers; however, it will be useful to anyone interested in identifying weeds of southern turfgrasses. Taxonomic descriptions accompany each species and emphasize important identification characters.

Through the guide is most applicable to the South, many of the weeds species shown are found across the United States. Consequently, the geographical range of each weed species is listed for the United States as well as the world.

**Weeds of Southern Turfgrasses** will be a valuable identification guide for golf course superintendents, lawn care companies, roadside managers, sod growers, recreational facility managers, chemical company representatives, extension agents, vocational agriculture teachers, turfgrass students and anyone interested in weed identification.

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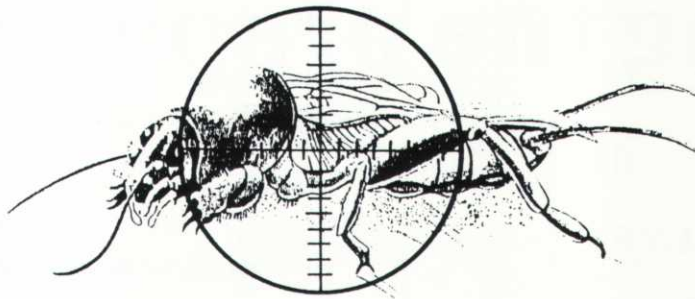
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# Finding the proper soil pH

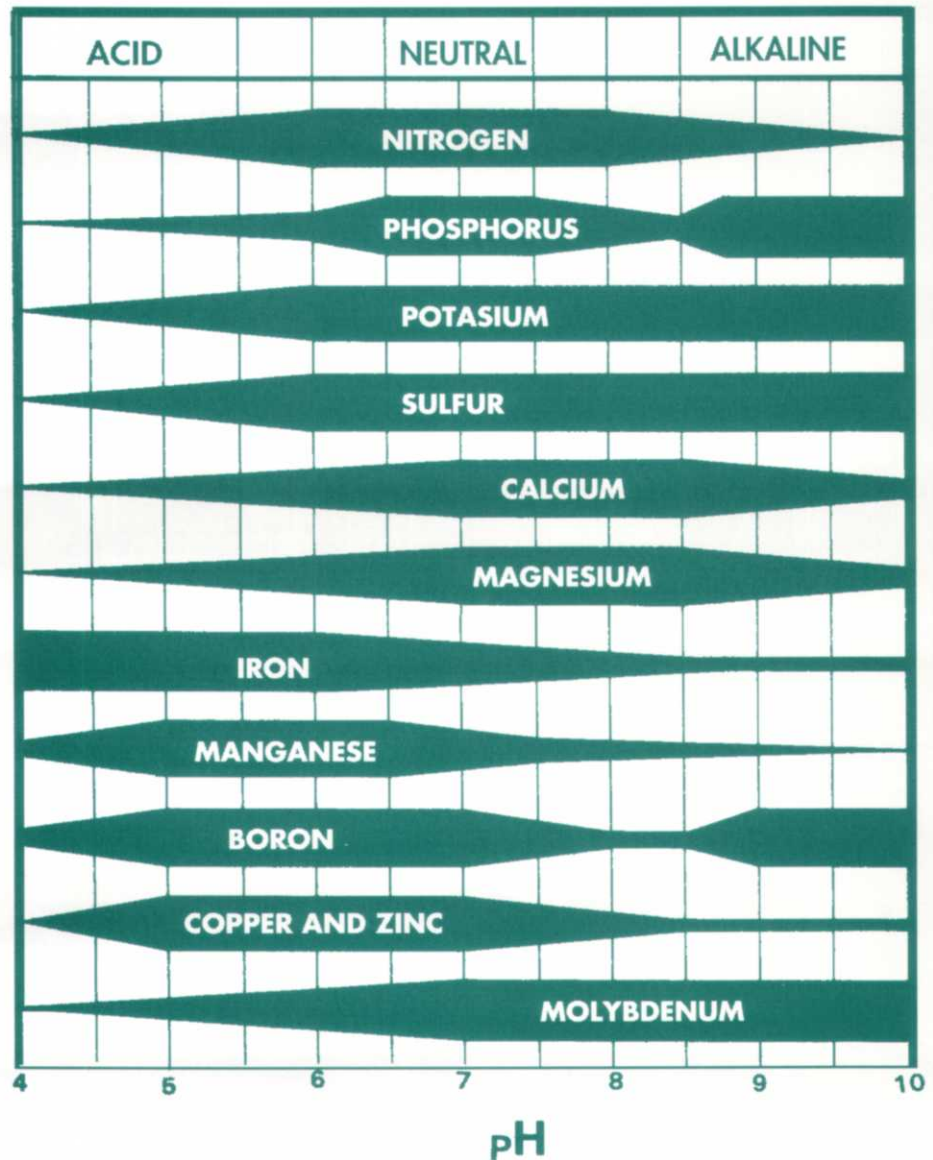
From the  
**Superintendent's Journal**  
*Are you getting  
the biggest  
bang for your  
fertilizer buck?*

When you spend money for product and labor to apply fertilizer to your golf course you and your superiors want to see "green" results. You also want a healthy dense stand of turf with good roots to withstand grooming pressure, drought, and pest attacks.

Fertilizing a golf course takes a lot of planning and a little bit of luck to avoid interfering with play and fooling Mother Nature. Not everyone has the luxury of closing Mondays like some of the private clubs to take care of such critical tasks. Because it can be such an onerous job under heavy play pressure or changing weather conditions, you want to get the maximum benefit for your effort.

One of the most basic factors for good fertilizer interaction with your turf is the proper soil pH. The graph (shown on the right) shows how the availability of nutrients is affected by different pH levels. The ideal level for bermudagrass is centered around 6.5. A low pH can be raised one unit at a time by applying one ton of lime per acre. Conversely, a high pH can be lowered by applying one ton of sulfur per acre. Because sulfur has the potential to burn the turfgrass, it may be wise to limit application to the cooler months of spring and fall. Depending on the product used, split applications at half rates may be advisable. Lime is relatively safe, but is often a dusty nuisance during application.

**Case in point:** The soil used to build two new courses at Disney's Bonnet Creek Golf Club, Eagle Pines and Osprey Ridge, had a background pH of 4.5 - 5.0. Prior to planting the course the pH was not prop-



Soil pH affects availability of nutrients

erly adjusted. We have been persistently applying Granulime to correct the situation. Unfortunately, pH adjustments are sometimes painfully slow. This low pH condition resulted in a longer than normal grow-in period, and poorly rooted turf in many areas that were severely damaged by a recent hollow tine aeration. We're closed for a few weeks for some post-construction renovation, and we'll be applying more lime to raise the pH up to an acceptable level.

One of our sister courses at the Disney Inn, The Palm Course, has rebuilt its

greens this summer. Their greens with a proper pH in the soil mix are almost totally covered with two to three weeks growth.

The moral of the story is to make sure that your soil pH is in the proper range so that all the nutrients you apply will be available to your turfgrass plant. Soil sampling can be done by the superintendent or by one of his regular fertilizer vendors. The relatively inexpensive pH test can be a significant tool in helping to maximize your fertilization program. — Joel Jackson



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# Audubon Cooperative Sanctuary Program

*Not only has it gained support among golf course superintendents, but the USGA has donated funds*

BY KIT BRADSHAW

Ron Dodson — founder, booster, educator and ombudsman for the Audubon Cooperative Sanctuary Program — has a goal for 1992. He wants 1,000 golf courses in the country as participants in this program by the end of the year. So far, 450 courses have signed up for the program.

Dodson told a group of Florida golf course superintendents who met at John's Island West on June 19 that even with the remarkable success of the Audubon Cooperative Sanctuary Program in a little over a year, the Audubon Society is still out on a limb.

"When I left my vice presidential post with the national Audubon Society and went to the New York Audubon Society as president, I wanted to make the Society reach out in a positive way," Dodson said. "This program does this. But because we are the first

conservation or environmental group to cooperate with golf courses to enhance the environment, we've taken our shots from these other groups and they are watching this program closely."

The Audubon Cooperative Sanctuary Program for golf courses allows any course the opportunity to enhance its wildlife habitats, practice sound conservation activities, have environmental planning and utilize effective Integrated Plant Management. The unique part of the program is although the goal is universal — the active environmental enhancement of the golf course — the plan for each course is customized.

Ron Andrews, golf course manager of Grand Harbor in Vero Beach, pointed out that "John's Island West was built in a natural setting, and has great potential in this program. But the best part about the cooperative sanctuary program is that even a course with parallel holes can be a little better environmentally with the program.

"And, the golf course superintendent doesn't have to do all the work," Andrews added. "At my course, I intend to enlist the support of the residents who want to maintain the bluebird boxes, for instance, and have them be part of the program."

Not only has the program gained support among golf course superintendents, but the USGA has donated funds toward the program which enabled Dodson to expand the activities and the staff to promote the cooperative sanctuary program.

Dodson says the involvement of the USGA has been significant.

"The program started when an upstate New York golf course called because they had problems with skunks running on the property. We helped them eliminate the skunk dens, so the skunks moved elsewhere. Through word of mouth, other golf courses contacted us for help in making their courses more conducive to increased wildlife activities without damaging the

course.

"Then, I happened to talk with the USGA, and not only told them about our small successes to that point, but our vision of what could be accomplished with the cooperation of golf courses. We already had programs for schools, businesses and individuals, and we felt golf courses were an excellent place to continue our conservation effort. The

USGA agreed, and in 1991, it made a \$30,000 donation on the condition that I devote a significant portion of my time to developing the program. These funds also provided us with the printed materials to distribute."

Dodson's efforts resulted in 280 courses joining the program last year, and with that success came the need for additional staff. The USGA donated \$100,000 to the program for 1992, 1993 and 1994, Dodson said, which provides for additional staff and printed materials.

Dodson's involvement hasn't stopped with his nearly continual traveling to educate golf course superintendents about the program. He is moving the program forward in several directions. Among these are:

- ◆ The *On Course with Nature* publication, funded with a USGA grant, which will provide an comprehensive ecosystem map and corresponding information about native plants and their benefits in each ecosystem. It will be available in early 1993.

- ◆ A 15-minute video describing the Audubon Cooperative Sanctuary Program for golf courses which will be distributed to every golf course in the country beginning in August.

- ◆ A expansion of the program for developers and golf course architects before a golf course is built. The foundation of this expanded program are the Audubon Sustainable Resource Management Principles, which cover a variety of areas of conservation and environmental awareness and make them part of



*The program started when an upstate New York golf course called because they had problems with skunks.*

*Ron Dodson, founder, of the Audubon Cooperative Sanctuary Program*





## How to enlist in the Audubon Cooperative Sanctuary Program

Want to be part of the Audubon Cooperative Sanctuary Program? Here's How:

1. Register by sending \$100 to the program in care of Audubon Society of N. Y. State, Inc., Hollyhock Hollow Sanctuary, Route 2, Box 121, Selkirk, NY 12158.

2. The ACSP will send you a resource inventory questionnaire, which you will use to provide information on your property. You can augment this inventory with topography maps, photographs, elevation maps, etc.

3. Upon receipt of the resource inventory, the ACSP will review the information, call for clarification, if needed and then provide you with a conservation report that is specific to your golf course. The report will give suggestions and guidelines for environmental enhancement projects that will improve wildlife habitat, conserve water, etc.

4. After receiving the report, you will form a resource committee composed of your staff members, players, citizens in the area, the cooperative extension consultant, etc. This committee will review the recommendations from the ACSP to determine which projects are financially and logistically feasible. When this is determined, you then send the ACSP the list of your committee members and the committee's environmental plan of action.

5. If the committee determines that you want certification, you can obtain it by following the recommendations in seven areas:

- A. Environmental planning
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- G. Water enhancement

6. You may work on one or two of the seven areas at one time, and then, as feasible, work for certification in other areas. The implementation of the ACSP suggestions remain with the golf course superintendent and the course officials.

7. For further information, call the Audubon Society of N.Y. State at 518-767-9051.

## Florida's 44 members of the Audubon Cooperative Sanctuary Program

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Bent Pine Golf Club	Vero Beach
Country Club at Jacaranda West	Venice
Country Club of Florida	Village of Golf
Countryside Executive Golf Course	Clearwater
Deering Bay Yacht & Country Club	Miami
Disney World: Eagle Pines Golf Course	Lake Buena Vista
Lake Buena Vista Club	
Magnolia Golf Course	
Oak Trails Golf Course	
Osprey Ridge Golf Course	
Palm Golf Course	
Don Shula's Hotel & Golf Club	Miami Lakes
El Conquistador	Bradenton
Erral Country Club	Apopka
Feather Sound Country Club	Clearwater
Fiddlesticks Country Club	Fort Myers
Golf Club at Marco	Marco Island
Green Point Golf Resort Community	Eastpoint
Grenelefe Golf & Tennis Resort	Grenelefe
Hawk's Nest Golf Club	Vero Beach
Hole-In-The-Wall Golf Club	Naples
Hunter's Creek Golf Course	Winter Park
Island Country Club	Marco Island
John's Island Club	Vero Beach
Jupiter Hills Club	Jupiter
Lauderhill Golf Course	Lauderhill
Loblolly Pines	Hobe Sound
Loxahatchee Club	Jupiter
Mariott Orlando World Center	Orlando
Martin County Golf & Country Club	Stuart
Matanzas Woods Golf Club	Palm Coast
Meadows Country Club	Sarasota
Oak Tree Country Club	Fort Lauderdale
Oceanside Country Club	Ormond Beach
Old Marsh Golf Club	Palm Beach Gardens
Orange Tree Golf Club	Orlando
Pelicans Nest	Bonita Springs
Pine Oaks of Ocala	Ocala
Pipers Landing Country Club	Palm City
Quail Ridge Country Club	Boynton Beach
Sawgrass Country Club	Ponte Vedra Beach
Sebastian Municipal Golf Course	Sebastian
Tampa Palms Golf & Country Club	Tampa
TPC at Sawgrass	Ponte Vedra Beach

the construction of the course and its buildings. Those developers who cooperate in the program and utilize the staff recommendations for the project will earn Audubon Signature Status.

"We still have obstacles to overcome with the program,"

Dodson told the superintendents. "This ranges from apathy to concern that the Audubon Society will use the information obtained in the course survey to undermine the golf course. There has been the perception that we are sneaks and will use the information to stop permitting. But, as the program grows, and the superintendents become educated about it, I think this program will help change this perception."



# Turf Industry Roundup

## Turf Industry Roundup

Companies doing business with golf course superintendents in Florida are invited to submit their news releases to *The Florida Green*, c/o Janlark Communications, P.O. Box 336, Auburndale, FL 33823.

## Books & Videos

*Weeds of Southern Turfgrasses* is hot off the presses and is one of the best weed identification books I've ever come across. Good clear photographs are hard to come by and this book is chock full of them. 437 to be exact. Unfortunately for my golf course, I recognized too many of the 193 weed species covered in this 208 page handbook. An order form and more information can be found on Page 30.

— Joel Jackson

**Jacklin Seed Co.** has donated seed-testing laboratory equipment worth more than \$7,000 to **Beijing Agricultural University**. The equipment, custom manufactured by Hoffman Manufacturing Co. of Albany, Ore., will help the university develop seed testing standards and procedures which will be standardized with the United States.

♦♦♦

**Brandell Products**, manufacturer of 19th Hole brand practice putting cups and other golf-related items, has been sold to an unidentified group of Chicago investors who will continue to operate the Lake Bluff, Ill.-based firm under its current name and format.

♦♦♦

**Randy Rogers** is a new senior market specialist for **Lebanon Turf Products**. He will specialize in training and service to Lebanon's distributor network. **Lisa Dacey** and **Rick Miller** have joined the domestic marketing department at **Jacklin Seed Co.** in Post Falls, Ida.

♦♦♦

**Linda Van Der Zee** has been promoted to manager of education and seminars for the **Florida Foliage Association**. She has been succeeded as advertising specialist by **Elaine Hudson**.

**Arthur Hills** of Toledo, Ohio, was elected president of the **American Society of Golf Course Architects** during the organization's recent 46th annual meeting at the Southampton Inn on Long Island, N.Y.

Hills has designed more than 100 courses and renovated more than 70 others throughout the United States and abroad during the past 25 years. He has more than 20 Florida courses to his credit, including three recently featured on *Florida Green*

covers; **Wilderness CC** in Naples, **Coral Oaks Municipal GC** in Cape Coral and **Tampa Palms** (in this issue).

Other officers elected at the meeting were **Gerald Matthews**, Lansing, Mich., vice president; **Donald Knott**, Palo Alto, Calif., secretary, and **Jeff Brauer**, Arlington, Texas, treasurer. **Alice Dye** of Delray Beach is the only Florida architect on the **ASGCA** board of governors.

Two Florida architects were among seven associate members elected to regular membership: **Jack Nicklaus** of North Palm Beach and **Steve Smyers** of Tampa. Among the five courses Smyers completed as an **ASGCA** associate were **Crescent Oaks** in Tarpon Springs (**Mike Swinson**, 7 Rivers **GCSA**) and **Highlands Ridge** in Sebring (**Dan Smokestab**, Ridge **GCSA**). Nicklaus did not submit any Florida courses for evaluation. Other new members elected to regular membership were **Fred Bliss**, Santa Rosa, Calif.; **Bruce Charlton**, Palo Alto, Calif.; **Ron Kern**, Noblesville, Ind.; **Jay Moorish**, Tulsa, Okla.; and **Kyle Phillips**, Palo Alto, Calif.

**Mariana Nork** is the new manager of **The Club Foundation**, an educational subsidiary of the **Club Managers Association of America**.

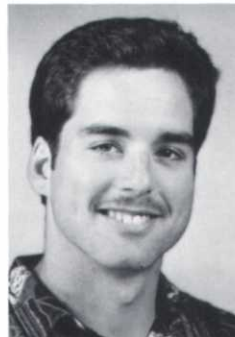
**Michele M. Thomas** of Shawnee Hills, Ohio, has won the inaugural \$1,000 scholarship offered by the **Turf and Ornamental Communicators Association** "to encourage people of ability to consider green industry journalism as a career." Thomas is a horticulture major at Ohio State University.

♦♦♦

**Product News:** EPA has approved a supplemental label for **M-Pede** insecticide, allowing use of the fatty acid insecticide on turf for control of soft-bodied pests, including mole crickets and cinch bugs. **M-Pede** is manufactured by **Mycogen Corp.**, San Diego.... EPA has approved **ConSyst** fungicide, which has both contact and systemic actions, for use on all types of ornamental turf-



Lisa Dacey



Rick Miller



Arthur Hills



Randy Rogers



grasses and many ornamentals. Con-Syst is manufactured by **Regal Chemical Co.**, Alpharetta, Ga. **International Seeds** and **Jacklin Seed Co.** have released C.E.O., a creeping bentgrass blend of Cobra, Putter and Emerald. It is recommended for overseeding bermudagrass.

## **Golf Course Builders Assn. of America initiates certification**

As many as 40 of the nation's leading contractors may become the world's first Certified Golf Course Builders this summer at the Golf Course Builders Association of America's summer meeting in St. Louis Aug. 12-14.

Before a builder may use the designation "Certified Golf Course Builder," he first must complete an application packet and then pass an examination of 100 objective questions covering 14 topics related to golf course construction.

The examination will be the final event in the three-day meeting which will feature two days of educational programs

and social events in conjunction with the PGA Championship at Bellerive CC.

Examination topics will include history of golf course design and layout, clearing, earthmoving, finish grading, drainage, green construction, trap construction, irrigation, fertilization, seeding, soil structure, regulations, building structures and cart paths, and grow-in.

Before taking the examination, a builder must first 1) establish that he has been in the golf course construction business for at least five years and has completed three golf course projects within the last five years; 2) provide references from individuals in five of the following categories: course owner/developer, golf course architect, engineer, irrigation designer, golf course superintendent, municipality, certified golf course builder; 3) provide references from each of the following: financial institution, credit references, insurance company, bonding company.

To retain certification, a builder will have to attend at least one GCBA education session per year. "Builders will

have to re-certify periodically — at least every five years and maybe as often as every three years," said Phil Arnold, GCBA executive vice president. "The board hasn't set the term yet."

Education programs at the summer meeting will focus on the Allied Associations of Golf and technological developments in construction and golf course operations. Among the speakers lined up is Jim Snow, director of the USGA Green Section.

"The point of the certification program is to identify competent, trustworthy golf course builders. The examination shouldn't be considered like a bar exam. A competent, experienced golf course builder should have no trouble passing it," said Arnold.

The questions will be drawn from a pool of 300 gathered by a committee whose members sought advice from scientists, engineers, superintendents, developers and architects.

"Some of the best questions came from our own members," Arnold said.

The certification program comes on

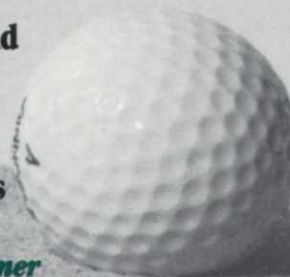
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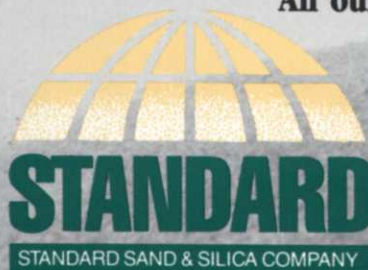
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the heels of the successful launch of the charter membership program designed for companies that wish to support the GCBA programs.

Less than a month after the directors approved the new membership category, five companies had paid the one-time charter fee (minimum \$5,000): Perry O. Dye Designs International, Inc., Perry Dye; Dye Construction of California, Neil Iverson; Wadsworth Golf Construction Co., Paul Eldredge; Jacklin Seed Co., Doyle W. Jacklin; and Irrigation Supply Co., James J. Kirchdorfer.

Arnold announced that the GCBA has agreed to continue the tradition of conducting its summer meeting in conjunction with the PGA Championship for at least the next three years.

The Golf Course Builders Association of America was founded in 1970 to provide comprehensive programs and services to all segments of the golf course construction industry in the rapidly changing regulations and technology of golf course construction.

### Education courses offered through UF Extension Service in Sanford

The University of Florida Cooperative Extension Service educational programs for 1992-93 are designed to disseminate the most recent and relevant educational information to the commercial turf industry. Courses are co-sponsored by the University of Florida Cooperative Extension Service, Central Florida Research and Education Center, Sanford. For information about any course listed below, contact Uday K. Yadav, extension director and commercial horticulturist at 407-323-2500, Ext. 5559.

#### Educational Programs

**Sept. 11 - 12, 1992 - National Horticulture Short Course**, sponsored by the Florida Nurserymen & Growers Association in cooperation with the University of Florida Cooperative Extension Service at the Orange County Civic Center, Orlando. For information contact Linda Adams at FNGA, 407/345-8137.

**Oct. 2, 1992 - Landscape Ornamentals Research Field Day**, sponsored by the UF Coop. Extension Service, CFREC, Sanford.

**Oct. 15, 1992 - Plant Nutrition/ Fertilizer Management**, sponsored by the UF Coop. Extension Service, CFREC, Sanford.

**Nov. 10, 1992 - Human Relations & Business Management**, sponsored by the UF Coop. Extension Service, CFREC, Sanford, Fla.


**Jan. 15, 1993 - 8th Annual Mid-Florida Turfgrass Conference**, sponsored by the U. of Florida Cooperative Extension Service, at the Seminole Community College, Sanford.

**Feb. 11, 1993 - Urban Tree Conference**, sponsored by the U. of Florida Cooperative Extension Service, Coop. Extension Service Auditorium, Sanford.

**March 16, 1993 - Environmental Issues**, sponsored by the UF Coop. Extension Service, CFREC, Sanford.

**April 23, 1992 - Insects That Feed on Trees & Shrubs**, sponsored by the U. of Florida Cooperative Extension Service, Seminole Community College, Sanford.

**May 23, 1993 - Water Quality For Horticulture**, sponsored by the U. of Florida Cooperative Extension Service, Coop. Extension Service Auditorium, Sanford, Fla.



**Reference Library**

*Trends in Resort and Daily Fee Golf, 1992 Edition*, is a statistical review from the National Golf Course Owners Association incorporating 1991 operating and financial data on approximately 100 daily fee, resort, and semi-private golf courses throughout the United States.

The publication shows revenue per

round, average income and expenses, golf course maintenance expenses, maintenance costs per hole, average expense variations 1991 v 1992, and food and beverage revenue per round. Data are reported by region and by type of course: resort, daily fee and semi-private.

The report was designed with the assistance of Pannell, Kerr and Forster to complement the NGCOA's *Uniform System of Accounting for Daily Fee and Resort Golf Courses*, which allows for the direct comparison of financial information between operations.

*Trends* is \$50 to NGCOA members and \$75 to nonmembers; the *Uniform System* is \$20 to members and \$30 to nonmembers. Contact NGCOA at 800-933-4262.

*Turfgrass Technical Manual* by Jacklin Seed is a step-by-step guide to selecting, planting and maintaining its varieties.

The publication is designed to assist golf course superintendents and turf professionals in identifying the varieties, blends and mixtures, recommended seeding rates, and planting instructions best suited to a variety of golf course applications.

Published in a loose-leaf binder, it also contains troubleshooting information to help diagnose and treat common turfgrass diseases and maintenance problems.

The manual is free from Jacklin; telephone 208-773-7581 or fax 208-773-4846.

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# Superintendents: Offensive linemen of golf

## Wise Words from Wisconsin

The Wisconsin GCSA's newsletter, *The Grass Roots*, edited by Monroe Miller, CGCS, is always chock full of good reading. Monroe's efforts have managed to earn the GCSAA's Best Editorial Content many years running. I found Chad Eberhardt's article "The Offensive Linemen of Golf" in the May/June issue worthy of sharing with all our readers. It is reprinted with their permission. — Joel D. Jackson, Editor.

BY CHAD EBERHARDT

Have you ever felt that the only time you ever got noticed, as a golf course superintendent, is when something goes wrong on the golf course?

It kind of makes you feel like an offensive lineman in football. After all, when they're executing correctly, offensive linemen go unnoticed by the average fan. In fact, the only time you will hear an offensive lineman singled out in the NFL is after he has committed a penalty and the referee announces his number.

Recognition and fame on offense usually starts with the quarterback, then goes to the running backs, wide receivers and tight ends. Then comes the offensive linemen.

But the truth of the matter is that the others would have little success if the offensive linemen weren't doing their jobs.

This anonymity is one of the reasons that good offensive linemen must have an enormous amount of self-esteem and self-confidence. They must believe they are good performers, capable of blocking anyone they may face.

Without this inner confidence, an offensive lineman always will be thinking about being defeated and not focusing on what he must do on each and every play.

Go ask the golf pro at your club which football position he thinks he can relate to. The answer will undoubtedly be the quarterback. After all, it's the most glamorous big money position on the team.

When the offense is successful, the praise is directed toward

the quarterback. When the offense fails, offensive linemen are usually at fault for lack of blocking.

Can you still relate? You bet!

Offensive linemen are the foundation for the whole team. They have to be solid. And they are.

In order to be successful, every position on a football team from the QB to the OL must work together to form a cohesive unit. Likewise, a partnership of mutual respect and understanding between the golf pro and the superintendent is invaluable to both. A true partnership is one in which the best interests of the club are promoted and maintained.

Have you ever wondered why we don't have a "Superintendent of the Year" award?

It's because of the same reason an offensive lineman doesn't win the NFL MVP award. There's nothing to base recognition upon. The only stats kept on an OL is his number of penalties.

Should the most valuable golf course superintendent be the one who has the fewest things go

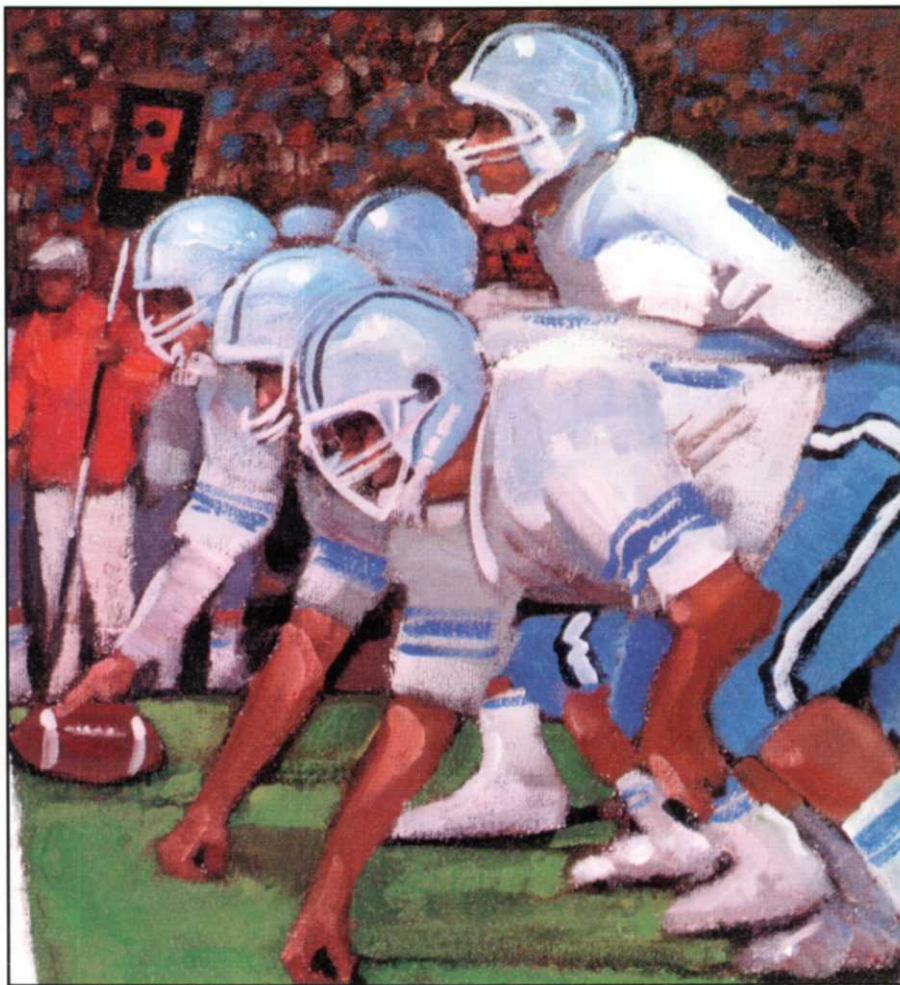
wrong in a year? Forget it! Recognition has to be a personal thing.

Use our friend, the good old offensive lineman, as an example. Mental toughness allows him to take the field on series after series, year after year. He knows each time that he is winning little battles that ultimately will be rewarded with a team victory.

With mental toughness comes a willingness and stubbornness to keep on trying, plus an enormous pride in individual performance on each and every down.

A good offensive lineman hangs in there and takes the shot, then lines up and does it again. His durability is impressive. They never miss a game or practice during the season. They can't. There cannot be any surprises.

Sounds very familiar, doesn't it?





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# Real superintendents don't wear earrings

One summer morning a few years ago, a young employee — a college student — came to work with a gold earring dangling from one ear.

David Noltner took one look at him and calmly offered this: "Jeff, I'm going over to my tool box, get a pair of big pliers and walk back. If you don't have that jewelry out of your ear when I get back, I'm going to yank it out with those pliers."

The kid never moved on the golf course as fast as he did removing his earring. He was lucky Dave wasn't offering a haircut; his long blond locks needed trimming. I was relating the story that night to my family. They didn't find it as humorous as I did. In fact, daughter Holly said, "I know, Dad. REAL superintendents don't wear earrings."

Some of Holly's friends do, though. The boys, I mean.

So, with thanks to Holly and apologies to the originator of "real men don't eat quiche," here's my REAL list for golf course superintendents.

- ◆ Real golf course superintendents don't wear earrings. Their employees don't wear them either And they certainly don't wear gold necklaces.

- ◆ Real golf course superintendents wear work boots to the golf course. Not boat mocs and for sure not tennis shoes.

- ◆ A real golf course superintendent never wears \$75 slacks, especially to work.

- ◆ A real golf course superintendent owns at least ten pairs of blue jeans. He also still wears a belt, not as a fashion (mis)statement, but to keep his pants up. He doesn't believe wrinkles are "in vogue" either.

- ◆ Real golf course superintendents discard a shirt or pair of pants when it's worn out, not when it's out of fashion.

- ◆ A real golf course superintendent doesn't wear cologne to work; he would rather smell like the shop than a house of ill repute.

- ◆ A real golf course superintendent is never mistaken for the club's golf pro. Even less likely is being mistaken for the clubhouse manager.

- ◆ Real golf course superintendents will always list green as their favorite color When you're from Wisconsin, red may tie green for first.

- ◆ A real golf course superintendent always considers a "Made in America" tag as an important criterion in purchase decisions.

- ◆ Real golf course superintendents never drive those little pickups made by Nissan or Toyota or Isuzu. They drive either Fords or Chevys (1/2 ton or larger). Occasionally you'll see a real superintendent in a Dodge truck, indicating one of his members owns a Dodge dealership.

- ◆ When it comes to cars, you won't see a real golf course superintendent (from Wisconsin, at least) driving a Saab, Peugeot, Volvo, Audi, Fiat or BMW. He doesn't drive Japanese or Korean cars, either.

- ◆ And speaking of vehicles, real golf course superintendents, at least those from Wisconsin, use real turf trucksters on their golf courses. They wouldn't have those little white imports with the skinny tires and no traction. We don't care how popular they are in California. In fact, that is reason enough NOT to run them!

- ◆ A real golf course superintendent never "does lunch" nor participates in "power lunches". Lunch time was meant for eating. In fact, real superintendents have lunch at mid-morning and eat dinner at noon. The evening meal is called "supper."

- ◆ A real Wisconsin golf course superintendent drinks real beer, not lite beer, not wine and for sure not ice cream drinks. Real cheese is his favorite

- ◆ snack. He drinks milk at every meal and feels unsatisfied if he hasn't had beef for either dinner or supper. Really.

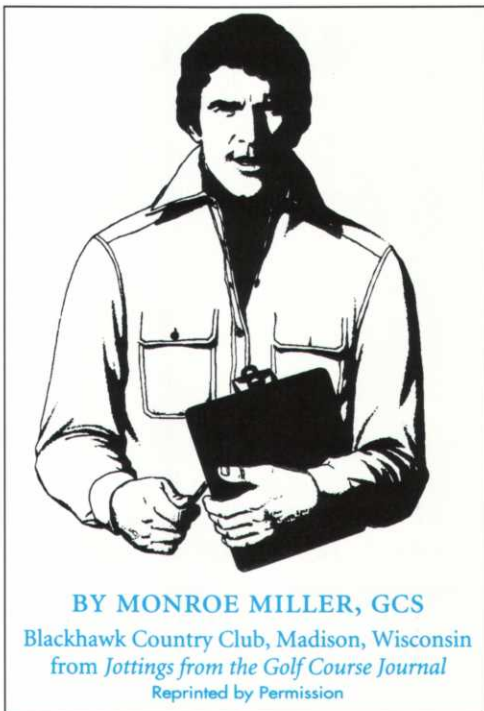
- ◆ A real golf course superintendent decides on how long to run his irrigation system himself and never leaves that duty to a "weather station".

- ◆ A real golf course superintendent decides on the radio stations allowed play time in his shop. No station featuring music by Jeb and the Haystacks is permitted. Neither is one playing tunes by Dougie and the Druggies.

A real superintendent listens to light rock or the music of your life.

- ◆ Real golf course superintendents don't fertilize their lawns more than once a year They simply do not need the extra work. When mowing is required, each does his own. No riding mowers and no self-propelled mowers allowed.

- ◆ A real golf course superintendent doesn't fib about 1) how much nitrogen



BY MONROE MILLER, GCS  
Blackhawk Country Club, Madison, Wisconsin  
from *Jottings from the Golf Course Journal*  
Reprinted by Permission

A real golf course superintendent doesn't like flowers on his golf course. He'd rather use the time and money spent on pansies and petunias for trees.





he applies on his putting greens each year 2) the stimpmeter readings for his putting greens, 3) the height of cut of his greens and fairways, 4) how much *poa annua* he really has, and 5) his salary. His ego isn't tied to any of the above.

◆ A real golf course superintendent doesn't like flowers on his golf course. He'd rather use the time and money spent on pansies and petunias for trees. They're a real man's plants. Flowers are reserved for clubhouse landscapes.

◆ Given his druthers, a real golf course superintendent would do away with all tee and green equipment — the furniture, the signage, ball washers, rakes, club cleaners, score card boxes, water coolers, etc. "Give them a flag stick to shoot at and let 'em play," says the real golf course superintendent. Many golfers feel the same way.

◆ A real golf course superintendent greatly prefers reel mowers to rotaries.

He understands the difference between cutting and mowing. He likes cutting better. He knows that rotary mowers are hackers to be used only when the ground

isn't suited for reel (real!) cutters. Rotaries finish a distant second to reels.

◆ A real golf course superintendent realizes that *poa annua* is one of the best golf turfs growing; he is perfectly capable of maintaining it in a superb playing condition.

◆ Real golf course superintendents are morning people, and they greatly prefer dawn to sunset. They subscribe to Ben Franklin's creed — early to bed, early to rise makes a man healthy, wealthy and wise. Except for the "wealthy" part.

◆ A real golf course superintendent doesn't jog. After 10-12 hours of work each day on the golf course, he doesn't have to. He likely wouldn't have the energy and absolutely wouldn't be seen in a cute, tight little jogging suit.

Before anyone gets his nose bent out of shape, let me confess I don't meet all the qualifications and criteria of a real golf course superintendent, either. I only own six pairs of blue jeans and proudly maintain flower beds on the golf course.

But make no mistake: this golf course superintendent doesn't wear earrings. ♪

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# Trashing the Planet

*A book that explains exactly what is and is not happening to the environment*

BY TERRY McIVER

MANAGING EDITOR, *LANDSCAPE MANAGEMENT* MAGAZINE\*

Many of our readers are skeptical when it comes to stories about how industry is destroying the environment. Some of the skepticism comes from the fact that they make their livings by caring for the earth. But they also feel a righteous indignation, because they know that the facts are being twisted or not reported.

There is, however, a book that explains exactly what is and is not happening to the environment, and it would make a great gift for special clients: *Trashing the Planet* by Dixy Lee Ray and Lan Guzzo (1990, Regnery Gateway Publishers, Washington, D.C.)

Ray once headed the Atomic Energy Commission, was governor of Washington, and has been associated with the U.S. Bureau of Oceans. She's also taught zoology at the University of Washington. Guzzo is a TV-radio-newspaperman and author.

*Trashing the Planet* is loaded with factual information refuting every eco-crisis you've come to love over the years:

**The greenhouse effect:** If the severe winters of 1978, 1982 or 1989 didn't convince you that the earth is not overheating, consider that, according to Ray, the computer models used to predict global warming are too simplistic and contain much guesswork. There also are variables that affect temperature that we can't control: ocean temperature, currents, volcanic eruptions, solar activity.

And while reduction of CO<sub>2</sub> is advisable, the great fluctuations of earth's temperature cast doubt on the belief that man's increased carbon dioxide output is causing global warming.

**The ozone layer:** As Ray explains, the thickness of the ozone

layer changes periodically. Natural layer fluctuations are about 15 percent, and brief.

"The term 'ozone hole'," writes Ray, "is misleading since it persists for only a few weeks. The Antarctic ozone 'hole' grew during the early 1980s becoming large in 1985 smaller in 1986

and reaching its greatest size in 1987. In 1988, the 'hole' did not appear as expected. It was finally discovered — only 15 percent as large as predicted and displaced over the ocean."

Ray also reports that penetration of ultraviolet light reaching the earth's surface has been decreasing up to 1.1 percent each year.

**Pesticides** — The amount of natural pesticides we eat every day is at least 10,000 times the level of pesticide residue from agricultural use of synthetics.

**Acid rain** — There are many sources: decaying organic matter in swamps and wetlands; volcanoes; lightning. Man-made sources have been reduced by more than 40 percent since the Clean Air Act of 1970.

Other man-made pollutants include volatile organic compounds, ammonia and hydrocarbons. But insects and disease have combined to kill more trees than any man-made source.

Man's stewardship is far from perfect, as Ray admits. But the point of much of *Trashing the Planet* is that change — and taxpayer-funded clean-up programs — must be based on fact, not assumptions, and science must be allowed to play its part in further developments and solutions.

If you've not read *Trashing the Planet* pick up a copy. The science is easy to follow, and it contains common sense we can all understand.

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**Table 6. Biweekly and seasonal means for turf quality of winter overseeded entries grown on 'Titway II' bermudagrass from October 1990 through May 1991 at Gainesville, Fl.**

Entry	Nov		Dec		Jan		Feb		Mar		Apr		May		Season Mean	CV	%
	18-30	1-15	18-31	1-15	18-31	1-15	18-28	1-15	16-31	1-15	16-30	1-15					
** Patriot II	7.2	8.2	8.3	8.3	8.2	8.2	7.4	8.2	8.2	7.8	7.9	6.8	7.86 a	9.9			
LDRF	7.6	8.4	8.4	8.4	8.0	8.0	7.3	7.9	7.3	7.9	8.1	7.6	7.86 a*	7.8			
Futura 2000	7.8	8.2	8.2	8.1	7.9	7.8	7.1	7.8	7.7	7.7	7.5	8.2	7.82 ab	6.7			
LDRD	7.9	8.4	8.2	8.1	8.1	8.1	7.4	7.7	7.4	7.9	8.0	8.2	7.77 ac	8.3			
Calypto	7.8	8.1	7.9	7.8	7.6	7.6	8.1	7.6	7.9	7.6	7.9	7.9	7.73 a-d	9.1			
Pleasure	7.4	8.2	7.9	7.8	7.4	7.4	7.7	7.5	7.6	8.1	8.0	6.7	7.71 a-d	6.8			
Del. Dwarf	7.7	8.3	7.7	7.7	8.0	8.0	7.1	7.7	7.5	7.6	7.6	6.9	7.69 a-d	7.4			
Medalist 8	7.7	8.1	8.0	8.1	7.9	7.8	7.4	7.7	7.5	7.9	8.0	7.7	7.69 a-d	8.8			
Blend I	7.5	8.1	7.9	7.9	8.0	8.0	7.9	7.7	7.4	7.9	7.7	6.7	7.67 a-d	8.1			
** Rodeo II	7.0	8.0	7.9	7.9	8.0	8.0	7.4	7.7	7.5	7.5	7.5	6.5	7.69 a-d	9.2			
Competitor	6.7	7.7	7.9	7.9	8.0	8.0	7.9	7.7	7.7	7.5	7.7	6.5	7.64 a-d	9.8			
Pennant	6.8	7.7	7.9	7.9	8.0	8.0	7.6	7.7	7.5	7.6	7.3	6.7	7.63 a-d	8.9			
Double Eagle	6.9	7.8	7.8	7.8	7.9	7.9	7.4	7.7	7.4	7.5	7.5	6.8	7.62 a-d	7.1			
Pebble Beach	7.0	7.7	7.8	7.8	7.9	7.9	7.3	7.7	7.7	7.6	7.6	6.8	7.62 a-d	7.1			
Pebble Beach	6.6	7.8	7.7	7.7	7.9	7.9	7.6	7.7	7.5	7.6	7.3	6.7	7.62 a-d	7.1			
Accolade	6.9	7.5	7.6	7.6	7.8	7.8	7.4	7.7	7.4	7.5	7.5	6.5	7.62 a-d	7.1			
Fiesta II	5.7	7.5	7.8	7.8	7.9	7.9	7.3	7.7	7.7	7.6	7.6	6.8	7.62 a-d	7.1			
Sunrise Primo	6.9	7.9	7.9	7.9	8.0	8.0	7.6	7.7	7.5	7.5	7.5	6.5	7.62 a-d	7.1			
Advent	7.2	7.9	7.7	7.7	7.8	7.8	7.4	7.7	7.4	7.4	7.4	6.5	7.62 a-d	7.1			
APM	7.8	8.1	7.5	7.5	7.9	7.9	7.3	7.7	7.7	7.6	7.6	6.5	7.62 a-d	7.1			
Mix 4	7.6	7.6	7.4	7.4	7.6	7.6	7.3	7.7	7.5	7.5	7.5	6.5	7.62 a-d	7.1			
Triple Play	7.2	7.8	7.4	7.4	7.6	7.6	7.3	7.7	7.4	7.4	7.4	6.5	7.62 a-d	7.1			
Seville	6.6	7.5	7.5	7.5	7.6	7.6	7.3	7.7	7.5	7.5	7.5	6.5	7.62 a-d	7.1			
Caliente	7.4	7.7	7.5	7.5	7.6	7.6	7.3	7.7	7.5	7.5	7.5	6.5	7.62 a-d	7.1			
Alliance	7.3	7.9	7.3	7.3	7.4	7.4	7.3	7.7	7.5	7.5	7.5	6.5	7.62 a-d	7.1			

# Cleaning out my desk

## Green Side Up



*Joel D. Jackson*

Joel D. Jackson, CGCS  
Editor

The time has come to slip the surly bonds of editorship and seek solace and redemption in my “day job.” You know, the one they call being a golf course superintendent.

What a passage these past four years have been! Bentgrass greens, FGCSA Presidency, double bypass surgery, return to Disney, and oh yeah, through it all, editor of *The Florida Green*. But the times they are a-changing. New job, new golf course, new challenges. It is time for a new editor.

So, I’m giving up the top spot on the masthead. Oh, I’m not jumping ship. I’m just going to slip down below and help out in the galley for awhile. We need someone else to plot the course and steer the ship. Someone who’s been round the horn. Someone who’s seen rough weather. Trying to manage a four-color magazine can be a significant burden for a solo sailor, so the FGCSA Publications Committee is trying to muster a conscientious crew to help the new skipper sail the ship.

Just a few words of thanks to those who made it all worthwhile.

It was really great visiting with the superintendents at the courses I scouted for the cover stories. Thanks for your hospitality and your participation. My sincere

thanks to those precious few superintendents who responded to the *Hands On* program and shared their knowledge in *The Florida Green*.

Also, I appreciate those who took the time to convey their pro and con comments about the magazine directly to me so I could try to stay on track. Especially gratifying were those instances when someone called or wrote seeking permission to reprint something we produced that they found worthy of sharing with their readers or club members.

It has been a privilege to have served as editor. I am looking forward to contributing to the magazine in the future, but in a limited role.

We turned the production of the magazine over to Janlark Communications in 1989 as Dan and Irene Jones opted for a well-deserved retirement from the fray. With Janlark rigging the sails and me hanging on to the helm for dear life through some stormy times, the *Florida Green* has managed to survive and even be recognized a few times in the GCSAA Publications Contest. Thanks, Larry. Thanks, Philip.

Until we meet again, remember, keep the GREEN SIDE UP!



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