



The Florida Green

March/April 1991



Hammock Dunes Links Course
Palm Coast
Number 4

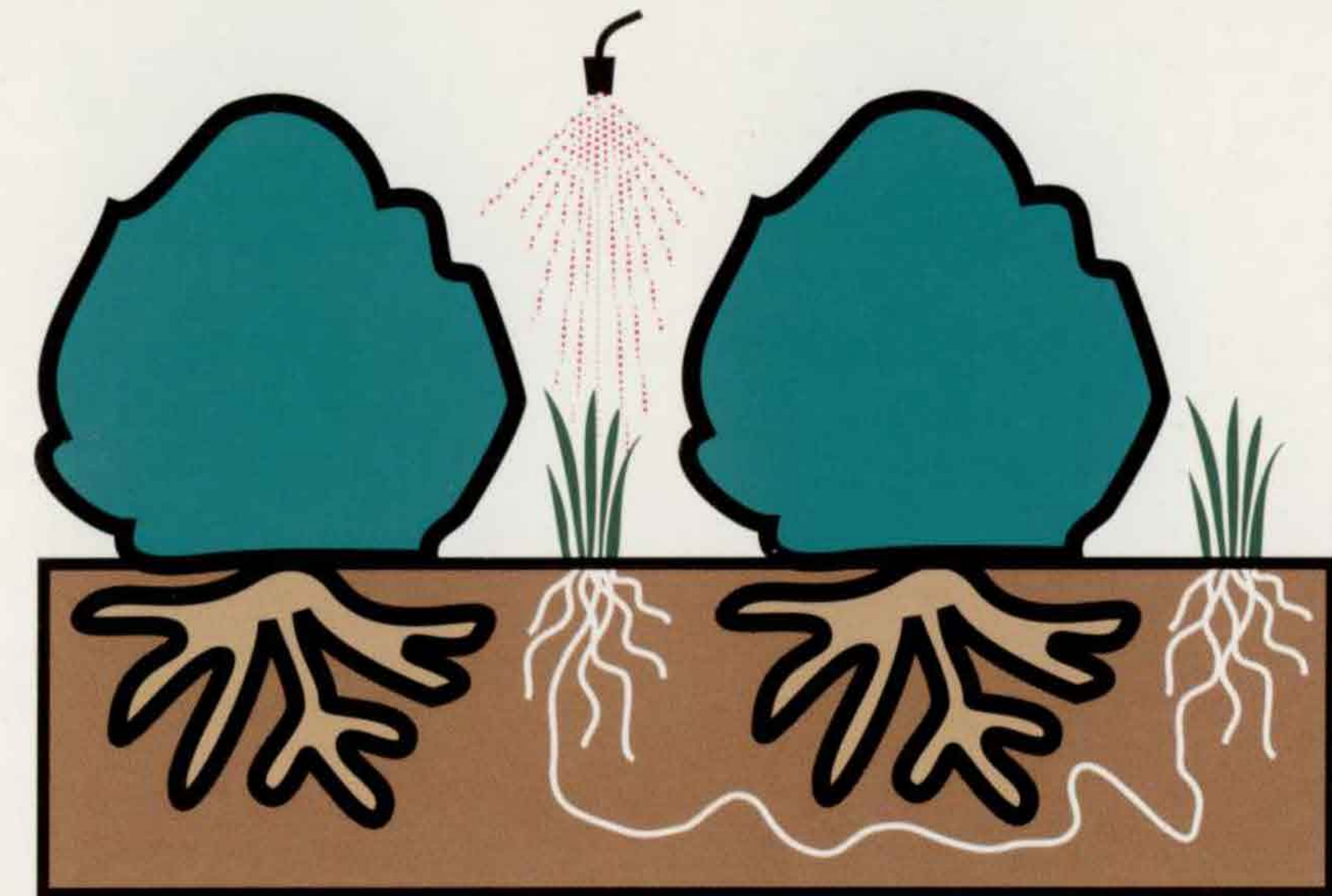
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*Selective, Systemic
Control of Grassy Weeds
in Ornamental Beds*



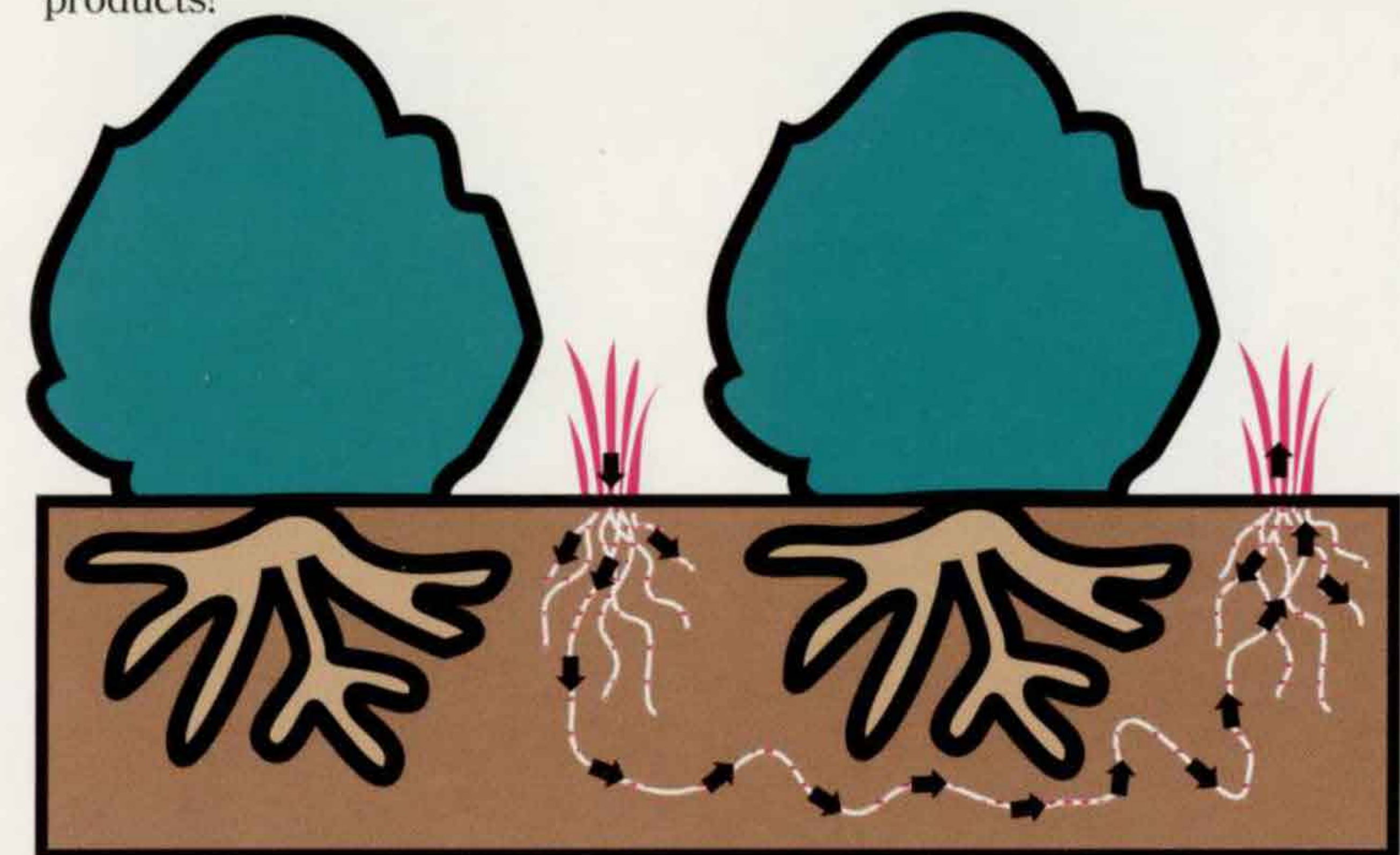
*Take out unsightly
grassy weeds with
LESCO Take-Away™
Postemergence
Herbicide!*

Selective



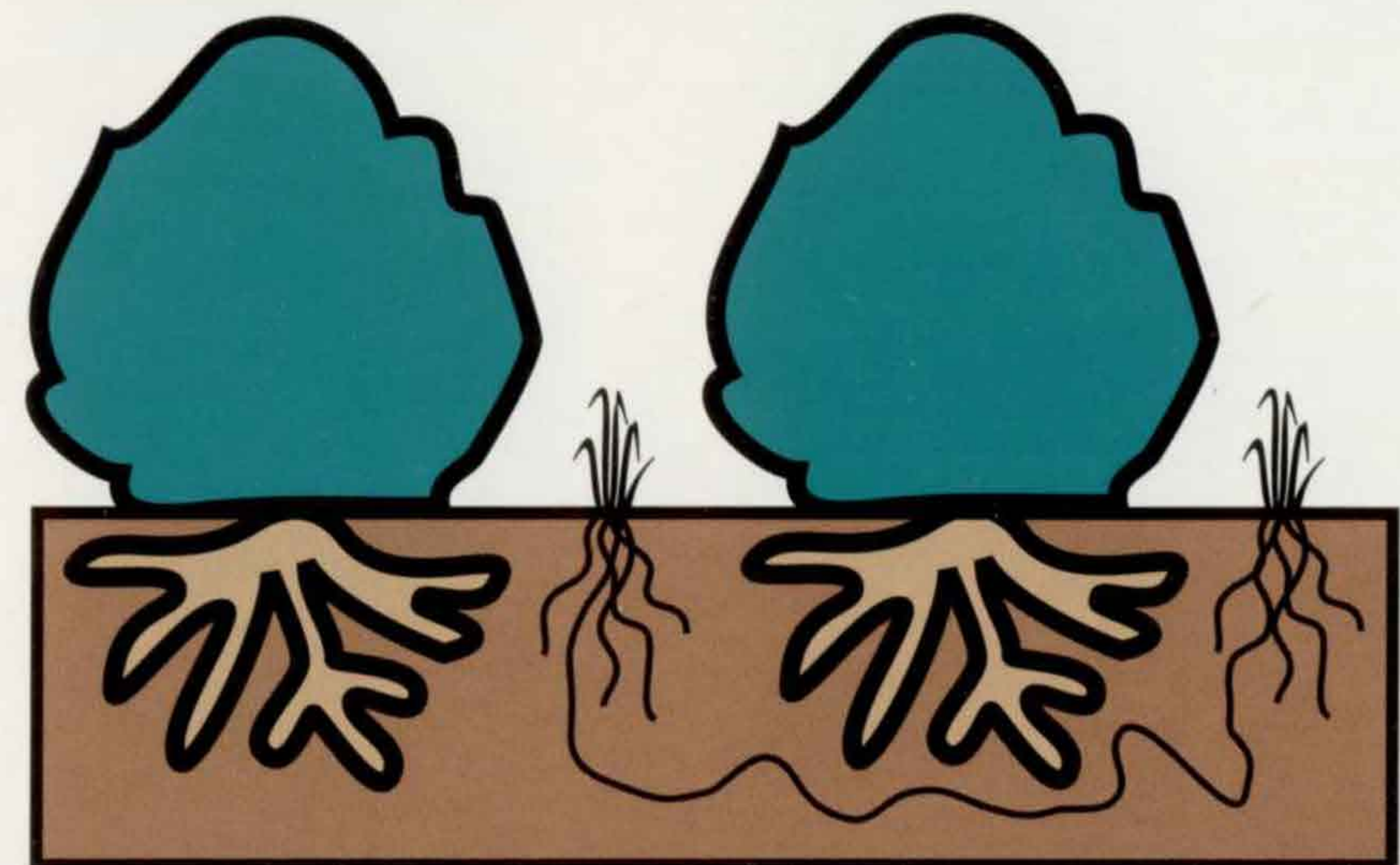
LESCO Take-Away controls over 30 problem annual and perennial grassy weeds. It is labeled for over-the-top application on over 300 species of ornamental plants — that's three times as many ornamentals as competitive products!

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Selective Postemergence Herbicide for Use on Ornamentals

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CAUTION

See Enclosed Supplemental Label For Complete Precautionary Statements and Application Instructions.

EPA Reg. No. 10182-104-10404
Est. No. 44616-M0-01

CONTENTS: 1 GAL.

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ACTIVE INGREDIENT:

Fluazifop-p-butyl
Butyl (R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoate*.....13.00%
INERT INGREDIENTS.....87.00%
TOTAL.....100.00%

*LESCO Take-Away Grassy Weed Herbicide contains 1 pound (+) isomer (fluazifop-p-butyl) per gallon

Manufactured for:
LESCO, INC.

20005 Lake Road, P.O. Box 16915 Rocky River, Ohio 44116

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LESCO

Take-AwayTM Grassy Weed Herbicide

Selective Postemergence Herbicide for Use on Ornamentals

Keep Out of Reach of Children
CAUTION

See Enclosed Supplemental Label For Complete Precautionary Statements and Application Instructions.

EPA Reg. No. 10182-104-10404
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NET CONTENTS: 16 FL. Oz.

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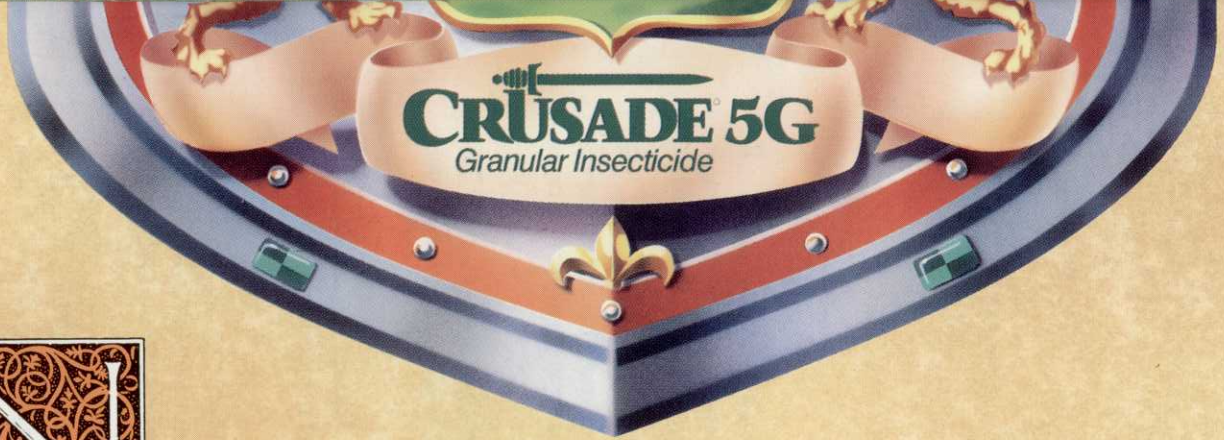
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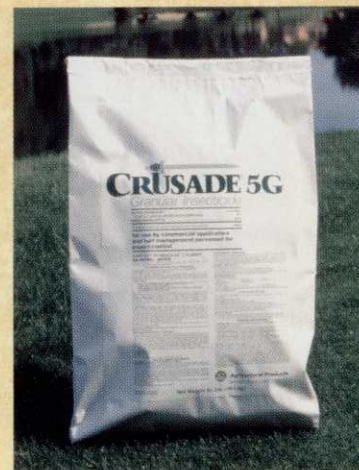


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The Florida Green

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Welcome!

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Coming in future issues

COVER STORIES

Weston Hills in Fort Lauderdale, Lake Region Yacht & CC in Winter Haven, BallenIsles CC of JDM and a course in the Everglades are scheduled for the balance of 1991.

HANDS ON

Articles on aerifying, top dressing, conditioning, frost and freeze protection, pesticide application, overseeding, fertility, facility and staff management, integrated pest management and managing turf under water restrictions have been scheduled for this year and early next year.

ALSO...

In-depth interview with Robert Trent Jones, Jr.; four-page, full-color summary of bermudagrass decline from IFAS; continued monitoring of regulatory agencies.

READ

...the fine print.

Net Weight 61 $\frac{7}{8}$ lbs

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ProTurf Fairway Fertilizer 32-3-10 643-8408

Guaranteed Analysis

Total nitrogen (N)	32%
0.8% ammoniacal nitrogen	
24.5% urea, methylene urea nitrogen	
6.7% water insoluble nitrogen	
Available phosphoric acid (P ₂ O ₅)	3%

Scott's ProTurf

GUARANTEED ANALYSIS

Total Nitrogen (N)	19%
5.5% Water Insoluble Nitrogen	
3.5% Urea Nitrogen	
Available Phosphoric Acid (P ₂ O ₅)	5%
Soluble Potash (K ₂ O)	9%
Magnesium (Mg)	10%
Sulfur (S)	6.0%
Iron (Fe)	10%
Manganese (Mn)	0.5%

Nutrient Sources: Urea, Methylene Ureas, Ammonium Phosphate, Ammonium Sulfate, Ammoniated Superphosphate, Sulfate of Potash, Oxides, Ferrous Sulfate, Sulfates.
Potential Acidity Equivalent 1300 lbs. Calcium Carbonate per Ton

Lebanon Country Club

GUARANTEED ANALYSIS

TOTAL NITROGEN (N)	24.0%
1.6% Ammoniacal Nitrogen	
11.6% Urea Nitrogen	
10.8% Water Insoluble Nitrogen	
AVAILABLE PHOSPHORIC ACID (P ₂ O ₅)	4.0%
SOLUBLE POTASH (K ₂ O)	12.0%
Magnesium (Mg)	0.7%
Sulfur (S)	5.0%
Iron (Fe)	0.4%

Derived from ammonium phosphate, isobutylidene diurea, urea, sulfate of potash, sulfate of potash-magnesia and iron sulfate. Potential Acidity 1000 lbs. Calcium Carbonate Equivalent per ton.
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Ray Hansen

Florida Golf Council needs your support

In January, Tim Hiers and I attended an organizational meeting of the Florida Golf Council.

The Board of Directors announced the hiring of its new executive director, Bobby Brantley, who has spent the past 12 years in Florida state government: eight years in the Florida Legislature and the last four as lieutenant governor. This timely appointment of a person with his background will be of great benefit during this critical start-up period.

For those who are not familiar with this new organization, let me tell you how the council evolved and its mission. Industry leaders from all phases of golf organized last fall to face such issues as land use, taxation, water management and environmental protection which we are all concerned with but were not being properly addressed. The council is made up of all existing golf associations and industry leaders who wish to promote the best interest of this \$5.5 billion Florida industry. Its mission is to become a focal point, clearinghouse, communicator and advocate to assure

that we receive our fair share of the state's resources including land, water, economic and government support.

The Florida Golf Council Board of Trustees and Board of Governors is comprised of people in all phases of the golf industry in Florida. Brantley is operating with a small staff out of Palm Beach County but as funding is developed, he will locate in Tallahassee where he will spend his time on state government issues.

This new organization is important to all of us if we are ever going to be able to tell our side on environmental issues in Tallahassee. For this council to survive, all golf courses and golf-related business in Florida will be asked to pay annual dues. Golf courses will be divided into three categories depending on the size of their maintenance budgets, which I feel is a fair approach. Developers will be asked to pay a fee above ours and businesses will be able to support this association also.

I urge all readers to support this new organization by joining so we may finally have a voice in Tallahassee.

Its mission is to become a focal point, clearinghouse, communicator and advocate to assure that we receive our fair share of the state's resources including land, water, economic and government support.

TURF NEWS

ROUNDUP

Florida Golf Council finds a mouthpiece government will hear

If the Florida Golf Council is to become the voice of the state's golf industry, it must have a powerful mouthpiece.

Many golf course superintendents are hoping that the selection of Bobby Brantley, Florida's former lieutenant governor under Bob Martinez, as the council's first executive director will bring credibility and political savvy to the golf trade organization.

Certainly Brantley comes with some impressive credentials.

As lieutenant governor, Brantley also served as Secretary of Commerce and was one of the cheerleaders for the council in its infancy.

He also has served in the state House of Representatives, giving him a roadmap to the halls of the state legislature and the ear of the lawmakers in Tallahassee.

The new executive director knows the problems facing golf courses. Brantley's father-in-law, Frank Moore, developed the Seminole Golf Club in Longwood. In 1972, Brantley became manager of the course, a position he held for 16 years.

Brantley has hit the ground running, meeting with representatives of organizations within golf that call Florida home. He says the success of the Florida Golf Council will be directly related to the cooperation among the different organizations in the industry.

For FGCSA President Ray Hansen, Brantley's selection is none too soon.

"The sooner our side is heard, the better," says Hansen. "With all the chemical restrictions, the water restrictions and the rules we have to contend with, we need to tell our side of the story. If the council has impact with just one issue — effluent usage — it will help. After all, golf courses are asked to take water that is polluted by industry and filter it back into the aquifer, and we aren't the polluters. Yet we have to pay the price for whoever polluted this water.

"I'm glad they picked someone who knows his way around Tallahassee instead of a novice. This will speed up the process," Hansen adds.

Brantley knows there's a difficult job ahead.

"I think that the biggest problem is one of communication," Brantley says. "The industry really doesn't know what is happening across the state that affects its business. For example, the St. John's Water Management District is considering rules on water consumptive use permits, and a section of these rules apply to golf courses. Many people in the industry don't know that their way of doing business will be changed because of water... and every district is looking at new rules on the use of water.

"The council needs to be a clearinghouse, to get this information out, and to assure we get the best spokespeople from different segments of the industry to make presentations to the regulators. The council doesn't need to re-invent the wheel; the experts are already there. But it needs to assure that the studies and the facts are articulated so that our voice can be heard."

Hansen says the "golf course superintendents are 100 percent behind the Council. We were one of the first to give the Council seed money."

"The golf course superintendents are probably the biggest cheerleaders we have," Brantley says. "They have been the most vocal in expressing the views of the industry over some of this rule-making because they are the ones getting hit by the regulations.

"You are talking about the superintendents' livelihoods when you talk about these rules.

"I've been impressed by their association and by how well they present the issues. Basically, the golf course superintendents are saying that they want to be recognized by the regulators. They don't disagree with *what* the regulators are trying to accomplish, but with *how* they are trying to accomplish it. There is another side to the story."



BRANTLEY/ARCHIVES

Bobby Brantley in his 1987 inaugural portrait as Florida's Lieutenant Governor.

ALSO

USGA Green Section, Society of Architects and Golf Course Owners announce major award winners 11

Florida continues to lead the nation in new golf course openings 12

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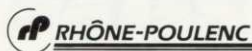
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TURF NEWS ROUNDUP

Brantley notes that some golf course superintendents and the turfgrass association members recently met with the St. John's River Management District representatives, and discussed one part of the proposed rules. As a result, changes were made.

"I'm not insinuating that the Council did this directly," Brantley says, "but through this meeting, the district people and the industry people were able to talk things over. The district representatives appreciated this chance to meet."

As far as Glenn Oberlander is concerned, there needs to be much more conservation — and clarification — concerning regulations.

"Right now the superintendent or person involved with the turf industry doesn't know what is happening," says Oberlander, the golf course superintendent at the Plantation Resort in Crystal River.

"Something tells me everyone in the industry is confused because we are having the same seminars all year long and when

If we can help head off some major expenses that would have occurred had a rule gone into effect, then the cost of membership in the Council is well worth it

everyone leaves the meetings, there is still a big question mark.

"Some problems with SARA Title III could have been avoided if they had come to us and talked to us about the effect of the regulations.

"And it's the same way dealing with the water restrictions... they don't make sense. They tell us *when* to water, but not *how much* water to use. If we had had someone talking to the government and telling our side of the water issue, this could be different."

Oberlander adds, "What we need is an opportunity to tell the public and the regulators the good things that golf courses can do."

Brantley continues to emphasize cooperation, but the council also needs money.

"We are basing the membership dues on the courses' annual maintenance budgets," says Brantley, "and I know that for some golf courses, the cost seems high. We are looking at \$500 a year for smaller clubs, with the dues graduating upwards as you get into the larger clubs with higher maintenance budgets.

"But if the Council can monitor what is happening in Tallahassee and get the industry talking to the regulators, then this is a lot less costly than each individual club hiring someone to do this. And, if we can help head off some major expenses that would have occurred had a rule gone into effect, then the cost of membership in the Council is well worth it to the courses in the state."
-Kit Bradshaw

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GOLF COURSE RENOVATION

USGA Green Section, Society of Architects, Owners pass out kudos

Dr. Joseph Troll, a renowned turfgrass educator, was presented the 1991 USGA Green Section Award at the International Golf Course Conference and Show in Las Vegas last month.

The award has been presented annually by the USGA since 1961 to recognize distinguished service to golf through work with turfgrass.

During his tenure at the University of Massachusetts, an estimated 1,100 students were graduated from the program he directed. Most became golf course superintendents.

Troll helped establish the Turf Research Center in South Deerfield, Mass., which is active in all aspects of research and testing new grass varieties.

Although he retired from the university in 1988, Troll remains general chairman of the Massachusetts Turf Conference and assists the Northeast Region of the USGA Green Section on its advisory visits.

He was awarded the GCSAA Distinguished Service Award in 1983.

• **Michael F. Bonallack**, secretary of the Royal and Ancient Golf Club of St. Andrews

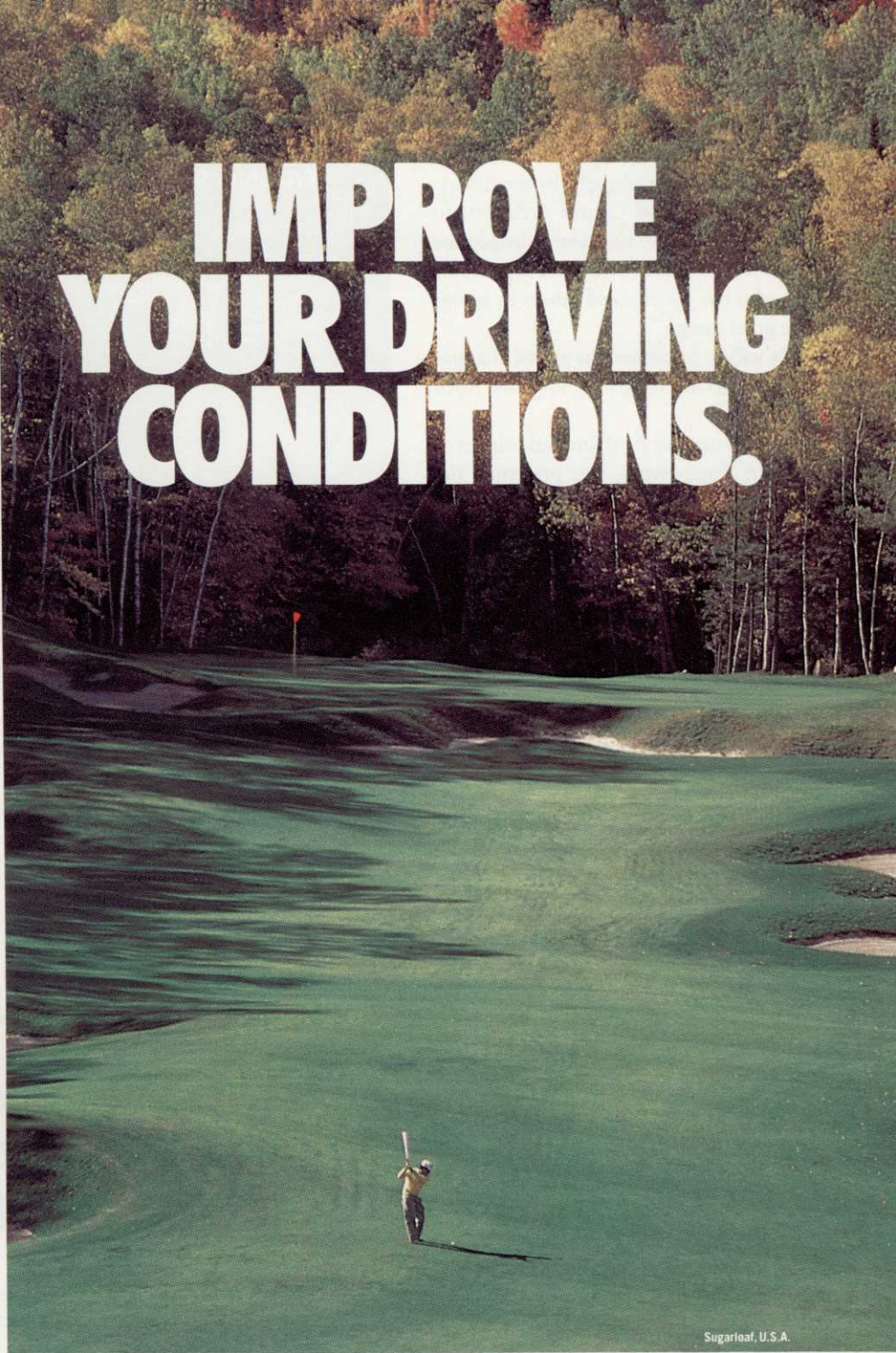
PREVIOUS WINNERS

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since 1983 is the 1991 recipient of the Donald Ross Award, given annually by the American Society of Golf Course Architects to "an individual who has acknowledged the importance of golf architecture to the game and who has encouraged others to recognize great design."

He will be presented the award at a special banquet in Broughton, England, April 23.

• Golf instructor **Paul Runyan**, winner of 28 PGA Tour events, was presented the Award of Merit by the National Golf Course Owners Association during its annual meeting at the Registry Resort in Naples Jan. 7. The award recognizes "achievements which reflect the proud traditions, elevate public awareness, and contribute to the advancement of golf as a lifelong recreational and competitive activity."

Florida still leads nation in course development

Florida opened more new golf courses in

LEADING STATES IN GOLF COURSE DEVELOPMENT 1990

Openings	Under Const.	Planing	Total
1. Florida 41	1. California ... 43	1. California 116	1. Florida 1,011
2. South Carolina ... 21	2. Michigan 42	2. Florida 93	2. California ... 853
3. California 17	3. Florida 39	3. Michigan 35	3. New York ... 781
4. Michigan 15	4. Georgia 28	4. Pennsylvania ... 38	4. Texas 756
4. North Carolina ... 15	4. Ohio 28	4. Virginia 30	5. Michigan 749

Source: National Golf Foundation

1990 than the next two states combined, according to the National Golf Foundation. With 41 openings last year, compared to South Carolina's 21 and California's 17, Florida now has 1,011 golf courses. California is second with 853.

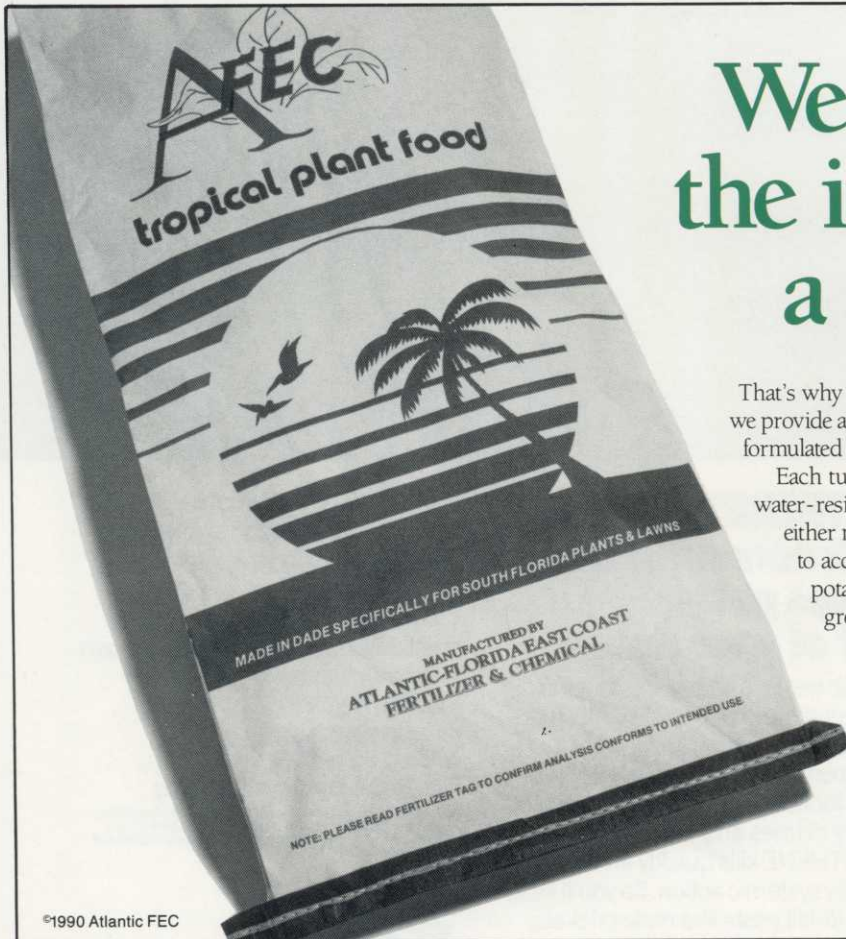
Another 39 courses were under construction in Florida as of Jan. 1, the NGF reports, with 93 others in the planning stages.

California (43) and Michigan (42) were

slightly ahead of Florida in the number of courses under construction while California also led the Sunshine State in the number of courses in planning with 116.

Nationally, 289 courses opened for play in 1990, one short of the 290 that opened in 1989. In 1988, the total was 211. Prior to that, the nation had been averaging fewer than 150 course openings per year.

Despite the economic slowdown at the end of the year, a total of 560 courses were



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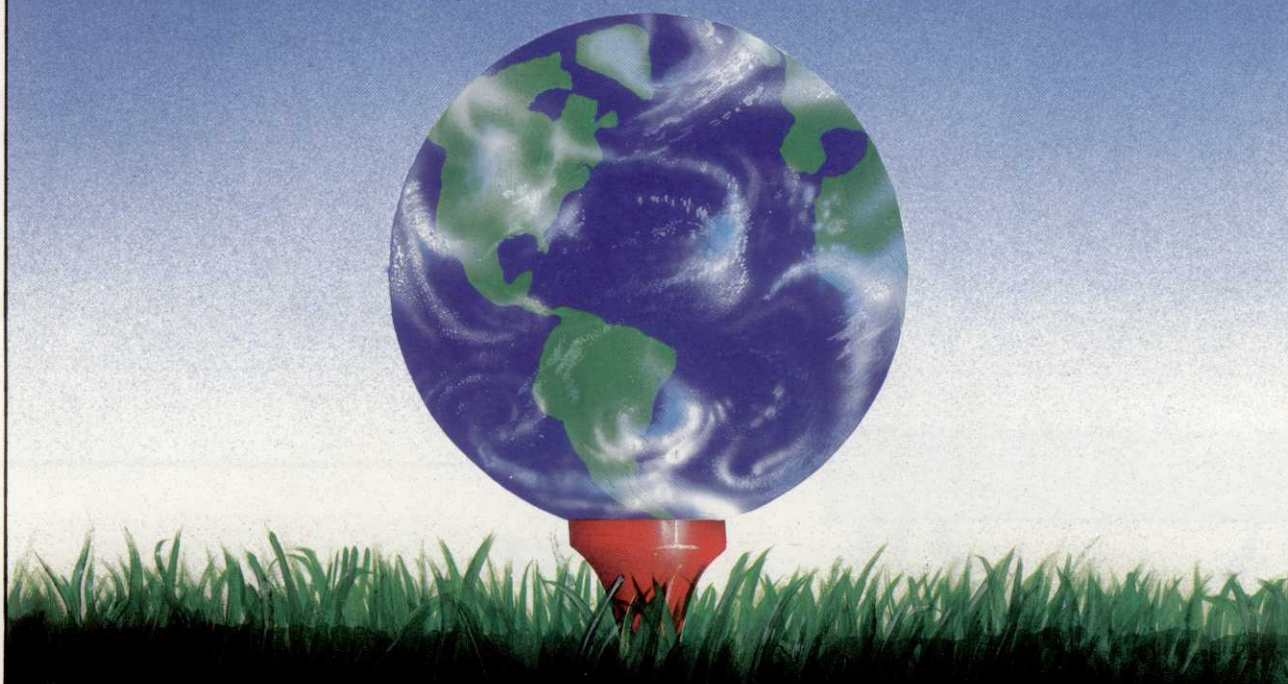
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under construction across the nation, the NGF says, significantly more than the 463 under construction at the end of 1989. The number of courses in the planning stages also rose from 603 to 781.

Of the 289 course openings last year, 206 were new facilities and 83 were expansions (nine holes or more) of existing facilities.

A significant number of the courses now listed under construction are carryover projects from 1990 that had set opening dates in the third and fourth quarters but were unable to meet them. The NGF attributed the delays to weather, financing, and environmental and other permitting difficulties.

A recent membership survey by the American Society of Golf Course Architects revealed that virtually every firm is experiencing increased difficulty in getting permits because of environmental considerations... with some encountering delays of several years.

The NGF's analysis of its data revealed three major points:

- Real estate continues to drive golf course development in Florida to a significantly greater extent than the national average. Of Florida's 41 new courses, 31 (76 percent) were linked to real estate projects, compared to the national average of 47 percent.

- On the other hand, more than half of Florida's new courses (22) are open to the public in some manner, reflecting the ratio of public to private among the state's existing courses. Nationally, 70 percent of all new courses were accessible by the public.

- Among the 206 new courses opened for play in 1990, 60 were nine-hole courses, of which 38 had no plans for further expansion. In Florida, 10 of the 41 new courses were nine-holers. Overall, nine-hole courses today make up 40 percent of the nation's supply of 13,951 golf courses. In Florida, 102 of the state's 1,011 courses — just over 10 percent — are nine-holers.

Florida's Taylor retains USGA post; Michigan owner to head NCGOA

C. Grant Spaeth, an attorney from Palo Alto, Calif., was elected to a second one-year term as president of the USGA at the association's annual meeting in January.

Among the nine members of the executive committee re-elected was F. Morgan "Buzz" Taylor of Hobe Sound, longtime member of the Green Section Committee.

Jeff Hoag, owner of Scott Lake CC in Comstock Park, Mich., was elected president of the National Golf Course Owners Association at its annual meeting in Naples in January.

Vince Alfonso, The Rail GC, Springfield, Ill., was elected vice president and Gibson Lunt, Lakeshore CC, Rochester, NY, was elected to another term as secretary/treasurer.

The NCGOA serves about 100 public golf course owners in Florida.



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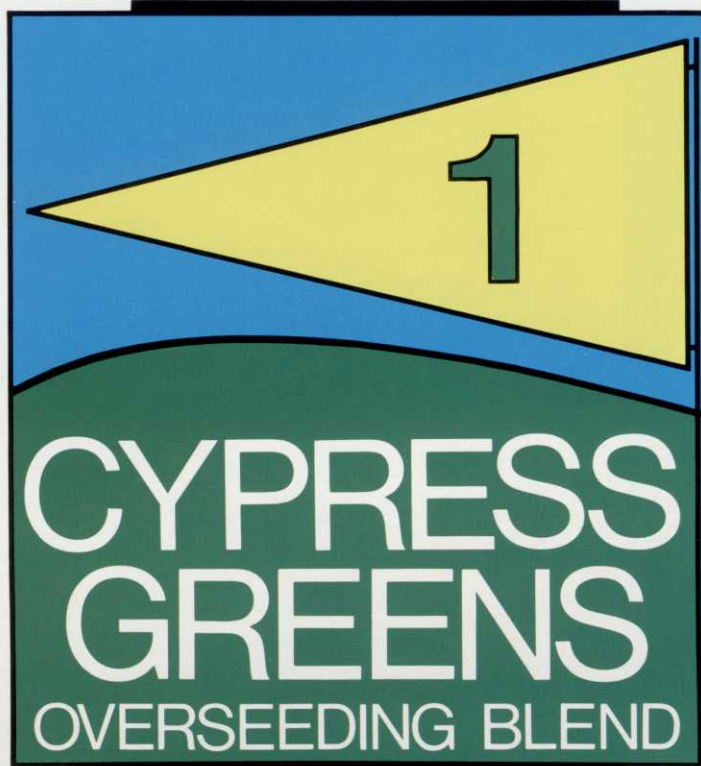
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“From a design standpoint, my number-one concern wasn’t wetlands and the natural areas, but the wind. You can’t see or touch the wind... it doesn’t belong to the terrain of the course, and yet the wind has a lot to do with how the holes were designed and how these holes are played.”

Tom Fazio

Welcome to

At the Hammock Dunes Links is the number-one concern.... a

BY KIT BRADSHAW

There are cranes, alligators, snakes, egrets, otters, bobcats and deer — including 8 to 10-point bucks — flying, scampering, slinking and bounding across more than a hundred acres of multi-million-dollar oceanfront property in Palm Coast.

They establish territories, splash in lakes, make nests, and even cavort across bunkers and nibble on the carefully tended flowers.

David Portz doesn’t care. “This is Audubon heaven,” says Portz.

“You see birds and wildlife here all day long. The humans just learn to cohabitate with nature.”

You’d think the man whose responsibility it is to maintain this precious 100 acres called the Hammock Dunes Links Course would be more concerned when he sees his flowers become a snack for a passing deer. But he isn’t.

Portz revels in the challenge.

“I’m environmentally conscious of everything in nature. I’ve always wanted to give a lending hand to



Audubon heaven!

Course along the Atlantic Ocean, sensitivity to the environment and Superintendent Dave Portz likes it that way.

the management of some area of God's good earth. And I don't think there is any surrounding more beautiful than a golf course," he says.

Tom Fazio's name may appear as the course designer but his "area of God's good earth" captures its character from the wind and the sea, the lowlands and the hammocks.

"From a design standpoint," says Fazio, "my number-one concern wasn't wetlands and the natural

areas, but the wind. You can't see or touch the wind... it doesn't belong to the terrain of the course, and yet the wind has a lot to do with how the holes were designed and how these holes are played.

"After that, the predominance of the ocean at the site and the sensitive areas of the course — hammocks of oak trees, the wetlands and the water quality issues and drainage of the site — became important factors in placing the golf course in the

ground," Fazio says. "I think the way the course fits into the natural terrain of the site is not new, but to me has become standard. We have learned a lot more about the environment recently."

"Fazio," says Portz, "created a golf course that is extremely sensitive to the environment, could qualify as a PGA Tour course, and yet is enjoyable for the average golfer."

Maintaining this natural beauty on a golf course has its own set of





EVERHART/PHOTOGRAPHICS

Portz uses a light pen to program his irrigation system on a personal computer. Balancing the marketing requirement to keep the golf course green and lush against the state's increasing regulation of its dwindling water resources is the primary challenge of his job. A graduate of Penn State University, Portz has held several offices in the Central Pennsylvania GCSA and Pennsylvania Turfgrass Council. He hopes to become active in Florida organizations as time permits.

difficulties, according to golf course superintendent Portz.

"To the best of my knowledge, we have more restrictions than any other golf course in the state as far as pesticide usage and use of chemicals on sensitive areas are concerned.

"For instance, Orthene is approved because it is not a chemical that persists in the environment and yet it gives us the control we need. But we can't use Triumph on the greens because of its possible effects on the environment.

"This is a challenge," he adds, "but I've always advocated the advantages of good aerification, top dressing, maintaining good fertility levels and keeping a balanced soil to allow the environment to be as healthy as possible for good grass growth. If you have healthy turf, you have less chance for infestation."

The course has five types of grasses:

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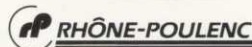
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fairways, Tifton 328 bermudagrass tees, zoysia around the sand bunkers and in waste bunkers, and St. Augustine in the roughs.

Portz says that his degree from Penn State and his 17 years at Brookside CC in Allentown, Pa., prepared him well for his duties at Hammock Dunes, where he began work in October.

"In this part of Florida, you have cool season grasses and warm season grasses, which is what we had in Pennsylvania. In the North, I think golf course superintendents get a little complacent because they can put their courses to bed part of the year and plan their vacations for the winter. I think growing grass in Florida is a lot of fun, even though it's a 365-day-a-year job. At least that's what I think now," he says. "Ask me again in five years."

Although the grasses may be similar, the type of golf course communities prevalent in the South and the North greatly.

"Much golf course development in Florida is community development, property development," says Portz. "And prop-



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Number two, as seen from a bridge.

erty management only understands one thing: green. There is a lot of pressure put on golf course superintendents to have a course that is green and lush and playable.

"But you can have a course that is less than lush and green and still have one that plays well. It's important that this information, this education, start at the management level and go up through the ranks. Golf course superintendents have to start convincing people that you don't have to put a lot of things on the course to make sure it is playable."

Portz realizes that Hammock Dunes is a marketable development, one that not only has a golf course and clubhouse, but one that has homesites as well. The golf course is part of the lifestyle at the Hammock Dunes community.

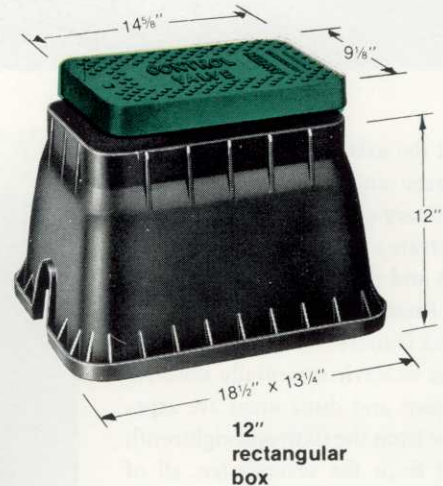
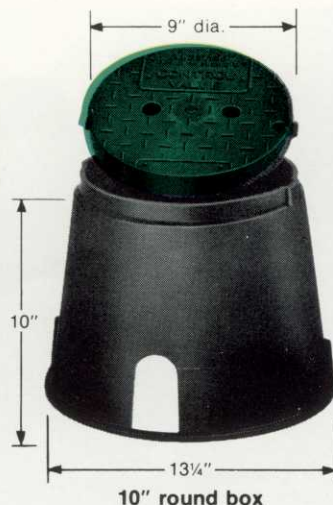
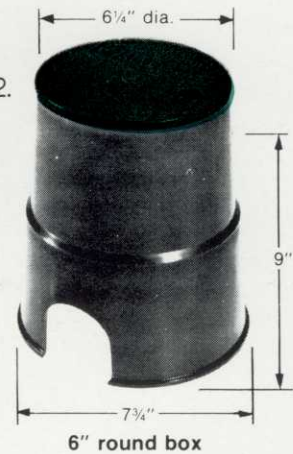
"I think the challenge here is to reduce pesticides and continuously monitor what you are doing with the course," Portz says. "It's a great opportunity to work and prove you can create good course conditions

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In creating the course, Fazio extended the dune line through the course to create dramatic ocean views and play. Portz says that the dune areas are left as natural as possible.

"If we have erosion, we come back in and plant and take care of weeds, but generally we leave the dune areas alone."

There are also hammocks which line the fairways and create a backdrop on the course. And there are the lowlands, lakes and marshes which provide habitat for much of the wildlife at the course.

Portz says he is using effluent for irrigation and therefore, his course doesn't fall under any drought restrictions.

"Effluent has to be returned to the aquifer in some way, shape or form," Portz says, "and using it to irrigate turf is one of the best ways to filter effluent into the aquifer."

Portz has a 22-man crew to help maintain the Links Course and the 10 to 15 acres of clubhouse grounds that contain formal gardens.

"I have an assistant, an irrigation technician, a spray technician and two mechanics, plus 16 other people who help us manage the course within our daily routines."

Portz says that Admiral Corp., a subsidiary of ITT Community Development Corp., is creating a residential community with "a great deal of environmental concern," much in the same way that the Links Course was created.

According to the developer's 20-year program, estate homes, villas and condo-



EVERHART/PHOTOGRAPHICS

without all the extras. There is a balance between green and lush and playability. And my primary objective as a superintendent is to create a course that is green and marketable and playable and still do this within our financial restrictions."

Hammock Dunes Links Course has three major areas of environmentally sensitive terrain. Ocean and dune areas are especially visible from the sixth and eighteenth greens and from the seventh tee, all of which are elevated along the ocean.

Entrance to maintenance complex could pass for a residential area.



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Stiff breeze over the dunes holds up the flag against a gray sky, lending the feeling of a true linksland course.

miniums are planned for the community. However, conservation of the wetlands, creation of lakes and marshes, protection and restoration of the dunes and preservation of the 250-acre oak hammock and an Indian mound archeological site are also part of the overall plan. Information from the developer says that more than 50 percent of the 2,250-acre property will remain open as recreation, conservation, service and preservation areas.

Portz's main concern, however, remains

the Links Course. It has taken up so much of his time since his arrival that he hasn't had the opportunity to become active in professional organizations.

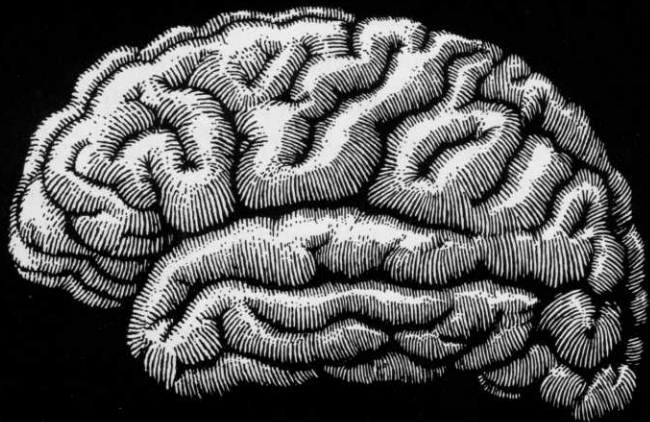
He is a member of the North Florida GCSA, the FTGA, the GCSAA and still maintains a membership in the Central Pennsylvania GCSA and Pennsylvania Turfgrass Council.

"When I was in Pennsylvania, I was president of the Central Pennsylvania organization and served as director for six

years," he says. "At this point, I'm still learning about the profession in Florida, and I haven't had time to become as active as I was up north. But I know that eventually, as time permits, I'll become active here as well.

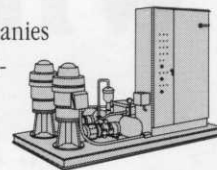
"Right now, this relocation has been an enlightening and very enjoyable experience. Hammock Dunes Links Course has a lot of advantages for a golf course superintendent. It has great design, a good foundation and it was built well."

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In a water war, golf will come in second

The FGCSA's 1990 Distinguished Service Award winner believes water will determine which golf courses survive

BY KIT BRADSHAW

The future of Florida's golf courses may lie no further than your kitchen faucet. The availability of water will determine who builds courses and which established courses will survive.

This is the assessment of Kevin Downing, the FGCSA's Distinguished Service Award winner for 1990 and the property and landscape manager at Willoughby Golf Club in Stuart.

"For years, we've been at seminars where they've told us to reuse this and recycle that, and now it's come to pass," says Downing. "The water management districts, the cities and towns are going to reduce the amount of water that you can use on a course. If communities such as Jupiter and Tequesta, which are in a critical water situation, are looking at permits for drilling wells, they will use those wells for their own public drinking water, not for golf courses.

"There's a golf course just down the street from us that is in the permitting process right now. If they don't get effluent water, that party doesn't fly,"

Downing says. "There's another course which was allowed to put in two wells on the site. But when the new water treatment plant is

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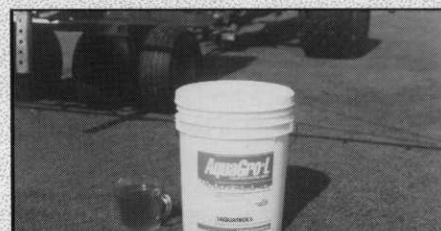
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completed, the water from the wells gets transferred to the plant and the golf course gets back the effluent. If they couldn't make that swap, I don't think the project would have been built. Today, water is the number-one criterion for golf courses."

At Willoughby, Downing is aware that there will be no more well drilling to supply water to the course. He is already taking the necessary steps to use effluent on the course.

"When our project was permitted, we were approved for effluent but it wasn't available. Recently, I met with the City of Stuart on its effluent water situation, and we'll be signing a letter of intent shortly. In our situation, we'll pay for a prorated percentage of the cost of the plant improvement and for a percentage of the pipe to get it to the course. This will be built into the cost of the water. It will be expensive — about 40 cents a gallon — which will add \$35,000 to our budget.

Water, says Downing, is only one issue. One of the key problems for golf course superintendents is to get out the word on the positive aspects of golf courses.

"Effluent usage is only one way we help the environment. The GCSAA has a list of other things a golf course does to put oxygen back into the atmosphere, to percolate water, to provide natural habitats for wildlife — a whole list of things. Right here at Willoughby, we saved 40 acres for two families of scrub jays. There were sandhill cranes that stayed in one of the protected wetlands all during the course construction. Now the Canadian geese are here and they are nesting.

"People think that because we work with chemicals that we are harming the environment. We need to spread the word about the good we do. After all, we are right in the middle of the environmental crunch."

Downing's involvement with issues affecting golf courses and the environment go back to the early 1970s, shortly after his graduation from Lake City Community College. After working for a brief time at Doral Country Club, he went to Port LaBelle as the golf and property manager.

"I first became involved with the FGCSA when I was at Port LaBelle," Downing says. "It was so remote from the rest of the state that it was good to be able to meet with

other people in the profession and to keep in touch with what was going on."

He continued his involvement when he became superintendent at Atlantis Golf Club in Lake Worth, and during that time, he served as secretary-treasurer and vice president of the FGCSA.

In 1982, Downing moved to Mariner Sands in Stuart and that same year he was president of the FGCSA.

"Erling Speer was my boss at Mariner Sands — he's also one of the partners at Willoughby — and he encouraged me to

At the GCSAA show, there must have been 15 companies that had organic fertilizers, biostimulants and so on and nobody I know of has tested this stuff. I think we should get involved. It doesn't have to be a seven-year research project; let's just see if this stuff works.

stay active in the superintendents association."

For three years, Downing has been involved with the creation of the research green at Fort Lauderdale. He sees it as a perfect locale to test various products.

"At the GCSAA show, there must have been 15 companies that had organic fertilizers, biostimulants and so on and nobody I know of has tested this stuff. I think we should get involved. It doesn't have to be a seven-year research project; let's just see if this stuff works."

During the same time Downing was working to help establish the research green, he also became involved in the initial planning of Willoughby.

"The collaboration with course designer

Art Hills from the beginning of the project had a tremendous impact on the eventual playability of the course. I wish that every golf course superintendent would have the same chance," Downing says.

Because of this collaboration, Downing was able to do several things:

He knew Willoughby's dues structure and eventual maintenance costs and was able to keep these costs in mind during the developmental stage of this project.

He was able to bring golf course superintendent Roy McDonald into the project early in the developmental stage.

Downing, Hills and McDonald were able to work actively to implement new policies required to preserve wetlands and drought prairies and to integrate these areas into the total look of the golf course.

He was able to work with the water management representatives to create a band of littoral zones near the golf course where the zones could be maintained, rather than near the homesites where the residents could damage them. As a result of this cooperation, the site plan was redrawn to satisfy both the water management representatives and the developer.

Downing and McDonald used xeriscape throughout Willoughby, with the goal of preserving water and using the right plants in the right location.

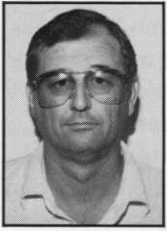
Finally, Downing says, his ability to interact with Hills during the planning process meant that the needs of his clients were considered in the development of the course.

"This is a residential, member community," Downing said. "We worked with Art Hills to make sure the homesites were located to capture a view of the course without interfering with the course design, and that the course itself was interesting and playable for our homeowners, who golf more than four times a week. As a result, we ended up with an enjoyable, playable course."

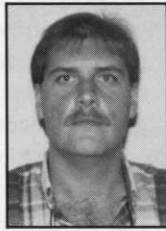
Downing estimates he spends half his time in property management and the other half overseeing the golf course.

"Having Roy McDonald here is a tremendous asset," Downing says. "I have a lot of confidence in his ability to take care of the golf course when I'm involved in other

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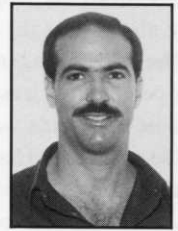
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parts of my job.”

Not only does Downing depend upon McDonald, but he has a small army of retirees who are the mainstay of his staff.

“I’ve always had the philosophy that it would be valuable to hire retired and semi-retired people. This is especially true on the east coast of Florida, where there’s more available personnel. I have about 10 people working here who are 55-plus. They are dependable, they do great things here. There is one man who worked with us at Mariner Sands. He puts up the mailboxes, changes the cups on the greens, does the barbeque for the crew when we have crew lunches. He even fixed Christmas dinner for us. You can’t beat that!

Downing says most of his members are between 55 and 65 themselves, which makes it more difficult to please everyone and having the older staff people has helped as well.

“We have a good rapport between the staff and the residents. I think part of it is that the residents like seeing some faces they can relate to rather than just always seeing younger staff members.”

Poa Annua Classic features two different courses

Buddy Carmouche, CGCS, president of the Everglades GCSA, reports that May 18-20 are the dates for the 1991 Poa Annua Classic weekend.

The Naples Beach Club once again will serve as headquarters for the majority of the weekend's activities, but this year the 17th annual Poa Annua Classic Golf Championship on Monday will be held at the Flamingo Island Club.

Golfing tradition will be observed at the Naples Beach Club GC when participants tee it up for the G.C. Horn Memorial Golf Tournament on Saturday afternoon.

Proceeds from this tournament are placed in the G.C. Horn Endowment Fund with the Florida Turfgrass Research Foundation.

Funds raised by the other functions held over the weekend also are dedicated to educating superintendents and funding scholarships and research in the golf industry.

POA ANNUA SCHEDULE

Saturday, May 18

8:00 AM FGCSA Board of Directors meeting

12:30 PM G.C. Horn Memorial Golf Tournament, Naples Beach Hotel Golf Course

Sunday, May 19

7:30 AM FGCSA Seminar “The Thinking Superintendent,” a panel discussion on some of the best turf tips from around the state.

Monday, May 20

8:30 AM 17th Annual Poa Annua Golf Tournament at the Flamingo Island Club.

Registration materials were mailed out to the various chapters in March.

New Seven Rivers Chapter to serve northwest-central

The Seven Rivers Chapter is being formed to serve the area north of the West Coast Chapter and south of the Big Bend Chapter. It will draw members principally from Alachua, Citrus, Dixie, Gilchrist, Hernando, Lake, Levy, Marion, Pasco and Sumpter

counties.

While the new chapter will take some current members from the North Florida, Central Florida and West Coast chapters, it will bring new members into the participation process and reduce travel time for some members who were having to drive great distances to attend meetings.

With the growth of some of the chapters, it will probably help in finding meeting sites by spreading out a little.

Al Ellis, superintendent of the Seven Rivers CC, is the membership chairman of the new chapter. Superintendents in the area can contact him at (904) 795-6665 or P.O. Box 1146, Crystal River, FL 32629.

South Fla. Expo April 17 features Dr. Houston Couch

The Fourth Annual South Florida Turfgrass Workshop and Exposition is scheduled for April 17 at the Rolling Hills Resort in Fort Lauderdale from 7:30 a.m. to 4 p.m.

Featured speaker is Dr. Houston Couch of Virginia Polytechnic Institute and a veteran GCSAA seminar instructor with a wealth of knowledge to share about fungicide tank mixes and application techniques.

Product displays and equipment demonstrations under working conditions will follow the workshop.



Because of the past success of this event, the FGCSA has been able to build and maintain a research green at the University of Florida's IFAS Research and Education Center at Fort Lauderdale.

As testament to the worthiness of the venture, the USGA recently awarded \$150,000 for two research projects on the green. Research of this nature is critical for demonstrating to the public that products and procedures used on golf courses are not harmful to the environment.

GCSAA attracts 16,400; FGCSA gives \$5,000

While a nervous economy and travel jitters prompted by the Persian Gulf War may have had a slight effect on the turnout for the 1991 International Golf Course Conference and Show hosted by the Golf Course Superintendents Association of America, more than 16,400 members made the trip and were not disappointed.

A strong contingent of Florida superintendents were in attendance and they took full advantage of more than 42 continuing education seminars on currently sensitive topics like Integrated Pest Management, Environmental Concerns in Golf Maintenance, and Water Resources.

They also had the opportunity to visit more than 590 exhibits that showcased the latest in turf equipment products and equipment ranging from a new biodegradable tee to the most sophisticated, computerized irrigation control and pumping equipment on the market.

Last year in Orlando, the attendees left with the knowledge that environmental issues were going to be paramount in the 1990s. And Lewis Crampton, associate administrator of the EPA was at two special presentations this year to reinforce the message.

This year, with education and research reflecting very positive data concerning the real positive impact that golf turf has on the environment, the challenge facing our in-

dustry is how to communicate the benefits of golf courses to the public.

The Florida GCSA met the challenge by maintaining its membership in the Platinum Tee Club with a \$5,000 donation to the GCSAA Scholarship and Research Fund.

At the close of the GCSAA Conference and Show, the membership elected officers and directors for the coming year:

President Stephen G. Cadenelli, CGCS, Metedeconk National Golf Club, Jackson, N.J.; Vice President William R. Roberts, CGCS, Lochmor Club, Grosse Point, Mich.; Secretary/Treasurer Randy Nichols, CGCS, Cherokee Town & Country Club, Dunwoody, Ga.

Directors Gary T. Grigg, CGCS, Shadow Glen Golf Club, Overland Park, Kan., Charles T. Passios, CGCS, Hyannisport Club, Mass.

Bruce R. Williams, CGCS, Bob O'Link Golf Club, Highland Park, Ill., was appointed to fill the remaining one year of Bill Roberts' term as director.

Directors not up for re-election were



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Joseph G. Baidy, CGCS, Acacia Country Club, Lyndhurst, Ohio; Randall P. Zidik, CGCS, Rolling Hills Country Club, McMurray, Pa.

GCSAA officers for 1991-92, from left: Randy Nichols, CGCS, secretary/treasurer; Stephen G. Cadenelli, CGCS, president; William R. Roberts, CGCS, vice president.

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THE FLORIDA GREEN

Take a byte out of costs

Computer allows a superintendent to control water and chemical applications and gives him more time to spend on the course

BY MACK BAUGH, CGCS

Everything in golf has gone up. Membership dues and initiation fees are at an all-time high, buying a new set of clubs requires a personal loan, the latest styles cost a fortune, tournament tickets are approaching Super Bowl levels and handicaps, well, we all know about handicaps.

Golf course maintenance costs, while perhaps not as visible, are on the rise and indications are the trend will continue. These increases are eventually passed on to paying members who should be concerned with keeping their courses well maintained while keeping costs as low as possible. Course architects, developers, operators and superintendents need to be — and are — equally concerned with rising maintenance costs.

At Laurel Oak Country Club in Sarasota, we've taken important measures to conserve money while maintaining course quality. These steps also have taken us firmly into the computer age, a move that can be a bit scary for a former computer illiterate like myself.

The system we installed (in our case a Rain Bird MAXI V) helps us conserve electricity, water, and manpower and it provides a fast, accurate means of irrigating the entire course and all of Laurel Oak's public areas. Water conservation in each of these areas translates into significant money savings.

The system starts with a weather station which is centrally located on the first of our two courses. The station collects and measures rainfall, records temperature, wind speed and direction, solar radiation, and relative humidity.

This information is constantly fed into our computer which evaluates the data and processes it according to guidelines



FGCSA/JACKSON

Mack Baugh at Laurel Oak Country Club's weather station, which helps him put exactly the right amount of water at each spot on the course, right down to the drop.

we've established for each part of the course and community.

For example, we may want our greens and tees to receive a quarter inch of water using a given period and our fairways one-half inch.

From the information fed by the weather station, the computer knows exactly how much rain has fallen during a 24-hour period and how much has evaporated due to temperature, wind and solar radiation. The computer also knows how many of each type of sprinkler heads are in place at any given location and at how many gallons per minute they apply water.

With this information, the computer automatically decides which heads go on, when and for how long to apply the precise amount required. Once a fairway has received exactly what is needed right down to the drop, the computer turns its attention to the irrigation of the greens, then the tees, then the common areas, etc.

Under the old system (and "old" is only

as recent as five to eight years ago) still operating on many courses, watering was largely a manual control operation often done inaccurately.

A mechanical timer activated sprinklers on the No. 2 green, watering the surface for two minutes whether two minutes' worth of water was really needed or not. The pumps would then be turned off and the procedure would continue on through the day or night until the job was completed.

Often the result was the application of either too much water, which is a scarce and expensive commodity these days, or too little water, leaving the greens thirsty and in less than optimum condition.

It also meant repeatedly turning the water pumps on and off. Turning these huge pumps on uses tremendous amounts of electricity and creates a maximum mechanical strain that accelerates the need for downtime and maintenance.

The savings solely in terms of money are obvious.

But there are other considerations to keep in mind. Water usage is being increasingly restricted in Florida. This factor alone necessitates far more controlled use of this dwindling resource. A computer-controlled irrigation system is state-of-the-art in controlling water amounts used.

Computers are also allowing golf course superintendents to precisely control herbicide and insecticide application, an important factor during a time when the public's environmental awareness is at an all-time high, as it should be. Manhour need is also reduced, allowing for fewer yet better skilled employees on the payroll.

One of the effects I've personally felt as a golf course superintendent is that the computer allows me more time to be out on the course on a daily basis, both for checking conditions and for contact with members. Those of us who are in this business must always remember that the members are our ultimate employers but are also the course's — and our — best critics.



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Most of us probably got into this business because we love the game of golf. But, with all that must be done to keep a course in top condition, too few of us have the time to play as much as we would like (which goes back to my opening comment about rising handicaps). The members play the

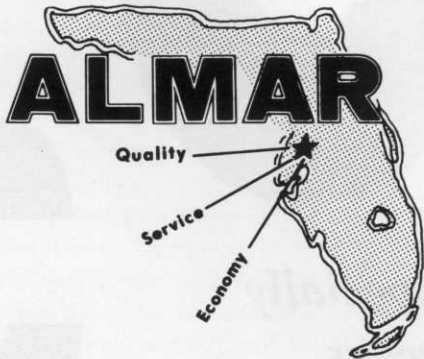
course every day and are perhaps the best barometer of what's right and what's wrong. Keeping in close contact with them is as important as any computer may be in maintaining a great course.

While a sophisticated computer irrigation system may not be able to help lower

their scores, it can do wonders in providing the best course conditions available and saving valuable maintenance dollars.

Mack Baugh is superintendent at Laurel Oak CC in Sarasota. This article is reprinted from the January issue of Florida Golfer with permission of the publisher.

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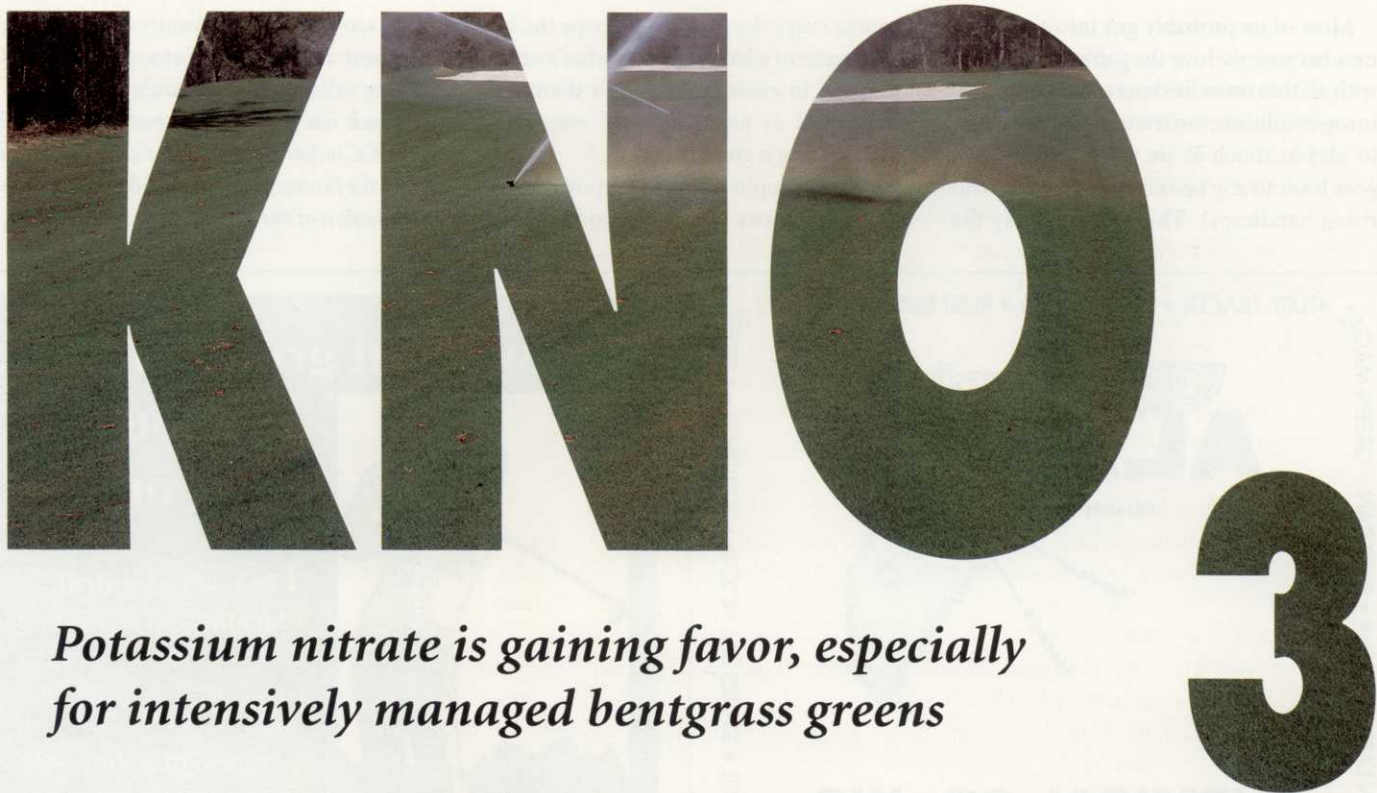
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KNO 3

Potassium nitrate is gaining favor, especially for intensively managed bentgrass greens

BY CATHEY L. BATEMAN

Researchers in many areas of the country agree on the importance of supplying potassium to maintain healthy greens and fairways on golf courses. Superintendents and fertilizer suppliers are placing more emphasis on potassium nitrate, especially for intensively managed bentgrass greens and tees.

Potassium nitrate is a unique source of two major plant nutrients, and since it is applied as a foliar spray, it is safer to use in those areas particularly sensitive to groundwater contamination. Many believe it is also safer for the plant, since it is less likely to cause burn and is free from chlorine and sodium.

In several areas of the country, potassium nitrate is the preferred source of potassium, particularly in intense greens programs. J.B. Sartain, professor of soil fertility, turf and ornamentals at the University of Florida, said that in Florida, potassium is used more in the fall and winter, when least amounts of nitrogen and higher levels of potassium are necessary.

Sartain said potassium nitrate minimizes growth while enhancing greener color, even in cooler weather. During the summer months, when higher rates of nitrogen are desired, potassium nitrate is often used in solution with added nitrogen sources.

"It is one of the more soluble forms of potassium," he said.

He added that the importance of potassium in turfgrasses was thought to be less than that of nitrogen for many years.

"Many felt a ratio of 3:1 (nitrogen to potassium)

was the most effective," he said. He said potassium helps develop a stronger root system during summer on bermudagrasses, Florida's primary golf course turfgrasses.

Dr. John Street, associate professor at Ohio State University, agreed. He said early indications from research at the University of Nebraska by Dr. Robert Sherman suggest that relatively high levels of potassium are necessary in a fertilizer blend even when soil potassium levels are high.

He said Sherman's research suggests a 2:1 ratio — or even 1:1 — of nitrogen to potassium is more beneficial for enhancing the summer stress tolerance of cool season grasses. Street said the results of Sherman's work may lead to a change in thinking about potassium's role in turfgrass production.

In most areas where cool season grasses are more prevalent, higher potassium-to-nitrogen ratios are now being applied in September, with another application in October or November to help winterize the turf. Street said Kentucky blue, creeping bent, perennial ryegrass and tall fescue are the predominant golf course grasses in the northern areas of the country. These experience more heat stress than the South's warm season varieties, which receive more nitrogen during the summer months.

In warm areas, cool season grasses are also making their way onto the greens in a big way, according to Tim Orton of Sta-Green Plant Food Co. of Sylacauga, Ala.

"With the technology and superintendents com-

ing out of the universities, the industry is getting so many guys with degrees in growing grass that bent(grass) is becoming more prevalent further south," he said.

"A lot of people are using potassium nitrate on bentgrass in the South. It's basic, it has a favorable effect on soil pH. It also has a small amount of nitrogen, along with the potash which is very important to the turf."

Potassium nitrate doesn't widen the leaf blade. A wide leaf blade slows the putting speed and affects the roll.

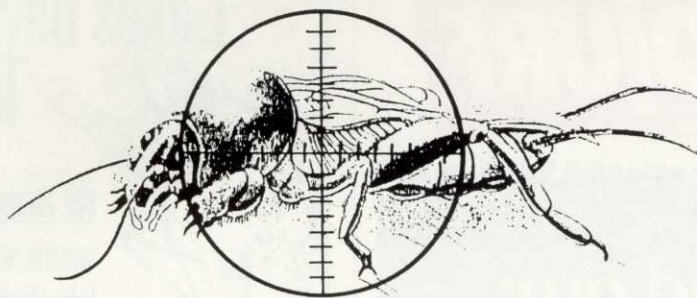
"That's why so many clubs went to it in the first place," said Orton, "to get a superior putting surface in the South. You see very little, if any, muriate of potash used on putting greens in the South, be they bent or bermuda."

Dave Lowe, golf course superintendent at The Plantation at Ponte Vedra near Jacksonville, said potassium nitrate is especially important in his intensive greens program.



Potassium nitrate is available in wet and dry formulations. The dry form spreads evenly and is non-hygroscopic.

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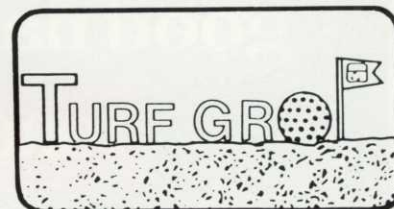


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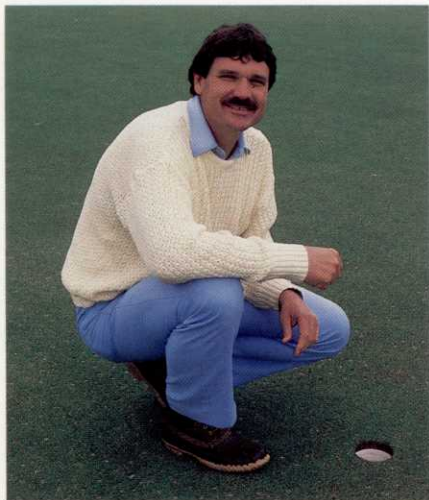
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David Lowe, superintendent of The Plantation at Ponte Vedra, uses potassium nitrate on his bentgrass greens.

"We have bentgrass greens, which are still a little unusual in Florida," he said. "Potassium nitrate offers an excellent ratio, especially for use in the fall, winter and spring applications we make here in Florida."

"We use potassium nitrate in many of our formulations to supply the superinten-

dent with the highest quality fertilizer for production of the highest quality turf," added Irv Stacy, vice president of the Par-Ex Woodace specialty division of Vigoro Industries, Inc.

"We use potassium nitrate because it's a high-grade, chlorine-free fertilizer, composed entirely of potassium and nitrogen in the nitrate form. It offers a microprill, a very finely-sized material and it fits in well with our formulas for greens fertilization."

Par-Ex is one of the few turf fertilizer product lines using potassium nitrate in its turfgrass products.

"It fills a very good niche and we've taken advantage of it," Stacy said.

Superintendent Lowe added that the potassium nitrate prill's uniformity makes it easy to apply, even at low rates. He also noted that it is not picked up by mowers. "It's also highly soluble, and moves into the soil quickly and easily."

Potassium nitrate is an excellent source of nitrate nitrogen in Par-Ex formulations, according to Stacy. His company blends potassium nitrate with its slow-release ni-

trogen. He said the blend offers an immediate green-up and long residual effect.

"Potassium nitrate is an excellent source of nitrogen on cool season turf, because of the nitrate form," he said. "It's an excellent source of potassium because of its low salt index."

Street agreed.

"From a salt-tolerance standpoint, potassium nitrate has an advantage over other forms of potassium," he said. "Other forms have a higher salt index (which can cause burn damage), than potassium nitrate."

"Bentgrass requires a more intensive program for its growth and maintenance anywhere in the country," he continued. "Whether you are dealing with heat stress or wintering over, your potassium source must be such that it can move into the soil profile quickly, made soluble, and taken into the plant to prepare it for stress."

Cathey L. Bateman is a freelance writer based in Orlando. The article was submitted by Patterson, Bach & Brooks, advertising agency for a supplier of a potassium and nitrate plant nutrient.

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Turf Industry Roundup

Former USGA agronomist forms firm

Charles B. "Bud" White, a long-time agronomist with the USGA Green Section before taking over golf and landscape operations at the Harbor Club in Greensboro, Ga., has formed a consulting firm, Total Turfgrass Services, Inc.

The new company will be headquartered in Watkinsville, Ga.

Among his services will be grow-in management, budget development, equipment need determination, custom fertilizer programming, maintenance facility planning and evaluation, soil testing and irrigation and drainage consultation.

White is a certified professional agronomist with a

master's degree in turfgrass management from Clemson University.

Philip R. Gardner has been named executive vice president/sales of Lesco, Inc.

Gardner will oversee all Lesco sales operations. The company markets primarily through golf course sales representatives who operate tractor-trailer Service Centers known as "stores on wheels" in 16 states.

"We will open numerous Service Centers in 1991, increase the number of golf course sales territories and expand our telemarketing operations," Gardner says.

He joined Lesco in 1975 as a golf course sales representative and most recently was vice president of the Lawn Service Sales Division. He is a member of the FTGA, Ohio Turfgrass Association and the Professional Lawn Care Association of America.

Dr. Bruce J. Augustin has been named director of fertilizer and marketing development for Lesco, Inc. He will develop, formulate and market Lesco fertilizer and fertilizer combination products.

Before joining Lesco,

Augustin was associate professor and extension turfgrass and water specialist with the University of Florida.

Larry Turnmire is the new chief planting superintendent for Pike Creek Turf Farms in Adel, Ga. He brings 18 years of experience to his new position.

David J. Campodonico III is a new territory account manager for Lebanon Turf Products, serving the Carolinas, Georgia and Florida.

He came to Lebanon from Kenmure CC in East Flat Rock, N.C., where he was assistant golf course superintendent.

Lebanon also announced the promotion of four product group managers in conjunction with its shift from geographic to product-oriented sales structure.

Paul Grosh and Randy Rogers will be responsible for marketing the Country Club brand for golf course use; Harry Mathis will be in charge of Greenskeeper and Lebanon Pro Line products; Ed Price will coordinate development of the Green Gold, Turf Master, WonderGro and private label lines for consumer sales.

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, 1206 Kimberle Court, Auburndale, FL 33823.



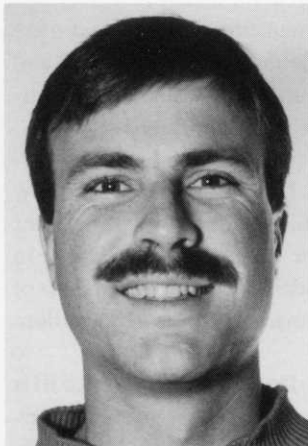
White



Augustin



Gardner

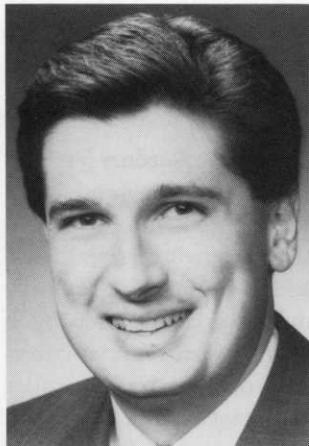


Campodonico

William E. Ryan is a new product manager for Rain Bird Sales, Inc. He will be responsible for developing the company's line of golf course irrigation products, including controllers, valves, rotors and accessories. Ryan has been a marketing coordinator for Rain Bird for the past two years.

Century Supply Corp., which distributes Rain Bird irrigation equipment from 12 locations in Florida and five other states, was named Distributor of the Decade by the commercial and contractor division of Rain Bird Sales, Inc.

Mills Irrigaion Supply of Fort Walton Beach was selected the firm's Eastern Lawn Line Distributor of the Year. Profes-



Ryan

sional Pump Corp. of Boca Raton also was recognized by Rain Bird for outstanding sales achievement.

Pamela Martin has been promoted from manager of accounting for the USGA to controller. She has been on the USGA staff since 1985.

Jim Sweeney has been named manager of the north central region for the USGA's Department of Regional Affairs. He previously was executive director of the Sun Country Golf Association in New Mexico.

David Chambers will oversee Monsanto's Lawn & Garden division in the Southeast.

His territory includes Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina and Tennessee. He previously supervised the division's Southwestern unit.

The PGA Merchandise Show drew a record 23,749 buyers, sellers and industry leaders to Orlando Jan. 25-28, marking an attendance increase of 4.1 percent. By converting restaurants and other meeting rooms to exhibit space, the show accommodated 73 new exhibitors.

On the second day of the show, the Orange County Convention/Civic Center set a one-day record for food and beverage service.

The switch from Saturday-Tuesday format to Friday-Monday, with only a half day reserved for members only, will be permanent, according to Show Director John Zurek.

Excel Industries, manufacturer of Hustler Turf Equipment, has expanded warranty coverage on all of its equipment to a minimum of two years.

Ciba-Geigy has introduced two iron chelate micronutrient formulations for use in turf, landscape plantings and nurseries.

Sprint 138 features 6 percent chelated iron and corrects iron deficiencies in alkaline and calcareous soils. Sprint 330 has 10 percent chelated iron and corrects deficiencies in slightly acidic to slightly alkaline soils.

Both can be applied as a soil or foliar treatment. In soil applications, the product must reach the root zone.

Lofts Seed has a new lower-growing tall fescue, Rebel Jr., which is darker than other turf-type tall fescues. It is dense, persistent, slower growing and performs well in full sun or moderate shade and adapts to a wide range of environmental conditions.

Pennington Seed has added a 10-ounce shaker canister to its line of wildflower seeds. Five different mixtures are available: country wildflower, cutting garden, floral ground cover, herbal garden and hummingbird lovers.

Lesco has introduced the Accu-Rate Professional Injector Gun, a hose-end sprayer featuring a heavy-duty, industrial venturi system, making it suitable for professional use.

The gun comes with 10 high-density florinated quart jars and lids, which allow the operator

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Recently released professional literature



How to Buy a Bridge, Continental Manufacturing, 24 pages.

Explains the many options available when considering a new bridge design, commonly used bridge terms, types of projects most suited to prefabricated bridges, determining location and how to get started. Includes a form on design data

that can be mailed or faxed to the company for cost estimates.

Contact Continental Bridge, Route 5, Box 178, Alexandria, MN 56308-9014; phone 612-852-7500.

Catalog of Golf Course Accessories, Standard Golf, 40 pages full color.

Among the new products are American-made bunker rakes and tee towels made of rib-tex.

Contact Standard Golf Co., P.O. Box 68, Cedar Falls, IA 50613; phone 319-266-2638.

to premix and spray 18 greens without refilling.

DowElanco's Snapshot herbicide has received EPA registration for use on established landscaped ornamentals, ground covers, non-bearing

fruit and nut crops, non-bearing vineyards and nursery stock. The new preemergent herbicide is available in a dry flowable formulation as Snapshot 80 DF.

The new product provides up to eight months' control of 86 broadleaf and grassy weeds

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and can be applied directly on established, labeled ornamentals and can be applied to wet foliage.

Rootsinc., a Connecticut crop science company, has released two root growth enhancers and a natural wetting agent.

The growth enhancers — **ROOTS** and **ironROOTS** — are concentrated liquid biostimulants developed with scientists from the Yale University School of Forestry.

The product is a natural biostimulant containing peat humic substances, marine algae extracts, thiamine mononitrate and intermediate metabolites. It is formulated to promote root growth and stress tolerance in the establishment and transplanting of turf and ornamen-

tal crops.

IronROOTS includes 5 percent chelated iron citrate and is formulated to promote stress tolerance, healthy color and fast recovery from seasonal stress damage in maintained turfgrass and ornamental plants.

NoburN Natural Wetting Agent and **Soil penetrant** is a steroid saponin extract from the desert yucca plant. Unlike synthetic wetting agents, **NoburN** does not have to be watered in after each application, and **Rootsinc** claims it will not burn or discolor leaf tissue when it is applied in hot or dry weather.

Since steroid saponins are natural plant fluids that are extracted only by pressure (not chemically), there is no danger of burning or groundwater contamination.

In a comparison study conducted by the University of Georgia on a hydrophobic putting green, **NoburN** achieved parity with 11 commercial chemicals in reducing hydrophobic conditions without causing any discoloration. Another test showed the wetting agent to be non-phytotoxic and completely compatible with pesticides.

Jacobsen has introduced two heavy-duty utility trucks, added two models to its lighter-weight Express line of utility trucks and introduced an aerator.

The heavy-duty trucks can haul 1,500 pounds and have a capacity of 19 cubic feet. One is powered by a 23.5 hp diesel engine and the other by a 20 hp gasoline engine.

The lightweight Express trucks can haul up to 1,000 pounds in an 8-cubic-foot load box. One is powered by an 8.5 hp, four-cycle gasoline engine and the other by a 6.5 hp electric motor. Each has a top speed of 12 mph.

The **PT2448** aerator has a 48-inch path and offers a variety of tine sizes with an adjustable pattern from 1x2 to 5x2. Optional mini-tines aerate with a 1x1 pattern.

The Fourth Annual **Southern Grounds & Turf Maintenance Exhibition and Conference** will be Nov. 19-20 at the Myrtle Beach (S.C.) Convention Center.

The show is produced by the South Carolina Board for Technical and Comprehensive Education and sponsored by

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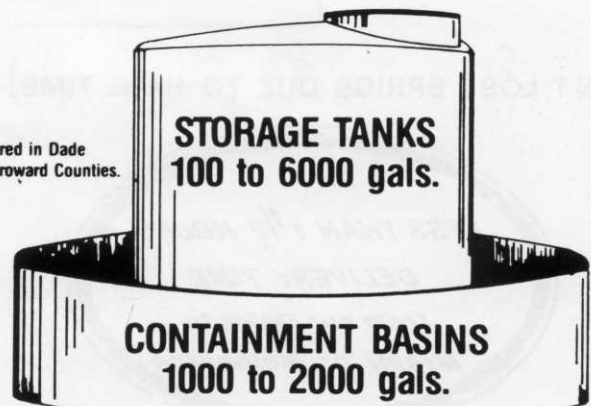
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the South Carolina Department of Parks and Recreation, Horry-Georgetown Technical College, and *Turf Magazine*.

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Harvard University Graduate School of Design will offer 41 continuing education courses and workshops in landscape architecture, architecture, management, real estate development and computer-aided design between June and August.

The courses will last from one to six days with fees ranging from \$250 to \$1,200.

For information, contact Office of Development and External Relations, GSD, Harvard University, 48 Quincy St., Cambridge, MA 02138; phone 617-495-4315.



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Fire ants' real sting has not yet been felt

About four years ago, I wrote an article that identified the mole cricket as the most serious pest of golf courses in Florida and much of the Southeast. But the imported red fire ant might soon change that assessment.

Both insects come from South America and are successful in the southern U.S. because of favorable climate and lack of natural predators and parasites. Both cause hundreds of millions of dollars worth of economic damage each year and both cause golf courses to spend money for their control,

although the total directed at mole crickets is substantially higher than that for fire ants. But pesticides applied for mole cricket control and other pests on golf courses can also suppress fire ant populations.

For practical considerations, the major difference between the two is that fire ants can sting you and possibly kill you. As many as 85,000 sting victims seek medical treatment for allergic reactions each year and 30 people died from stings last year. The fact that one of these fatalities allegedly occurred on a golf course in my area compounds the problem and magnifies the danger for the golf industry.

As expected in today's litigious society, the victim's family is seeking compensation from the golf course. Their lawyer has contacted superintendents in the area concerning their fire ant control programs so as to determine (I assume) whether or not the golf course in question was taking adequate control measures. If the plaintiffs are successful in this litigation and the golf course is found negligent and responsible for damages, think of the potential ramifications.

Who will determine what constitutes adequate control measures? What kind of liability will a club be forced to carry? Will the superintendent be personally liable for neglecting mandated procedures? How much more will a round of golf cost to satisfy one more regulation fueled by our society's quest for a no-fault, risk-free environment?

The fact is, one fire ant sting can kill you if you are one of the few highly allergic people. No control measure, no matter how thorough or expensive, will totally eradicate the target pest. Some will always survive, and re-infestation from nearby areas can occur very quickly. Clubs surrounded by open pastures infested with fire ants would be fighting losing battles. A fire ant queen is capable of flying as far as 15 miles to start a new colony. The risk of getting stung by a fire ant can be reduced, but not eliminated.

Attempts at eradication might have been the catalyst for the fire ant's remarkable evolutionary adaptation, which makes present control measures so difficult. Fire ants have only been in this country for about 40 years and already infest more than 400 million acres. There are places in Texas where nothing but fire ants can be found for miles in any direction. Widespread efforts to eradicate them with pesticides such as dieldrin, heptachlor, and mirex might have triggered an evolutionary response that causes them to produce multiple-queen colonies rather than the typical single-queen colony.

Just 10 years ago, a typically invested pasture averaged about 50 single-queen mounds per acre. Now the typical pasture has as many as 500 mounds per acre and 200-500 queens per mound. Individual mounds are no longer independent of or antagonistic towards each other, but are part of integrated "super colonies."

According to some experts, it is better to leave a few well-established colonies alone. By trying to wipe them out, you invite a massive re-infestation later.

The good news is that the U.S. Department of Agriculture spends \$5

Mark My Words



Mark Jarrell, CGCS

million annually on fire ant research and Texas about \$1.1 million. More than 8,000 chemicals have been screened for fire ant control. They have obviously had limited success and current research focuses more on promising biological, hormonal and genetic manipulation techniques.

With a nearly 40-year history of intense research dedicated to fire ant control, and its dismal record of success, the last thing the golf industry needs is a judicial decision mandating responsibility and protection of golfers from the sting of a fire ant.

EDITOR'S NOTE: Mark Jarrell wrote this column for the Jan. 19, 1991, issue of *Golfweek*, which has given us permission to reprint it.

Common sense prevailed in the recent ruling in West Palm Beach

when a jury declared that the PGA National Golf Club was not responsible for the death of a golfer bitten in 1988. The jury correctly noted that the club had attempted to get rid of the fire ants, but recognized that there is no sure-fire way to eliminate them completely.

This case underscores the need for all golf courses to keep accurate records of their pest control management programs, and it also points out the need for the continued education of the general public about the actual risks and benefits of chemical applications on golf courses.

The hazards caused by fire ants are not limited to golf courses. Home lawns, schoolyards, parks and other recreational facilities are also at risk for fire and infestation.

-JJ

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The Green Pages

A compendium of news and opinions about government, golf and the environment

EDITOR'S NOTE

Unless otherwise noted, items in this issue of The Green Pages were taken from GCSAA publications available to all GCSAA members and are reprinted with permission. For more information, contact the GCSAA Government Relations Department.

FGCSA committee strengthening agency ties

Tim Hiers, CGCS, chairman of the FGCSA Government Relations Committee, reports that the main emphasis of his committee right now is to establish a relationship and rapport with the various regulatory agencies.

Jeff Hayden, co-founder of the new Seven Rivers Chapter,

has been attending meetings of the Pesticide Review Council and others concerning endangered species in Tallahassee and Gainesville. He reports that one-time attendance is neither beneficial or informative. Regulation is a continual process that requires constant participation to be meaningful for our industry.

- JJ

EPA encourages development of safer pesticides

EPA's Office of Pesticide Programs once again stresses the introduction of "safer pesticides" in the four-year strategy it recently released. The safe pesticide strategy suggests the establishment of two separate tracks for processing chemical registrations.

Safer pesticides would be allowed on the "fast track," thus insuring quicker introduction to the user market, while more hazardous pesticides would have to remain on the slower registration track.

The safe pesticide strategy also seeks to increase the availability of information and public awareness concerning pesticide risks, the effectiveness

of pesticide management programs, and the availability of options for pest control.

EPA amends UST technical requirements

The deadline for UST owners and operators with pressurized piping systems to install automatic line leak detectors has been extended to Sept. 22.

The deadline extension applies only to the installation (on new or existing underground pressurized piping systems) of automatic line leak detectors that meet the minimum performance requirements.

Container study findings to be released soon

Final revisions are being made to the soon-to-be-released pesticide container study, according to Nancy Fitz of EPA's Office of Pesticide Programs.

Draft regulations, which will soon follow as part of the 1988 reauthorization of FIFRA, will include significant changes in the amount of residual product that can be left in refillable and non-refillable containers.

EPA will encourage the use of refillable containers, but call for a structural integrity test and performance standard of these refillable containers to avoid cross-contamination of product and secondary protection against releases. The most desirable containers are, in order of EPA preference, water-soluble packaging and refillables, then non-refillable, recyclable containers; and lastly, non-recyclable containers.

The draft regulations also require that:

- a closed transfer system be used for non-refillable containers.
- performance standards be established for dispersion capability while pouring from the container.
- containers be made of recyclable materials.
- residue removal standards be supplied by the registrant on the label. At this time, the standard for rigid containers holding dilutable pesticides is a 99.9999 percent rate of residue removal.

High court hears FIFRA pre-emption case

The U.S. Supreme Court has agreed to decide whether federal laws regulating pesticides prevent cities from making their own rules.

Last spring, the Wisconsin Supreme Court ruled that the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) pre-empts a 1985 ordinance adopted by the town of Casey, Wis. The Casey ordinance requires a town permit to use pesticides on public lands or to perform aerial pesticide applications on private lands.

The appeal argues that the rule is legal because of the state's authority to work through local governments under the Safe Drinking Water Act, and that FIFRA pre-emption would hinder local governments in protecting groundwater recharge areas from pesticide pollution.

The federal appellate courts have ruled that FIFRA pre-empts local pesticide rules, while state supreme court rulings in Maine and California said that FIFRA does not preempt local regulation.

Few legal authorities believe that the Supreme Court will

Environment a stagnant issue

Let's be brutally honest.

I'm getting tired of hearing about golf and the environment. I'm bored with speakers and studies that tap golf as a friend of the environment and not an enemy, out to pollute the air we breathe and the water we drink.

That is not to say, however, that I'm anti-golf or anti-environment. The belief here is that golf is indeed a friend of the environment and that most of the so-called environmentalists don't believe the facts... or don't want to believe the facts.

What I'm getting tired of hearing and seeing is the golf industry going around in circles. Superintendent seminars and meetings of the American Society of Golf Course Architects recently in Las Vegas were good examples of what is becoming a vicious cycle.

Nobody is telling anybody anything

they don't know, at least regarding golf and the environment...

...The case was basically the same at Golf Summit this past summer in Palm Desert, Calif. The National Golf Foundation, which sponsored the Summit, presented an encyclopedia of facts about the golf industry, but to people who already knew the evidence.

In most cases, golf's message on the environment and other issues is simply not getting to the proper people...

...The golf industry doesn't have to apologize for its environmental record or its efforts in designing and building courses that protect such things as wetlands and wildlife preserves.

The industry, particularly organizations such as the architects' Society, GCSAA and the USGA have done a fine job of compiling information concerning golf and the environment.

That was Step 1.

The next step is to get that information

to the public and government agencies that make the environmental rules and laws.

A lobby for the industry as a whole? Possibly. Associations such as the Florida Golf Council and Arizona Golf Association are trying to make a difference within their respective states.

The industry needs one collective voice, which doesn't necessarily mean it needs a lobby. Industry leaders, architects, superintendents, builders, owners, and others can work as a lobby, speaking to legislators and regulators on behalf of golf. In that respect, they're much more credible than a lobby.

But most of all, the industry needs to work as hard at getting its message out as compiling ammunition the message contains. It doesn't do anybody any good to continue going in circles.

-Steve Pike, business editor of Golfweek. Excerpted from a March 2 editorial.

weaken the doctrine of federal pre-emption.

Senate schedules hearing on pesticide notification

A Senate hearing concerning a notification system for pesticide use will be held in April.

The Senate Subcommittee on Toxic Substances, Environmental Oversight, Research and Development, which last year heard testimony on lawn care chemicals from GCSAA Vice President William R. Roberts, CGCS, is responsible for planning the hearing.

It is believed that Senator Reid (D-Nev.), subcommittee chairman, and Sen. Lieberman (D-Conn.) both favor the development of a national notification

system to inform chemically sensitive people before pesticide applications. Connecticut recently imposed a similar system.

GCSAA will be seeking comments about this proposed notification system from its network of government relations liaisons. The association also plans to participate in the hearing.

RCRA, OSHA set penalty criteria

New penalty formulas for environmental violations and worker safety cases are expected to improve punishment effectiveness and consistency.

In the past, OSHA and EPA — under the Resource Conservation and Recovery Act — issued fines on a violation-by-violation basis. Recently, both

agencies re-evaluated their systems and set up formulas for determining penalty amounts.

EPA realized that some companies had been saving money by paying the fines rather than complying with RCRA. Because of these new policies, stronger penalties will probably be issued and less negotiating will occur.

EPA, OSHA will conduct joint inspections

EPA and OSHA have announced that they will combine inspection efforts to enforce national workplace and environmental statutes more effectively.

Even though EPA inspectors will not perform OSHA inspections, they will refer worker

health and safety issues to OSHA.

The agencies are developing a 1991 fiscal-year workplan for the joint inspection activities. The likely result will be more routine OSHA citations.

EPA toughens with more investigators

Amidst the budget cuts and imposition of higher taxes, the 101st Congress passed legislation to increase the number of EPA criminal investigators.

The Pollution Prosecution Act of 1990 directs the agency to increase, in steps, the number of investigators to total at least 200 by Oct. 1, 1995. This new legislation is designed to increase inspections — with a particular focus on small business violations.

Never have so many owed so much to so few. Winston Churchill's famous World War II quote still rings true today as superintendents across the nation wage a battle to demonstrate the environmental and economic benefits of golf and to showcase the multiple skills of the professional superintendent. Individuals in every local, state, and national association deserve recognition for their time and effort.

Is someone else fighting your battles?

These people have been heard in the halls of Congress, at local water management districts and in town council meetings. They have served on committees, as officers and directors of associations and have led the support and defense of our industry with energy and enthusiasm year after year.

Just as our nation has rallied its support for our troops in the recent Persian Gulf war, the golf community must rally its support for those who lead us in the growth and development of turf management.

Just as American, European and Arabic forces forged a successful coalition for victory, the golf community must participate in coalitions like the FGCSA, the Florida Turfgrass Association, the Florida Golf Council, and the newly formed Coalition for Responsible Pesticide Regulation.

Admittedly united action is sometimes difficult because of the different agendas of private, resort, development and municipal golf facilities. But it is not impossible.

There are approximately 1,000 golf courses in the state. About 680 superintendent and assistant superintendents are members of the FGCSA. Probably fewer than 100 members are actively engaged in any form of activity which is helping guide us through these murky days of increased regulation and negative publicity. And yet, all members of

the golf community are reaping the spoils of the hard-fought victories won by the dedicated few.

They need your support!

Every golf course that is able to irrigate under reasonable regulations written with the input from superintendents, every superintendent who can continue to apply chemicals and fertilizers tested and approved because of research funds raised by superintendents, and every golfer or person who derives his pleasure or livelihood from golf, owes a debt to those who continue to protect and serve our industry.

Those who are operating in the golf industry without paying that debt are undermining the future of golf.

By refusing to join associations, pay dues, attend meetings, donate funds for education and research, they are contributing to the frustration and burnout of those who have sought to preserve for others the right to operate profitably.

If every one of the 1,000 golf courses budgeted a reasonable amount for dues and research as a line-item expense and paid that money to the FGCSA, the FTGA or the Florida Golf Council, we could make significant progress in the ongoing business of turf management and golf course operations.

We are on the brink of a new era in the golf industry. An era in which environmental protection, water resource conservation and economic considerations are shaping the way we continue to conduct our complex business.

Responsible members of the golf community will invest the time and money necessary to become part of the solution. They will reinforce the few who have served so well for so long. Without replacements and reinforcements for our war-weary leaders, our pro-active attacks and our data-based defenses may lose their initiative and face crippling defeats.

We need all of you for a unified voice and a unified victory! Call 407-692-9349 for information on how you can help to sustain the growth and development of golf.

Green Side Up



Joel D. Jackson

Joel D. Jackson, CGCS

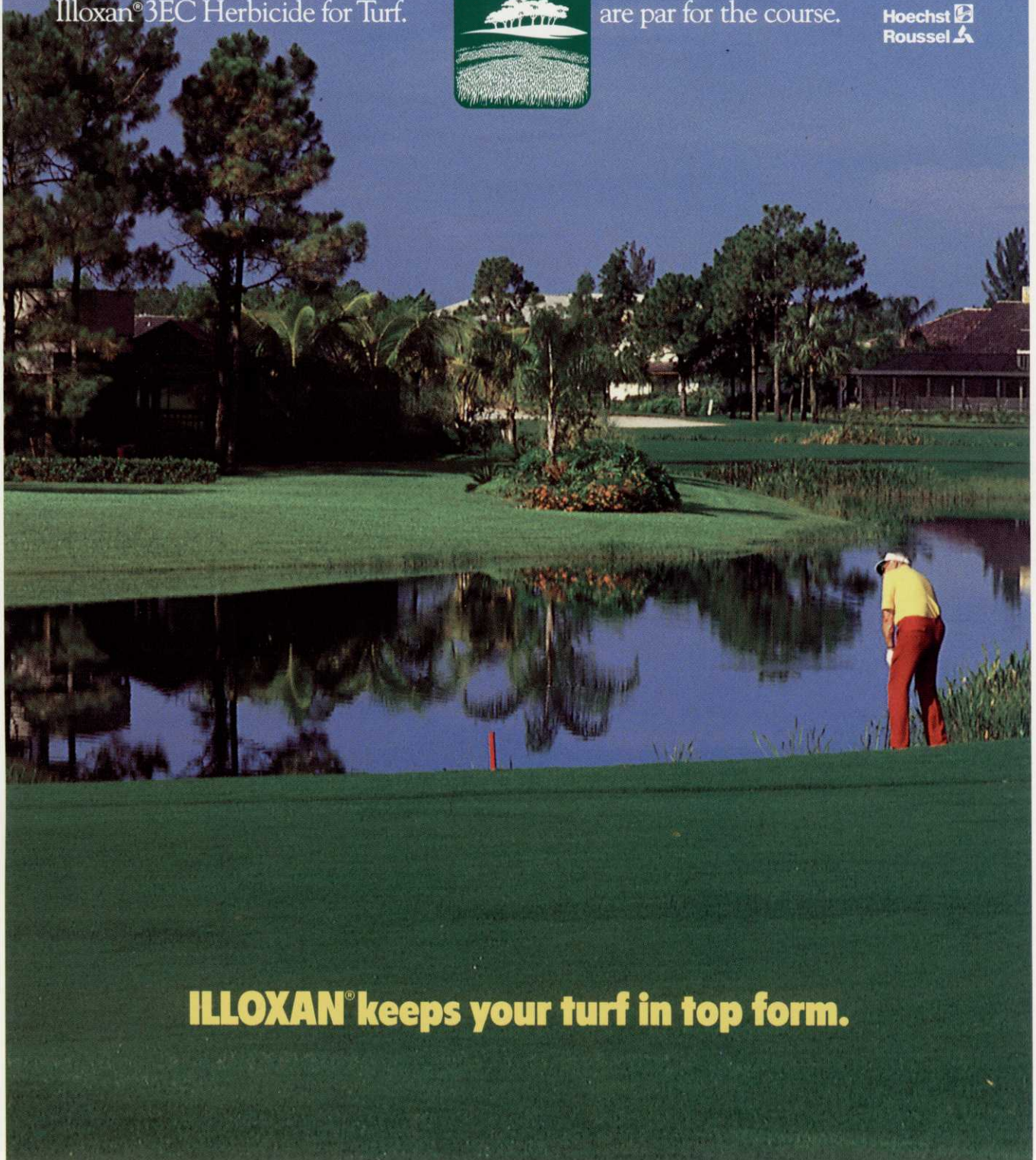
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